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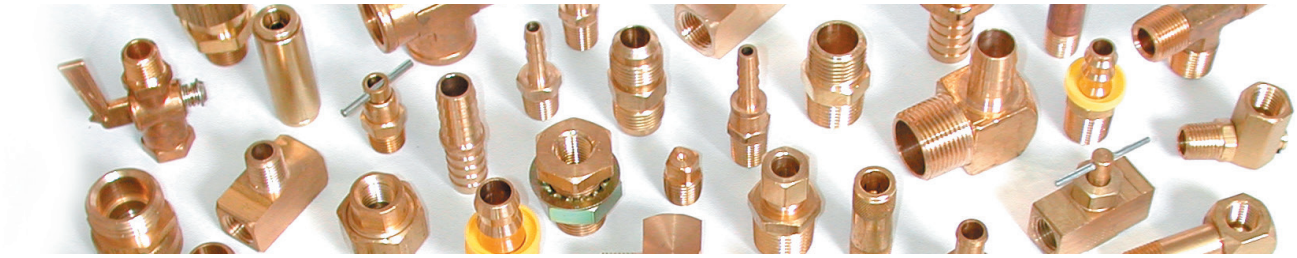

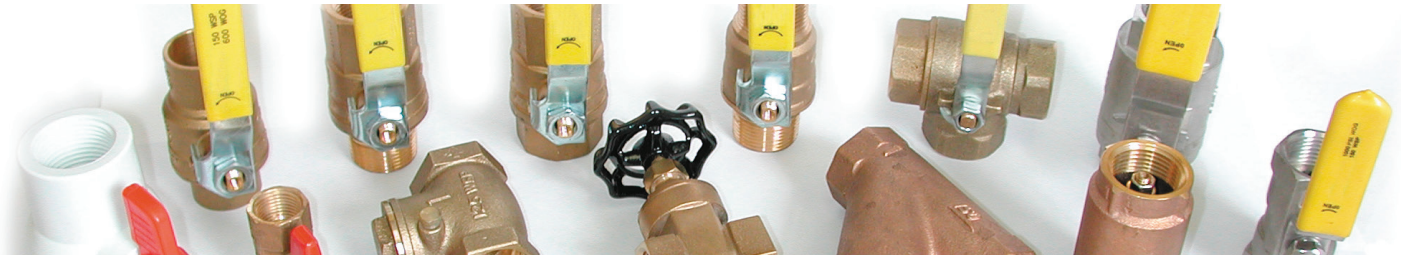

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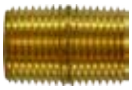
RED COU-PLING PG 158	HEX BUSHING PG 158	FACE BUSHING PG 158	HEX CAP PG 159	SOLID SQ PLUG PG 159	COUNTER-SUNK PG 159	CORED HEX PLUG PG 159	CLOSE NIPPLE  PG 159	HEX NIPPLE PG 159
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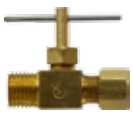
FORGED RED TEE PG 165	UNION ELBOW PG 165	FORGED RED EL PG 165	COMP X SWEAT PG 165	FEMALE ADAPTER PG 166	MALE ADAPTER PG 166	MALE ELBOW PG 166	FEMALE ELBOW PG 166	NEEDLE VALVE  PG 167
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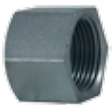
SHROOM CAP PG 278	**STEEL FITTINGS PG 279-280**	PG 279	BLK HEX BUSH PG 279	GALV CAP  PG 279	BLK CAP PG 279	GALV FACE PG 279	BLK FACE PG 279	GALV SQR PG 280
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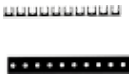
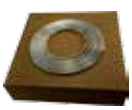
MINITUBING CUT PG 340	TUBING CUT-TER PG 340	PLASTIC TUBE CUT PG 340	MOUNTING RACK  PG 340	ALUMINUM  PG 341	COPPER TUBE PG 341	SOFT COPPER PG 341	**PRESSURE WASHER** PGS 342-347	QD NOZZLE PG 343

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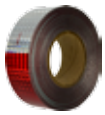
BATT GRND STRAP PG 388	SS BATTERY NUT PG 388	RUB GROM-MET PG 388	DEER WHISTLE PG 389	CONSP TAPE  PG 390	TARP STRAP PG 390	DOT TUBING PG 391	FUEL LINE PG 392	AIR BRAKE HOSE PG 392
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O-RING PORT PG 414	**FEMALE SWIVELS PG 415-416**	JIC SWL PG 415	JIC SWL PG 415	JIC SWL 45° PG 415	JIC SWL TO PG 415	JIC SWL CONN PG 415	JIC SWL TO M PG 415	JIC SWL TOF PG 416
JIC SWL PG 416	JIC SWL RUN T PG 416	**SAE O-RING ADAPTERS PG 417-419**	JIC TO ORING PG 417	JIC TO ORING PG 417	JIC BRANCH PG 417	JIC RUN TEE PG 417	ORING TO PG 417	ORING TO PG 418
ORING JIC 90° PG 418	F TO M ORING 90° PG 418	M ORING SWL AD PG 418	90° ORING SWL PG 418	45° ORING SWL PG 419	VITON O-RING PG 419	NITRILE O-RING PG 419	**O-RING FACE SEAL PGS 419-423**	BRAZE TUBE NUT PG 419
BRAZETUBE SLV PG 420	CAP PG 420	BULKHEAD LKNUT PG 420	FACE SEAL ADPT PG 420	PLUG PG 421	ORFS UNION 90° PG 421	ORFS TO M 90° PG 421	ORFS TO PIPE 90° PG 421	ORFS UNION T PG 421
M ORFS TO ORB PG 422	M TO F 37° SWL PG 422	SWL NUT ELBOW PG 422	37° SWIVEL PG 422	O-RING ELBOW PG 422	ORFS TO 45° PG 422	SWIVEL ELBOW PG 423	**BSPT, BSPP METRIC PGS 423-426**	JIC BSPT PG 423
BSPT ELBOW PG 423	HEX NIPPLE PG 423	PLUG PG 423	HEX NIPPLE BSPP PG 423	COUPLING PG 424	FEMALE SWIVEL PG 424	ELBOW PG 424	45° ELBOW PG 424	MALE NIPPLE PG 424
MALE BSPP PG 424	SWIVEL BSPP PG 425	PLUG BSPP PG 425	HOLLOW BSPP PG 425	FEMALE BSPP PG 425	MALE ELBOW PG 426	STRAIGHT SWIVEL PG 426	METRIC PARALLEL PG 426	HOLLOW PG 426
FEMALE ADAPTER PG 426	**QUICK DISCONNECTS PGS 427-429**	NO SPILL PG 427	DRYBREAK PG 427	ISO-A COUPLER PG 427	ISO-A PLUG PG 427	ISO-B COUPLER PG 427	ISO-B PLUG PG 427	FLUSH FACE PG 428
FEMALE ADAPTER-FLUSH FACE PG 428	FEMALE ADAPTERLSQ SERIES PG 428	NO SPILLLSQ SERIES PG428	AG SERIES PG 427429	ISO-A COUPLERKZE SERIES PG 427429	ISO-A PLUG-FLOW VALVE PG 427430	ISO-B COUPLERNEEDLE VALVE PG 427430	ISO-B PLUG-PRESSURE VALVE PG 427431	FLUSH FACEAIR BREATHER PG 428431

PIPE

Pipe Size	1/16	1/8	1/4	3/8	1/2	3/4	1
Thread Size	1/16-27	1/8-27	1/4-18	3/8-18	1/2-14	3/4-14	1-11 1/2
Working Pressure	1200	1200	1200	1200	1200	1000	1000
Thread OD	1/4	3/8	1/2	5/8	3/4	1	1-1/4

•Typical Application
Grease, fuels, LP and Natural gas (available on special order), refrigeration, instrumentation and hydraulic systems.

•Pressure
Operating pressure up to 1200 PSI.

•Vibration
Fair resistance.

•Temperature Range
-65^{0}F to +250^{0}F (-53^{0}C to +121^{0}C).

•Used With
Brass, bronze, copper, steel, aluminum and iron pipe.

• Tolerance
+/- .02 on all dimensions. Dimension Data can change without notice. Please call us when dimensions are critical.

• Conformance
Meets specifications and standards of ASA, ASME and SAE

• Not lead free

• "L" at the end of a Part# means Light Pattern
- these fittings are completely interchangeable with full pattern fittings, but have been modified in some way. This modification is usually in the length of the pipe threads. Used in plumbing and light industrial applications.

•Assembly Instructions
1- Tighten approximately 2-1/2 turns past hand tight.
2- Fittings with Everseal tighten two turns past hand tight. Brittle materials require special cautions.

• see page 409-412 for hydraulic pipe steel fittings.

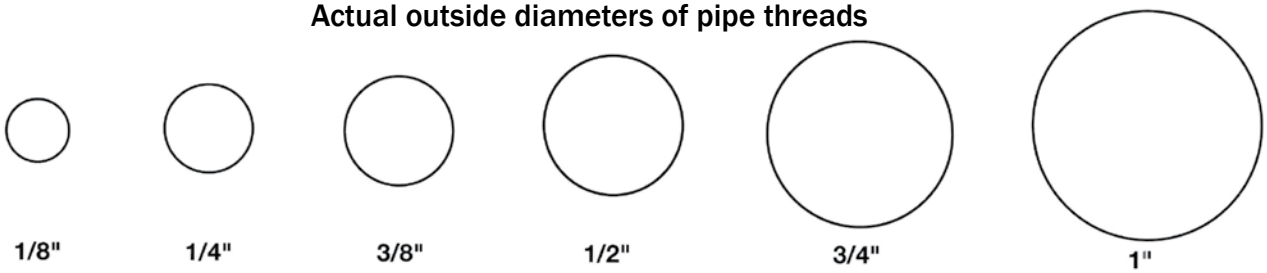
• see page 295-297 for plastic pipe fittings.

• Lead Free Fittings
see pages 158-160

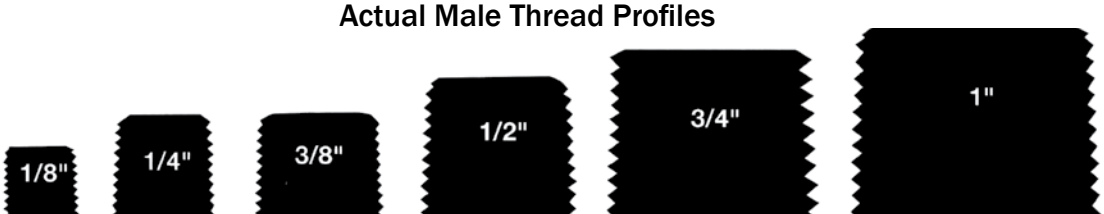
• For Bronze & Larger Sizes
see pages 223-231

*** For larger sizes, see bronze fittings on pg. 220-227**

Actual outside diameters of pipe threads



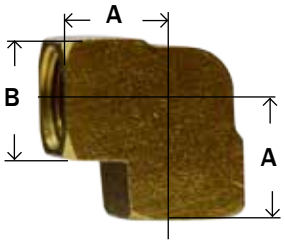
Actual Male Thread Profiles



WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

90° FEMALE ELBOW

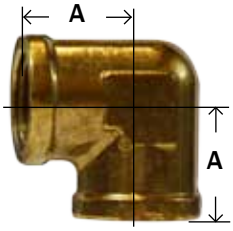
SAE# 130238



	Part #	Thread Size NPTF	A	B	Approx. Wt. Lbs.	
	28-001	1/8”	0.55	0.56	0.09	----
	28-002	1/4”	0.78	0.68	0.13	----
	28-003	3/8”	0.84	0.81	0.16	----
	28-004	1/2”	1.09	1.00	0.34	----
	28-005	3/4”	1.16	1.25	0.60	----
NEW	28-015B	3/8" x 1/4"	0.84	0.81	0.18	----
NEW	28-053B	1/2" x 1/4"	1.09	1.00	0.37	----
NEW	28-016B	1/2" x 3/8"	1.09	1.00	0.36	----

100 2200P 3500 302 200

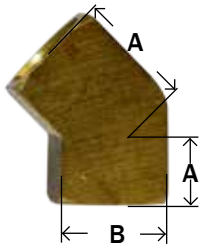
90° FORGED FEMALE ELBOW



Part #	Thread size NPTF	A	Body Width	Approx. Wt. Lbs.	
28-009	1/8”	0.57	0.50	0.04	----
28-010	1/4”	0.70	0.68	0.10	----
28-011	3/8”	0.81	0.81	0.12	----
28-012	1/2”	1.00	1.00	0.23	----
28-013	3/4”	1.13	1.25	0.42	----
28-014	1/4” x 1/8”	0.72	0.65	0.12	----
28-015	3/8” x 1/4”	0.81	0.81	0.15	----
28-016	1/2” x 3/8”	1.00	1.00	0.28	----
28-017	1"	1.42	1.50	0.75	----

1200P E7 100AF 100B

45° FEMALE ELBOW

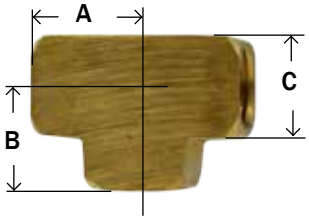


Part #	Thread size NPTF	A	B	Approx. Wt. Lbs.	
28-018	1/8”	0.45	0.56	0.06	----
28-019	1/4”	0.66	0.68	0.12	----
28-020	3/8"	0.69	0.81	0.16	----
28-021B	1/2"	0.94	1.00	0.25	----

129 2201P 205 23355 45EZ 105 100-45A

UNION TEE

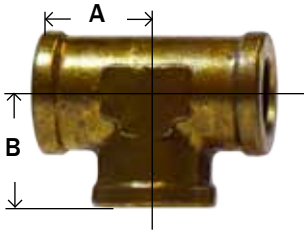
SAE# 130438



Part #	Thread size NPTF	A	B	C	Approx. Wt. Lbs.	
28-022	1/16"	0.55	0.55	0.58	0.11	----
28-024	1/8”	0.55	0.55	0.56	0.08	----
28-025	1/4”	0.78	0.78	0.68	0.17	----
28-026	3/8”	0.84	0.84	0.81	0.22	----
28-027	1/2”	1.09	1.09	1.00	0.43	----
28-028	3/4”	1.16	1.16	1.25	0.64	----

311 101A 322 2203P 3700 203

UNION FORGED TEE

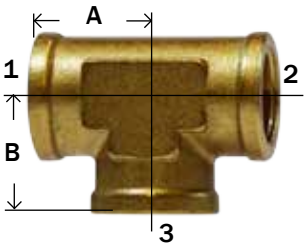


Part #	Thread size NPTF	A & B	Body Width	Approx. Wt. Lbs.	
28-032	1/8”	0.56	0.50	0.06	----
28-033	1/4”	0.71	0.68	0.13	----
28-034	3/8”	0.81	0.81	0.16	----
28-035	1/2”	1.00	1.00	0.27	----
28-036	3/4”	1.16	1.25	0.53	----
28-023	1”	1.42	1.50	.924	----

1203P LT7 101AF 101B

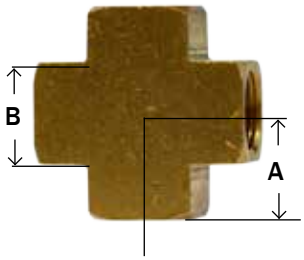
WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

REDUCING FORGED TEES



Part #	1 NPT	2 NPT	3 NPT	A & B	Body Width	Approx. Wt. Lbs.	
28-029	1/8”	1/8”	1/4”	0.72	0.69	0.16	----
28-030	1/4”	1/4”	1/8”	0.72	0.69	0.14	----
28-031	1/4”	1/4”	3/8”	0.81	0.81	0.21	----
28-038	3/8”	1/4”	3/8”	0.81	0.81	0.18	----
28-039	3/8”	3/8”	1/4”	0.81	0.81	0.18	----
28-046	1/2”	1/2”	3/8”	1.00	1.00	0.30	----
28-047	3/4"	1/2"	3/4"	1.20	1.25	0.59	----
28-048	3/4”	3/4”	1/2”	1.16	1.25	0.59	----

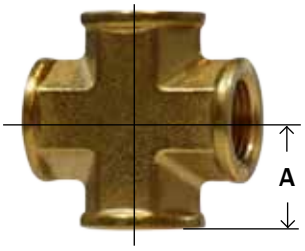
CROSS



Part #	Thread size NPTF	A	B	Approx. Wt. Lbs.	
28-041	1/8”	0.55	0.56	0.10	----
28-042	1/4”	0.78	0.68	0.21	----
28-043	3/8”	0.84	0.81	0.25	----
28-044	1/2”	1.09	1.00	0.51	----
28-045	3/4”	1.16	1.25	0.75	----

2205P 3950 228 102A 102BE

FORGED CROSS

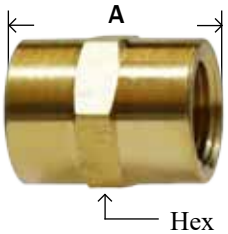


Part #	Thread size NPTF	A	Body Width	Approx. Wt. Lbs.	
28-049	1/8”	0.56	0.50	0.06	----
28-050	1/4”	0.72	0.69	0.15	----
28-051	3/8”	0.81	0.81	0.18	----
28-052	1/2”	1.00	1.00	0.34	----

C7 105 102AF 102B

COUPLING

SAE# 130138



Part #	Thread size NPTF	A	Hex	Approx. Wt. Lbs.	
28-057	1/16"	0.75	0.44	0.02	
28-058L	1/8”	0.75	0.50	0.02	----
28-058	1/8”	0.75	0.56	0.03	----
28-059L	1/4”	0.88	0.63	0.03	----
28-059	1/4”	1.12	0.75	0.09	----
28-060L	3/8”	1.00	0.81	0.06	----
28-060	3/8”	1.12	0.87	0.10	----
28-061L	1/2”	1.19	0.93	0.09	----
28-061	1/2”	1.50	1.06	0.19	----
28-062L	3/4”	1.19	1.25	0.18	----
28-062	3/4”	1.53	1.25	0.24	----
28-063	1"	1.89	1.50	.357	----

207P 371 3300 103AH 103B

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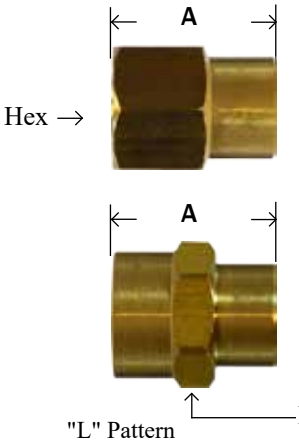
REDUCING COUPLING

SAE# 130138

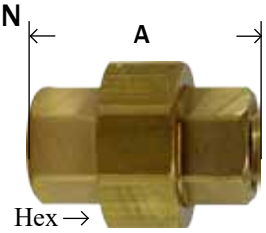


	Part #	Thread size NPTF	A	Hex	Approx. Wt. Lbs.	
	28-181L	1/4" x 1/8"	0.94	0.62	0.04	----
	28-181	1/4" x 1/8"	0.97	0.75	0.08	----
	28-182	3/8" x 1/8"	0.94	0.87	0.10	----
	28-183L	3/8" x 1/4"	1.00	0.81	0.06	----
	28-183	3/8" x 1/4"	1.16	0.87	0.12	----
	28-180*	1/2" x 1/8"	1.19	0.93	0.15	----
	28-184L	1/2" x 1/4"	1.11	1.00	0.10	----
	28-184	1/2" x 1/4"	1.28	1.06	0.20	----
	28-185L	1/2" x 3/8"	1.19	0.93	0.10	----
	28-185	1/2" x 3/8"	1.38	1.06	0.20	----
NEW	28-186	3/4" x 1/8"	1.19	1.19	0.16	----
NEW	28-187	3/4" x 1/4"	1.19	1.19	0.17	----
	28-188*	3/4" x 3/8"	1.32	1.37	0.20	----
	28-189*	3/4" x 1/2"	1.19	1.18	0.14	----
NEW	28-178	1" x 1/2"	1.50	1.56	0.41	----
NEW	28-179	1" x 3/4"	1.56	1.56	0.39	----

*Not to SAE specs

377 3300 208P 108 119B 119AH

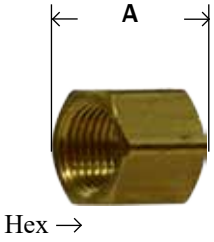
UNION



	Part #	Thread size NPTF	A	Hex	Approx. Wt. Lbs.	
	28-067	1/8"	1.25	0.94	0.13	----
	28-068	1/4"	1.31	1.06	0.18	----
	28-069	3/8"	1.75	1.25	0.33	----
	28-070	1/2"	1.79	1.56	0.50	----
NEW	28-071	3/4"	1.96	1.68	0.47	----

3250 212P 104A 104B

CAP

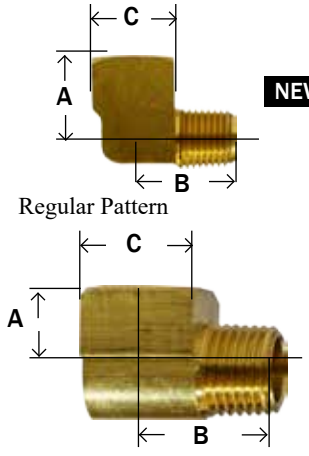


Part #	Thread size NPTF	A	Hex	Approx. Wt. Lbs.	
28-075	1/8"	0.47	0.56	0.03	----
28-076	1/4"	0.60	0.68	0.04	----
28-077	3/8"	0.69	0.81	0.06	----
28-078	1/2"	0.78	0.93	0.08	----
28-079	3/4"	0.94	1.25	0.16	----
28-080	1"	1.13	1.50	0.23	----

3129 213P 23129 108A 108B

90⁰ STREET ELBOW

SAE# 130239



	Part #	Thread size NPTF	A	B	C	Approx. Wt. Lbs.	
NEW	28-161	1/16"	0.69	0.60	0.47	0.04	----
	28-156	1/8"	0.48	0.66	0.56	0.05	----
	28-156S	1/8" short	0.34	0.57	0.50	0.03	----
	28-157	1/4"	0.72	0.91	0.735	0.09	----
	28-157S	1/4" short	0.45	0.78	0.68	0.07	----
	28-158	3/8"	0.78	0.97	0.81	0.16	----
	28-159	1/2"	1.03	1.25	1.00	0.33	----
	28-160	3/4"	1.12	1.38	1.25	0.52	----

2202P 304 115 202 3400 116A

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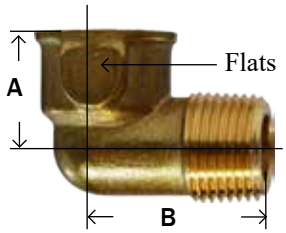
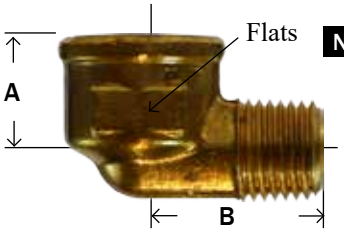
FORGED 90° STREET ELBOW



Part #	Thread size NPTF	A	B	Wrench Flats	Approx. Wt. Lbs.	
28-165	1/8”	0.61	0.85	0.62	0.06	----
28-166	1/4”	0.50	0.86	0.72	0.08	----
28-167	3/8”	0.70	1.00	0.88	0.10	----
28-168	1/2”	0.96	1.43	1.00	0.20	----
28-169	3/4”	0.90	1.40	1.25	0.25	----

5E8 1202P 116AF 116B

FORGED REDUCING 90° STREET ELBOW

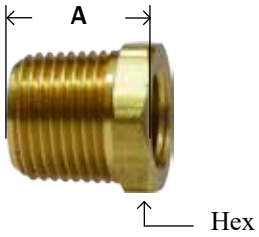


	Part #	Thread size NPTF FxM	A	B	Wrench flats	Approx. Wt. Lbs.	
NEW	28-259*	1/8" x 1/16"					----
	28-260	1/8” x 1/4”	0.50	0.87	0.71	0.08	----
	28-261B*	1/4” x 1/8”	0.53	0.72	0.69	0.07	----
	28-261	1/4” x 1/8”	0.50	0.81	0.72	0.06	----
	28-262	1/4” x 3/8”	0.93	1.06	0.59	0.12	----
	28-263	3/8” x 1/4”	0.58	0.94	0.81	0.07	----
	28-264	3/8” x 1/2”	0.97	1.36	1.00	0.28	----
	28-265	1/2” x 3/8”	0.96	1.37	1.00	0.22	----
NEW	28-265B*	1/2" x 3/8"	1.03	1.11	1.00	0.24	----

*Barstock

HEX BUSHING

SAE# 130140



Part #	Thread size NPTF MxF	A	Hex	Approx. Wt. Lbs.	
28-102L	1/4” x 1/8”	0.62	0.56	0.02	----
28-102	1/4” x 1/8”	0.75	0.56	0.04	----
28-103	3/8” x 1/8”	0.75	0.68	0.05	----
28-104L	3/8” x 1/4”	0.69	0.68	0.03	----
28-104	3/8” x 1/4”	0.75	0.75	0.05	----
28-105L	1/2” x 1/8”	0.81	0.81	0.08	----
28-105	1/2” x 1/8”	1.00	0.87	0.10	----
28-106L	1/2” x 1/4”	0.81	0.81	0.08	----
28-106	1/2” x 1/4”	1.00	0.87	0.11	----
28-107L	1/2” x 3/8”	0.81	0.81	0.05	----
28-107	1/2” x 3/8”	1.00	0.87	0.10	----
28-108	3/4” x 1/8”	0.94	1.06	0.20	----
28-109L	3/4” x 1/4”	0.94	1.06	0.18	----
28-110L	3/4” x 3/8”	0.94	1.06	0.15	----
28-111L	3/4” x 1/2”	0.94	1.06	0.11	----
28-111	3/4” x 1/2”	1.00	1.12	0.14	----
NEW 28-091	1" x 1/8"	1.15	1.37	0.29	----
28-112	1” x 1/4”	1.15	1.37	0.32	----
28-113	1” x 3/8”	1.12	1.37	0.30	----
28-114	1” x 1/2”	1.31	1.44	0.29	----
28-115	1” x 3/4”	1.31	1.37	0.20	----

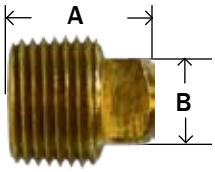
373 3220 209P 110A 110B

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

FACE BUSHING

	Part #	Thread size NPTF MxF	A	Approx. Wt. Lbs.	
	28-121	1/4" x 1/8"	0.45	0.01	----
	28-122	3/8" x 1/8"	0.50	0.03	----
	28-116	3/8" x 1/4"	0.50	0.02	----
	28-090	1/2" x 1/8"	0.56	0.06	----
	28-128	1/2" x 1/4"	0.56	0.05	----
	28-117	1/2" x 3/8"	0.56	0.03	----
	28-129	3/4" x 1/4"	0.62	0.11	----
	28-130	3/4" x 3/8"	0.62	0.08	----
	28-118	3/4" x 1/2"	0.64	0.03	----
NEW	28-120	1" x 1/2"	0.75	0.11	----
	28-119	1" x 3/4"	0.77	0.10	----

SQUARE HEAD PLUG
1/8 - 1/2 Solid

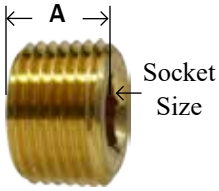


Part #	Thread size NPTF	A	B	Approx. Wt. Lbs.	
28-084	1/8"	0.58	0.27	0.02	----
28-085	1/4"	0.80	0.37	0.03	----
28-086	3/8"	0.80	0.43	0.06	----
28-087	1/2"	1.07	0.55	0.13	----
28-088**	3/4"	1.09	0.61	0.20	----
28-089**	1"	1.24	0.81	0.35	----

** Cored

3151 211P 109A 109B

COUNTERSUNK HEX PLUG
3/4" taper thread



Part #	Thread size NPTF	A	Socket size	Approx. Wt. Lbs.	
28-092	1/16"	0.30	0.12	0.01	----
28-093	1/8"	0.30	0.18	0.01	----
28-094	1/4"	0.45	0.26	0.02	----
28-095	3/8"	0.45	0.31	0.03	----
28-096	1/2"	0.61	0.39	0.05	----
28-097	3/4"	0.62	0.56	0.10	----

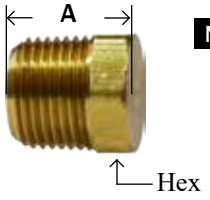
3153 219P 109CS 118

SLOTTED-HEAD PLUG

	Part #	Thread size NPTF	A	Approx. Wt. Lbs.	
	28-174	1/8"	0.31	0.01	----
	28-175	1/4"	0.42	0.02	----
	28-176	3/8"	0.45	0.05	----
NEW	28-177	1/2"	0.56	0.10	

220P 3150 117A 117B

CORED HEX PLUGS

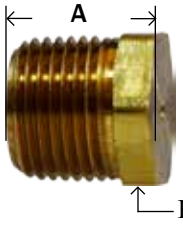


	Part #	Thread size NPTF	A	Hex	Approx. Wt. Lbs.	
NEW	28-200	1/16"	0.48	0.38	0.01	----
	28-201	1/8"	0.55	0.43	0.01	----
	28-202	1/4"	0.62	0.56	0.02	----
	28-203	3/8"	0.72	0.68	0.06	----
	28-204	1/2"	0.81	0.87	0.09	----
	28-205	3/4"	0.94	1.06	0.16	----
	28-206	1"	1.16	1.37	0.28	----

218P 3152 121A 103 121B PPH 218P

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

SOLID HEX HEAD PLUGS



Part #	Thread size NPTF	A	Hex	Approx. Wt. Lbs.	
28-201S	1/8’	0.55	0.43	0.02	----
28-202S	1/4”	0.75	0.56	0.05	----
28-203S	3/8”	0.66	0.68	0.07	----
28-204S	1/2”	0.81	0.87	0.12	----
28-205S	3/4”	0.92	1.06	0.24	----
28-206S	1”	1.00	1.31	0.38	----

121AS

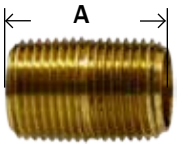
LOCKNUT

- **Jam Nuts**
- **Straight pipe thread**

	Part #	Thread size NPSL	Hex	Thickness	Approx. Wt. Lbs.	
	28-123	1/8”	0.68	0.19	0.02	----
	28-124	1/4”	0.87	0.25	0.04	----
	28-125	3/8”	1.00	0.31	0.04	----
	28-126	1/2”	1.125	0.25	0.04	----
NEW	28-127	3/4"	1.38	0.38	0.09	----

210P 21102 111A 111B

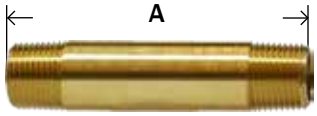
CLOSE NIPPLE



Part #	Thread size NPTF	A	Approx. Wt. Lbs.	
28-131	1/8”	0.75	0.01	----
28-132	1/4”	0.88	0.02	----
28-133	3/8”	1.00	0.05	----
28-134	1/2”	1.12	0.06	----
28-135	3/4”	1.31	0.11	----

165 215PN 3326 112A 112B

LONG NIPPLE



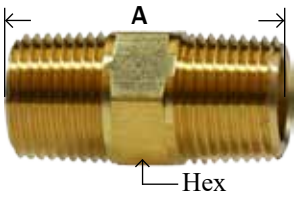
Part #	Thread size NPTF	A Length	Approx. Wt. Lbs.	
28-140	1/8”	1.50	0.03	----
28-141	1/8”	2.00	0.04	----
28-142	1/8”	2.50	0.06	----
28-143	1/8”	3.00	0.06	----
28-475	1/8"	3.50	0.07	----
28-144	1/4”	1.50	0.03	----
28-145	1/4”	2.00	0.05	----
28-146	1/4”	2.50	0.08	----
28-147	1/4”	3.00	0.10	----
28-481	1/4"	3.50	0.12	----
28-148	3/8”	1.50	0.06	----
28-149	3/8”	2.00	0.10	----
28-150	3/8”	2.50	0.10	----
28-151	3/8”	3.00	0.13	----
28-487	3/8"	3.50	0.17	----
28-152	1/2”	1.50	0.08	----
28-153	1/2”	2.00	0.12	----
28-154	1/2”	2.50	0.16	----
28-155	1/2”	3.00	0.20	----
28-493	1/2"	3.50	0.24	----
28-136	3/4"	1.50	0.12	----
28-497	3/4"	2.00	0.18	----
28-498	3/4"	2.50	0.23	----
28-499	3/4"	3.00	0.28	----

• NOTE: For longer lengths and larger diameters, see our red brass nipples section, pg. 215-222

113B 113A 166 3327, 3328, 3329, 3330 3331 215PNL

HEX NIPPLE

SAE# 130137

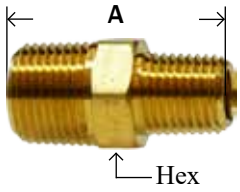


	Part #	Thread size NPTF	A	Hex	Approx. Wt. Lbs.	
NEW	28-210	1/16"	0.97	0.38	0.02	----
	28-211L	1/8”	0.91	0.43	0.02	----
	28-211	1/8”	0.97	0.43	0.03	----
	28-212L	1/4”	1.12	0.56	0.04	----
	28-212	1/4”	1.38	0.56	0.06	----
	28-213L	3/8”	1.25	0.68	0.07	----
	28-213	3/8”	1.41	0.68	0.07	----
	28-214L	1/2”	1.50	0.87	0.11	----
	28-214	1/2”	1.81	0.87	0.17	----
	28-215L	3/4"	1.55	1.07	0.17	----
	28-215	3/4”	1.96	1.13	0.23	----
	28-216L	1"	1.75	1.39	0.22	----
	28-216	1”	2.30	1.37	0.43	----

216P 3325 379 122AH 122B

REDUCING HEX NIPPLE

SAE# 130137

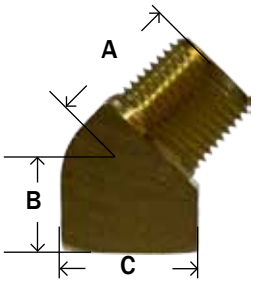


	Part #	Thread size NPTF	A	Hex	Approx. Wt. Lbs.	
NEW	28-218	1/8" x 1/16"	1.00	0.56	0.05	----
	28-220L	1/4” x 1/8”	1.00	0.56	0.04	----
	28-220	1/4” x 1/8”	1.19	0.56	0.04	----
	28-221L	3/8” x 1/8”	1.11	0.68	0.06	----
	28-221	3/8” x 1/8”	1.22	0.68	0.07	----
	28-222L	3/8” x 1/4”	1.19	0.68	0.06	----
	28-222	3/8” x 1/4”	1.41	0.68	0.07	----
	28-223L	1/2” x 1/4”	1.34	0.87	0.09	----
	28-223	1/2” x 1/4”	1.62	0.87	0.12	----
	28-224L	1/2” x 3/8”	1.41	0.87	0.11	----
	28-224	1/2” x 3/8”	1.62	0.87	0.12	----
NEW	28-225L	3/4" x 1/2"	1.81	1.06	0.19	----
	28-225	3/4” x 1/2”	1.50	1.06	0.15	----
NEW	28-227	1" x 3/4"	2.31	1.38	0.38	----

216P 3325 379 122AH 122B

45° STREET ELBOW

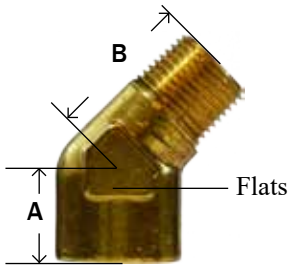
SAE# 130339



Part #	Thread size NPTF	B	A	C	Approx. Wt. Lbs.	
28-230	1/8”	0.38	0.50	0.56	0.03	----
28-231	1/4”	0.56	0.72	0.68	0.09	----
28-232	3/8”	0.56	0.78	0.81	0.12	----
28-233	1/2”	0.75	1.00	1.00	0.20	----
28-234	3/4”	0.75	1.06	1.25	0.34	----

306 3350 2214P 224

45⁰ FORGED STREET ELBOW



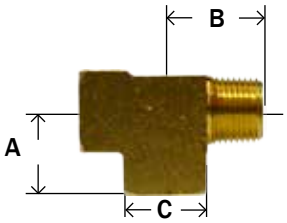
Part #	Thread size NPTF	A	B	Wrench flats	Approx. Wt. Lbs.	
28-238	1/8”	0.63	0.81	0.56	0.05	----
28-239	1/4”	0.63	1.06	0.81	0.11	----
28-240	3/8”	0.72	1.06	0.93	0.17	----

45E8 124B

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

STREET TEE/ SERVICE TEE/ MALE RUN TEE

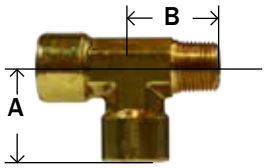
SAE# 130424



Part #	Thread size NPTF	A	B	C	Approx. Wt. Lbs.	
28-245	1/8”	0.55	0.66	0.56	0.08	----
28-246	1/4”	0.78	0.91	0.68	0.17	----
28-247	3/8”	0.84	0.97	0.81	0.22	----
28-248	1/2”	1.09	1.25	1.00	0.40	----
28-249	3/4”	1.16	1.39	1.25	0.60	----

225 2225P 3750 326 225 127A

FORGED STREET TEE

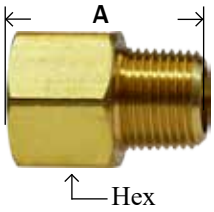


Part #	Thread size NPTF	A	B	Body Width	Approx. Wt. Lbs.	
28-253	1/8”	0.56	0.75	0.50	0.05	----
28-254	1/4”	1.03	1.00	0.46	0.13	----
28-255	3/8”	1.19	1.09	0.68	0.24	----
28-256	1/2”	1.52	1.40	0.88	0.45	----
28-257	3/4”	1.34	1.73	1.25	0.65	----

107 T8 127B

EXTENDER ADAPTER

SAE# 130139

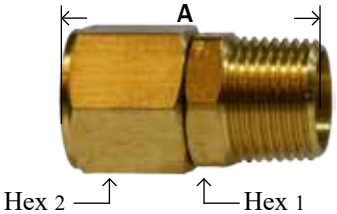


Part #	Thread size NPTF FxM	A	Hex	Approx. Wt. Lbs.	
28-190L	1/8” x 1/8”	0.83	0.50	0.03	----
28-190	1/8” x 1/8”	0.88	0.56	0.04	----
28-191L	1/4” x 1/8”	0.94	0.62	0.04	----
28-191	1/4” x 1/8”	1.06	0.75	0.07	----
28-192L	1/4” x 1/4”	1.00	0.62	0.04	----
28-192	1/4” x 1/4”	1.25	0.75	0.07	----
28-198	3/8” x 1/8”	1.00	0.81	0.06	----
28-193L	3/8” x 1/4”	1.12	0.81	0.08	----
28-193	3/8” x 1/4”	1.25	0.87	0.09	----
28-194L	3/8” x 3/8”	1.24	0.81	0.10	----
28-194	3/8” x 3/8”	1.25	0.87	0.11	----
NEW 28-197	1/2" x 1/8"	1.09	0.94	0.07	----
28-199	1/2” x 1/4”	1.46	1.06	0.08	----
28-195L	1/2” x 3/8”	1.19	0.93	0.09	----
28-195	1/2” x 3/8”	1.47	1.06	0.18	----
28-196L	1/2" x 1/2"	1.25	0.94	0.10	----
28-196	1/2” x 1/2”	1.66	1.06	0.12	----
28-207	3/4” x 3/8”	1.59	1.25	0.26	----
28-208	3/4” x 1/2”	1.69	1.37	0.14	----
28-208L	3/4” x 1/2”	1.22	1.25	0.13	----
28-209	3/4” x 3/4”	1.69	1.37	0.34	----

375 222P 3200 R1 120AH 120B

PIPE SWIVEL ADAPTER

*300 PSI all sizes



Part #	Thread size NPTF FxM	A	Hex 1	Hex 2	Approx. Wt. Lbs.	
28-424	1/8"	1.10	0.43	0.50	0.05	----
28-425	1/4”	1.34	0.56	0.62	0.06	----
28-426	3/8”	1.36	0.68	0.75	0.08	----
28-427	1/2"	1.87	0.87	0.95	0.10	----

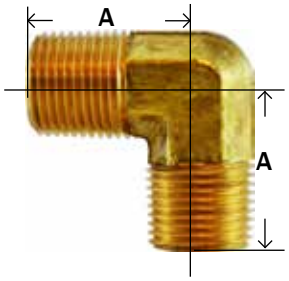
Male NPT x Female NPT

- 360° Turning
- Swivels

Part #	Size	
320-061	1/4	----

344R 3183

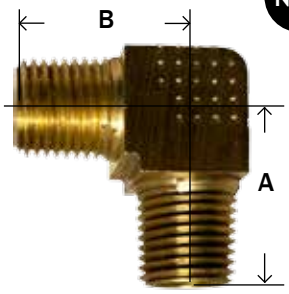
FORGED 90° MALE ELBOW



Part #	Thread size NPTF	A	Body Width	Approx. Wt. Lbs.	
28-266	1/8”	0.79	0.38	0.04	----
28-267	1/4”	0.87	0.45	0.06	----
28-268	3/8”	1.06	0.59	0.12	----
28-269	1/2”	1.38	0.78	0.21	----

LE5 3455 116AMF

BARSTOCK 90° MALE ELBOW



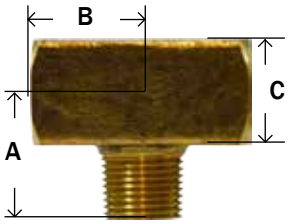
Part #	Thread size NPTF	A	Body Width	Approx. Wt. Lbs.	
28-266B	1/8"	0.69	0.56	0.08	----
28-267B	1/4"	0.95	0.59	0.09	----
28-268B	3/8"	1.01	0.71	0.15	----
28-269B	1/2"	1.40	1.00	0.38	----
28-270B	3/4"	1.50	1.25	0.55	----
28-276B	1/2" x 3/8"	1.12	1.00	0.35	----

FORGED 90° MALE REDUCING ELBOW

Part #	Thread size NPTF	A	B	Body Width	Approx. Wt. Lbs.	
28-274	1/4”x 1/8”	0.88	0.78	0.47	0.06	----
28-275	3/8” x 1/4”	0.90	0.90	0.46	0.06	----
28-276	1/2” x 3/8”	1.12	1.00	0.59	0.12	----

MALE BRANCH TEE

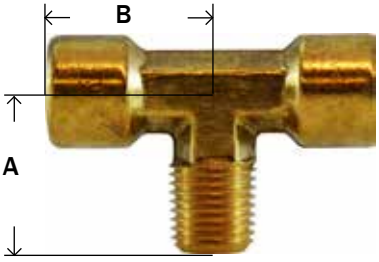
SAE# 130425



Part #	Thread size NPTF	A	B	C	Approx. Wt. Lbs.	
28-281	1/8”	0.66	0.55	0.56	0.08	----
28-282	1/4”	0.91	0.78	0.68	0.15	----
28-283	3/8”	0.97	0.84	0.81	0.22	----
28-284	1/2”	1.25	1.09	1.00	0.40	----
28-285	3/4”	1.38	1.16	1.25	0.62	----

T9 X106 23601 3600 2224P 226 329 128

FORGED MALE BRANCH TEE

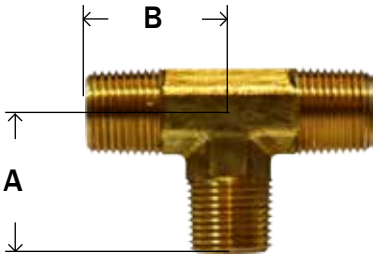


Part #	Thread size NPTF	A	B	Body Width	Approx. Wt. Lbs.	
28-281F	1/8”	0.75	0.56	0.50	0.06	----
28-282F	1/4”	1.00	1.03	0.46	0.12	----

T9

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

FORGED ALL MALE TEE

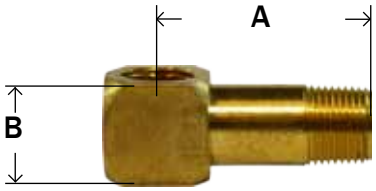


Part #	Thread size NPTF	A	B	Body Width	Approx. Wt. Lbs.	
28-290	1/8”	0.75	0.75	0.43	0.06	----
28-291	1/4”	0.86	0.86	0.43	0.08	----
28-292	3/8”	1.09	1.09	0.60	0.16	----
28-293	1/2”	1.22	1.22	0.68	0.22	----
28-294	3/4”	1.43	1.43	0.87	0.38	----

T12 M101

LONG STREET ELLS

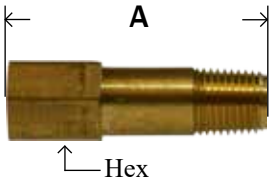
D.O.T. Approved



Part #	Thread size NPTF	A	B	Approx. Wt. Lbs.	
28-440	1/8”	1-3/16”	0.50	0.06	----
28-441	1/8”	1-7/16”	0.50	0.06	----
28-442	1/8”	1-11/16”	0.50	0.06	----
28-443	1/8”	1-7/8”	0.50	0.16	----
28-328	1/4”	1-3/16”	0.75	0.12	----
28-329	1/4”	1-7/16”	0.75	0.14	----
28-330	1/4”	1-11/16”	0.75	0.15	----
28-331	1/4"	1-7/8"	0.62	0.09	----
28-332	1/4”	2-1/4”	0.75	0.17	----
28-333	3/8”	1-3/4”	0.87	0.22	----

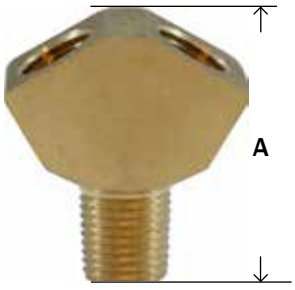
LONG EXTENSION ADAPTERS

D.O.T. Approved

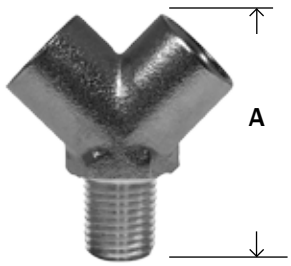


Part #	Thread size NPTF	A	Hex	Approx. Wt. Lbs.	
28-335	1/8”	1-1/4”	0.50	0.04	----
28-336	1/8”	1-3/4”	0.50	0.05	----
28-337	1/8”	3”	0.50	0.09	----
28-338	1/4”	1-9/16”	0.62	0.07	----
28-339	1/4”	1-13/16”	0.62	0.08	----
28-340	1/4”	2-1/16”	0.62	0.10	----

PIPE WYE FIP x MIP



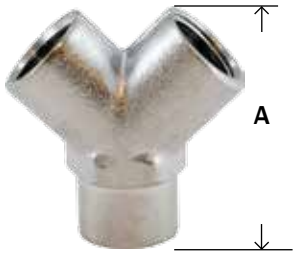
28-295



28-296

Part #	Thread Size NPT	A	Approx. Wt. Lbs.	
28-295	1/4"	1.56	.15	----
28-296	1/4 N/P	1.4	.12	----

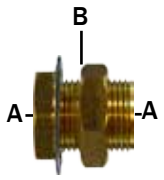
PIPE WYE FIP x FIP - NICKEL PLATED



Part #	Thread Size NPT	A	Approx. Wt. Lbs.	
28-298	1/4	1.4	.12	----

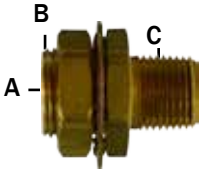
BULKHEAD / ANCHOR / FRAME COUPLINGS

FEMALE PIPE X FEMALE PIPE



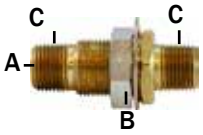
Part #	Terminal Bolts/ Frame A	B	Hole Size	Length (in.)	
28-299	1/8-27 NPTF	5/8-18 UNS	5/8	0.96	----
28-300	1/8-27 NPTF	5/8-18 UNS	5/8	1-1/2	----
28-301	1/4-18 NPTF	3/4-16 UNS	3/4	15/16	----
28-302	1/4-18 NPTF	3/4-16 UNS	3/4	1-1/2	----
28-315*	1/4-18 NPTF	3/4-16 UNS	3/4	1-1/2	----
28-303	3/8-18 NPTF	1-14 UNS	1	1-5/16	----
28-304	1/2-14 NPTF	1-1/8-14 UNS	1-1/8	1-1/2	----
28-311	3/4-14 NPTF	1-5/16-12	1-5/16	1-1/2	----
28-316**	1-11/1/2	1-5/8-14	1-5/8	1.68	----

* Same as 28-302 except with a larger mounting nut. **Without washer



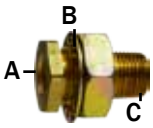
FEMALE PIPE X MALE PIPE

	A	B	C		
28-317	1/4-18 NPTF	1-14 UNS	1/2-14 NPTF	2-1/8	----
28-318	3/8-18 NPTF	1-14 UNS	1/2-14 NPTF	1-11/16	----
28-319	3/8-18 NPTF	1-14 UNS	1/2-14 NPTF	1-29/32	----



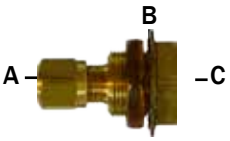
FEMALE PIPE X MALE PIPE

28-313	1/4-18 NPTF	1-14 UNS	1/2-14 NPTF	2-7/8	----



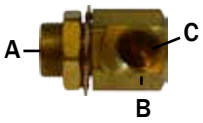
FEMALE PIPE X MALE PIPE

28-346	3/8-18 NPTF	1-14 UNS	1/2-14 NPTF	1-7/8	----
28-347	1/2-14 NPTF	1-14 UNS	1/2-14 NPTF	2-3/8	----



TUBE X FEMALE PIPE

28-321	1/2-O.D. Tube	7/8-20 UNCF	3/8-18 NPTF	1-5/16	----
28-322	3/8-O.D. Tube	7/8-20 UNCF	3/8-18 NPTF	1-3/8	----



FEMALE PIPE X CLAMPING STUD ELBOW

28-348	3/8-18 NPTF	7/8-20 UNEF	3/8-18 NPTF	2-5/16	----

BRASS MARINE BULKHEAD

46-540	5/16 Hose ID	----	----	2.37	----
46-541	3/8 Hose ID	----	----	2.37	----

CROSSOVER NUMBERS

28-300	207x2	129A-A	50004	55207								1495B-A	ACBH207-2	207ACBH-2					
28-301	207X4	129AS-B		55611		S611	114-44	1345	382-44S	392C-94			ACBHS207-4						
28-302	207X4	129A-B	50005	55661			114B-44	1344	382-44L		035081		ACBH207-4	207ACBH-4			11306		90648
28-303	207X6	129A-C	50006	55607		S661/S607	114-66	1346	382-66		035087		ACBH207-6	207ACBH-6			11307	17709	
28-304	207X8	129A-D	50007	55807		S807	114-88	1351					ACBH207-8	207ACBH-8					
28-317				55615		S615	117-84												
28-318				55620		S620			381-86S						11304				
28-319			50001				115-86				035079	1496-DC							
28-313			50010	55600		S664	115-88	1342	380-84	5730	035021				11300	55X6			
28-346			50013	55613		S613													
28-347			50012	55629		S629					035039								
28-321					391-86/1347	S608													
28-322					391-66	S609													
28-348				55616															

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

STEEL BULKHEAD FITTINGS

Part #	Terminal Bolts/ Frame A	B	C	Length (in.)	List
28-306	1/4-18 NPTF	3/4 - 16 UNS		0.94	----
28-307	1/4-18 NPTF	3/4 - 16 UNS		1.50	----
28-308	3/8-18 NPTF	1 - 14 UNS		1.31	----

FEMALE PIPE X MALE PIPE

28-309	1/4-18 NPTF	3/4 - 16 UNS	1/2-14 NPTF	2.16	----
28-310	1/4-18 NPTF	3/4 - 16 UNS	1/2-14 NPTF	2.53	----
28-345	1/4-18 NPTF	3/4 - 16 UNS	1/2-14 NPTF	2-5/32	----

FEMALE PIPE X MALE PIPE

28-325	1/4-18 NPTF	3/4 - 16 UNS	1/2-14 NPTF	1-11/16	----

28-312	1/4-18 NPTF	1-14 UNS	1/2-14 NPTF	2.94	----
28-320	1/4-18 NPTF	1-14 UNS	1/2-14 NPTF	3-15/16	----

STAINLESS STEEL BULKHEAD FITTINGS

- Temperature range: -20F°- 360F°
- Working pressure: 1450 - 2175PSI

BULKHEAD FITTINGS - STAINLESS STEEL 316L NPT (1/8-1/2")

Part #	Size	Hole Size	Hex	Length	
28300SS	1/8"	0.701	0.866	0.748	----
28301SS	1/4"	0.858	1.063	0.748	----
28303SS	3/8"	1.055	1.260	1.102	----
28304SS	1/2"	1.173	1.417	1.378	----

BULKHEAD FITTINGS - STAINLESS STEEL 316 NPT (3/4-2")

Part #	Size	Hole Size	Hex	Length	
63214	3/4"	1-5/8"	2-15/32"	1-13/16"	----
63215	1"	2-1/4"	3-1/16"	2-7/8"	----
63216	1-1/4"	2-1/4"	3-1/16"	2-3/8"	----
63217	1-1/2"	3"	4-1/4"	2-5/8"	----
63218	2"	3"	4-1/4"	2-5/8"	----

No act of kindness, no matter how small, is ever wasted. - Aesop

HOSE BARB FITTINGS

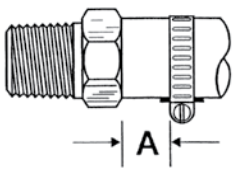
• Temperature and Working Pressure Ranges
From -40^{0}F to + 160^{0}F at 150 PSI maximum.

• Tolerance
+/- .02 on all dimensions. Dimension Data can change without notice. Please call us when dimensions are critical.

Note: These fittings are intended for use with hose clamp, similar type clamp or a crimped ferrule.

• Assembly Instructions

1- Cut hose cleanly and squarely to length.
2- Slide clamp on hose.
3- Lubricate hose. Push hose on fitting until hose bottoms against stop ring or hex.
4- Position hose clamp as shown below and secure with a screwdriver or wrench. Maintain "A" dimension noted below for proper clamp positioning.



• For Lead Free AB1953 Compliant Fittings
see pages 160--161
Other Barbs available

See page 292-295 for plastic hose barb fittings

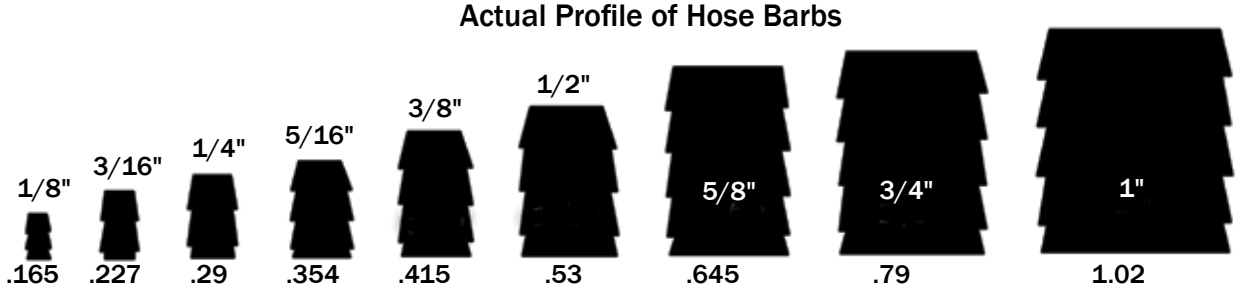
See page 27-28 for stainless steel hose barbs

See page 307 for King Nipples

Stainless Steel hose barbs for beverage service available -
See beverage fitting section, pg. 28-29

Hose Size	A
3/16"	1/4"
1/4"	1/4"
5/16"	1/4"
3/8"	1/8"
1/2"	1/8"
5/8"	1/8"
3/4"	1/8"

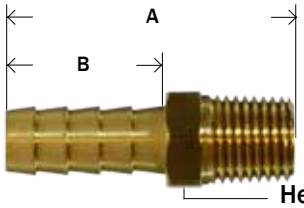
Actual Profile of Hose Barbs



WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

RIGID MALE ADAPTER

• These are not Lead Free



	Part #	Hose I.D. x Male NPTF	A	B	Hex	Approx. Wt. Lbs.	
NEW	32-950	1/16" x 10/32"	0.90	0.45	0.38	0.01	----
NEW	32-951	1/16" x 1/16"	0.91	0.48	0.38	0.01	----
NEW	32-912	1/8" x 10/32"	0.92	0.48	0.38	0.01	----
NEW	32-300	1/8" x 1/16"	0.93	0.48	0.38	0.01	----
	32-001 *	1/8” x 1/8”	1.19	0.69	0.43	0.02	----
	32-027	1/8” x 1/4”	1.16	0.46	0.56	0.02	----
NEW	32-952	3/16" x 1/16"	1.20	0.75	0.38	0.02	----
	32-002 *	3/16” x 1/8”	1.19	0.75	0.43	0.02	----
	32-003 *	3/16” x 1/4”	1.37	0.69	0.56	0.04	----
NEW	32-953	3/16" x 3/8"	1.44	0.69	0.68	0.04	----
	32-301	1/4” x 1/16”	1.44	0.88	0.43	0.02	----
	32-004 *	1/4” x 1/8”	1.47	0.97	0.43	0.02	----
	32-005 *	1/4” x 1/4”	1.72	0.97	0.56	0.04	----
	32-006 *	1/4” x 3/8”	1.72	0.97	0.68	0.05	----
	32-007	1/4” x 1/2”	1.72	0.81	0.87	0.10	----
NEW	32-954	1/4" x 3/4"	1.86	0.96	1.06	0.15	----
	32-008 *	5/16” x 1/8”	1.47	0.97	0.43	0.02	----
	32-009 *	5/16” x 1/4”	1.72	0.97	0.56	0.04	----
	32-010 *	5/16” x 3/8”	1.76	0.97	0.68	0.06	----
	32-390	5/16” x 1/2”	1.88	0.95	0.87	0.10	----
NEW	32-955	5/16" x 3/4"	1.95	0.95	1.06	0.15	----
	32-011 *	3/8” x 1/8”	1.53	0.97	0.56	0.03	----
	32-012 *	3/8” x 1/4”	1.75	0.97	0.56	0.05	----
	32-013 *	3/8” x 3/8”	1.72	0.96	0.68	0.06	----
	32-014 *	3/8” x 1/2”	1.87	0.97	0.87	0.09	----
	32-026 *	3/8” x 3/4”	1.97	0.97	1.06	0.16	----
NEW	32-956	7/16" x 1/4"	1.75	0.97	0.56	0.05	----
NEW	32-957	7/16" x 3/8"	1.73	0.97	0.70	0.07	----
NEW	32-958	7/16" x 1/2"	1.87	0.97	0.88	0.10	----
	32-302	1/2” x 1/8”	1.57	0.95	0.56	0.06	----
	32-015 *	1/2” x 1/4”	1.72	0.97	0.56	0.04	----
	32-016 *	1/2” x 3/8”	1.76	0.97	0.68	0.07	----
	32-017 *	1/2” x 1/2”	1.87	0.96	0.87	0.11	----
	32-018 *	1/2” x 3/4”	1.94	0.97	1.06	0.16	----
	32-303	1/2” x 1”	2.31	0.99	1.37	0.33	----
	32-304	5/8” x 1/4”	1.67	0.92	0.68	0.06	----
	32-019 *	5/8” x 3/8”	1.76	0.97	0.68	0.08	----
	32-020 *	5/8” x 1/2”	1.87	0.96	0.87	0.11	----
	32-021 *	5/8” x 3/4”	1.87	0.96	1.06	0.14	----
	32-305	5/8” x 1”	2.31	0.96	1.37	0.36	----
NEW	32-915	3/4" x 1/4"	1.64	0.87	0.81	0.11	----
	32-306	3/4” x 3/8”	1.65	0.87	0.81	0.12	----
	32-022 *	3/4” x 1/2”	1.87	0.96	0.87	0.14	----
	32-023 *	3/4” x 3/4”	1.87	0.96	1.06	0.15	----
	32-316	3/4” x 1”	2.55	1.15	1.37	0.38	----
	32-307	1” x 1/2”	1.80	0.87	1.06	0.18	----
	32-024 *	1” x 3/4”	2.19	1.19	1.06	0.32	----
	32-025 *	1” x 1”	2.48	1.19	1.37	0.39	----
	32-029	1-1/4" x 3/4"	2.37	1.19	1.37	0.35	----
	32-028	1-1/4” x 1”	2.55	1.19	1.37	0.46	----

* See page 27 for stainless steel.

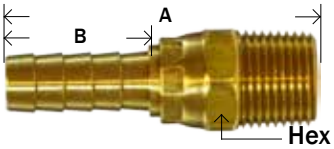
See page 28 for beverage #303 stainless fittings

HOSE BARB

BRASS RIGID MALE BSPT BARB ADAPTER

Part #	Hose I.D. x MALE BSPT	
32-450	1/4" x 1/8"	----
32-451	1/4" x 1/4"	----
32-452	3/8" x 1/4"	----
32-453	3/8" x 3/8"	----
32-454	3/8" x 1/2"	----
32-455	1/2" x 3/8"	----
32-456	1/2" x 1/2"	----
32-457	3/4" x 3/4"	----
32-458	1" x 1"	----

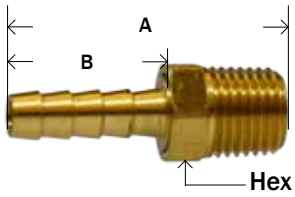
SWIVEL MALE ADAPTER



Rotation 360°

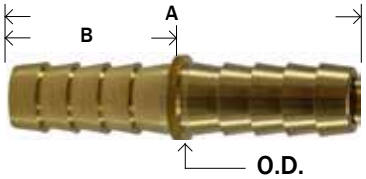
Part #	Hose I.D. x Male NPTF	A	B	Hex	Approx. Wt. Lbs.	
32-329	3/16" x 1/8"	2.00	0.78	0.56	0.06	----
32-331	3/16" x 1/4"	1.95	0.78	0.56	0.06	----
32-332	1/4" x 1/8"	2.19	0.97	0.56	0.06	----
32-349	1/4" x 1/4"	2.12	0.97	0.56	0.06	----
32-351	3/8" x 1/8"	2.12	0.97	0.56	0.07	----
32-201	3/8" x 1/4"	2.12	0.97	0.56	0.07	----
32-360	3/8" x 3/8"	2.12	0.97	0.69	0.08	----
32-355	1/2" x 3/8"	2.12	0.97	0.68	0.10	----
32-356	1/2" x 1/2"	2.33	0.97	0.87	0.14	----
32-357	3/4" x 3/4"	2.33	0.97	1.06	0.20	----
32-386	1" x 1"	2.88	1.19	1.38	0.40	----

SMS 103



Part #	Hose I.D. x Male NPTF	A	B	Hex	Approx. Wt. Lbs.	
32-200	1/4" x 1/4"	1.65	.89	0.56	0.04	----
32-202	3/8" x 3/8"	1.75	1.00	0.68	0.08	----

MENDER/ SPLICER



	Part #	Hose I.D. x Hose I.D.	A	B	O.D.	Approx. Wt. Lbs.	
	32-091 *	1/8"	0.98	0.45	0.31	0.01	----
	32-092	3/16"	1.62	0.77	0.36	0.02	----
	32-093 *	1/4"	2.00	0.96	0.37	0.02	----
	32-079 *	1/4" x 1/8"	1.50	0.97	0.37	0.02	----
	32-094 *	5/16"	2.00	0.96	0.39	0.02	----
	32-090 *	5/16" x 1/4"	2.00	0.97	0.50	0.03	----
	32-095 *	3/8"	2.00	0.97	0.51	0.04	----
NEW	32-960	3/8 x 1/8	1.58	1.00	0.50	0.03	----
NEW	32-961	3/8 x 3/16	1.75	1.00	0.50	0.03	----
	32-080 **	3/8" x 1/4"	2.06	0.97	0.56	0.03	----
	32-375 *	3/8" x 5/16"	2.00	0.97	0.50	0.03	----
	32-096 *	1/2"	2.00	0.96	0.62	0.06	----
	32-087 *	1/2" x 3/8"	2.06	0.97	0.71	0.06	----
	32-097	5/8"	2.05	0.96	0.75	0.08	----
	32-088	5/8" x 3/8"	2.06	0.97	0.75	0.06	----
	32-376	5/8" x 1/2"	2.06	0.97	0.75	0.07	----
	32-098 *	3/4"	2.50	1.15	0.87	0.10	----
	32-089	3/4" x 1/2"	2.28	1.19	0.87	0.10	----
	32-379	3/4" x 5/8"	2.02	0.96	0.87	0.10	----
	32-380	1" x 3/4"	2.58	1.19	1.12	0.18	----
	32-099	1"	3.00	1.44	1.02	0.23	----

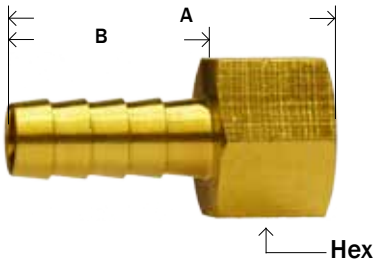
* Add SS to the end of the part number for Stainless.

** See hose splicers on page 27 for Stainless.

MSB 122HBL HM 129 178 73 108

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

RIGID FEMALE ADAPTER



	Part #	Hose I.D. x Female NPTF	A	B	Hex	Approx. Wt. Lbs.	
	32-050	1/8” x 1/8”	0.96	0.46	0.50	0.02	----
	32-317	1/8” x 1/4”	1.15	0.46	0.62	0.04	----
	32-051	3/16” x 1/8”	1.10	0.68	0.50	0.02	----
	32-062	3/16” x 1/4”	1.44	0.75	0.62	0.04	----
	32-052	1/4” x 1/8”	1.35	0.93	0.50	0.02	----
	32-053	1/4” x 1/4”	1.60	0.97	0.62	0.06	----
	32-054	1/4” x 3/8”	1.65	1.03	0.75	0.04	----
	32-441	1/4" x 1/2"	1.66	0.97	0.93	0.08	----
	32-055	5/16” x 1/8”	1.47	0.97	0.56	0.04	----
	32-056	5/16” x 1/4”	1.66	0.97	0.62	0.04	----
	32-318	5/16” x 3/8”	1.66	0.97	0.75	0.06	----
	32-320	5/16” x 1/2”	1.67	0.96	0.93	0.08	----
	32-057	3/8” x 1/8”	1.47	0.97	0.56	0.04	----
	32-058	3/8” x 1/4”	1.61	0.97	0.62	0.06	----
	32-059	3/8” x 3/8”	1.63	1.00	0.81	0.08	----
	32-063	3/8” x 1/2”	1.72	0.94	0.93	0.12	----
	32-442	3/8" x 3/4"	1.97	0.97	1.18	0.20	----
NEW	32-449	1/2" x 1/8"	1.51	0.98	0.56	0.06	----
	32-064	1/2” x 1/4”	1.66	0.96	0.62	0.08	----
	32-060	1/2” x 3/8”	1.66	0.97	0.75	0.08	----
	32-061	1/2” x 1/2”	1.76	0.96	0.93	0.12	----
	32-443	1/2" x 3/4"	1.97	0.97	1.18	0.26	----
	32-444	5/8" x 3/8"	1.66	0.97	0.75	0.08	----
	32-445	5/8" x 1/2"	1.66	0.97	0.93	0.10	----
	32-446	5/8" x 3/4"	1.97	0.97	1.18	0.21	----
	32-447	3/4" x 1/2"	1.88	1.19	0.93	0.13	----
	32-065	3/4” x 3/4”	2.19	1.21	1.18	0.22	----
	32-049	1” x 3/4”	2.19	1.19	1.18	0.26	----
	32-321	1" x 1"	2.32	1.19	1.44	0.35	----
	32-448	1-1/4" x 1"	2.32	1.19	1.43	0.44	----

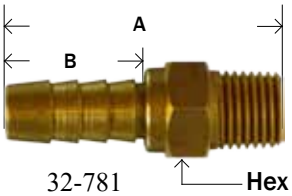
209A 128 29A 29F 126HB 126 FPB 105B-2 KF-RS 104 144

SWIVEL FEMALE ADAPTER NPTF

Part #	Hose I.D. x Female NPTF	A	B	Hex	Approx. Wt. Lbs.	
32-470	1/4" x 1/4"	1.80	0.97	0.62	0.06	----
32-472	3/8" x 1/4"	1.80	0.97	0.62	0.06	----
32-473	3/8" x 3/8"	1.82	0.97	0.75	0.09	----
32-475	1/2" x 3/8"	1.82	0.97	0.75	0.09	----
32-476	1/2" x 1/2"	1.86	0.97	0.93	0.14	----

HIGH VOLUME MALE SWIVEL

• 300 PSI • Nitrile Buna (NBR) O-Ring



32-781

28-415

Part #	Hose I.D. x Male NPTF	A	B	Hex	Approx. Wt. Lbs.	
32-781	3/8” x 1/4”	1.83	0.87	0.62	0.07	----
28-415	1/4" x 1/4"	1.30	0.94	0.81	0.14	----

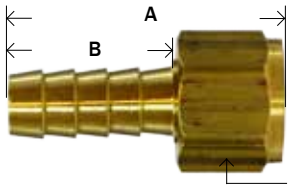
4065

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

SWIVEL FEMALE ADAPTER - With Gasket

• NPSM Thread

National Pipe Straight Gasket Seal Swivel

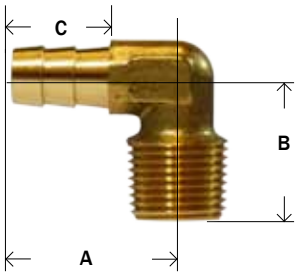


• Not recommend for water due to fiber gasket - for air service only.

Part #	Hose I.D. x Female NPSM	A	B	Hex	Approx. Wt. Lbs.	
32-131	1/8" x 1/8"	0.90	0.46	0.50	0.02	----
32-132	3/16" x 1/8"	1.19	0.75	0.50	0.03	----
32-133	3/16" x 1/4"	1.28	0.75	0.62	0.04	----
32-120	1/4” x 1/8”	1.41	0.97	0.50	0.02	----
32-121	1/4” x 1/4”	1.50	0.97	0.62	0.02	----
32-129	1/4” x 3/8”	1.63	0.97	0.75	0.04	----
32-130	5/16” x 1/4”	1.50	0.97	0.62	0.04	----
32-122	3/8” x 1/4”	1.54	1.00	0.62	0.06	----
32-123	3/8” x 3/8”	1.60	0.97	0.75	0.06	----
32-354	3/8” x 1/2”	1.66	0.97	0.93	0.10	----
32-124	1/2” x 3/8”	1.60	0.97	0.75	0.08	----
32-125	1/2” x 1/2”	1.66	0.97	0.93	0.12	----
32-117	1/2” x 3/4”	1.82	1.19	1.18	0.16	----
32-118	5/8” x 3/4”	1.82	1.19	1.18	0.18	----
32-119	3/4” x 3/4”	1.82	1.19	1.18	0.14	----

130 126 29FSG KF-RN NPSM Gasket Seat

FORGED HOSE BARB 90° ELBOW



32-330
**Square Barstock Body

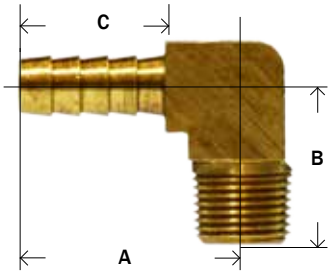
Part #	Hose I.D. x Male NPTF	A	B	C	Body Size	Approx. Wt. Lbs.	
32-308	3/16” x 1/8”	0.95	0.70	0.66	0.37	0.02	----
32-391	3/16” x 1/4”	1.00	0.84	0.63	0.46	0.10	----
32-038 *	1/4” x 1/8”	1.01	0.81	0.71	0.47	0.06	----
32-039 *	1/4” x 1/4”	1.01	0.87	0.63	0.47	0.06	----
32-309 **	1/4” x 3/8”	1.08	0.97	0.73	0.69	0.12	----
32-036	5/16” x 1/8”	1.01	0.81	0.63	0.47	0.04	----
32-040	5/16” x 1/4”	1.01	0.87	0.63	0.47	0.06	----
32-310	5/16” x 3/8”	1.06	0.94	0.63	0.50	0.06	----
32-046 *	3/8” x 1/8”	1.01	0.81	0.63	0.47	0.06	----
32-041 *	3/8” x 1/4”	1.02	0.88	0.65	0.47	0.06	----
32-042 *	3/8” x 3/8”	1.09	0.93	0.68	0.50	0.08	----
32-047 *	3/8” x 1/2”	1.11	1.09	0.63	0.59	0.10	----
32-048	1/2” x 1/4”	1.06	1.00	0.68	0.59	0.10	----
32-043 *	1/2” x 3/8”	1.06	1.09	0.69	0.59	0.10	----
32-311 *	1/2” x 1/2”	1.31	1.19	0.87	0.56	0.12	----
32-044	5/8” x 3/8”	1.12	1.06	0.61	0.56	0.12	----
32-045	5/8” x 1/2”	1.12	1.12	0.68	0.63	0.14	----
32-312	5/8” x 3/4”	1.46	1.26	0.93	1.06	0.32	----
32-313	3/4” x 1/2”	1.31	1.28	0.87	0.85	0.22	----
32-314 *	3/4” x 3/4”	1.46	1.26	0.91	1.06	0.32	----
32-330 **	3/4” x 1”	1.57	1.64	0.90	1.34	0.64	----
32-315	1” x 3/4”	1.60	1.40	0.95	1.06	0.32	----
32-319	1" x 1"	1.69	1.64	0.98	1.30	0.43	----

129 HBE1 KF-PS90 HE-1 29E 146

* Add SS to the end of the part number for Stainless. See page 27.

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

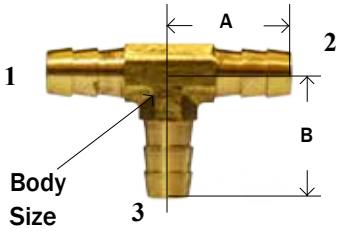
BARSTOCK HOSE BARB 90° ELBOW



	Part #	Hose I.D. x Male NPTF	A	B	C	Body Size	Approx. Wt. Lbs.	
	32-038B	1/4” X 1/8”	1.00	0.75	0.75	0.50	0.02	----
	32-039B	1/4” X 1/4”	1.02	0.91	0.74	0.56	0.04	----
NEW	32-309B	1/4" X 3/8"	1.19	0.84	0.76	0.58	0.09	----
NEW	32-036B	5/16" X 1/8"	1.06	0.66	0.76	0.44	0.04	----
NEW	32-040B	5/16" X 1/4"	1.12	0.84	0.76	0.58	0.07	----
NEW	32310B	5/16" X 3/8"	1.19	0.84	0.76	0.72	0.09	----
NEW	32046B	3/8" X 1/8"	1.32	0.94	0.97	0.58	0.06	----
	32-041B	3/8” X 1/4”	1.32	0.89	0.97	0.58	0.08	----
	32-042B	3/8” X 3/8”	1.50	1.06	0.97	0.75	0.14	----
NEW	32047B	3/8" X 1/2"	1.52	1.25	0.97	0.90	0.26	----
NEW	32048B	1/2" X 1/4"	1.53	1.06	0.97	0.72	0.12	----
	32-043B	1/2” X 3/8”	1.53	1.07	0.97	0.72	0.16	----
NEW	32311B	1/2" X 1/2"	1.53	1.25	0.97	0.90	0.26	----
NEW	32314B	3/4" X 3/4"	1.33	1.27	0.97	1.10	0.32	----

129HB

HOSE BARB TEES

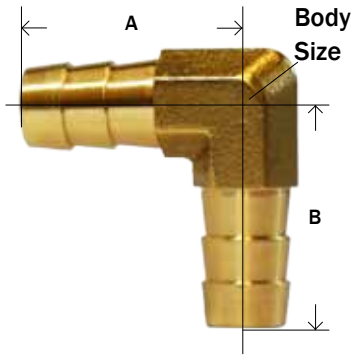


32-128

Part #	Hose Barb Size (1 & 2) x 3	A	B	Body Size	Approx. Wt. Lbs.	
32-367 *	1/8”	0.84	0.83	0.25	0.02	----
32-368	3/16"	1.02	1.02	0.37	0.03	----
32-365 **	1/4”	1.00	1.00	0.44	0.06	----
32-350 *	(1/4") x 1/8"	0.94	0.94	0.44	0.04	----
32-366	5/16”	1.00	1.00	0.44	0.06	----
32-126 **	3/8”	1.01	1.01	0.43	0.06	----
32-400 *	1/2”	1.02	1.00	0.43	0.08	----
32-352 *	(1/2") x 3/8"	1.26	1.26	0.43	0.10	----
32-361	5/8"	1.26	1.26	0.75	0.16	----
32-363	3/4"	1.45	1.45	0.90	0.18	----
32-353	(3/4") x 1/2"	1.41	1.41	0.88	0.23	----
32-128 *	3/8”HB x 1/4” MIP	1.00	0.94	0.43	0.06	----

* Add SS to the end of the part number for Stainless.
** See page 29 for stainless steel.

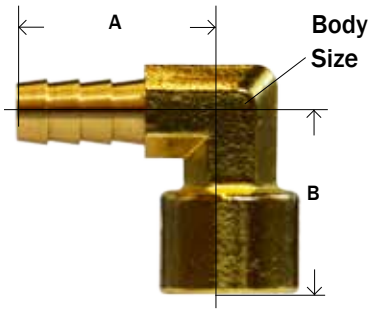
90° HOSE BARB ELBOW



Part #	Hose I.D. x Hose I.D.	A	B	Body Size	Approx. Wt. Lbs.	
32-429	1/8" x 1/8"	0.55	0.55	0.37	0.03	----
32-433	3/16" x 3/16"	0.90	0.90	0.37	0.03	----
32-412	1/4” x 1/8”	1.02	1.02	0.44	0.04	----
32-413 *	1/4” x 1/4”	1.01	1.01	0.44	0.04	----
32-425	5/16" x 5/16"	1.15	1.15	0.48	0.05	----
32-414	3/8” x 1/8”	1.01	1.01	0.44	0.04	----
32-415	3/8” x 1/4”	1.00	1.00	0.44	0.04	----
32-416 *	3/8” x 3/8”	1.02	1.02	0.44	0.04	----
32-417	3/8” x 1/2”	1.24	1.10	0.50	0.06	----
32-418	1/2” x 1/4”	1.24	1.08	0.50	0.06	----
32-419	1/2” x 3/8”	1.22	1.09	0.50	0.06	----
32-420 *	1/2” x 1/2”	1.24	1.24	0.50	0.06	----
32-434	5/8" x 5/8"	1.20	1.20	0.75	0.16	----
32-435	3/4" x 1/2"	1.41	1.41	0.88	0.21	----
32-436	3/4" x 3/4"	1.41	1.41	0.88	0.21	----

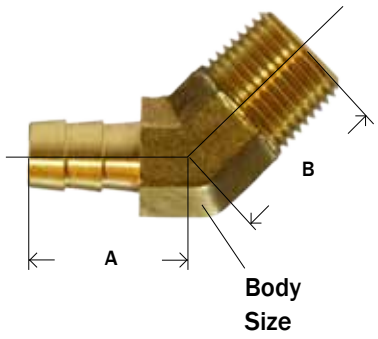
* Add SS to the end of the part number for Stainless.

90° FEMALE HOSE BARB ELBOW



Part #	Hose I.D. x Female NPTF	A	B	Body Size	Approx. Wt. Lbs.	
32-401	1/4” x 1/8”	1.01	0.82	0.47	0.06	----
32-402	1/4” x 1/4”	1.13	0.91	0.56	0.10	----
32-403	3/8” x 1/8”	1.01	0.82	0.47	0.06	----
32-404	3/8” x 1/4”	1.15	0.91	0.56	0.10	----
32-405	3/8” x 3/8”	1.15	1.11	0.68	0.14	----
32-406	3/8” x 1/2”	1.26	1.39	0.75	0.20	----
32-407	1/2” x 1/4”	1.26	0.91	0.56	0.10	----
32-410	1/2” x 3/8”	1.24	1.11	0.68	0.14	----
32-411	1/2” x 1/2”	1.37	1.39	0.75	0.20	----
32-409	3/4" x 3/4"	1.52	1.75	0.81	0.50	----

45° ELBOW



Part #	Hose I.D. x Male NPTF	A	B	Body Size	Approx. Wt. Lbs.	
32-110	1/4” x 1/8”	0.91	0.62	0.53	0.04	----
32-109*	1/4” x 1/4”	1.00	0.62	0.57	0.06	----
32-111	3/8” x 1/8”	0.83	0.66	0.53	0.04	----
32-112	3/8” x 1/4”	0.82	0.84	0.53	0.06	----
32-113	3/8” x 3/8”	0.93	0.87	0.59	0.08	----
32-346	1/2” x 1/4”	1.00	0.84	0.59	0.08	----
32-114	1/2” x 3/8”	1.00	0.88	0.59	0.08	----
32-116	1/2" x 1/2"	1.15	0.94	0.59	0.12	----
32-115	5/8” x 3/8”	0.97	0.88	0.59	0.10	----
32-345	3/4" x 1/2"	1.15	0.94	0.81	0.13	----

* Barstock

140 HE145 139HB KF-PS45 13945

CROSSES

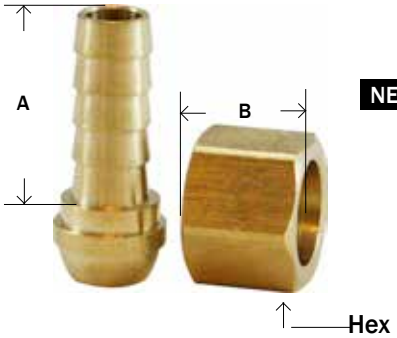
Part #	Hose ID	
32-608	1/4	----
32-609	5/16	----
32-610	3/8	----

HOSE WYES AVAILABLE WITH EXTENDED LEAD TIME.

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

BALL END SWIVEL

NPSM - Ball seat type



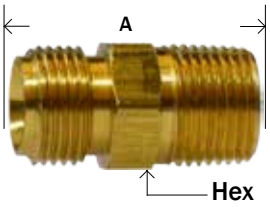
NEW

Part #	Hose I.D. x NPSM	A	B	Hex	Approx. Wt. Lbs.	
32-066	1/8" x 1/8"	0.46	0.44	0.50	0.03	----
32-067	3/16" x 1/8"	0.75	0.44	0.50	0.03	----
32-068	3/16" x 1/4"	0.75	0.52	0.62	0.04	----
32-962	3/16" x 3/8"	0.75	0.63	0.75	0.05	----
32-069	1/4" x 1/8"	0.97	0.44	0.50	0.04	----
32-070	1/4" x 1/4"	0.97	0.53	0.62	0.06	----
32-078	1/4" x 3/8"	0.97	0.63	0.75	0.06	----
32-071	5/16" x 1/4"	0.97	0.52	0.62	0.05	----
32-389	5/16" x 3/8"	0.97	0.63	0.75	0.07	----
32-072	3/8" x 1/4"	0.97	0.53	0.62	0.06	----
32-073	3/8" x 3/8"	0.97	0.59	0.75	0.08	----
32-074	3/8" x 1/2"	0.97	0.69	0.94	0.14	----
32-075	1/2" x 3/8"	0.97	0.59	0.75	0.08	----
32-076	1/2" x 1/2"	0.97	0.69	0.94	0.10	----
32-077	3/4" x 3/4"	0.97	0.70	1.12	0.14	----

128HBLSV 29FS 209AS 124 131

BALLSEAT MALE ADAPTER

Beveled seat

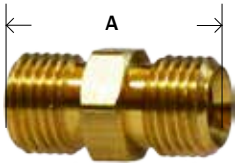


30° Seat

Part #	NPSM x Male NPTF	A	Hex	Approx. Wt. Lbs.	
32-359	1/8" x 1/8"	0.94	0.43	0.03	----
32-034	1/4" x 1/8"	1.06	0.56	0.04	----
32-030	1/4" x 1/4"	1.25	0.56	0.06	----
32-362	3/8" x 1/4"	1.28	0.68	0.08	----
32-031	3/8" x 3/8"	1.30	0.68	0.08	----
32-392	3/8" x 1/2"	1.47	0.88	0.13	----
32-364	1/2" x 3/8"	1.35	0.87	0.10	----
32-032	1/2" x 1/2"	1.53	0.87	0.14	----
32-033	3/4" x 3/4"	1.53	1.06	0.20	----

172 134 127HB 122AS

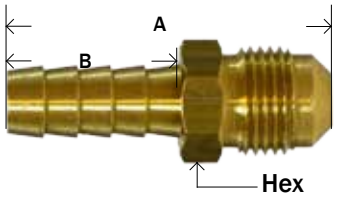
BALLSEAT UNION



30° Seat

Part #	NPSM x NPSM	A	Hex	Approx. Wt. Lbs.	
32-460	1/8"	0.79	0.43	0.02	----
32-461	1/4"	1.09	0.56	0.04	----
32-462	3/8"	1.19	0.68	0.07	----
32-463	1/2"	1.31	0.87	0.10	----

45° FLARE ADAPTER



Part #	Hose I.D. x 45° Flare	Thread	A	B	Hex	Approx. Wt. Lbs.	
32-322	3/16" x 1/4"	7/16-20	1.5	0.75	0.43	0.03	----
32-081 *	1/4" x 1/4"	7/16-20	1.72	0.97	0.43	0.03	----
32-082 *	1/4" x 3/8"	5/8-18	1.82	0.97	0.62	0.07	----
32-083	5/16" x 5/16"	1/2-20	1.75	0.97	0.50	0.08	----
32-084 *	3/8" x 3/8"	5/8-18	1.82	0.97	0.62	0.08	----
32-085	3/8" x 1/2"	3/4-16	1.97	0.97	0.75	0.10	----
32-086	1/2" x 1/2"	3/4-16	1.97	0.97	0.75	0.10	----

* Add SS to the end of the part number for Stainless.

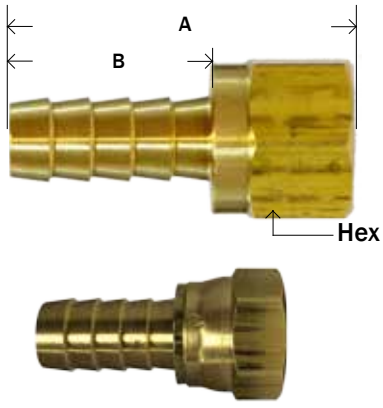
142 201BF KF-MS KDS

COMPRESSION ADAPTER - BARB X MALE COMPRESSION THREAD

NEW

Part #	Size	
18-534	1/4" x 1/4"	

DUAL 45°/ 37° FLARE SWIVEL



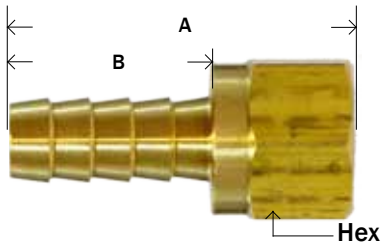
CRIMP STYLE

Part #	Hose ID x Dual Seat	Thread	A	B	Hex	Approx. Wt. Lbs.	
32-107	3/16” x 1/4”	7/16-20	1.34	0.75	0.56	0.04	----
32-107C**	3/16 X 1/4	7/16-20	1.42	0.78	0.56	0.04	----
32-337	1/4” x 1/4”	7/16-20	1.56	0.97	0.56	0.04	----
32-337C**	1/4" X 1/4"	7/16-20	1.60	0.97	0.56	0.04	----
32-102	1/4” x 5/16”	1/2-20	1.61	0.97	0.62	0.06	----
32-339	5/16” x 5/16”	1/2-20	1.60	0.97	0.62	0.06	----
32-340	3/8” x 1/2”	3/4-16	1.68	0.97	0.87	0.10	----
32-341	1/2” x 1/2”	3/4-16	1.68	0.97	0.87	0.10	----
32-341C**	1/2" X 1/2"	3/4-16	1.75	0.97	0.87	0.09	----
32-342	1/2” x 5/8”	7/8-14	1.76	0.97	1.00	0.12	----
32-394**	5/8" x 5/8"	7/8-14	1.83	0.97	1.00	0.14	----

** Swivel crimp style

KDS

FEMALE 45° FLARE SWIVEL



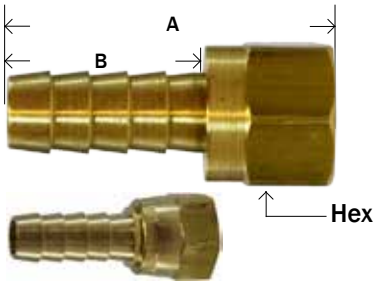
CRIMP STYLE

Part #	Hose I.D. x Female 45° Flare	UNF Thread	A	B	Hex	Approx. Wt. Lbs.	
32-326	3/16” x 3/16”	3/8-24	1.19	0.75	0.43	0.04	----
30-295**	3/16" x 3/8"	5/8-18	1.82	0.90	0.75	0.04	----
32-101	1/4” x 1/4”	7/16-20	1.57	0.97	0.56	0.04	----
32-103	1/4” x 3/8”	5/8-18	1.64	0.97	0.75	0.08	----
32-104	5/16” x 5/16”	1/2-20	1.61	0.97	0.62	0.05	----
32-327	5/16” x 3/8”	5/8-18	1.67	0.97	0.75	0.08	----
32-105	3/8” x 3/8”	5/8-18	1.64	0.97	0.75	0.08	----
32-105C**	3/8" x 3/8"	5/8-18	1.71	0.97	0.75	0.07	----
32-106	3/8” x 1/2”	3/4-16	1.81	0.97	0.87	0.10	----
32-100	1/2” x 1/2”	3/4-16	1.68	0.97	0.87	0.12	----
32-328	3/4" x 3/4"	1-1/16-14	2.00	0.97	1.25	0.20	----

29SAE 209ASF 146HBLFSV KF-NS 128 FSS 146 144

** Swivel crimp style (crimped on the outside of fitting)

FEMALE 37° J.I.C. FLARE SWIVEL



CRIMP STYLE

STAINLESS STEEL

32338SS

Part #	Hose ID x Female 37° Flare	Thread	A	B	Hex	Approx. Wt. Lbs.	
32-334	1/4” x 3/8”	9/16-18	1.60	0.97	0.68	0.06	----
32-335	5/16” x 3/8”	9/16-18	1.60	0.97	0.68	0.06	----
32-336	3/8” x 3/8”	9/16-18	1.60	0.97	0.68	0.10	----
32-336C**	3/8" X 3/8"	9/16-18	1.66	0.97	0.68	0.06	----
32-338*	3/4" x 3/4"	1-1/16-12	2.00	0.97	1.25	0.20	----
32-338SS	3/4" x 3/4"	1-1/16-12	2.00	0.97	1.25	0.24	----
32-338C	3/4" x 3/4"	1-1/16-12	2.13	1.19	1.25	0.20	----
32-397**	1" x 1"	1-5/16-12	2.31	1.19	1.50	0.33	----

KJS

*Available in swivel crimp style - add a "C" at the end of the part # (100 piece minimum)

** Swivel crimp style

Put your heart, mind, and soul into even your smallest acts. This is the secret of success.

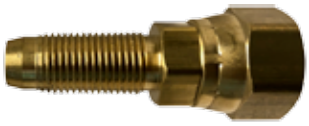
- Swami Sivananda

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

REUSABLE MALE FITTINGS

Part #	Hose ID	Hose OD	Male NPTF	
32-727	1/4"	1/2"	1/4"	----
32-728	1/4"	9/16"	1/4"	----
32-726	1/4"	5/8"	1/4"	----
32-741	5/16"	5/8"	1/4"	----
32-742	3/8"	5/8"	1/4"	----
32-744	3/8"	11/16"	1/4"	----
32-725	3/8"	3/4"	1/4"	----
32-747	3/8"	5/8"	3/8"	----
32-750	3/8"	11/16"	3/8"	----
32-746	1/2"	7/8"	1/2"	----

REUSABLE FEMALE SWIVEL STEMS



Part #	Hose ID	Female NPSM	
32-770	1/4"	1/4"-18	----
32-771	3/8"	3/8"-18	----

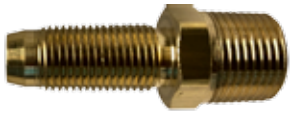
REUSABLE FEMALE SWIVELS

Part #	Hose ID	Hose OD	Female NPSM	
32-772	1/4"	1/2"	1/4"	----
32-773	3/8"	5/8"	3/8"	----
32-774	3/8"	11/16"	3/8"	----
32-775	1/2"	7/8"	1/2"	----

REUSABLE FERRULES

Part #	Hose ID	Hose OD	
32-749	1/4"	1/2"	----
32-751	1/4"	9/16"	----
32-752	1/4"	5/8"	----
32-753	3/8"	5/8"	----
32-754	3/8"	11/16"	----
32-755	3/8"	3/4"	----
32-756	1/2"	7/8"	----

REUSABLE MALE STEMS



Part #	Hose ID	Male NPT Thread	
32-758	1/4"	1/4"	----
32-759	3/8"	1/4"	----
32-760	3/8"	3/8"	----
32-761	1/2"	1/2"	----

Your work is going to fill a large part of your life, and the only way to be truly satisfied is to do what you believe is great work. And the only way to do great work is to love what you do. If you haven't found it yet, keep looking. Don't settle. As with all matters of the heart, you'll know when you find it.

– Steve Jobs

HOSE BARB

BRASS FUEL HOSE BARBS

Typical Application: Low pressure air, fuel and oil applications. Generally used for automotive, light truck, and small engine fuel lines. Use with fuel hose SAE 30R7 & SAE 30R9.

Advantages: Easy to assemble, just push the fitting into the hose & clamp. Good selection of configurations at reasonable cost.

MALE CONNECTOR

HOSE BARB X MALE PIPE

	Part #	Hose ID	MIP	Ind #	
	38-800	3/16	1/8	1541	----
	38-802	1/4	1/8	1537	----
	32-377	1/4	1/4	1581	----
	38-806	5/16	1/8	1551	----
	38-808	5/16	1/4	1555	----
	38-810	3/8	1/8	1565	----
	32-381	3/8	1/4	1564	----
	32-382	3/8	3/8	1566	----
NEW	32-383	1/2	3/8		----
NEW	32-384	1/2	1/2		----
	32-385	5/8	1/2	1431	----
	32-387	3/4	1/2	1430	----
NEW	32-388	3/4	3/4		----

68HB

BUBBLE BARB MALE ADAPTER

BUBBLE X MIP

Part #	Bubble x MIP	
32176	3/8 x 3/8	----
32177	1/2 x 1/4	----
32178	1/2 x 3/8	----
32179	1/2 x 1/2	----
32182	5/8 x 3/8	----
32183	5/8 x 1/2	----
32184	3/4 x 1/2	----
32180	3/4 x 3/4	----
32185	1 x 3/4	----
32181	1 x 1	----

INVERTED FLARE MALE CONNECTOR

HOSE BARB X INVERTED FLARE

Part #	Hose ID	Inv. Flare	Ind #	
38-828	5/16	1/4	1598	----
38-830	5/16	5/16	1560	----
38-832	5/16	3/8	1561	----
38-834	3/8	5/16	1568	----
38-836	3/8	3/8	1570	----

269HB

90° MALE ELBOW

HOSE BARB X MALE PIPE

Part #	Hose ID	MIP	Ind #	
38-860	1/4	1/8	1582	----
38-862	5/16	1/8	1556	----
38-864	5/16	1/4	1557	----
38-866	3/8	1/8	1572	----
38-868	3/8	1/4	1571	----

BUBBLE BARB

Part #	Hose ID	MIP	
32-186	3/8	3/8	----
32-194	1/2	1/4	----
32-187	1/2	3/8	----
32-191	1/2	1/2	----
32-195	5/8	1/4	----
32-188	5/8	3/8	----
32-189	5/8	1/2	----
32-190	3/4	1/2	----
32-192	3/4	3/4	----

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

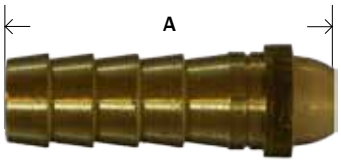
INVERTED FLARE MALE SWIVEL 90° ELBOW

HOSE BARB X TUBE O.D.

Part #	Hose ID	Inv. Flare	Ind #	
38-873	5/16	5/16	1405	----
38-874	3/8	3/8	1407	----

WELDED HOSE FITTINGS

STEM ONLY - WELDING HOSE CONNECTOR

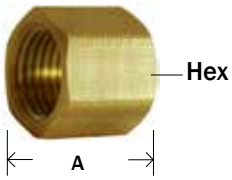


Part #	Hose I.D.	A	Approx. Wt. Lbs.	
30-410	3/16”	1.43	0.02	----
30-411	1/4”	1.43	0.02	----
30-413	3/8”	1.43	0.04	----

Assemble with nuts below.

201RWA WRS WLS

RIGHT HAND 9/16 - 18 FOR OXYGEN LINE - WELDING HOSE NUT

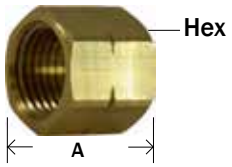


Part #	Size	A	Hex	Approx. Wt. Lbs.	
30-420	R.H. Nut only	0.63	0.68	0.04	----

Assemble with stem above.

201RWA WRS KF-PE 152

LEFT HAND 9/16 - 18 FOR ACETYLENE LINE - WELDING HOSE NUT

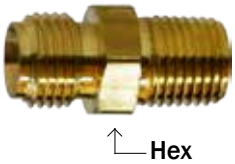


Part #	Size	A	Hex	Approx. Wt. Lbs.	
30-421	L.H. Nut only	0.63	0.68	0.04	----

Assemble with stem above.

209LWA WLS 154 KF-RE

RIGHT HAND 9/16 - 18 #122RWA - WELDING HOSE CONNECTOR

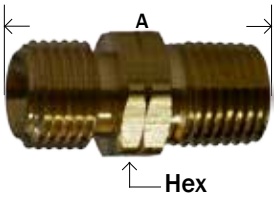


Part #	Size	A	Hex	Approx. Wt. Lbs.	
30-401	1/4”-18	1.30	0.62	0.06	----
32-437	3/8"-18	1.30	0.68	0.09	----
32-438*	9/16"-18	1.25	0.68	0.07	----

* Right UNF thread

156

LEFT HAND 9/16 - 18 #122LWA - WELDING HOSE CONNECTOR



Part #	Size	A	Hex	Approx. Wt. Lbs.	
30-406	1/4”-18	1.30	0.62	0.06	----
32-439	3/8"-18	1.30	0.68	0.09	----
32-440*	9/16"-18	1.25	0.68	0.07	----

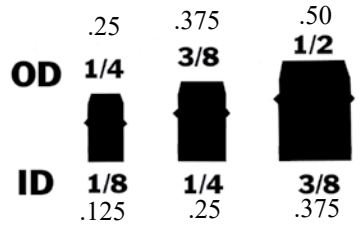
* Left UNF thread

158

BARBED FOR PLASTIC TUBING

BRASS BARBS FOR POLYETHYLENE TUBING

• Quick connecting fittings that do not require tube preparations for hand assembly. Inexpensive with excellent resistance to vibration.
• **All sizes are tube O.D. (I.D.)**



UNION

TUBE O.D. (TUBE I.D.) X TUBE O.D. (TUBE I.D.)

Part #	Size	
21-003	1/4(1/8) x 1/4(1/8)	----
21-007	3/8(1/4) x 1/4(1/8)	----
21-009	3/8(1/4) x 3/8(1/4)	----

1062 962

MALE ADAPTER

TUBE O.D. (TUBE I.D.) X MALE PIPE

Part #	Size	
21-021	1/4(1/8) x 1/16	----
21-023	1/4(1/8) x 1/8	----
21-025	1/4(1/8) x 1/4	----
21-027	3/8(1/4) x 1/8	----

1068 968 688

FEMALE ADAPTER

TUBE O.D. (TUBE I.D.) X FEMALE PIPE

Part #	Size	
21-043	1/4(1/8) x 1/8	----
21-046	3/8(1/4) x 1/4	----
21-049	1/2(3/8) x 3/8	----

1066 966 26 668

BULKHEAD UNION

TUBE O.D. (TUBE I.D.)

Part #	Size	
21-082	1/4(1/8)	----
21-083	3/8(1/4)	----
21-084	1/2(3/8)	----

1074

UNION ELBOW

1065
965

TUBE O.D (I.D.)

Part #	Size	
21-095	1/4(1/8)	----
21-097	3/8(1/4)	----
21-099	1/2(3/8)	----

MALE 90° ELBOW

TUBE O.D. (I.D.) X MALE PIPE

Part #	Size	
21-109	1/8" x 1/4-28"	----
21-111	1/4(1/8) x 1/16	----
21-113	1/4(1/8) x 1/8	----
21-115	1/4(1/8) x 1/4	----
21-117	3/8(1/4) x 1/8	----
21-119	3/8(1/4) x 1/4	----
21-121	1/2(3/8) x 3/8	----

1069 969 229

FEMALE 90° ELBOW

TUBE O.D. (I.D.) X FEMALE PIPE

Part #	Size	
21-133	1/4(1/8) x 1/8	----

1070 970 230

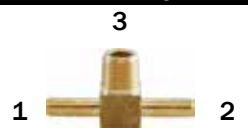
UNION TEE

O.D. (I.D.) X O.D. (I.D.) X O.D. (I.D.)

Part #	Size	
21-151	1/4(1/8)	----
21-153	3/8(1/4)X 3/8(1/4)X1/4(1/8)	----
21-155	3/8(1/4)	----
21-159	1/2(3/8)X1/2(3/8)X3/8(1/4)	----
21-161	1/2(3/8)	----

1064 964 224

MALE BRANCH TEE

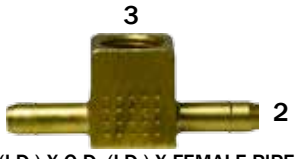


O.D. (I.D.) X O.D. (I.D.) X MALE PIPE

Part #	Size	
21-193	1/4(1/8) x 1/4(1/8) x 1/8	----
21-195	3/8(1/4) x 3/8(1/4) x 1/8	----
21-197	3/8(1/4) x 3/8(1/4) x 1/4	----

1072 972 232

FEMALE BRANCH TEE



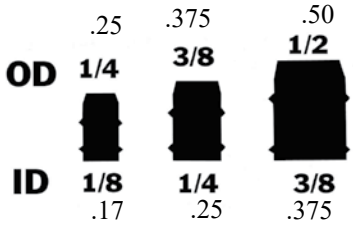
O.D. (I.D.) X O.D. (I.D.) X FEMALE PIPE

Part #	Size	
21-207	1/4(1/8) x 1/4(1/8) x 1/8	----

1077 978

TWO BARB FITTINGS

More Sizes Available - Please Ask!



MALE ADAPTER PIPE

TUBE O.D. (I.D.) X MALE PIPE

Part #	Size	
32-150	1/4(1/8) x 1/8	----
32-151	1/4(1/8) x 1/4	----
32-153	3/8(1/4) x 1/4	----

28

UNION TEE

Part #	Tube O.D. (I.D.)	
32-159	1/4(1/8 ID)	----
32-160	3/8(1/4 ID)	----

90° ELBOW

Part #	Tube O.D. (I.D.)	
32-170	1/4(1/8 ID)	----
32-171	3/8(1/4 ID)	----

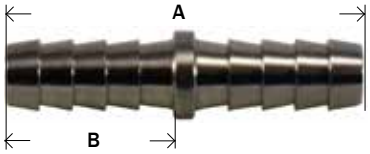
225

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

316 STAINLESS STEEL MACHINED RIGID MALE ADAPTER

Part #	Hose I.D. x NPT	
32-001SS	1/8" x 1/8"	----
32-002SS	3/16" x 1/8"	----
32-003SS	3/16" x 1/4"	----
32-004SS	1/4" x 1/8"	----
32-005SS	1/4" x 1/4"	----
32-006SS	1/4" x 3/8"	----
32-008SS	5/16" x 1/8"	----
32-009SS	5/16" x 1/4"	----
32-010SS	5/16" x 3/8"	----
32-011SS	3/8" x 1/8"	----
32-012SS	3/8" x 1/4"	----
32-013SS	3/8" x 3/8"	----
32-014SS	3/8" x 1/2"	----
32-015SS	1/2" x 1/4"	----
32-016SS	1/2" x 3/8"	----
32-017SS	1/2" x 1/2"	----
32-018SS	1/2" x 3/4"	----
32-019SS	5/8" x 3/8"	----
32-020SS	5/8" x 1/2"	----
32-021SS	5/8" x 3/4"	----
32-022SS	3/4" x 1/2"	----
32-023SS	3/4" x 3/4"	----
32-024SS	1" x 3/4"	----

316 STAINLESS STEEL SPLICER



Part #	Hose I.D. x Hose I.D.	A	B	
32-091SS	1/8"			----
32-093SS	1/4"	2.03	0.97	----
32-094SS	5/16"			----
32-095SS	3/8"	2.06	0.97	----
32-096SS	1/2"	2.06	0.97	----
32-098SS	3/4"	2.50	1.19	----

316 STAINLESS STEEL BARB ELBOW

Part #	Hose I.D. x NPT	
32-038SS	1/4 x 1/8	----
32-039SS	1/4 x 1/4	----
32-041SS	3/8 x 1/4	----
32-042SS	3/8 x 3/8	----
32-043SS	1/2" x 3/8"	----
32-311SS	1/2 x 1/2	----
32-314SS	3/4" x 3/4"	----

304 STAINLESS STEEL HOSE NIPPLES

• Cast

Part #	Hose I.D. x Male Pipe	
73-951	1/4"	----
73-952	3/8"	----
73-953	1/2"	----
73-954	3/4"	----
73-955	1"	----
73-956	1-1/4"	----
73-957	1-1/2"	----
73-958	2"	----
73-959	2-1/2"	----
73-960	3"	----

304 STAINLESS STEEL REDUCING HOSE NIPPLES

• Cast

Part #	Hose I.D. x Male Pipe	
73-970	1/4" X 1/8"	----
73-971	3/8" X 1/4"	----
73-972	1/2" X 3/8"	----
73-973	1/2" X 1/4"	----
73-974	3/4" X 1/2"	----
73-975	1" X 3/4"	----
73-976	1" X 1/2"	----
73-977	1-1/4" X 1"	----
73-979	1-1/2" X 1-1/4"	----
73-980	1-1/2" X 1"	----
73-981	2" X 1-1/2"	----
73-982	2" X 1-1/4"	----

316 STAINLESS STEEL HOSE NIPPLES

• Cast

Part #	Hose I.D. x Male Pipe	
973-951	1/4"	----
973-952	3/8"	----
973-953	1/2"	----
973-954	3/4"	----
973-955	1"	----
973-956	1-1/4"	----
973-957	1-1/2"	----
973-958	2"	----
973-959	2-1/2"	----
973-990	3"	----
973-991	4"	----

• See King nipples on page 312

BEVERAGE FITTINGS

STAINLESS STEEL

BARB TO MALE PIPE ADAPTER

HOSE ID x MALE NPT

Part #	Size	
34-587	1/4" x 1/8"	----
34-588	1/4" x 1/4"	----
34-589	1/4" x 3/8"	----
34-590	3/8" x 1/8"	----
34-591	3/8" x 1/4"	----
34-592	3/8" x 3/8"	----
34-595	3/8" x 1/2"	----
34-597	1/2" x 3/4"	----

BARB TO MALE FLARE ADAPTER

NEW

HOSE ID x 45° FLARE

Part #	Size	
34-579	1/4" x 1/4"	----
34-586	1/4" x 5/16"	----
34-584	1/4" x 3/8"	----
34-580	1/4" x 1/2-16"	----
34-583	3/8" x 1/4"	----
34-585	3/8" x 3/8"	----
34-581	3/8" x 1/2-16"	----

FEMALE FLARE SWIVEL SETS

NEW

Part #	Size	
34-501	1/4" x 1/4"	----
34-502	5/16" x 1/4"	----
34-504	3/8" x 3/8"	----

ONE PIECE SWIVEL BARB X FE. FL

NEW

Part #	Size	
34-510	3/8" x 1/4"	----

HOSE SPLICER (STRAIGHT)

ID HOSE

Part #	Size	
34-532	3/16"	----
34-533	1/4"	----
34-534	1/4" x 3/16"	----
34-536	5/16"	----
34-537	5/16" x 1/4"	----
34-535	3/8"	----
34-538	3/8" x 3/16"	----
34-543	3/8" x 1/4"	----
34-539	3/8" x 5/16"	----
34-540	1/2" x 3/8"	----

THINWALL SPLICERS

Part #	Size	
34-533T	1/4"	----
34-535T	3/8"	----
34-541T	1/2"	----
34-540T	1/2" x 3/8"	----
34-543T	3/8" x 1/4"	----

PLUG

Part #	Size	
34-572	1/4"	----
34-574	3/8"	----

THINWALL

Part #	Size	
34-572T	1/4"	----
34-574T	3/8"	----

BARB X COMPRESSION

Part #	Size	
34-625	1/4" x 3/8"	----
34-626	3/8" x 3/8"	----

PLATED BRASS SPLICERS

NEW

Part #	Size	
34-725	3/16"	----
34-726	1/4" x 3/16"	----
34-728	5/16"	----
34-727	5/16" x 3/16"	----

TAILPIECES

NEW

SS BARB X SWIVEL SHANK

Part #	Size	
34-711	3/16"	----
34-713	1/4"	----
34-715	5/16"	----
34-716	3/8"	----
34-717	1/2"	----

NEW

N/P BRASS

Part #	Size	
34-710	3/16"	----
34-712	1/4"	----
34-714	5/16"	----
34-716	3/8"	----
34-718	1/2"	----

NEW

#304 SS 90° ELBOW

Part #	Size	
34-720	3/16"	----
34-721	1/4"	----
34-722	5/16"	----
34-723	3/8"	----
34-724	1/2"	----

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

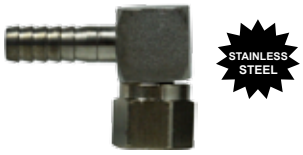
90° SWIVEL ELBOW

90° SWIVEL ELBOW

HOSE ID x FEMALE 45° FLARE

Part #	Size	
34-525	1/4" x 1/4"	----
34-526	3/8" x 1/4"	----
34-529	3/8" x 3/8"	----
34-531	1/2" x 1/2"	----

BARB TO SWIVEL ELBOW



HOSE ID x FEMALE 45° FLARE

Part #	Size	
34-600	1/4" x 1/4"	----
34-601	3/8" x 1/4"	----

MALE ELBOWS

HOSE ID x MALE NPTF

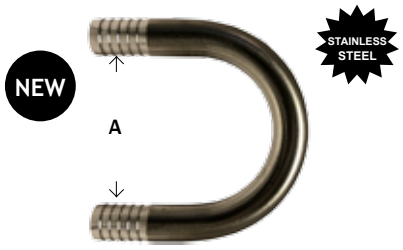
Part #	Size	
34-610	1/4" x 1/8"	----
34-611	3/8" x 1/4"	----
34-612	3/8" x 3/8"	----
34-613	1/2" x 1/2"	----

FEMALE ADAPTERS

BARB X FEMALE PIPE

Part #	Size	
34-661	1/4"	----
34-658	1/2"	----

U-BEND



Part #	Size	A	
34-633	3/8"	2	----

THINWALL U-BEND

Part #	Size	A	
34-633T	3/8"	1-1/2	----

U-BEND W/MANIFOLD

THINWALL

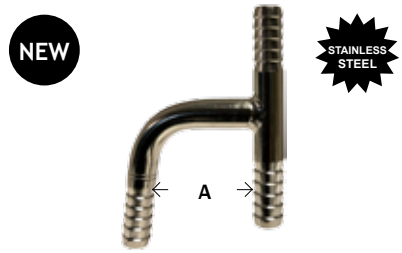
Part #	Size	
34-621T	1/4"	----
34622T	3/8"	----

CROSS

CROSS - THINWALL

Part #	Size	
34-635T	1/4"	----
34-638T	3/8"	----

Y TEES



THINWALL

Part #	Size	A	
34-650T	1/4"	1-1/8	----
34-652T	3/8"	1-1/4	----

BARB HOSE TEES

ID HOSE

Part #	Size	
34-561	1/8"	----
34-562	1/4"	----
34-565	5/16"	----
34-563	3/8"	----

REDUCING TEES

Part #	1&2	3	
34-567	1/4"	3/8"	----
34-568	3/8"	1/4"	----

THINWALL TEES

Part #	Size	
34-562T	1/4"	----
34-565T	5/16"	----
34-563T	3/8"	----
34-564T	1/2"	----

REDUCING THINWALL TEES

Part #	1&2	3	
34-567T	1/4"	3/8"	----
34-568T	3/8"	1/4"	----

90° BARB SPLICER

ID HOSE

Part #	Size	
34-551	1/4"	----
34-550	5/16"	----
34-552	3/8"	----

THINWALL 90° BARB SPLICERS

Part #	Size	
34-551T	1/4"	----
34-552T	3/8"	----
34-553T	1/2"	----

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

PUSH ON BARB FITTINGS

Typical Application: Low Pressure Air, Fuel, Lube, and Oil Lines

• Pressure determined by tube material and hardness.Our Parts have been tested to max 150 PSI.

Advantages: Easy assembly. No clamps needed!!

• Assembly Instructions

1- Lubricate insert.

2- Hold hose at angle as shown & push on and up over first barb.

3- Continue to push straight on until hose is seated under protective plastic cap. Keep hands back from hose end area so that hose can expand.

• Disassembling Instructions

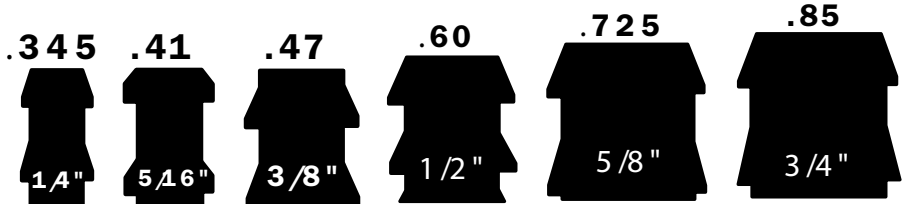
1- Split hose. Do not cut completely through hose. Sealing edge of barb could be damaged.

2- Bend hose and remove with a quick pull.

See lead free section for lead free push-on barb fittings.

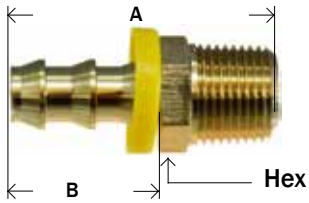
Stainless steel available at the end of this section.

Actual Profile of Push On Barbs



WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

MALE ADAPTER



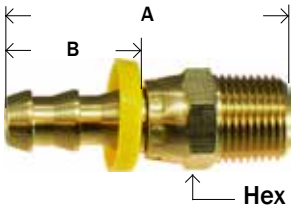
	Part #	Hose I.D. x Male NPTF	A	B	Hex	Approx. Wt. Lbs.	
	30-200 *	1/4” x 1/8”	1.43	0.87	0.50	0.04	----
	30-201 *	1/4” x 1/4”	1.66	0.87	0.56	0.06	----
	30-211	1/4” x 3/8”	1.66	0.87	0.68	0.06	----
NEW	30-208	1/4" x 1/2"	1.83	0.88	0.88	0.10	----
	30-212	5/16” x 1/8”	1.42	0.77	0.43	0.04	----
	30-213	5/16” x 1/4”	1.66	0.87	0.56	0.06	----
	30-202	3/8” x 1/8”	1.53	0.97	0.50	0.04	----
	30-203 *	3/8” x 1/4”	1.69	0.89	0.56	0.07	----
	30-204 *	3/8” x 3/8”	1.76	0.97	0.68	0.08	----
	30-205	3/8” x 1/2”	1.97	0.97	0.87	0.10	----
	30-392	3/8” x 3/4”	1.97	0.92	1.06	0.16	----
	30-216	1/2” x 1/4”	1.76	0.97	0.68	0.08	----
	30-206 *	1/2” x 3/8”	1.76	0.97	0.68	0.09	----
	30-207 *	1/2” x 1/2”	1.97	0.97	0.87	0.14	----
	30-217	1/2” x 3/4”	1.97	0.97	1.06	0.16	----
NEW	30-218	1/2" x 1"	2.29	0.97	1.37	0.34	----
	30-219	5/8” x 3/8”	2.34	1.50	0.75	0.12	----
	30-209	5/8” x 1/2”	2.45	1.45	0.87	0.16	----
	30-214	5/8” x 3/4”	2.45	1.45	1.06	0.18	----
	30-215 *	3/4” x 1/2”	2.45	1.45	0.87	0.21	----
	30-210 *	3/4” x 3/4”	2.45	1.45	1.06	0.20	----
	30-238	1” x 3/4”	2.93	1.50	1.25	0.43	----

• See page 161 for lead free

• See page 36 for Stainless

301 P990A HLM 100B-1 KA-MB 272 29PO 725 625 BPN 941 30182

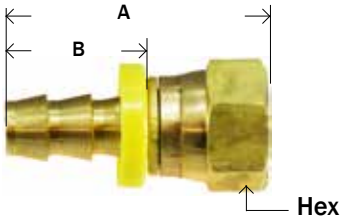
MALE SWIVEL



Part #	Hose I.D. x Male NPTF	A	B	Hex	Approx. Wt. Lbs.	
30-422	1/4" x 1/8"	2.07	0.87	0.56	0.06	----
30-385	1/4” x 1/4”	2.02	0.87	0.56	0.06	----
30-423	3/8" x 1/8"	2.12	0.97	0.56	0.07	----
30-386	3/8” x 1/4”	2.12	0.97	0.56	0.08	----
30-387	3/8” x 3/8”	2.12	0.97	0.68	0.08	----
30-388	1/2” x 3/8”	2.12	0.97	0.68	0.10	----
30-389	1/2” x 1/2”	2.33	0.97	0.87	0.14	----
30-424	5/8" x 1/2	2.80	1.45	0.88	0.18	----
30-390	3/4” x 3/4”	2.80	1.45	1.06	0.24	----

921 HMS 285 31382

FEMALE GASKET SEAL SWIVEL - NPSM



Part #	Hose I.D. x Gasket Swivel (NPSM)	A	B	Hex	Approx. Wt. Lbs.	
30-359	1/4” x 1/8”	1.39	0.77	0.50	0.03	----
30-358	1/4” x 1/4”	1.47	0.82	0.68	0.06	----
30-360	3/8” x 1/4”	1.61	1.00	0.68	0.06	----
30-361	3/8” x 3/8”	1.77	0.97	0.81	0.08	----
30-362	3/8” x 1/2”	1.80	0.92	0.93	0.09	----
30-363	1/2” x 1/2”	1.90	1.02	0.93	0.11	----
30-366	3/4” x 3/4”	2.36	1.55	1.18	0.32	----

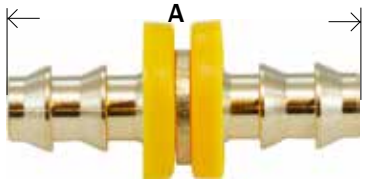
280

• Not recommend for water due to fiber gasket - for air service only.

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

PUSH ON HOSE BARB

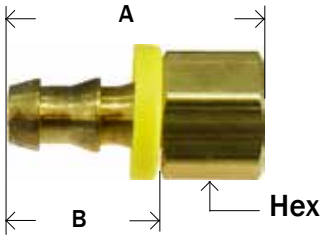
HOSE SPLICER



Part #	Hose I.D.	A	Approx. Wt. Lbs.	
30-300	1/4"	1.87	0.04	----
30-305	5/16"	1.80	0.04	----
30-301	3/8"	2.00	0.06	----
30-302	1/2"	2.01	0.08	----
30-303	5/8"	3.03	0.14	----
30-304	3/4"	3.03	0.14	----
30-306	1"	3.21	0.28	----

BPM 696 29SPO 296 915 729 100B-Y KA-RM MHL 296 38282

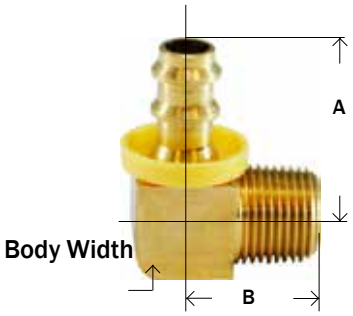
RIGID FEMALE ADAPTER



Part #	Hose I.D. x Female NPTF	A	B	Hex	Approx. Wt. Lbs.	
30-220	1/4" x 1/8"	1.35	0.87	0.50	0.02	----
30-221	1/4" x 1/4"	1.51	0.87	0.62	0.06	----
30-384	1/4" x 3/8"	1.51	0.77	0.75	0.06	----
30-391	5/16" x 1/8"	1.32	0.77	0.50	0.03	----
30-222	5/16" x 1/4"	1.51	0.87	0.62	0.06	----
30-393	3/8" x 1/8"	1.47	0.92	0.56	0.06	----
30-224	3/8" x 1/4"	1.61	0.97	0.62	0.06	----
30-225	3/8" x 3/8"	1.63	0.97	0.75	0.06	----
30-394	3/8' x 1/2"	1.66	0.92	0.93	0.12	----
30-397	3/8" x 3/4"	1.97	0.97	1.18	0.20	----
30-223	1/2" x 1/4"	1.76	1.02	0.68	0.08	----
30-226	1/2" x 3/8"	1.63	0.97	0.75	0.08	----
30-227	1/2" x 1/2"	1.77	0.97	0.93	0.14	----
30-396	1/2" x 3/4"	2.07	1.02	1.18	0.20	----
30-398	5/8" x 3/8"	2.24	1.55	0.75	0.10	----
30-229	5/8" x 1/2"	2.24	1.48	0.93	0.11	----
NEW 30-403	5/8" x 3/4"	2.26	1.44	1.19	0.20	
30-399	3/4" x 1/2"	2.24	1.50	0.93	0.14	----
30-395	3/4" x 3/4"	2.55	1.50	1.18	0.24	----
30-400	1" x 3/4"	2.55	1.55	1.18	0.25	----
30-402	1" x 1"	2.68	1.55	1.43	0.37	----

30282 29FPO HLF 626 274 726 940

MALE ELBOW

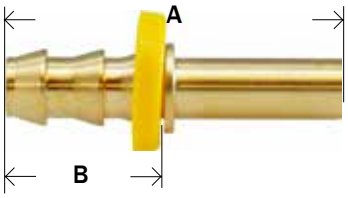


Part #	Hose I.D. x Male NPTF	A	B	Body Width	Approx. Wt. Lbs.	
30-372	1/4" x 1/8"	0.98	0.75	0.50	0.04	----
30-373	1/4" x 1/4"	1.04	0.95	0.56	0.06	----
30-374	5/16" x 1/8"	1.02	0.94	0.50	0.06	----
30-375	5/16" x 1/4"	1.09	0.94	0.56	0.08	----
30-370	3/8" x 1/8"	1.11	0.75	0.50	0.10	----
30-371	3/8" x 1/4"	1.13	0.90	0.56	0.10	----
30-376	3/8" x 3/8"	1.21	0.92	0.70	0.12	----
30-377	3/8" x 1/2"	1.30	1.19	0.87	0.22	----
30-382	1/2" x 3/8"	1.32	1.02	0.70	0.13	----
30-378	1/2" x 1/2"	1.50	1.19	0.87	0.22	----
30-379	5/8" x 1/2"	1.98	1.19	0.87	0.26	----
30-383	3/4" x 1/2"	2.15	1.24	0.87	0.25	----
30-381	3/4" x 3/4"	2.07	1.28	1.06	0.34	----

100-C 29EPO 273

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

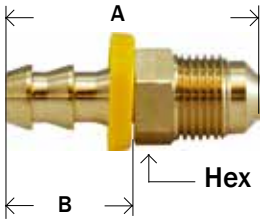
RIGID TUBE ADAPTER



Part #	Hose I.D. x O.D Tube	A	B	Approx. Wt. Lbs.	
30-290	1/4" x 3/16"	1.68	0.77	0.04	----
30-291	1/4" x 1/4"	1.88	0.77	0.04	----
30-292	1/4" x 5/16"	1.88	0.77	0.04	----
30-293	5/16" x 5/16"	1.91	0.79	0.04	----
30-294	3/8" x 3/8"	2.03	0.92	0.06	----
30-426	3/8" x 1/2	1.81	0.97	0.04	----
30-297	1/2" x 1/2"	2.13	1.02	0.06	----
30-298	5/8" x 5/8"	2.61	1.50	0.10	----
30-299	3/4" x 3/4"	2.61	1.50	0.25	----

294 100B-X KA-RL 303 732 694

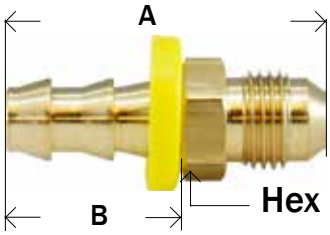
MALE SAE FLARE ADAPTER



Part #	Hose I.D. x 45° Male Flare	UNF Thread	A	B	Hex	Approx. Wt. Lbs.	
30-240	1/4" x 1/4"	7/16-20	1.45	0.75	0.43	0.04	----
30-241	1/4" x 5/16"	1/2-20	1.59	0.84	0.50	0.04	----
30-249	5/16" x 5/16"	1/2-20	1.60	0.80	0.50	0.06	----
30-271	3/8" x 5/16"	1/2-20	1.64	0.86	0.50	0.08	----
30-243	3/8" x 3/8"	5/8-18	1.83	0.92	0.62	0.08	----
30-245	1/2" x 1/2"	3/4-16	1.98	1.02	0.875	0.10	----
30-246	5/8" x 5/8"	7/8-14	2.73	1.50	0.87	0.19	----
30-247	3/4" x 3/4"	1-1/16-14	2.98	1.50	1.06	0.32	----

100B-3 KA-MS 727 945 682 302 282

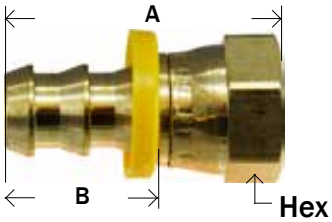
37° MALE JIC FLARE ADAPTER



• more sizes available

Part #	Hose I.D. x Male JIC	UNF Thread	A	B	Hex	Approx. Wt. Lbs.	
32-900	1/4" x 1/4"	7/16-20	1.57	0.84	0.50	0.04	----
32-901	1/4" x 5/16"	1/2-20	1.60	0.83	0.56	0.04	----
32-906	1/4" x 3/8"	9/16-18	1.63	0.77	0.62	0.05	----
32-902	3/8" x 3/8"	9/16-18	1.78	0.97	0.62	0.06	----
32-903	1/2" x 1/2"	3/4-16	1.97	0.97	0.75	0.10	----
32-907	5/8" x 5/8"	7/8-14	2.62	1.50	0.93	0.19	----
32-905	3/4" x 3/4"	1-1/16-12	2.79	1.50	1.12	0.29	----

SAE/JIC DUAL 45°/37° FEMALE SWIVEL



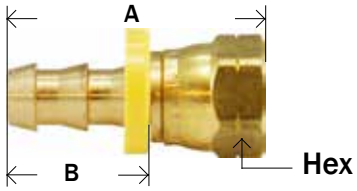
Part #	Hose I.D. x Dual Seat	UNF Thread	A	B	Hex	Approx. Wt. Lbs.	
30-230 *	1/4" x 1/4"	7/16-20	1.53	0.87	0.56	0.06	----
30-231	1/4" x 5/16"	1/2-20	1.53	0.87	0.62	0.04	----
30-232	5/16" x 5/16"	1/2-20	1.56	0.87	0.62	0.04	----
30-427	3/8" x 5/16"	1/2-20	1.74	0.87	0.62	0.06	----
30-233	3/8" x 1/2"	3/4-16	1.79	0.97	0.87	0.10	----
30-234 *	1/2" x 1/2"	3/4-16	1.77	0.97	0.87	0.10	----
30-235	1/2" x 5/8"	7/8-14	1.84	0.97	1.00	0.12	----
30-236	5/8" x 1/2"	3/4-16	2.27	1.45	0.87	0.18	----
30-237	5/8" x 5/8"	7/8-14	2.33	1.45	1.00	0.14	----
30-428	3/4" x 5/8"	7/8-14	2.33	1.45	1.00	0.20	----

* See page 36 for stainless
* See page 161 for lead free

29FDS 287 HDF 309 735 690 P990-K 305 935/ 934

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

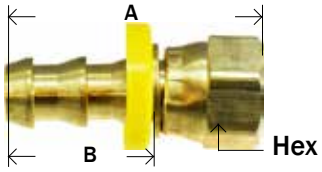
45° SAE FLARE FEMALE SWIVEL



Part #	Hose I.D. x 45° Female Flare	UNF Thread	A	B	Hex	Approx. Wt. Lbs.	
30-250	1/4" x 1/4"	7/16-20	1.54	0.87	0.56	0.04	----
30-251	1/4" x 5/16"	1/2-20	1.57	0.87	0.62	0.04	----
30-253	1/4" x 3/8"	5/8-18	1.63	0.87	0.75	0.06	----
30-254	5/16" x 5/16"	1/2-20	1.58	0.87	0.68	0.06	----
30-260	5/16" x 3/8"	5/8-18	1.63	0.87	0.75	0.08	----
30-252	3/8" x 3/8"	5/8-18	1.73	0.97	0.75	0.10	----
30-257	3/8" x 1/2"	3/4-16	1.85	0.87	0.87	0.10	----
30-261	1/2" x 3/8"	5/8-18	1.92	1.05	0.75	0.10	----
30-255	1/2" x 1/2"	3/4-16	1.77	0.97	0.87	0.12	----
30-258	5/8" x 5/8"	7/8-14	2.35	1.45	1.00	0.14	----
30-259	3/4" x 3/4"	1-1/16-14	2.42	1.45	1.25	0.22	----

30882 728 P990-H 29AEPO 307 284 100S-4 KA-NS HSF 684 934

FEMALE 37° JIC FLARE SWIVEL

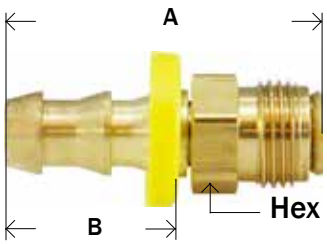


Part #	Hose I.D. x Female JIC	UNF Thread	A	B	Hex	Approx. Wt. Lbs.	
30-265	1/4" x 1/4"	7/16-20	1.54	0.87	0.56	0.04	----
30-264	1/4" x 3/8"	9/16-18	1.57	0.87	0.68	0.06	----
30-270	5/16" x 3/8"	9/16-18	1.60	0.82	0.68	0.06	----
30-266 *	3/8" x 3/8"	9/16-18	1.70	0.97	0.68	0.08	----
30-267	1/2" x 1/2"	3/4-16	1.78	0.97	0.87	0.10	----
30-268	5/8" x 5/8"	7/8-14	2.33	1.45	1.00	0.14	----
30-269 *	3/4" x 3/4"	1-1/16-12	2.40	1.45	1.25	0.22	----
30-429	1" x 1"	1-5/16-12	2.60	1.45	1.50	0.39	----

* See page 36 for stainless

JF 944/934 29J1CPO HJF 688 738 288 100B-6 308 P990-F 30682 KA-NJ

INVERTED FLARE MALE SWIVEL



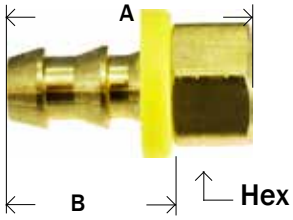
Part #	Hose I.D. x Male INV Flare	UNF Thread	A	B	Hex	Approx. Wt. Lbs.	
30-275	1/4" x 3/16"	3/8-24	1.52	0.87	0.37	0.04	----
30-276	1/4" x 1/4"	7/16-24	1.56	0.87	0.43	0.04	----
30-277	1/4" x 5/16"	1/2-20	1.62	0.87	0.50	0.04	----
30-280	5/16" x 5/16"	1/2-20	1.62	0.87	0.50	0.06	----
30-283	5/16" x 3/8"	5/8-18	1.63	0.87	0.62	0.06	----
30-284	3/8" x 5/16"	1/2-20	1.72	0.97	0.50	0.06	----
30-279	3/8" x 3/8"	5/8-18	1.76	0.97	0.62	0.06	----
30-282	1/2" x 1/2"	3/4-18	1.84	0.97	0.75	0.10	----
30-286	5/8" x 5/8"	7/8-18	2.50	1.57	0.87	0.14	----

290 100B-B KA-MF 1MS 947

The best preparation for tomorrow is doing your best today. – H. Jackson Brown, Jr.

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

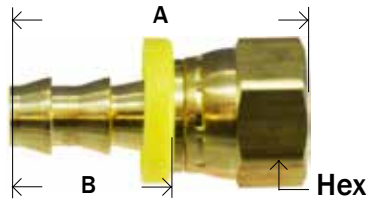
INVERTED FLARE FEMALE ADAPTER



Part #	Hose I.D. x Female INV Flare	A	B	Hex	Approx. Wt. Lbs.	
30-310	1/4" x 3/16"	1.12	0.84	0.50	0.02	----
30-311	1/4" x 1/4"	1.14	0.84	0.56	0.02	----
30-312	1/4" x 5/16"	1.18	0.82	0.62	0.02	----
30-316	5/16" x 5/16"	1.25	0.81	0.62	0.04	----
30-313	3/8" x 5/16"	1.32	0.87	0.62	0.04	----
30-314	3/8" x 3/8"	1.35	0.95	0.75	0.06	----
30-315	1/2" x 1/2"	1.73	1.04	0.87	0.12	----

306 100B-A KA-NG 292 P990-J 736 692 946

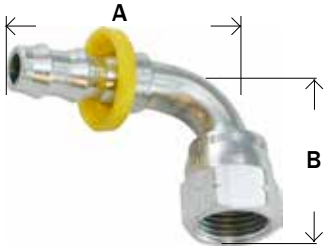
FEMALE BALLSEAT SWIVEL



Part #	Hose I.D. x Female NPSM	A	B	Hex	Approx. Wt. Lbs.	
30-340	1/4" X 1/8"	1.39	0.85	0.50	0.06	----
30-341	1/4" X 1/4"	1.47	0.80	0.68	0.06	----
30-342	1/4" x 3/8"	1.40	0.77	0.68	0.09	----
30-343	3/8" X 1/4"	1.61	0.97	0.68	0.08	----
30-344	3/8" X 3/8"	1.75	0.95	0.81	0.10	----
30-430	3/8" x 1/2"	1.79	0.97	0.93	0.11	----
30-346	1/2" X 1/2"	1.88	1.09	0.93	0.12	----
30-345	1/2" x 3/4"	2.36	1.02	1.18	0.18	----
30-349	3/4" X 3/4"	2.36	1.55	1.18	0.22	----

628 278 29SPO 731 NPSM

SAE/ JIC 37°/ 45° FEMALE SWIVEL 90° ZINC PLATED STEEL



Part #	Hose I.D. x Female 37°/45°	UNF Thread	A	B	Approx. Wt. Lbs.	
30-480	1/4"	7/16-20	1.55	0.83	.064	----
30-482	3/8"	9/16-18	1.85	0.91	.095	----
30-483*	3/8"	5/8-18	1.98	0.85	.095	----
30-484	1/2"	3/4-16	2.33	1.09	.171	----
30-486	3/4"	1-1/16-12	3.26	1.81	.281	----

* SAE

Nearly all men can stand adversity, but if you want to test a man's character, give him power.

- Abraham Lincoln

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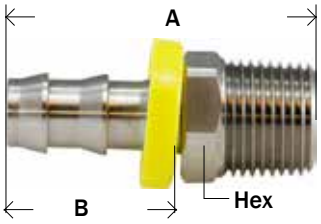
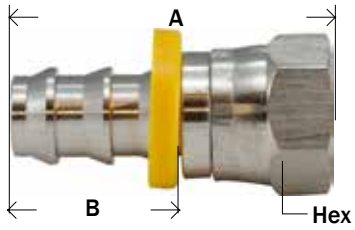
316 STAINLESS STEEL MALE ADAPTERS



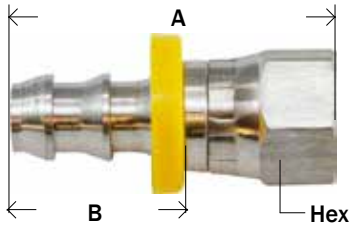
Part #	Hose I.D. x NPT	A	B	Hex	Approx. Wt. Lbs.	
30-200SS	1/4" x 1/8"	1.42	0.77	0.44	0.027	----
30-201SS	1/4" x 1/4"	1.61	0.77	0.56	0.043	----
30-203SS	3/8" x 1/4"	1.76	0.92	0.56	0.053	----
30-204SS	3/8" x 3/8"	1.76	0.92	0.69	0.067	----
30-206SS	1/2" x 3/8"	1.86	1.02	0.69	0.071	----
30-207SS	1/2" x 1/2"	2.07	1.02	0.88	0.119	----
30-215SS	3/4" x 1/2"	2.55	1.50	0.88	0.20	----
30-210SS	3/4" x 3/4"	2.55	1.50	1.06	0.194	----

316 STAINLESS STEEL SAE/ JIC 45°/ 37° FEMALE SWIVEL



Part #	Hose I.D. x Female 45°/37°	A	B	Hex	Approx. Wt. Lbs.	
30-230SS	1/4" x 1/4"	1.48	0.74	0.56	0.023	----
30-234SS	1/2" x 1/2"	1.93	1.03	0.88	0.04	----

316 STAINLESS STEEL FEMALE 37° JIC FLARE SWIVEL



Part #	Hose I.D. x Female 37°	A	B	Hex	Approx. Wt. Lbs.	
30-266SS	3/8" x 3/8"	1.75	.92	0.68	0.065	----
30-269SS	3/4" x 3/4"	2.53	1.50	1.25	0.259	----

only two things are infinite, the universe and human stupidity, and I'm not sure about the former.

- Albert Einstein

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GARDEN HOSE FITTINGS

• Temperature and Working Pressure Ranges

From +35^{0}F to +100^{0}F at 75 PSI maximum or the recommended working pressure of the garden hose. (Not to exceed 150 PSI.)

Note: All female connector ends should have a rubber washer inserted prior to usage.

FGH = Female Garden Hose threads
MGH = Male Garden Hose threads
Male garden hose threads are all 3/4" with an outside diameter of 1.0625 and 11-1/2" threads per inch.

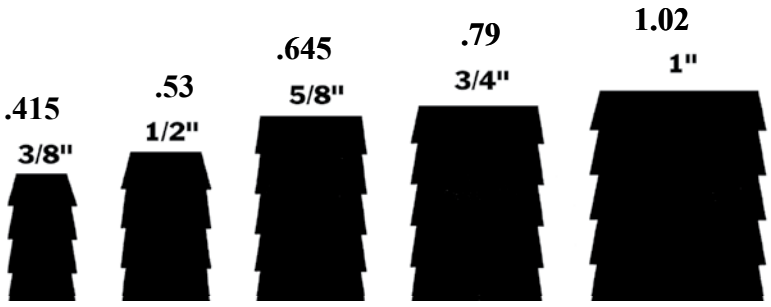
Male Garden Hose Profile

See Plastic section for Plastic Garden Hose Fittings

See page 162 for lead free Garden Hose

Washers included are #30150B black rubber washers.

Actual Profile of Garden Hose Barbs



WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

SWIVEL - MGH X FGH

•WASHER INCLUDED

Internal Hex

Part #	MGH X FGH	A	Hex	Approx. Wt. Lbs.	
30-000**	3/4" x 3/4"	1.03	0.50*	0.26	----

* Internal Hex
* Not a live swivel
** available in swivel crimp style

SWIVEL - FGH X FGH

•WASHER INCLUDED

30-011

30-012

Part #	FGH X FGH	A	Hex	Approx. Wt. Lbs.	
30-011	3/4" x 3/4"	1.03	1.18 O.D.	0.24	----
30-012	No Swivel	1.08	1.19	0.24	----

HUS 91 203W GSU 101GHSV 22AS 506 FS66

SWIVEL - FGH X FEMALE PIPE

•WASHER INCLUDED

Part #	FGH x Female NPTF	A	Hex	Approx. Wt. Lbs.	
30-001	3/4" x 1/2"	1.20	1.00	0.11	----
30-006	3/4" x 3/4"	1.11	1.12	0.11	----

S1 HSU11 91Z 197S 98GHSV 5AS 21517 502 FS65

EVAPORATIVE COOLER FITTINGS

50-016

30-013

NEW

30-020

Part #	Size	
50-016	MGH x 1/2" FIP	----
30-013	1/2 MIP x 1/2 FIP x 1/8	----
30-019	3/4 MIP x 3/4 FIP x 1/8	----
30-020	MGH x FGH x 1/8	----

RIGID - FGH X FEMALE PIPE

•WASHER INCLUDED

30-017

Part #	FGH x Female NPTF	A	Hex	Approx. Wt. Lbs.	
30-016	3/4" x 1/8"	1.02	1.18	0.08	----
30-017	3/4" x 1/4"	0.65	1.12	0.07	----
30-018	3/4" x 3/8"	1.19	1.18	0.11	----

95GH 501

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

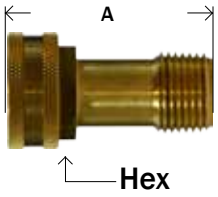
RIGID - FGH X FEMALE PIPE

Part #	FGH x Female NPTF	A	Hex	Approx. Wt. Lbs.	
30-078	3/4” x 1/2”	1.06	1.18	0.10	----
30-083	3/4” x 3/4”	1.06	1.18	0.12	----

FS67 198 HU11 21507 501 99GH 5A H15PP

SWIVEL - FGH X MALE PIPE

•WASHER INCLUDED

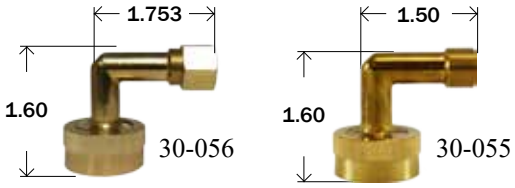


Part #	FGH x Male NPTF	A	Hex	Approx. Wt. Lbs.	
30-047	3/4” x 1/4”	2.04	0.75	0.13	----
30-048	3/4” x 3/8”	2.06	0.75	0.14	----
30-049	3/4” x 1/2”	2.06	0.87	0.18	----

504 89GH W1 62H4 88GH W1

3/8" Comp 3/4" FGH DISHWASHER 90° ELBOW

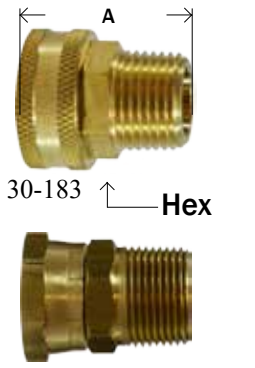
• WASHER INCLUDED



Part #	3/4 Female Garden Hose Thread x 3/8 Compression	
30-055	3/4" x 3/8" Body Only	----
30-056	3/4" x 3/8" w/ nut & sleeve	----

SWIVEL - FGH X MALE PIPE

• WASHER INCLUDED

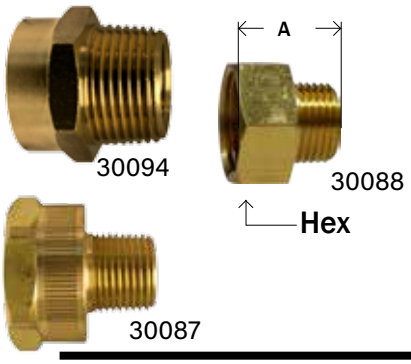


* Crimp style

Part #	FGH x Male NPTF	A	Hex	Approx. Wt. Lbs.	
30-181*	3/4" x 1/4"	1.43	1.18	0.13	----
30-184*	3/4" x 3/8"	1.43	1.18	0.15	----
30-183	3/4” x 1/2”	1.32	0.81	0.11	----
30-182*	3/4" x 3/4"	1.43	1.18	0.14	----

RIGID - FGH X MALE PIPE

• WASHER INCLUDED



Part #	FGH x Male NPTF	A	Hex	Approx. Wt. Lbs.	
30-087	3/4" x 3/8"	1.37	1.18	0.11	----
30-088	3/4” x 1/2”(1/2”SWT)**	1.06	1.18	0.09	----
30-093	3/4” x 3/4”	1.06	1.18	0.11	----
30-094	3/4” x 3/4”(1/2” FIP)	1.17	1.18	0.11	----
30-093L*	3/4” x 3/4”	1.22	1.18	0.14	----

* Long pattern

** 1/2 Swt = 5/8 O.D.

21505 503 83GH 20A HU21 199 H7

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

RIGID - MGH X FEMALE PIPE

30-068

	Part #	MGH X Female NPTF	A	Hex	Approx. Wt. Lbs.	
	30-066	3/4” x 1/4”	1.10	1.06	0.09	----
	30-067	3/4” x 3/8”	1.09	1.06	0.12	----
	30-068	3/4” x 1/2”	0.81	1.06	0.10	----
	30-073	3/4” x 3/4”	1.12	1.18	0.10	----
NEW	30-074	3/4" x 1"	1.36	1.37	0.19	
NEW	30-075	1" x 1"	1.60	1.38	0.25	

197 18R HU12 H11PP 18A 507 18H 81GH 21503 MF67

RIGID - MGH X MALE PIPE

	Part #	MGH X Male NPTF	A	Hex	Approx. Wt. Lbs.	
NEW	30-054	3/4" x 1/4"	1.26	1.06	0.12	
	30-053	3/4” x 3/8”	1.25	1.06	0.10	----
	30-058*	3/4” x 1/2”	1.31	1.06	0.12	----
	30-063**	3/4” x 3/4” x 1/2”	1.31	1.06	0.13	----
	30-063BE***	3/4” x 3/4”	1.31	1.06	0.15	----
	30-063S	3/4” x 3/4” Short	1.10	1.06	0.10	----
	30-064	3/4" x 1"	1.88	1.37	0.35	----
NEW	30-065	1" x 1"	1.88	1.37	0.26	

No Tap

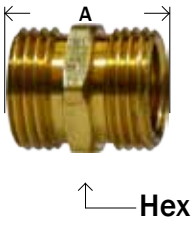
19R 196 H530 21501 508 HU22 514 71GH 19A

* (1/2 Swt = 5/8 O.D.)

** (Tapped 1/2 FIP)

*** (Tapped 1/2 FIP Both ends)

RIGID - MGH X MGH



	Part #	MGH X MGH	A	Hex	Approx. Wt. Lbs.	
	30-098	3/4” x 3/4” (1/2" FIP)	1.22	1.06	0.13	----
	30-099	3/4" x 3/4"	1.38	1.06	0.15	----
	30-100*	1" x 3/4"	1.31	1.37	0.21	----
NEW	30-101	1" x 1"	1.38	1.37	0.23	

* 1-11-1/2

21500 509 75GH 23A H8 19R

GARDEN HOSE NUT

30-021

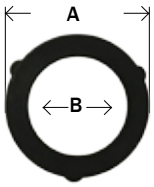
30-022

Part #	Size	A	Hex	Approx. Wt. Lbs.	
30-021	Knurled	0.61	1.37 O.D.	0.08	----
30-022	Hex Nut	0.62	1.18	0.08	----

94GH GHN1 HNR 21514

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

GARDEN HOSE WASHERS



30-150

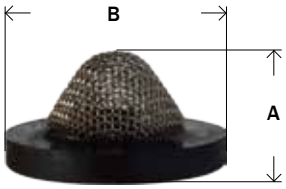
30-150R

Part #	Size	A	B	Thickness	Approx. Wt. Lbs.	
30-150	black*	0.98	0.68	0.13	0.01	----
30-150R	red	1.00	0.68	0.13	0.01	----
30-150B	black rubber	1.00	0.68	0.13	0.01	----
30-151	1"	1.27	0.86	0.16	0.01	----

GHW 901GH

* plasticized rubber

GARDEN HOSE FILTER WASHER



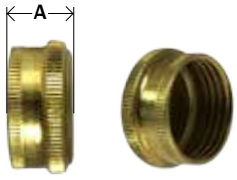
• 300 Series Stainless Steel Screen

Part #	Size	A	B	Approx. Wt. Lbs.	
30-180	30 Mesh	0.52	1.00	0.02	----
30-180F	60 Mesh	0.52	1.00	0.02	----

LA662

GARDEN HOSE CAP

30-103



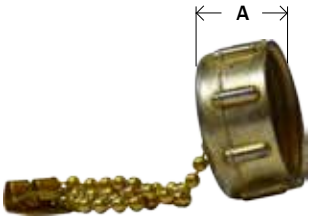
30-103B

Part #	Size	A	Approx. Wt. Lbs.	
30-103	3/4" Die Cast	0.58	0.04	----
30-103B	3/4" Barstock	0.60	0.048	----

513 96GH GHN5 HC1 LA215 21518 200-W

• Garden hose washers sold seperately

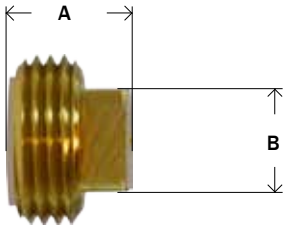
GARDEN HOSE CAP WITH CHAIN



Part #	Size	A	Approx. Wt. Lbs.	
30-142	3/4" w/ 12" Chain	0.58	0.06	----

* Zinc die cast

GARDEN HOSE PLUG



Part #	Size	A	B	Approx. Wt. Lbs.	
30-026	3/4"	0.69	0.61	0.12	----

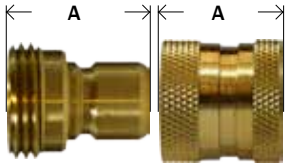
WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

HOSE MENDERS - SOLID BARB X BARB

Part #	Hose I.D. x Hose I.D.	A	B	O.D.	Approx. Wt. Lbs.	
32-096	1/2”	2.00	0.96	0.62	0.06	----
32-097	5/8”	2.05	0.96	0.75	0.08	----
32-098	3/4”	2.50	1.15	0.87	0.10	----
32-099	1"	3.00	1.44	1.02	0.23	----

QUICK DISCONNECT GARDEN HOSE COUPLERS

•WASHER INCLUDED



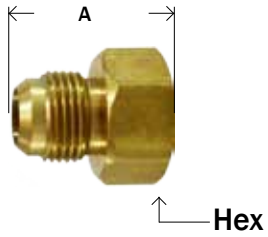
30-452 30-451

- Unvalved construction allows maximum Flow
- 150 PSI
- NBR Seals

Part #	Size	A	Approx. Wt. Lbs.	
30-450	Complete	1.70	0.24	----
30-451	Female end	1.14	0.12	----
30-452	Male end	1.26	0.12	----
30-149	Recessed Washer	1.02	0.01	

LA73C

MALE FLARE X FGH RIGID

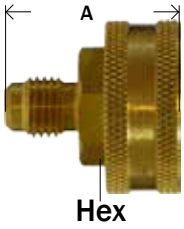


Part #	Male Flare x FGH	A	Hex	Approx. Wt. Lbs.	
30-123	3/8” x 3/4”	1.31	1.18	0.10	----
30-128	1/2” x 3/4”	1.38	1.18	0.12	----
30-133	5/8” x 3/4”	1.53	1.18	0.14	----

190 46WH HFU21

MALE FLARE x FGH SWIVEL

•WASHER INCLUDED



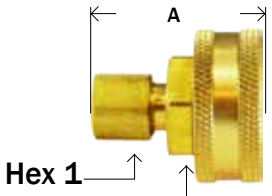
Part #	Male Flare x FGH	A	Hex	Approx. Wt. Lbs.	
30-052	1/4” x 3/4”	1.24	0.75	0.10	----
30-138	3/8” x 3/4”	1.25	0.25*	0.12	----
30-139	1/2” x 3/4”	1.49	0.81	0.14	----

* Internal Hex

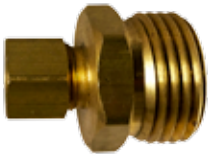
50GHSV 51GHSV W1 68H 191

COMPRESSION X FGH

•WASHER INCLUDED



Part #	Swivel Compression x FGH	A	Hex 1	Hex 2	Approx. Wt. Lbs.	
30-050	1/4” x 3/4”	1.02	0.50	0.75	0.09	----
30-051	3/8” x 3/4”	1.04	0.62	0.75	0.12	----



NEW

Part #	No Swivel Compression x MGH	A	Hex 1	Hex 2	Approx. Wt. Lbs.	
30-135	1/4” x 3/4”	1.45	0.50	0.625	0.14	----
30-136	3/8” x 3/4”	1.525	0.625	0.62	0.15	----
30-137	1/2" x 3/4"	1.8	0.815	0.685	0.19	----

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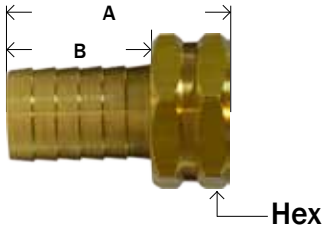
BARSTOCK BRASS GARDEN HOSE COUPLINGS

FEMALE SWIVEL ONLY

•WASHER INCLUDED



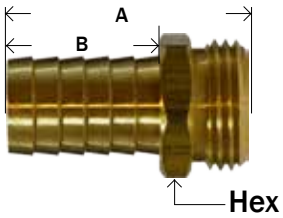
BRASS

Part #	Hose Barb x FGH	A	B	Hex	Approx. Wt. Lbs.	
30-031	3/8” x 3/4"	1.82	1.19	1.18	0.11	----
30-032	1/2” x 3/4"	1.82	1.19	1.18	0.12	----
30-033	5/8” x 3/4"	1.82	1.19	1.18	0.13	----
30-034	3/4” x 3/4"	1.82	1.19	1.18	0.15	----
30-044	1" x 3/4"	2.10	1.19	1.18	0.18	----
30-035	1” x 1"	2.28	1.47	1.50	0.18	----

STAINLESS STEEL 316

30-032SS	1/2" x 3/4"	1.82	1.19	1.18	0.12	----
30-033SS	5/8" x 3/4"	1.82	1.19	1.18	0.13	----
30-034SS	3/4" x 3/4"	1.82	1.19	1.18	0.15	----

MALE END ONLY



BRASS

Part #	Hose Barb x MGH	A	B	Hex	Approx. Wt. Lbs.	
30-039	3/8” x 3/4"	1.88	1.19	1.06	0.12	----
30-040	1/2” x 3/4"	1.88	1.19	1.06	0.12	----
30-041	5/8” x 3/4"	1.88	1.19	1.06	0.12	----
30-042	3/4” x 3/4"	1.88	1.19	1.06	0.13	----
30-045	1" x 3/4"	1.94	1.19	1.06	0.21	----
30-043	1” x 1"	2.34	1.47	1.37	0.26	----

STAINLESS STEEL 316

30-040SS	1/2" x 3/4"	1.88	1.19	1.06	0.12	----
30-041SS	5/8" x 3/4"	1.88	1.19	1.06	0.12	----
30-042SS	3/4" x 3/4"	1.88	1.19	1.06	0.13	----

GARDEN HOSE COUPLING

•WASHER INCLUDED

BRASS

Part #	Hose Barb	
30-025	3/8”	----
30-027	1/2”	----
30-028	5/8”	----
30-029	3/4”	----
30-046	1"(3/4" threads)	----
30-030	1”	----

STAINLESS STEEL 316

30-027SS	1/2"	----
30-028SS	5/8"	----
30-029SS	3/4"	----

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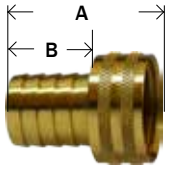
FEMALE SWIVEL ONLY - Short Shank Knurled Nut

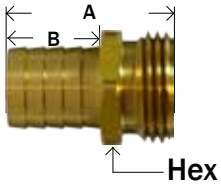


	Part #	Hose Barb x FGH	A	B	Approx. Wt. Lbs.	
NEW	30-464	1/4" x 3/4"	1.39	0.77	0.09	
	30-466	1/2" x 3/4"	1.50	0.88	0.08	----
	30-467	5/8" x 3/4"	1.50	0.88	0.09	----
	30-468	3/4" x 3/4"	1.47	0.88	0.10	----

FEMALE END ONLY - Short Shank w/ hex

Part #	Hose x FGH	A	B	Hex	Approx. Wt. Lbs.	
30-453	1/2" x 3/4"	1.63	1.00	1.18	0.11	----
30-454	5/8" x 3/4"	1.63	1.00	1.18	0.11	----
30-455	3/4" x 3/4"	1.63	1.00	1.18	0.13	----

MALE END ONLY - Short Shank



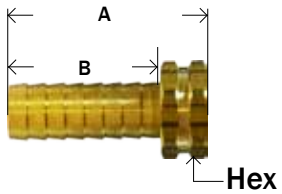
	Part #	Hose Barb x MGH	A	B	Hex	Approx. Wt. Lbs.	
NEW	30-469	1/4" x 3/4"	1.55	0.88	1.06	0.11	
	30-471	1/2" x 3/4"	1.55	0.88	1.06	0.11	----
	30-472	5/8" x 3/4"	1.56	0.88	1.06	0.12	----
	30-473	3/4" x 3/4"	1.56	0.88	1.06	0.13	----

GARDEN HOSE COUPLING SETS - Short Shank w/ hex nut

Part #	Hose Barb	
30-457	1/2"	----
30-458	5/8"	----
30-459	3/4"	----

FEMALE SWIVEL ONLY - 2" SHANK

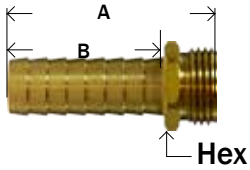
•WASHER INCLUDED



Part #	Hose Barb x FGH	A	B	Hex	Approx. Wt. Lbs.	
30-505	1/2" x 3/4"	2.55	2.04	1.18	0.13	----
30-506	5/8" x 3/4"	2.56	2.04	1.18	0.16	----
30-507	3/4" x 3/4"	2.67	2.04	1.18	0.17	----
30-508	1" x 1"	2.84	2.03	1.43	0.29	----

GHFL 594

MALE END ONLY - 2" SHANK



Part #	Hose Barb x MGH	A	B	Hex	Approx. Wt. Lbs.	
30-510	1/2" x 3/4"	2.72	2.04	1.06	0.16	----
30-511	5/8" x 3/4"	2.72	2.04	1.06	0.17	----
30-512	3/4" x 3/4"	2.72	2.04	1.06	0.20	----
30-513	1" x 1"	2.90	2.03	1.37	0.28	----

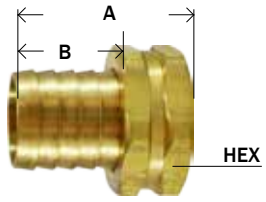
GHML 593

GARDEN HOSE COUPLING SETS - 2" SHANK

Part #	Hose x FGH	
30-516	1/2"	----
30-517	5/8"	----
30-518	3/4"	----

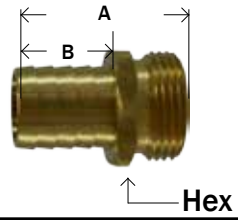
WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

NPSM FEMALE SHORT SHANK



Part #	Hose ID	NPSM Thread	A	B	Hex	
30-545	1/2	3/4"	1.45	0.88	1.18	----
30-546	5/8	3/4"	1.47	0.88	1.18	----
30-547	3/4	3/4"	1.47	0.88	1.18	----
30-548	1	1"	1.50	1.00	1.50	----

NPSM MALE SHORT SHANK

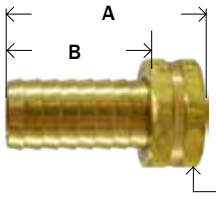


Part #	Hose ID	NPSM Thread	A	B	Hex	
30-550	1/2	3/4"	1.56	0.88	1.06	----
30-551	5/8	3/4"	1.56	0.88	1.06	----
30-552	3/4	3/4"	1.56	0.88	1.06	----
30-553	1	1"	1.77	0.98	1.30	----

NPSM SHORT SHANK SETS

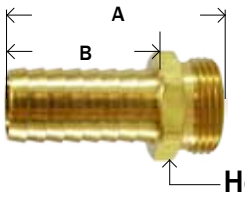
Part #	Size	
30-540	1/2"	----
30-541	5/8"	----
30-542	3/4"	----
30-543	1"	----

NPSM FEMALE LONG SHANK



Part #	Hose ID	NPSM Thread	A	B	Hex	
30-565	1/2	1/2"	2.09	1.50	0.94	----
30-566	5/8	3/4"	2.09	1.50	1.18	----
30-567	3/4	3/4"	2.09	1.50	1.18	----
30-568	1	1"	2.12	1.53	1.50	----

NPSM MALE LONG SHANK



Part #	Hose ID	NPSM Thread	A	B	Hex	
30-570	1/2	1/2"	2.18	1.50	0.87	----
30-571	5/8	3/4"	2.18	1.50	1.06	----
30-572	3/4	3/4"	2.18	1.50	1.06	----
30-573	1	1"	2.32	1.53	1.30	----

NPSM LONG SHANK SETS

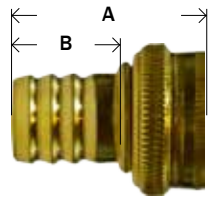
Part #	Size	
30-560	1/2"	----
30-561	5/8"	----
30-562	3/4"	----
30-563	1"	----

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

WROUGHT BRASS

WROUGHT BRASS - Female end only

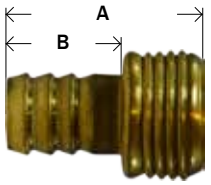
•WASHER INCLUDED



Part #	Hose Barb x FGH	A	B	Approx. Wt. Lbs.	
30-526	5/8” x 3/4"	1.58	0.91	0.05	----

85L

WROUGHT BRASS COUPLINGS - Male end only



Part #	Hose Barb x MGH	A	B	Approx. Wt. Lbs.	
30-530	1/2” x 3/4"	1.50	0.88	0.02	----

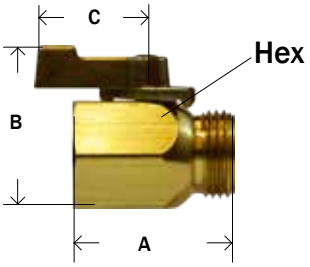
85M

GARDEN HOSE VALVES

ONE WAY BRASS BALL VALVE - FGH x MGH

• 500 PSI • 180°F

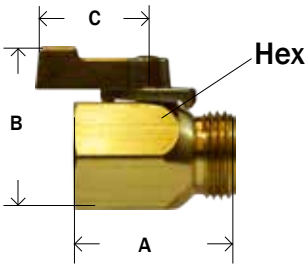
• WASHER INCLUDED



Part #	FGH x MGH	A	B	C	Hex	Approx. Wt. Lbs.	
30-161	3/4” x 3/4"	1.87	1.89	1.31	1.06	0.42	----

ONE WAY BRASS BALL VALVE - Female Pipe x MGH

• 500 PSI • 180°F



Part #	Female NPTF x MGH	A	B	C	Hex	Approx. Wt. Lbs.	
30-162	3/4” x 3/4"	1.55	1.89	1.31	1.06	0.42	----

ZINC ALLOY HOSE SHUT-OFF W/ ONE LEVER

• WASHER INCLUDED

Part #	FGH x MGH	A	Approx. Wt. Lbs.	
30-631	3/4" x 3/4"	1.67	0.08	----

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

PLASTIC GARDEN HOSE VALVE

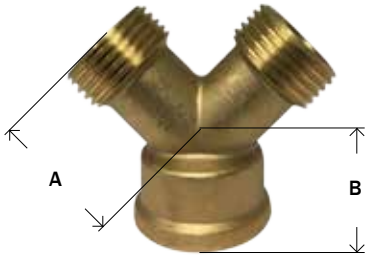
• CYCOLAC BODY & BALL • WASHER INCLUDED

Part #	FGH x MGH	A	Hex	Approx. Wt. Lbs.	
30-163	3/4" x 3/4"	1.75	1.25	0.04	----

LA45OC

CAST BRASS HOSE - "Y" CONNECTOR

• WASHER INCLUDED

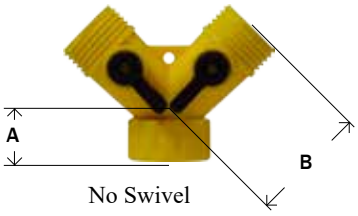


Part #	Size FGH x MGH(2)	A	B	Approx. Wt. Lbs.	
30-140	3/4"	1.40	0.67	0.22	----

86Y 21A

PLASTIC, NON-CORROSIVE, 2-WAY HOSE SHUT-OFF "Y"

• WASHER INCLUDED

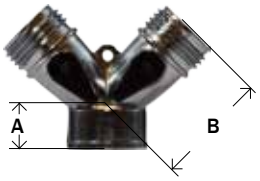


No Swivel

Part #	Size FGH x MGH(2)	A	B	Approx. Wt. Lbs.	
30-160	3/4"	0.74	1.87	0.08	----

"Y" SHAPE ZINC ALLOY CONNECTOR W/ TWO LEVERS

• WASHER INCLUDED



No Swivel

Part #	Size FGH x MGH(2)	A	B	Approx. Wt. Lbs.	
30-626	3/4"	0.60	1.66	0.10	----

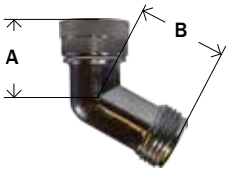
"Y" SHAPE BRASS CONNECTOR W/ 2-WAY SHUT OFF

• WASHER INCLUDED

• Brass Levers

Part #	Size	Description FGH Swivel x MGH(2)	Approx. Wt. Lbs.	
30-627	3/4"	3/4 Double Y valve, swivel inlet	0.56	----

ZINC ALLOY SWIVEL HOSE CONNECTOR



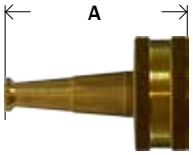
Part #	Size FGH x MGH	A	B	Approx. Wt. Lbs.	
30-629	3/4"	1.31	1.50	0.08	----

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

GARDEN HOSE NOZZLES

2-1/2" BRASS NOZZLE

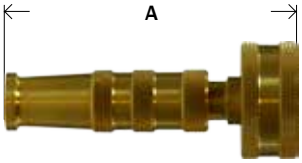
• WASHER INCLUDED



Part #	Size	A	Approx. Wt. Lbs.	
30-637	3/4"	2.50	0.14	----

3" CROSSED PATTERN BRASS NOZZLE

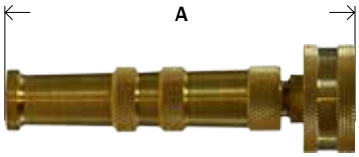
• WASHER INCLUDED



Part #	Size	A	Approx. Wt. Lbs.	
30-640	3/4"	2.89	0.25	----

4" CROSSED PATTERN BRASS NOZZLE

• WASHER INCLUDED



Part #	Size	A	Approx. Wt. Lbs.	
30-638	3/4"	3.80	0.50	----

• WASHER INCLUDED

Adjustable Spray

Part #	Size		
30-600	5-1/2"	Zinc Alloy spray nozzle with insulated handle soft grip and front thread protector	----

• WASHER INCLUDED

Lead Free

Part #	Size		
30-620	4-1/4"	Zinc Alloy spray nozzle	----

• WASHER INCLUDED

Lead Free
Adjustable Spray

Part #	Size		
30-609	5-1/4"	Zinc Alloy spray nozzle with easily adjustable brass head and plastic grip	----

• WASHER INCLUDED

Part #	Size		
30-630	4-1/2"	Plastic spray nozzle	----

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

SAE 45° FLARE

Tube O.D.	1/8	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4
Thread Size-B	5/16-24	3/8-24	7/16-20	1/2-20	5/8-18	11/16-16	3/4-16	7/8-14	1-1/16-14

•Typical Application
LP and natural gas, flammable liquids, instrumentation, refrigeration, power steering, hydraulic and pneumatic systems.

•Working Pressure Ranges
Temperature and type of tubing used are important factors. However, the following table is a good guide for proper selection. Temperature 73^{0}F with copper tubing:

PSI	Tube O.D. (in.)	Tube Wall (in.)
2800	1/8	.030
1900	3/16	.030
1400	1/4	.030
1200	5/16	.032
1000	3/8	.032
750	1/2	.032
650	5/8	.035
550	3/4	.035
450	7/8	.035

•Vibration
Good resistance - use long nut when greater vibration resistance is required.

•Temperature Range
-65^{0}F to +250^{0}F (-53^{0}C to +121^{0}C) range at maximum operating pressures.

•Used With
Copper, brass, aluminum and steel hydraulic tubing that can be flared.

• Tolerance
+/- .03 on all dimensions. Dimension data can change without notice. Please call us when dimensions are critical.

•Conformance
Meets specifications and standards of ASA, ASME, SAE and MS (Military standards).

Assembly Instructions
1- Cut tubing to desired length. Make sure all burrs are removed and ends are cut square.
2- Slide nut on tube. Threaded end "A" of nut must face out.
3- Flare end of tube with a 45^0 flaring tool.
a-Measure flare diameter.
b- Examine flare for excessive thin out.
4- Lubricate threads and assemble to fitting body. Nut should be turned hand tight.
5- Tighten assembly with wrench until a solid feeling is encountered. From that point, apply a one-sixth turn.
Note: Do not over-torque as it may damage the fitting or split the tubing at the flare.

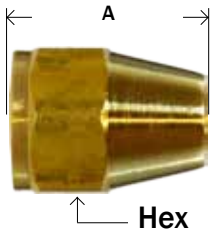
• See Lead Free Flare Fittings page 163-164

Actual O.D. of Flare Fittings

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

SHORT ROD NUT

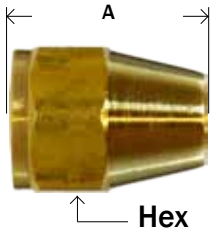
SAE# 010110



Part #	Thread Size UNF	Thread	A	Hex	Approx. Wt. Lbs.	
10-013	1/8”	5/16-24	0.50	0.37	0.01	----
10-014	3/16”	3/8-24	0.62	0.43	0.02	----
10-015	1/4”	7/16-20	0.75	0.56	0.03	----
10-015L	1/4"	7/16-20	0.75	0.50	0.03	----
10-016	5/16”	1/2-20	0.88	0.62	0.04	----
10-017L	3/8”	5/8-18	0.77	0.75	0.05	----
10-017	3/8”	5/8-18	1.00	0.75	0.04	----
10-018	7/16”	11/16-16	1.06	0.81	0.06	----
10-019L	1/2”	3/4-16	0.93	0.87	0.06	----
10-019	1/2”	3/4-16	1.12	0.87	0.09	----
10-020L	5/8”	7/8-14	1.08	1.00	0.10	----
10-020	5/8”	7/8-14	1.31	1.06	0.15	----
10-021	3/4”	1-1/16-14	1.50	1.25	0.24	----
10-022	7/8”	1-1/4-12	1.62	1.50	0.36	----
10-026	1”	1-3/8-12	1.81	1.62	0.44	----

20910 41FS 1110 N1 41FX 441S 'L'

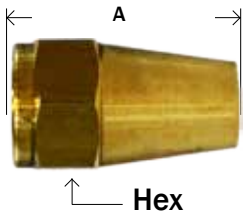
REDUCING SHORT ROD NUT



Part #	Thread Size UNF	A	Hex	Approx. Wt. Lbs.	
10-023	3/8” x 1/4”	0.74	0.81	0.06	----
10-024	1/2” x 3/8”	0.86	0.94	0.10	----
10-025	5/8” x 1/2”	0.99	1.06	0.12	----

LONG ROD NUT

SAE# 010111



Part #	Thread Size UNF	A	Hex	Approx. Wt. Lbs.	
10-001	1/8”	0.75	0.37	0.01	----
10-002	3/16”	0.81	0.43	0.02	----
10-003L	1/4"	0.98	0.55	0.03	----
10-003	1/4”	0.94	0.56	0.03	----
10-004	5/16”	1.12	0.62	0.04	----
10-005	3/8”	1.31	0.75	0.06	----
10-006	1/2”	1.62	0.87	0.12	----
10-007	5/8”	1.88	1.06	0.20	----
10-008	3/4”	2.19	1.25	0.34	----

41FL N2 241 441 41

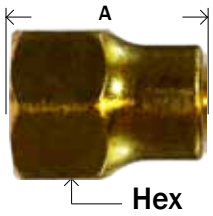
"L" means light pattern.

-These fittings are completely interchangeable with full pattern fittings, but have been modified in some way. This modification is usually in the length of the pipe threads. Used in plumbing and light industrial applications.

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

LONG FORGED NUT

SAE# 010167



Part #	Thread Size UNF	A	Hex	Approx. Wt. Lbs.	
10-028	1/4”	0.94	0.62	0.05	----
10-030	3/8”	1.06	0.81	0.08	----
10-031	1/2”	1.19	0.94	0.12	----
10-032	5/8”	1.44	1.06	0.26	----
10-033	3/4”	1.75	1.31	0.35	----

41FF 39 N4 14FL 641

SHORT FORGED NUT

SAE# 010166

Part #	Thread Size UNF	A	Hex	Approx. Wt. Lbs.	
10-038	3/16”	0.56	0.50	0.02	----
10-039	1/4”	0.60	0.62	0.04	----
10-040	5/16”	0.66	0.69	0.04	----
10-041	3/8”	0.70	0.81	0.06	----
10-042	1/2”	0.82	0.94	0.08	----
10-043	5/8”	0.95	1.06	0.12	----
10-044	3/4”	1.16	1.31	0.22	----
10-045	7/8”	1.18	1.38	0.30	----

14FS 41FFS 40 641-S 1116 NS4

EXTRA HEAVY SHORT FORGED NUT

Part #	Thread Size UNF	A	Hex	Approx. Wt. Lbs.	
10-046	1/4”	0.63	0.75	0.04	----
10-047	3/8”	0.72	0.88	0.06	----
10-048	1/2”	0.88	1.00	0.08	----
10-049	5/8”	0.98	1.12	0.12	----

NSA

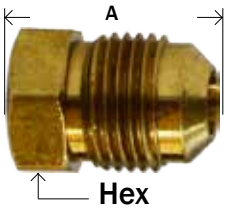
FORGED REDUCING NUT

Part #	Female Flare x OD	A	Hex	Approx. Wt. Lbs.	
10-051	5/16” x 1/4”	0.66	0.75	0.06	----
10-052	3/8” x 1/4”	0.72	0.81	0.06	----
10-053	3/8” x 5/16”	0.72	0.81	0.08	----
10-054	1/2” x 3/8”	0.81	0.94	0.08	----
10-055	5/8” x 3/8”	0.96	1.12	0.15	----
10-056	5/8” x 1/2”	0.97	1.06	0.12	----
10-058	3/4” x 5/8”	1.17	1.31	0.30	----

NSR4 14FS 41FRS 40R 662-S

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

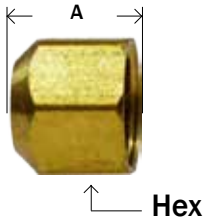
FLARED PLUG



	Part #	Thread Size UNF	A	Hex	Approx. Wt. Lbs.	
NEW	10-062	1/8"	0.53	0.34	0.01	
	10-063	3/16”	0.59	0.50	0.02	----
	10-064 *	1/4”	0.69	0.43	0.02	----
	10-065 *	5/16”	0.78	0.50	0.04	----
	10-066 *	3/8”	0.88	0.62	0.06	----
	10-067	1/2”	1.06	0.75	0.10	----
	10-068	5/8”	1.19	0.87	0.14	----
	10-069	3/4"	1.32	1.06	0.22	----

* Available in Stainless Steel. Add SS to the part# 58 639F PF 57 P2 2229 439

FLARED CAP

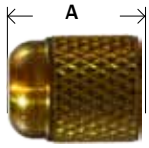


	Part #	Thread Size UNF	A	Hex	Approx. Wt. Lbs.	
NEW	10-073	1/8"	0.46	0.37	0.02	
	10-074	3/16”	0.47	0.50	0.02	----
	10-075 *	1/4”	0.48	0.50	0.02	----
NEW	10-075EH	1/4"	0.54	0.57	0.02	
	10-076	5/16”	0.62	0.62	0.04	----
	10-077 *	3/8”	0.58	0.75	0.03	----
	10-078	1/2”	0.69	0.81	0.14	----
	10-079	5/8”	0.81	0.94	0.20	----
	10-080	3/4”	1.17	1.37	0.30	----

* Available in Stainless Steel. Add SS to the part# 640F 41FC 56 N5 2129 54 440

FINGER TIGHTENING CAP

- Neoprene
- **O-Ring Included**

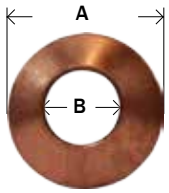


	Part #	Thread Size UNF	A	Approx. Wt. Lbs.	
	10-081	1/4"	0.62	0.02	----
NEW	10-082	3/8"	0.70	0.03	

NFT5

COPPER GASKET

SAE# 010113



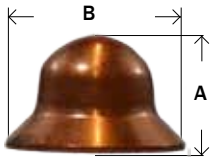
Part #	Size	A	B	Approx. Wt. Lbs.	
10-084	3/16”	0.31	0.12	0.01	----
10-085	1/4”	0.36	0.19	0.01	----
10-086	5/16”	0.42	0.22	0.01	----
10-087	3/8”	0.55	0.28	0.01	----
10-088	1/2”	0.66	0.41	0.01	----
10-089	5/8”	0.77	0.50	0.01	----
10-090	3/4”	0.95	0.62	0.01	----

B2 2GF 6251 FG 157 59 46

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

COPPER BONNET

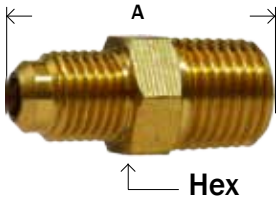
SAE# 010114

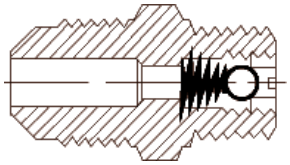


Part #	Size	A	B	Approx. Wt. Lbs.	
10-094	3/16”	0.16	0.31	0.01	----
10-095	1/4”	0.22	0.36	0.01	----
10-097	3/8”	0.34	0.55	0.01	----
10-098	1/2”	0.41	0.66	0.01	----
10-099	5/8”	0.44	0.77	0.01	----
10-100	3/4”	0.56	0.95	0.01	----

B1 3GF 64C 57 156 FB 695 464

MALE BALL CHECK CONNECTOR





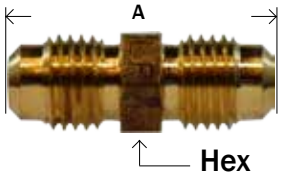
	Part #	Male Flare x Male NPTF	A	Hex	Approx. Wt. Lbs.	
	10-131*	1/4" x 1/8"	1.06	0.43		----
	10256WC	1/4” x 1/4”	1.24	0.6	0.04	----
	10-133*	3/8” x 1/4”	1.31	0.62	0.08	----
NEW	10-132	5/16" x 1/8"	1.14	0.50	0.04	

43A

* Note: Ball & Spring position may be reversed to change flow/check position. Min working pressure 3 PSI.

UNION

SAE# 010101



	Part #	Thread Size UNF	A	Hex	Approx. Wt. Lbs.	
	10-104	1/8”	0.91	0.31	0.02	----
	10-105	3/16”	1.06	0.37	0.02	----
	10-106L	1/4”	1.19	0.43	0.03	----
	10-106 *	1/4”	1.19	0.43	0.03	----
NEW	10-106EH	1/4"	1.55	0.56	0.05	
	10-107	5/16”	1.34	0.50	0.05	----
	10-108L	3/8”	1.50	0.62	0.09	----
	10-108 *	3/8’	1.50	0.62	0.09	----
	10-109L	1/2”	1.67	0.75	0.12	----
	10-109	1/2”	1.81	0.75	0.14	----
	10-110L	5/8”	2.00	0.87	0.20	----
	10-110	5/8”	2.12	0.87	0.20	----
	10-111	3/4”	2.44	1.06	0.35	----
	10-112	7/8”	2.72	1.25	0.52	----

* Available in Stainless Steel. Add SS to the part#

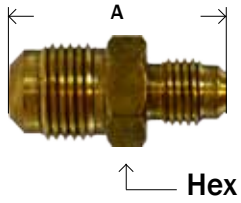
42F U2

"L" means light pattern.

-These fittings are completely interchangeable with full pattern fittings, but have been modified in some way. This modification is usually in the length of the pipe threads. Used in plumbing and light industrial applications.

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

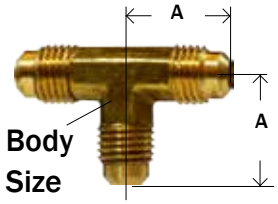
REDUCING UNION



Part #	Thread Size UNF	A	Hex	Approx. Wt. Lbs.	
10-115	1/4" x 1/8"	1.11	0.44	0.03	----
10-116	1/4" x 3/16"	1.12	0.44	0.03	----
10-117	5/16" x 1/4"	1.28	0.50	0.04	----
10-118	3/8" x 1/4"	1.38	0.62	0.06	----
10-119	3/8" x 5/16"	1.44	0.62	0.08	----
10-120	1/2" x 1/4"	1.53	0.75	0.10	----
10-121	1/2" x 3/8"	1.69	0.75	0.10	----
10-122	5/8" x 3/8"	1.88	0.87	0.17	----
10-123	5/8" x 1/2"	1.87	0.87	0.14	----
10-126	3/4" x 1/2"	2.18	1.06	0.26	----
10-127	3/4" x 5/8"	2.20	1.06	0.27	----

656F UR2 42-R

UNION TEE



Forged Tee

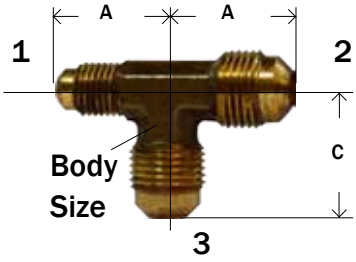
SAE# 010401

Part #	Thread Size UNF	A	Body Size	Approx. Wt. Lbs.	
10-157	1/8"	0.67	0.36	0.04	----
10-158	3/16"	0.75	0.36	0.06	----
10-159 **	1/4"	0.78	0.36	0.06	----
10-160 **	5/16"	0.91	0.44	0.10	----
10-161 **	3/8"	1.00	0.44	0.12	----
10-162	1/2"	1.16	0.59	0.19	----
10-163	5/8"	1.41	0.69	0.30	----
10-164	3/4"	1.64	0.88	0.53	----
10-165	7/8"	1.75	1.25	0.93	----

** Available in Stainless Steel. Add SS to the part#

244F T2 144F

REDUCING TEE 1 x 2 x 3

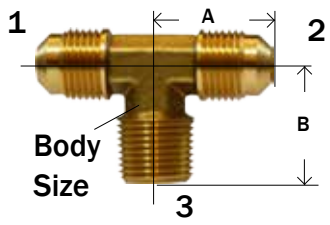


Part #	Thread Size UNF 1x2x3	A	C	Body Size	Approx. Wt. Lbs.	
10-170	1/4" x 1/4" x 3/8"	0.91	1.00	0.44	0.10	----
10-171	5/16" x 5/16" x 1/4"	0.94	0.94	0.44	0.12	----
10-172	3/8" x 1/4" x 1/4"	0.91	1.00	0.44	0.10	----
10-173	3/8" x 1/4" x 3/8"	1.00	0.91	0.44	0.12	----
10-174	3/8" x 3/8" x 1/4"	1.00	0.88	0.44	0.11	----
10-175	3/8" x 3/8" x 1/2"	1.00	1.19	0.59	0.14	----
10-176	3/8" x 3/8" x 5/8"	1.16	1.44	0.69	0.16	----
10-178	1/2" x 3/8" x 3/8"	1.16	1.12	0.59	0.18	----
10-179	1/2" x 3/8" x 1/2"	1.16	1.09	0.59	0.18	----
10-180	1/2" x 1/2" x 1/4"	1.16	0.97	0.59	0.18	----
10-181	1/2" x 1/2" x 3/8"	1.16	1.12	0.59	0.19	----
10-182	1/2" x 1/2" x 5/8"	1.28	1.41	0.69	0.28	----
10-187	5/8" x 1/2" x 5/8"	1.44	1.33	0.69	0.27	----
10-188	5/8" x 5/8" x 3/8"	1.38	1.16	0.69	0.30	----
10-189	5/8" x 5/8" x 1/2"	1.38	1.28	0.69	0.28	----
10-197	3/4" x 3/4" x 5/8"	1.66	1.50	0.88	0.36	----

144F TR2 659F 684F 44R

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

MALE BRANCH TEE
SAE# 010425



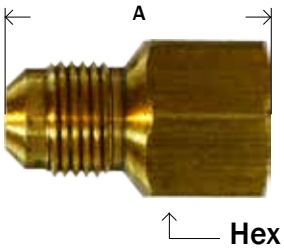
Forged Tee

Part #	Male Flare x Male NPT (1&2)x3	A	B	Body Size	Approx. Wt. Lbs.	List Price
10-203	3/16" x 1/8"	0.75	0.75	0.36	0.10	----
10-204	1/4" x 1/8"	0.78	0.75	0.36	0.05	----
10-205	1/4" x 1/4"	0.88	0.88	0.44	0.08	----
10-206	1/4" x 3/8"	0.92	1.00	0.47	0.10	----
10-207	5/16" x 1/8"	0.89	0.78	0.44	0.08	----
10-208	5/16" x 1/4"	0.94	0.94	0.44	0.08	----
10-209	3/8" x 1/8"	1.00	0.91	0.44	0.14	----
10-210	3/8" x 1/4"	1.00	0.94	0.44	0.12	----
10-211 **	3/8" x 3/8"	1.00	1.00	0.47	0.13	----
10-212 **	3/8" x 1/2"	1.12	1.22	0.69	0.22	----
10-213	1/2" x 1/4"	1.16	1.00	0.59	0.20	----
10-214	1/2" x 3/8"	1.16	1.14	0.59	0.19	----
10-215	1/2" x 1/2"	1.22	1.22	0.69	0.24	----
10-216	1/2" x 3/4"	1.38	1.41	0.88	0.22	----
10-217	5/8" x 3/8"	1.38	1.25	0.69	0.24	----
10-218	5/8" x 1/2"	1.41	1.31	0.69	0.29	----
10-219	5/8" x 3/4"	1.41	1.41	0.88	0.36	----
10-220	3/4" x 1/2"	1.63	1.59	0.88	0.49	----
10-221	3/4" x 3/4"	1.63	1.44	0.88	0.48	----

** Available in Stainless Steel. Add SS to the part#

T1 145F 45

FEMALE ADAPTER
SAE# 010103



Part #	Male Flare x Female NPTF	A	Hex	Approx. Wt. Lbs.	List Price
10-227	3/16" x 1/8"	0.97	0.56	0.03	----
10-228L	1/4" x 1/8"	1.03	0.56	0.03	----
10-228	1/4" x 1/8"	1.03	0.56	0.04	----
10-229L	1/4" x 1/4"	1.06	0.68	0.06	----
10-229	1/4" x 1/4"	1.23	0.68	0.07	----
10-230	1/4" x 3/8"	1.18	0.81	0.08	----
10-231	1/4" x 1/2"	1.31	0.94	0.06	----
10-232	5/16" x 1/8"	1.06	0.56	0.05	----
10-233	5/16" x 1/4"	1.28	0.68	0.08	----
10-234	3/8" x 1/8"	1.09	0.62	0.08	----
10-235L	3/8" x 1/4"	1.25	0.68	0.08	----
10-235	3/8" x 1/4"	1.31	0.81	0.08	----
10-236L	3/8" x 3/8"	1.25	0.81	0.08	----
10-236	3/8" x 3/8"	1.25	0.81	0.10	----
10-237L	3/8" x 1/2"	1.31	0.94	0.08	----
10-237	3/8" x 1/2"	1.60	1.00	0.16	----
10-238	3/8" x 3/4"	1.41	1.18	0.11	----
10-239	1/2" x 1/4"	1.37	0.75	0.10	----
10-240L	1/2" x 3/8"	1.38	0.81	0.12	----
10-240	1/2" x 3/8"	1.50	0.81	0.14	----
10-241L	1/2" x 1/2"	1.42	0.94	0.10	----
10-241	1/2" x 1/2"	1.75	1.00	0.12	----
10-242L	1/2" x 3/4"	1.40	1.10	0.16	----
10-242	1/2" x 3/4"	1.60	1.12	0.16	----
10-243	5/8" x 3/8"	1.24	0.87	0.12	----
10-244L	5/8" x 1/2"	1.51	0.86	0.15	----
10-244	5/8" x 1/2"	1.62	0.94	0.12	----
10-245	5/8" x 3/4"	1.65	1.12	0.17	----
10-246	3/4" x 1/2"	1.74	1.18	0.32	----
10-247	3/4" x 3/4"	1.75	1.18	0.22	----
10-248	7/8" x 3/4"	1.94	1.31	0.26	----

46 U3

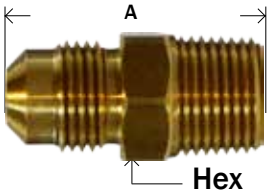
"L" means light pattern.

-These fittings are completely interchangeable with full pattern fittings, but have been modified in some way. This modification is usually in the length of the pipe threads. Used in plumbing and light industrial applications.

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

SAE 45° FLARE — BRASS FITTINGS

MALE ADAPTER



SAE# 010102

	Part #	Male Flare x Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
	10-253	1/8” x 1/8”	0.92	0.43	0.02	----
	10-254	3/16” x 1/8”	1.00	0.43	0.03	----
	10-255L	1/4” x 1/8”	1.06	0.43	0.03	----
	10-255 *	1/4” x 1/8”	1.06	0.43	0.04	----
NEW	10-255EH	1/4" x 1/8"	1.06	0.44	0.03	
	10-256L	1/4” x 1/4”	1.15	0.56	0.03	----
	10-256 *	1/4” x 1/4”	1.25	0.56	0.04	----
	10-257 *	1/4” x 3/8”	1.31	0.68	0.06	----
	10-258	1/4” x 1/2”	1.44	0.87	0.11	----
	10-259L	5/16” x 1/8”	1.15	0.50	0.04	----
	10-259	5/16” x 1/8”	1.16	0.50	0.04	----
	10-260L	5/16” x 1/4”	1.31	0.56	0.06	----
	10-260	5/16” x 1/4”	1.34	0.56	0.06	----
	10-261 *	5/16” x 3/8”	1.38	0.68	0.08	----
	10-262	3/8” x 1/8”	1.25	0.62	0.07	----
	10-263L	3/8” x 1/4”	1.31	0.62	0.06	----
	10-263 *	3/8” x 1/4”	1.44	0.62	0.08	----
	10-264L	3/8” x 3/8”	1.37	0.68	0.09	----
	10-264 *	3/8” x 3/8”	1.42	0.68	0.09	----
	10-265L	3/8” x 1/2”	1.44	0.89	0.12	----
	10-265 *	3/8” x 1/2”	1.69	0.87	0.14	----
	10-266	3/8” x 3/4”	1.81	1.06	0.18	----
	10-267	1/2” x 1/4”	1.60	0.75	0.11	----
	10-268L	1/2” x 3/8”	1.46	0.75	0.10	----
	10-268	1/2” x 3/8”	1.62	0.75	0.12	----
	10-269L	1/2” x 1/2”	1.62	0.87	0.13	----
	10-269	1/2” x 1/2”	1.79	0.87	0.15	----
	10-270	1/2” x 3/4”	1.75	1.06	0.22	----
	10-271	5/8” x 1/4”	1.81	0.87	0.14	----
	10-272L	5/8” x 3/8”	1.67	0.87	0.14	----
	10-272	5/8” x 3/8”	1.81	0.87	0.18	----
	10-273L	5/8” x 1/2”	1.80	0.87	0.11	----
	10-273	5/8” x 1/2”	2.00	0.87	0.20	----
	10-274	5/8” x 3/4”	1.85	1.06	0.21	----
	10-275	3/4” x 1/2”	2.19	1.06	0.28	----
	10-276	3/4” x 3/4”	2.08	1.06	0.28	----
	10-277	7/8” x 1/2”	2.22	1.25	0.52	----
	10-278	7/8” x 3/4”	2.35	1.25	0.41	----
	10-279	1” x 3/4”	2.44	1.43	0.53	----
	10-280	1” x 1”	2.44	1.43	0.53	----

* Available in Stainless Steel. Add SS to the part#

U1 48

"L" means light pattern.

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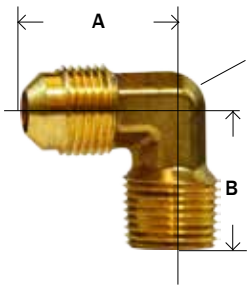
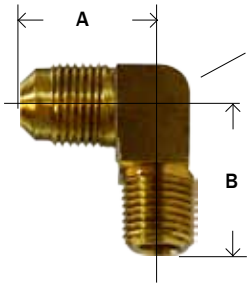
WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

90° MALE ELBOW

SAE# 010202



Forged Elbow



Barstock Elbow

Part #	Male Flare x Male NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
10-283	1/8" x 1/8"	0.63	0.73	0.37	0.04	----
10-283B*	1/8" x 1/8"	0.62	0.69	0.43	0.04	----
10-284	3/16" x 1/8"	0.75	0.75	0.38	0.04	----
10-284B*	3/16" x 1/8"	0.75	0.75	0.43	0.06	----
10-285	3/16" x 1/4"	0.81	0.88	0.44	0.08	----
10-286	1/4" x 1/8"	0.84	0.78	0.38	0.04	----
10-286L	1/4" x 1/8"	0.96	0.80	0.37	0.04	----
10-286B*	1/4" x 1/8"	0.81	0.78	0.47	0.05	----
10-287 **	1/4" x 1/4"	0.81	0.88	0.44	0.05	----
10-287B*	1/4" x 1/4"	0.91	0.93	0.59	0.08	----
10-288 **	1/4" x 3/8"	0.91	0.91	0.47	0.08	----
10-289	1/4" x 1/2"	1.03	1.09	0.59	0.10	----
10-290	5/16" x 1/8"	0.91	0.88	0.44	0.06	----
10-290B*	5/16" x 1/8"	0.91	0.78	0.52	0.06	----
10-291	5/16" x 1/4"	0.98	0.96	0.44	0.08	----
10-291B*	5/16" x 1/4"	0.95	0.92	0.62	0.08	----
10-292	5/16" x 3/8"	1.06	1.09	0.59	0.08	----
10-293	3/8" x 1/8"	1.00	0.91	0.53	0.08	----
10-293B*	3/8" x 1/8"	1.03	0.91	0.65	0.08	----
10-294	3/8" x 1/4"	1.01	0.89	0.48	0.08	----
10-294B*	3/8" x 1/4"	0.97	1.04	0.68	0.11	----
10-295 **	3/8" x 3/8"	1.00	0.88	0.47	0.10	----
10-295L	3/8" x 3/8"	0.95	0.89	0.46	0.11	----
10-295B*	3/8" x 3/8"	1.06	1.09	0.69	0.12	----
10-296 **	3/8" x 1/2"	1.10	1.09	0.59	0.12	----
10-297	3/8" x 3/4"	1.25	1.31	0.81	0.12	----
10-298	1/2" x 1/4"	1.19	1.00	0.59	0.12	----
10-298B*	1/2" x 1/4"	1.22	1.19	0.81	0.12	----
10-299	1/2" x 3/8"	1.10	1.00	0.59	0.13	----
10-299B*	1/2" x 3/8"	1.22	1.12	0.77	0.18	----
10-300	1/2" x 1/2"	1.16	1.13	0.59	0.14	----
10-300B*	1/2" x 1/2"	1.26	1.26	0.94	0.26	----
10-301	1/2" x 3/4"	1.42	1.25	0.81	0.24	----
10-311	5/8" x 1/4"	1.34	1.13	0.72	0.28	----
10-302	5/8" x 3/8"	1.35	1.22	0.72	0.20	----
10-302B*	5/8" x 3/8"	1.41	1.25	0.94	0.20	----
10-303	5/8" x 1/2"	1.35	1.22	0.72	0.20	----
10-303L	5/8" x 1/2"	1.29	1.11	0.70	0.20	----
10-303B*	5/8" x 1/2"	1.41	1.38	0.94	0.20	----
10-304	5/8" x 3/4"	1.44	1.31	0.81	0.25	----
10-305	3/4" x 1/2"	1.67	1.50	0.88	0.34	----
10-306	3/4" x 3/4"	1.67	1.63	0.88	0.30	----
10-306B*	3/4" x 3/4"	1.60	1.62	0.91	0.32	----
10-307	7/8" x 3/4"	1.75	1.68	1.00	0.44	----
10-308	1" x 3/4"	1.94	1.69	1.31	0.75	----
10-309	1" x 1"	1.94	1.75	1.25	0.78	----

* Barstock

** Available in Stainless Steel. Add SS to the part#

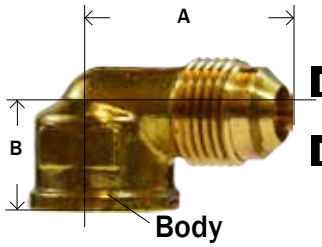
249F 49 E1 149F

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

SAE 45° FLARE — BRASS FITTINGS

90° FEMALE ELBOW

SAE# 010203



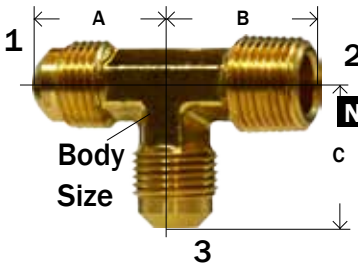
Forged Elbow

	Part #	Male Flare x Female NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
	10-312	3/16" x 1/8"	0.81	0.44	0.56	0.05	----
	10-313	1/4" x 1/8"	0.90	0.46	0.56	0.06	----
NEW	10-313B*	1/4" x 1/8"	0.95	0.46	0.56	0.06	----
	10-314	1/4" x 1/4"	0.97	0.59	0.75	0.08	----
NEW	10-314B*	1/4" x 1/4"	0.95	0.66	0.75	0.08	----
	10-315	1/4" x 3/8"	1.03	0.57	0.81	0.09	----
	10-333	1/4" x 1/2"	1.08	0.66	1.00	0.12	----
	10-316	5/16" x 1/8"	0.94	0.88	0.45	0.08	----
NEW	10-306B*	5/16" x 1/8"	0.94	0.87	0.56	0.07	----
	10-317	5/16" x 1/4"	1.03	0.58	0.75	0.06	----
	10-318	3/8" x 1/8"	1.00	0.88	0.47	0.10	----
	10-319	3/8" x 1/4"	1.06	0.59	0.75	0.09	----
NEW	10-319B*	3/8" x 1/4"	1.15	0.73	0.68	0.14	----
	10-320	3/8" x 3/8"	1.06	0.57	0.81	0.10	----
NEW	10-320B*	3/8" x 3/8"	1.10	0.75	0.82	0.16	----
	10-321	3/8" x 1/2"	1.16	0.66	1.00	0.14	----
	10-321L	3/8" x 1/2"	1.21	0.42	0.96	0.13	----
	10-322	3/8" x 3/4"	1.28	0.72	1.25	0.12	----
	10-323	1/2" x 1/4"	1.25	0.70	0.88	0.13	----
	10-324	1/2" x 3/8"	1.25	0.70	0.88	0.12	----
NEW	10-324B*	1/2" x 3/8"	1.26	0.75	0.88	0.16	----
	10-325	1/2" x 1/2"	1.29	0.72	1.00	0.18	----
	10-325L	1/2" x 1/2"	1.24	0.71	0.98	0.17	----
	10-326	1/2" x 3/4"	1.41	0.72	1.25	0.20	----
	10-327	5/8" x 3/8"	1.35	1.22	0.72	0.22	----
	10-328	5/8" x 1/2"	1.38	0.75	1.00	0.20	----
	10-329	5/8" x 3/4"	1.50	0.76	1.25	0.28	----
	10-330	3/4" x 1/2"	1.63	1.06	1.06	0.42	----
	10-331	3/4" x 3/4"	1.88	1.06	1.31	0.40	----

* Barstock

E3 50 150F

FORGED MALE RUN TEE



	Part #	Male Flare x Male NPTF (1&3) x 2	A	B	C	Body Size	Approx. Wt. Lbs.	List Price
	10-361	3/16" x 5/16" x 1/8"	0.87	0.78	0.97	0.44	0.08	----
	10-343	3/16" x 1/8"	0.75	0.75	0.75	0.37	0.05	----
	10-344	1/4" x 1/8"	0.78	0.75	0.78	0.37	0.06	----
NEW	10-344B*	1/4" x 1/8"	0.90	0.76	0.86	0.37	0.07	----
	10-345	1/4" x 1/4"	0.88	0.88	0.88	0.44	0.08	----
	10-347	5/16" x 1/8"	0.88	0.80	0.88	0.44	0.08	----
	10-348	5/16" x 1/4"	0.94	0.94	0.94	0.44	0.08	----
	10-350	3/8" x 1/4"	1.00	0.94	1.00	0.44	0.12	----
	10-351	3/8" x 3/8"	1.00	1.00	1.00	0.47	0.10	----
	10-340	3/8" x 1/2" x 3/8"	1.09	1.09	1.16	0.59	0.18	----
	10-352	3/8" x 1/2"	1.12	1.22	1.12	0.69	0.12	----
	10-353	1/2" x 3/8" x 1/2"	1.22	1.22	1.15	0.69	0.22	----
	10-354	1/2" x 3/8"	1.16	1.09	1.16	0.59	0.18	----
	10-355	1/2" x 1/2"	1.22	1.22	1.22	0.69	0.22	----
	10-357	5/8" x 1/2"	1.41	1.31	1.41	0.69	0.28	----
	10-359	3/4" x 1/2"	1.63	1.59	1.63	0.88	0.48	----
	10-360	3/4" x 3/4"	1.62	1.44	1.62	0.88	0.48	----

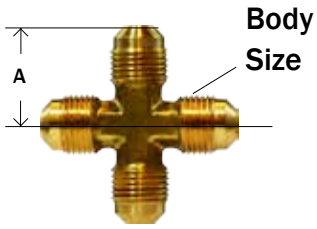
* Barstock

T3 151F 51

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

FORGED FLARE CROSS

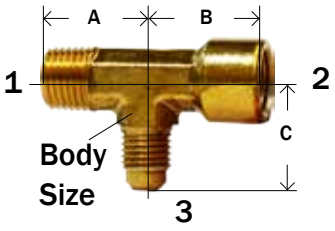
SAE# 010501



Part #	Thread Size UNF	A	Body Size	Approx. Wt. Lbs.	List Price
10-373	1/4”	0.88	0.44	0.10	----
10-374	5/16”	0.92	0.44	0.10	----
10-375	3/8”	1.00	0.44	0.16	----
10-376	1/2”	1.16	0.59	0.24	----

455 C1 147F 52

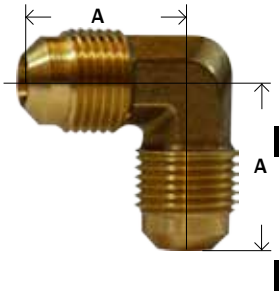
FORGED ADAPTER TEE / SERVICE TEE



Part #	Size 1 x 2 x 3	A	B	C	Body Size	Approx. Wt. Lbs.	List Price
10-382	1/8” x 1/8” x 1/4”	0.72	0.53	0.80	0.47	0.08	----
10-383	1/4” x 1/4” x 1/4”	0.88	1.00	0.91	0.47	0.11	----

T17 53

FORGED 90° FLARE ELBOW

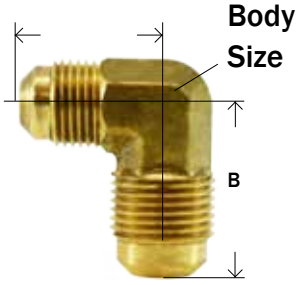


	Part #	Thread Size UNF	A	Approx. Wt. Lbs.	List Price
	10-404	1/8”	0.64	0.04	----
	10-405	3/16”	0.75	0.06	----
	10-406	1/4”	0.81	0.08	----
NEW	10-406B*	1/4"	0.89	0.04	----
	10-407	5/16”	0.91	0.10	----
	10-408	3/8”	1.00	0.10	----
	10-409	1/2”	1.16	0.14	----
NEW	10-409B*	1/2"	1.23	0.22	----
	10-410	5/8”	1.41	0.22	----
	10-411	3/4”	1.66	0.68	----
	10-412	7/8”	1.81	0.82	----

* Barstock

E2 155F

FORGED REDUCING ELBOW



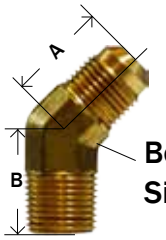
Part #	Male Flare x Male Flare	A	B	Body Size	Approx. Wt. Lbs.	List Price
10-416	3/8” x 1/4”	1.00	0.88	0.47	0.08	----
10-419	1/2” x 3/8”	1.19	1.02	0.59	0.14	----
10-421	5/8” x 1/2”	1.34	1.23	0.72	0.21	----

ER2 657F 55R

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

SAE 45° FLARE — BRASS FITTINGS

45° ELBOW



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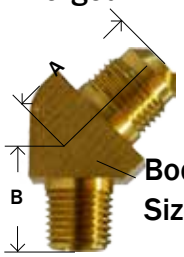


Barstock

SAE# 010302

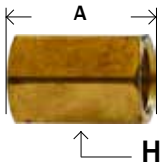
Part #	Male Flare x Male NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
10-448	1/4" x 1/8"	0.67	0.64	0.41	0.04	----
10-448B*	1/4" x 1/8"	0.67	0.64	0.44	0.04	----
10-449	1/4" x 1/4"	0.75	0.86	0.53	0.07	----
10-450	5/16" x 1/8"	0.78	0.64	0.53	0.06	----
10-451	5/16" x 1/4"	0.81	0.86	0.53	0.07	----
10-452	3/8" x 1/4"	0.91	0.86	0.53	0.09	----
10-452B*	3/8" x 1/4"	0.89	0.86	0.64	0.12	----
10-453	3/8" x 3/8"	0.93	0.94	0.59	0.11	----
10-454	3/8" x 1/2"	0.99	1.17	0.75	0.19	----
10-455	1/2" x 3/8"	1.07	0.88	0.59	0.12	----
10-455B*	1/2" x 3/8"	1.06	0.94	0.76	0.18	----
10-456	1/2" x 1/2"	1.12	1.18	0.75	0.20	----
10-460	5/8" x 3/8"	1.13	0.95	0.81	0.22	----
10-457	5/8" x 1/2"	1.12	1.17	0.78	0.18	----
10-458	3/4" x 1/2"	1.28	1.16	0.88	0.26	----
10-459	3/4" x 3/4"	1.41	1.20	0.88	0.31	----

* Barstock

E145 54 159F 654F 59FF 254 47 4945

FEMALE 45° FLARE FITTINGS

UNION



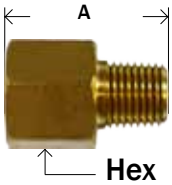
- Use with Copper Gasket

SAE# 010107

	Part #	Female Flare x Female Flare	A	Hex	Approx. Wt. Lbs.	List Price
	10-135	1/4"	1.00	0.62	0.06	----
	10-136	3/8"	1.25	0.81	0.14	----
	10-137	1/2"	1.43	0.94	0.18	----
NEW	10-138	5/8"	1.69	1.07	0.24	----
NEW	10-139	3/4"	2.00	1.31	0.42	----

2310 U4 660HD 32

FEMALE FLARE ADAPTER



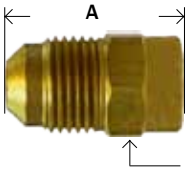
SAE# 010106

Part #	Female Flare x Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
10-440	1/4" x 1/8"	0.91	0.62	0.05	----
10-441	1/4" x 1/4"	1.01	0.62	0.06	----
10-442	3/8" x 1/4"	1.28	0.81	0.10	----
10-443	1/2" x 3/8"	1.36	0.94	0.14	----
10-444	1/2" x 1/2"	1.46	0.94	0.14	----

U5 664FHD 33 48-FF

FLARE REDUCER

SAE# 010105



Part #	Male Flare x Female Flare	A	Hex	Approx. Wt. Lbs.	List Price
10-462	1/4" x 3/8"	1.22	0.81	0.10	----
10-461	1/4" x 1/2"	1.36	0.94	0.14	----
10-463 *	3/8" x 1/4"	1.12	0.62	0.06	----
10-464	3/8" x 1/2"	1.44	0.94	0.14	----
10-473	3/8" x 5/8"	1.63	1.12	0.16	----
10-467	1/2" x 3/8"	1.41	0.81	0.13	----
10-468	1/2" x 5/8"	1.68	1.06	0.20	----
10-469	5/8" x 1/2"	1.63	1.00	0.17	----
10-470	5/8" x 3/4"	1.97	1.31	0.31	----
10-471	3/4" x 5/8"	1.75	1.18	0.32	----

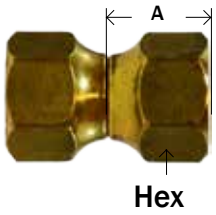
* Available in Stainless Steel. Add SS to the part#

UR3 661FHD 227 46-FF

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

BRASS FLARE SWIVEL FITTINGS

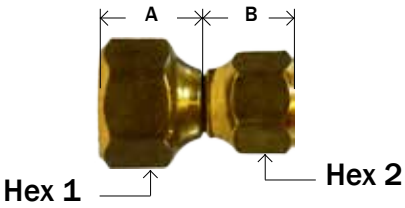
FORGED SWIVEL
SAE# 010108



Part #	Female Flare UNF	A	Hex	Approx. Wt. Lbs.	List Price
10-481	1/4”	0.59	0.62	0.04	----
10-482	5/16”	0.62	0.68	0.06	----
10-483	3/8”	0.69	0.81	0.10	----
10-483L	3/8"	0.63	0.80		----
10-484	1/2”	0.81	0.94	0.16	----
10-484L	1/2"	0.82	0.92		----
10-485	5/8”	0.94	1.06	0.24	----
10-486	3/4”	1.12	1.31	0.34	----

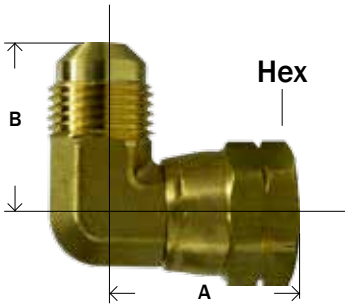
1350 US4 14FSV 34

REDUCING SWIVELS



Part #	Female Flare UNF	A	B	Hex 1	Hex 2	Approx. Wt. Lbs.	List Price
10-487	3/8” x 1/4”	0.72	0.60	0.81	0.62	0.08	----
10-488	1/2” x 3/8”	0.84	0.70	0.94	0.81	0.12	----
10-489	5/8” x 1/2”	0.98	0.82	1.03	0.94	0.22	----

FORGED SWIVEL ELBOWS



Part #	Male Flare x Female Flare	A	B	Hex	Approx. Wt. Lbs.	List Price
10-493	1/4”	0.93	0.86	.563	0.12	----
10-494	3/8”	1.13	1.1	.75	0.20	----
10-495	1/2"	1.29	1.20	.88	0.25	----
10-496	5/8"	1.50	1.30	1.00	0.37	----
10-497	3/4"	1.83	1.60	1.25	0.54	----

ES4

FLARE SWEAT FITTINGS

NEW

Part #	Flare x Sweat	List Price
10-600	1/4" x 1/4"	----
10-602	1/4" x 3/8"	----
10-620	3/8" x 1/4"	----
10-612	3/8" x 3/8"	----
10-613	3/8" x 1/2"	----
10-621	1/2" x 1/2"	----
10-611	1/2" x 5/8"	----
10-614	5/8" x 5/8"	----
10-622	5/8" x 7/8"	----
10-615	3/4" x 3/4"	----
10-616	3/4" x 7/8"	----
10-617	7/8" x 7/8	----
10-618	1" x 1-1/8"	----
10-619	1-1/8" x 1-1/8"	----

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

SPACE HEATER/ GAS RANGE FITTINGS | BRASS FITTINGS

SPACE HEATER FITTINGS

9/16-24 FINE THREAD FLARE

NUT

#M-82SH

Part #	Size	
14-001	3/8	----

MALE ADAPTER

#M-83SH

Part #	Size	
14-016	3/8 x 3/8	----
14-017	3/8 x 1/2	----

FEMALE ADAPTER

#M-80SH

Part #	Size	
14-018	3/8 x 3/8	----
14-025	3/8 x 1/2	----

UNION

Part #	Size	
14-011	3/8	----

BRASS GAS RANGE FITTINGS

BRASS MALE ADAPTERS

	Part #	Male Flare x Male NPTF	
NEW	35-130	3/8" x 3/8"(1/8 Tap)	----
NEW	35-133	3/8" x 3/8"(1/4 Tap)	----
NEW	35-131	3/8" x 1/2"(3/8 Tap)	----
	35-132	1/2" x 1/2" (3/8" FIP TAP)	----
	35-134	15/16" x 1/2"	----
	35-135	15/16" x 3/4" (1/2" FIP TAP)	----

BRASS FEMALE ADAPTERS

15/16-16 FLARE THREAD

Part #	Flare x FIP	
35-136	15/16" x 1/2"	----
35-142	15/16" x 3/4"	----

CAP

Part #	Size	
35-186	15/16"	----

DRUM ADAPTERS

- Straight Thread

SAE# 010165

Part #	Male Flare x FIP	
50-011	1/4" x 1/2"	----
50-001	1/4" x 3/4"	----

RD IF K1

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TEE CONNECTION

Part #	Pipe Size	
34-001	1/4" Inverted flare x 1/4" MPT	----

41-1-390-0014 2000

TAILPIECE WITH FLATS

1/4 NPT

Part #	Description	
34-011	2.34 w/ wrench Flats	----
34-012	2.13 w/ Hex	----

1001AUL 21605 M-2001-A 2002A 2001AHN

STANDARD NUT

7/8" Hex

Part #	Pipe Size	
34-016	.880-14 LH	----

2001B

TAILPIECE & NUT ASSEMBLY

Part #	Pipe Size	
34-022	1/4	----

2002AB

POL CAP

Part #	Pipe Size	
34-031	.880-14LH	----

ME1699 POL2004 1004A M-2004

POL PLUG WITH CHAIN

Part #	Description	
34-141	POL PLUG WITH CHAIN	----

ME1691-1

SINGLE PIECE POL ADPATER

Part #	Description	
34-130	MALE POL X 1/4 FPT	----
34-131	MALE POL X 1/2 FPT	----

ME351 ME357

ADAPTERS

Part #	Pipe Size	
34-041	3/8 Flare x .880-14LH	----
34-046	1/2 Flare x .880-14LH	----
34-051	5/8 Flare x .880-14LH	----

ME3510 2906E 2007

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TAILPIECE ASSEMBLY W/HEX HEAD NUT & STEM

NEW

Part #	Length	
34-080	1/4 NPT X POL 2 LONG HARD NOSE 2 OAL	----
34-082	MALE POL X 3/8 NPT	----

2906D ME352

NEW

Part #	Length	
34-088	MPOL HARD NOSE 9/16-18 FE LH THREAD	----

ME1650

NEW

Part #	Length	
34-084	MPOL X 1/4 HOSE BARB 7/8 HEX	----

ME5930 970JR

SOFT NOSE TAILPIECE ASSEMBLY

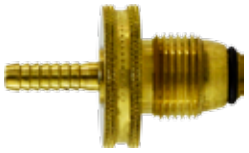
NEW

Part #	Length	
34-060	1/4 NPT X POL 2.1 LONG #60 ORIFICE	----
34-061	1/4 MPT X POL SOFT NOSE 2-1/2	----
34-062	1/4 NPT POL SOFT NOSE #60 ORIFICE 2.3 LONG	----
34-063	POL X 9/16-18 LH TAILPIECE SOFT NOSE	----
34-064	1/4 NPT X POL SOFT NOSE 2 3/8 LONG	----

ME1638 2003-T-GH-60 2002 2018-L 2003-T 970S

HAND WHEEL POL ADAPTERS

NEW



Part #	Length	
34-065	MPOL SOFT NOSE X 1/4 HOSE BARB BR.WHEEL	----

ME1656AR

NEW

Part #	Length	
34-072	1/4 MPT POL SOFT NOSE W/PLASTIC WHEEL	----

ME1654

NEW

Part #	Length	
34-073	1/4 MPT POL SOFT NOSE WITH BRASS WHEEL	----

ME1654AR

NEW

Part #	Length	
34-074	MPOL SOFT NOSE X 1/4 HB W/PLASTIC WHEEL	----

ME1656

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PROPANE MOTOR FUEL FILL ADAPTER

NEW

• Allows a standard POL fitting to be adapted to fill an engine fuel tank.

Part #	Length	
34-079	FE POL X 1 3/4 ACME FUEL FILL ADPT	----

ME458 2017

FEMALE POL X MIP ADAPTER

NEW

Part #	Length	
34-111	1/4 MPT X FE POL ADAPTER	----
34-112	3/8 MPT X FE POL ADAPTER	----
34-113	1/2 MPT X FE POL ADAPTER	----
34-114	3/4 MPT X FE POL ADAPTER	----

2011-B ME285 2011-D 2011-E

FEMALE FPT X FEMALE POL ADAPTER

NEW

Part #	Length	
34-120	1/4 FPT X FE POL	----
34-121	3/8 FPT X FE POL	----
34-122	1/2 FPT X FE POL	----
34-123	3/4 FPT X FE POL	----

2016-B ME302 2016-D ME304

POL O-RING ONLY

NEW

Part #	Length	
34-143	POL O-RING ONLY	----

C5-OR-POL 568-110-01

POL PLASTIC DUST PLUG

NEW

Part #	Length	
34-160	POL PLASTIC DUST PLUG	----

ME970P

APPLIANCE TEE

NEW

• Tap & Add

Part #	Length	
34-170	M.POLXF.POL W/1-20M CYL AND 1/4 INV FLAR	----

2090

NEW

• Add an appliance

Part #	Length	
34-172	M.POLXF. POL W/1-20 MALE CYLINDER THREAD	----

2012

NEW

• With QCC1 connection

Part #	Length	
34-174	QCC1 X F. POL W/1-20 MALE CYLINDER THD	----

2013

DUAL APPLIANCE TEE

NEW

Part #	Length	
34-176	M.POL X (2) OF 1-20 MALE CYLINDER THREAD	----

2099

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JIC 37° FLARE STRAIGHTS

STRAIGHT TUBE UNION

Part #	Tube OD	Tube Thread	L	Hex	Working Pressure	
28-966	1/4	7/16-20	1.35	0.49	3250 psi	----
28-969	3/8	9/16-18	1.41	0.63	3250 psi	----
28-970	1/2	3/4-16	1.62	0.81	3250 psi	----
28-971	3/4	1-1/16-12	2.14	1.13	3250 psi	----
28-972	1"	1-5/16-12	2.25	1.38	2600 psi	----

SBC 132403 HTXB

FEMALE STRAIGHT ADAPTER

Part #	Tube OD	Pipe	Tube Thread	L	Hex	Working Pressure	
28-957	1/4	1/8-27	7/16-20	1.19	0.56	3250 psi	----
28-958	1/4	1/4-18	7/16-20	1.40	0.75	3250 psi	----
28-959	3/8	1/4-18	9/16-18	1.40	0.75	3250 psi	----
28-960	3/8	3/8-18	9/16-18	1.40	0.88	3250 psi	----
28-961	1/2	3/8-18	3/4-16	1.56	0.88	3250 psi	----
28-962	1/2	1/2-14	3/4-16	1.79	1.13	3250 psi	----
28-963	5/8	1/2-14	7/8-14	1.87	1.13	3250 psi	----
28-964	3/4	3/4-1/4	1-1/16-12	2.06	1.38	2600 psi	----

STRAIGHT

	Part #	Tube OD	A NPTF	Tube Thread	L	Hex	Working Pressure	
	28-701	1/4	1/8-27	7/16-20	1.22	0.45	3250 psi	----
	28-702	1/4	1/4-18	7/16-20	1.37	0.56	3250 psi	----
	28-703	1/4	3/8-18	7/16-20	1.42	0.75	3250 psi	----
NEW	28-704	5/16	1/8-27	1/2-20	1.41	0.56	3250 psi	----
	28-705	5/16	1/4-18	1/2-20	1.42	0.56	3250 psi	----
	28-706	3/8	1/8-27	9/16-18	1.24	0.63	3250 psi	----
	28-707	3/8	1/4-18	9/16-18	1.43	0.63	3250 psi	----
	28-708	3/8	3/8-18	9/16-18	1.38	0.75	3250 psi	----
	28-709	3/8	1/2-14	9/16-18	1.69	0.88	3250 psi	----
	28-710	1/2	1/4-18	3/4-16	1.53	0.81	3250 psi	----
	28-711	1/2	3/8-18	3/4-16	1.53	0.81	3250 psi	----
	28-712	1/2	1/2-14	3/4-16	1.79	0.88	3250 psi	----
	28-713	1/2	3/4-14	3/4-16	1.85	1.13	2600 psi	----
NEW	28-714	5/8	3/8	7/8-14	1.84	0.94	3250 psi	----
	28-715	5/8	1/2-14	7/8-14	1.89	0.94	3250 psi	----
	28-716	5/8	3/4-14	7/8-14	1.95	1.13	2600 psi	----
	28-748	3/4	1/2-14	1 1/16-12	2.06	1.13	2925 psi	----
	28-717	3/4	3/4-14	1 1/16-12	2.06	1.13	2600 psi	----
	28-749	3/4	1-11 1/2	1 1/16-12	2.25	1.38	1950 psi	----
	28-719	1	3/4-14	1 5/16-12	2.06	1.13	2275 psi	----
	28-718	1	1-11 1/2	1 5/16-12	2.3	1.38	1950 psi	----

B2404 SB FTXB

STRAIGHT SWIVEL ADAPTER

Part #	Tube OD	A NPTF	Tube Thread	L	Hex	Working Pressure	
28-752	1/4	1/4-18	7/16-20	1.389	.563	3250 psi	----
28-753	3/8	1/4-18	9/16-18	1.6	.563	3250 psi	----
28-754	3/8	3/8-18	9/16-18	1.574	.690	2925 psi	----
28-756	1/2	1/2-14	3/4-16	1.706	.875	2600 psi	----

B6505 SJS

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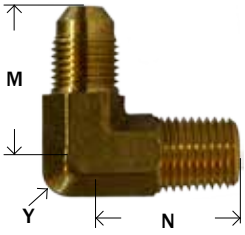
90° FORGED ELBOW

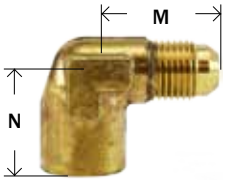


• Swivel available

Part #	Tube OD	Tube Thread	A NPTF	M	N	Y	Working Pressure	
28-760F	1/4	7/16-20	1/8-27	0.89	0.78	0.5	2160 psi	----
28-762F	1/4	7/16-20	1/4-18	1.05	1.03	0.53	1846 psi	----
28-766F	5/16	1/2-20	1/4-18	1.10	1.10	0.55	3905 psi	----
28-768F	3/8	9/16-18	1/8-27	1.06	1.00	0.56	3128 psi	----
28-770F	3/8	9/16-18	1/4-18	1.06	1.09	0.54	1564 psi	----
28-772F	3/8	9/16-18	3/8-18	1.15	1.22	0.74	1464 psi	----
28-773F	3/8	9/16-18	1/2-14	1.22	1.47	0.90	1265 psi	----
28-774F	1/2	3/4-16	3/8-18	1.25	1.22	0.81	1467 psi	----
28-777F	1/2	3/4-16	1/2-14	1.31	1.47	0.90	1265 psi	----
28-778F	1/2	3/4-16	3/4-14	1.4	1.59	0.89	2061 psi	----
28-780F	5/8	7/8-14	1/2-14	1.45	1.47	0.88	1265 psi	----
28-781F	3/4	1 1/16-12	1/2-14	1.66	1.56	1.08	1265 psi	----
28-783F	3/4	1 1/16-12	3/4-14	1.66	1.59	1.06	1084 psi	----
28-784F	1	1 5/16-12	3/4-14	1.88	1.77	1.32	1802 psi	----
28-786F	1	1 5/16-12	1-11 1/2	1.81	1.97	1.3	2361 psi	----

DL3B2 3F69CL GGL6A1 F23L2 EE48D3 EE46B2 FF45A2 F48C3 FF22C3 D49B1 D25B1 3F47C1

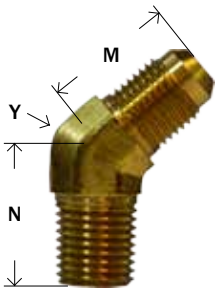
FEMALE ELBOW FORGED BODY



Part #	Tube OD	Tube Thread	A NPTF	M	N	Working Pressure	
28-973	1/4	7/16-20	1/8-27	1.08	0.66	2797 psi	----
28-974	1/4	7/16-20	1/4-18	1.25	0.55	3066 psi	----
28-975	3/8	9/16-18	1/4-18	1.23	0.88	2842 psi	----

B2502 EBF DTXB

45° FORGED ELBOW



• Swivel available

Part #	Tube OD	Tube Thread	A NPTF	M	N	Y	Working Pressure	
28-722F	1/4	7/16-20	1/8-27	0.72	0.64	0.5	4367 psi	----
28-724F	1/4	7/16-20	1/4-18	0.81	0.84	0.53	3750 psi	----
28-728F	5/16	1/2-2	1/4-18	0.88	0.86	0.54		
28-729F	3/8	9/16-18	1/8-27	0.83	0.65	0.63	3128 psi	----
28-731F	3/8	9/16-18	1/4-18	0.83	0.86	0.63	3128 psi	----
28-733F	3/8	9/16-18	3/8-18	0.91	0.95	0.81	3100 psi	----
28-734F	3/8	9/16-18	1/2-14	1.03	1.17	0.94	2826 psi	----
28-736F	1/2	3/4-16	3/8-18	0.98	0.95	0.75	2938 psi	----
28-738F	1/2	3/4-16	1/2-14	1.13	1.17	0.86	2826 psi	----
28-740F	5/8	7/8-14	1/2-14	1.13	1.08	0.88		
28-742F	3/4	1 1/16-12	3/4-14	1.28	1.2	1.13	2442 psi	----

B2503 FBC-F VTXB

Thread Chart	
Size	JIC Thread
1/8	5/16-24
3/16	3/8-24
1/4	7/16-20
5/16	1/2-20
3/8	9/16-18
1/2	3/4-16
5/8	7/8-14
3/4	1-1/16-12
1	1-5/16-12

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INVERTED FLARE

Tube O.D.	1/8	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8	1
Thread O.D. threads per inch	5/16-28	3/8-24	7/16-24	1/2-20	5/8-18	11/16-18	3/4-18	7/8-18	1-1/16-16	1-3/16-16	1-5/16-16

•Typical Application
Hydraulic brake, power steering, fuel lines and transmission cooler lines, LP and natural gas.

•Working Pressure Ranges
Temperature and type of tubing used are important factors. However, the following table is a good guide for proper selection. Temperature 73^{0}F with copper tubing:

PSI	Tube O.D. (in.)	Tube Wall (in.)
2800	1/8	.030
1900	3/16	.030
1400	1/4	.030
1200	5/16	.032
1000	3/8	.032
750	1/2	.032
650	5/8	.035
550	3/4	.035

•Vibration
Excellent resistance.

•Temperature Range
-65^{0}F to +250^{0}F (-53^{0}C to +121^{0}C) range at maximum operating pressures.

•Used With
Copper, brass, aluminum and steel hydraulic tubing that can be flared.

•Advantages
Very low cost and reusable. Seats and threads are internal and protected. Compact, excellent vibration life. Short nut affords very close tube bends. Steel or brass tube nut.

• Tolerance
+/- .03 on all dimensions.

•Conformance
Meets specifications and standards of ASA, ASME, SAE and MS (Military Standards).

•Assembly Instructions
1-Cut tubing to desired length. Make sure all burrs are removed and the ends are cut square.
2- Slide nut on tube. Threaded end "A" of nut must face out.
3- Flare end of tube with a 45^0 flaring tool.
a- Measure flare diameter.
b- Examine flare for excessive thin out.
c- On thin wall, welded or brazed tubing, use double flare to prevent pinch-off and cracked flares.
4- Lubricate threads and assemble to fitting body. Nut should be turned hand tight.
5- Tighten assembly with wrench until a solid feeling is encountered. From that point, apply a one-sixth turn.

Note: Do not over-torque as it may damage the fitting or split the tubing at the flare.

STANDARD METRIC THREADS

Description Tube Size	Thread O.D.	Crest (Pitch)	Thread Description
Japanese 3/16"	10mm	1.0mm	M10 x 1.0
European 3/16"	10mm	1.0mm	M10 x 1.0
GM 6mm	12mm	1.0mm	M12 x 1.0
Fuel 5/16"	14mm	1.5mm	M14 x 1.5
Fuel 3/8?	16mm	1.5mm	M16 x 1.5

Measuring Metric Threads: Measure the O.D. of the threads and the crest to crest distance (pitch) in millimeters between threads.

Actual O.D. of male inverted flare threads

5/16"-28 2800 PSI	3/8"-24 1900 PSI	7/16"-24 1400 PSI	1/2"-20 1200 PSI	5/8"-18 1000 PSI	3/4"-18 750 PSI	7/8"-18 650 PSI	1-1/16"-16 550 PSI
1/8"	3/16"	1/4"	5/16"	3/8"	1/2"	5/8"	3/4"

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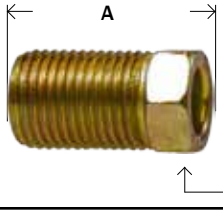
ZINC CHROMATE STEEL NUT

SAE# 040110

	Part #	Size	Thread	A	Hex	Approx. Wt. Lbs.	
	12-001	1/8”	5/16-28	0.52	0.31	0.01	----
	12-002	3/16”	3/8-24	0.56	0.37	0.02	----
	12-018	3/16"	7/16-24	0.56	0.43	0.02	----
	12-003	1/4”	7/16-24	0.56	0.43	0.02	----
	12-004	5/16”	1/2-20	0.62	0.50	0.02	----
	12-005	3/8”	5/8-18	0.66	0.62	0.03	----
	12-000	7/16”	11/16-18	0.68	0.68	0.04	----
	12-011	3/8"	11/16-18	0.66	0.68	0.05	----
	12-006	1/2”	3/4-18	0.74	0.75	0.08	----
	12-007	5/8”	7/8-18	0.80	0.87	0.10	----
	12-008	3/4”	1-1/16-16	0.88	1.06	0.10	----
NEW	12-083	7/8"	1-3/16-16	1.07	1.19	0.14	----
NEW	12-084	1"	1-5/16-16	1.18	1.375	0.21	----

121XXX 2105 411FS 105 41W

LONG STEEL NUT



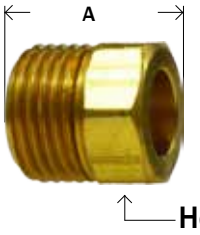
for Domestic lines

Part #	Size	A	Hex	Approx. Wt. Lbs.	
12-009	3/16”	0.84	0.37	0.02	----
12-010	1/4”	0.81	0.43	0.02	----

7896

INVERTED FLARE BRASS NUT

SAE# 040110



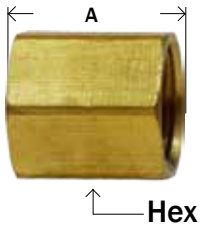
Part #	Size	A	Hex	Approx. Wt. Lbs.	
12-012	1/8”	0.52	0.31	0.01	----
12-013	3/16”	0.56	0.37	0.01	----
12-014	1/4”	0.56	0.43	0.02	----
12-015	5/16”	0.62	0.50	0.03	----
12-016	3/8”	0.66	0.62	0.04	----
12-017	1/2”	0.74	0.75	0.05	----

2100 41IF 100 41IB

ZINC STEEL METRIC TUBE NUTS

Part #	Tubesize	Thread	Ref#	
12-260	3/16 British	3/8-24 Bubble	---	----
12-261	3/16 European	M10 x 1.0 Bubble	276110	----
12-262	3/16 Japanese	M10 x 1.0 Inv.	121050	----
12-263	3/16 Domestic	1/2 x 20 Inv.	---	----
12-264	3/16 Domestic	9/16 - 18 Inv.	121039	----
12-265	3/16 Imported	M11 x 1.5 Bubble	276011	----
12-266	3/16 Imported	M12 x 1.0 Bubble	276012	----
12-267	3/16 Imported	M13 x 1.5 Bubble	276013	----
12-268	1/4 Domestic	9/16 x 18 Inv.	121049	----
12-269	1/4 Domestic	1/2 x 20 Inv.	121045	----
12-270	6mm Imported	M12 x 1.0 Bubble		----
12-271	6mm GM	M12 x 1.0 Bubble		----
12-272	6mm GM	M12 x 1.5 Bubble		----
12-273	6mm GM	M14 x 1.5 Bubble		----
12-274	5/16 Domestic	M14 x 1.5 Surface Seal	121069	----
12-275	3/8 Domestic	M16 x 1.5 Surface Seal	121070	----

UNION INTERNAL



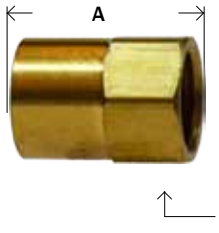
SAE# 040101

	Part #	Inv. Flare X Inv. Flare	A	Hex	Approx. Wt. Lbs.	
	12-022	1/8”	0.59	0.40	0.02	----
	12-023	3/16”	0.62	0.43	0.02	----
	12-024	1/4”	0.62	0.50	0.03	----
	12-025	5/16”	0.70	0.56	0.04	----
	12-026	3/8”	0.80	0.75	0.08	----
	12-027	1/2”	0.91	0.90	0.10	----
NEW	12-028	5/8"	1.31	1.06	0.22	----

see page 72 for metric unions

302 2300 42IFHD

FEMALE ADAPTER

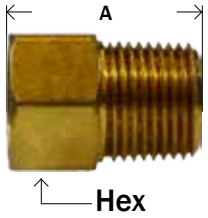


SAE# 040103

	Part #	Inv. Flare X Female NPTF	A	Hex	Approx. Wt. Lbs.	
NEW	12-029	1/8" x 1/8"	0.716	0.50	0.03	----
	12-032	3/16” x 1/8”	0.75	0.50	0.02	----
	12-033	1/4” x 1/8”	0.75	0.53	0.02	----
NEW	12-030	1/4" x 1/4"	1.01	0.751	0.11	----
	12-034	5/16” x 1/8”	0.78	0.59	0.04	----
	12-035	3/8” x 1/4”	1.03	0.75	0.08	----
NEW	12-031	7/16" x 1/4"	1.06	0.81	0.11	----
NEW	12-037	1/2" x 1/4"	1.09	0.90	0.12	----
	12-036	1/2” x 3/8”	1.10	0.90	0.12	----
NEW	12-039	5/8" x 1/2"	1.32	1.065	0.19	----
NEW	12-099	3/4" x 3/4"	1.50	1.25	0.36	----

46IFHD 252 46W

MALE ADAPTER



SAE# 040102

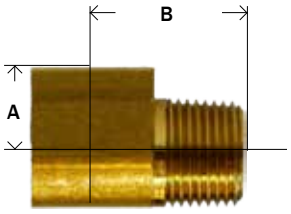
	Part #	Inv. Flare X Male NPTF	A	Hex	Approx. Wt. Lbs.	
	12-041	1/8” x 1/8”	0.63	0.40	0.02	----
	12-042	3/16” x 1/8”	0.70	0.43	0.02	----
NEW	12-053	3/16" x 1/4"	0.72	0.56	0.04	----
	12-043	1/4” x 1/8”	0.74	0.50	0.03	----
	12-044	1/4” x 1/4”	0.89	0.56	0.04	----
	12-045	5/16” x 1/8”	0.79	0.56	0.03	----
	12-046	5/16” x 1/4”	0.98	0.56	0.05	----
NEW	12-055	5/16" x 3/8"	1.01	0.75	0.07	----
	12-047	3/8” x 1/8”	0.88	0.72	0.05	----
	12-048	3/8” x 1/4”	1.02	0.75	0.06	----
	12-049	3/8” x 3/8”	1.02	0.75	0.08	----
NEW	12-104	7/16" x 1/4"	1.05	0.81	0.06	----
	12-038	1/2” x 1/4”	0.97	0.87	0.10	----
	12-050	1/2” x 3/8”	1.06	0.87	0.08	----
	12-051	1/2” x 1/2”	1.06	0.87	0.11	----
	12-052	5/8” x 1/2”	1.32	1.06	0.15	----
NEW	12-105	3/4" x 1/2"	1.38	1.25	0.18	----
	12-040	3/4” x 3/4”	1.39	1.25	0.24	----
NEW	12-107	7/8" x 3/4"	1.375	1.375	0.21	----
NEW	12-108	1" x 1"	1.62	1.50	0.37	----

2200 48IFHD 202 48W 200

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

ELBOW

SAE# 040202



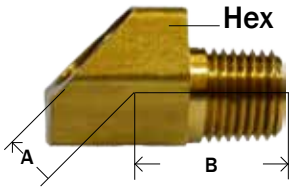
	Part #	Inv. Flare X Male NPTF	A	B	Approx. Wt. Lbs.	
	12-057	1/8” x 1/8”	0.26	0.59	0.03	----
	12-058	3/16” x 1/8”	0.26	0.61	0.03	----
	12-059	1/4” x 1/8”	0.33	0.65	0.04	----
	12-054*	1/4” x 1/8”	0.33	0.65	0.04	----
	12-060	1/4” x 1/4”	0.28	0.82	0.06	----
	12-061	5/16” x 1/8”	0.47	0.68	0.05	----
	12-062	5/16” x 1/4”	0.45	0.85	0.08	----
NEW	12-082	5/16" x 3/8"	0.47	0.86	0.12	----
	12-063	3/8” x 1/8”	0.54	0.76	0.14	----
	12-064	3/8” x 1/4”	0.53	0.92	0.14	----
	12-065	3/8” x 3/8”	0.50	0.94	0.12	----
NEW	12-114	1/2" x 1/4"	0.72	1.08	0.14	----
	12-066	1/2” x 3/8”	0.59	1.03	0.16	----
	12-067	1/2” x 1/2”	0.66	1.22	0.25	----
	12-056	5/8” x 3/8”	0.67	1.09	0.20	----
	12-068	5/8” x 1/2”	0.67	1.29	0.18	----
	12-069	3/4” x 1/2”	0.80	1.39	0.42	----
	12-080	7/8” x 3/4”	0.94	1.43	0.48	----
	12-081	1” x 1”	1.02	1.69	0.60	----

*** Restricted pipe end .062**

400 2400 249IFHD 402 249IF 49W

45° ELBOW

SAE# 040302

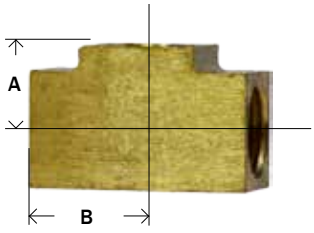


	Part #	Inv. Flare X Male NPTF	A	B	Hex	Approx. Wt. Lbs.	
NEW	12-070	1/8" x 1/8"	0.22	0.48	0.50	0.03	----
	12-072	3/16” x 1/8”	0.25	0.55	0.53	0.02	----
	12-073	1/4” x 1/8”	0.27	0.58	0.56	0.04	----
	12-074	5/16” x 1/8”	0.36	0.56	0.62	0.06	----
	12-075	5/16” x 1/4”	0.23	0.83	0.62	0.06	----
NEW	12-115	3/8" x 1/8"	0.34	0.87	0.87	0.09	----
	12-076	3/8” x 1/4”	0.51	0.84	0.78	0.09	----
	12-077	1/2” x 3/8”	0.38	0.91	0.84	0.11	----
	12-079	5/8” x 1/2”	0.44	1.00	1.06	0.21	----

154 2352 259IFHD 352 94W

UNION TEE

SAE# 040401



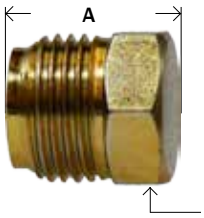
Part #	Size	A	B	Approx. Wt. Lbs.	
12-085	1/8”	0.33	0.47	0.04	----
12-086	3/16”	0.39	0.55	0.04	----
12-087	1/4”	0.42	0.56	0.08	----
12-088	5/16”	0.45	0.63	0.09	----
12-089	3/8”	0.56	0.74	0.17	----
12-090	1/2”	0.67	0.88	0.24	----

244IFHD 702 441

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

STEEL PLUG

• cored

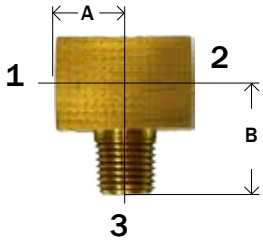


SAE# 040109

	Part # Steel	Size	A	Hex	Approx. Wt. Lbs.	
	12-091	3/16”	0.53	0.37	0.01	----
	12-092	1/4”	0.54	0.43	0.02	----
	12-093	5/16”	0.59	0.50	0.03	----
	12-094	3/8”	0.66	0.62	0.04	----
	Brass					
NEW	12-095	3/8"	0.66	0.63	0.04	----
NEW	12-096	1/2"	0.82	0.75	0.07	----
NEW	12-097	5/8"	0.90	0.87	0.10	----
NEW	12-098	3/4"	0.95	1.07	0.17	----

106 41IP 131 2131

MALE BRANCH TEE

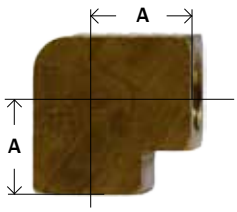


SAE# 040425

Part #	Inv. Flare x Male NPTF (1&2)x3	A	B	Approx. Wt. Lbs.	
12-100	3/16” x 1/8”	0.41	0.60	0.04	----
12-101	1/4” x 1/8”	0.42	0.64	0.06	----
12-102	5/16” x 1/8”	0.47	0.68	0.07	----
12-103	3/8” x 1/4”	0.58	0.93	0.15	----

145 245IFHD 602 2600 600

FEMALE ELBOW

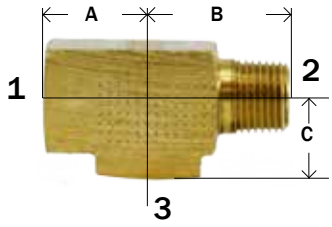


SAE# 040203

Part #	Inv. Flare x Female NPTF	A	Approx. Wt. Lbs.	
12-110	1/4” x 1/8”	0.55	0.07	----
12-111	5/16” x 1/8”	0.51	0.08	----
12-112	3/8” x 1/4”	0.68	0.10	----

450

MALE RUN TEE



SAE# 040424

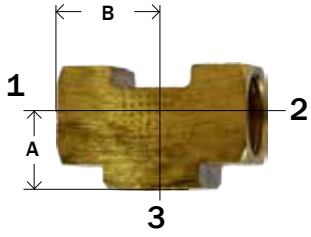
Part #	Inv. Flare x Male NPTF (1&3)x2	A	B	C	Approx. Wt. Lbs.	
12-118	3/16” x 1/8”	0.53	0.72	0.39	0.06	----
12-119	1/4” x 1/8”	0.56	0.75	0.42	0.08	----
12-120	5/16” x 1/8”	0.62	0.85	0.45	0.10	----
12-121	3/8” x 1/4”	0.75	1.08	0.56	0.14	----

251IFHD 752 550 151

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

FEMALE BRANCH TEE

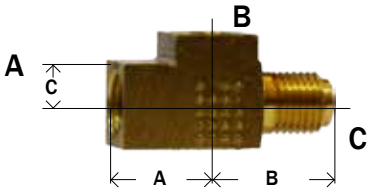
SAE# 040427



Part #	Inv. Flare x Female NPTF (1&2)x3	A	B	Approx. Wt. Lbs.	
12-127	3/16" x 1/8"	0.39	0.55	0.06	----
12-129	5/16" x 1/8"	0.45	0.63	0.12	----
12-130	3/8" x 1/4"	0.56	0.74	0.17	----

252IFHD 652 136

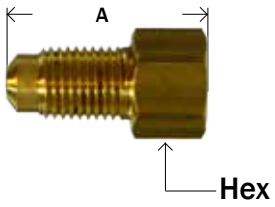
TOWED TRAILER BRAKE TEE



Part #	A	B	C	Reference #	Approx. Wt. Lbs.	
12-147	3/16" 0.57	3/16" 0.76	3/16" 0.42	7900	0.08	----
12-145	3/16" (1/2-20) 0.68	3/16" (3/8-24) 0.94	3/16" (1/2-20) 0.47	7906	0.17	----
12-148	3/16" (9/16-18)	3/16" (3/8-24)	3/16" (9/16/18)	7933	0.10	----
12-144	3/16" (9/16-20) 0.82	3/16" (3/8-24) 0.94	3/16" (9/16-20) 0.47	7905	0.18	----
12-146	3/16" (7/16-24) 0.54	3/16" (3/8-24) 0.78	1/4" (7/16-24) 0.42	7914	0.08	----
12-150	1/4" 0.56	3/16" 0.77	1/4" 0.43	7901	0.10	----
12-149	1/4" (9/16-18) 0.81	3/16" (3/8-24) 0.93	1/4" (9/16-18) 0.50	7904	0.10	----
12-151	1/4" 0.56	1/4" 0.77	1/4" 0.43	7898	0.12	----

INVERTED FLARE AUTO FITTINGS

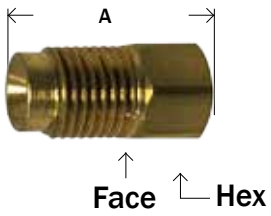
DUAL MASTER CYLINDER ADAPTER



Part #	Male Flare x Female Inv.	A	Hex	Reference #	Approx. Wt. Lbs.	
12-200	3/16" x 3/16"	1.00	0.50	1441	0.03	----
12-202	5/16" x 3/16"	0.96	0.68	7897	0.07	----

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

DUAL MASTER CYLINDER ADAPTER

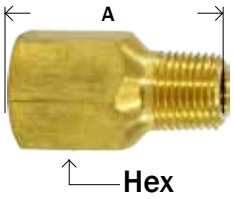


*** Seals on hex face**

Part #	Male Inverted Thread	Female Inverted Thread	Ref#	
12-206	3/16(9/16-18)	3/16	7911	----
12-209	3/16(9/16-18)	3/16(1/2-20)	7913	----
12-207	3/16(9/16-20)	3/16	7910	----
12-210	3/16	1/4	7828	----
12-212	1/4	3/16	7818	----
12-214*	7/16-20	1/4	7732	----
12-211	1/4(9/16-18)	1/4	7908	----
12-215	1/4	5/16	7917	----
12-213*	5/16	3/16	7817	----
12-216	5/16	3/16	7909	----
12-208	5/16	3/16(9/16-18)	7912	----
12-218*	5/16	1/4	7727	----
12-220	5/16	1/4	7829	----
12-222*	5/16	5/16	1074	----
12-221	5/16	3/8	7915	----
12-224	3/8" NPTF	5/16	7771	----
12-217	3/8	5/16	7916	----

47W

CARBURETOR TO FUEL LINE ADAPTER - FORD

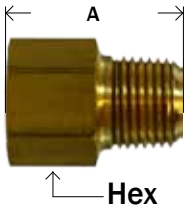


Part #	Female Tube OD x Male NPTF	A	Hex	Ref #	Approx. Wt. Lbs.	
12-230	1/4"(1/2-20) x 1/8"	1.06	0.56	1513	0.04	----

1513

RESTRICTION PIPE ADAPTER

(.0625 ORIFICE)

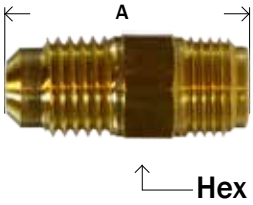


Part #	Size FIP x MIP	A	Hex	Ref #	Approx. Wt. Lbs.	
12-310	1/8"	0.75	0.50	1512	0.02	----

1510

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

SAE FLARE X INVERTED FLARE

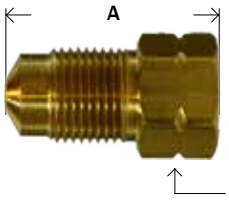


Part #	SAE Flare x Inv. Flare	A	Hex	Ref #	Approx. Wt. Lbs.	
12-250	1/4" x 3/16"	1.03	0.43	1518	0.02	----
12-252	1/4" x 1/4"	1.03	0.43	1522	0.03	----
12-254	3/8" x 5/16"	1.34	0.63	1553	0.08	----
12-256	3/8" x 3/8"	1.37	0.63	1563	0.09	----
12-257	3/8" x 7/16"	1.40	0.68	1554	0.10	----

4205

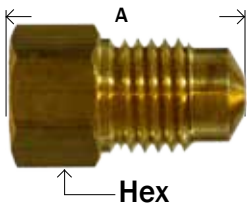
METRIC HYDRAULIC BRAKE FITTINGS

METRIC ADAPTER



Part #	Bubble Male Thread	Tube O.D./ Female Thread	A	Hex	Ref #	Approx. Wt. Lbs.	
12-335	M10x1.0	3/16"(3/8-24)	1.02	0.50	1442	0.02	----
12-326	M11x1.5	3/16"(M10x1.0)	1.06	0.50	7935	0.02	----
12-327	M12x1.0	3/16"(M10x1.0)	1.02	0.53	7936	0.04	----
12-328	M16x1.5	3/16"(M10x1.0)	1.02	0.56	7937	0.06	----

ADAPTER STANDARD TO METRIC BUBBLE



Part #	Female Inv. Flare Seat	Male Metric Bubble Flare	A	Hex	Ref #	Approx. Wt. Lbs.	
12-336	3/16" (3/8-24)	11x1.5			7973		----
12-337	3/16" (3/8-24)	(3/16") (10x1.25)	1.00	0.50	7970	0.02	----
12-339	3/16" (3/8-24)	13x1.5	1.03	0.56	7972	0.04	----
12-341	3/16" (3/8-24)	12x1.0	1.02	0.53	7974	0.04	----

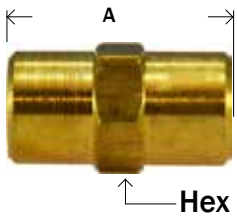
FEMALE X MALE ADAPTERS

Part #	Female Standard Flare Seat	Male Bubble Flare	Material	
12-330	3/8-24 (3/16)	7/16-20	Steel	----

Part #	Tube OD/ Female Thread	Inverted Male Thread	Ref #	
12-205	3/16 (3/8-24)	M10 x 1.0	1443	----

Part #	Female Standard Flare	Inverted Male Thread	Material	
12-329	3/8-24 (3/16)	M9 x 1.0	Steel	----

METRIC UNION



Part #	Size	A	Hex	Ref #	Approx. Wt. Lbs.	
12-342	British Brake Lines 3/16 (3/8-24 Bubble)	0.87	0.50	1594	0.03	----
12-343	European Brake Lines 3/16"(10.0MM)	1.04	0.56	7975	0.04	----
12-344	Japanese Brake Lines 3/16 (M10 x 1.0) Inverted	1.00	0.50	7934A	0.04	----
12-345	GM Brake Lines 6mm M12 x 1.0 Bubble	1.11	0.63		0.06	----

COMPRESSION FITTINGS

These are NOT Lead Free

See pages 164-166 for Lead Free products

Tube O.D.	1/8	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8
Thread Size-B	5/16-24	3/8-24	7/16-24	1/2-24	9/16-24	5/8-24	11/16-20	13/16-18	1-18	1-1/8-18
Working Pressure	400	400	300	300	200	200	200	150	100	75

• Typical Application
Use with copper, aluminum and thermoplastic tubing. Not recommended for steel tubing. Manufactured for low and medium pressure tubing connection work where excessive vibration or tube movement is not involved. Not recommended for application using gaseous media.

•Pressure
See table above for working pressures at 73°F.

•Vibration
Fair resistance - use long nut when greater vibration resistance is needed.

•Temperature Range
-65°F to +250°F (-53°C to +121°C) range at maximum operating pressures. (Refer to tubing temperature range.)

•Used With
Aluminum, copper, brass and plastic tubing. Plastic tubing requires insert. Not recommended for steel tubing.

• Tolerance
+/- .02 on all dimensions. Dimension data can change without notice. Please call us when dimensions are critical.

• Conformance
Meets specifications and standards of ASA, ASME and SAE.

•Assembly Instructions
1- Cut tubing to desired length.
2- Slide nut and then sleeve on tube. Threaded end "A" of nut must face toward fitting.
3- Insert tubing into fitting body. Be sure tubing is bottomed on fitting shoulder.
4- Lubricate threads and assemble nut to fitting body.
5- Tighten nut hand tight. From that point, tighten with a wrench the number of turns indicated in the chart below.

Tube Size	Additional Turns from Hand Tight
1/8" thru 1/4"	1-1/4"
5/16"	1-3/4"
3/8" thru 1"	2-1/4"

• "L" at the end of a Part# means Light Pattern -These fittings are completely interchangeable with full pattern fittings, but have been modified in some way. This modification is usually in the length of the pipe threads. Used in plumbing and light industrial applications.

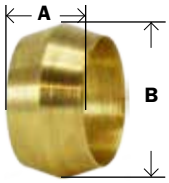
WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

Actual Profile of Compression Threads

BRASS SLEEVE

• FERRULES

SAE# 060115

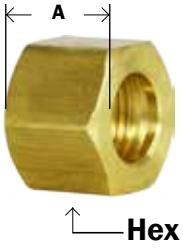


Part #	Size	A	B	Approx. Wt. Lbs.	
18-001	1/8”	0.19	0.19	0.01	----
18-002	3/16”	0.22	0.27	0.01	----
18-003	1/4”	0.25	0.34	0.01	----
18-004	5/16”	0.25	0.41	0.01	----
18-005	3/8”	0.25	0.47	0.02	----
18-006	7/16”	0.31	0.53	0.02	----
18-007	1/2”	0.38	0.59	0.02	----
18-008	5/8”	0.38	0.71	0.03	----
18-009	3/4”	0.44	0.87	0.03	----
18-010	7/8”	0.41	0.99	0.03	----
18-011	1"	0.55	1.16	0.03	----

60 260

BRASS NUT

SAE# 060110

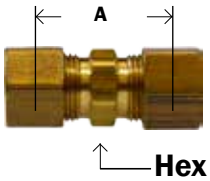


Part #	Size	Thread	A	Hex	Approx. Wt. Lbs.	
18-033	1/8”	5/16-24	0.38	0.37	0.01	----
18-034	3/16”	3/8-24	0.41	0.43	0.01	----
18-035L	1/4”	7/16-24	0.44	0.50	0.02	----
18-035	1/4”	7/16-24	0.44	0.50	0.02	----
18-036	5/16”	1/2-24	0.44	0.56	0.02	----
18-037L	3/8”	9/16-24	0.47	0.62	0.04	----
18-037	3/8”	9/16-24	0.47	0.62	0.04	----
18-038	7/16”	5/8-24	0.50	0.68	0.04	----
18-039L	1/2”	11/16-20	0.56	0.75	0.04	----
18-039	1/2”	11/16-20	0.62	0.81	0.04	----
18-040L	5/8”	13/16-18	0.56	0.87	0.06	----
18-040	5/8”	13/16-18	0.62	0.94	0.06	----
18-041	3/4”	1-18	0.68	1.12	0.08	----
18-042	7/8”	1-1/8 - 18	0.62	1.25	0.10	----
18-043	1"		0.94	1.38	0.15	----

61 261

UNION

SAE# 060101BA



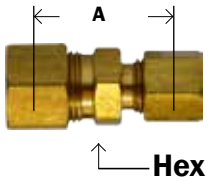
Part #	Size	A	Hex	Approx. Wt. Lbs.	
18-062	1/8”	0.64	0.31	0.03	----
18-063	3/16”	0.75	0.37	0.04	----
18-064L	1/4”	0.79	0.43	0.06	----
18-064	1/4”	0.81	0.43	0.06	----
18-065	5/16”	0.88	0.50	0.06	----
18-066L	3/8”	0.96	0.56	0.09	----
18-066	3/8”	0.98	0.56	0.10	----
18-067	7/16”	1.02	0.62	0.12	----
18-068L	1/2”	1.06	0.68	0.16	----
18-068	1/2”	1.25	0.68	0.16	----
18-069L	5/8”	1.43	0.81	0.24	----
18-069	5/8”	1.25	0.81	0.26	----
18-070	3/4”	1.41	1.00	0.35	----
18-071L	7/8”	1.03	1.12	0.34	----
18-071	7/8”	1.00	1.12	0.36	----
18-072	1"	1.78	1.38	0.58	----

NEW

M-62

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

REDUCING UNION

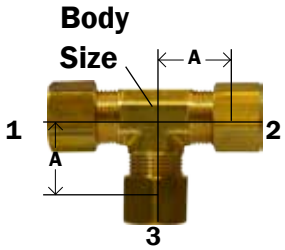


	Part #	Size	A	Hex	Approx. Wt. Lbs.	
	18-076	1/4” x 1/8”	0.73	0.44	0.04	----
	18-077	1/4” x 3/16”	0.78	0.44	0.06	----
	18-078	5/16” x 1/4”	0.81	0.50	0.06	----
	18-079	3/8” x 1/4”	0.90	0.56	0.10	----
	18-080	3/8” x 5/16”	0.94	0.56	0.10	----
	18-081	1/2” x 3/8”	1.03	0.68	0.12	----
	18-082	5/8” x 3/8”	1.03	0.81	0.15	----
NEW	18-083	5/8" x 1/2"	1.16	0.81	0.18	----
NEW	18-085	7/8" x 3/8"	1.18	1.18	0.26	----
NEW	18-086	7/8" x 1/2"	1.21	1.18	0.24	----
	18-084	7/8” x 5/8”	1.23	1.18	0.20	----

62-R

TEE

SAE# 060401



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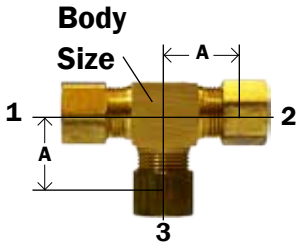


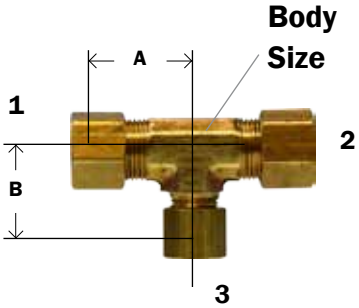
Barstock

Part #	Size	A	Body Size	Approx. Wt. Lbs.	
18-101	1/8”	0.61	0.37	0.04	----
18-101B*	1/8”	0.62	0.33	0.04	----
18-102	3/16”	0.59	0.36	0.08	----
18-102B*	3/16”	0.60	0.38	0.08	----
18-103	1/4”	0.63	0.36	0.10	----
18-103B*	1/4”	0.62	0.49	0.10	----
18-104	5/16”	0.72	0.50	0.13	----
18-104B*	5/16”	0.60	0.50	0.14	----
18-105	3/8”	0.75	0.50	0.16	----
18-105B*	3/8”	0.73	0.59	0.16	----
18-106	1/2”	0.94	0.59	0.22	----
18-106B*	1/2”	0.94	0.69	0.24	----
18-107	5/8”	1.06	0.69	0.28	----
18-108	3/4”	1.22	0.88	0.32	----
18-109	7/8”	1.25	0.94	0.34	----

* Barstock

64 **264C**

FORGED REDUCING TEE

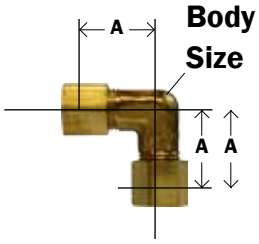


Part #	Size 1 x 2 x 3	A	B	Body Size	Approx. Wt. Lbs.	
18-114	1/4” x 1/4” x 1/8”	0.62	0.59	0.38	0.09	----
18-110	1/4” x 1/4” x 3/8”	0.69	0.75	0.50	0.14	----
18-111	3/8” x 1/4” x 1/4”	0.75	0.69	0.50	0.12	----
18-115	3/8” x 3/8” x 1/4”	0.75	0.69	0.50	0.14	----
18-116	1/2” x 1/2” x 1/4”	0.94	0.81	0.59	0.16	----
18-117	1/2” x 1/2” x 3/8”	0.94	0.81	0.59	0.24	----
18-118	5/8” x 5/8” x 3/8”	1.06	0.94	0.69	0.28	----
18-119	5/8” x 5/8” x 1/2”	1.06	1.06	0.69	0.30	----

64-R

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

UNION ELBOW SAE# 060201

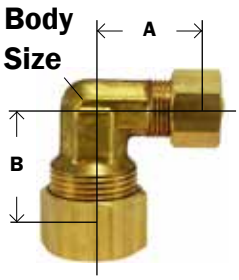


Forged Barstock

Part #	Size	A	Body Size	Approx. Wt. Lbs.	
18-122B*	1/8”	0.62	0.35	0.04	----
18-123	3/16”	0.61	0.37	0.06	----
18-124	1/4”	0.66	0.38	0.08	----
18-125	5/16”	0.69	0.47	0.09	----
18-126	3/8”	0.72	0.43	0.12	----
18-127	1/2”	0.94	0.59	0.19	----
18-128	5/8”	1.06	0.72	0.26	----
18-129	3/4”	1.19	0.94	0.48	----
18-130	7/8”	1.25	0.94	0.44	----

65 BSE2 165C 265C

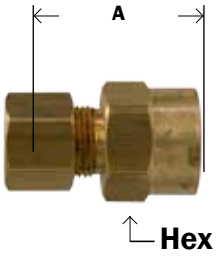
REDUCING ELBOW - Forged



Part #	Size	A	B	Body Size	Approx. Wt. Lbs.	
18-135	3/8” x 1/4”	0.69	0.75	0.47	0.12	----
18-136	1/2” x 3/8”	0.88	0.94	0.59	0.15	----
18-137	5/8” x 3/8”	0.88	0.97	0.56	0.18	----
31-137	3/8" OD x 5/8" OD	Chrome Plated				----

65-R

FEMALE ADAPTER SAE# 060103



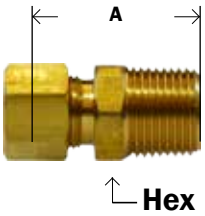
Part #	Comp. X Female NPTF	A	Hex	Approx. Wt. Lbs.	
18-142	1/8” x 1/8”	0.75	0.56	0.02	----
18-143	3/16” x 1/8”	0.78	0.56	0.04	----
18-144	3/16” x 1/4”	0.96	0.68	0.04	----
18-145L	1/4” x 1/8”	0.84	0.50	0.05	----
18-145	1/4” x 1/8”	0.78	0.56	0.05	----
18-146L	1/4” x 1/4”	0.88	0.62	0.09	----
18-146	1/4” x 1/4”	1.03	0.68	0.09	----
18-148	1/4” x 1/2”	1.02	0.87	0.12	----
18-149	5/16” x 1/8”	0.81	0.56	0.05	----
18-150	5/16” x 1/4”	0.91	0.62	0.06	----
18-152	3/8” x 1/8”	0.88	0.56	0.06	----
18-153L	3/8” x 1/4”	0.97	0.62	0.08	----
18-153	3/8” x 1/4”	1.06	0.68	0.08	----
18-154L	3/8” x 3/8”	1.03	0.75	0.08	----
18-154	3/8” x 3/8”	1.06	0.81	0.10	----
18-155	3/8” x 1/2”	1.12	1.00	0.08	----
18-156	3/8” x 3/4”	1.19	1.16	0.14	----
18-157	1/2” x 1/4”	1.09	0.68	0.10	----
18-158L	1/2” x 3/8”	0.94	0.81	0.12	----
18-158	1/2” x 3/8”	1.12	0.81	0.12	----
18-159L	1/2” x 1/2”	1.19	1.00	0.12	----
18-159	1/2” x 1/2”	1.31	1.00	0.12	----
18-160	1/2” x 3/4”	1.25	1.16	0.18	----
18-162L	5/8” x 1/2”	1.20	0.94	0.18	----
18-162	5/8” x 1/2”	1.38	1.00	0.18	----
18-163	5/8” x 3/4”	1.20	1.12	0.22	----
18-164	3/4” x 1/2”	1.25	1.06	0.26	----
18-165	3/4” x 3/4”	1.28	1.19	0.28	----
18-167	7/8” x 1/2”	1.28	1.19	0.32	----
18-166	7/8” x 3/4”	1.31	1.12	0.34	----

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

COMPRESSION — BRASS FITTINGS

MALE ADAPTER

SAE# 060102

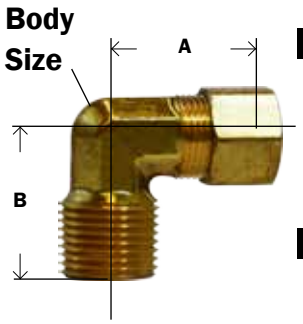


	Part #	Comp. X Male NPTF	A	Hex	Approx. Wt. Lbs.	
	18-175	1/8” x 1/16”	0.78	0.37	0.02	----
	18-176	1/8” x 1/8”	0.78	0.43	0.04	----
	18-177	3/16” x 1/8”	0.84	0.43	0.04	----
	18-178	3/16” x 1/4”	0.94	0.56	0.06	----
	18-179L	1/4” x 1/8”	0.88	0.56	0.04	----
	18-179	1/4” x 1/8”	0.88	0.43	0.04	----
	18-180L	1/4” x 1/4”	0.94	0.56	0.05	----
	18-180	1/4” x 1/4”	1.06	0.56	0.06	----
	18-181	1/4” x 3/8”	1.03	0.68	0.08	----
	18-182	1/4” x 1/2”	1.09	0.81	0.10	----
	18-183	5/16” x 1/8”	0.91	0.50	0.05	----
	18-184L	5/16” x 1/4”	1.01	0.56	0.06	----
	18-184	5/16” x 1/4”	1.09	0.56	0.06	----
	18-185	5/16” x 3/8”	1.06	0.68	0.07	----
	18-186	5/16” x 1/2”	1.14	0.87	0.10	----
	18-187L	3/8” x 1/8”	0.94	0.56	0.06	----
	18-187	3/8” x 1/8”	0.97	0.56	0.06	----
	18-188L	3/8” x 1/4”	1.03	0.56	0.06	----
	18-188	3/8” x 1/4”	1.16	0.56	0.07	----
	18-189L	3/8” x 3/8”	1.09	0.68	0.08	----
	18-189	3/8” x 3/8”	1.14	0.69	0.08	----
	18-190L	3/8” x 1/2”	1.19	0.88	0.12	----
	18-190	3/8” x 1/2”	1.34	0.87	0.13	----
	18-191	3/8” x 3/4”	1.29	1.06	0.16	----
	18-192	7/16” x 1/4”	1.06	0.62	0.10	----
	18-204	7/16” x 3/8”	1.10	0.68	0.12	----
	18-193L	1/2” x 1/4”	1.09	0.69	0.11	----
	18-193	1/2” x 1/4”	1.22	0.68	0.11	----
	18-194L	1/2” x 3/8”	1.16	0.68	0.12	----
	18-194	1/2” x 3/8”	1.16	0.69	0.12	----
	18-195L	1/2” x 1/2”	1.09	0.81	0.12	----
	18-195	1/2” x 1/2”	1.41	0.87	0.19	----
	18-196	1/2” x 3/4”	1.38	1.06	0.22	----
NEW	18-216	5/8" x 1/4"	1.21	0.87	0.22	----
	18-197	5/8” x 3/8”	1.22	0.87	0.24	----
	18-198	5/8” x 1/2”	1.12	0.81	0.24	----
	18-199	5/8” x 3/4”	1.31	1.06	0.26	----
	18-200	3/4” x 1/2”	1.44	1.00	0.26	----
	18-201	3/4” x 3/4”	1.50	1.06	0.26	----
	18-202	7/8” x 1/2”	1.18	1.12	0.26	----
	18-203	7/8” x 3/4”	1.22	1.12	0.28	----
	18-205	7/8” x 1”	1.67	1.37	0.32	----
NEW	18-206	1" x 3/4"	1.95	1.37	0.44	----
NEW	18-207	1" x 1"	2.00	1.38	0.48	----

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

MALE ELBOW

SAE# 060202



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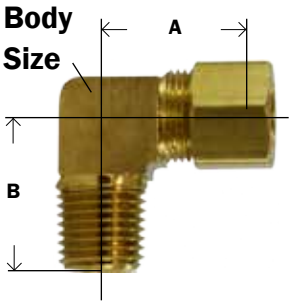


Barstock

	Part #	Comp. X Male NPTF	A	B	Body Size	Approx. Wt. Lbs.	
NEW	18-219	1/8" x 1/16"	0.59	0.73	0.34	0.02	----
	18-220	1/8” x 1/8”	0.59	0.75	0.34	0.02	----
	18-220B*	1/8” x 1/8”	0.60	0.67	0.43	0.04	----
	18-221	3/16” x 1/8”	0.63	0.72	0.34	0.04	----
	18-221B*	3/16” x 1/8”	0.62	0.69	0.43	0.06	----
	18-223	3/16” x 1/4”	0.60	0.81	0.39	0.05	----
NEW	18-223B*	3/16" x 1/4"	0.65	0.85	0.41	0.08	----
	18-224	1/4” x 1/8”	0.60	0.75	0.37	0.06	----
	18-224B*	1/4” x 1/8”	0.62	0.75	0.43	0.06	----
	18-225	1/4” x 1/4”	0.65	0.94	0.36	0.08	----
	18-225B*	1/4” x 1/4”	0.61	0.81	0.56	0.08	----
	18-226	1/4” x 3/8”	0.75	0.91	0.47	0.08	----
	18-227	1/4” x 1/2”	0.81	1.13	0.56	0.12	----
	18-228	5/16” x 1/8”	0.66	0.75	0.47	0.06	----
	18-228B*	5/16” x 1/8”	0.62	0.75	0.42	0.06	----
	18-229	5/16” x 1/4”	0.66	0.81	0.47	0.07	----
	18-229B*	5/16” x 1/4”	0.69	0.84	0.57	0.08	----
	18-230	5/16” x 3/8”	0.75	0.91	0.47	0.10	----
	18-231	5/16” x 1/2”	0.84	1.12	0.56	0.12	----
	18-232	3/8” x 1/8”	0.72	0.66	0.39	0.06	----
	18-232B*	3/8” x 1/8”	0.69	0.69	0.57	0.06	----
	18-233	3/8” x 1/4”	0.75	0.82	0.46	0.08	----
	18-233B*	3/8” x 1/4”	0.75	0.94	0.57	0.08	----
	18-234	3/8” x 3/8”	0.81	0.94	0.46	0.10	----
	18-234B*	3/8” x 3/8”	0.71	0.83	0.69	0.10	----
	18-235	3/8” x 1/2”	0.87	1.12	0.56	0.14	----
	18-235B*	3/8” x 1/2”	0.88	1.16	0.94	0.14	----
	18-248	3/8” x 3/4”	1.03	1.19	0.81	0.18	----
NEW	18-248B*	3/8" x 3/4"	1.03	1.20	0.86	0.16	----
	18-247	7/16” x 1/4”	0.84	1.00	0.56	0.14	----
	18-236	1/2” x 1/4”	0.88	0.97	0.56	0.14	----
NEW	18-236B*	1/2" x 1/4"	0.85	0.94	0.07	0.17	----
	18-237	1/2” x 3/8”	0.88	1.03	0.56	0.19	----
	18-237B*	1/2” x 3/8”	0.94	1.12	0.70	0.19	----
	18-238	1/2” x 1/2”	0.94	1.13	0.59	0.17	----
	18-238B*	1/2” x 1/2”	0.94	1.31	0.86	0.17	----
	18-239	1/2” x 3/4”	1.16	1.25	0.81	0.18	----
	18-240	5/8” x 3/8”	1.06	1.12	0.68	0.18	----
	18-241	5/8” x 1/2”	1.06	1.16	0.68	0.20	----
	18-241B*	5/8” x 1/2”	1.06	1.31	0.86	0.20	----
	18-242	5/8” x 3/4”	1.16	1.31	0.81	0.24	----
	18-243	3/4” x 1/2”	1.19	1.31	0.94	0.26	----
	18-245	3/4” x 3/4”	1.19	1.38	0.94	0.30	----
	18-246	7/8” x 3/4”	1.25	1.38	0.94	0.35	----

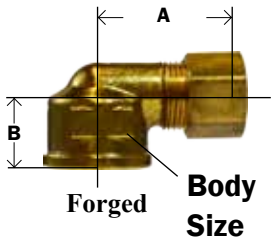
* Barstock

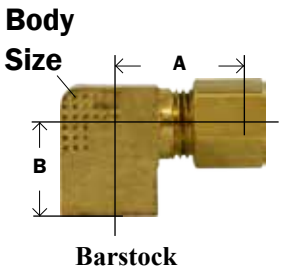
Dimension data can change without notice. Please see our website when dimensions are critical.

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

FEMALE ELBOW

SAE# 060203



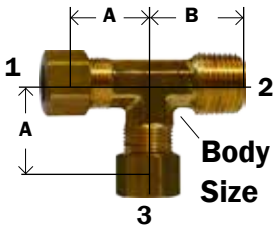


	Part #	Comp. X Female NPTF	A	B	Body Size	Approx. Wt. Lbs.	
	18-251	1/8” x 1/8”	0.69	0.56	0.56	0.04	----
NEW	18-251B*	1/8" x 1/8"	0.69	0.60	0.57	0.06	----
	18-252	3/16” x 1/8”	0.69	0.47	0.56	0.04	----
NEW	18-252B*	3/16” x 1/8”	0.60	0.60	0.58	0.07	----
	18-253	1/4” x 1/8”	0.69	0.47	0.56	0.06	----
	18-253B*	1/4” x 1/8”	0.69	0.56	0.56	0.06	----
	18-254	1/4” x 1/4”	0.75	0.50	0.72	0.08	----
NEW	18-254B*	1/4” x 1/4”	0.72	0.85	0.68	0.13	----
	18-267	1/4” x 3/8”	0.81	0.58	0.81	0.08	----
	18-268	1/4” x 1/2”	0.89	0.66	1.00	0.10	----
	18-255	5/16” x 1/8”	0.72	0.84	0.47	0.08	----
	18-256	5/16” x 1/4”	0.78	0.50	0.72	0.09	----
	18-257	3/8” x 1/8”	0.75	0.84	0.47	0.10	----
	18-258	3/8” x 1/4”	0.84	0.59	0.75	0.10	----
	18-259	3/8” x 3/8”	0.88	0.58	0.81	0.12	----
	18-260	3/8” x 1/2”	0.97	0.66	1.00	0.14	----
	18-250	3/8” x 3/4”	1.09	0.72	1.25	0.18	----
	18-261	1/2” x 1/4”	1.06	0.70	0.88	0.18	----
	18-262	1/2” x 3/8”	1.00	0.70	0.88	0.16	----
	18-263	1/2” x 1/2”	1.03	0.72	1.00	0.20	----
	18-270	1/2” x 3/4”	1.16	0.72	1.25	0.23	----
	18-269	5/8” x 3/8”	1.09	0.77	1.00	0.20	----
	18-264	5/8” x 1/2”	1.09	0.77	1.00	0.22	----
	18-265	5/8” x 3/4”	1.22	0.77	1.25	0.24	----
	18-266	3/4” x 1/2”	1.25	1.25	0.94	0.28	----

* Barstock

70 270C BSE3 170C

FORGED MALE RUN TEE



	Part #	Comp. X Male NPTF (1&3) X 2	A	B	Body Size	Approx. Wt. Lbs.	
	18-272	1/8” x 1/8”	0.63	0.69	0.36	0.06	----
	18-273	3/16” x 1/8”	0.63	0.69	0.36	0.07	----
NEW	18-273B*	3/16" x 1/8"	0.63	0.69	0.36	0.06	----
NEW	18-274B*	1/4" x 1/8"	0.63	0.75	0.36	0.07	----
	18-274	1/4” x 1/8”	0.63	0.75	0.36	0.08	----
	18-275	1/4” x 1/4”	0.69	0.88	0.44	0.10	----
	18-276	5/16” x 1/8”	0.72	0.75	0.50	0.10	----
	18-277	5/16” x 1/4”	0.75	0.88	0.44	0.10	----
	18-278	3/8” x 1/8”	0.75	0.75	0.50	0.14	----
	18-279	3/8” x 1/4”	0.79	0.87	0.44	0.18	----
	18-280	3/8” x 3/8”	0.88	1.00	0.47	0.20	----
	18-281	1/2” x 3/8”	0.94	1.09	0.59	0.24	----
	18-282	1/2” x 1/2”	0.97	1.19	0.69	0.26	----
	18-283	5/8” x 1/2”	1.06	1.31	0.69	0.28	----
	18-284	3/4” x 1/2”	1.22	1.34	0.88	0.30	----

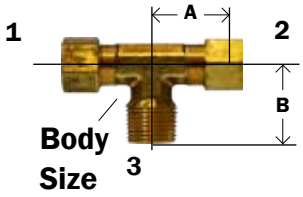
* Barstock

71 171C BST3

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

MALE BRANCH TEE

SAE# 060425



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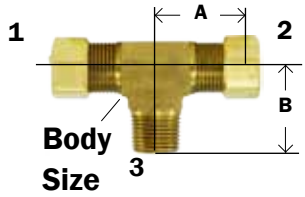


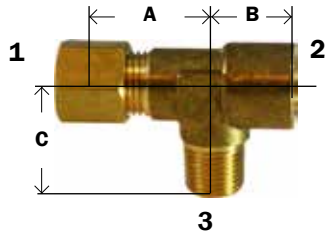
Barstock

Part #	Comp. X Male NPTF (1&2) X 3	A	B	Body Size	Approx. Wt. Lbs.	
18-290	3/16" x 1/8"	0.63	0.69	0.36	0.08	----
18-291	1/4" x 1/8"	0.62	0.75	0.36	0.10	----
18-291B*	1/4" x 1/8"	0.64	0.73	0.45	0.10	----
18-292	1/4" x 1/4"	0.69	0.86	0.44	0.10	----
18-293	5/16" x 1/8"	0.72	0.75	0.50	0.11	----
18-294	5/16" x 1/4"	0.75	0.88	0.44	0.12	----
18-295	3/8" x 1/8"	0.75	0.75	0.50	0.14	----
18-296	3/8" x 1/4"	0.78	0.88	0.44	0.16	----
18-297	3/8" x 3/8"	0.78	0.97	0.47	0.18	----
18-298	3/8" x 1/2"	0.88	1.22	0.69	0.20	----
18-304	1/2" x 1/4"	0.94	0.97	0.59	0.22	----
18-299B*	1/2" x 3/8"	0.96	1.09	0.70	0.24	----
18-299	1/2" x 3/8"	0.94	1.12	0.59	0.24	----
18-300	1/2" x 1/2"	0.97	1.19	0.69	0.30	----
18-301	5/8" x 1/2"	1.06	1.31	0.69	0.32	----
18-302	3/4" x 1/2"	1.22	1.34	0.88	0.50	----
18-303	3/4" x 3/4"	1.25	1.50	0.88	0.54	----

* Barstock

72 BST1 172C

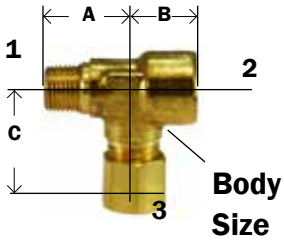
FORGED TEE



Part #	Comp. X Female NPTF x Male NPTF 1x(2&3)	A	B	C	Approx. Wt. Lbs.	
18-307	1/4" x 1/8"	0.72	0.53	0.72	0.20	----

71 171C BST3

ADAPTER TEE

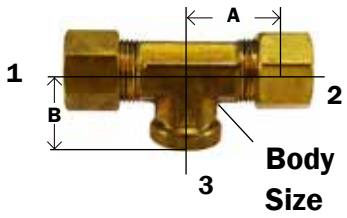


Part #	Male NPTF x Female NPTF x Comp. 3x (1&2)	A	B	C	Body Size	Approx. Wt. Lbs.	
18-314	1/8" x 1/4"	0.72	0.53	0.72	0.47	0.08	----
18-316	3/8" x 1/4"	0.84	0.97	0.81	0.47	0.10	----

76 176C

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

FEMALE BRANCH FORGED TEE

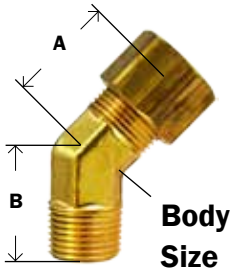


Part #	Comp. X Female NPTF (1&2)x3	A	B	Body Size	Approx. Wt. Lbs.	
18-321	1/4" x 1/8"	0.78	0.75	0.45	0.10	----
18-328	1/4" x 1/4"	0.78	0.75	0.44	0.12	----
18-325	3/8" x 1/8"	0.75	0.63	0.50	0.12	----
18-322	3/8" x 1/4"	0.81	0.97	0.47	0.14	----
18-323	3/8" x 3/8"	0.97	0.69	1.05	0.16	----
18-326	1/2" x 1/8"	0.94	0.75	0.59	0.20	----
18-324	1/2" x 3/8"	1.00	0.72	0.88	0.22	----
18-327	5/8" x 1/8"	1.06	0.81	0.69	0.26	----

78 **BST4** 77 **177C** 2908

45° ELBOW

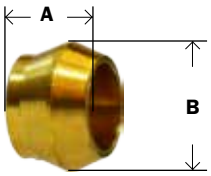
SAE# 060302



Part #	Comp. X Male NPTF	A	B	Body Size	Approx. Wt. Lbs.	
18-329	3/16" x 1/8"	0.40	0.63	0.41	0.04	----
18-330	1/4" x 1/8"	0.40	0.61	0.41	0.04	----
18-336	1/4" x 1/4"	0.59	0.84	0.53	0.06	----
18-331	5/16" x 1/8"	0.59	0.65	0.53	0.06	----
18-332	5/16" x 1/4"	0.59	0.83	0.53	0.08	----
18-333	3/8" x 1/4"	0.62	0.83	0.53	0.08	----
18-338	3/8" x 3/8"	0.75	0.95	0.59	0.10	----
18-334	1/2" x 3/8"	0.75	0.88	0.59	0.14	----
18-339	1/2" x 1/2"	0.94	1.14	0.75	0.14	----
18-335	5/8" x 1/2"	0.78	1.14	0.78	0.14	----

6945 **45BSE1** 74 **179C** 273 **77**

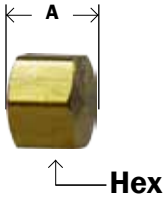
COMPRESSION PLUG



	Part #	Size	A	B	Approx. Wt. Lbs.	
NEW	18-028	1/4"	0.30	0.34	0.01	----
	18-029	3/8"	0.31	0.47	0.04	----
	18-032	5/16"	0.40	0.40	0.01	----
	18-030	1/2"	0.34	0.59	0.06	----
NEW	18-031	5/8"	0.45	0.72	0.04	----

CSP

CAP



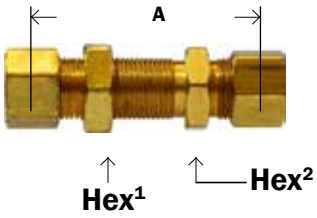
Part #	Size	A	Hex	Approx. Wt. Lbs.	
18-047	1/4"	0.44	0.50	0.02	----
18-048	3/8"	0.40	0.62	0.04	----
18-049	1/2"	0.48	0.75	0.06	----
18-050	5/8"	0.56	0.94	0.10	----

61-CC **N5CT**

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

BULKHEAD UNIONS

SAE# 060101

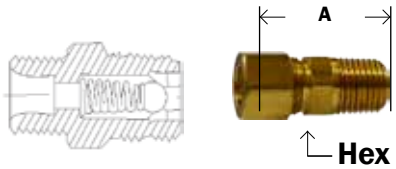


	Part #	Size	A	Hex 1	Hex 2	Approx. Wt. Lbs.	
NEW	18-087	3/16"	1.25	0.56	0.50	0.07	----
	18-088	1/4"	1.58	0.56	0.56	0.10	----
NEW	18-089	5/16	1.68	0.625	0.625	0.11	----
	18-090	3/8"	1.76	0.68	0.68	0.14	----
NEW	18-091	1/2"	1.92	0.82	0.875	0.24	----
NEW	18-093	5/8"	2.01	1.000	0.94	0.32	----

See our website for bulkhead nuts

62BH **75** 274

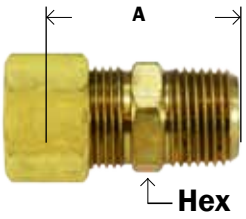
BALL CHECK VALVE - Min. Working pressure 3 psi.



Part #	Tube OD x Male NPTF	A	Hex	Approx. Wt. Lbs.	
18-092	1/8" x 1/8"	0.78	0.44	0.04	----
18-094	1/4" x 1/8"	0.88	0.44	0.04	----
18-096	3/8" x 1/4"	1.16	0.56	0.08	----

63 **263** 63A

TANK ADAPTER DRILLED THRU (NO STOP)



Part #	Comp. X Male NPTF	A	Hex	Approx. Wt. Lbs.	
18-208	1/4" x 1/8"	0.88	0.43	0.04	----
18-209	1/4" x 1/4"	0.99	0.56	0.05	----
18-210	3/8" x 1/4"	1.16	0.56	0.05	----
18-211	3/8" x 3/8"	1.09	0.68	0.08	----
18-212	3/8" x 1/2"	1.19	0.87	0.10	----
18-213	1/2" x 3/8"	1.22	0.68	0.12	----
18-214	1/2" x 1/2"	1.09	0.81	0.14	----
18-215	5/8" x 1/2"	1.12	0.81	0.18	----

68-T **682C** 80F

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

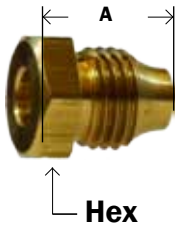
COMPRESSION — BRASS FITTINGS

DOUBLE COMPRESSION THREADED SLEEVE FITTINGS

- Use with aluminum and copper tubing or plastic tubing with internal tube support. Not recommended for steel tubing.
- Easy to assemble, no flaring, two piece construction.
- For use on oil, air, water and grease lubrication systems.
- When design makes a dimension critical, contact us for information.

Tube OD	1/8	3/16	1/4	5/16	3/8
Thread	5/16-24	3/8-24	7/16-24	1/2-20	9/16-20
Working Pressure	500	500	500	250	250

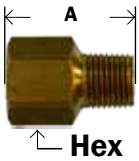
NUT



	Part #	Size	A	Hex	Approx. Wt. Lbs.	
	16-001	1/8”	0.50	0.37	0.02	----
	16-002	3/16”	0.53	0.43	0.02	----
	16-003	1/4”	0.56	0.50	0.04	----
	16-004	5/16”	0.61	0.56	0.04	----
	16-005	3/8”	0.61	0.62	0.04	----
NEW	16-006	1/2"	0.90	0.69	0.05	----
NEW	16-007	5/8"	1.07	0.88	0.06	----

181 **6100** 11

MALE ADAPTER

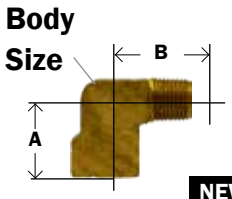


	Part #	THRD Sleeve x Male NPTF	A	Hex	Approx. Wt. Lbs.	
	16-117	1/8” x *	0.62	0.43	0.02	----
	16-118	1/8” x 1/8”	0.62	0.43	0.02	----
	16-119	3/16” x 1/8”	0.69	0.43	0.02	----
	16-121	1/4” x 1/8”	0.75	0.50	0.04	----
NEW	16-120	1/4" x 1/4"	1.06	0.56	0.05	----
	16-122	5/16” x 1/8”	0.89	0.56	0.04	----
NEW	16-125	5/16" x 1/4"	1.09	0.56	0.05	----
	16-123	3/8” x 1/4”	0.84	0.62	0.06	----

* 1/4 - 28 Male Thread Tapered.

188 **6200** 12

90° ELBOW

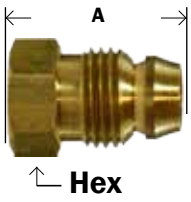


	Part #	THRD Sleeve x Male NPTF	A	B	Body Size	Approx. Wt. Lbs.	
	16-127	1/8” x *	0.50	0.52	0.41	0.02	----
	16-128	1/8” x 1/8”	0.50	0.66	0.43	0.02	----
	16-129	3/16” x 1/8”	0.56	0.62	0.44	0.02	----
	16-130	1/4” x 1/8”	0.52	0.62	0.50	0.04	----
NEW	16-131	5/16" x 1/8"	0.75	0.81	0.56	0.09	----
NEW	16-133	3/8" x 1/4"	0.88	1.00	0.56	0.13	----

* 1/4 - 28 Male Thread Tapered

189 **6400** 15

BREAK-AWAY NUT



- 1-Piece Fiting

	Part #	Size	A	Hex	Approx. Wt. Lbs.	
NEW	16-009	1/8"	0.66	0.31	0.02	----
	16-090	3/16”	0.57	0.37	0.02	----
	16-010	1/4”	0.62	0.43	0.02	----
NEW	16-011	5/16"	0.77	0.50	0.04	----
NEW	16-012	3/8"	0.84	0.56	0.04	----
NEW	16-013	1/2"	0.92	0.69	0.05	----

* Threaded sleeve fittings on page 85.

181-BA **21604** 99LB **81LB**

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

BRASS SPLIT SLEEVE D.O.T. FITTINGS (5/32 O.D.)

TRANSMISSION BRASS FITTINGS

APPLICATIONS: Used with SAE J844 Type A nylon tube in pressure protected air transmission applications.
TECHNICAL DATA: Maximum working pressure up to 150 PSI. Fittings will withstand variations from -40°F to +220°F (-40°C to + 104°C)

Ideally suited for use in passive protected air transmission applications. A specially designed slotted sleeve helps eliminate notch stress related to over torque.

COLLET

	Part #	Tube O.D.	
	38-711	5/32"	----
	25-001	1/8"	----
NEW	25-002	3/16"	----
NEW	25-003	1/4"	----

1460 **90791** 280 **90946**

NUT

Part #	Tube O.D.	
38-732	5/32"	----
25-033	1/8"	----

1461 **90790** 281 **90885**

DOUBLE END UNION

Part #	Tube O.D.	
38-761	5/32"	----
25-062	1/8"	----
25-064	1/4"	----

1462 **90792** 283 **90891**

CONNECTOR WITH NUT AND SLEEVE

	Part #	Tube O.D.	Pipe Thread	
	38-769	5/32"	1/16"	----
	38-770	5/32"	1/8"	----
	25-175	1/8"	1/16"	----
	25-176	1/8"	1/8"	----
NEW	25-177	3/16"	1/8"	----
NEW	25-179	1/4"	1/8"	----

• Shipped with nut and split sleeve, picture shows insert 1468 **90794** 282 **90985**

ELBOW

	Part #	Tube O.D.	Pipe Thread	
NEW	38-715	5/32"	1/16"	----
	38-718	5/32"	1/8"	----
	25-220	1/8"	1/8"	----
NEW	25-219	1/8"	1/16"	----
NEW	25-221	3/16"	1/8"	----
NEW	25-224	1/4"	1/8"	----

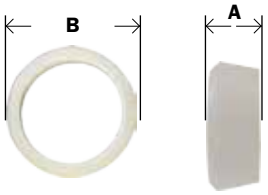
WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

SPECIAL COMPRESSION ASSEMBLIES | BRASS FITTINGS

To purchase special compression assemblies, delete the 18 prefix on part# and add the prefix of the type of special assembly you desire. Pricing and availability upon request.

22 - Plastic sleeve (inserts should be ordered seperately)
24 - Long nut compression
26 - Captive sleeve (parts listed on following pages)
27 - Self align sleeve

DELRIN SLEEVE

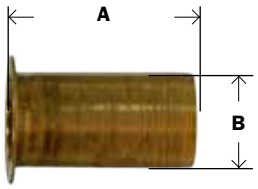


	Part #	Size	A	B	Approx. Wt. Lbs.	
	18-015	1/4”	0.19	0.37	0.01	----
	18-016	5/16”	0.19	0.43	0.01	----
	18-017	3/8”	0.19	0.50	0.02	----
	18-018	1/2”	0.25	0.63	0.02	----
	18-019	5/8”	0.22	0.74	0.02	----
NEW	18-020	3/4"	0.25	0.93	0.02	----

60-P

BRASS INSERT

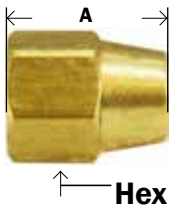
• SLEEVE



	Part #	Size	A	B	Approx. Wt. Lbs.	Wall	
	22-008	1/8”	0.46	0.080	0.01	.016	----
NEW	22-008A	1/8"	0.46	0.080	0.01	.016	----
	22-009	3/16”	0.45	0.135	0.01	.025	----
	22-009A	3/16”	0.52	0.095	0.01	.040	----
	22-010	1/4”	0.50	0.163	0.02	.04	----
	22-010A	1/4”	0.59	0.125	0.02	.04	----
	22-010B	1/4”	0.53	0.172	0.02	.03	----
	22-011A	5/16”	0.50	0.232	0.02	.04	----
	22-011	5/16”	0.53	0.187	0.02	.062	----
	22-012	3/8”	0.56	0.250	0.03	.062	----
	22-013	1/2”	0.72	0.370	0.03	.062	----
	22-014	5/8”	0.72	0.483	0.03	.062	----
	22-015	3/4”	1.03	0.563	0.03	.03	----

63-BI **60AE** 2030 **63PT**

LONG NUT COMPRESSION - Can be assembled on any compression fitting



Part #	Size	A	Hex	Approx. Wt. Lbs.	
10-013	1/8"	0.50	0.37	0.01	----
24-002	3/16"	0.62	0.43	0.01	----
24-003	1/4”	0.75	0.50	0.02	----
24-004	5/16”	0.84	0.56	0.02	----
24-005	3/8”	0.97	0.62	0.04	----
24-006	1/2”	1.06	0.81	0.06	----
24-007	5/8"	1.19	0.94	0.11	----
24-008	3/4"	1.50	1.25	0.14	----

161

SELF-ALIGN SLEEVES

Part #	Size	
27-001	1/8"	----
27-002	3/16"	----
27-003	1/4"	----

860 **601**

Part #	Size	
27-005	3/8"	----
27-006	1/2"	----

860

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

CAPTIVE SLEEVE NUT

Part #	Size	
26-001	1/8”	----
26-002	3/16”	----
26-003	1/4”	----
26-004	5/16”	----
26-005	3/8”	----
26-007	1/2”	----
26-008	5/8”	----

CS61 **61CA**

UNION

Part #	Size	
26-062	1/8”	----
26-063	3/16”	----
26-064	1/4”	----
26-065	5/16”	----
26-066	3/8”	----
26-079	3/8” x 1/4”	----
26-068	1/2"	----
26-069	5/8"	----

CS62 **62CA**

TEE

Part #	Size	
26-102	3/16”	----
26-103	1/4”	----
26-105	3/8”	----

CS64 **164CA**

FEMALE ADAPTER

Part #	Comp. X Female NPTF	
26-142	1/8" x 1/8"	----
26-145	1/4” x 1/8”	----
26-146	1/4" x 1/4"	----
26-153	3/8” x 1/4”	----

CS66 **66CA**

MALE ADAPTER

Part #	Comp. X Male NPTF	
26-175	1/8" x 1/4"	----
26-176	1/8” x 1/8”	----
26-177	3/16” x 1/8”	----
26-179	1/4” x 1/8”	----
26-180	1/4” x 1/4”	----
26-180L	1/4" x 1/4"	----
26-181	1/4” x 3/8”	----
26-182	1/4" x 1/2"	----
26-183	5/16” x 1/8”	----
26-184	5/16” x 1/4”	----
26-188	3/8” x 1/4”	----
26-189	3/8” x 3/8”	----
26-190	3/8” x 1/2”	----
26-194	1/2" x 3/8"	----
26-195	1/2” x 1/2”	----
26-198	5/8" x 1/2"	

CS68 **68CA**

MALE ELBOW

Part #	Comp. X Male NPTF	
26-220	1/8” x 1/8”	----
26-220B	1/8” x 1/8”	----
26-221	3/16” x 1/8”	----
26-224B	1/4" x 1/8"	----
26-224	1/4” x 1/8”	----
26-221B	3/16" x 1/8"	----
26-225	1/4” x 1/4”	----
26-225B	1/4” x 1/4”	----
26-228	5/16” x 1/8”	----
26-229	5/16” x 1/4”	----
26-232	3/8" x 1/8"	----
26-233	3/8” x 1/4”	----
26-233B	3/8" x 1/4"	----
26-234	3/8" x 3/8"	----
26-235	3/8" x 1/2"	----
26-237	1/2” x 3/8”	----
26-238	1/2” x 1/2”	----

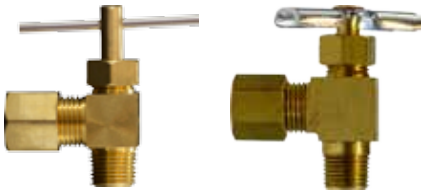
CS69 **169CA**

MALE BRANCH TEE

Part #	Comp. X Male NPTF (1&2) X 3	
26-291	1/4” x 1/8”	----
26-292	1/4” x 1/4”	----
26-293	5/16” x 1/8”	----
26-296	3/8” x 1/4”	----

CS72 **172CA**

CAPTIVE SLEEVE x MALE PIPE ANGLE NEEDLE VALVE



Part #	Comp X Male Pipe	
26-011	1/4” x 1/8”	----
26-014	5/16” x 1/4”	----

CAPTIVE SLEEVE x CAPTIVE SLEEVE NEEDLE VALVE

Part #	Comp X Comp	
26-021	1/4”	----
26-023	3/8”	----

Interchangeable with compress-align fittings.

These are NOT Lead Free
Lead Free products
available upon request

- More sizes available
- Lead Free - add LF to part #

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

Flareless

Flareless Brass Tube Fittings are Interchangeable with Poly-Flo®, Poly-Tite® and Poly-Line® and Poly-Fit®

Built-in SS
Tube Support

Tube O.D.	1/8	3/16	1/4	5/16	3/8	1/2
Thread Size-B	5/16-24	3/8-24	3/8-24	7/16-24	1/2-24	11/16-20

•Typical Application
Pneumatic instrumentation circuits, lubricant and cooling lines.

•Working Pressure and Temperature Ranges
Up to 150 PSI from 0°F to + 150°F with thermoplastic tubing. Up to 300 PSI from 0°F to + 175°F with soft metal tubing.

•Maximum allowable metal tube wall thickness for use with Poly-Tite fittings:
1/8", 3/16" O.D. --no limitation,
1/4" O.D.--.035 5/16", 3/8",1/2" O.D.--.049

•Vibration
Excellent Resistance.

•Temperature Range
Depends on tubing used. -65°F to +250°F (-53°C to +121°C) with brass sleeve, -40°F to +150°F (-40°C to +66°C) with plastic sleeve. (Refer to tubing temperature range.)

•Used With
Aluminum & copper tubing. Hard plastic tubing requires brass sleeve. Not recommended for steel tubing.

• Tolerance
+/- .02 on all dimensions. Dimension data can change without notice. Please call us when dimensions are critical.

•Advantages
No flaring of tubing required. Easy installation, captive sleeve, pre-assembled for installation and can be reassembled. Nuts rotate around the sleeve during tightening, preventing twisting of tubing.

•Assembly Instructions
1- Cut tubing to desired length.
2- Slide nut/sleeve assembly on tube. Threaded end "A" of nut must face toward fitting.
3- Bottom tubing into fitting.
4- Plastic sleeve - Tighten nut hand tight.
Brass Sleeve - Tighten nut hand tight, then an additional 3/4 turn.

* Note: 1/8 and 3/16 sizes have brass sleeves

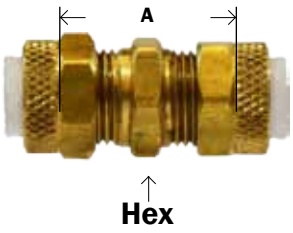
WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

NUT AND PLASTIC SLEEVE ASSEMBLY

Part #	Tube O.D.	Thread	A	Hex (Dia.)	Approx. Wt. Lbs.	
20-211	1/4”	3/8-24	0.34	0.43	0.02	----
20-212	5/16”	7/16-24	0.45	0.50	0.02	----
20-213	3/8”	1/2-24	0.38	0.56	0.04	----
20-214	1/2”	11/16-20	0.42	0.81	0.04	----

261PF **1261** 61PN

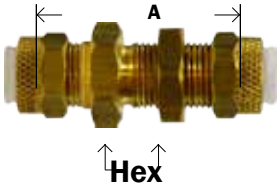
UNION



Part #	Tube O.D.	A	Hex	Approx. Wt. Lbs.	
20-240	1/8”	0.66	0.31	0.02	----
20-241	3/16”	0.75	0.37	0.04	----
20-242	1/4”	0.69	0.37	0.04	----
20-243	5/16”	0.69	0.44	0.04	----
20-244	3/8”	0.72	0.50	0.10	----
20-200	3/8” x 1/4”	0.72	0.50	0.08	----
20-245	1/2”	0.84	0.69	0.14	----

262PF **1262** 62P **262P**

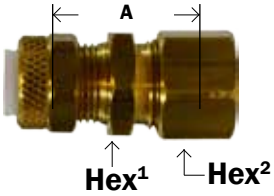
BULKHEAD UNION



Part #	Tube O.D.	A	Hex	Approx. Wt. Lbs.	
20-337	1/4”	1.25	0.56	0.06	----
20-338	5/16”	1.25	0.62	0.08	----
20-339	3/8”	1.31	0.69	0.10	----

62PBH **329P** 282P

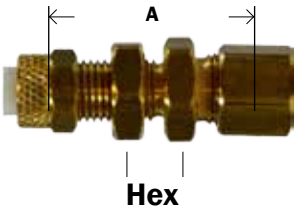
UNION TUBE #M62C - FLARELESS X STANDARD COMPRESSION



Part #	Tube O.D.	A	Hex 1	Hex 2	Approx. Wt. Lbs.	
20-235	1/4”	0.75	0.44	0.50	0.04	----
20-237	3/8”	0.84	0.62	0.62	0.08	----

262S **62PCA** 262PC

BULKHEAD UNION - FLARELESS X COMPRESSION



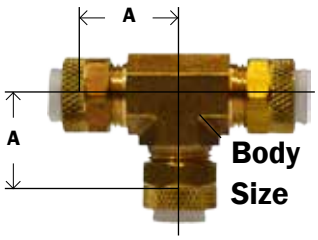
Part #	Tube O.D.	A	Hex	Approx. Wt. Lbs.	
20-333	1/4”	1.31	0.56	0.07	----
20-334	3/8”	1.44	0.69	0.12	----

1274

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

FLARELESS BRASS FITTINGS

UNION TEE

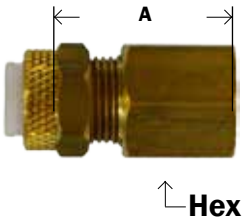


Part #	Tube O.D.	A	Body Size	Approx. Wt. Lbs.	
20-248	1/8”	0.62	0.31	0.02	----
20-249	3/16”	0.62	0.31	0.04	----
20-250	1/4”	0.73	0.44	0.06	----
20-251	5/16”	0.62	0.37	0.08	----
20-252	3/8”	0.86	0.56	0.08	----
20-330*	3/8” x 1/4”	0.72	0.44	0.08	----
20-253	1/2”	0.81	0.62	0.24	----

* Reducing Branch

1264 **164P** 264P

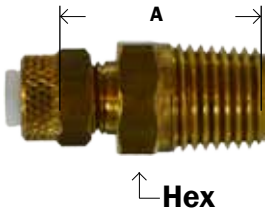
FEMALE CONNECTOR



Part #	Tube O.D. x Female NPTF	A	Hex	Approx. Wt. Lbs.	
20-256	1/8” x 1/8”	0.75	0.56	0.03	----
20-257	3/16” x 1/8”	0.78	0.56	0.05	----
20-259	1/4” x 1/8”	0.76	0.50	0.04	----
20-260	1/4” x 1/4”	1.08	0.62	0.05	----
20-261	5/16” x 1/8”	0.75	0.50	0.03	----
20-265	3/8” x 1/8”	0.77	0.56	0.05	----
20-262	3/8” x 1/4”	0.94	0.62	0.05	----
20-263	1/2” x 3/8”	1.00	0.81	0.12	----

1266 **66P** 266P

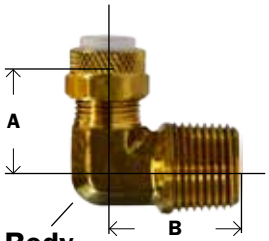
MALE CONNECTOR



Part #	Tube O.D. x Male NPTF	A	Hex	Approx. Wt. Lbs.	
20-268	1/8” x 1/8”	0.80	0.34	0.04	----
20-269	3/16” x 1/8”	0.86	0.44	0.04	----
NEW 20-270	1/4" x 10/32"				
20-271	1/4” x 1/8”	0.82	0.44	0.03	----
20-272	1/4” x 1/4”	1.00	0.56	0.05	----
20-273	1/4” x 3/8”	1.03	0.69	0.08	----
20-274	5/16” x 1/8”	0.81	0.44	0.04	----
20-275	5/16” x 1/4"	1.00	0.56	0.05	----
20-276	3/8” x 1/8”	1.00	0.56	0.06	----
20-277	3/8” x 1/4”	1.03	0.56	0.08	----
20-278	3/8” x 3/8”	1.03	0.69	0.10	----
20-279	1/2” x 3/8”	1.09	0.69	0.16	----
20-282	1/2” x 1/2”	1.33	0.88	0.18	----

1268 **68P** 268P

MALE ELBOW



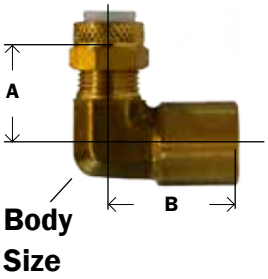
Part #	Tube O.D. x Male NPTF	A	B	Body Size	Approx. Wt. Lbs.	
20-287	1/8” x 1/8”	0.62	0.69	0.31	0.02	----
20-288	3/16” x 1/8”	0.62	0.69	0.37	0.04	----
20-289*	1/4” x 1/8”	0.53	0.73	0.50	0.04	----
20-290	1/4” x 1/4”	0.66	0.94	0.37	0.06	----
20-291	1/4” x 3/8”	0.75	1.03	0.50	0.10	----
20-292	5/16” x 1/8”	0.62	0.75	0.41	0.04	----
20-293	3/8” x 1/8”	0.79	0.73	0.37	0.08	----
20-294	3/8” x 1/4”	0.72	0.94	0.44	0.10	----
20-295	3/8” x 3/8”	0.78	1.03	0.50	0.14	----
20-296	1/2” x 3/8”	1.09	1.10	0.73	0.16	----

* Barstock

1269 **169P** 269P

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

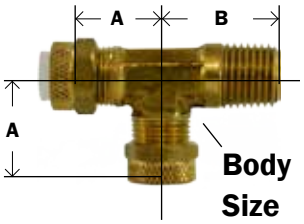
FEMALE ELBOW



Part #	Tube O.D. x Female NPTF	A	B	Body Size	Approx. Wt. Lbs.	
20-300	1/8" x 1/8"	0.69	0.55	0.56	0.02	----
20-301	3/16" x 1/8"	0.72	0.55	0.56	0.02	----
20-302	1/4" x 1/8"	0.62	0.75	0.37	0.08	----
20-303	1/4" x 1/4"	0.72	0.88	0.50	0.10	----
20-304	3/8" x 1/4"	0.72	0.88	0.50	0.12	----
20-305	1/2" x 3/8"	0.91	0.94	0.63	0.16	----

1270 **170P**

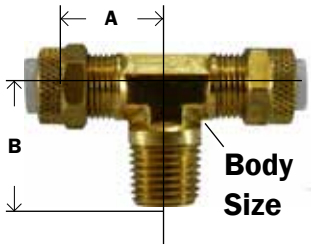
MALE RUN TEE



Part #	Tube O.D. x Male NPTF	A	B	Body Size	Approx. Wt. Lbs.	
20-308	1/8" x 1/8"	0.62	0.69	0.31	0.04	----
20-309	3/16" x 1/8"	0.62	0.69	0.31	0.04	----
20-310	1/4" x 1/8"	0.62	0.75	0.37	0.08	----
20-311	1/4" x 1/4"	0.66	0.94	0.37	0.10	----
20-312	5/16" x 1/8"	0.62	0.75	0.37	0.08	----
20-313	3/8" x 1/4"	0.66	0.94	0.44	0.10	----
20-314	1/2" x 3/8"	0.81	1.06	0.63	0.16	----

1271 **171P**

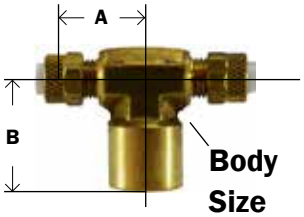
MALE BRANCH TEE



Part #	Tube O.D. x Male NPTF	A	B	Body Size	Approx. Wt. Lbs.	
20-317	1/8" x 1/8"	0.63	0.69	0.31	0.04	----
20-318	3/16" x 1/8"	0.63	0.69	0.31	0.04	----
20-319	1/4" x 1/8"	0.63	0.75	0.37	0.07	----
20-320	1/4" x 1/4"	0.66	0.94	0.37	0.09	----
20-321	5/16" x 1/8"	0.63	0.75	0.37	0.10	----
20-322	3/8" x 1/8"	0.63	0.75	0.44	0.08	----
20-323	3/8" x 1/4"	0.66	0.94	0.44	0.11	----
20-324	1/2" x 3/8"	0.81	1.06	0.63	0.21	----

1272 **172P** 272P

FEMALE BRANCH TEE



Part #	Tube O.D. x Female NPTF	A	B	Body Size	Approx. Wt. Lbs.	
20-327	1/4" x 1/8"	0.66	0.94	0.37	0.12	----
20-328	1/4" x 1/4"	0.84	1.16	0.56	0.16	----

1277 **177P** 277P

Dimension data can change without notice. Please see our website when dimensions are critical.

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

UNIVERSAL NUT AND BRASS SLEEVE ASSEMBLY

Part #	Tube O.D.	Thread	A	Hex	Approx. Wt. Lbs.	
20-227	1/8”	5/16-24	0.37	0.37	0.02	----
20-228	3/16”	3/8-24	0.41	0.44	0.02	----
20-229	1/4”	3/8-24	0.34	0.43	0.02	----
20-230	5/16”	7/16-24	0.34	0.50	0.02	----
20-231	3/8”	1/2-24	0.37	0.56	0.04	----
20-232	1/2”	11/16-20	0.42	0.81	0.04	----

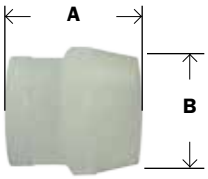
261PFB **1261B** 61PB **261UB**

NUT

Part #	Tube O.D.	Thread	A	Hex (Dia.)	Approx. Wt. Lbs.	
20-218	1/8”	5/16-24	0.37	0.37	0.01	----
20-219	3/16”	3/8-24	0.41	0.44	0.01	----
20-220	1/4”	3/8-24	0.34	0.44	0.02	----
20-221	5/16”	7/16-24	0.34	0.50	0.02	----
20-222	3/8”	1/2-24	0.38	0.56	0.04	----
20-223	1/2”	11/16-20	0.42	0.81	0.06	----

61PN **1261** 261FPN

PLASTIC SLEEVE



Part #	Tube O.D.	A	B	Approx. Wt. Lbs.	
20-205	1/4”	0.34	0.26	0.01	----
20-206	5/16”	0.39	0.32	0.01	----
20-207	3/8”	0.41	0.38	0.01	----
20-208	1/2”	0.44	0.51	0.01	----

260FF **1260** 60P **260P**

PLASTIC CAP

Part #	Tube O.D.	A	Approx. Wt. Lbs.	
20-201	1/4”	0.50	0.01	----
20-203	3/8”	0.56	0.01	----
20-204	1/2”	0.59	0.01	----

1229 **59P** 259P

Dimension data can change without notice. Please see our website when dimensions are critical.

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

PUSH-IN/ PUSH-TO-CONNECT FITTINGS

BRASS PUSH-IN
PAGE 96-101

NICKEL PLATED BRASS PUSH-IN
PAGE 102-106

BALL VALVES FOR N/P PUSH-IN
PAGE 107

METRIC N/P BRASS PUSH-IN
PAGE 108-110

COMPOSITE BODY PUSH-IN
PAGE 111-115

COMPOSITE BODY METRIC PUSH-IN
PAGE 116-118

FDA PLASTIC PUSH-IN
PAGE 303-304

DOT BRASS PUSH-IN
PAGE 119-125

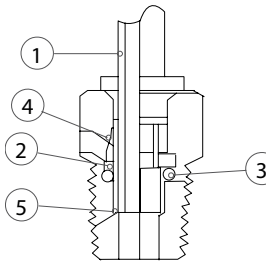
DOT COMPOSITE PUSH-IN
PAGE 126-130

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

BRASS PUSH-IN FITTINGS

ENGINEERING AND DESIGN

• **QUICK CONNECT**, simply push tubing in, no tools. Saves up to 75% of assembly time of standard compression fittings.
• **QUICK DISCONNECT**, hold two fingers on insert and pull tubing out, no tools required.
• **REUSEABLE**, connect and disconnect numerous times.
• **FULL FLOW DESIGN**, provides up to 60% more flow area than conventional fittings with internal tube supports.
• **POSITIVE SEAL**, no leaks. After tubing is inserted, seal is made.
• **VERSATILE**, BunaN "O" rings standard. Other materials of "O" rings available.
• **SECURE TUBE RETENTION**, pulling on tubing only serves to tighten the connection.
• **SELF CONTAINED ASSEMBLY**, no loose parts, brass body and insert.



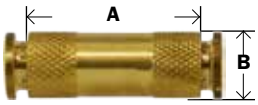
When tubing (1) is inserted into the fitting, it first passes through the gripping teeth (2). Just beyond the gripping teeth is the o-ring (3) which provides the leak proof seal against the OD of the tube. The gripping teeth grab the tube, which expands the insert. Pulling back on the tube only tightens the grip as the insert moves onto the camming surface (4). Pressure through the tube also serves to tighten the grip. The tube bottoms against a positive tube stop (5) in a cavity providing tube support to prevent leakage.

• **BRASS CONSTRUCTION**, elbows and tees are forged brass.
• **CHOICE** of convenient swivel of economical stationary elbows and tees.
• **STRAIGHT CONNECTORS** have interior hex for Allen key tightening where space is limited...no need to use a wrench.
• **PRE-APPLIED TEFLON ®** based pipe sealant on all male pipe threads, saving customer additional labor.
• **METRIC SIZES AVAILABLE**: Metric tube sizes from 2mm through 12mm in both standard NPT and metric pipe sizes are available on a special order basis.
• **WORKING TEMPERATURE**:
-10^{0}F to 200^{0}F (other ranges available on request).
• **PIPE THREAD**: NPTF with Teflon ® based sealant pre-applied.

• **Tolerance**
+/- .02 on all dimensions. Dimension data can change without notice. Please call us when dimensions are critical

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

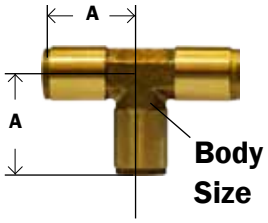
UNION CONNECTOR



Part #	Tube O.D.	A	B	Approx. Wt. Lbs.	
20-017	1/8”	1.07	0.38	0.03	----
20-018	5/32”	1.07	0.38	0.03	----
20-019	1/4”	1.50	0.44	0.05	----
20-022	3/8” x 1/4”	1.46	0.56	0.05	----
20-020	3/8”	1.44	0.56	0.06	----
20-021	1/2”	1.63	0.81	0.18	----

AQ62 **6580** 3106 **62PL** KQH **12-020** 50-562 **262-OF** 1162 **262PP**

UNION TEE

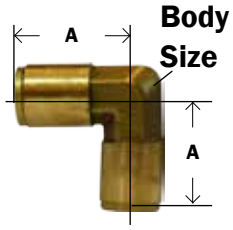


Part #	Tube O.D.	A	Body Size	Approx. Wt. Lbs.	
20-025	1/8”	0.65	0.31	0.04	----
20-026	5/32”	0.67	0.31	0.04	----
20-027	3/16”	0.75	0.37	0.06	----
20-028	1/4”	0.92	0.37	0.09	----
20-031*	5/16”	0.89	0.49	0.10	----
20-029	3/8”	0.98	0.50	0.13	----
20-030	1/2”	1.16	0.62	0.24	----

* Nickel Plated

KQT **12-060** 50-564 **264OF** 264PP **1164** AQ64 **6540** 3140

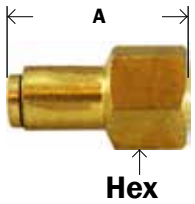
UNION ELBOW



Part #	Tube O.D.	A	Body Size	Approx. Wt. Lbs.	
20-150	1/8”	0.65	0.31	0.02	----
20-151	5/32”	0.67	0.31	0.04	----
20-152	1/4”	0.87	0.37	0.06	----
20-155	5/16”	0.91	0.47	0.08	----
20-153	3/8”	0.97	0.50	0.09	----
20-154	1/2”	1.15	0.62	0.18	----

AQ65 **6550** 3102 **165PL** KQL **12-040** 50-565 **265-OF**

FEMALE CONNECTOR

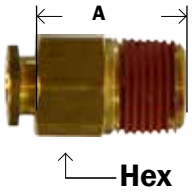


Part #	Tube O.D. x Female NPTF	A	Hex	Approx. Wt. Lbs.	
20-032	1/8” x 1/8”	0.96	0.56	0.04	----
20-038	1/8” x 1/4”	1.04	0.67	0.04	----
20-012	5/32" x 1/8"	1.09	0.56	0.05	----
20-034	1/4” x 1/8”	1.23	0.56	0.06	----
20-035	1/4” x 1/4”	1.42	0.75	0.09	----
20-036	3/8” x 1/4”	1.32	0.75	0.09	----
20-037	3/8” x 3/8”	1.31	0.87	0.12	----

266PP **AQ66** 6463 **3114** 66PL **12-426** 50-566 **266-OF** 1166

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

MALE CONNECTOR

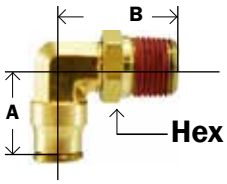


Part #	Tube O.D. x Male NPTF	A	Hex	Approx. Wt. Lbs.	
20-047*	1/8” x 10-32”*	0.69	0.37	0.02	----
20-045	1/8" x 1/16"	0.68	0.37	0.02	----
20-048	1/8” x 1/8”	0.61	0.43	0.02	----
20-023	1/8” x 1/4”	0.98	0.56	0.04	----
20-049*	5/32” x 10-32”*	0.67	0.37	0.02	----
20-050	5/32” x 1/8”	0.67	0.43	0.03	----
20-046	5/32” x 1/4”	0.85	0.56	0.05	----
20-051*	3/16” x 10-32”*	0.80	0.37	0.02	----
20-052	3/16” x 1/8”	0.93	0.43	0.03	----
20-053*	1/4” x 10-32”*	0.70	0.43	0.03	----
20-039	1/4" x 1/16"	0.92	0.43	0.06	----
20-054	1/4” x 1/8”	0.93	0.43	0.06	----
20-055	1/4” x 1/4”	0.93	0.56	0.10	----
20-056	1/4” x 3/8”	0.94	0.68	0.08	----
20-530	5/16” x 1/8”	1.07	0.56	0.05	----
20-531	5/16” x 1/4”	0.98	0.56	0.10	----
20-532	5/16” x 3/8”	1.06	0.75	0.08	----
20-057	3/8” x 1/8”	1.10	0.56	0.06	----
20-058	3/8” x 1/4”	1.11	0.56	0.05	----
20-059	3/8” x 3/8”	1.02	0.68	0.08	----
20-062	3/8”x 1/2”	1.02	0.87	0.08	----
20-060	1/2” x 1/4”	1.36	0.81	0.11	----
20-061	1/2” x 3/8”	1.30	0.81	0.12	----
20-063	1/2” x 1/2”	1.23	0.87	0.14	----

* Furnished with gaskets

268PP **AQ68** 6510 **3115** 68PL **KQH** 12-425 **50-568** 268-OF **1168**

SWIVEL MALE ELBOW



Part #	Tube O.D. x Male NPTF	A	B	Hex	Approx. Wt. Lbs.	
20-079	1/8” x 1/8”	0.69	0.98	0.43	0.07	----
20-535*	1/8” x 1/4”	0.76	0.87	0.56	0.06	----
20-076**	5/32” x 10-32”	0.67	0.71	0.37	0.04	----
20-080	5/32” x 1/8”	0.68	0.89	0.43	0.05	----
20-077	5/32” x 1/4”	0.68	1.08	0.56	0.07	----
20-078**	1/4” x 10-32”	0.86	0.79	0.31	0.05	----
20-081	1/4” x 1/8”	0.90	0.93	0.37	0.08	----
20-082	1/4” x 1/4”	0.90	0.99	0.56	0.10	----
20-086	1/4” x 3/8”	0.98	1.14	0.68	0.09	----
20-538*	5/16” x 1/4”	0.91	0.85	0.56	0.07	----
20-539*	5/16” x 3/8”	0.91	0.87	0.75	0.08	----
20-087	3/8” x 1/8”	1.00	1.06	0.43	0.09	----
20-083	3/8” x 1/4”	0.99	1.15	0.56	0.10	----
20-084	3/8” x 3/8”	1.00	1.24	0.68	0.20	----
20-088	3/8” x 1/2”	1.00	1.54	0.87	0.19	----
20-085	1/2” x 3/8”	1.16	1.34	0.68	0.18	----
20-092	1/2” x 1/2”	1.16	1.51	0.87	0.24	----

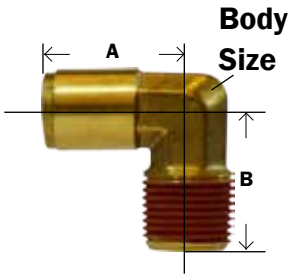
* Nickel Plated

** Furnished with gaskets

aq69-ps **56520** 3109 **169pl** kql **12-447** 50-579 **269-OFS** 11695

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

FIXED MALE ELBOW

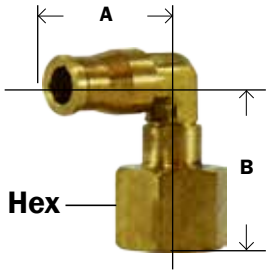


Part #	Tube O.D. x Male NPTF	A	B	Body Size	Approx. Wt. Lbs.	
20-065	1/8" x 1/8"	0.69	0.69	0.31	0.03	----
20-066	5/32" x 1/8"	0.68	0.68	0.31	0.03	----
20-067	3/16" x 1/8"	0.75	0.71	0.37	0.04	----
20-068	1/4" x 1/8"	0.89	0.75	0.37	0.06	----
20-069	1/4" x 1/4"	0.95	0.96	0.37	0.08	----
20-070	1/4" x 3/8"	1.00	0.98	0.50	0.10	----
20-071	3/8" x 1/8"	0.99	0.80	0.50	0.06	----
20-072	3/8" x 1/4"	0.98	0.98	0.50	0.09	----
20-073	3/8" x 3/8"	0.97	0.98	0.50	0.12	----
20-074	1/2" x 1/4"	1.15	1.05	0.62	0.15	----
20-075	1/2" x 3/8"	1.18	1.05	0.62	0.22	----
20-064	1/2" x 1/2"	1.16	1.66	0.62	0.20	----

269PP **AQ69-P** 6500 **169PLNS** 12-445 **1169**

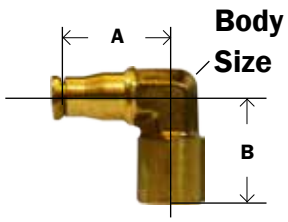
Dimension data can change without notice. Please see our website when dimensions are critical.

FEMALE SWIVEL ELBOW



Part #	Tube O.D. x Female NPTF	A	B	Hex	
20-094S	5/32" x 1/8"	0.76	1.06	0.56	----
20-089S	1/4" x 1/8"	0.98	1.08	0.56	----
20-090S	1/4" x 1/4"	0.98	1.26	0.75	----
20-091S	3/8" x 1/4"	1.07	1.48	0.75	----

FEMALE ELBOW



Part #	Tube O.D. x Female NPTF	A	B	Body Size	Approx. Wt. Lbs.	
20-192	1/8" x 1/8"	0.78	0.82	0.31	0.02	----
20-094	5/32" x 1/8"	0.68	0.82	0.37	0.02	----
20-089	1/4" x 1/8"	0.91	0.75	0.37	0.06	----
20-090	1/4" x 1/4"	1.03	1.03	0.50	0.11	----
20-091	3/8" x 1/4"	0.98	0.95	0.50	0.16	----

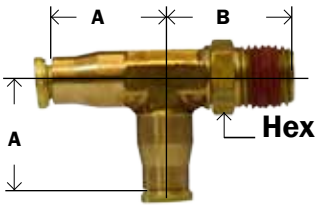
AQ70-P **3009**

Life is really simple, but we insist on making it complicated.

- Confucius

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

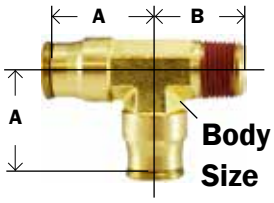
SWIVEL MALE RUN TEE



Part #	Tube O.D. x Male NPTF	A	B	Hex	Approx. Wt. Lbs.	
20-160	1/8" x 1/8"	0.65	0.86	0.43	0.08	----
20-161	5/32" x 1/8"	0.67	1.04	0.43	0.09	----
20-162	1/4" x 1/8"	0.92	1.04	0.44	0.09	----
20-163	1/4" x 1/4"	0.92	1.13	0.56	0.11	----
20-164	3/8" x 1/4"	0.94	1.19	0.56	0.11	----
20-165	3/8" x 3/8"	0.96	1.24	0.50	0.12	----
20-174	1/2" x 1/4"	1.12	1.18	0.51	0.16	----
20-166	1/2" x 3/8"	1.14	1.31	0.68	0.14	----
20-167	1/2" x 1/2"	1.14	1.61	0.87	0.16	----

AQ71-PS **56440** 3103 **171PL** KQY **12-468** 50-571 **271-OFS** 11715

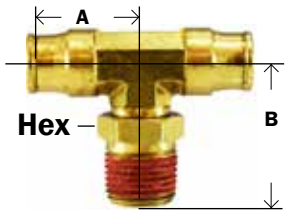
FIXED MALE RUN TEE



Part #	Tube O.D. x Male NPTF	A	B	Body Size	Approx. Wt. Lbs.	
20-095	1/8" x 1/8"	0.65	0.72	0.31	0.04	----
20-097	3/16" x 1/8"	0.75	0.73	0.37	0.06	----
20-098	1/4" x 1/8"	0.92	0.74	0.37	0.08	----
20-093	1/4" x 1/4"	0.92	0.92	0.43	0.10	----
20-099	3/8" x 1/8"	0.94	0.82	0.50	0.14	----
20-100	3/8" x 1/4"	0.98	0.98	0.50	0.12	----
20-101	3/8" x 3/8"	1.05	1.05	0.62	0.10	----
20-102	1/2" x 3/8"	1.14	1.05	0.62	0.18	----

AQ71-P

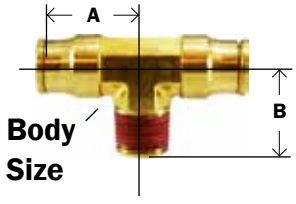
SWIVEL MALE BRANCH TEE



Part #	Tube O.D. x Male NPTF	A	B	Hex	Approx. Wt. Lbs.	
20-103	1/8" x 1/8"	0.65	0.81	0.31	0.04	----
20-104*	5/32" x 10-32"*	0.65	0.71	0.31	0.04	----
20-109	5/32" x 1/8"	0.67	0.94	0.37	0.06	----
20-105	1/4" x 1/8"	0.92	0.97	0.37	0.08	----
20-106	1/4" x 1/4"	0.92	1.09	0.55	0.10	----
20-107	3/8" x 1/4"	0.96	1.14	0.56	0.18	----
20-108	3/8" x 3/8"	0.96	1.23	0.69	0.16	----
20-110	1/2" x 3/8"	1.16	1.34	0.69	0.24	----
20-111	1/2" x 1/2"	1.16	1.64	0.87	0.28	----

* Furnished with gaskets

FIXED MALE BRANCH TEE

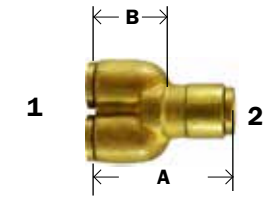


Part #	Tube O.D. x Male NPTF	A	B	Body Size	Approx. Wt. Lbs.	
20-112	1/8" x 1/8"	0.69	0.72	0.31	0.04	----
20-113	5/32" x 1/8"	0.69	0.65	0.31	0.04	----
20-115	1/4" x 1/8"	0.92	0.74	0.37	0.12	----
20-116	1/4" x 1/4"	0.91	0.91	0.43	0.10	----
20-117	3/8" x 1/8"	0.98	0.80	0.50	0.08	----
20-118	3/8" x 1/4"	0.98	0.97	0.50	0.12	----
20-119	3/8" x 3/8"	0.98	0.97	0.50	0.14	----
20-120	1/2" x 3/8"	1.16	1.05	0.62	0.18	----

AQ72-P

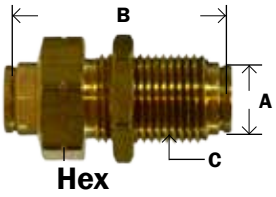
WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

UNION "Y"



Part #	Tube O.D. 1 X 2	A	B	Approx. Wt. Lbs.	
20-551	5/32" x 5/32"	1.36	0.81	0.11	----
20-552	1/4" x 1/8"	1.61	1.06	0.12	----
20-553	1/4" x 1/4"	1.81	1.16	0.14	----

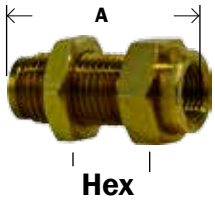
BULKHEAD UNION



Part #	Tube O.D. A	B	C	Hex	Approx. Wt. Lbs.	
20-124	1/8"	1.12	7/16-20	0.62	0.03	----
20-125	5/32"	1.12	7/16-20	0.62	0.03	----
20-126	3/16"	1.27	1/2-20	0.68	0.04	----
20-127	1/4"	1.69	1/2-20	0.68	0.06	----
20-128	3/8"	1.69	3/4-16	0.81	0.13	----
20-129	1/2"	1.85	15/16-20	1.12	0.16	----

AQ82-P **6590** 62PLBH **KQE** 12-029 **50-582** 282-OF **1174**

FEMALE BULKHEAD UNION

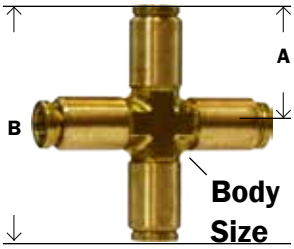


Part #	Tube O.D. x Female NPTF	A	Hex	Approx. Wt. Lbs.	
20-170	1/4" x 1/8"	1.19	0.68	0.08	----
20-171	1/4" x 1/4"	1.36	0.75	0.10	----
20-172	3/8" x 1/4"	1.71	0.75	0.14	----

AQ86-P **1166BH**

Dimension data can change without notice. Please call us when dimensions are critical.

CROSS



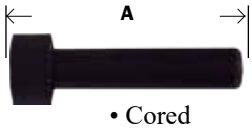
Size	Size	A	B	Body Size	
20-142	1/4"	1.03	2.06	0.37	----
20-143	3/8"	1.06	2.12	0.50	----

REDUCER - NICKEL PLATED - TUBE OD X STUD

Part #	Tube O.D. 1 X 2	A	B	Approx. Wt. Lbs.	
20-510	1/8" x 1/4"	1.38	0.39	0.02	----
20-511	5/32" x 1/4"	1.33	0.35	0.02	----
20-512	1/4" x 3/8"	1.50	0.51	0.04	----

67PPL **286PP**

PLASTIC PLUG



• Cored

Part #	Tube O.D.	A	Approx. Wt. Lbs.	
20-009	5/32"	1.16	0.01	----
20-010	1/4"	1.40	0.01	----
20-011	3/8"	1.40	0.02	----
20-013	1/2"	1.50	0.02	----

284PP **AQ59** 209-OF **1129** 6900 **639PL** 12-004 **50-526**

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

NICKEL PLATED PUSH-IN FITTINGS
with GLOBAL THREAD

• NPTF • BSPP • BSPT • ISO 7 • ISO 228 • G THREAD • J THREAD

- Saves time and money
- No stripped threads
- No stripped parts
- Reduce inventory
- Completely reusable
- Quick installation
- No pitch identification

Component Parts and Materials	
Body	Brass - Nickel Plated
Thrust Ring	Acetalic Resin/ Glass filled Nylon
Sleeve	Brass - Nickel Plated
Gripper Collet	Stainless Steel
Safety Ring	PA66
Lip Seal (1/8 O-Ring Seal)	NBR 70
Thread Seal	NBR 70

Max Operating Pressure: Vacuum to 290PSI.
Min Temperature: -4°F
Max Temperature: 176°F
Tubing: Nylon, Polyethylene, Polyurethane.
- For best results use 95 Durometer
Media: Compressed air, water, vacuum

• Tolerance
+/- .02 on all dimensions. Dimension data can change without notice. Please call us when dimensions are critical.

GLOBAL THREAD

Works With Inch or Metric Threads

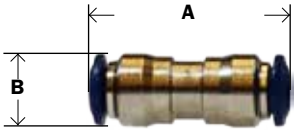
GLOBAL THREAD
NPT • BSPT • RC • NPTF • BSPP • G

"Global Thread" fittings can be assembled with female threads produced to the following standards: **Tapered NPTF**
Parrallel (BSPP, BSP, ISO 7)
Tapered (BSPT, PT, ISO 7, ISO 228)

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

NICKEL PLATED PUSH-IN FITTINGS

UNION CONNECTOR

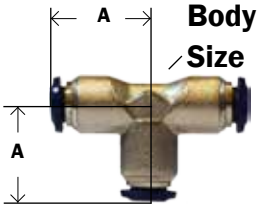


Part #	Tube O.D.	A	B	Approx. Wt. Lbs.	
20-017N	1/8”	1.06	0.34	0.03	----
20-018N*	5/32”	1.20	0.41	0.03	----
20-016N	5/32" x 1/4"	1.20	0.40	0.04	----
20-019N*	1/4”	1.38	0.49	0.05	----
20-015N*	5/16"	1.46	0.57	0.06	----
20-020N*	3/8”	1.69	0.69	0.06	----
20-022N	3/8" x 1/4"	1.69	0.68	0.06	----
20-021N*	1/2”	1.93	0.81	0.18	----
20-024N	1/2" x 3/8"	1.84	0.80	0.17	----

62PL **88040**

* Available in SS

UNION TEE

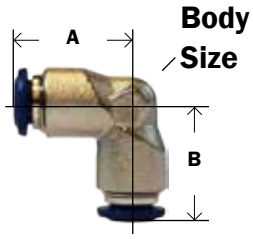


Part #	Tube O.D.	A	Body Size	Approx. Wt. Lbs.	
20-025N	1/8”	0.67	0.35	0.04	----
20-026N*	5/32”	0.67	0.35	0.04	----
20-028N*	1/4”	0.83	0.43	0.09	----
20-031N*	5/16”	0.87	0.51	0.10	----
20-029N*	3/8”	1.04	0.63	0.13	----
20-030N*	1/2”	1.20	0.74	0.24	----

164PL **88230**

* Available in SS

UNION ELBOW

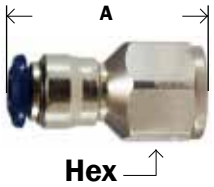


Part #	Tube O.D.	A	Body Size	Approx. Wt. Lbs.	
20-150N	1/8”	0.67	0.35	0.02	----
20-151N*	5/32”	0.67	0.35	0.04	----
20-152N*	1/4”	0.83	0.43	0.06	----
20-155N*	5/16”	0.87	0.51	0.08	----
20-153N*	3/8”	1.04	0.63	0.09	----
20-154N*	1/2”	1.20	0.75	0.18	----

165PL **88130**

* Available in SS

FEMALE CONNECTOR



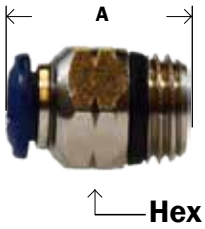
Part #	Tube O.D. x Female NPTF	A	Hex	Approx. Wt. Lbs.	
20-032N	1/8” x 1/8”	0.93	0.51	0.04	----
20-038N	1/8” x 1/4”	1.14	0.63	0.04	----
20-034N	1/4” x 1/8”	1.06	0.51	0.06	----
20-035N	1/4” x 1/4”	1.26	0.63	0.09	----
20-036N	3/8” x 1/4”	1.38	0.71	0.09	----
20-037N	3/8” x 3/8”	1.38	0.79	0.12	----

66PL **88030**

Today is a GOOD day.

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

MALE CONNECTOR



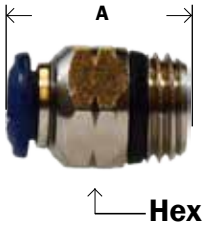
GLOBAL THREAD
NPT • BSPT • RC • NPTF • BSPP • G

• Can be purchased with NPTF threads upon request

* Available in stainless steel

Part #	Tube O.D. x Male Global Thread	A	Hex	Approx. Wt. Lbs.	
20-047N	1/8” x 10-32”	0.75	0.31	0.02	----
20-048N	1/8” x 1/8”	0.77	0.43	0.02	----
20-023N	1/8” x 1/4”	0.97	0.55	0.04	----
20-049N*	5/32” x 10-32”	0.83	0.39	0.02	----
20-050N*	5/32” x 1/8”	0.83	0.43	0.03	----
20-046N*	5/32” x 1/4”	0.98	0.55	0.05	----
20-053N*	1/4” x 10-32”	0.97	0.51	0.03	----
20-054N*	1/4” x 1/8”	0.98	0.51	0.06	----
20-055N*	1/4” x 1/4”	0.98	0.55	0.10	----
20-056N	1/4” x 3/8”	0.98	0.71	0.08	----
20-530N*	5/16” x 1/8”	0.98	0.55	0.05	----
20-531N*	5/16” x 1/4”	1.08	0.55	0.10	----
20-532N	5/16” x 3/8”	1.08	0.71	0.08	----
20-057N	3/8” x 1/8”	1.38	0.67	0.06	----
20-058N*	3/8” x 1/4”	1.32	0.67	0.05	----
20-059N*	3/8” x 3/8”	1.32	0.71	0.08	----
20-062N	3/8” x 1/2”	1.32	0.87	0.08	----
20-841N	1/2" x1/8"	1.03	0.79	0.12	----
20-060N	1/2” x 1/4”	1.54	0.79	0.11	----
20-061N*	1/2” x 3/8”	1.42	0.79	0.12	----
20-063N*	1/2” x 1/2”	1.58	0.87	0.14	----

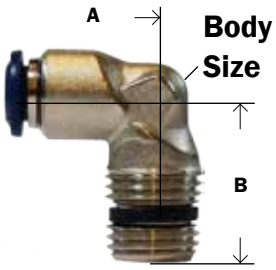
MALE CONNECTOR WITH INTERNAL HEX



Part #	Tube O.D. x Male Global Thread	A	Hex	Approx. Wt. Lbs.	
20-842N	1/8” x 10-32” UNF	0.71	0.10	0.02	----
20-847N	5/32" x 10-32 UNF	0.79	0.10	0.02	----
20-846N	5/32" x 1/8"	0.71	0.12	0.03	----
20-845N	1/4” x 10-32” UNF	0.93	0.10	0.03	----
20-843N	1/4" x 1/8"	0.93	0.16	0.06	----
20-844N	1/4" x 1/4"	0.85	0.16	0.10	----

68PL **87000**

FIXED MALE ELBOW



Part #	Tube O.D. x Male NPTF	A	B	Body Size	Approx. Wt. Lbs.	
20-068N	1/4” x 1/8”	0.83	0.73	0.43	0.06	----
20-069N	1/4” x 1/4”	0.83	0.91	0.43	0.08	----
20-072N	3/8” x 1/4”	1.04	1.04	0.63	0.09	----
20-073N	3/8” x 3/8”	1.04	1.00	0.63	0.12	----

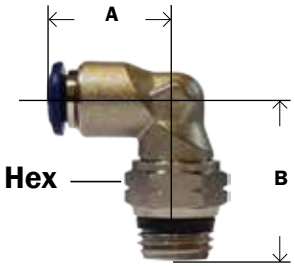
W169PLNS **8100**

The best and most beautiful things in the world cannot be seen or even touched - they must be felt with the heart.

- Helen Keller

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

SWIVEL MALE ELBOW



GLOBAL THREAD
NPT • BSPT • RC • NPTF • BSPP • G

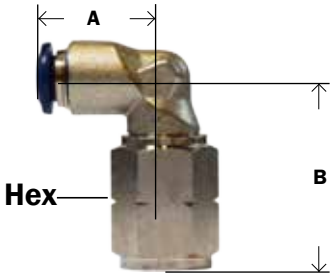
• Can be purchased with NPTF threads upon request

* Available in stainless steel

Part #	Tube O.D. x Male Global Thread	A	B	Hex	Approx. Wt. Lbs.	
20-079N	1/8” x 1/8”	0.67	0.78	0.51	0.07	----
20-535N	1/8” x 1/4”	0.67	0.95	0.59	0.06	----
20-076N*	5/32” x 10-32”	0.67	0.95	0.59	0.04	----
20-080N*	5/32” x 1/8”	0.67	0.79	0.51	0.05	----
20-848N*	5/32" x 1/4"	0.67	1.00	0.59	0.05	----
20-081N*	1/4” x 1/8”	0.83	0.87	0.51	0.08	----
20-082N*	1/4” x 1/4”	0.83	0.98	0.59	0.10	----
20-086N	1/4” x 3/8”	0.83	1.10	0.67	0.09	----
20-537N*	5/16" x 1/8"	0.91	0.98	0.51	0.06	----
20-538N*	5/16” x 1/4”	0.89	1.02	0.59	0.07	----
20-539N	5/16” x 3/8”	0.87	1.10	0.67	0.08	----
20-087N	3/8” x 1/8”	1.04	1.02	0.51	0.09	----
20-083N*	3/8” x 1/4”	1.04	1.10	0.59	0.10	----
20-084N*	3/8” x 3/8”	1.04	1.18	0.67	0.20	----
20-088N*	3/8” x 1/2”	1.04	1.30	0.83	0.19	----
20-184N	1/2" x 1/4"	1.24	1.30	0.59	0.17	----
20-085N*	1/2” x 3/8”	1.20	1.24	0.59	0.18	----
20-092N*	1/2” x 1/2”	1.20	1.42	0.83	0.24	----

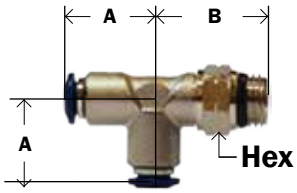
W169PL **87110**

FEMALE SWIVEL ELBOW



Part #	Tube O.D. x Female NPTF	A	B	Hex	
20-094N	5/32" x 1/8"	0.669	0.994	0.354	----
20-089N	1/4" x 1/8"	0.826	1.023	0.433	----
20-090N	1/4" x 1/4"	0.826	1.200	0.433	----
20-762N	3/8" x 1/8"	0.885	1.082	0.511	----
20-091N	3/8" x 1/4"	0.885	1.240	0.511	----

SWIVEL MALE RUN TEE



GLOBAL THREAD
NPT • BSPT • RC • NPTF • BSPP • G

• Can be purchased with NPTF threads upon request

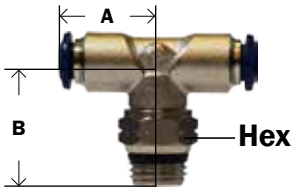
Part #	Tube O.D. x Male Global Thread	A	B	Hex	Approx. Wt. Lbs.	
20-095N	1/8" x 1/8"	0.67	0.81	0.51	0.05	----
20-851N	1/8" x 1/4"	0.67	0.95	0.59	0.06	----
20-852N	5/32" x 1/8"	0.67	0.79	0.51	0.07	----
20-853N	5/32" x 1/4"	0.67	0.95	0.59	0.07	----
20-162N	1/4” x 1/8”	0.83	0.87	0.51	0.09	----
20-163N	1/4” x 1/4”	0.83	0.98	0.59	0.11	----
20-164N	1/4" x 3/8"	0.83	1.10	0.59	0.11	----
20-159N	3/8" x 1/8"	1.04	1.07	0.59	0.12	----
20-168N	3/8" x 1/4"	1.04	1.10	0.59	0.12	----
20-165N	3/8” x 3/8”	1.04	1.18	0.67	0.12	----
20-181N	3/8" x 1/2"	1.20	1.24	0.59	0.15	----
20-174N	1/2” x 1/4”	1.20	1.24	0.59	0.16	----
20-166N	1/2” x 3/8”	1.20	1.30	0.67	0.14	----
20-167N	1/2" x 1/2"	1.20	1.42	0.83	0.17	----

W171PL **87222**

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

NICKEL PLATED PUSH-IN FITTINGS

SWIVEL MALE BRANCH TEE



GLOBAL THREAD
NPT • BSPT • RC • NPTF • BSPP • G

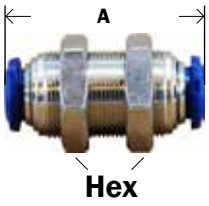
• Can be purchased with NPTF threads upon request

Part #	Tube O.D. x Male Global Thread	A	B	Hex	Approx. Wt. Lbs.	
20-103N	1/8” x 1/8”	0.67	0.78	0.51	0.04	----
20-104N	5/32” x 10-32”	0.67	0.79	0.31	0.04	----
20-109N	5/32" x 1/8"	0.70	0.79	0.51	0.06	----
20-850N	5/32" x 1/4"	0.67	1.00	0.59	0.06	----
20-105N	1/4” x 1/8”	0.83	0.87	0.51	0.08	----
20-106N	1/4” x 1/4”	0.83	0.98	0.59	0.10	----
20-156N	1/4" x 3/8"	1.043	1.10	0.59	0.18	----
20-157N	3/8" x 1/8"	1.04	1.08	0.59	0.18	----
20-107N	3/8” x 1/4”	1.04	1.10	0.59	0.18	----
20-108N	3/8” x 3/8”	1.04	1.18	0.67	0.16	----
20-158N	3/8" x 1/2"	1.04	1.30	0.82	0.18	----
20-112N	1/2" x 1/4"	1.20	1.24	0.59	0.23	----
20-110N	1/2” x 3/8”	1.20	1.30	0.67	0.24	----
20-111N	1/2” x 1/2”	1.20	1.42	0.82	0.28	----

* Available in stainless steel

W172PL **87210**

BULKHEAD UNION

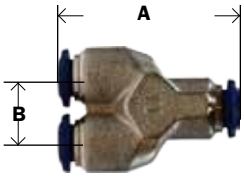


Part #	Tube O.D.	A	Hex	Approx. Wt. Lbs.	
20-124N	1/8"	1.03	0.55	0.04	----
20-125N*	5/32"	1.22	0.67	0.05	----
20-127N*	1/4”	1.38	0.67	0.06	----
20-123N*	5/16”	1.45	0.74	0.08	----
20-128N*	3/8”	1.69	0.94	0.13	----
20-129N*	1/2"	1.93	1.02	0.15	----

* Available in stainless steel

62PLBH **88050**

UNION "Y"



Part #	Tube O.D.	A	B	Approx. Wt. Lbs.	
20-553N	1/4” x 1/4”	1.44	0.53	0.14	----

662PL **88310**

REDUCER

Part #	Tube O.D. 2	Tube O.D. 1	A	
20-510N	1/4"	1/8"	1.142	----
20-511N	1/4"	5/32"	1.181	----
20-512N	3/8"	1/4"	1.496	----
20-513N	1/2"	1/4"	1.693	----
20-514N	1/2"	3/8"	1.693	----

67PPL **88700**

Also available:
- Nylon plug
- Single banjo
- Double banjo
- Push fit cartridges and tools

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

CHROME PLATED BRASS MINI BALL VALVES

- Compact Design
- Max Working Pressure 250 psi
- Optional colors of handle plate for identification

PUSH-IN X PUSH-IN

Part #	Size	Box/Case	Wgt.	
28400	1/8	30/300	.07	----
28401	1/4	30/300	.10	----
28402	3/8	20/200	.21	----

PUSH-IN X MALE PIPE

Part #	Size Tube x MIP	Box/ Case	Wgt.	
28403	5/32 x 1/8	30/300	.08	----
28407	1/4 x 1/8	30/300	.08	----
28404	1/4 x 1/4	30/300	.10	----
28405	3/8 x 3/8	20/200	.17	----

FIP X FIP

Part #	Size	Box/Case	Wgt.	
46650	1/8	30/300	.11	----
46651	1/4	30/300	.10	----
46652	3/8	20/200	.14	----
46653	1/2	15/150	.25	----

MIP X FIP

Part #	Size	Box/Case	Wgt.	
46660	1/8	30/300	.11	----
46661	1/4	30/300	.10	----
46662	3/8	20/200	.14	----
46663	1/2	15/150	.25	----

PANEL MOUNT DESIGN

FIP X FIP ANGLE

Part #	Size	Box/Case	Wgt.	
46670	1/8	20/200	.19	----
46671	1/4	20/200	.20	----
46672	3/8	25/250	.11	----

3-WAY FIP - OPEN CENTER

Part #	Size	Box/Case	Wgt.	
466900	1/8	25/250	.13	----
466901	1/4	20/200	.21	----
466902	3/8	20/200	.21	----

3-WAY FIP - CLOSED CENTER

Part #	Size	Box/Case	Wgt.	
46680	1/8	25/250	.13	----
46681	1/4	20/200	.21	----
46682	3/8	20/200	.21	----

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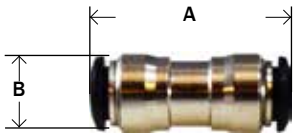
NICKEL PLATED METRIC PUSH-IN FITTINGS

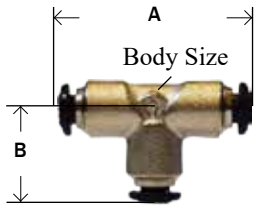
UNION



Part #	Tube O.D. (mm)	Tube O.D. (mm)	A	B	
20-723N	3		1.014	0.332	----
20-600N*	4		1.190	0.410	----
20-724N	5		1.287	0.449	----
20-725N	6	4	1.248	0.488	----
20-601N*	6		1.326	0.488	----
20-726N	8	6	1.365	0.566	----
20-727N*	8		1.404	0.566	----
20-728N	10	8	1.638	0.683	----
20-603N*	10		1.638	0.683	----
20-729N	12	10	1.833	0.800	----
20-604N*	12		1.833	0.800	----
20-730N	14		1.911	0.839	----

* Available in SS

UNION TEE



Part #	Tube O.D. (mm)	A	B	Body Size	
20-741N	3	1.326	0.663	0.351	----
20-610N*	4	1.326	0.663	0.351	----
20-742N	5	1.560	0.780	0.429	----
20-611N*	6	1.638	0.819	0.429	----
20-612N*	8	1.755	0.878	0.507	----
20-613N*	10	2.067	1.034	0.624	----
20-614N*	12	2.379	1.190	0.741	----
20-743N	14	2.379	2.535	0.741	----

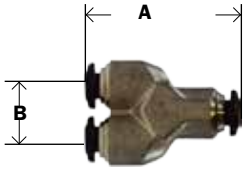
* Available in SS

UNION ELBOW

Part #	Tube O.D. (mm)	A	Body Size	
20-738N	3	0.663	0.51	----
20-206N*	4	0.663	0.351	----
20-739N	5	0.780	0.429	----
20-660N*	6	0.780	0.429	----
20-661N*	8	0.878	0.507	----
20-807N*	10	1.034	0.624	----
20-808N*	12	1.190	0.741	----
20-740N	14	1.268	0.741	----

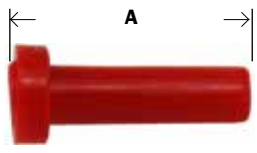
* Available in SS

UNION Y



Part #	Tube O.D. (mm)	B	A	
20-744N	3	0.390	1.131	----
20-813N	4	0.429	1.248	----
20-745N	5	0.527	1.365	----
20-814N	6	0.527	1.424	----
20-815N	8	0.605	1.599	----
20-746N	10	0.728	1.890	----

PLUG

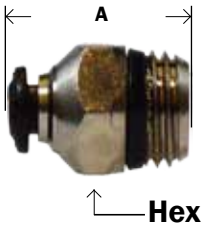


Part #	Tube O.D. (mm)	A	
20-748N	4	0.917	----
20-749N	5	0.956	----
20-750N	6	0.956	----
20-751N	8	1.014	----
20-752N	10	1.112	----
20-753N	12	1.190	----

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

NICKEL PLATED METRIC PUSH-IN FITTINGS

METRIC TUBE STRAIGHT MALE



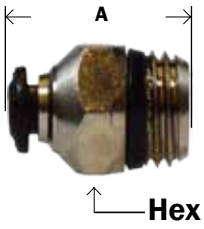
GLOBAL THREAD
NPT • BSPT • RC • NPTF • BSPP • G

• Can be purchased with BSPP or BSPT Threads

* Available in SS

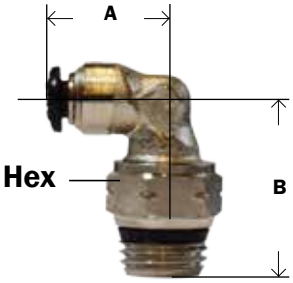
Part #	Tube O.D. (mm)	Global Thread	A	Hex	
20-630N*	4	1/8"	0.702	0.429	----
20-631N*	4	1/4"	0.760	0.546	----
20-700N	5	1/8"	0.78	0.429	----
20-701N	5	1/4"	0.78	0.546	----
20-632N*	6	1/8"	0.78	0.546	----
20-633N*	6	1/4"	0.819	0.546	----
20-628N	6	3/8"	0.90	0.546	----
20-629N	6	1/2"	0.92	0.546	----
20-702N*	8	1/8"	0.955	0.546	----
20-634N*	8	1/4"	0.858	0.546	----
20-635N	8	3/8"	0.897	0.663	----
20-703N	8	1/2"	0.897	0.663	----
20-636N*	10	1/4"	1.092	0.663	----
20-637N*	10	3/8"	1.092	0.663	----
20-704N*	10	1/2"	1.014	0.663	----
20-801N	12	1/4"	1.267	0.78	----
20-638N*	12	3/8"	1.267	0.78	----
20-705N*	12	1/2"	1.209	0.78	----
20-706N	14	3/8"	1.287	0.858	----
20-707N	14	1/2"	1.248	0.858	----

METRIC TUBE INTERNAL HEX



Part #	Tube O.D. (mm)	Global Thread	A	Hex	
20-619N	3	M5	0.31	0.31	----
20-620N	4	1/8"	0.71	0.43	----
20-621N*	4	M5	0.39	0.38	----
20-622N	4	M7 x 1"	0.83	0.38	----
20-623N	6	1/4"	0.83	0.55	----
20-624N	6	1/8"	0.85	0.47	----
20-625N*	6	M5	0.47	0.47	----
20-626N	8	1/4"	0.88	0.55	----
20-627N	8	1/8"	0.98	0.55	----

METRIC TUBE SWIVEL MALE ELBOW



GLOBAL THREAD
NPT • BSPT • RC • NPTF • BSPP • G

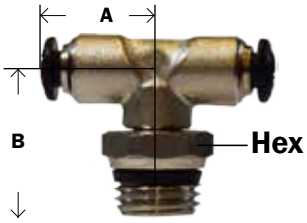
• Can be purchased with BSPP or BSPT Threads

* Available in SS w BSPP or BSPT Threads

Part #	Tube O.D. (mm)	Global Thread	A	B	Hex	
20-708N*	4	1/8"	0.663	0.780	0.507	----
20-709N*	4	1/4"	0.663	0.936	0.585	----
20-710N	5	1/8"	0.780	0.858	0.507	----
20-642N*	6	1/8"	0.819	0.858	0.507	----
20-803N*	6	1/4"	0.819	0.975	0.585	----
20-711N*	8	1/8"	0.878	0.917	0.507	----
20-805N*	8	1/4"	0.878	1.014	0.585	----
20-655N	8	3/8"	0.878	1.092	0.663	----
20-712N	8	1/2"	0.878	1.404	0.819	----
20-656N*	10	1/4"	1.034	1.092	0.585	----
20-657N*	10	3/8"	1.034	1.170	0.663	----
20-713N*	10	1/2"	1.034	1.287	0.819	----
20-658N*	12	3/8"	1.190	1.287	0.663	----
20-659N*	12	1/2"	1.190	1.404	0.819	----
20-714N	14	3/8"	1.268	1.404	0.663	----
20-715N	14	1/2"	1.268	1.443	0.819	----

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

METRIC TUBE SWIVEL MALE BRANCH TEE

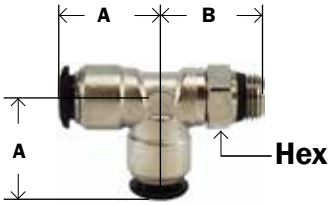


• Can be purchased with BSPP or BSPT threads

* Available in SS w/BSPP or BSPT threads

Part #	Tube O.D. (mm)	Global Thread	A	B	Hex	
20-680N*	4	1/8"	0.663	0.780	0.507	----
20-716N*	4	1/4"	0.663	0.936	0.585	----
20-717N	5	1/8"	0.78	0.858	0.507	----
20-682N*	6	1/8"	0.819	0.858	0.507	----
20-683N*	6	1/4"	0.819	0.975	0.585	----
20-809N*	8	1/8"	0.877	0.917	0.507	----
20-684N*	8	1/4"	0.877	1.014	0.585	----
20-690N	8	3/8"	0.886	1.024	0.585	----
20-691N	8	1/2"	0.886	1.122	0.585	----
20-686N*	10	1/4"	1.033	1.092	0.585	----
20-687N*	10	3/8"	1.033	1.170	0.663	----
20-810N*	10	1/2"	1.033	1.287	0.819	----
20-688N*	12	3/8"	1.189	1.287	0.663	----
20-689N*	12	1/2"	1.189	1.404	0.819	----
20-718N	14	3/8"	1.267	1.404	0.663	----
20-719N	14	1/2"	1.267	1.443	0.819	----

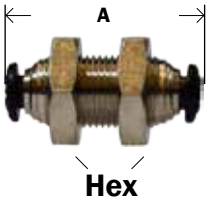
METRIC TUBE SWIVEL MALE RUN TEE



• Can be purchased with BSPP threads

Part #	Tube O.D. (mm)	Global Thread	A	B	Hex	
20-670N	4	1/8"	0.663	0.780	0.507	----
20-720N	4	1/4"	0.663	0.936	0.585	----
20-721N	5	1/8"	0.780	0.858	0.507	----
20-672N	6	1/8"	0.819	0.858	0.507	----
20-673N	6	1/4"	0.819	0.975	0.585	----
20-811N	8	1/8"	0.819	0.917	0.507	----
20-674N	8	1/4"	0.878	1.014	0.585	----
20-668N	8	3/8"	0.885	1.063	0.585	----
20-669N	8	1/2"	0.885	1.063	0.585	----
20-676N	10	1/4"	0.878	1.092	0.585	----
20-677N	10	3/8"	1.034	1.170	0.663	----
20-722N	10	1/2"	1.034	1.287	0.819	----
20-678N	12	3/8"	1.190	1.287	0.663	----
20-679N	12	1/2"	1.190	1.404	0.819	----

BULKHEAD



* Available in SS

Part #	Tube O.D. (mm)	M	A	Hex	
20-731N	3	M10x1	1.014	0.546	----
20-732N*	4	MI2x1	1.229	0.663	----
20-733N	5	M14x1	1.287	0.663	----
20-734N*	6	M14x1	1.365	0.663	----
20-735N*	8	M16x1	1.443	0.741	----
20-736N*	10	M20x1	1.677	0.936	----
20-737N*	12	M22x1	1.872	1.014	----

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

Composite Body Push-In Fittings

• For Food Grade,
see page 298-299

Specifications

Fluid admitted	Air
Working pressure range	0-150 PSI (10BAR)
Min. Burst pressure	340PSI (23BAR)
Working Temperature range	0°F ~160°F

Materials of Construction:

1	Body	Composite Polyacetal (hemopolymer,copolymer)
2	Body	Brass
3	Tube Release	Acetal Resin
4	Retainer	Brass
5	Gripper Ring	Stainless Steel
6	Spacer	Brass
7	O-Ring	NBR 70
8	Threads	Brass w/ white sealant

The latest generation of composite material is used in the body construction in addition to brass on threaded components and stainless steel on the tube gripper.

• **Tolerance**
+/- .02 on all dimensions. Dimension data can change without notice. Please call us when dimensions are critical.

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

UNION

Part #	Tube O.D.	Approx. Wt. Lbs.	
20-017C	1/8"	0.01	----
20-018C	5/32"	0.01	----
20-001C	3/16"	0.01	----
20-019C	1/4”	0.01	----
20-015C	5/16"	0.01	----
20-020C	3/8”	0.02	----
20-021C	1/2"	0.03	----
20-016C	1/4" x 5/32"	0.01	----
20-515C	5/16" x 1/4"	0.01	----
20-022C	3/8" x 1/4"	0.01	----
20-516C	3/8" x 5/16"	0.02	----
20-024C	1/2" x 3/8"	0.03	----

PQ62P

UNION TEE

Part #	Tube O.D.	Approx. Wt. Lbs.	
20-025C	1/8"	0.01	----
20-026C	5/32"	0.01	----
20-027C	3/16"	0.02	----
20-028C	1/4”	0.02	----
20-031C	5/16"	0.02	----
20-029C	3/8”	0.02	----
20-030C	1/2"	0.08	----

PQ64P

90° UNION ELBOW

Part #	Tube O.D.	Approx. Wt. Lbs.	
20-150C	1/8"	0.01	----
20-151C	5/32"	0.01	----
20-149C	3/16"	0.01	----
20-152C	1/4”	0.02	----
20-155C	5/16"	0.02	----
20-153C	3/8”	0.02	----
20-154C	1/2"	0.02	----

PQ65P

UNION "Y" CONNECTOR

Part #	Tube O.D.	Approx. Wt. Lbs.	
20-551C	5/32"	0.01	----
20-553C	1/4”	0.02	----
20-182C	5/16"	0.02	----
20-555C	3/8”	0.02	----
20-185C	1/2	0.07	----

PQ89P

FEMALE CONNECTOR

- Brass

Part #	Tube O.D. x Female NPT	Approx. Wt. Lbs.	
20-034C	1/4” x 1/8”	0.02	----
20-035C	1/4” x 1/4”	0.04	----
20-036C	3/8” x 1/4”	0.04	----
20-037C	3/8” x 3/8”	0.06	----

PQ66P

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

MALE CONNECTOR

• Nickel Plated

• See broader range of sizes on page 104
N/P push-in fittings

Part #	Tube O.D. x Male NPT	Approx. Wt. Lbs.	
20-050C	5/32" x 1/8"	0.02	----
20-053C	1/4" x 10-32"	0.02	----
20-054C	1/4” x 1/8”	0.02	----
20-055C	1/4” x 1/4”	0.02	----
20-056C	1/4” x 3/8”	0.04	----
20-530C	5/16" x 1/8"	0.05	----
20-531C	5/16" x 1/4"	0.05	----
20-057C	3/8" x 1/8"	0.05	----
20-058C	3/8” x 1/4”	0.06	----
20-059C	3/8” x 3/8”	0.06	----
20-062C	3/8” x 1/2”	0.08	----
20-060C	1/2” x 1/4”	0.06	----
20-061C	1/2” x 3/8”	0.08	----
20-063C	1/2” x 1/2”	0.10	----

PQ68P

SWIVEL MALE ELBOW

• Swivels for installation only.
• Not a live swivel

* Global Thread

Part #	Tube O.D. x Male NPT	Approx. Wt. Lbs.	
20-079C	1/8" x 1/8"	0.01	----
20-535C*	1/8" x 1/4"	0.01	----
20-517C*	3/16" x 1/4"	0.01	----
20-080C*	5/32" x 1/8"	0.01	----
20-077C*	5/32" x 1/4"	0.01	----
20-049C*	5/32" x 10/32"	0.01	----
20-078C	1/4" x 10-32	0.01	----
20-081C	1/4” x 1/8”	0.02	----
20-082C	1/4” x 1/4”	0.04	----
20-086C	1/4” x 3/8”	0.06	----
20-518C*	1/4" x 1/2"	0.07	----
20-537C	5/16" x 1/8"	0.04	----
20-538C	5/16" x 1/4"	0.04	----
20-539C*	5/16" x 3/8"	0.06	----
20-087C	3/8” x 1/8’	0.04	----
20-083C	3/8” x 1/4”	0.08	----
20-084C	3/8” x 3/8”	0.10	----
20-088C	3/8” x 1/2”	0.12	----
20-184C	1/2" x 1/4"	0.14	----
20-085C	1/2" x 3/8"	0.16	----
20-092C	1/2" x 1/2"	0.18	----

PQ69PS

LONG PATTERN MALE ELBOWS

Part #	Tube O.D. x Thread	Approx. Wt. Lbs.	
20-572C	1/4 X 1/8	0.03	----
20-573C	1/4 X 1/4	0.05	----
20-574C	1/4 X 3/8	0.06	----
20-579C	3/8 X 1/4	0.09	----
20-580C	3/8 X 3/8	0.12	----
20-581C	3/8 X 1/2	0.14	----
20-582C	1/2 X 1/4	0.16	----
20-583C	1/2 X 3/8	0.18	----
20-584C	1/2 X 1/2	0.20	----

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

COMPOSITE BODY PUSH-IN FITTINGS | BRASS FITTINGS

FEMALE SWIVEL ELBOWS

Part #	Tube O.D. x Female NPT	Approx. Wt. Lbs.	
20-089C	1/4 X 1/8	0.05	----
20-090C	1/4 X 1/4	0.06	----
20-591C	1/4 X 3/8	0.07	----
20-091C	3/8 X 1/4	0.10	----
20-595C	3/8 X 3/8	0.14	----
20-596C	3/8 X 1/2	0.15	----
20-597C	1/2 X 3/8	0.20	----
20-598C	1/2 X 1/2	0.23	----

45° SWIVELS

Part #	Tube O.D. x Male NPT	Approx. Wt. Lbs.	
20-139C	1/4 X 1/8	0.04	----
20-140C	1/4 X 1/4	0.05	----

SWIVEL MALE RUN TEE

- Swivels for installation only.
- Not a live swivel

* Global Thread

Part #	Tube O.D. x Male NPT	Approx. Wt. Lbs.	
20-160C*	1/8" x 1/8"	0.03	----
20-833C*	1/8" x 1/4"	0.03	----
20-835C*	5/32" x 10-32	0.03	----
20-162C	1/4” x 1/8”	0.04	----
20-163C	1/4” x 1/4”	0.04	----
20-834C*	1/4" x 10-32	0.04	----
20-099C	3/8” x 1/8”	0.06	----
20-100C	3/8” x 1/4”	0.08	----
20-165C	3/8” x 3/8”	0.10	----
20-181C	3/8 x 1/2	0.12	----
20-174C	1/2 x 1/4	0.12	----
20-166C	1/2 x 3/8	0.14	----
20-167C	1/2 x 1/2	0.16	----

PQ71PS

SWIVEL MALE BRANCH TEE

- Swivels for installation only.
- Not a live swivel

* Global Thread

Part #	Tube O.D. x Male NPT	Approx. Wt. Lbs.	
20-103C*	1/8" x 1/8"	0.02	----
20-519C*	1/8" x 1/4"	0.03	----
20-109C*	5/32" x 1/8"	0.02	----
20-135C*	5/32" x 1/4"	0.03	----
20-104C*	5/32" x 10/32"	0.03	----
20-830C*	3/16" x 1/8"	0.03	----
20-105C	1/4” x 1/8”	0.04	----
20-106C	1/4” x 1/4”	0.06	----
20-831C*	1/4" x 10/32"	0.06	----
20-121C	1/4” x 3/8”	0.08	----
20-136C*	5/16" x 1/8"	0.04	----
20-137C*	5/16" x 1/4"	0.05	----
20-832C*	5/16" x 3/8"	0.06	----
20-107C	3/8” x 1/4”	0.10	----
20-108C	3/8” x 3/8”	0.12	----
20-158C	3/8 X 1/2	0.14	----
20-138C	1/2 X 1/4	0.14	----
20-110C	1/2 X 3/8	0.16	----
20-111C	1/2 X 1/2	0.21	----

PQ72PS

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

BULKHEAD UNION

Part #	Tube O.D.	Approx. Wt. Lbs.	
20-127C	1/4”	0.04	----
20-128C	3/8”	0.06	----
20-129C	1/2"	0.10	----

PQ82P

BULKHEAD FEMALES

Part #	Tube O.D. x Thread	Approx. Wt. Lbs.	
20-170C	1/4 X 1/8	0.04	----
20-171C	1/4 X 1/4	0.04	----
20-172C	3/8 X 1/4	0.06	----
20-173C	3/8 X 3/8	0.07	----
20-175C	1/2 X 1/4	0.07	----
20-176C	1/2 X 3/8	0.09	----
20-179C	1/2 X 1/2	0.10	----

SWIVEL "Y" CONNECTOR

• Swivels for installation only. • Not a live swivel

Part #	Tube O.D. x Male NPT	Approx. Wt. Lbs.	
20-187C	1/4 X 1/8	0.02	----
20-557C	1/4” x 1/4”	0.02	----
20-188C	3/8 X 1/4	0.04	----
20-189C	3/8 X 3/8	0.04	----
20-193C	3/8 X 1/2	0.07	----
20-194C	1/2 X 3/8	0.06	----
20-195C	1/2 X 1/2	0.09	----

PQ88PS

IN-LINE NEEDLE VALVE

Part #	Tube O.D.	Approx. Wt. Lbs.	
20-487C	1/4”	0.04	----
20-488C	5/16”	0.05	----
20-489C	3/8”	0.06	----

PQ310C

RIGHT ANGLE FLOW CONTROL METER IN

• Free flow out

Part #	Tube O.D. x Male NPT	Approx. Wt. Lbs.	
20-727C	1/4 X 1/8	0.04	----
20-728C	1/4” x 1/4”	0.04	----
20-780C	3/8 X 1/4	0.06	----
20-781C	3/8 X 3/8	0.06	----
20-782C	1/2 X 1/2	0.10	----

JPQ

RIGHT ANGLE FLOW CONTROL METER OUT

• Free flow in

Part #	Tube O.D. x Male NPT	Approx. Wt. Lbs.	
20-785C	1/4 x 1/8	0.04	----
20-786C	1/4 x 1/4	0.04	----
20-787C	3/8 x 1/4	0.06	----
20-788C	3/8 x 3/8	0.06	----
20-789C	1/2 x 1/2	0.10	----

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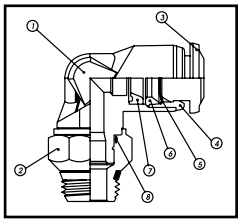
METRIC COMPOSITE BODY PUSH-IN FITTINGS

Technical Characteristics



PART 1	BODY	COMPOSITE
PART 2	BODY	NICKEL PLATED BRASS
PART 3	TUBE RELEASE	ACETAL RESIN
PART 4	RETAINER	NICKEL PLATED BRASS
PART 5	GRIPPER RING	STAINLESS STEEL
PART 6	SPACER	COMPOSITE
PART 7	THREAD PACKING	NBR 70
PART 8	O-RING	NBR 70
PART 9	THREAD SEAL	NBR70

Operating Range

Pressure: 0 to 220 PSI (15 bar)

Vacuum: 0 to 29hg (-.99 bar)

Temperature

-5^0 F to + 175^0 F (-20^0 C to + 80^0 C)

Media

Compressed air.

Non-toxic fluids (water)

Materials

The latest generation of composite material is used in the body construction in addition to nickel-plated brass on threaded components and stainless steel on the tube gripper.

UNION

Part #	Tube O.D. (mm)	
20-600	4	----
20-601	6	----
20-602	8	----
20-603	10	----
20-604	12	----

UNION TEE

Part #	Tube O.D. (mm)	
20-610	4	----
20-862	5	----
20-611	6	----
20-612	8	----
20-613	10	----
20-614	12	----
20-861	14	----

3104

UNION ELBOW

Part #	Tube O.D. (mm)	
20-806	4	----
20-660	6	----
20-661	8	----
20-807	10	----
20-808	12	----
20-740	14	----

3102

MALE ADAPTER

Part #	Tube OD (mm)	BSPT Thread	
20-630	4	1/8”	----
20-631	4	1/4”	----
20-632	6	1/8”	----
20-633	6	1/4”	----
20-634	8	1/4”	----
20-635	8	3/8”	----
20-636	10	1/4”	----
20-637	10	3/8”	----
20-801	12	1/4”	----
20-638	12	3/8”	----

3175

NOTE: See page 102 for a complete line of male adapters with global thread.

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SWIVEL ELBOW

Part #	Tube OD (mm)	BSPT Thread	
20-690*	4	M5	----
20-856*	4	1/8"	----
20-855*	4	1/4"	----
20-692*	5	M5	----
20-857*	5	1/8"	----
20-859*	6	M5	----
20-642	6	1/8”	----
20-803	6	1/4”	----
20-698*	6	3/8"	----
20-699*	6	1/2"	----
20-711*	8	1/8"	----
20-805	8	1/4”	----
20-655	8	3/8"	----
20-712*	8	1/2"	----
20-656	10	1/4"	----
20-657	10	3/8"	----
20-713*	10	1/2"	----
20-801	12	1/4"	----
20-658	12	3/8"	----
20-659	12	1/2"	----
20-714*	14	3/8"	----
20-854*	14	1/2"	----

* Global Thread
• BSPP Available

SWIVEL BRANCH TEE

Part #	Tube OD (mm)	BSPT Thread	
20-680*	4	1/8”	----
20-860*	4	1/4"	----
20-717*	5	1/8"	----
20-682	6	1/8”	----
20-683	6	1/4”	----
20-809	8	1/8"	----
20-684	8	1/4"	----
20-685	8	3/8"	----
20-686	10	1/4"	----
20-687	10	3/8"	----
20-810	10	1/2"	----
20-688	12	3/8"	----
20-689	12	1/2"	----
20-718*	14	3/8"	----
20-719*	14	1/2"	----

* Global Thread
• BSPP Available

SWIVEL RUN TEE

Part #	Tube OD (mm)	BSPT Thread	
20-670	4	1/8”	----
20-720*	4	1/4"	----
20-721*	5	1/8"	----
20-672	6	1/8”	----
20-673	6	1/4”	----
20-811	8	1/8"	----
20-674	8	1/4"	----
20-675	8	3/8"	----
20-676	10	1/4"	----
20-677	10	3/8"	----
20-678	12	3/8"	----
20-679	12	1/2"	----

* Global Thread
• BSPP Available

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

UNION WYE

Part #	Tube OD (mm)	
20-813	4	----
20-814	6	----
20-815	8	----
20-746	10	----
20-827	12	----

SWIVEL MALE WYE

Part #	Tube OD (mm)	Global Thread	
20-816	4	1/8"	----
20-821*	4	1/4"	----
20-817*	6	1/8"	----
20-818	6	1/4"	----
20-819*	8	1/8"	----
20-820*	8	1/4"	----
20-822*	8	3/8"	----
20-823*	10	1/4"	----
20-824*	10	3/8"	----
20-825*	10	1/2"	----
20-826*	12	3/8"	----
20-827*	12	1/2"	----

* Global Thread
• BSPP Available

Also available:
• 45° elbow swivel
• 4 position Y
• Manifolds
• Extended swivel elbows
• Bulkhead union
• Plug-in elbows and tees

Affliction comes to us, not to make us sad but sober; not to make us sorry but wise.

- H. G. Wells

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

D.O.T. PUSH-IN TUBE FITTINGS

Meets D.O.T. FMVSS 571.106 SAE J1131 Air Brake System Requirements

Benefits for Cost Savings & Engineering Project

- **Fast assembly:** No tools required. Simply push tubing in. Saves up to 75% of assembly time compared to standard air compression fittings. No loose parts to handle.
- **Fast disconnect:** Hold the collet collar with two fingers and pull out tube. No tools required.
- **Reusable:** Can be connected and disconnected several times.
- **Reliable sealing:** Using recommended tubing, full sealing is guaranteed.
- **Versatility:** Buna N O'ring standard. Viton and others available per request. Secure tube retention. Pulling on tubing only serves to tighten the connection.
- **Pre-Applied Teflon®** based pipe sealant on all male pipe threads, saving customer additional labor.
- **Full Flow Design,** provides more flow area than conventional fittings with internal tube supports even in the swivels.

DOT Fittings are constructed with an all brass captive eyelet which allows for maximum flow. The brass captive eyelet with extended length is floating and has a machined top end radius for easy installation of tubing. All male threads have a pre-applied Teflon® based pipe sealant to provide for easy assembly and leak proof seal.

- **Materials:**
  Brass
  "O" Ring: Buna - Nitrile (90 Durometer)
  EP (Ethylene Propylene)

- **Working Pressures & Temperature Ranges**
  Vacuum to 150 PSI
  -40°F to 200° F (-40°C to +93°C)

Dimension data can change without notice. Please see our website when dimensions are critical.

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PLUG

Part #	Tube O.D.	Approx. Wt. Lbs.	
595320	5/32”	0.01	----
590400	1/4”	0.02	----
590600	3/8”	0.02	----
590800	1/2”	0.04	----

1829 **DQ59DOT** 639PMT

UNION

Part #	Tube O.D.	Approx. Wt. Lbs.	
620532	5/32”	0.06	----
620400	1/4”	0.06	----
620600	3/8”	0.13	----
620604	3/8" x 1/4"	0.15	----
620800	1/2”	0.19	----
621000	5/8”	0.30	----
621200	3/4”	0.44	----

AQ62DOT **62PMT** 1862 **DQ62DOT**

UNION TEE

Part #	Tube O.D.	Approx. Wt. Lbs.	
640400	1/4”	0.09	----
640600	3/8”	0.16	----
640800	1/2”	0.25	----
641000	5/8"	0.32	----
641200	3/4"	0.36	----

AQ64DOT **164 PMT** 1864 **DQ64DOT**

UNION ELBOW

Part #	Tube O.D.	Approx. Wt. Lbs.	
655320	5/32”	0.03	----
650400	1/4”	0.06	----
650600	3/8”	0.12	----
650800	1/2”	0.18	----

AQ65DOT **165 PMT** 1865 **DQ65DOT**

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FEMALE CONNECTOR

Part #	Tube O.D. x Female NPTF	Approx. Wt. Lbs.	
660402	1/4” x 1/8”	0.06	----
660404	1/4” x 1/4”	0.10	----
660602	3/8” x 1/8”	0.11	----
660604	3/8” x 1/4”	0.11	----
660606	3/8” x 3/8”	0.17	----
660804	1/2” x 1/4”	0.14	----
660806	1/2” x 3/8”	0.16	----
660808	1/2” x 1/2”	0.25	----

AQ66DOT **66PMT** 1866 **DQ66DOT**

MALE CONNECTOR

Part #	Tube O.D. x Male NPTF	Approx. Wt. Lbs.	
685320	5/32” x 10/32”	0.02	----
685321	5/32” x 1/16”	0.02	----
685322	5/32” x 1/8”	0.02	----
680302	3/16” x 1/8”	0.02	----
680421	1/4" x 1/16"	0.02	----
680402	1/4” x 1/8”	0.03	----
680404	1/4” x 1/4”	0.04	----
680406	1/4” x 3/8”	0.07	----
680602	3/8” x 1/8”	0.06	----
680604	3/8” x 1/4”	0.07	----
680606	3/8” x 3/8”	0.06	----
680608	3/8” x 1/2”	0.13	----
680804	1/2” x 1/4”	0.11	----
680806	1/2” x 3/8”	0.12	----
680808	1/2” x 1/2”	0.14	----
681006	5/8” x 3/8”	0.18	----
681008	5/8” x 1/2”	0.18	----
681208	3/4” x 1/2”	0.20	----
681212	3/4” x 3/4”	0.20	----

AQ68DOT **68PM** 1868 **DQ68DOT** 68PMT

Dimension data can change without notice. Please see our website when dimensions are critical.

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MALE ELBOW

Forged

Part #	Tube O.D. x Male NPTF	Approx. Wt. Lbs.	
695302	5/32" x 1/16"	0.03	----
695322	5/32" x 1/8"	0.03	----
690302	3/16" x 1/8"	0.03	----
690402	1/4" x 1/8"	0.08	----
690404	1/4" x 1/4"	0.06	----
690406	1/4" x 3/8"	0.11	----
690602	3/8" x 1/8"	0.08	----
690604	3/8" x 1/4"	0.09	----
690606	3/8" x 3/8"	0.11	----
690608	3/8" x 1/2"	0.20	----
690804	1/2" x 1/4"	0.22	----
690806	1/2" x 3/8"	0.22	----
690808	1/2" x 1/2"	0.24	----
691006	5/8" x 3/8"	0.30	----
691008	5/8" x 1/2"	0.32	----
691208	3/4" x 1/2"	0.32	----
691212	3/4" x 3/4"	0.34	----

AQ69DOT **169 PMTNS** 1869 **DQ69DOT**

MALE SWIVEL ELBOW

Forged

Part #	Tube O.D. x Male NPTF	Approx. Wt. Lbs.	
695322S	5/32" x 1/8"	0.07	----
690402S	1/4" x 1/8"	0.06	----
690404S	1/4" x 1/4"	0.10	----
690406S	1/4" x 3/8"	0.10	----
690602S	3/8" x 1/8"	0.10	----
690604S	3/8" x 1/4"	0.11	----
690606S	3/8" x 3/8"	0.12	----
690608S	3/8" x 1/2"	0.20	----
690804S	1/2" x 1/4"	0.16	----
690806S	1/2" x 3/8"	0.18	----
690808S	1/2" x 1/2"	0.26	----
691006S	5/8" x 3/8"	0.28	----
691008S	5/8" x 1/2"	0.30	----
691208S	3/4" x 1/2"	0.50	----
691212S	3/4" x 3/4"	0.56	----

AQ69DOTS **169PMT** 1869 **DQ69DOTS**

Weeds are flowers too, once you get to know them. – A. A. Milne

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FEMALE ELBOW

Forged

Part #	Tube O.D. x Female NPTF	Approx. Wt. Lbs.	
700402	1/4” x 1/8”	0.06	----
700404	1/4” x 1/4”	0.10	----
700406	1/4” x 3/8”	0.16	----
700602	3/8” x 1/8”	0.15	----
700604	3/8” x 1/4”	0.12	----
700606	3/8” x 3/8”	0.17	----
700806	1/2” x 3/8”	0.26	----
700808	1/2” x 1/2”	0.30	----

AQ70DOTS **1870** DQ70DOTS **170PMTNS**

FEMALE SWIVEL ELBOW

Part #	Tube O.D. x Female NPTF	
700404S	1/4” x 1/4"	----

MALE RUN TEE

Forged

Part #	Tube O.D. x Male NPTF (1 x 3) x 2	Approx. Wt. Lbs.	
710402	1/4” x 1/8”	0.06	----
71040604	(1/4" x 3/8") x 1/4"	0.20	----
710404	1/4” x 1/4”	0.08	----
710604	3/8” x 1/4”	0.20	----
71060404	(3/8" x 1/4") x 1/4"	0.20	----
710606	3/8” x 3/8”	0.17	----
71060406	(3/8" x 1/4") x 3/8"	0.20	----
710608	3/8” x 1/2”	0.14	----
710806	1/2” x 3/8”	0.28	----

AQ71DOT **171PMTNS** 1871 **DQ71DOT**

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You cannot escape the responsibility of tomorrow by evading it today. - Abraham Lincoln

MALE SWIVEL RUN TEE

Forged

Part #	Tube O.D. x Male NPTF	Approx. Wt. Lbs.	
710402S	1/4" x 1/8"	0.09	----
710404S	1/4" x 1/4"	0.11	----
710604S	3/8" x 1/4"	0.15	----
710606S	3/8" x 3/8"	0.14	----
710804S	1/2" x 1/4"	0.24	----
710806S	1/2" x 3/8"	0.24	----
710808S	1/2" x 1/2"	0.30	----

AQ71DOTS **171PMT** 1871 **DQ71DOTS**

MALE 45° ELBOW

Forged

Part #	Tube O.D. x Male NPTF	Approx. Wt. Lbs.	
540402	1/4" x 1/8"	0.06	----
540404	1/4" x 1/4"	0.06	----
540602	3/8" x 1/8"	0.08	----
540604	3/8" x 1/4"	0.09	----
540606	3/8" x 3/8"	0.11	----
540608	3/8" x 1/2"	0.15	----
540804	1/2" x 1/4"	0.13	----
540806	1/2" x 3/8"	0.16	----
540808	1/2" x 1/2"	0.18	----
541006	5/8" x 3/8"	0.22	----
541008	5/8" x 1/2"	0.21	----
541208	3/4" x 1/2"	0.28	----
541212	3/4" x 3/4"	0.32	----

AQ54DOT **179MTNS** 1880 **DQ54DOT**

MALE 45° SWIVEL ELBOW

Part #	Tube O.D. x Male NPTF	Approx. Wt. Lbs.	
540402S	1/4" x 1/8"	0.06	----
540404S	1/4" x 1/4"	0.09	----
540602S	3/8" x 1/8"	0.10	----
540604S	3/8" x 1/4"	0.11	----
540606S	3/8" x 3/8"	0.13	----
540804S	1/2" x 1/4"	0.14	----
540806S	1/2" x 3/8"	0.16	----
540808S	1/2" x 1/2"	0.18	----
541008S	5/8" x 1/2"	0.24	----

AQ54DOTS **179PMT** 1880 **DQ54DOTS**

MALE BRANCH TEE

Forged

Part #	Tube O.D. x Male NPTF (1 x 2) x 3	Approx. Wt. Lbs.	
720302	3/16" x 1/8"	0.07	----
720402	1/4" x 1/8"	0.10	----
720404	1/4" x 1/4"	0.10	----
720604	3/8" x 1/4"	0.14	----
72060404	(3/8" x 1/4") x 1/4"	0.20	----
720606	3/8" x 3/8"	0.15	----
720804	1/2" x 1/4"	0.20	----
720806	1/2" x 3/8"	0.24	----
720808	1/2" x 1/2"	0.32	----
72100808	(5/8" x 1/2") x 1/2"	0.20	----

AQ72DOT **172PMTNS** 1872 **DQ72DOT**

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MALE SWIVEL BRANCH TEE

Part #	Tube O.D. x Male NPTF	Approx. Wt. Lbs.	
720402S	1/4” x 1/8”	0.12	----
720404S	1/4” x 1/4”	0.14	----
720602S	3/8" x 1/8"	0.19	----
720604S	3/8” x 1/4”	0.15	----
720606S	3/8” x 3/8”	0.17	----
720804S	1/2” x 1/4”	0.30	----
720806S	1/2” x 3/8”	0.34	----
720808S	1/2” x 1/2”	0.22	----

AQ72DOTS **172PMT** 1872 **DQ72DOTS**

FEMALE BRANCH TEE

(RUN) BRANCH

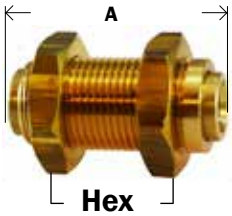
Part #	(1 & 2) x 3	
770402	1/4” x 1/8"	----
770404	1/4" x 1/4"	----
770604	3/8" x 1/4"	----

GLADHAND BULKHEAD CONNECTOR

TUBE OD x MALE NPTF

Part #	Size	
830808	1/2" x 1/2"	----

BULKHEAD UNION



Part #	Tube O.D.	Approx. Wt. Lbs.	
820400	1/4”	0.16	----
820600	3/8”	0.21	----
820800	1/2”	0.14	----
821000	5/8”	0.30	----

AQ82DOT **62PMTBH** 1874 **DQ82DOT**

FEMALE BULKHEAD UNION

Part #	Tube O.D. x Female NPTF	Approx. Wt. Lbs.	
860402	1/4" x 1/8"	0.08	----
860404	1/4" x 1/4”	0.10	----
860604	3/8” x 1/4”	0.14	----
860606	3/8” x 3/8”	0.31	----
860808	1/2” x 1/2”	0.32	----

• Jam nuts not available separately

AQ86DOT **1873** DQ86DOT **66PMTBH**

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COMPOSITE BODY DOT AIRBRAKE FITTINGS

WARNING

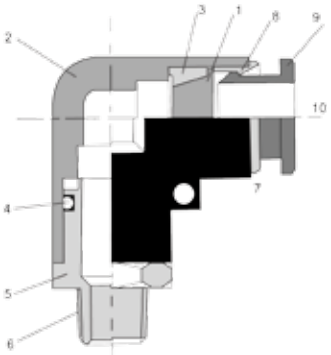
- Composite DOT push-to-connect fittings are designed only for use in applications where air is utilized as an operating fluid.
- Fittings must be used in accordance with manufacturer and industry specifications.
- They are not intended for use in environments exceeding 145psi or 140 degrees F.
- The Department of Transportation FMVSS 49CFR571-106 prohibits use of this type of fitting for connections between towed and towing vehicles or between a driveshaft and chassis.
- Using Composite DOT fittings in a manner inconsistent with manufacturer specifications may result in serious injury or property damage.
- Under no circumstances shall the supplier be liable to buyer for any consequential or incidental damages of any nature whatsoever arising from nonconformity of goods, defective goods, or delay in shipment or any other breach by seller.

Please feel free to email warning@compdotfitting.com with any questions or concerns.

- One touch connection reduces installation time and cost.
- Rugged ultraviolet and vibration resistant composite body.
- Various shapes and configurations to meet vehicle applications and make installations easier.

Specifications for FMVSS (D.O.T.) and SAE Compliant Fittings

Operating Fluid	Air						
Max. Operating Pressure	145psi (1.0MPa)						
Proof Pressure	Size	5/32"	1/4"	3/8"	1/2"	5/8"	3/4"
	At 75°F (24°C)	1200psi	1200psi	1400psi	950psi	900psi	800psi
	At 200 °F (93°C)	450psi (3.1MPa)					
Recommended Fluid and Ambient Temperature*	-40°F to 140°F (-40°C to 60°C)						
Leak Rate at -40°F (-40°C)	7 Ncm^3/min. or less						
Thread	Thread Portion	ANSI/ASME B1.20.1, 1983 R1992					
	Nut	JIS B 0208 (Unified fine thread) ISO 263					
Thread Sealant	Fluorine/ Acrylic						
Applicable Standards	D.O.T. FMVSS 49 CFR 571.106, SAE J2494-3						
Applicable Tubing	Tubing conforming to both SAE J844 and D.O.T. FMVSS 49 CFR 571.106. Material: Nylon12						
Tube O.D.	5/32", 1/4", 3/8", 1/2", 5/8", 3/4"						



1. Chuck	Stainless steel or Brass
2. Body	Polybutylene Terephthalate (PBT), Brass
3/4. Tube seal, O-Ring	Buna-N, Nitrile Rubber
5. Stud	Brass
6. Sealant	Flourine/ Acrylic
7. Guide	Stainless Steel or Polyacetal (Acetal)
8. Stabilization Ring	Stainless Steel
9. Release Button	Polyacetal, POM (Acetal)
10. Tube support	Stainless Steel/ Brass

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STRAIGHT UNION

	Part #	Tube OD (inch)	Approx. Wt. Lbs.	
	620532C	5/32	0.01	----
	620400C	1/4	0.01	----
	620600C	3/8	0.03	----
	620800C	1/2	0.05	----
	621000C	5/8	0.08	----

UNION TEE

	Part #	Tube OD (inch)	Approx. Wt. Lbs.	
NEW	645320C	5/32	0.02	----
	640400C	1/4	0.02	----
	640600C	3/8	0.05	----
	640800C	1/2	0.07	----
	641000C	5/8	0.13	----

UNION 90° ELBOW

Part #	Tube OD (inch)	Approx. Wt. Lbs.	
655320C	5/32	0.01	----
650400C	1/4	0.02	----
650600C	3/8	0.04	----
650800C	1/2	0.05	----

FEMALE CONNECTOR

	Part #	Tube OD (inch)	Thread NPT	Approx. Wt. Lbs.	
NEW	665302C	5/32	1/8-27	0.04	----
NEW	665304C	5/32	1/4-18	0.06	----
	660402C	1/4	1/8-27	0.04	----
	660404C	1/4	1/4-18	0.06	----
	660406C	1/4	3/8-18	0.10	----
	660602C	3/8	1/8-27	0.07	----
	660604C	3/8	1/4-18	0.07	----
	660606C	3/8	3/8-18	0.11	----
	660608C	3/8	1/2-14	0.12	----
	660802C	1/2	1/8-27	0.11	----
	660804C	1/2	1/4-18	0.13	----
	660806C	1/2	3/8-18	0.12	----
	660808C	1/2	1/2-14	0.13	----

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COMPOSITE BODY D.O.T. PUSH-IN — BRASS FITTINGS

STRAIGHT MALE CONNECTOR

	Part #	App. Tube OD (inch)	Thread NPT	Approx. Wt. Lbs.	
NEW	685301C	5/32	1/16-28	0.02	----
NEW	685302C	5/32	1/8-27	0.02	----
NEW	685304C	5/32	1/4-27	0.03	----
	680402C	1/4	1/8-27	0.02	----
	680404C	1/4	1/4-18	0.03	----
	680406C	1/4	3/8-18	0.05	----
	680602C	3/8	1/8-27	0.05	----
	680604C	3/8	1/4-18	0.06	----
	680606C	3/8	3/8-18	0.06	----
	680608C	3/8	1/2-14	0.09	----
	680804C	1/2	1/4-18	0.09	----
	680806C	1/2	3/8-18	0.09	----
	680808C	1/2	1/2-14	0.09	----
	681006C	5/8	3/8-18	0.15	----
	681008C	5/8	1/2-14	0.13	----
	681208C	3/4	1/2-14	0.38	----

90° MALE ELBOW

• Fixed

	Part #	Tube OD (inch)	Thread NPT	Approx. Wt. Lbs.	
NEW	695322SC	5/32	1/8-27	0.03	----
NEW	690402SC	1/4	1/8-27	0.03	----
	690404SC	1/4	1/4-18	0.04	----
	690406SC	1/4	3/8-18	0.07	----
	690602SC	3/8	1/8-27	0.07	----
	690604SC	3/8	1/4-18	0.06	----
	690606SC	3/8	3/8-18	0.08	----
	690608SC	3/8	1/2-14	0.14	----
	690804SC	1/2	1/4-18	0.07	----
	690806SC	1/2	3/8-18	0.09	----
	690808SC	1/2	1/2-14	0.14	----
	691006SC	5/8	3/8-18	0.14	----
	691008SC	5/8	1/2-14	0.18	----
	691208SC	3/4	1/2-14	0.26	----

90° FEMALE ELBOW

	Part #	Tube OD (inch)	Thread NPT	Approx. Wt. Lbs.	
NEW	705302C	5/32	1/8-27	0.03	----
NEW	705304C	5/32	1/4-18	0.05	----
	700402SC	1/4	1/8-27	0.03	----
	700404SC	1/4	1/4-18	0.05	----
	700406SC	1/4	3/8-18	0.08	----
NEW	700602C	3/8	1/8-27	0.05	----
	700604SC	3/8	1/4-18	0.07	----
	700606SC	3/8	3/8-18	0.09	----
	700608SC	3/8	1/2-14	0.10	----
NEW	700804C	1/2	1/4-18	0.08	----
	700806SC	1/2	3/8-18	0.10	----
	700808SC	1/2	1/2-14	0.11	----

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MALE RUN TEE

• Fixed

	Part #	Tube OD (inch)	Thread NPT	Approx. Wt. Lbs.	
NEW	715301C	5/32	1/16	0.05	----
NEW	715302C	5/32	1/8	0.03	----
NEW	715304C	5/32	1/4	0.04	----
	710402SC	1/4	1/8-27	0.04	----
	710404SC	1/4	1/4-18	0.05	----
	710604SC	3/8	1/4-18	0.08	----
	710606SC	3/8	3/8-18	0.10	----
	710608SC	3/8	1/2-14	0.15	----
NEW	710804C	1/2	1/4-8	0.09	----
	710806SC	1/2	3/8-18	0.11	----
	710808C	1/2	1/2-14	0.17	----

MALE BRANCH TEE

• Fixed

	Part #	Tube OD (inch)	Thread NPT	Approx. Wt. Lbs.	
NEW	725301C	5/32	1/16	0.03	----
NEW	725302C	5/32	1/8	0.03	----
NEW	725304C	5/32	1/4	0.05	----
	720402SC	1/4	1/8-27	0.04	----
	720404SC	1/4	1/4-18	0.05	----
	720406SC	1/4	3/8-18	0.08	----
	720604SC	3/8	1/4-18	0.08	----
	720606SC	3/8	3/8-18	0.10	----
NEW	720608C	3/8	1/2-14	0.15	----
NEW	720804C	1/2	1/4-18	0.09	----
	720806SC	1/2	3/8-18	0.11	----
	720808SC	1/2	1/2-14	0.17	----
NEW	721006C	5/8	3/8	0.18	----
NEW	721008C	5/8	1/2	0.21	----

FEMALE BRANCH TEE

	Part #	Tube OD (inch)	Thread NPT	Approx. Wt. Lbs.	
	770402C	1/4	1/8-27	0.06	----
	770404C	1/4	1/4-18	0.08	----
	770604C	3/8	1/4-18	0.08	----
NEW	770806C	1/2	3/8	0.13	----
NEW	771004C	5/8	1/4	0.21	----

45° MALE ELBOW

• Fixed

	Part #	Tube OD (inch)	Thread NPT	Approx. Wt. Lbs.	
NEW	545302C	5/32	1/8-27	0.03	----
	540402SC	1/4	1/8-27	0.03	----
	540404SC	1/4	1/4-18	0.04	----
	540602SC	3/8	1/8-27	0.06	----
	540604SC	3/8	1/4-18	0.06	----
	540606SC	3/8	3/8-18	0.08	----
	540608SC	3/8	1/2-14	0.13	----
NEW	540802C	1/2	1/8-27	0.08	----
	540804SC	1/2	1/4-18	0.08	----
	540806SC	1/2	3/8-18	0.10	----
	540808SC	1/2	1/2-14	0.15	----
	541006SC	5/8	3/8-18	0.14	----
	541008SC	5/8	1/2-14	0.17	----
	541208SC	3/4	1/2-14	0.26	----

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

UNION "Y"

Part #	A&B Tube OD (inch)	C Tube OD (inch)	Approx. Wt. Lbs.	
620553C	1/4	1/4	0.03	----
620409C	1/4	3/8	0.03	----
620555C	3/8	3/8	0.05	----
620559C	3/8	1/4	0.07	----
620557C	1/2	1/2	0.08	----

MALE BRANCH "Y"

	Part #	Tube OD (inch)	Thread NPT	Approx. Wt. Lbs.	
NEW	880402C	1/4	1/8	0.05	----
NEW	880404C	1/4	1/4	0.06	----
NEW	880406C	1/4	3/8	0.09	----
	620604C	3/8	1/4-18	0.09	----
	620606C	3/8	3/8-18	0.12	----
	620806C	1/2	3/8-18	0.13	----
	620808C	1/2	1/2-14	0.15	----

BULKHEAD UNION

	Part #	Tube OD (inch)	Thread (UNF)	Approx. Wt. Lbs.	
NEW	825320C	5/32	1/2-20	0.07	----
	820400C	1/4	9/16-18	0.07	----
	820600C	3/8	7/8-14	0.19	----
	820800C	1/2	1-12	0.26	----
	821000C	5/8	1 1/8-12	0.42	----

FEMALE BULKHEAD CONNECTOR

	Part #	App. Tube OD (inch)	Thread NPT	T (UNF)	Approx. Wt. Lbs.	
NEW	865304C	5/32	1/4-18	1/2-20	0.08	----
	860402C	1/4	1/8-27	9/16-18	0.01	----
	860404C	1/4	1/4-18	9/16-18	0.08	----
	860604C	3/8	1/4-18	7/8-14	0.20	----
	860606C	3/8	3/8-18	7/8-14	0.20	----
	860806C	1/2	3/8-18	1-12	0.26	----
	860808C	1/2	1/2-14	1-12	0.27	----

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D.O.T. AIR BRAKE - NYLON TUBING

Tube O.D	1/4	3/8	1/2	5/8	3/4
Thread Size-B	7/16-24	17/32-24	11/16-20	13/16-18	1-18

•Typical Application
Air brake systems except where temperatures exceed +200^{0}F or where battery acid can drip on tubing.

•Pressure
Maximum operating pressure of 150 PSI.

•Vibration
Fair resistance.

•Temperature Range
-40^{0}F to +200^{0}F (-40^{0}C to +93^{0}C).

•Material
Brass

•Used With
NT Nylon Tubing - SAE J844 Type A and B.

• Tolerance
+/- .02 on all dimensions. Dimension data can change without notice. Please call us when dimensions are critical

•Advantages
Easy to assemble (no tube preparation or flaring required.) Built in tube support. Fittings utilize a ribbed sleeve for compression and positive grip. May be used with copper tubing by replacing nut, sleeve and insert with long nut and spherical sleeve. Insert should be removed for copper tubing use.

•Conformance
Meets specifications and standards of SAE and DOT FMVSS 571,106.

•Assembly Instructions
1- Cut tubing to desired length.
2-Slide nut and then sleeve on tubing. Threaded end of nut "A" must face toward fitting body.
3-Insert tubing into the preassembled fitting. Be sure tubing is bottomed in fitting.
4- Tighten nut to required torque as indicated on chart.

Disassembling: Remove nut and pull tubing out of fitting body. Insert will remain in tubing.
Reassembly: Push tubing and insert into fitting body until it bottoms. Thread nut onto fitting body and torque as in step 4.

Tube Size	Additional Number of Turns from Hand-Tight
1/4	3
3/8, 1/2	4
5/8, 3/4	3-1/2

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D.O.T. AIR BRAKE - NYLON TUBING

SLEEVE
SAE# 100115

Part #	Tube O.D.	Approx. Wt. Lbs.	
38-000	3/16"		----
38-001	1/4”	0.01	----
38-002	3/8”	0.01	----
38-003	1/2”	0.01	----
38-004	5/8”	0.01	----
38-005	3/4”	0.01	----

60NAB **60NTA** 1460

NUT
SAE# 100110

Part #	Tube O.D.	Approx. Wt. Lbs.	
38-009	3/16"		----
38-010	1/4”	0.02	----
38-011	3/8”	0.03	----
38-012	1/2”	0.05	----
38-013	5/8”	0.06	----
38-014	3/4”	0.09	----

61NAB **61NTA** 1461

UNION
SAE# 100101BA

Part #	Tube O.D.	Approx. Wt. Lbs.	
38-018	3/16"		----
38-019	1/4”	0.07	----
38-020	3/8”	0.11	----
38-021	1/2”	0.20	----
38-022	5/8”	0.25	----
38-023	3/4”	0.40	----

62NAB **62NTA** 1462

BULKHEAD UNION

Part #	Tube O.D.	Approx. Wt. Lbs.	
38-028	1/4”	0.11	----
38-029	3/8”	0.16	----
38-030	1/2”	0.26	----

62NBH **1474** 475

STAINLESS STEEL INSERT
- 300 series stainless

- **For SAE# J844 TUBING**

Part #	Tube O.D.	Approx. Wt. Lbs.	
38-035	1/4”	0.01	----
38-036	3/8”	0.01	----
38-037	1/2”	0.01	----
38-038	5/8”	0.01	----
38-039	3/4”	0.01	----

59A **63NTA**

BRASS INSERT

Part #	Tube O.D.	Approx. Wt. Lbs.	
38-040	1/4”	0.01	----
38-041	3/8”	0.01	----
38-042	1/2”	0.01	----
38-043	5/8”	0.01	----
38-048	3/4”	0.02	----

1484 **463**

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

TEE

SAE# 100401BA

Part #	Tube O.D.	Approx. Wt. Lbs.	
38-044	1/4”	0.12	----
38-045	3/8”	0.19	----
38-046	1/2”	0.36	----
38-047	5/8”	0.48	----

64NAB **264NTA** 1464

REDUCING BRANCH TEE

Part #	Tube O.D. (1&2) x 3	Approx. Wt. Lbs.	
38-049	3/8” x 1/4”	0.24	----
38-057	1/2” x 3/8”	0.30	----

ELBOW

SAE# 100201BA

Part #	Tube O.D.	Approx. Wt. Lbs.	
38-052	1/4”	0.09	----
38-053	3/8”	0.13	----
38-054	1/2”	0.15	----
38-055	5/8”	0.36	----

65NAB **265NTA** 1465

FEMALE ADAPTER

SAE# 100103BA

Part #	Tube O.D. x Female NPT	Approx. Wt. Lbs.	
38-060	1/4” x 1/8”	0.06	----
38-061	1/4” x 1/4”	0.08	----
38-062	3/8” x 1/8”	0.07	----
38-063	3/8” x 1/4”	0.10	----
38-064	3/8” x 3/8”	0.14	----
38-065	1/2” x 3/8”	0.16	----
38-066	1/2” x 1/2”	0.20	----
38-067	5/8” x 3/8”	0.28	----
38-068	5/8” x 1/2”	0.28	----
NEW 38-059	3/4" x 1/2"	0.31	

66NAB **66NTA** 1466 **66NBH**

Adopt the pace of nature: her secret is patience.

– Ralph Waldo Emerson

Dimension data can change without notice.
Please see our website when dimensions are critical.

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

MALE ADAPTER
SAE# 100102BA

Part #	Tube O.D. x Male NPTF	Approx. Wt. Lbs.	
38-072	1/4" x 1/16"	0.05	----
38-073	1/4" x 1/8"	0.05	----
38-074	1/4" x 1/4"	0.06	----
38-075	1/4" x 3/8"	0.08	----
38-076	3/8" x 1/8"	0.07	----
38-077	3/8" x 1/4"	0.08	----
38-078	3/8" x 3/8"	0.10	----
38-079	3/8" x 1/2"	0.14	----
38-080	1/2" x 1/4"	0.13	----
38-081	1/2" x 3/8"	0.14	----
38-082	1/2" x 1/2"	0.18	----
38-087	1/2" x 3/4"	0.23	----
38-083	5/8" x 3/8"	0.17	----
38-084	5/8" x 1/2"	0.21	----
38-088	5/8" x 3/4"	0.25	----
38-085	3/4" x 1/2"	0.28	----
38-086	3/4" x 3/4"	0.30	----

68NAB **68NTA** 1468

SWIVEL MALE ADAPTER

Part #	Tube O.D. x Male NPTF	Approx. Wt. Lbs.	
38-078S	3/8" x 3/8"	0.18	----
38-081S	1/2" x 3/8"	0.22	----

MALE ELBOW
SAE# 100202BA

Part #	Tube O.D. x Male NPTF	Approx. Wt. Lbs.	
38-091	1/4" x 1/8"	0.06	----
38-092	1/4" x 1/4"	0.08	----
38-093	1/4" x 3/8"	0.13	----
38-094	3/8" x 1/8"	0.09	----
38-095	3/8" x 1/4"	0.11	----
38-090	3/8" x 1/4" LONG	0.14	----
38-101	3/8" x 3/8"	0.14	----
38-102	3/8" x 1/2"	0.20	----
38-103	1/2" x 1/4"	0.16	----
38-104	1/2" x 3/8"	0.20	----
38-109	1/2" x 3/8" LONG	0.26	----
38-105	1/2" x 1/2"	0.29	----
38-106	5/8" x 3/8"	0.26	----
38-107	5/8" x 1/2"	0.32	----
38-110	5/8" x 3/4"	0.40	----
38-108	3/4" x 1/2"	0.43	----
38-111	3/4" x 3/4"	0.51	

SWIVEL MALE ELBOW

269NTA **1469**

Part #	Tube O.D. x Male NPTF	Approx. Wt. Lbs.	
38-101S	3/8" x 3/8"	0.28	----
38-104S	1/2" x 3/8"	0.32	----

FEMALE ELBOW
SAE# 100203BA

Part #	Tube O.D. x Female NPTF	Approx. Wt. Lbs.	
38-113	1/4" x 1/8"	0.08	----
38-114	1/4" x 1/4"	0.12	----
38-115	3/8" x 1/8"	0.14	----
38-116	3/8" x 1/4"	0.10	----
38-117	3/8" x 3/8"	0.12	----
38-118	1/2" x 3/8"	0.23	----
38-119	1/2" x 1/2"	0.36	----
38-120	5/8" x 1/2"	0.38	----

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MALE RUN TEE

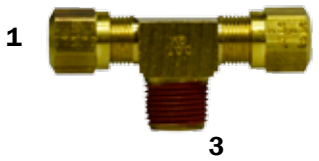
SAE# 100424BA

Part #	Tube O.D. x Male NPTF x Tube O.D. 1x2x3	Approx. Wt. Lbs.	
38-125	1/4" x 1/8" x 1/4"	0.10	----
38-126	1/4" x 1/4" x 1/4"	0.13	----
38-124	3/8" x 1/4" x 1/4"	0.14	----
38-127	3/8" x 1/4" x 3/8"	0.17	----
38-128	3/8" x 3/8" x 3/8"	0.20	----
38-129	1/2" x 3/8" x 1/2"	0.30	----

71NAB **271NTA** 1471

MALE BRANCH TEE

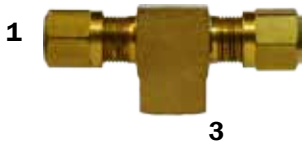
SAE# 100425BA



Part #	Tube O.D. x Tube O.D. x Male NPTF 1x2x3	Approx. Wt. Lbs.	
38-136	1/4" x 1/4" x 1/8"	0.10	----
38-137	1/4" x 1/4" x 1/4"	0.13	----
38-138	3/8" x 3/8" x 1/8"	0.14	----
38-132	3/8" x 1/4" x 1/4"	0.15	----
38-139	3/8" x 3/8" x 1/4"	0.17	----
38-133	1/2" x 1/2" x 1/4"	0.26	----
38-140	3/8" x 3/8" x 3/8"	0.21	----
38-134	1/2" x 3/8" x 3/8"	0.26	----
38-141	1/2" x 1/2" x 3/8"	0.30	----
38-142	1/2" x 1/2" x 1/2"	0.37	----
38-143	5/8" x 5/8" x 1/2"	0.44	----

72NAB **272NTA** 1472

FEMALE BRANCH TEE



Part #	Tube O.D. x Tube O.D. x Female NPTF 1x2x3	Approx. Wt. Lbs.	
38-144	3/8" x 3/8" x 1/4"	0.21	----
38-146	5/8" x 5/8" x 1/4"	0.48	----

45° ELBOW

SAE# 100302BA

Part #	Tube O.D. x Male NPTF	Approx. Wt. Lbs.	
38-148	1/4" x 1/8"	0.06	----
38-149	1/4" x 1/4"	0.08	----
38-150	3/8" x 1/8"	0.09	----
38-151	3/8" x 1/4"	0.11	----
38-152	3/8" x 3/8"	0.14	----
38-153	3/8" x 1/2"	0.24	----
38-157	1/2" x 1/4"	0.18	----
38-154	1/2" x 3/8"	0.19	----
38-155	1/2" x 1/2"	0.25	----
38-156	5/8" x 1/2"	0.30	----
38-158	3/4" x 1/2"	0.38	----

6945NAB **279NTA** 1480

SWIVEL 45° ELBOW

Part #	Tube O.D. x Male NPTF	Approx. Wt. Lbs.	
38-152S	3/8" x 3/8"	0.20	----
38-154S	1/2" x 3/8"	0.24	----

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

SLEEVE

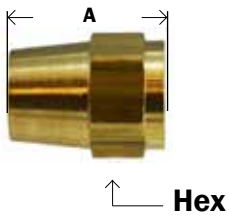
SAE# 120115BA

Part #	Tube O.D.	A	Approx. Wt. Lbs.	
38-161	1/4”	0.25	0.01	----
38-162	3/8”	0.31	0.02	----
38-163	1/2”	0.38	0.02	----
38-164	5/8”	0.44	0.02	----
38-165	3/4”	0.50	0.04	----

60AB **1360**

NUT

SAE# 120111BA

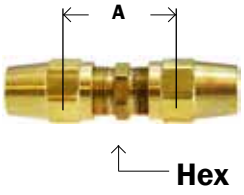


Part #	Tube O.D.	A	Hex	Approx. Wt. Lbs.	
38-170	1/4”	0.75	0.56	0.02	----
38-171	3/8”	1.13	0.62	0.04	----
38-172	1/2”	1.25	0.81	0.08	----
38-173	5/8”	1.38	0.94	0.12	----
38-174	3/4”	1.56	1.12	0.18	----

20961 **61AB** 1361

UNION

SAE# 120101BA

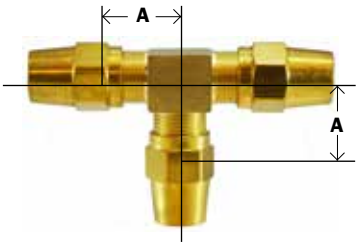


Part #	Tube O.D.	A	Hex	Approx. Wt. Lbs.	
38-179	1/4”	0.81	0.44	0.08	----
38-180	3/8”	1.10	0.56	0.14	----
38-181	1/2”	1.07	0.69	0.24	----
38-182	5/8”	1.41	0.81	0.34	----
38-183	3/4"				----

62AB **1362**

TEE

SAE# 120401BA

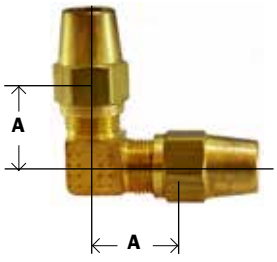


Part #	Tube O.D.	A	Approx. Wt. Lbs.	
38-188	1/4”	0.62	0.16	----
38-189	3/8”	0.82	0.24	----
38-190	1/2”	0.94	0.48	----
38-191	5/8"			

264AB **1364**

ELBOW

SAE# 120201BA



Part #	Tube O.D.	A	Approx. Wt. Lbs.	
38-196	1/4”	0.62	0.10	----

265AB **1365**

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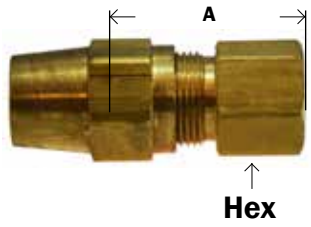
FEMALE ADAPTER

SAE# 120103BA

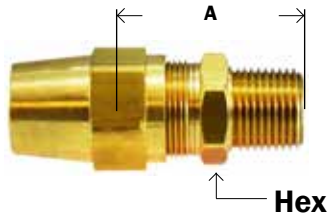


Part #	Tube O.D. x Female NPTF	A	Hex	Approx. Wt. Lbs.	
38-204	1/4" x 1/8"	0.84	0.56	0.08	----
38-205	1/4" x 1/4"	1.07	0.68	0.10	----
38-206	3/8" x 1/8"	1.00	0.56	0.10	----
38-207	3/8” x 1/4”	1.19	0.68	0.12	----
38-208	3/8” x 3/8”	1.18	0.87	0.16	----
38-209	1/2” x 3/8”	1.27	0.87	0.18	----
38-210	1/2' x 1/2"	1.44	1.06	0.20	----
38-211	5/8" x 3/8"	1.31	0.87	0.24	----
38-212	5/8" x 1/2"	0.50	1.06	0.26	----
38-213	3/4" x 1/2"				----

66AB **1366**

MALE ADAPTER

SAE# 120102BA

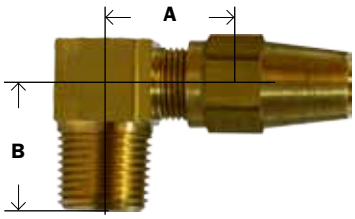


Part #	Tube O.D. x Male NPTF	A	Hex	Approx. Wt. Lbs.	
38-217	1/4” x 1/8”	0.88	0.43	0.06	----
38-218	1/4” x 1/4”	0.97	0.56	0.08	----
38-221	3/8” x 1/4”	1.09	0.56	0.10	----
38-222	3/8” x 3/8”	1.19	0.69	0.12	----
38-223	3/8” x 1/2”	1.45	0.87	0.18	----
38-224	1/2” x 1/4”	1.32	0.69	0.16	----
38-225	1/2” x 3/8”	1.35	0.69	0.18	----
38-226	1/2” x 1/2”	1.51	0.87	0.24	----
38-227	5/8” x 3/8”	1.39	0.81	0.22	----
38-228	5/8” x 1/2”	1.57	0.87	0.24	----
38-229	3/4” x 1/2”	1.67	1.00	0.34	----

68AB **368**

90° MALE ELBOW

SAE# 120202BA

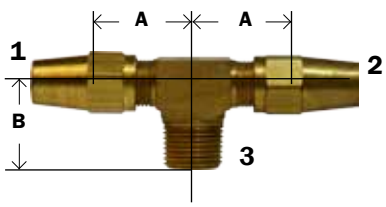


Part #	Tube O.D. x Male NPTF	A	B	Approx. Wt. Lbs.	
38-235	1/4” x 1/8”	0.64	0.76	0.08	----
38-236	1/4” x 1/4”	0.69	0.88	0.10	----
38-237	1/4” x 3/8”	0.73	0.86	0.14	----
38-239	3/8” x 1/4”	0.80	0.93	0.12	----
38-240	3/8” x 3/8”	0.83	0.90	0.16	----
38-241	3/8" x 1/2"				----
38-243	1/2” x 3/8”	0.92	0.98	0.22	----
38-244	1/2” x 1/2”	1.04	1.19	0.30	----
38-246	5/8” x 1/2”	1.10	1.25	0.36	----

269AB **1369**

MALE BRANCH TEE

SAE# 120425BA



Part #	Tube O.D. x Male NPTF (1&2)x3	A	B	Approx. Wt. Lbs.	
38-278	3/8” x 1/4”	0.78	0.91	0.18	----
38-279	3/8” x 3/8”	0.85	0.92	0.24	----

272AB **1372**

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

D.O.T. AIR BRAKE REUSABLE HOSE/ FITTINGS

•Typical Application
Air Brake hose connections.
Meets SAE & DOT specifications
(FMVCS 10 GAL)

•Pressure
Determined by maximum working pressure for hose size.
Up to 125 psi

Temperature: -40^{0}F to + 120^0 F (-40°C to +48°C)

•Advantages
Can be used for nearly any brake line. Easy to assemble with a good selection of hose end configurations. Brass material offers excellent resistance against corrosion.

• Tolerance
+/- .02 on all dimensions. Dimension data can change without notice. Please call us when dimensions are critical.

•Assembly Instructions
1- Slide nut and sleeve onto hose. Make sure bevel edge of sleeve faces out toward fitting.
2- Push hose into fitting until it bottoms.
3- Screw nut until contact is made with body hex.

NOTE: When reassembling fitting, body and nut should be inspected. Only reuse if in proper condition. Sleeves should never be reused.

SLEEVE
FERRULE

Part #	Hose I.D. Size	Approx. Wt. Lbs.	
38-300	3/8”	0.02	----
38-301	1/2”	0.02	----

#60HC 3380-A 0903610 367 60RB

NUT

Part #	Hose I.D. Size	Approx. Wt. Lbs.	
38-306	3/8”	0.04	----
38-307	1/2”	0.06	----

61RB **#61HC** 369 **3380-B** 0903624

NUT FOR USE WITH SPRING

Part #	Hose I.D. Size	Thread	Approx. Wt. Lbs.	
38-312	3/8”	31/32-20	0.04	----
38-313	1/2”	1-3/32-20	0.06	----

#61HCS **0903613** 3380-D **61RBSG**

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

SPRING

Part #	Hose I.D.	Approx. Wt. Lbs.	
38-351	3/8”	0.20	----
38-352	1/2”	0.22	----

#60SG **0901045** 3380-C **377**

NUT AND SPRING ASSEMBLY

Part #	Hose I.D. Size	Approx. Wt. Lbs.	
38-015	3/8”	0.18	----
38-016	1/2”	0.24	----

379 **67RBSG** 0999999

UNION

Part #	Hose I.D.	Thread	Approx. Wt. Lbs.	
38-318	3/8”	31/32-20	0.32	----
38-319	1/2”	1-1/8-20	0.48	----

#62HC **3380B-Y0** 362

BODY ONLY

Part #	Hose I.D.	Thread	Approx. Wt. Lbs.	
39-318	3/8”	31/32-20	0.32	----
39-319	1/2”	1-1/8-20	0.48	----

FEMALE CONNECTOR HOSE

Part #	Hose I.D. x Female ABS	Approx. Wt. Lbs.	
38-357	3/8” x 3/4-20	0.24	----
38-358	1/2” x 7/8-20	0.39	----

#66ABS **66RBSV** 3380B-Y7 **386**

BODY ONLY

Part #	Hose I.D. x Female ABS	Approx. Wt. Lbs.	
39-357	3/8” x 3/4-20	0.24	----
39-358	1/2” x 7/8-20	0.38	----

MALE CONNECTOR

Part #	Hose I.D. x Male Pipe	Approx. Wt. Lbs.	
38-363	3/8” x 1/4”	0.38	----
38-364	1/2” x 3/8”	0.46	----

#68ABS **09155** 3380B-Y8 **387**

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

ADAPTER FOR SWIVEL TYPE REUSABLE AND CRIMPED ON

Part #	Male ABS x Male Pipe	ABS Thread	Approx. Wt. Lbs.	
38-369	3/8" x 1/4"	3/4-20	0.05	----
38-368	3/8" x 3/8"	3/4-20	0.08	----
38-372	3/8" x 1/2"	3/4-20	0.12	----
38-370	1/2" x 3/8"	7/8-20	0.10	----
38-371	1/2" x 1/2"	7/8-20	0.12	----

#68ABS **1390** 76RB **388**

MALE ADAPTER

Part #	Hose I.D. x Male Pipe	Approx. Wt. Lbs.	
38-333	3/8" x 1/4"	0.22	----
38-334	3/8" x 3/8"	0.24	----
38-335	3/8" x 1/2"	0.26	----
38-336	1/2" x 3/8"	0.33	----
38-337	1/2" x 1/2"	0.36	----

#68HC **368** 3380B-Y2 **68RB**

ADAPTER BODY

Part #	Hose I.D. x Male Pipe	Approx. Wt. Lbs.	
38-324	3/8" x 1/4"	0.12	----
38-325	3/8" x 3/8"	0.14	----
38-326	3/8" x 1/2"	0.20	----
38-327	1/2" x 3/8"	0.18	----
38-328	1/2" x 1/2"	0.20	----

#68B **W1391Z**

MALE ADAPTER

Part #	Hose I.D. x Male Pipe	Approx. Wt. Lbs.	
38-342	3/8" x 1/4"	0.32	----
38-343	3/8" x 3/8"	0.34	----
38-344	3/8" x 1/2"	0.38	----
38-345	1/2" x 3/8"	0.48	----
38-346	1/2" x 1/2"	0.52	----

#68HCS **3380B-Y3** 68RBSG **378**

America was not built on fear. America was built on courage, on imagination and an unbeatable determination to do the job at hand.

- Harry S Truman

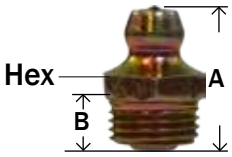
WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

- 8000 PSI max. pressure
- Exceeds 12hr salt spray

Meets SAE #J-534C
Many types available on special order.

- Assortments also available
- See website for Grease Accesssories

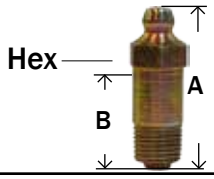
PIPE THREAD — BALL CHECK - 1/8-27 NPTF



Part #	Size	A	B	Hex	Approx. Wt. Lbs.	
36-110	1/8" -27 NPTF	0.66	0.28	0.437	0.01	----
36-110SS	303 SS	0.68	0.29	0.437	0.01	----
36-111	Thread Forming	0.62	0.23	0.437	0.01	----

#610 **1610** 2800 **1720** 5000

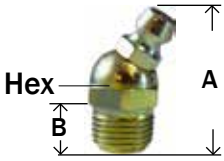
PIPE THREAD — BALL CHECK



Part #	Size	A	B	Hex	Approx. Wt. Lbs.	
36-112	1/8" -27 NPTF	1.25	0.22	0.437	0.02	----
36-113	1/8" -27 NPTF	1.75	1.26	0.437	0.02	----

#607 **1607** 2800 **1669** 5003

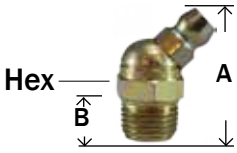
PIPE THREAD — 30° ANGLE BALL CHECK



Part #	Size	A	B	Hex	Approx. Wt. Lbs.	
36-114	1/8" -27 NPTF	0.90	0.30	0.437	0.01	----

#611 **1611** 2830 **5100**

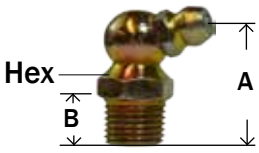
PIPE THREAD — 45° ANGLE BALL CHECK



Part #	Size	A	B	Hex	Approx. Wt. Lbs.	
36-116	1/8" -27 NPTF	0.88	0.22	0.437	0.01	----
36-116SS	303 SS	0.95	0.29	0.437	0.01	----

#688 **1688** 2845 **5200**

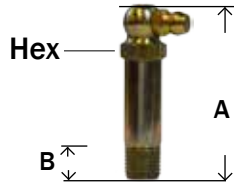
PIPE THREAD — 65° ANGLE BALL CHECK



Part #	Size	A	B	Hex	Approx. Wt. Lbs.	
36-118	1/8" -27 NPTF	0.86	0.30	0.437	0.01	----

#612 **1612** 2865 **5300**

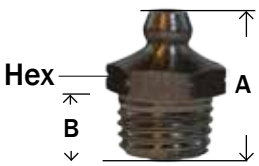
PIPE THREAD — 90° ANGLE BALL CHECK



Part #	Size	A	B	Hex	Approx. Wt. Lbs.	
36-120	1/8" -27 NPTF	0.84	0.30	0.437	0.01	----
36-120SS	303 SS	0.84	0.29	0.437	0.01	----
36-121	1/8" -27 NPTF	1.81	1.25	0.437	0.01	----

#613 **1613** 2890 **5400** 5407

PIPE THREAD — BALL CHECK - 1/4-18 NPTF



Part #	Size	A	B	Hex	Approx. Wt. Lbs.	
36-130	1/4" -18 NPTF	0.84	0.30	0.437	0.02	----
36-130SS	303 SS	0.87	0.42	0.437	0.02	----

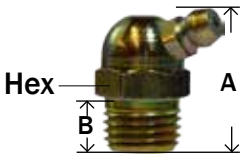
#627 **1627** 2900K **5050**

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

STEEL GREASE FITTINGS

PIPE THREAD

65° ANGLE BALL CHECK

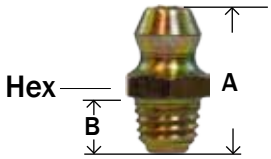


Part #	Size	A	B	Hex	Approx. Wt. Lbs.	
36-132	1/4"-18 NPTF	0.97	0.34	0.56	0.02	----

#629 **1629** 2965 **5350**

1/4-28 TAPER THREAD

SHORT BALL CHECK - 1/4-28 NPTF

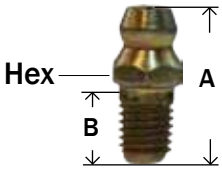


Part #	Size	A	B	Hex	Approx. Wt. Lbs.	
36-140	1/4"-28 NPTF	0.54	0.18	0.31	0.01	----
36-140SS	303 SS	0.54	0.18	0.31	0.01	----
36-141	Thread Forming	0.55	0.10	0.31	0.01	----

#641 **1641** 2400 **3038** 5010

1/4-28 TAPER THREAD

LONG BALL CHECK

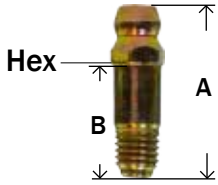


Part #	Size	A	B	Hex	Approx. Wt. Lbs.	
36-142	1/4"-28 Taper Thread	0.69	0.34	0.312	0.01	----

#652 **1652** 2400 **5013**

1/4-28 TAPER THREAD

EXTRA LONG BALL CHECK

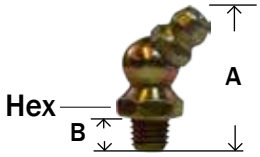


Part #	Size	A	B	Hex	Approx. Wt. Lbs.	
36-144	1/4"-28 Taper Thread	0.92	0.60	0.312	0.02	----

#680 **1680** 2400 **5014**

1/4-28 TAPER THREAD

SHORT 45° BALL CHECK

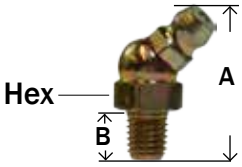


Part #	Size	Angle	A	B	Hex	Approx. Wt. Lbs.	
36-146	1/4"-28 Taper Thread	45°	0.82	0.20	0.375	0.02	----
36-146SS	303 SS	45°	0.81	0.20	0.375	0.02	----
36-147	1/4"-28 Taper Thread	65°	0.78	0.20	0.375	0.02	----

#637 **1637** 2445 **1665** 2465 **3010** 5210

1/4-28 TAPER THREAD

LONG 45° BALL CHECK



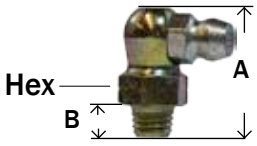
Part #	Size	A	B	Hex	Approx. Wt. Lbs.	
36-148	1/4"-28 Taper Thread	0.94	0.30	0.375	0.02	----

#636 **1630** 2445

1/4-28 TAPER THREAD

90° ANGLE BALL CHECK

SAE# A515002

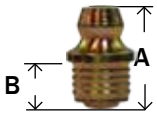


Part #	Size	A	B	Hex	Approx. Wt. Lbs.	
36-150	1/4"-28 Taper Thread	0.75	0.10	0.375	0.02	----
36-150SS	303 SS	0.75	0.20	0.375	0.02	----
36-152	Thread Forming	0.75	0.16	0.375	0.02	----

#911 **1911** 2490 **3054** 5410

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

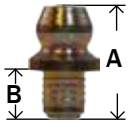
DRIVE TYPE — BALL CHECK Drive Type



Part #	Size	A	B	Approx. Wt. Lbs.	
36-160	5/16"	0.55	0.25	0.01	----

#608 **1608** 5021

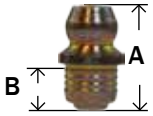
DRIVE TYPE — BALL CHECK



Part #	Size	A	B	Approx. Wt. Lbs.	
36-164	3/16"	0.52	0.25	0.01	----
36-164SS	303 SS	0.51	0.25	0.01	----

#728 **1728** 2316 **5033**

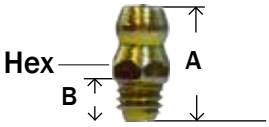
DRIVE TYPE — BALL CHECK



Part #	Size	A	B	Approx. Wt. Lbs.	
36-166	1/4"	0.55	0.23	0.01	----
36-166SS	303 SS	0.55	0.23	0.01	----

#743 **1743** 214 **5029**

METRIC

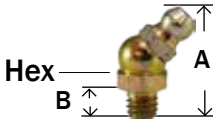


Part #	Size	A (mm)	B (mm)	Hex (mm)	Approx. Wt. Lbs.	
36-168	6MM x 1	16	3.7	7	0.01	----

(Diameter x Pitch)

#711 **6000** 2106 **2M6** 5175

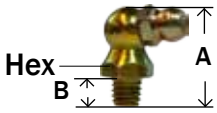
METRIC — 45° ANGLE



Part #	Size	A (mm)	B (mm)	Hex (mm)	Approx. Wt. Lbs.	
36-170	6MM x 1	21	3.7	9	0.02	----

#712 **6045** 2107 **5176**

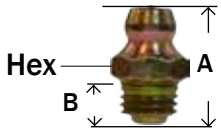
METRIC — 90° ANGLE



Part #	Size	A (mm)	B (mm)	Hex (mm)	Approx. Wt. Lbs.	
36-172	6MM x 1	18	3.7	9	0.02	----

#713 **6090** 2108 **ZM906** 5177

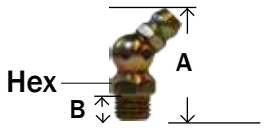
METRIC



Part #	Size	A (mm)	B (mm)	Hex (mm)	Approx. Wt. Lbs.	
36-174	8MM x 1	16	3.7	9	0.02	----

#811 **8000** 2103 **ZM58** 5178

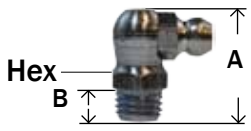
METRIC — 45° ANGLE



Part #	Size	A (mm)	B (mm)	Hex (mm)	Approx. Wt. Lbs.	
36-176	8MM x 1	21	3.7	9	0.02	----

#812 **8045** 2104 **ZM458** 5179

METRIC — 90° ANGLE

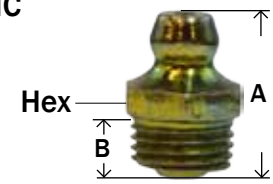


Part #	Size	A (mm)	B (mm)	Hex (mm)	Approx. Wt. Lbs.	
36-178	8MM x 1	18	3.7	9	0.02	----

#813 **8090** 2105 **ZM908** 5180

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

METRIC

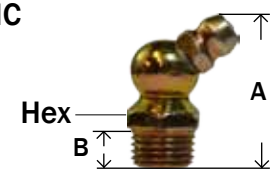


Part #	Size	A (mm)	B (mm)	Hex (mm)	Approx. Wt. Lbs.	
36-180	10MM x 1	16	3.7	11	0.02	----

• Diameter x pitch (extra fine)

#911 **9000** 2109 **ZM510** 5181

METRIC

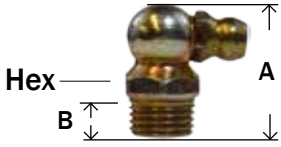


45° ANGLE

Part #	Size	A (mm)	B (mm)	Hex (mm)	Approx. Wt. Lbs.	
36-182	10MM x 1	21	3.7	11	0.02	----

#912 **9045** 2110 **ZM4510**

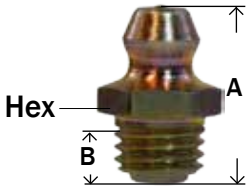
METRIC



90° ANGLE

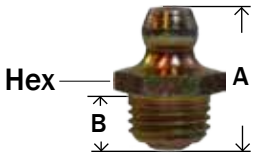
Part #	Size	A (mm)	B (mm)	Hex (mm)	Approx. Wt. Lbs.	
36-184	10MM x 1	18	3.7	11	0.02	----

#913 **9090** 2111 **ZM9010** 5183



Part #	Size	A	B	Hex	Approx. Wt. Lbs.	
36-186	5/16"-24	0.65	0.12	0.375	0.02	----

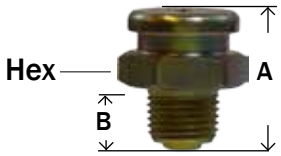
#711-B **1711** 2500



Part #	Size	A	B	Hex	Approx. Wt. Lbs.	
36-188	3/8"-24	0.65	0.14	0.437	0.01	----

#710-B **1710** 2600

BUTTON HEAD



Part #	Size	A	B	Hex	Approx. Wt. Lbs.	
36-200	1/8"-27 PTF	0.75	0.34	0.625	0.03	----
36-205	1/4"-18 NPT	0.83	0.44	0.625	0.03	----

1184 **1186**

WHIP HOSE - EXCEEDS SAE 100R1-AT - use with hand grease guns only

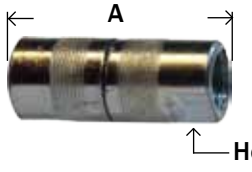
10,000 PSI Burst Pressure Rubber Hose

1/8" NPT Solid Base
3/16" ID
3,000 PSI Working pressure

Part #	Length	
36-210	12" RUBBER	----
36-212	18" RUBBER	----
36-214	24" RUBBER	----
36-216	36" RUBBER	----

4 JAW GREASE GUN COUPLER

Provides quick, positive, leakproof connection w/ grease fittings.



1/8" NPTF

Part #	A	Hex	Approx. Wt. Lbs.	
36-220	1.50	0.56	0.05	----

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

ADAPTERS FOR GREASE FITTINGS

ADAPTERS

• CARBON STEEL, ZINC COATED

NEW

Part #	Female	Male	L	H	Weight	
36-300	1/8"-27 NPTF	1/4-28" SAE-LT	.75	1/2	0.02	----
36301	1/8"-27 NPTF	1/4-28" SAE-LT	.87	1/2	0.02	----

Part #	Female English to Male English		L	H	Weight	
36-304	1/4"-28 UNF	M6 x 1.0	.43	9mm	0.01	----
36-305	1/4"-28 UNF	M8 x 1.0	.45	3/8	0.01	----
36-306	1/4"-28 UNF	M10 x 1.0	.32	7/16	0.01	----

EXTENSIONS

Part #	Female English to Male English		L	H	Weight	
36-307	1/4"-28 UNF	1/4"-28 SAE-LT	1.34	-	0.01	----
36-308	1/8"-27 NPTF	1/8"-27 NPTF	.75	1/2	0.02	----
36-309*	1/8"-27 NPTF	1/8"-27 NPTF	.82	1/2	0.02	----
36-310	1/8"-27 NPTF	1/8"-27 NPTF	.94	9/16	0.04	----
36-311	1/8"-27 NPTF	1/8"-27 NPTF	1.25	1/2	0.04	----

*BRASS PLATED

45° ANGLE ELBOWS

Part #	Female	Male	L	H	Weight	
36-360	1/8"-27 NPTF	1/4"-28 SAE-LT	.81	1/2	0.02	----
36-362	1/8"-27 NPTF	1/8"-27 PTF SAE Short	1.00	1/2	0.03	----

90° ANGLE ELBOWS

Part #	Female	Male	L	H	Weight	
36-370	1/8"-27 NPTF	1/4"-28 SAE-LT	.81	1/2	0.03	----
36-371	1/8"-27 NPTF	1/4"-28 SAE-LT	1.04	1/2	0.03	----
36-372	1/8"-27 NPTF	1/4"-18 PTF SAE Short	1.19	9/16	0.06	----
36-374	1/8"-27 NPTF	1/8"-27 PTF SAE Short	1.00	1/2	0.03	----
36-375	1/8"-27 NPTF	1/8"-27 NPTF	1.13	1/2	0.03	----
36-377	1/4"-18 NPTF	1/4"-18 NPTF	1.34	11/16	0.08	----
36-376	1/8"-27 NPTF	1/8"-27 NPTF	1.50	5/8	0.07	----
36-373	1/8"-27 PTF SPL Extra Short	1/8"-27 PTF SPL Extra Short	.82	1/2	0.03	----

COUPLING

Part #	Female	Female	L	H	Weight	
36-340	1/4"-28 UNF	1/8"-27 NPTF	.65	1/2	0.02	----

BULKHEAD CONNECTOR

Part #	Female	Male (Female)	L	H	Weight	
36-350	1/8"-27 NPTF	1/8"-27 NPSM (1/4"-28 UNF)	.88	1/2	0.03	----

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

SPECIALTY VALVES AND COCKS

DRAIN COCKS
PAGE 147-148

AIR VALVES

3, 4 AND 6 WAY
PAGE 153-154

NEEDLE
PAGE 150-151

MARINE & ANTI-SIPHON
PAGE 154

PANEL MOUNT BALL VALVES
PAGE 155

TRUCK
PAGE 152

MINI BALL
PAGE 155

SOLID BOTTOM SHUT-OFF
PAGE 152

CHECK
PAGE 156

SPRING BOTTOM SHUT-OFF
PAGE 149

MORE VALVES ON OUR WEBSITE

See our valve section for much, much more!

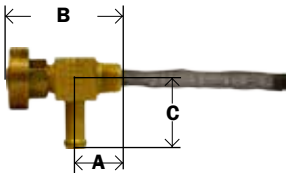
WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

DRAIN COCKS

- For use with low pressure air, water and fluids.
- Designed for a working pressure of 150 psi @ 250°.
- Hand-tightening provides a metal-to-metal seal.
- Not intended for natural gas, LPG, nuclear or aircraft applications.

Install on your tank for easy draining

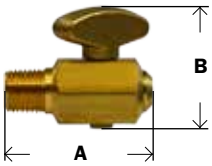
GASOLINE SHUT OFF w/ SCREEN FILTER



Part #	Barb X Male Pipe	A	B	C	Approx. Wt. Lbs.	
46-064	1/4" x 1/8"	0.55	1.34	0.66	0.06	----

827

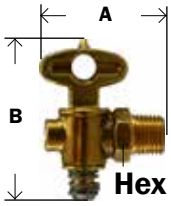
DRAIN COCK 150 PSI - Trunk Air Tank



Part #	Male Pipe	A	B	Approx. Wt. Lbs.	
46-066	1/4"	1.73	1.41	0.22	----

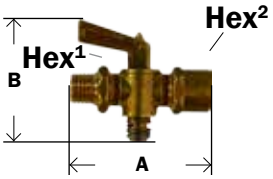
DCR601-4

TRUCK DRAIN - 125 P.S.I.G



Part #	Male Pipe	Industry Number	A	B	Hex	Approx. Wt. Lbs.	
46-067	1/8"		1.53	1.95	0.62	0.14	----
46-068	1/4"	W15310	1.53	1.95	0.62	0.18	----

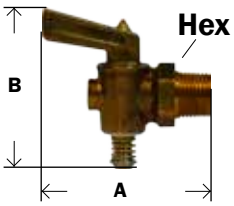
SHUT OFF - 150 P.S.I max.



Part #	Male Pipe x Female Pipe	Industry Number	A	B	Hex 1	Hex 2	Approx. Wt. Lbs.	
46-069	1/4"	W20332	1.96	1.96	0.75	0.62	0.20	----

#60HC **3380-A** 0903610 **367**

LEVER HANDLE



Part #	Male Pipe	Industry Number	A	B	Hex	Approx. Wt. Lbs.	
46-070	1/8"	M-41-P	1.99	1.80	0.62	0.04	----
46-071	1/4"	M-42-P	2.06	1.81	0.62	0.06	----
46-072	3/8"	M-43-P	2.30	2.29	0.81	0.08	----
46-073	1/2"	M-44-P	3.00	2.50	0.87	0.16	----

840 **41D** DC601

- 30 psi

*Valve is closed when handle is in the position of the picture

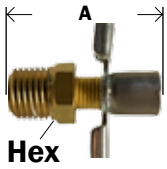
AIR TANK DRAIN PULL VALVE

Part #	Size	Description	
39595	1/4" male	5ft nylon coated pull cable	----
39596	1/4" male	4ft nylon coated pull cable	----
39597	1/4" male	3ft nylon coated pull cable	----
39600	1/4" male	Air valve only	----

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

DRAIN COCKS

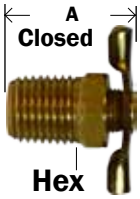
INTERNAL SEAT



Part #	Male Pipe	Industry Number	A	Hex	Approx. Wt. Lbs.	
46-079	1/8”	6783	1.45	0.55	0.02	----

DC602 **808** 400A **1800A**

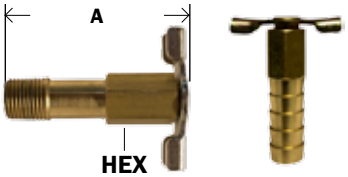
INTERNAL SEAT - Wing Nut Handle



Part #	Male Pipe	Industry Number	A	Hex	Approx. Wt. Lbs.	
46-074	1/8”	130	0.92	0.40	0.04	----
46-075	1/4”	140	0.94	0.56	0.06	----
46-077	3/8”	230	1.27	0.68	0.08	----

HB - 5/16 **803** 305A

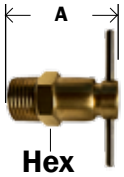
LONG INTERNAL SEAT



Part #	Size	Ind #	A	Hex	Approx. Wt. Lbs.	
46-078	1/8 MIP	1.85				----
46-076	3/8” Hose I.D.		1.65	0.43	0.02	----

809

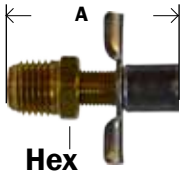
PIN HANDLE - Internal Seat



Part #	Male Pipe	Industry Number	A	Hex	Approx. Wt. Lbs.	
46-080	1/8”	M-200-P	1.22	0.50	0.04	----
46-081	1/4”	M-201-P	1.31	0.56	0.06	----
46-082	3/8”	M-202-P	1.53	0.68	0.12	----

DC603 **802**

EXTERNAL SEAT w/ SPOUT



Part #	Male Pipe	Industry Number	A	Hex	Approx. Wt. Lbs.	
46-084*	1/4”	6788	1.56	0.56	0.02	----

* Replaces GM # 511771 & Chrysler #836015

200A **239** DC606 **807**

BIBB VALVE

Part #	Male Pipe	Industry Number	A	B*	C	Approx. Wt. Lbs.	
46-088	1/8”	150	0.82	1.60	0.55	0.04	----
46-089	1/4”	120	0.89	1.59	0.54	0.06	----
46-089A	1/4”	6660	0.55	1.34	0.66	0.06	----

* With valve closed

804 **DC607** 2019 **201DH**

RADIATOR TYPE - External Seat

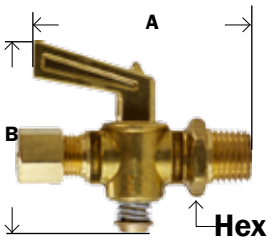
Part #	Male Pipe	Industry Number	Ind #	A	Hex	Approx. Wt. Lbs.	
46-085	1/8”	M-320-P	135	0.90	0.43	0.02	----
46-086	1/4”	M-321-P	145	1.00	0.56	0.04	----
46-087	3/8”	M-322-P	270	1.25	0.68	0.08	----
46-083	1/2”	108	108	1.48	0.87	0.12	----

320D **240** DC604 **801**

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

- Designed for working pressure of 30 PSI.
- Forged brass bodies and brass handles.
- Instantaneous off-on operation with 360⁰ rotation.
- Not good for gasoline.

COMPRESSION X MALE PIPE

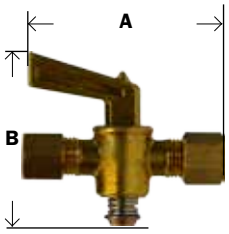


Part #	Comp X Male Pipe	Ind. #	A	B	Hex	Approx. Wt. Lbs.	
46-130	1/4" x 1/8"	27-C	1.87	1.81	0.51	0.14	----
46-131	1/4" x 1/4"	227-C	2.05	1.86	0.62	0.15	----
46-132	5/16" x 1/8"	29-C	2.05	1.90	0.50	0.16	----
46-134	3/8" x 1/4"	57-C	2.05	1.83	0.62	0.15	----

868 **V304C** 2068 **133C** VC206

COMPRESSION X COMPRESSION

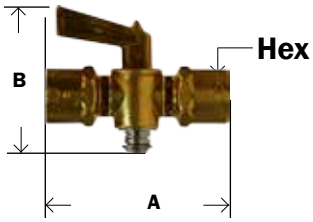
* See pg. 73-74 to order nut and sleeve separately.



Part #	Comp X Comp	Ind. #	A	B	Approx. Wt. Lbs.	
46-140	1/4"	28-C	1.82	1.84	0.12	----
46-141	5/16"	30-C	1.84	1.88	0.14	----
46-142	3/8"	58-C	1.87	1.80	0.14	----
46-143	1/2"	68-C	2.21	2.32	0.22	----

V3030F **2062** 134C

FEMALE X FEMALE PIPE

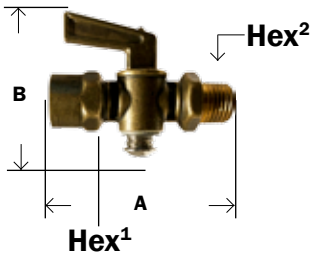


Part #	Female Pipe X Female Pipe	A	B	Hex	Approx. Wt. Lbs.	
46-151	1/8"	1.77	1.79	0.56	0.12	----
46-152	1/4"	2.28	1.82	0.69	0.20	----
46-152T*	1/4"	2.28	2.00	0.68	0.20	----
46-153	3/8"	2.44	2.28	0.81	0.30	----

* 150 PSI

V403P **132C** 875

MALE PIPE X FEMALE

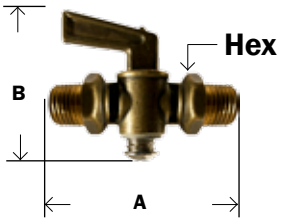


Part #	Male Pipe X Female Pipe	Ind. #	A	B	Hex 1	Hex 2	Approx. Wt. Lbs.	
46-160	1/8"	48-P	2.03	1.84	0.50	0.56	0.14	----
46-161	1/4"	49-P	2.26	1.79	0.69	0.69	0.18	----
46-161T*	1/4"		2.26	1.98	0.69	0.69	0.20	----
46-162	3/8"	50-P	2.33	2.28	0.82	0.82	0.28	----

* 150 PSI

880 **V402P** 130C

MALE PIPE X MALE PIPE



Part #	Male Pipe X Male Pipe	Ind. #	A	B	Hex	Approx. Wt. Lbs.	
46-165	1/8"	76-P	2.15	1.80	0.69	0.12	----
46-166	1/4"	77-P	2.22	1.84	0.70	0.17	----
46-166T*	1/4"		2.23	2.00	0.68	0.18	----
46-167	3/8"	78-P	2.43	2.24	0.82	0.22	----

* 150 PSI

1V401P **890**

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

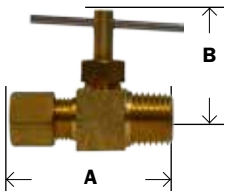
NEEDLE VALVES

THESE ARE NOT LEAD FREE SEE PAGES 169-182 FOR LEAD FREE PRODUCTS

Made with either pin handle or pressed on handle.
Please specify if you have a preference.

- Used on instrumentation, hydraulic, and pneumatic systems.
- Designed for a maximum working pressure of 150 PSI.
- Provided with steel handles and metal-to-metal seats with fine-thread screwdown.
- Not designed for natural gas, LPG, nuclear or aircraft applications.
- Always install with pressure against the seat.

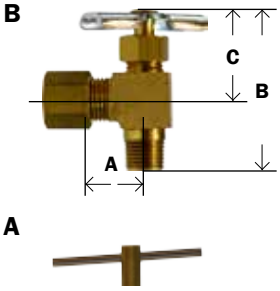
COMP X MALE PIPE



Part #	Comp X Male Pipe	Ind. #	A	B	Approx. Wt. Lbs.	
46-002	1/4" x 1/8"	**M-101-C**	1.29	1.12	0.07	----
46-003	1/4" x 1/4"	**M-101-C**	1.27	1.14	0.10	----

NV106C **2205** 820 **3068**

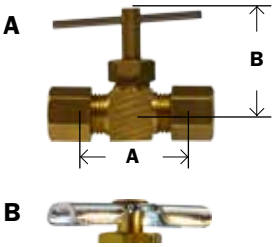
COMP X MALE PIPE-ANGLE



Part #	Comp X Male Pipe	Handle	Ind. #	A	B	C	Approx. Wt. Lbs.	
46-011	1/4" x 1/8"	A	**M-103-C**	0.56	1.48	0.93	0.08	----
46-011X	Heavy Pattern	B	**M-103-C**	0.53	1.53	0.83	0.08	----
46-012	1/4" x 1/4"	B	**M-104-C**	0.62	1.67	0.90	0.13	----
46-013	5/16" x 1/8"	B	**M-104-C**	0.63	1.63	0.95	0.10	----
46-016	3/8" x 1/4"	A	**M-303-C**	0.65	1.71	0.92	0.16	----

NV104C **2203** 821 **3069**

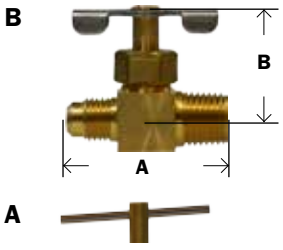
COMP X COMP



Part #	Comp X Comp	Handle	Ind. #	A	B	Approx. Wt. Lbs.	
46-020	3/16"	B	**M-105-C**	1.06	0.88	0.08	----
46-021	1/4"	A	**M-106-C**	1.17	1.12	0.10	----
46-022	5/16"	A	**M-107-C**	1.22	1.08	0.12	----
46-023	3/8"	B	**M-113-C**	1.31	1.15	0.13	----

NV105C **3062** 2201 **822**

FLARE X MALE PIPE

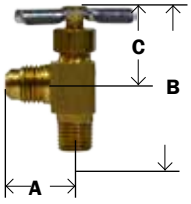


Part #	Male Flare X Male Pipe	Handle	Ind. #	A	B	Approx. Wt. Lbs.	
46-028	1/4" x 1/8"	A	**M-104-SAE**	1.35	1.12	0.07	----
46-029	1/4" x 1/4"	B	**M-1040-SAE**	1.38	0.88	0.09	----
46-031	3/8" x 1/4"	B	**M-108-SAE**	1.73	1.22	0.18	----

NV103F **2405** 823 **3048**

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

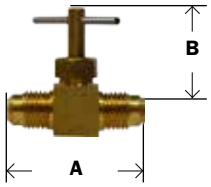
FLARE X MALE PIPE



Part #	Male Flare X Male Pipe	Ind. #	A	B	C	Approx. Wt. Lbs.	
46-036	1/4" x 1/8"	M-103-SAE	0.68	1.54	0.86	0.08	----
46-038	5/16" x 1/8"	M-203-SAE	0.88	1.59	0.94	0.11	----
46-039	5/16" x 1/4"	M-204-SAE	0.90	1.94	1.00	0.14	----
46-040	3/8" x 1/4"	M-303-SAE	0.95	1.86	0.90	0.17	----

NV101F **2403** 824 **3049**

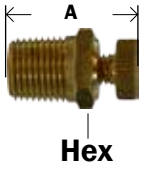
FLARE X FLARE



Part #	Male Flare X Male Flare	Ind. #	A	B	Approx. Wt. Lbs.	
46-045	1/4"	M-110-SAE	1.48	1.20	0.18	----
46-046	3/8"	M-115-SAE	1.79	1.19	0.20	----

NV102F **3042** 825 **2401**

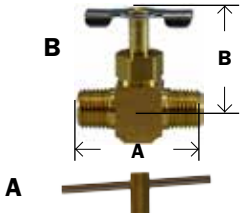
MULTI-PURPOSE AIR VENT



Part #	Male Pipe	A	Hex	Approx. Wt. Lbs.	
46-048	1/8"	0.78	0.43	0.02	----

705

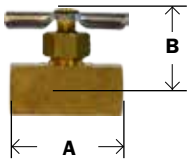
MALE PIPE TO MALE PIPE



Part #	Male Pipe X Male Pipe	Handle	Ind. #	A	B	Approx. Wt. Lbs.	
46-050	1/8"	A	M-108-P	1.25	1.09	0.08	----
46-051	1/4"	B	M-110-P	1.69	1.00	0.16	----

NV107P **2301** 826 **3122**

FEMALE PIPE X FEMALE PIPE

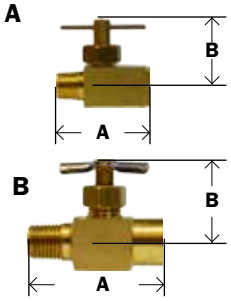


Part #	Female Pipe X Female Pipe	Ind. #	A	B	Approx. Wt. Lbs.	
46-055*	1/8"	M-304-P	1.18	0.84	0.18	----
46-056	1/4"	M-3044-P	1.60	1.24	0.21	----
46-056P*	1/4" Heavy	M-3044-P	1.62	2.53	0.20	----

* Pressed on handle

6800 **NV109P** 2304 **817** 3103

MALE X FEMALE PIPE



NBR seals -30°C to 120°C

Part #	Male Pipe X Female Pipe	Handle	Ind. #	A	B	Approx. Wt. Lbs.	
46-060	1/8"	A	M-305-P	1.18	1.09	0.10	----
46-061	1/4'	A	M-3055-P	1.60	1.14	0.18	----
46-061L	1/4" Light Pattern	B	M-3055-P	1.88	1.09	0.21	----

NV108P **2305** 818 **3120**

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

BRASS TRUCK VALVES

- Used in heavy duty truck, trailer and mobile markets.
- Used on water, oil and coolant lines.
- Forged brass construction with steel handle.
- Temperature range -40° - 250°
- Max pressure 250 psi
- Metal to metal seats for high heat/fluid compatibility
- Fine thread screw down to afford flow control ability and a positive seal.
- Not intended for natural gas, LPG, Nuclear or aircraft applications

200 PSI

BARB TO MALE PIPE

Part #	Size	
46-450	3/8 x 3/8	----
46-451	5/8 x 3/8	----
46-455	5/8 x 1/2	----
46-457	3/4 x 3/8	----
46-456	3/4 x 1/2	----

404V

FEMALE TO MALE PIPE

Part #	Size	
46-465	3/8 x 3/8	----
46-466	3/8 x 1/2	----
46-467	1/2 x 1/2	----

405V

FLARE TO MALE PIPE

Part #	Size	
46-475	1/2 x 1/2	----
46-476	5/8 x 1/2	----

409V

MIP X FLARE

Part #	Size	
46-485	1/2 x 5/8	----

SOLID BOTTOM VALVES

- Designed for instantaneous on-off operation.
- 360^0 rotation standard.
- 30 PSI
- Packed with grease.

8875

O-RING SEALED MIP X FIP

Part #	Size	
46-400	1/8	----
46-401	1/4	----
46-402	3/8	----

1035D **M-70-SBV**

- Good for Propane

#M-72-SBV

FIP x FIP

Part #	Size	
46-411	1/4	----

SOLID BOTTOM FUEL VALVES

- Approved for use on Motorcraft fuel lines.
- Pointer lever.
- 90^0 turn stop mechanism to assure positive location of the on and off positions.
- Corrosion proofed internal construction assures maximum salt atmosphere protection.
- Port hole is 1/4 (.250) diameter.
- UL listed for use in fuel oils no. 1 & no. 2, LP gas and utility gas.

PIPE MALE X FEMALE

Part #	Size	
46-400M	1/8 x 1/8	----
46-401M	1/4 x 1/4	----
46-402M	3/8 x 3/8	----

8980

PIPE

MALE x MALE

Part #	Size	
46-406M	1/4 x 1/4	----

8990

- Good for Propane

FEMALE X FEMALE

Part #	Size	
46-411M	1/4 x 1/4	----

8975

MALE PIPE X FLARE

Part #	Size	
46-429M	1/4 x 3/8	----
46-430M	3/8 x 3/8	----

8948

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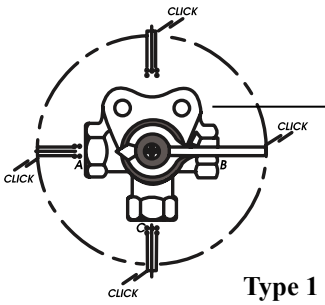
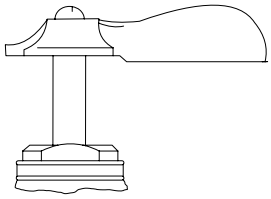
GROUND PLUG SHUT-OFF COCKS

NON-LUBRICATED PLUG VALVES are designed to operate in systems where INSTANTANEOUS PORT SELECTION is desired. Since LUBRICANTS ARE NOT USED, relubrication is not required. There is no lubricant to freeze and lock the valve or to contaminate fine fluids. The O-RING SEALED CAP and STEM eliminate leakage to atmosphere. The mating BRASS BODY and CELCON PLUG produce a fine seal that WILL NOT SEIZE OR GALL.

Designed for PANEL or BRACKET MOUNTING. They are generally recommended for operation in GASOLINE, OIL, AIR, WATER and DETERGENT systems from minus 40^0 to 180^{0}F, at a maximum operating pressure of 30 p.s.i.g. The fluid port size is 9/32 (.281) diameter for 1/8 and 1/4 sizes, 5/16 (.312) diameter for the 3/8 size. **(Consult factory for applications requiring a higher pressure).**

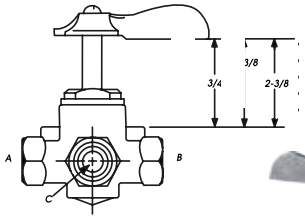


Bracket Mount


PANEL MOUNTING AVAILABLE

Type 1 (Standard)
A pronounced "click" may be felt at each position.

THREE-WAY VALVES (Side Outlet)



- 1-3/8" Stem
- Side Outlet
- Bracket Mounting
- O-Ring Sealed
- 4-way celcon roter standard

LESS CLICK

Part #	A-B-C Female Pipe Thread	Length of Stem	
46-247	1/4	1-3/8"	----
46-248	3/8	1-3/8"	----

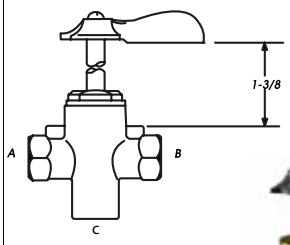
M-108-MID WITH CLICK 360^0

Part #	A-B-C Female Pipe Thread	Length of Stem	
46-250	1/8	1-3/8"	----
46-251	1/4	1-3/8"	----
46-252	3/8	1-3/8"	----

V406P 6749

Openings:
Handle Pointer over A.....Valve Open A-C
Handle Pointer over C.....Valve Open B-C
Handle Pointer over B.....Valve "OFF"
Handle Pointer over Bracket.....Valve "OFF"

THREE-WAY VALVES (Bottom Outlet)



- 1-3/8" Stem
- Side Outlet
- Bracket Mounting
- O-Ring Sealed
- 4-way celcon roter standard

LESS CLICK

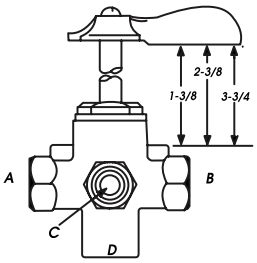
Part #	A-B-C Female Pipe Thread	Length of Stem	
46-241	1/4	1-3/8"	----

WITH CLICK 360^0

Part #	A-B-C Female Pipe Thread	Length of Stem	
46-243	1/8	1-3/8"	----
46-244	1/4	1-3/8"	----

Openings:
Handle *Pointer* over A.....Valve Open A-C
Handle *Pointer* over B.....Valve Open B-C
Handle *Pointer* over Bracket.....Valve "OFF"

FOUR-WAY VALVES



- Side Outlet
- Bracket Mounting
- O-Ring Sealed
- 4-way celcon roter standard

LESS CLICK

Part #	A-B-C-D Female Pipe Thread	Length of Stem	
46-257	1/4	1-3/8"	----

M-114-MID WITH CLICK (360^0)

Part #	A-B-C-D Female Pipe Thread	Length of Stem	
46-255	1/4	1-3/8"	----
46-256	3/8	1-3/8"	----

WITH 2-3/8" LONG STEM M-115-MID

Part #	A-B-C-D Female Pipe Thread	Length of Stem	
46-260	1/4	2-3/8"	----

V407P

Openings:
Handle *Pointer* over A.....Valve Open A-D
Handle *Pointer* over C.....Valve Open C-D
Handle *Pointer* over B.....Valve Open B-D
Handle *Pointer* over Bracket.....Valve "OFF"

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

MARINE FITTINGS

• Calibrated to support 30" column of gasoline.

BRASS ANTI-SIPHON VALVES

MALE X MALE

Part #	Size	
46-520	1/4 x 1/4	----
46-521	3/8 x 3/8	----
46-522	1/2 x 1/2	----

ALUMINUM

Part #	Size	
46-520A	1/4 x 1/4	----
46-521A	3/8 x 3/8	----

• Flo direction <-

BRASS ANTI-SIPHON VALVES

BARB X NPT

Part #	Size	
46-529	1/4 x 1/4	----
46-530	5/16 x 1/4	----
46-531	3/8 x 1/4	----
46-532	3/8 x 3/8	----
46-533	1/2 x 3/8	----

ALUMINUM

Part #	Size	
46-530A	5/16 x 1/4	----
46-531A	3/8 x 1/4	----
46-532A	3/8 x 3/8	----
46-533A	1/2 x 3/8	----

MINI BALL VALVE - BRASS W/ SS HANDLE AND NUT

Part #	Barb x MIP	
46-986	5/6 x 1/4	----
46-987	3/8 x 1/4	----
46-988	3/8 x 3/8	----
46-989	1/2 x 1/2	----

• NBR O-Ring
• Working temp 180°F
• 3,000 PSI
• Brass or Aluminum
• #316 Ball & Spring

MALE MIP X FEMALE FIP BRASS

Part #	Size	
46-523	1/4	----
46-524	3/8	----

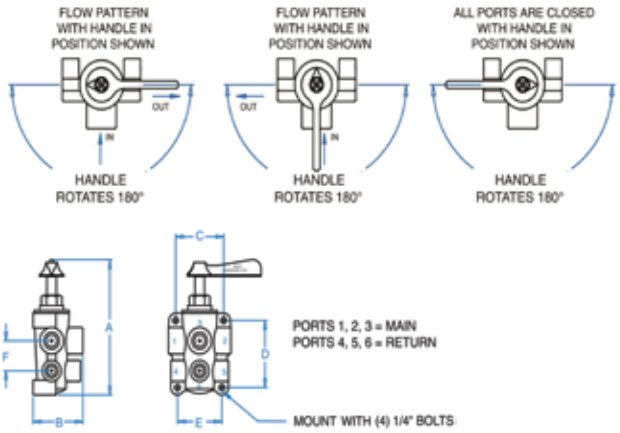
ALUMINUM

Part #	Size	
46-523A	1/4	----
46-524A	3/8	----

FLARE X MIP - BRASS

Part #	Size	
46-526	3/8 x 1/4	----

SIX PORT VALVES



Six port fuel valves are used where 2 tanks supply a single engine, and a return to each supply tank is required.

ABYC H33.9.2 states that fuel system valves must have an independent means of support, so in-line valves are not suitable for fuel system applications

Part #	Ind. #	Female Pipe Thread of 1-2-3 4-5-6	Stem	Length Type	
46-237	SK-1036	1/2 x 3/8	13/16	1	----

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

BRASS MINIATURE BALL VALVES

- Working Pressure up to 1000 P.S.I.G.
- ASTM B-16 Corrosion Resistant Brass Body.
- Non-Adjusting Viton O-Ring Stem Seal Design Never Needs Tightening.
- Highly Inert Teflon Seats.
- Long Life Nickel Plated Brass Ball.
- Blow-Out Proof Stem for Safety.
- Temperature: -40°F to 300°F
- 1/4 Turn Instantaneous On-Off Operation.
- Quarter Turn Handle Design.
- Water, Oil, and Air Pressure Systems.
- Ideal for tight, confined areas, or when routing aesthetics are desired. Applications include instrumentation, gas sampling systems, high pressure gauges, test stands, hydraulic and pneumatic service lines on capital equipment.
- Not good for steam.
- Good for propane, gas and diesel.

MALE X FEMALE

Part #	Size	
46-900	1/8 x 1/8	----
46-903	1/4 x 1/4	----

MALE X MALE

Part #	Size	
46-910	1/8 x 1/8	----
46-912	1/4 x 1/4	----

MALE PIPE X HOSE BARB

Part #	Size	
47-042	1/8 x 1/4	----
46-980	1/4 x 1/4	----
46-981	1/4 x 3/8	----

FEMALE X FEMALE

Part #	Size	
46-920	1/8 x 1/8	----
46-921	1/8 x 1/4	----
46-922	1/4 x 1/4	----

Part #	Size	
46-922A	1/4 x 1/4	----
46-923	3/8 x 3/8	----

Part #	Size	
46-924	1/2 x 1/2	----
46-925	3/4 x 3/4	----

U.L. TWO WAY VALVES

- Buna-N Seal, Teflon Seat Plated metal handle, plated brass ball.
- 250 PSI Working Pressure

U.L. TWO WAY VALVES FNPT X FNPT

Part #	Size	
46-440	1/4 x 1/4	----

U.L. TWO WAY VALVES MNPT X FNPT

Part #	Size	
46-443	1/4 x 1/4	----

PANEL MOUNT BRASS BALL VALVES

- Working pressure: 1500 psi wog for 1/8" to 1/4", 1000 psi wog for 3/8" to 1/2"
- Vacuum rating: 29.92" Hg
- Working temp: -40°F to +300°F
- Panel mount hole is 9/16" Dia.
- Brass body cap, PTFE ball seats, Viton stem sealing, Brass chrome plated ball

FEMALE X FEMALE

Part #	Size	
46-830	1/8 x 1/8	----
46-832	1/4 x 1/4	----
46-833	3/8 x 3/8	----
46-834	1/2 x 1/2	----

FEMALE X FEMALE

Part #	Size	
46-875	1/8 x 1/8	----
46-878	1/4 x 1/4	----

Part #	Size	
46-951	1/8 FPT	----
46-956	1/4 FPT	----

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

CHECK VALVES

BRASS CHECK VALVES

- 500 PSI
- 180° temp rating
- 1 PSI Cracking Pressure
- Buna-N Seal for water, air and inert gas
- **Viton Seal for oil, gas and diesel fuel**

FIP X FIP BUNA-N

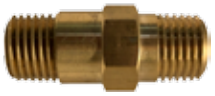
Part #	Size	
46-560	1/8"	----
46-561	1/4"	----
46-562	3/8"	----
46-563	1/2"	----
46-564	3/4"	----

FIP X FIP VITON

Part #	Size	
46-560V	1/8"	----
46-561V	1/4"	----
46-562V	3/8"	----
46-563V	1/2"	----
46-564V	3/4"	----

FEMALE X MALE BUNA-N

Part #	Size	
46-565	1/8"	----
46-566	1/4"	----
46-567	3/8"	----
46-568	1/2"	----
46-569	3/4"	----



MALE X MALE

Part #	Size	
46-570	1/8"	----
46-571	1/4"	----
46-572	3/8"	----
46-573	1/2"	----

MALE X FEMALE

Part #	Size	
46-575	1/8"	----
46-576	1/4"	----
46-577	3/8"	----
46-578	1/2"	----

HIGH PRESSURE CHECK VALVES

MAX. 2500 PSI
Cracking Pressure 1 PSI

- Opening diameter .187
- 180⁰ max operating temp.
- •SS ball and spring

CV = 0.4

MNPT X MNPT

Part #	Size	Opening Dia.	
46-500	1/4 x 1/4	0.187	----

MAX. 2500 PSI

- Flo direction ->
- Opening diameter .187
- 180⁰ max operating temp.
- Buna Seal
- •SS ball and spring

MNPT X FNPT

Part #	Size	Opening Dia.	
46-505	1/4 x 1/4	0.187	----

MAX. 1200 PSI

- O-Ring poppet seal Bubble tight operation
- 180°F max operating temp.

FNPT X FNPT

Part #	Size	Opening Dia.	
46-510	1/4 x 1/4	0.25	----
46-511	3/8 x 3/8	0.375	----
46-512	1/2 x 1/2	0.437	----

PNEUMATIC CHECK VALVES

- Max Operating Pressure: 220 psi
- Working Pressure: 14.5-145 psi
- Cracking Pressure: 2.8 psi
- Maximum Temperatures: 140° F

Body	Chrome plated Brass
Spring	Steel
O-Ring	NBR Rubber

NPT- Inlet NPSM - Outlet

Part #	Size	Dimensions (In.) A	Dimensions (In.) B	
46-200	1/4	1.97	0.67	----
46-201	3/8	1.97	0.83	----
46-202	1/2	2.48	0.98	----

HIGH PRESSURE CHECK VALVES

- Operates in any position, and is available in mixed or matched end combinations.
- Standard cracking pressure 1 p.s.i with a maximum operating pressure of 3000 p.s.i. and a maximum operating temperature of 180°F using Buna-N seals.
- Buna-N seals standard, other seals available.
- Guided 316 stainless steel ball + spring.
- Fixed ringed seat prevents extrusion of seal.
- Opening diameter .28
- Approximate CV 1.2
- Brass
- Water G.P.M. @ 10 p.s.i. is 4.0
- Good for air

FEMALE X FEMALE

Part #	Size	
46-513	1/4	----
46-517	3/8	----

FEMALE X MALE

Part #	Size	
46-514	1/4	----
46-518	3/8	----

MALE X FEMALE

Part #	Size	
46-516	1/4	----
46-539	3/8	----

MALE X MALE

Part #	Size	
46-515	1/4	----
46-519	3/8	----

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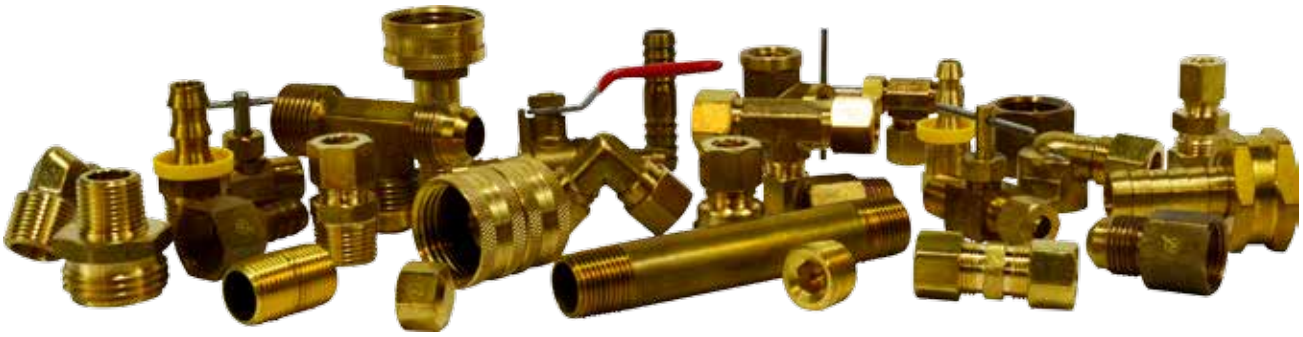
LEAD FREE



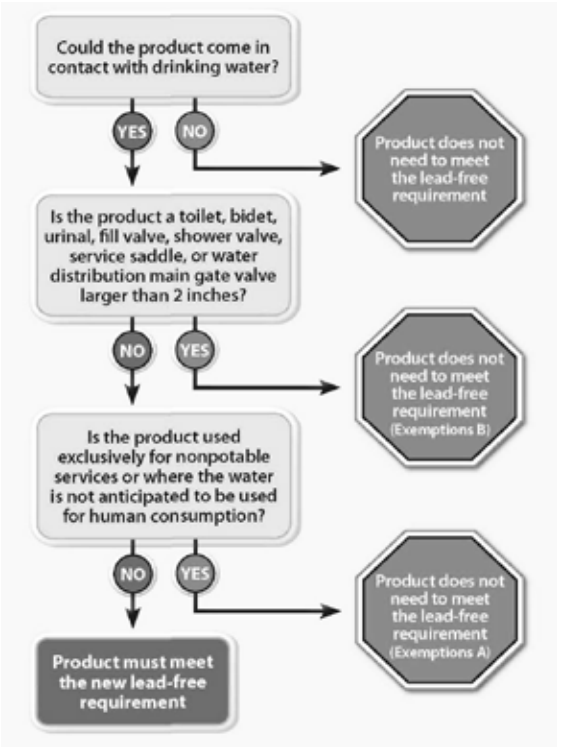
What is the new lead-free requirement?

In 2011, the Reduction of Lead in Drinking Water Act was signed into law. The Act has reduced the lead content allowed in drinking water system and plumbing materials by changing the definition of "lead-free" in Section 1417of the Safe Drinking Water Act.

*The term "lead-free" has been updated from notmore that 8% lead content to mean "**not more than a weighted average of 0.25% lead when used with respect to the wetted surfaces of pipes, pipe fittings, plumbing fittings and fixtures.**"*

How do I know which products must meet the new lead-free requirement?

The prohibitions on use and introduction into commerce apply to all pipe, pipe fittings, plumbing fittings, and fixtures (henceforth reffered to as "products"), including stocked inventories that have not been installed. This includes coated or uncoated brass or bronze materials. By using the flowchart below as a guide, you can determine if a product must meet the new lead-free requirement:



Lead-Free Requirement Exemptions

(A) The new requirement does not apply to pipes, pipe fittings, plumbing fittings, or fixtures, including backflow preventers, that are used exclusively for nonpotable service such as manufacturing, industrial processing, irrigation, outdoor watering or any other uses where the water is not anticipated to be used for human consumption.

(B) The new requirement does not apply to toilets, bidets, urinals, fill valves, flushometer valves, tub fillers, shower valves, service saddles or water distribution main gate valves 2 inches in diameter or larger.

LEAD FREE

90⁰ FORGED FEMALE ELBOW

Part #		Thread size NPTF	Part #	
28-009LF	----	1/8"	28-001LF	----
28-010LF	----	1/4"	28-002LF	----
28-011LF	----	3/8”	28-003LF	----
28-012LF	----	1/2”	28-004LF	----
28-013LF	----	3/4”	28-005LF	----

UNION FORGED TEE

Part #		Thread size NPTF	Part #	
28-032LF	----	1/8"	28-024LF	----
28-033LF	----	1/4"	28-025LF	----
28-034LF	----	3/8”	28-026LF	----
28-035LF	----	1/2”	28-027LF	----
28-036LF	----	3/4”	28-028LF	----

90⁰ STREET ELBOW

Part #		Thread size NPTF	Part #	
28-165LF	----	1/8”	28-156LF	----
28-166LF	----	1/4”	28-157LF	----
28-167LF	----	3/8"	28-158LF	----
28-168LF	----	1/2”	28-159LF	----
28-169LF	----	3/4"	28-160LF	----

COUPLING

Part #	Thread size NPTF	
28-058LF	1/8"	----
28-059LF	1/4”	----
28-060LF	3/8"	----
28-061LF	1/2”	----

REDUCING COUPLING

	Part #	Thread size NPTF	
NEW	28-181LF	1/4" x 1/8"	----
NEW	28-182LF	3/8" x 1/8"	----
	28-183LF	3/8" x 1/4"	----
NEW	28-180LF	1/2" x 1/8"	----
	28-185LF	1/2” x 3/8”	----
NEW	28-188LF	3/4" x 3/8"	----
	28-189LF	3/4” x 1/2”	----

HEX BUSHING

Part #	Thread size NPTF MxF	
28-102LF	1/4” x 1/8”	----
28-103LF	3/8" x 1/8"	----
28-104LF	3/8” x 1/4”	----
28-105LF	1/2" x 1/8"	----
28-106LF	1/2” x 1/4”	----
28-107LF	1/2” x 3/8”	----
28-108LF	3/4" x 1/8"	----
28-109LF	3/4" x 1/4"	----
28-110LF	3/4" x 3/8"	----
28-111LF	3/4” x 1/2”	----
28-119LF	1 x 1/8	----
28-112LF	1 x 1/4	----
28-114LF	1 x 1/2	----
28-115LF	1" x 3/4"	----

FACE BUSHING

Part #	Thread size NPTF MxF	
28-121LF	1/4” x 1/8”	----
28-122LF	3/8" x 1/8"	----
28-116LF	3/8” x 1/4”	----
28-128LF	1/2” x 1/4”	----
28-117LF	1/2” x 3/8”	----
28-129LF	3/4" x 1/4"	----
28-130LF	3/4" x 3/8"	----
28-118LF	3/4" x 1/2"	----

HEX CAP

	Part #	Thread size NPTF	
	28-075LF	1/8"	----
	28-076LF	1/4"	----
	28-077LF	3/8”	----
	28-078LF	1/2"	----
	28-079LF	3/4”	----
NEW	28-080LF	1"	

SQUARE HEAD PLUG

Part #	Thread size NPTF	
28-084LF	1/8"	----
28-085LF	1/4"	----
28-086LF	3/8"	----
28-087LF	1/2"	----
28-088LF	3/4”	----

COUNTERSUNK HEX PLUG

Part #	Thread size NPTF	
28-093LF	1/8"	----
28-094LF	1/4"	----
28-095LF	3/8”	----
28-096LF	1/2”	----
28-097LF	3/4"	----
28-098LF	1"	----

CORED HEX PLUGS

	Part #	Thread size NPTF	
	28-201LF	1/8”	----
	28-202LF	1/4”	----
NEW	28-203LF	3/8"	----
	28-204LF	1/2"	----

CLOSE NIPPLE

Part #	Thread size NPTF	
28-131LF	1/8"	----
28-132LF	1/4”	----
28-133LF	3/8”	----
28-134LF	1/2”	----
28-135LF	3/4”	----

LONG NIPPLE

Part #	Thread size NPTF	
28-141LF	1/8" x 2"	----
28-144LF	1/4" x 1-1/2"	----
28-145LF	1/4" x 2"	----
28-147LF	1/4" x 3"	----
28-148LF	3/8” x 1-1/2"	----
28-149LF	3/8" x 2"	----

HEX NIPPLE

	Part #	Thread size NPTF	
	28-211LF	1/8"	----
	28-212LF	1/4”	----
NEW	28-220LF	1/4" x 1/8"	----
	28-213LF	3/8"	----
	28-222LF	3/8" x 1/4"	----
	28-214LF	1/2”	----
	28-224LF	1/2" x 3/8"	----
	28-215LF	3/4"	----
	28-225LF	3/4" x 1/2"	----

MALE BRANCH TEE

	Part #	Thread size NPTF	
	28-283LF	3/8”	----
NEW	28-284LF	1/2"	

EXTENDER ADAPTER

	Part #	Thread size NPTF FxM	
NEW	28-190LF	1/8" x 1/8"	----
	28-191LF	1/4” x 1/8”	----
	28-192LF	1/4" x 1/4"	----
	28-193LF	3/8" x 1/4"	----
NEW	28-194LF	3/8" x 3/8"	----
NEW	28-199LF	1/2" x 1/4"	----
	28-195LF	1/2" x 3/8"	----
	28-196LF	1/2” x 1/2”	----
NEW	28-207LF	3/4" x 3/8"	----
	28-208LF	3/4" x 1/2"	----

STREET TEE/ SERVICE TEE

NEW

Part #	Thread size NPTF	
28-245LF	1/8"	----
28-246LF	1/4"	----
28-247LF	3/8"	----
28-248LF	1/2"	----

HOSE BARBS

RIGID MALE ADAPTER

	Part #	Hose I.D. x Male NPTF	
	32-001LF	1/8" x 1/8"	----
	32-027LF	1/8" x 1/4"	----
	32-002LF	3/16” x 1/8”	----
	32-003LF	3/16" x 1/4"	----
	32-004LF	1/4” x 1/8”	----
	32-005LF	1/4” x 1/4”	----
	32-006LF	1/4" x 3/8"	----
	32-007LF	1/4" x 1/2"	----
NEW	32-954LF	1/4" x 3/4"	----
	32-008LF	5/16” x 1/8”	----
	32-009LF	5/16” x 1/4”	----
	32-010LF	5/16" x 3/8"	----
	32-011LF	3/8” x 1/8”	----
	32-012LF	3/8” x 1/4”	----
	32-013LF	3/8” x 3/8”	----
	32-014LF	3/8” x 1/2”	----
	32-026LF	3/8" x 3/4"	----
	32-015LF	1/2” x 1/4”	----
	32-016LF	1/2” x 3/8”	----
	32-017LF	1/2” x 1/2”	----
	32-018LF	1/2" x 3/4"	----
	32-019LF	5/8" x 3/8"	----
	32-020LF	5/8” x 1/2”	----
	32-021LF	5/8" x 3/4"	----
	32-306LF	3/4" x 3/8"	----
	32-022LF	3/4” x 1/2”	----
	32-023LF	3/4” x 3/4”	----
	32-024LF	1" x 3/4"	----
	32-025LF	1" x 1"	----

MENDER/ SPLICER

Part #	Hose I.D. x Hose I.D.	
32-091LF	1/8"	----
32-092LF	3/16"	----
32-093LF	1/4”	----
32-094LF	5/16"	----
32-095LF	3/8"	----
32-096LF	1/2”	----
32-097LF	5/8"	----
32-098LF	3/4"	----

RIGID FEMALE ADAPTER

	Part #	Hose I.D. x Female NPTF	
	32-050LF	1/8" x 1/8"	----
	32-317LF	1/8" x 1/4"	----
NEW	32-062LF	3/16" x 1/4"	----
	32-052LF	1/4" x 1/8"	----
	32-053LF	1/4" x 1/4"	----
	32-054LF	1/4" x 3/8"	----
	32-055LF	5/16" x 1/8"	----
	32-056LF	5/16" x 1/4"	----
	32-057LF	3/8" x 1/8"	----
	32-058LF	3/8" x 1/4"	----
	32-059LF	3/8" x 3/8"	----
	32-063LF	3/8" x 1/2"	----
	32-064LF	1/2" x 1/4"	----
	32-060LF	1/2" x 3/8"	----
	32-061LF	1/2" x 1/2"	----
	32-065LF	3/4" x 3/4"	----

FORGED HOSE BARB 90° ELBOW

Part #	Hose I.D. x Male NPTF	
32-038LF	1/4" x 1/8"	----
32-039LF	1/4" x 1/4"	----
32-309LF	1/4" x 3/8"	----
32-036LF	5/16" x 1/8"	----
32-040LF	5/16" x 1/4"	----
32-046LF	3/8" x 1/8"	----
32-041LF	3/8" x 1/4"	----
32-042LF	3/8" x 3/8"	----
32-047LF	3/8" x 1/2"	----
32-048LF	1/2" x 1/4"	----
32-043LF	1/2" x 3/8"	----
32-311LF	1/2" x 1/2"	----
32-313LF	3/4" x 1/2"	----

HOSE BARB TEES

Part #	Hose Barb Size	
32-365LF	1/4"	----
32-126LF	3/8"	----

FEMALE 45° FLARE SWIVEL

Part #		
32-105LF	3/8" x 3/8"	----

LEAD FREE MINI BALL VALVES BARB x BARB

Part #	H.B. x H.B.	
944-142LF	1/4"	----
944-134LF	3/8"	----

PUSH-ON

MALE ADAPTER

Part #	Hose I.D. x Male NPTF	
30-200LF	1/4" x 1/8"	----
30-201LF	1/4" x 1/4"	----
30-203LF	3/8" x 1/4"	----
30-204LF	3/8" x 3/8"	----
30-206LF	1/2" x 3/8"	----
30-207LF	1/2" x 1/2"	----

SAE/JIC DUAL 45°/37° FEMALE SWIVEL

Part #	Hose I.D. x Female 45°/37°	
30-230LF	1/4" x 1/4"	----

GARDEN HOSE

SWIVEL - FGH X FGH

• WASHER INCLUDED

Part #	FGH X FGH	
30-011LF	3/4" x 3/4"	----

SWIVEL - FGH X FEMALE PIPE

NEW

• WASHER INCLUDED

Part #	FGH x Female NPTF	
30-001LF	3/4" x 1/2"	----
30-006LF	3/4" x 3/4"	----

RIGID - FGH X FEMALE PIPE

• WASHER INCLUDED

NEW

Part #	FGH x Female NPTF	
30-083LF	3/4" x 3/4"	----

SWIVEL - FGH X MALE PIPE

• WASHER INCLUDED

Part #	FGH x Male NPTF	
30-047LF	3/4" x 1/4"	----
NEW 30-048LF	3/4" x 3/8"	----
30-049LF	3/4" x 1/2"	----

RIGID - FGH X MALE PIPE

• WASHER INCLUDED

NEW

Part #	FGH x Male NPTF	
30-088LF	3/4" x 1/2"(1/2"SWT)**	----
30-094LF	3/4" x 3/4"(1/2" FIP)	----

RIGID - MGH X FEMALE PIPE

Part #	MGH X Female NPTF	
NEW 30-066LF	3/4" x 1/4"	----
NEW 30-068LF	3/4" x 1/2"	----
30-073LF	3/4" x 3/4"	----

RIGID - MGH X MALE PIPE

Part #	MGH X Male NPTF	
30-052LF	3/4" x 1/4"	----
NEW 30-053LF	3/4" x 3/8"	----
NEW 30-058LF	3/4" x 1/2"	----
30-063LF	3/4" x 3/4" x 1/2"	----

RIGID - MGH X MGH

NEW

Part #	MGH X MGH	
30-098LF	3/4" x 3/4" (1/2" FIP)	----

GARDEN HOSE CAP

NEW

Part #	Size	
30-103LF	3/4" Die Cast	----

RIGID - MGH X FEMALE PIPE

Part #	MGH x Female NPTF	
NEW 30-066LF	3/4" x 1/4"	
NEW 30-068LF	3/4" x 1/2"	
30-073LF	3/4" x 3/4"	----

SHORT ROD NUT

	Part #	Thread Size UNF	
NEW	10-013LF	1/8"	----
NEW	10-014LF	3/16"	----
	10-015LF	1/4"	----
NEW	10-016LF	5/16"	----
	10-017LF	3/8”	----
NEW	10-018LF	7/16"	----
	10-019LF	1/2”	----
NEW	10-020LF	5/8"	----
	10-021LF	3/4"	----

SHORT FORGED NUT

	Part #	Thread Size UNF	
NEW	10-039LF	1/4"	----
	10-041LF	3/8”	----
	10-042LF	1/2”	----

FLARED CAP

	Part #	Thread Size UNF	
	10-075LF	1/4”	----
	10-077LF	3/8”	----
	10-078LF	1/2”	----
	10-079LF	5/8”	----
NEW	10-080LF	3/4"	----

UNION

	Part #	Thread Size UNF	
NEW	10-104LF	1/8"	70404202
NEW	10-105LF	3/16"	70404203
	10-106LF	1/4”	----
NEW	10-107LF	5/16"	70404205
	10-108LF	3/8”	----
	10-118LF	3/8" x 1/4"	----
	10-109LF	1/2”	----
NEW	10-121LF	1/2" x 3/8"	
	10-110LF	5/8”	----
NEW	10-123LF	5/8" x 1/2"	

MALE BRANCH TEE

Part #	Size	
10-204LF	1/4" x 1/8"	----

FEMALE ADAPTER

	Part #	Male Flare x Female NPTF	
NEW	10-228LF	1/4" x 1/8"	
	10-229LF	1/4" x 1/4"	----
NEW	10-230LF	1/4" x 3/8"	
NEW	10-235LF	3/8" x 1/4"	
	10-236LF	3/8” x 3/8”	----
	10-237LF	3/8” x 1/2”	----
	10-240LF	1/2” x 3/8”	----
	10-241LF	1/2” x 1/2”	----
	10-242LF	1/2” x 3/4”	----
NEW	10-244LF	5/8" x 1/2"	
NEW	10-245LF	5/8" x 3/4"	
NEW	10-247LF	3/4" x 3/4"	

MALE ADAPTER

	Part #	Male Flare x Male NPTF	
	10-255LF	1/4” x 1/8”	----
	10-256LF	1/4” x 1/4”	----
	10-257LF	1/4" x 3/8"	----
	10-258LF	1/4” x 1/2”	----
	10-262LF	3/8” x 1/8”	----
	10-263LF	3/8” x 1/4”	----
	10-264LF	3/8” x 3/8”	----
	10-265LF	3/8” x 1/2”	----
NEW	10-266LF	3/8" x 3/4"	----
	10-267LF	1/2" x 1/4"	----
	10-268LF	1/2” x 3/8”	----
	10-269LF	1/2” x 1/2”	----
	10-270LF	1/2” x 3/4”	----
	10-272LF	5/8" x 3/8	----
	10-273LF	5/8" x 1/2"	----
	10-274LF	5/8" x 3/4"	
NEW	10-275LF	3/4" x 1/2"	----
	10-276LF	3/4” x 3/4”	----
NEW	10-278LF	7/8" x 3/4"	

90° MALE ELBOW

Forged Elbow

Part #	Male Flare x Male NPTF	
10-286LF	1/4" x 1/8"	----
10-287LF	1/4" x 1/4"	----
10-288LF	1/4" x 3/8"	----
10-293LF	3/8" x 1/8"	----
10-294LF	3/8" x 1/4"	----
10-295LF	3/8" x 3/8"	----
10-296LF	3/8" x 1/2"	----
10-299LF	1/2" x 3/8"	----
10-300LF	1/2" x 1/2"	----
10-301LF	1/2" x 3/4"	----
10-305LF	3/4" x 1/2"	----
10-306LF	3/4" x 3/4"	----

FORGED MALE RUN TEE

Part #	Male Flare x Male NPTF (1&3) x 2	
10-351LF	3/8" x 3/8"	----
10-355LF	1/2" x 1/2"	----
10-359LF	3/4" x 1/2"	----

FORGED SWIVEL

	Part #	Female Flare UNF	
NEW	10-481LF	1/4"	7407004
	10-483LF	3/8"	----
	10-484LF	1/2"	----
	10-485LF	5/8"	----
	10-487LF	3/8" x 1/4"	----
NEW	10-488LF	1/2" x 3/8"	

TEE

Part #	Size	
10-159LF	1/4"	----
10-161LF	3/8"	----

BRASS SLEEVE

• FERRULES

Part #	Size	
18-002LF	3/16"	----
18-003LF	1/4"	----
18-004LF	5/16"	----
18-005LF	3/8"	----
18-007LF	1/2"	----
18-008LF	5/8"	----
18-009LF	3/4"	----
18-010LF	7/8"	----

60 260

NUT

NEW

BRASS C/P

Part #	Size	
18-035LF	1/4"	70006104
18-037LF	3/8"	70006106
18-039LF	1/2"	70006108
18-040LF	5/8"	70006110

DELRIN SLEEVE

Part #	Size	
18-015	1/4"	----
18-016	5/16"	----
18-017	3/8"	----
18-018	1/2"	----
18-019	5/8"	----

60-P

BRASS INSERT

• SLEEVE

Part #	Size	
22-010LF	1/4"	----
22-011LF	5/16"	----
22-012LF	3/8"	----
22-013LF	1/2"	----
22-014LF	5/8"	----

63-BI 60AE 2030 63PT

CAP

Part #	Size	
18-047LF	1/4”	----
18-048LF	3/8”	----
18-049LF	1/2”	----
18-050LF	5/8”	----

61-CC N5CT

UNION

BRASS C/P

Part #	Size	
18-062LF	1/8”	----
18-063LF	3/16”	----
18-064LF	1/4”	----
18-065LF	5/16”	----
18-066LF	3/8”	----
18-067LF	7/16"	----
18-068LF	1/2”	----
18-069LF	5/8”	----
18-070LF	3/4”	----
18-071LF	7/8”	----

M-62

REDUCING UNION

Part #	Size	
18-076LF	1/4” x 1/8”	----
18-077LF	1/4” x 3/16”	----
18-078LF	5/16” x 1/4”	----
18-079LF	3/8” x 1/4”	----
NEW 18-080LF	3/8" x 5/16"	7000820605
18-081LF	1/2" x 3/8"	----
18-082LF	5/8" x 3/8"	----
18-083LF	5/8" x 1/2"	----

62-R

TEE

Part #	Size	
18-101LF	1/8”	----
18-102LF	3/16"	----
18-103LF	1/4”	----
18-104LF	5/16"	----
18-105LF	3/8”	----
18-106LF	1/2”	----
18-107LF	5/8”	----
18-109LF	7/8”	----

FORGED REDUCING TEE

Part #	Size	
18-115LF	3/8” x 3/8” x 1/4”	----
18-117LF	1/2” x 1/2” x 3/8”	----

64-R

UNION ELBOW

Part #	Size	
18-124LF	1/4”	----
18-125LF	5/16”	----
18-126LF	3/8”	----
18-127LF	1/2”	----
18-128LF	5/8”	----
18-129LF	3/4”	----
18-130LF	7/8”	----

65 BSE2 165C 265C

REDUCING ELBOW - Forged

Part #	Size	
18-135LF	3/8” x 1/4”	----
NEW 18-136LF	1/2" x 3/8"	7000850806
18-137LF	5/8” x 3/8”	----

65-R

COMP X SWEAT ADAPTER

Part #		Comp. X Sweat Adapter		Part #
18-171LF	----	3/8” x 1/2” nom.swt.		31-171

66-S

COMPRESSION

LEAD FREE BRASS FITTINGS

LEAD FREE

FEMALE ADAPTER

	Part #		Comp. X Female NPT	Part # C/P	
	18-142LF	----	1/8” x 1/8”		
	18-143LF	----	3/16” x 1/8”		
	18-145LF	----	1/4” x 1/8”		
	18-146LF	----	1/4” x 1/4”		
	18-147LF	----	1/4” x 3/8”		
	18-148LF	----	1/4” x 1/2”		
	18-150LF	----	5/16” x 1/4”		
	18-151LF	----	5/16” x 3/8”		
	18-152LF	----	3/8” x 1/8”		
	18-153LF	----	3/8” x 1/4”		
	18-154LF	----	3/8” x 3/8”	31-154	
	18-155LF	----	3/8” x 1/2”	31-155	
	18-156LF	----	3/8” x 3/4”		
	18-158LF	----	1/2” x 3/8”		
	18-159LF	----	1/2” x 1/2”	31-159	
	18-160LF	----	1/2” x 3/4”		
NEW	18-161LF		5/8" x 3/8"		
	18-162LF	----	5/8” x 1/2”		
	18-163LF	----	5/8” x 3/4”		
NEW	18-165LF		3/4" x 3/4"		
NEW	18-167LF		7/8" x 1/2"		
	18-166LF	----	7/8” x 3/4”		

66

MALE ELBOW

Forged

Part #	Comp. X Male NPT	
18-220LF	1/8" x 1/8"	
18-221LF	3/16” x 1/8”	----
18-224BLF	1/4" x 1/8"	----
18-225BLF	1/4” x 1/4”	----
18-226BLF	1/4" X 3/8"	----
18-227LF	1/4” x 1/2”	----
18-228LF	5/16” x 1/8”	----
18-229LF	5/16” x 1/4”	----
18-232BLF	3/8” x 1/8”	----
18-233BLF	3/8” x 1/4”	----
18-234BLF	3/8” x 3/8”	----
18-235BLF	3/8” x 1/2”	----
18-236LF	1/2” x 1/4”	----
18-237BLF	1/2” x 3/8”	----
18-238BLF	1/2” x 1/2”	----
18-239LF	1/2” x 3/4”	----
18-240LF	5/8” x 3/8”	----
18-241BLF	5/8” x 1/2”	----
18-242BLF	5/8” x 3/4”	----
18-246LF	7/8” x 3/4”	----

69 269C BSE1 169C

MALE ADAPTER

	Part #		Comp. X Male NPT	Part # C/P	
	18-176LF	----	1/8” x 1/8”		
	18-177LF	----	3/16” x 1/8”		
	18-178LF	----	3/16” x 1/4”		
	18-179LF	----	1/4” x 1/8”		
	18-180LF	----	1/4” x 1/4”		
	18-181LF	----	1/4” x 3/8”		
	18-182LF	----	1/4” x 1/2”		
	18-183LF	----	5/16” x 1/8”		
	18-184LF	----	5/16” x 1/4”		
	18-187LF	----	3/8” x 1/8”		
	18-188LF	----	3/8” x 1/4”		
	18-189LF	----	3/8” x 3/8”	31-189	
	18-190LF	----	3/8” x 1/2”	31-190	
	18-191LF	----	3/8” x 3/4”	31-191	
	18-192LF	----	7/16” x 1/4”		
	18-193LF	----	1/2” x 1/4”		
	18-194LF	----	1/2” x 3/8”		
	18-195LF	----	1/2” x 1/2”		
	18-196LF	----	1/2” x 3/4”		
	18-197LF	----	5/8” x 3/8”		
	18-198LF	----	5/8” x 1/2”		
	18-199LF	----	5/8” x 3/4”		
NEW	18-200LF		3/4" x 1/2"		
	18-201LF	----	3/4” x 3/4”		
	18-202LF	----	7/8” x 1/2”		
	18-203LF	----	7/8” x 3/4”		

FEMALE ELBOW

Forged

	Part #	Comp. X Female NPT	
	18-253LF	1/4” x 1/8”	----
	18-254LF	1/4” x 1/4”	----
	18-267LF	1/4” x 3/8”	----
	18-258BLF	3/8" x 1/4"	----
	18-259BLF	3/8” x 3/8”	----
	18-260LF	3/8” x 1/2”	----
	18-262BLF	1/2” x 3/8”	----
	18-263LF	1/2” x 1/2”	----
NEW	18-269BLF	5/8" x 3/8"	----
	18-264BLF	5/8” x 1/2”	----

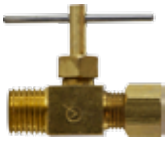
70 270C BSE3 170C

COUPLING NUT

	Part #		
NEW	50-032	1/2" IPS	----

NEEDLE VALVES

COMP X MALE PIPE



Part #	Comp x Male Pipe	
46-002LF	1/4" x 1/8"	----
46-003LF	1/4" x 1/4"	----
46-005LF	3/8" x 1/4"	----

COMP X MALE PIPE-ANGLE

Part #	Comp x Male Pipe	
46-011LF	1/4" x 1/8"	----
46-012LF	1/4" x 1/4"	----

COMP X COMP

Part #	Comp x Comp	
46-021LF	1/4"	----
46-023LF	3/8"	----

FEMALE PIPE X FEMALE PIPE

Part #	Female x Female	
46-055LF	1/8" x 1/8"	----
46-056LF	1/4" x 1/4"	----

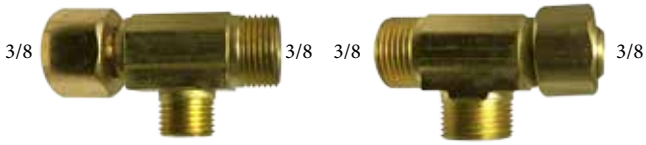
MALE X FEMALE PIPE

Part #	Male x Female	
46-061LF	1/4" x 1/4" MIP	----

LEAD FREE DISHWASHER TEES

COMP X COMP X SWIVEL FE COMPRESSION

- For adding a water line
- Ice makers, Coffe makers and instant hot water systems



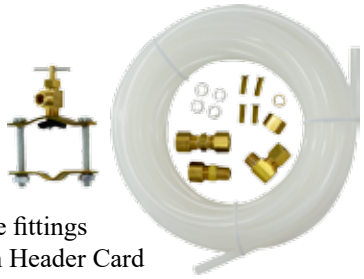
Part #	Male & Fem. compression x Male Comp	
935044LF	3/8 x 1/4	----
935045LF	3/8 x 3/8	----

FLARE X FLARE

Part #	Comp x Comp	
46045LF	1/4"	

Ice Maker Kits

ICE MAKER WATER SUPPLY KIT with Poly Tubing

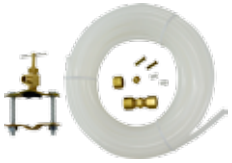


- Lead free fittings
- Bag with Header Card
- 25' 1/4" O.D. Polyethylene Tubing - 979215
- Self Piercing Saddle Valve
- 1/4" O.D. Compression x 1/8" MIP Elbow & Adapter
- 1/4" O.D. Compression Union
- 1/4" Inserts & Sleeves

Part #	Description	
43-265LF	Kit	----
979-215	1/4" OD, 25' Tube	----

ICE-MAKER WATER SUPPLY KIT

- Economy
- 25' Polyethylene Tubing
- Self Piercing Saddle Valve
- 1/4" Compression Union
- 1/4" Inserts & Sleeves



Part #	
43-266LF	----

SELF PIERCING SADDLE VALVES

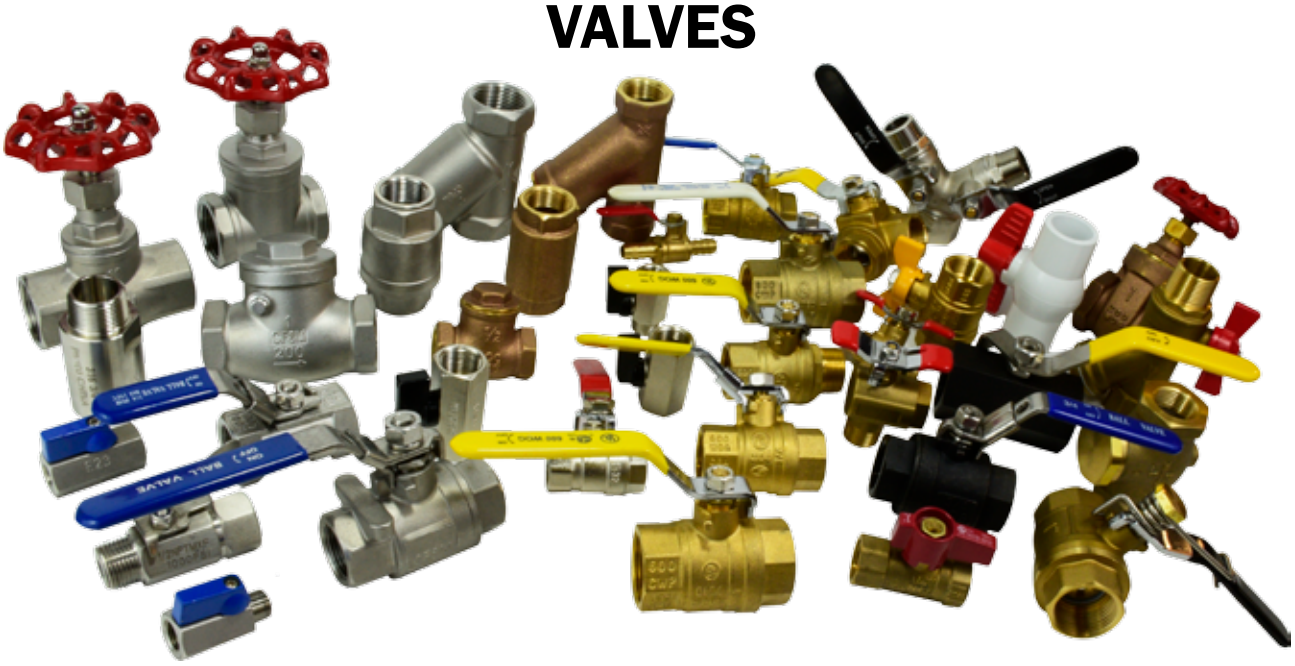
SELF PIERCING NEEDLE VALVE KIT #M-104-VSP

- **INDIVIDUALLY BAGGED WITH NEEDLE VALVE**
- **SADDLE CLAMP**
- **2 NUTS**
- **2 BOLTS & WASHERS**

Has brass sleeve for copper tube installation & delrin sleeve & brass insert for plastic tube installation.

Part #	Tube O.D.	Min Pkg Qty	
46-090ALF	1/4	1	----

VALVES



VALVES 168-213

LEAD FREE BALL VALVES 169-171
LEAD FREE VALVES 172
BRASS VALVES 173-197
Full Port Ball 173
Locking Handle 174
Butterfly Handle 175
N/P Ball Valve 176
N/P Ball w/SS Trim 177
Italian Ball Valve 178
M X F Ball Valve 179-180
Tee Handle M X F Ball 181
M X F Ball Locking handle 182
Spring Handle Ball Valve 183
Right Angle Ball valve 183
Wye, 3-Way Ball Valve 184
Safety Exhaust Ball Valve 184
Gas Valves 185
Mini Ball Valves 186-189
3-Way Valves 190
Strainer Ball Valve 191
Vacuum Breaker/Hose Bibb 191
Bent Nose Garden Valve 191
Gate Valves 192
Quick Opening Gate 193
Y Strainer 194
Check Valves 195-197

STAINLESS STEEL VALVES

2000# Full Port 198
Standard Port 199
1,000 PSI Full Port 200
SS Mini Ball Valve 201-202
Check Valves 203-207
Y-strainer, Globe,Gate 207

Carbon Steel valves 208-211

2,000# Standard Port 208
2,000 # FP 2-Piece 209
Hi Pressure 2-Way Valves 210
Hi Pressure 3-Way Balves 210
Check valves-5,000# 211

PVC Valves 212-213

LEAD FREE BALL VALVE

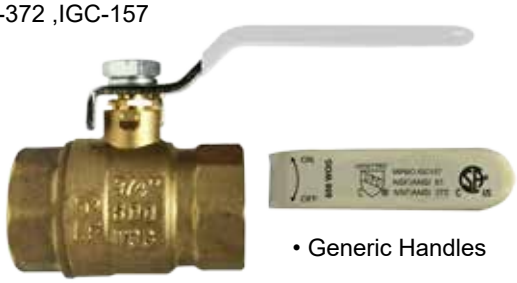
5 PSIG

• BRASS • 600PSI • STAINLESS STEEL BALL • FULL PORT

LEAD FREE

IAMPO IGC 157 - 2004b

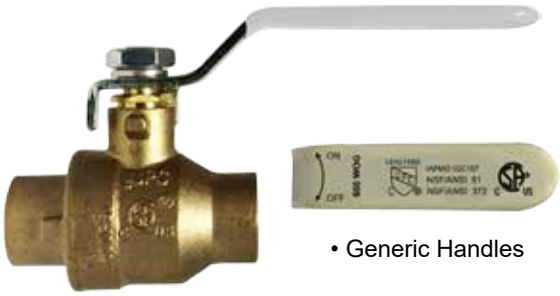
Lead Free Brass Ball Valve NPT,Female*Female
Lead Free and dezincification resistant (DZR) material
IAPMO listed to NSF/ANSI-61, NSF/ANSI-372 ,IGC-157
CSA listed to NSF/ANSI-61, NSF/ANSI-372 ,IGC-157
Vacuum Services 29.92 inches Hg
600 psi (WOG) 150 psi (WSP) Service
Thread conform ANSI B1.20.1
Temperature Range : -40° F to 365° F
Construction:Forging Brass Body
PTFE Ball Seats
Blow Out Proof Brass Stem
Stainless Steel Ball
Steel Handle w/Vinyl Grip
Made in China



• Generic Handles

FIP X FIP LEAD FREE BALL VALVE

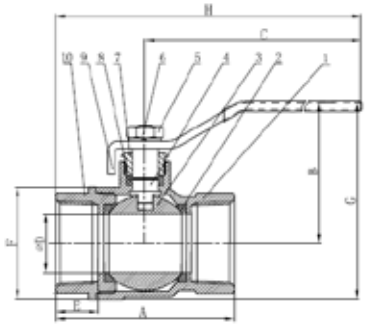
Part #	Size	OD	A	B	C	E	F	G	H	Weight	Box/Case	
941151LF	1/4"	0.394	1.73	1.69	3.35	0.453	0.945	2.154	4.331	0.32	10/120	----
941152LF	3/8"	0.394	1.73	1.69	3.35	0.473	0.945	2.154	4.331	0.32	10/120	----
941153LF	1/2"	0.524	1.89	1.73	3.35	0.472	1.083	2.276	4.291	0.36	10/100	----
941154LF	3/4"	0.748	2.28	1.89	3.35	0.563	1.378	2.579	4.488	0.57	10/80	----
941155LF	1"	0.984	2.80	2.14	4.29	0.650	1.772	3.031	5.689	0.94	8/48	----
941156LF	1-1/4"	1.240	3.15	2.32	4.29	0.669	2.165	3.398	5.866	1.30	4/36	----
941157LF	1-1/2"	1.476	3.44	2.66	5.53	0.701	2.50	3.909	7.343	1.92	2/24	----
941158LF	2"	1.949	4.06	3.01	5.53	0.708	3.244	4.638	7.638	3.12	2/12	----



• Generic Handles

SWT X SWT LEAD FREE BALL VALVE

Part #	Size	OD	A	B	C	E	G	H	Weight	WTG	Box/Case	
941163LF	1/2"	0.524	1.945	1.73	3.35	0.504	1.083	2.276	4.319	0.38	10/100	----
941164LF	3/4"	0.748	2.654	1.89	3.35	0.748	1.378	2.579	4.665	0.65	10/80	----
941165LF	1"	0.984	3.315	2.14	4.29	0.909	1.772	3.031	5.949	0.93	8/48	----
941166LF	1-1/4"	1.240	3.741	2.32	4.29	0.968	2.165	3.398	6.165	1.35	4/36	----
941167LF	1-1/2"	1.476	4.252	2.66	5.63	1.091	2.50	3.909	7.756	1.88	2/24	----
941168LF	2"	1.949	5.38	3.01	5.63	1.343	3.244	4.638	8.268	3.62	2/12	----



No	Item	Qty	Material
1	Body	1	Lead Free Brass
2	Seat	2	PTFE
3	Ball	1	Stainless Steel
4	Stem	1	Brass
5	Handle Nut	1	Plated Steel
6	Lock Washer	1	Plated Steel
7	Packing Nut	1	Brass
8	Packing	1	PTFE
9	Handle	1	Plated Steel
10	Cap	1	Lead Free Brass

LEAD FREE

1/2" - 2" Sizes Gas Approved

C US UL842, UL258, UL125,FM

LEAD FREE BALL VALVE W/APPROVALS

• BRASS • 600PSI • FULL PORT

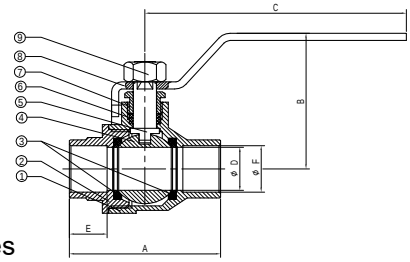
CSA, UL, FM(1/4"-2"), cUPC, NSF/ ANSI 61 & 372

FEATURES

- Leadfree Brass Ball valve NPT, Female * Female
- Lead free and dezincification resistant (DZR) material
- 1/4"-1" Lead Free Brass Ball
- Size 1-1/4" thru 4" with Stainless steel ball
- IAMPO listed to cUPC, NSF/ ANSI 61 & 372, IGC 157
- CSA - 1/4" thru 2": ANSI Z21.15/ CSA 9.1 for 1/2 psig valves ASME B16.44, CGA CR91-002 for 2 & 5 psig valves; CAN/ CGA-3.16, ASME B16.33 (1/2"-2") for 125 psig valves
- UL 125, UL 1477, UL 842 - for size 1/4" thru 4", 250 psig
- UL 258 - for size 1/4" thru 2", 175 psig
- FM - for size 1/4" thru 2"
- ISO 9002 Manufacture
- Suitable for full range of liquids and gases
- Minimal pressure drop due to large full size ports
- Bottom loaded, pressure retaining stem
- Pressure rated for 1/4"-2" at 600psi (42 bars) and 2-1/2"-4" at 400 psi WOG (non-shock) and 150 WSP (10.34 bars) saturated steam. Virgin PTFE stem packing seal, thrust washer and seats
- White vinyl insulator on heavy duty plated carbon steel handles
- Fast 1/4 turn open or close operation
- Low operating torque
- **Adjustable stem packing gland**
- Maximum operating temperature: 302^{0}F (150^0 C)
- Minimum operating temperature: -22^{0}F (-30^{0}C)
- Each valve individually tested
- Forged Brass - for more strength
- Threaded ends to ANSI B1.20.1
- Hard chromium plated solid ball
- Bottom entry, blow-out proof stem
- Deeper threads - for better connections
- Made in China

POS	Components	Materials
1	Body	Lead Free Brass
2	End Cap	Lead Free Brass
3	Ball Seat	PTFE
4	Ball	1/4-1:Lead Free Brass 1 1/4-4:SS316 Hollowball
5	Stem	Brass
6	Stem Padding	PTFE
7	Padding Nut	Brass
8	Lever Handle	Nickel plating steel
9	Stem Nut	Brass plating steel
10	Seal	PTFE

• Generic Handles



Part#	Size	DIMENSIONS A	B	C	D	E	F	G	H	Weight	Box/Case	
940-171LF	1/4"	1.756	1.732	3.543	0.394	0.457	1.012	2.238	4.421	0.34	70/140	----
940-172LF	3/8"	1.756	1.732	3.543	0.394	0.457	1.012	2.238	4.421	0.34	70/140	----
940-173LF	1/2"	2.047	2.040	3.543	0.583	0.520	1.240	2.559	4.567	0.45	50/100	----
940-174LF	3/4"	2.362	2.260	3.780	0.748	0.563	1.492	2.854	4.961	0.69	30/60	----
940-175LF	1"	2.756	2.579	4.528	0.945	0.630	1.791	3.476	5.906	1.11	20/40	----
940-176LF	1-1/4"	3.307	3.050	4.528	1.260	0.709	2.343	4.134	6.181	1.85	12/24	----
940-177LF	1-1/2"	3.661	3.366	5.420	1.575	0.717	2.835	4.783	7.343	2.60	9/18	----
940-178LF	2"	4.181	3.701	5.42	1.969	0.748	3.425	5.413	7.602	3.62	6/12	----
940-179LF	2-1/2"	4.181	4.650	8.870	2.520	1.024	4.331	6.969	11.350	7.93	3/6	----
940-180LF	3"	6.039	4.970	8.870	2.913	1.102	4.921	7.579	11.681	10.40	1/4	----
940-181LF	4"	7.386	6.130	10.85	3.898	1.220	6.430	9.055	13.299	20.99	1/2	----

SWT X SWT LEAD FREE BALL VALVE

FM, cUPC, NSF/ ANSI 61 & 372

Part #	SWT	A	B	C	D	E	F	Weight	Box/Case	
943-612LF	1/2"	2.047	1.839	3.543	0.583	0.512	0.630	0.45	50/100	----
943-613LF	3/4"	2.748	2.14	3.780	0.748	0.748	0.878	0.68	30/60	----
943-614LF	1"	3.228	2.449	4.528	0.945	0.906	1.130	1.08	20/40	----
943-615LF	1-1/4"	3.819	3.04	4.36	1.260	0.972	1.378	1.80	12/24	----
943-616LF	1-1/2"	4.425	3.169	5.39	1.575	1.088	1.630	2.51	9/18	----
943-617LF	2"	5.377	3.488	6.307	1.989	1.346	2.130	3.57	6/12	----

ITALIAN LEAD FREE BRASS BALL VALVE

5 PSIG C US

UL842, UL258, UL125,FM

CSA AGA 3.88 5 PSIG

IAMPO IGC 157 - 2004b

ISO 9002 Manufacturer

FEATURES

600 PSI non-shock cold water, gas, oil - 150 PSI saturated steam

- **SOLID CHROME PLATED BRASS BALL**
- Suitable for full range of liquids and gases
- Minimal pressure drop due to large full size ports
- Bottom loaded, pressure retaining stem
- Pressure rated at 600psi (42 bars) WOG (non-shock) and 150 WSP (10.34 bars) saturated steam. Virgin TFE stem packing seal, thrust washer and seats.
- Blue vinyl insulator on heavy duty plated carbon steel handles.
- Fast 1/4 turn open or close operation
- Low operating torque
- Flow can go both directions
- Adjustable stem packing gland
- Maximum operating temerature: 248^{0}F (120^0 C) at 600 PSI
- Minimum operating temperature: -20^{0}F (-40^{0}C)
- Each valve individually tested
- Forged Brass - for more strength
- Threaded ends to ANSI B1.20.1
- Hard chromium plated solid ball
- Bottom entry, blow-out proof stem
- Deeper threads - for better connections

MADE IN ITALY

FIP X FIP

ANSI/INSF 61-8

- Generic Handles

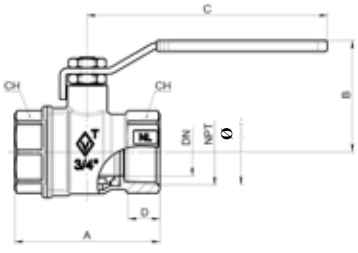
SWT X SWT

FIP X FIP LEAD FREE FORGED BRASS BALL VALVE

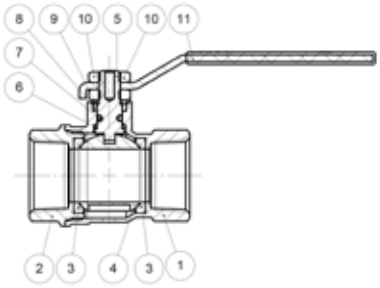
Part #	NPT	DN	A	B	C	D	CH	Weight (lbs)	Box/Case	
943-233LF	1/2"	0.57	2.09	1.57	3.35	0.46	0.98	0.39	20/80	----
943-234LF	3/4"	0.75	2.28	1.77	3.80	0.49	1.22	0.56	14/56	----
943-235LF	1"	0.94	3.04	2.03	3.80	0.59	1.50	0.89	6/24	----
943-236LF	1-1/4"	1.24	3.23	2.32	4.72	0.62	1.85	1.44	4/16	----
943-237LF	1-1/2"	1.49	3.70	2.60	4.72	0.64	2.13	2.19	2/8	----
943-238LF	2"	1.96	4.13	3.27	6.38	0.65	2.64	3.62	1/4	----

SWT X SWT LEAD FREE FORGED BRASS BALL VALVE

Part #	SWT	Ø	DN	A	B	C	D	CH	Weight (lbs)	Box/Case	
940-212LF	1/2"	0.63	0.57	2.40	1.57	3.35	0.42	0.79	0.35	20/80	----
940-213LF	3/4"	0.866	0.75	3.26	1.77	3.80	0.61	1.06	0.55	10/40	----
940-214LF	1"	1.102	0.94	3.68	2.03	3.80	0.73	1.34	0.87	6/24	----
940-215LF	1-1/4"	1.377	1.24	4.23	2.32	4.72	0.91	1.61	1.41	6/24	----
940-216LF	1-1/2"	1.61	1.49	4.96	2.60	4.72	1.06	1.89	2.08	2/8	----
940-217LF	2"	2.125	1.96	5.86	3.27	6.38	1.26	2.40	3.62	1/4	----



POS	Components	Materials
1	Body	CW510L
2	End Connection	CW510L
3	Ball Seal	PTFE
4	Seal	CW510L
5	Stem	CW614N
6	Lower Stem	PTFE
7	O-Ring	NBR70sh
8	Upper Seal	PTFE
9	Brass Ring	CW614N
10	Nut	Steel
11	Handle	Steel P10



LEAD FREE GATE/ CHECK/ Y VALVES

LEAD FREE

BRASS GATE VALVE IPS

- **200 WOG (Cold water, oil, gas)**
- **125 WSP (Saturated Steam)**

- Brass Forged body/bonList- stronger than sand castings.
- Superior quality and finish.
- Each valve individually tested.
- Threaded ends to ANSI B1.20.1, Solder ends to ANSI B16.18
- Non rising stem.
- Cast iron handle.
- Temp. 32°-320°F

BRASS GATE VALVE IPS

Part#	Size	
940-130LF	1/4	74001004
940-131LF	3/8	74001006
940-132LF	1/2	74001008
940-133LF	3/4	74001012
940-134LF	1	74001016
940-135LF	1-1/4	74001020
940-136LF	1-1/2	74001024
940-137LF	2	74001032

BRASS GATE VALVE C X C

Part#	Size	
940-142LF	1/2"	----
940-143LF	3/4"	----
940-144LF	1"	----
940-145LF	1-1/4"	----
940-146LF	1-1/2"	----
940-147LF	2"	----

BRASS CHECK VALVE

NO	Part	Material
1	Cap	C37700
2	Gasket	NBR
3	Spring	Stainless Steel
4	Positioning Seat	BRASS
5	Screw	BRASS
6	Body	C37700

LEAD-FREE

Part #	Size	
944-430LF	1/2	74003408
944-431LF	3/4	74003412
944-432LF	1	74003416
944-433LF	1-1/4	74003420
944-434LF	1-1/2	74003424
944-435LF	2	74003432

CAST BRASS SWING CHECK VALVE IPS SCREWED ENDS

- Working pressure non-shock: 200 psi W.O.G. (cold water, oil, gas) 125 psi WSP (saturated steam)
- Swing type disc.
- Screwed Cap.
- Hard Seat.
- 90^0 Straight Pattern.
- Used to prevent reverse flow in commercial and industrial applications.
- Threaded ends to ANSI B1.20.1
- Integral seat.

Part #	Size	
940-352LF	1/2"	----
940-353LF	3/4"	----
940-354LF	1"	----
940-355LF	1-1/4"	----
940-356LF	1-1/2"	74003024
940-357LF	2"	----

C X C SWING CHECK VALVE

Part #	Size	
940-362LF	1/2	----
940-363LF	3/4	74003212
940-364LF	1	74003216
940-365LF	1-1/4	74003220
940-366LF	1-1/2	----
940-367LF	2	74003232

CLASS 150 BRASS Y-PATTERN STRAINER

LEAD-FREE

Part#	Size	
940-523LF	1/2"	----

FORGED BRASS BALL VALVE

• BRASS • 600WOG • FULL PORT

C US

UL842, UL258, UL125,FM

ISO 9002 Manufacturer

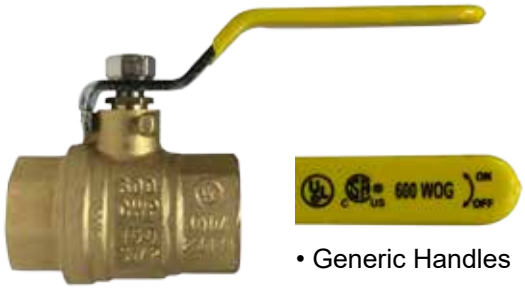
1/4-2" 600 PSI non-shock cold water, gas, oil - 150 PSI saturated steam

2-1/2"- 4" 400 PSI non-shock cold water, gas, oil

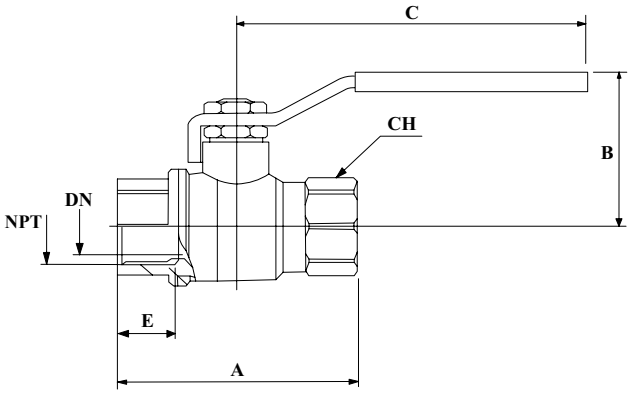
Made in China

FEATURES

- Suitable for full range of liquids and gases
- Minimal pressure drop due to large full size ports
- Bottom loaded, pressure retaining stem
- Pressure rated for 1/4"-2" at 600psi (42 bars) and 2-1/2"-4" at 400 psi WOG (non-shock) and 150 WSP (10.34 bars) saturated steam. Virgin PTFE stem packing seal, thrust washer and seats
- Yellow vinyl insulator on heavy duty plated carbon steel handles
- Fast 1/4 turn open or close operation
- Not Lead Free
- Good for gasoline
- Low operating torque
- Adjustable stem packing gland
- Maximum operating temperature: 302^{0}F (150^0 C)
- Minimum operating temperature: -22^{0}F (-30^{0}C)
- Each valve individually tested
- Forged Brass - for more strength
- Threaded ends to ANSI B1.20.1
- Hard chromium plated solid ball
- Bottom entry, blow-out proof stem
- Deeper threads - for better connections



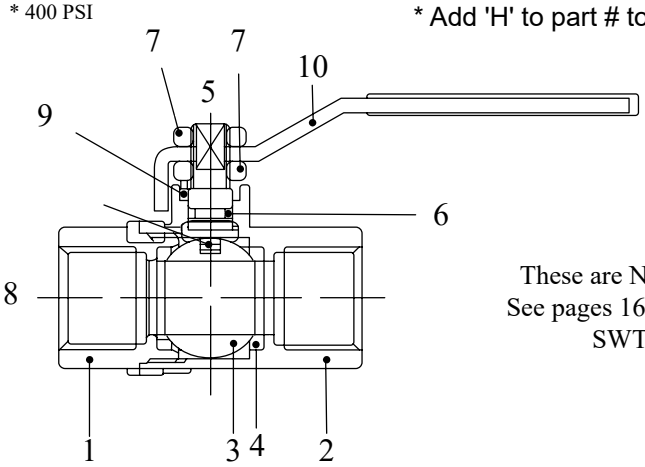
• Generic Handles



Part#	Size	Dimension Inches								
	NPT	DN	A	B	C	E	CH	Weight	Box/Case	
940-171	1/4"	0.39	1.75	1.92	3.54	0.46	0.78	0.34	70/140	4002404
940-172	3/8"	0.41	1.75	1.92	3.54	0.46	0.78	0.30	70/140	4002406
940-173	1/2"	0.58	2.05	2.08	3.54	0.52	0.98	0.44	50/100	4002406
940-174	3/4"	0.75	2.36	2.30	3.78	0.56	1.20	0.67	30/60	4002412
940-175	1"	0.94	2.75	2.68	4.52	0.66	1.50	1.05	20/40	4002416
940-176	1-1/4"	1.26	3.30	3.14	4.52	0.70	1.82	1.50	12/24	4002420
940-177	1-1/2"	1.57	3.66	3.61	5.51	0.72	2.09	2.30	9/18	4002424
940-178	2"	1.97	4.18	3.68	5.51	0.74	2.62	3.38	6/12	4002432
940-179*	2-1/2"	2.52	5.38	4.76	8.66	1.01	3.36	7.61	4/8	4002440
940-180*	3"	2.95	6.04	5.08	8.66	1.11	3.86	11.10	2/4	4002448
940-181*	4"	3.89	7.38	5.86	9.00	1.22	4.89	12.12	1/2	4002460

* 400 PSI

* Add 'H' to part # to order handles *



These are NOT Lead Free
See pages 165 for Lead Free SWT Valves

POS	Components	Materials	N
1	Body	Forged Brass	1
2	End Connection	Forged Brass	1
3	Ball	CP Brass	1
4	Ball Seat	P.T.F.E.	2
5	Stem	Brass	1
6	Gland	Brass	1
7	Nut	Steel	1
8	Spring Inseat	Steel	1
9	Stem Seal	P.T.F.E.	1
10	Handle	Steel	1

• Not Lead Free AB1953 Compliant

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

LOCKING HANDLE BALL VALVE

• BRASS • 600WOG • FULL PORT

5 PSIG

UL842, UL258, UL125,FM

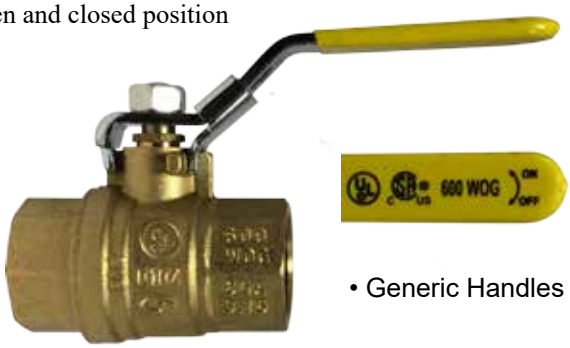
ISO 9002 Manufacturer

FEATURES

1/4-2" 600 PSI non-shock cold water, gas, oil - 150 PSI saturated steam

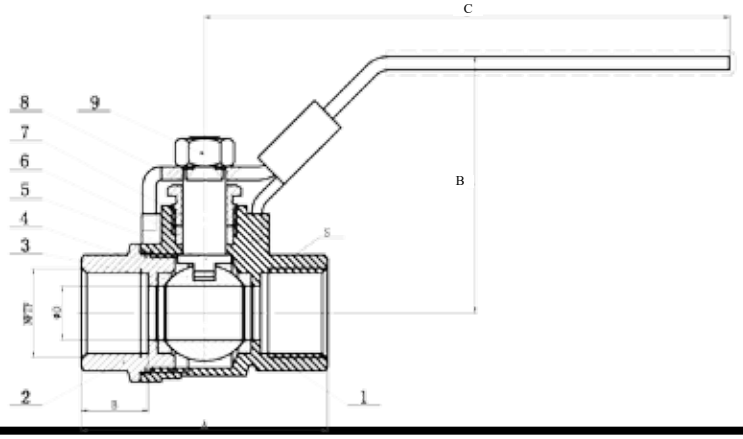
Made in China

- Suitable for full range of liquids and gases
- Minimal pressure drop due to large full size ports
- Bottom loaded, pressure retaining stem
- Pressure rated for 1/4"-2" at 600psi (42 bars) and 2-1/2"-4" at 400 psi WOG (non-shock) and 150 WSP (10.34 bars) saturated steam. Virgin PTFE stem packing seal, thrust washer and seats
- Yellow vinyl insulator on heavy duty plated carbon steel handles
- Fast 1/4 turn open or close operation
- Not Lead Free
- Locking mechanism works in open and closed position
- Low operating torque
- Adjustable stem packing gland
- Maximum operating temperature: 302^{0}F (150^0 C)
- Minimum operating temperature: -22^{0}F (-30^{0}C)
- Each valve individually tested
- Forged Brass - for more strength
- Threaded ends to ANSI B1.20.1
- Hard chromium plated solid ball
- Bottom entry, blow-out proof stem
- Deeper threads - for better connections



• Generic Handles

Part#	Size	Dimension Inches								
	NPT	DN	A	B	C	E	CH	Weight	Box/Case	
940-171L	1/4"	0.31	1.73	1.84	3.15	0.49	0.71	0.39	70/140	----
940-172L	3/8"	0.39	1.81	1.88	3.86	0.49	0.79	0.35	70/140	----
940-173L	1/2"	0.58	2.23	2.09	3.43	0.61	0.98	0.49	50/100	----
940-174L	3/4"	0.75	2.48	2.24	3.62	0.62	1.20	0.78	30/60	----
940-175L	1"	0.94	2.95	2.67	4.42	0.73	1.50	1.18	20/40	----
940-176L	1-1/4"	1.26	3.42	3.05	4.73	0.77	1.81	1.76	12/24	----
940-177L	1-1/2"	1.57	3.78	3.51	5.18	0.78	2.09	2.53	9/18	----
940-178L	2"	1.97	4.18	3.84	5.24	0.75	2.60	3.53	6/12	----



POS	Components	Materials	N
1	Body	Forged Brass	1
2	End Connection	Forged Brass	1
3	Ball	CP Brass	1
4	Ball Seat	P.T.F.E.	2
5	Stem	Brass	1
6	Gland	Brass	1
7	Nut	Steel	1
8	Spring Inseat	Steel	1
9	Stem Seal	P.T.F.E.	1
10	Handle	Steel	1

• Not Lead FreeAB1953 Compliant

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

BUTTERFLY HANDLE BALL VALVE

• BRASS • 600WOG • FULL PORT

5 PSIG

UL842, UL258, UL125,FM

ISO 9002 Manufacturer

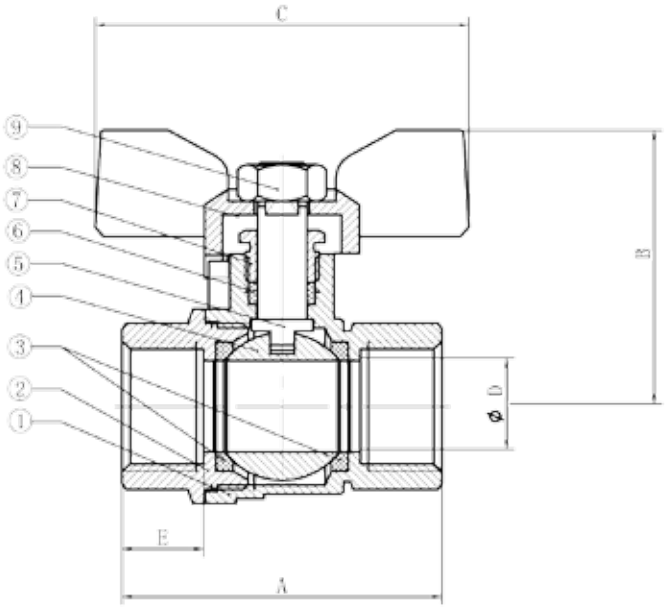
FEATURES

1/4-3/4" 600 PSI non-shock cold water, gas, oil - 150 PSI saturated steam

Made in China

- Suitable for full range of liquids and gases
- Minimal pressure drop due to large full size ports
- Bottom loaded, pressure retaining stem
- Pressure rated for 1/4"-3/4" at 600psi (42 bars) and 150 WSP (10.34 bars) saturated steam. Virgin PTFE stem packing seal, thrust washer and seats
- Fast 1/4 turn open or close operation
- Low operating torque
- Adjustable stem packing gland
- Maximum operating temperature: 302^{0}F (150^0 C)
- Minimum operating temperature: -22^{0}F (-30^{0}C)
- Each valve individually tested
- Forged Brass - for more strength
- Threaded ends to ANSI B1.20.1
- Hard chromium plated solid ball
- Bottom entry, blow-out proof stem
- Deeper threads - for better connections
- Not Lead Free

Part#	Size NPT	A	B	C	D	E	Weight	Box/Case	
940-171T	1/4"	1.75	1.488	1.831	0.315	0.457	0.342	70/140	----
940-172T	3/8"	1.756	1.488	1.831	0.394	0.457	0.31	70/140	----
940-173T	1/2"	2.047	1.756	2.394	0.583	0.520	0.44	50/100	----
940-174T	3/4"	2.362	1.921	2.394	0.748	0.563	0.68	30/60	----



POS	Components	Materials
1	Body	C37700
2	End Cap	C37700
3	Ball Seat	PTFE
4	Ball	C37700
5	Stem	C37700
6	Stem Packing	PTFE
7	Packing Nut	C37700
8	Lever Handle	ZL102
9	Stem Nut	A570

Steel Tee handle option available with extended delivery (1/4" - 4")

• Not Lead Free AB1953 Compliant

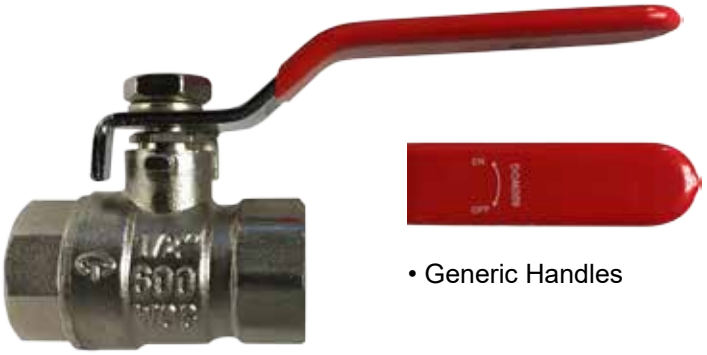
WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

NICKEL PLATED BALL VALVE

• BRASS • 600WOG • FULL PORT • NO APPROVALS

Vacuum service to 29 inches Hg
600 psi (WOG) 150 psi (WSP) Service
Thread conform ANSI B1.20.1
Temperature Range : -40° F to 365° F
Construction:Forging Brass Body, Nickel plated
PTFE Ball Seats
Blow Out Proof Brass Stem
Steel Handle w/Vinyl Grip
Made in China

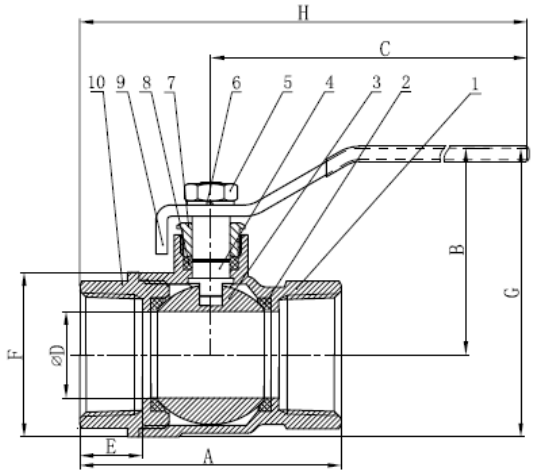
• Not Lead Free



• Generic Handles

FIP X FIP NICKEL PLATED BALL VALVE

Part #	Size	OD	A	B	C	E	F	G	H	Weight	Box/Case	
941151NP	1/4"	0.394	1.73	1.69	3.35	0.453	0.945	2.154	4.331	0.32	10/120	----
941152NP	3/8"	0.394	1.73	1.69	3.35	0.473	0.945	2.154	4.331	0.32	10/120	----
941153NP	1/2"	0.524	1.89	1.73	3.35	0.472	1.083	2.276	4.291	0.36	10/100	----
941154NP	3/4"	0.748	2.28	1.89	3.35	0.563	1.378	2.579	4.488	0.57	10/80	----
941155NP	1"	0.984	2.80	2.14	4.29	0.650	1.772	3.031	5.689	0.65	8/48	----
941156NP	1-1/4"	1.240	3.15	2.32	4.29	0.669	2.165	3.398	5.866	1.75	4/36	----
941157NP	1-1/2"	1.476	3.44	2.66	5.63	0.701	2.50	3.909	7.343	2.10	2/24	----
941158NP	2"	1.949	4.06	3.01	5.63	0.708	3.244	4.638	7.638	3.35	2/12	----



No	Item	Qty	Material
1	Body	1	NP Brass
2	Seat	2	PTFE
3	Ball	1	Brass CP
4	Stem	1	Brass/ NP
5	Handle Nut	1	Plated Steel
6	Lock Washer	1	Plated Steel
7	Packing Nut	1	Brass/ NP
8	Packing	1	PTFE
9	Handle	1	Plated Steel
10	Cap	1	Brass/ NP

Gratitude is the sign of noble souls.

- Aesop

WARNING: This product can expose you to chemicals, including Nickel, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

Gas Approved

UL842, UL258, UL125,FM

CSA AGA 3.88 5 PSIG

N/P BALL VALVE W/SS TRIM

• NICKEL PLATED • SS BALL, HANDLE, NUT & STEM

• LOCKING HANDLE • W/APPROVALS

Features

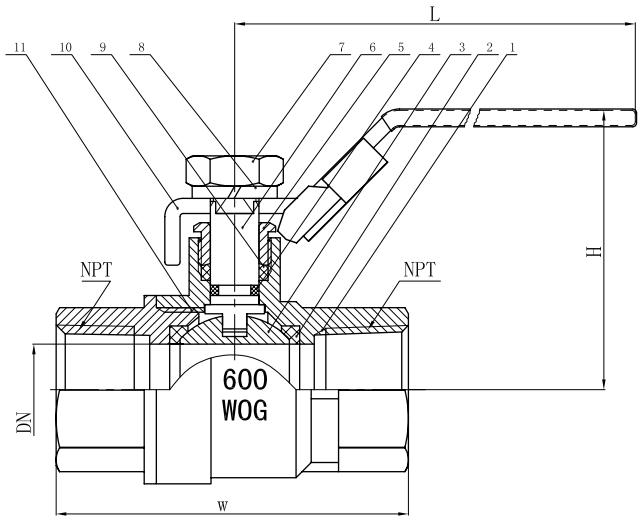
- **Vacuum service to 29 inches Hg**
- Thread Conform ANSI B1.20.1
- Forged Brass Body
- Blow Out Proof Stem Design
- Packing Nut, O-RING & Packing On The Stem Seal
- Stainless Steel Ball, Handle, Nut&Stem
- Handle With Vinyl Grip

Performance rating

- 600 PSI (WOG) 150 PSI (WSP) Service
- Temperature range: -20° F to 300° F
- Made in China
- Not lead free
- No more rusty handles

• Generic Handles

Part#	Size	D	L	H	W	Cv	Wt.(lbs.)	Box/Case	
941-121NP	1/4	0.394	3.22	1.84	1.73	8.23	0.326	10/120	----
941-122NP	3/8	0.394	3.22	1.84	1.73	8.23	0.320	10/120	----
941-123NP	1/2	0.591	3.22	2.02	2.24	18.55	0.474	10/100	----
941-124NP	3/4	0.748	4.04	2.40	2.52	29.76	0.785	10/80	----
941-125NP	1	0.984	4.08	2.20	2.97	51.55	1.155	8/48	----
941-126NP	1-1/4	1.259	5.20	3.05	3.44	84.42	1.797	4/36	----
941-127NP	1 1/2	1.574	5.20	3.18	3.88	131.93	2.447	2/24	----
941-128NP	2	1.941	5.20	3.48	4.33	200.35	3.477	2/12	----



Part Name	Material
Body	Brass/ Nickel Plated
Seat	PTFE
Ball	Stainless Steel
O-ring	Viton
Packing Nut	Brass/ Nickel Plated
Stem	Stainless Steel
Handle Nut	Stainless Steel
Lock Washer	Stainless Steel
Packing	PTFE
Handle	Stainless Steel
Cap	Brass/ Nickel Plated

BRONZE BALL VALVES AVAILABLE WITH UL-MARINE LISTING AND SS TRIM

WARNING: This product can expose you to chemicals, including chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

ITALIAN BALL VALVE

• BRASS • 600WOG • FULL PORT

ISO 9002 Manufacturer

FEATURES

5 PSIG C US

UL842, UL258, UL125,FM

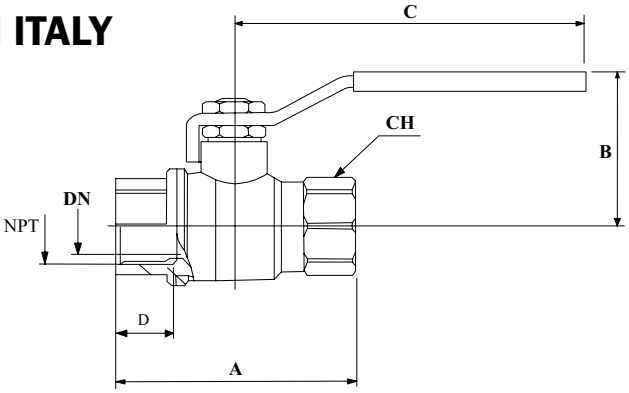
CSA AGA 3.88 5 PSIG

IAMPO IGC 157 - 2004b

- **SOLID CHROME PLATED BRASS BALL**
- Suitable for full range of liquids and gases
- Minimal pressure drop due to large full size ports
- Bottom loaded, pressure retaining stem
- Pressure rated at 600psi (42 bars) WOG (non-shock) and 150 WSP (10.34 bars) saturated steam. Virgin TFE stem packing seal, thrust washer and seats.
- Yellow vinyl insulator on heavy duty plated carbon steel handles.
- Fast 1/4 turn open or close operation
- Low operating torque
- Flow can go both directions
- Generic Handles
- **Adjustable stem packing gland**
- Maximum operating temerature: 248^{0}F (120^0 C) at 600 PSI
- Minimum operating temperature: -20^{0}F (-40^{0}C)
- Each valve individually tested
- Forged Brass - for more strength
- Threaded ends to ANSI B1.20.1
- Hard chromium plated solid ball
- Bottom entry, blow-out proof stem
- Deeper threads - for better connections
- **REVERSIBLE HANDLES**

MADE IN ITALY

Female x Female



Part#	Size	Dimension Inches								
	NPT	DN	A	B	C	D	CH	Weight	Box/Case	
943-200	1/4"	.39	1.96	1.53	3.31	.43	.75	0.36	24/96	----
943-201	3/8"	.39	1.96	1.53	3.31	.43	.86	0.40	24/96	----
943-202	1/2"	.57	2.09	1.57	3.25	.46	.98	0.44	20/80	----
943-203	3/4"	.75	2.28	1.77	3.80	.49	1.22	0.57	14/56	----
943-204	1"	.94	2.80	2.03	3.80	.59	1.50	0.89	6/24	----
943-205	1-1/4"	1.24	3.50	2.32	4.72	0.72	1.85	1.64	4/16	----
943-206	1-1/2"	1.49	3.90	3.02	6.38	0.85	2.13	2.78	2/8	----
943-207	2"	1.96	4.07	3.27	6.38	.65	2.64	3.21	2/8	----
942-208	2-1/2"	2.48	5.80	4.98	7.54	1.06	3.31	6.97	5	----
942-209	3"	2.99	6.85	5.63	8.86	1.14	3.89	10.34	3	----
942-210	4"	3.54	7.67	6.04	8.86	1.22	4.80	18.77	1	----

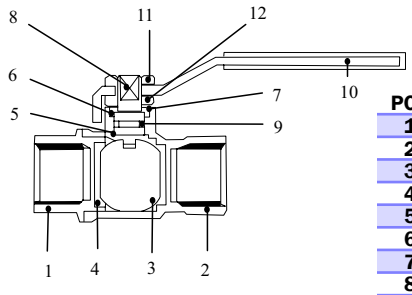
HANDLE OPTIONS

TEE HANDLES

Part #	Valve Size	
43-200T	1/4" - 3/4"	----
43-204T	1"	----

LOCKING HANDLES

Part #	Valve Size	
43-200L	1/4" - 3/4"	----
43-204L	1"	----
43-206L	1-1/4" - 1-1/2"	----
43-207L	2"	----



POS	Components	Materials	N
1	Body	Forged Brass	1
2	End Connection	Forged Brass	1
3	Ball	CP Brass	1
4	Ball Stems	P.T.F.E.	2
5	Stem Antif. Seat	P.T.F.E.	1
6	Stem Seat	P.T.F.E.	1
7	Brass Ring	Brass	1
8	Stem	Brass	1
9	O-Ring	NBR 80	1
10	Handle	Steel	1
11	Nut	Steel	1
12	Nut	Brass	1

• Not Lead Free AB1953 Compliant

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

MALE X FEMALE BRASS BALL VALVE

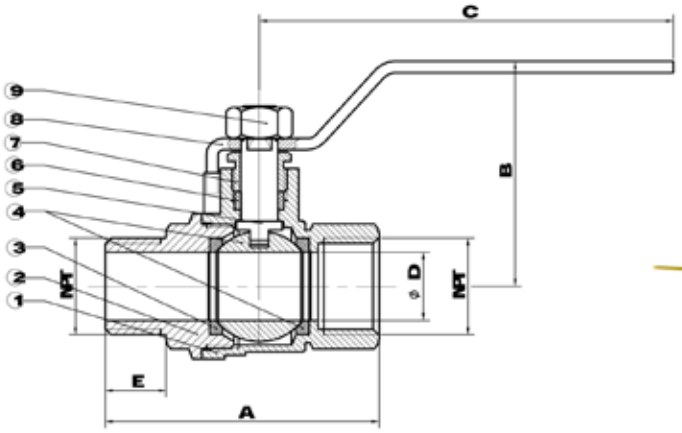
• 600WOG • FULL PORT

UL842, UL258

- Solid chrome plated brass ball
- Suitable for full range of liquids and gases.
- Minimal pressure drop due to large full size ports.
- Bottom loaded, pressure retaining stem.
- Pressure rated at 600psi (42 bars) WOG (non-shock) and 150psi (10.34 bars) saturated steam. Virgin TFE stem packing seal, thrust washer and seats.
- Yellow vinyl insulator on heavy duty plated carbon steel handles.
- Fast 1/4 turn open or close operation.
- Flow both directions.
- Low operating torque.
- Adjustable stem packing gland.
- Generic Handles
- Maximum operating temperature: 248^{0}F (120^{0}C)
- Minimum operating temperature: -20^{0}F (-40^{0}C)
- Each valve individually tested.
- Forged Brass - for more strength.
- Threaded ends to ANSI B1.20.1
- Hard chromium plated solid ball
- Bottom entry, blow-out proof stem.
- Made in China

- Not Lead Free

Part#	Size	NPT	A	B	C	D	E	Weight	Box/Case	
948-170	1/4	1/4 - 18	2.016	1.689	2.756	0.315	0.457	0.29	70/140	----
948-171	3/8	3/8 - 18	2.094	1.89	3.543	0.394	0.457	0.33	70/140	----
948-172	1/2	1/2 - 14	2.343	2.05	3.543	0.583	0.520	0.47	50/100	----
948-173	3/4	3/4 - 14	2.618	2.20	3.780	0.748	0.563	0.68	30/60	----
948-174	1	1 - 11.5	3.000	2.579	4.528	0.945	0.630	1.11	20/40	----
948-175	1-1/4	1-1/4 - 11.5	3.563	2.953	4.528	1.260	0.709	1.70	12/24	----
948-176	1-1/2	1-1/2 - 11.5	3.965	3.346	5.512	1.575	0.717	2.50	9/18	----
948-177	2	2 - 11.5	4.496	3.681	5.512	1.969	0.748	3.57	6/12	----



POS	Components	Materials
1	Body	C37700
2	End Cap	CS7700
3	Ball Seat	PTFE
4	Ball	CS7700
5	Stem	CS7700
6	Stem Reducing	PTFE
7	Reducing Nut	CS7700
8	Lever Handle	1008
9	Stem Nut	A570 Gr.A

Locking Handle option
see pg. 182

Tee handle option
see pg. 181

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

ITALIAN MALE X FEMALE BALL VALVE

• BRASS • 600WOG • FULL PORT

Gas Approved

5 PSIG

C US

CSA AGA 3.88 5 PSIG

UL842, UL258, UL125,FM

Made in Italy

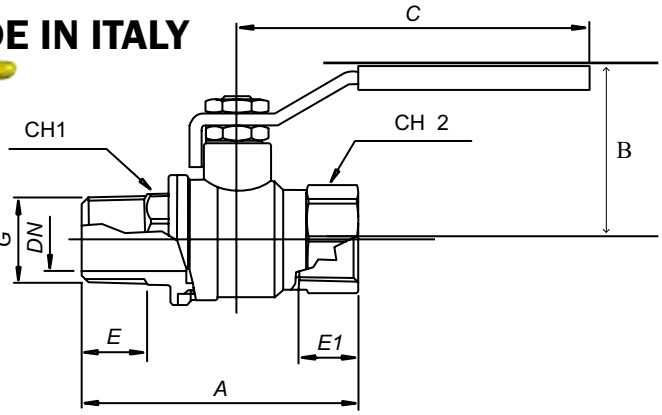
ISO 9002 Manufacturer

FEATURES

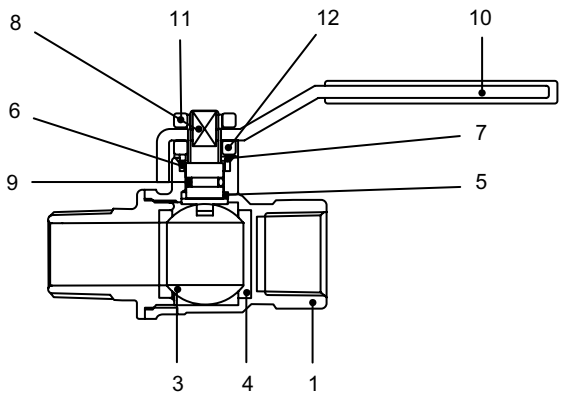
- Solid chrome plated brass ball
- Suitable for full range of liquids and gases.
- Minimal pressure drop due to large full size ports.
- Bottom loaded, pressure retaining stem.
- Pressure rated at 600psi (42 bars) WOG (non-shock) and 150psi (10.34 bars) saturated steam. Virgin TFE stem packing seal, thrust washer and seats.
- Yellow vinyl insulator on heavy duty plated carbon steel handles.
- Fast 1/4 turn open or close operation.
- Generic Handles
- Low operating torque.
- Adjustable stem packing gland.
- Maximum operating temperature: 248^{0}F (120^{0}C) at 600 p.s.i
- Minimum operating temperature: -20^{0}F (-40^{0}C)
- KV: Pressure drop m^3/h.
- Each valve individually tested.
- Forged Brass - for more strength.
- Threaded ends to ANSI B1.20.1
- Hard chromium plated solid ball
- Bottom entry, blow-out proof stem.
- Deeper threads - for better connections.

MADE IN ITALY

MIP x FIP



Part#	Size	DN	A	B	C	E	E1	CH1	CH2	Weight	Box/Case	
948-101	1/4	.39	2.18	1.53	3.28	.39	.43	.55	.75	0.35	24/96	----
948-102	3/8	.39	2.20	1.53	3.28	.43	.43	.71	.86	0.35	24/96	----
948-103	1/2	.57	2.54	1.57	3.28	.62	.46	.87	.98	0.42	14/56	----
948-104	3/4	.75	2.75	1.77	3.80	.55	.49	1.12	1.22	0.68	12/48	----
948-105	1	.94	3.23	2.03	3.80	.69	.59	1.34	1.50	0.95	6 /24	----
948-106	1-1/4	1.24	3.86	2.32	4.63	.81	.79	1.69	1.90	1.66	4/16	----
948-107	1-1/2	1.49	4.20	2.98	6.28	.85	.64	2.15	2.13	2.83	2/8	----
948-108	2	1.96	4.90	3.27	6.38	.90	.75	2.40	2.64	4.22	1/4	----



POS	Components	Materials	N
1	Body	CW617N Forged Brass	1
2	End Connection	CW617N Forged Brass	1
3	Ball	CW617N CP Brass	1
4	Ball Stems	P.T.F.E.	2
5	Stem Antif. Seat	P.T.F.E.	1
6	Stem Seat	P.T.F.E.	1
7	Brass Ring	CW617N Brass	1
8	Stem	CW617N Brass	1
9	O-Ring	NBR 80	1
10	Handle	UNI EN 10025 Steel	1
11	Nut	UN 5771 Steel	1
12	Nut	CW617N Brass	1

• Not Lead Free

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

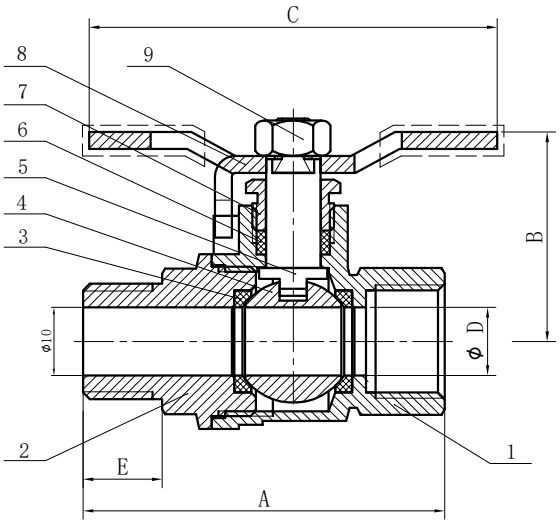
TEE HANDLE BALL VALVE - MALE X FEMALE

UL842, UL258

Features
- Thread conform ANSI B1.20.1
- Forged brass body
- Blow out proof stem design
- Packing nut, O-Ring and packing on the stem seal
- Chrome Plated Brass Ball
- Handle with vinyl grip

Performance rating
- 600 PSI (WOG) 150 PSI (WSP) Service
- Temperature range: -20° F to 300° F
- Made in China
- Not lead free

Part#	Size	Dimension Inches							
	NPT	A	B	C	D	E	Weight	Box/Case	
948-170T	1/4"	2.016	1.27	2.67	0.315	0.457	0.26	70/140	----
948-171T	3/8"	2.094	1.213	2.67	0.394	0.457	0.33	70/140	----
948-172T	1/2"	2.343	1.61	3.12	0.583	0.520	0.49	50/100	----
948-173T	3/4"	2.618	1.26	3.12	0.748	0.563	0.66	30/60	----
948-174T	1"	3.000	1.921	3.701	0.945	0.630	1.06	20/40	----
948-176T	1-1/2"	3.965	2.717	4.331	1.575	0.717	2.46	9/18	----



Item	Part	Materials
1	Body	Brass
2	End Cap	Brass
3	Ball Seat	PTFE
4	Ball	C/P Brass
5	Stem	Brass
6	Stem Packing	PTFE
7	Packing Nut	Brass
8	T-Handle	Nickel plating steel
9	Stem Nut	Brass plating steel

It is during our darkest moments that we must focus to see the light. - Aristotle

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

LOCKING HANDLE BALL VALVES - FEMALE X MALE

UL842, UL258

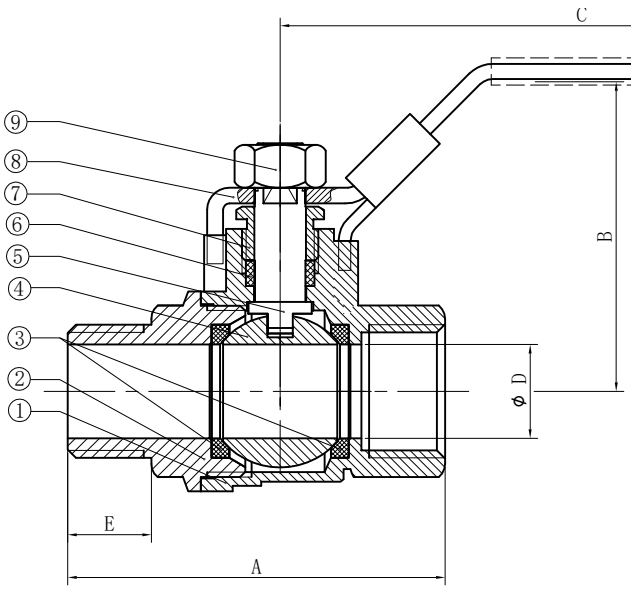
Features

- Thread conform ANSI B1.20.1
- Forged brass body
- Blow out proof stem design
- Packing nut, O-Ring and packing on the stem seal
- Chrome Plated Brass ball
- Handle with vinyl grip

Performance rating

- 600 PSI (WOG) 150 PSI (WSP) Service
- Temperature range: -20° F to 300° F
- Made in China
- Not lead free

Part#	Size	Dimension Inches							
	NPT	A	B	C	D	E	Weight	Box/Case	
948-170L	1/4"	2.016	1.732	3.543	0.315	0.457	0.32	70/140	----
948-171L	3/8"	2.094	1.732	3.543	0.394	0.457	0.37	70/140	----
948-172L	1/2"	2.343	1.941	3.543	0.583	0.520	0.50	50/100	----
948-173L	3/4"	2.618	2.106	3.78	0.748	0.563	0.77	30/60	----
948-174L	1"	3.000	2.579	4.528	0.945	0.630	1.21	20/40	----
948-175L	1-1/4"	3.563	2.961	4.528	1.260	0.709	1.74	12/24	----
948-176L	1-1/2"	3.965	3.366	5.36	1.575	0.717	2.58	9/18	----
948-177L	2"	4.496	3.701	5.36	1.969	0.748	3.73	6/12	----

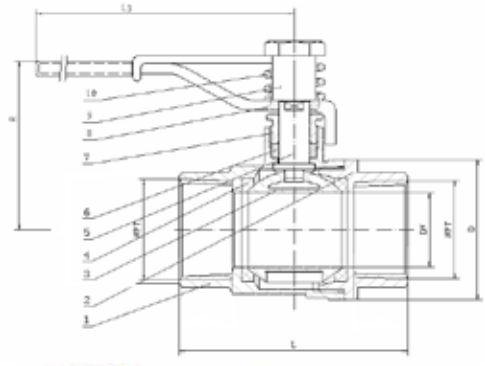


Item	Part	Materials
1	Body	Brass
2	End Cap	Brass
3	Ball Seat	PTFE
4	Ball	C/P Brass
5	Stem	Brass
6	Stem Packing	PTFE
7	Packing Nut	Brass
8	Lever Handle	Nickel plating steel
9	Stem Nut	Brass plating steel

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

BRASS SPRING HANDLE BALL VALVE

Working pressure:600 PSI for brass
Temperature Range:-40°F to 365°F(-40°C to +185°C)
Material:Brass
Spring Lever Handle w/Vinyl Grip
Made in China
Not lead free

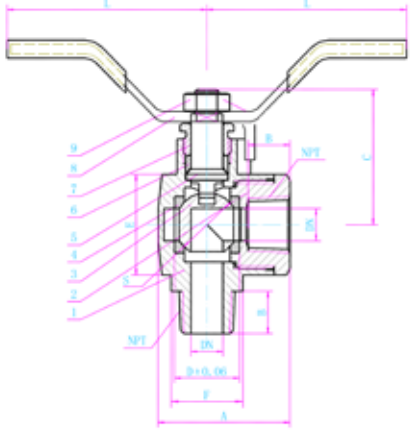


Part #	Part Name	Material
1	Body	Brass
2	Bonnet	Brass
3	Ball	Brass
4	Sealing Seat	PTFE
5	Stem	Stainless Steel
6	Packing Ring	PTFE
7	Gland	Brass
8	Handle	Stainless Steel
9	Bolt	Brass
10	Spring	Stainless Steel

Item#	Size	L	D	DN	H	L3	WTG	Box/Case	
947-103	**1/2"**	2.19	1.24	0.59	1.83	4.24	0.54	10/80	----
947-104	**3/4"**	2.38	1.5	0.75	2.19	4.24	0.72	5/40	----
947-105	**1"**	3.23	1.91	0.98	2.49	4.71	1.32	5/30	----

RIGHT ANGLE BRASS BALL VALVE

Working pressure: 250PSI
Temperature Range -40° to 400°F(-40 °C to +205 °C)
With lever Handle Teflon seats 2-pc,full port Heavy Duty forged Body Steel Handle w/Vinyl Grip-
Made in China
Not lead free



Part #	Part Name	Material
1	Body	Brass
2	Cap	Brass
3	Ball	Brass
4	Seat	PTFE
5	Stem	Brass
6	Stuffing	PTFE
7	Packing Nut	Brass
8	Handle	Steel
9	Nut	Brass

Part #	Size	A	B	C	D	S	DN	L	E	F	WTG	Box/Case	
947-111	1/4	1.59	0.41	1.40	0.64	0.63	0.32	2.60	0.98	0.65	0.34	12/120	----
947-112	3/8	1.59	0.41	1.40	0.73	0.71	0.39	2.60	0.98	0.65	0.36	12/120	----
947-113	1/2	1.73	0.55	1.40	0.79	0.87	0.55	2.60	1.08	0.83	0.47	10/80	----

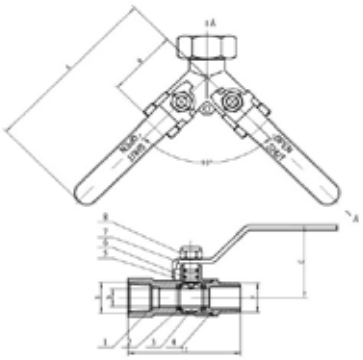
WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

3-WAY AND SAFETY EXHAUST BALL VALVES

3-WAY WYE BRASS BALL VALVE,VENTED AND UNVENTED

- Max.pressure:W.O.G.(water,oil,inert gas)
  Unvented Valve:600psi@70ºF
  Vented Valve:250psi@70ºF
  W.S.P.(working steam pressure)
  Unvented Valve:150psi@365ºF
  Vented Valve:Not related
- Vacuum Rating:29"Hg
- Temperature Range:-40º to 365ºF
- Ports:Full

Part#	Part Name	Material
1	Body	Brass Nickel Plated
2	Seat	PTFE
3	Ball	Brass,Cr.Plated
4	Cap	Brass Nickel Plated
5	Stem	Brass
6	O-Ring	Viton
7	Handle	Stainless Steel
8	Nut	Steel



Designed for the portable air compressor industry,these valves control the flow of water,oil, and inert gases in two direction and are great for mixing and diverting.They have a single female inlet and two male outlets with two ball valves.Valves are Brass Nickel Plated and have chrome-plated brass balls,brass blow-out proof stems ,PTFE seats and seals,and steel lever handles with vinyl grips.Vented valves has a drilled hole on the two valve balls and body that vents compressed air in the line when valve is closed. Connections:1"NPT female inlet and 3/4"NPT male outlet. • Made in China • Not lead free

NON-VENTED

NOW WITH STAINLESS STEEL HANDLES

VENTED

Part #	Ball	E	F	A	B	C	D	G	WTG	Box/Case	
947-125	Non-vented	1" Female	3/4" Male	5.18"	**2.5"**	2.05"	0.59"	90°	1.43	2/24	----
947-126	Vented								1.48	2/24	----

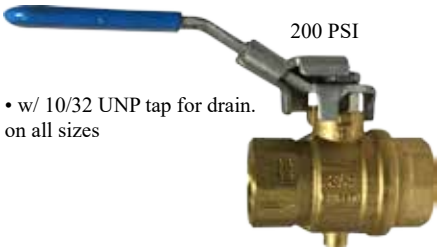
EXHAUST VALVES

AUTOMATIC DRAIN & LATCH LOCK HANDLE

Full port hot forged brass ball valve, blow-out proof stem, downstream automatic vent with lockable handle in compliance with OSHA requirements.

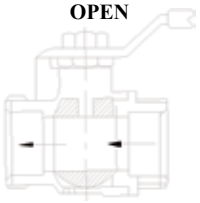
- Maximum working pressure: 200 PSI (CWP).
- Temperature rating: +15°F through +210°F.
- Made in Italy
- Not lead free

200 PSI



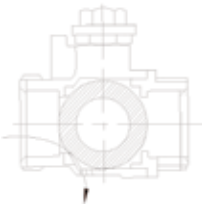
• w/ 10/32 UNP tap for drain. on all sizes

OPEN



Valve - open position. Drain vent shut off.

CLOSED



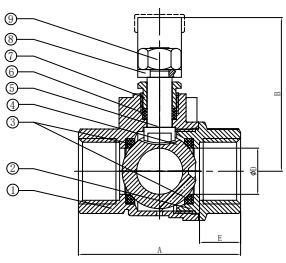
Part#	Size	
948-131	1/4"	----
948-132	3/8"	----
948-133	1/2"	----
948-134	3/4"	----
948-135	1"	----

Valve - closed and draining occurs. Upstream seat prevents air flow. Downstream system is vented to atmosphere.

SAFETY EXHAUST BALL VALVE

- Threaded - Two Piece Body - Full Port • Vented
- Blow-out Proof Stem - PTFE Seats • 400 PSI WOG
- To Exhaust and Downstream Air in the Closed Position w/ locking lever handle.
- Made in China • Not lead free

Part #	Size	A	B	D	E	
948-141	1/4"	1.756	1.88	0.394	0.457	----
948-142	3/8"	1.756	1.88	0.394	0.457	----
948-143	1/2"	2.047	2.13	0.583	0.520	----
948-144	3/4"	2.362	2.28	0.748	0.563	----



MATERIAL LIST

Item	Part	Material
1	Body	Brass
2	End Cap	Brass
3	Ball Seat	PTFE
4	Ball	Brass
5	Stem	Brass
6	Stem Packing	PTFE
7	Packing Nut	Brass
8	Lever Handle	Nickel plating steel
9	Stem Nut	Nickel plating steel

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

GAS BALL VALVES

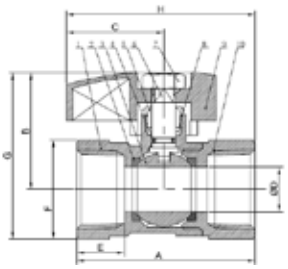
5 PSIG
C US
CSA AGA 3.88 5 PSIG

Manual Valve
LISTED
Threaded NPT
UL 842, UL 258, UL 125

ISO 9002 Manufacturer

FEATURES

- Material: C37700
- Forged brass,Regular port,Thread*Flare Thread
- Thread ends in ANSI B1.20.1
- Working temperature:0-65°(32-149°)
- Pressure :1/2PSI;5PSI;
- ASME B16.44/CR91; ANSI Z21.15/CSA9.1
- UL 125 For LP-Gas 125psig
- Made in China



NO.	ITEM	TOTAL	MATERIAL
10	BALL VALVE CAP	1	BRASS
9	HANDLE	1	AL-alloy
8	PACKING	1	PTFE
7	HANDLE NUT	1	PLATED STEEL
6	STEM	1	BRASS
5	PACKING NUT	1	BRASS
4	O-RING	1	NBR
3	BALL	1	BRASS
2	SEALING WASHER	2	PTFE
1	BALL VALVE BODY	1	BRASS

GAS BALL VALVE (2-Piece)

FEMALE x FEMALE

Part#	Size	WTG	Box/Case	
943-311	3/8"	0.35	10/100	4004006
943-312	1/2"	0.44	10/100	4004008
943-313	3/4"	0.62	10/100	4004012

SIZE	⌀D	A	B	C	E	F	G	H
3/8″	0.394	1.752	1.437	1.28	0.472	0.945	1.909	2.146
1/2″	0.394	2.204	1.437	1.28	0.606	1.043	1.961	2.461
3/4″	0.591	2.362	1.535	1.28	0.626	1.299	2.815	2.476

FLARE X FLARE

Part#	Size	
943342	3/8	----
943343	1/2	----
943345	5/8	----
943344	15/16	----

FLARE X MIP

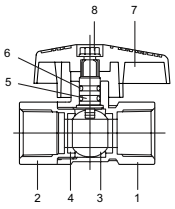
Part#	Size	
943347	3/8 x 1/2	----
943348	1/2 x 1/2	----

FLARE X FIP

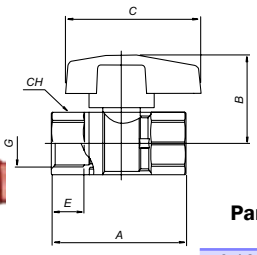
Part#	Size	
943331	3/8 x 1/2	----
943332	1/2 x 1/2	----
943351	5/8 x 3/4	----
943350	15/16 x 3/4	400461512

- For use with natural, manufactured, mixed liquified. petroleum and LP gas-air mixtures.
- Deeper thread connections. Smooth quarter-turn.
- Manufactured to ANSI Z21.15, C.G.A. 9.1-M81, 9.2-M88, 1/2 psig. 372 also to A.G.A.3-8, C.G.A. CR91-002, 2 psig.
- Solid chrome plated brass ball
- Bottom entry
- Blow out proof design.
- Double viton o-rings stem seals
- Teflon seats for durability.
- Forged construction for greater strength.
- Larger ports for increased flow capacity.
- Red Reversible handle.
- May be used with water 400 WOG.

MADE IN ITALY



	Components	Materials
1	Body	Forged Brass
2	End Connection	Forged Brass
3	Ball	Forged Brass
4	Ball Seats	P.T.F.E.
5	Stem	Brass
6	O-Ring	NBR
7	Butterfly	Steel
8	Screw	UNI 5771 Steel



5 PSIG
C US
CSA AGA 3.88 5 PSIG

Manual Valve
LISTED
Threaded NPT
UL 842, UL 258, UL 125

GAS BALL VALVES

FEMALE x FEMALE

Part#	Size	Dimension Inches						PN in psi	WTG	Box/ Case
	G	DN	A	B	C	E	CH			
943-212	1/2"	.47	2.26	1.45	2.28	.55	.98	600	0.33	20/80
943-213	3/4"	.59	2.48	1.57	2.28	.57	1.22	600	0.45	14/56

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

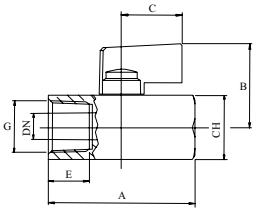
CHROME PLATED BRASS MINI BALL VALVE | VALVES

ITALIAN CHROME PLATED BRASS MINI BALL VALVE

ISO 9002 Manufacturer

FEATURES

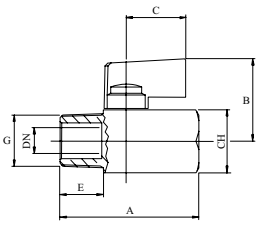
- Solid chrome plated brass ball
- Max working pressure 235 psi will handle 300psi@75° F
- Longer body style for longer, deeper thread connections
- One piece drawn sand blasted chrome plated body.
- Each valve is seal tested for maximum safety.
- Double seal system allows valve to be operated in both directions making installation easier.
- Blowout-proof brass stem.
- NPT taper ANSI B1.20.1 threads.
- 32°F to +176°F temperature.
- 1/4 Turn Aluminium handle with mechanical stop.
- NSF Approved valves available upon request!
- Not lead free



Made in Italy

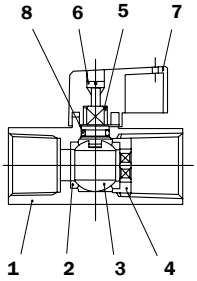
Female x Female

Part#	Size		Dimension Inches							
	G	DN	A	B	C	E	CH	WTG	Box/ Case	
46-922I	1/4"	0.31	1.81	1.17	0.9	0.51	0.83	0.24	50/200	----
46-923I	3/8"	0.31	1.85	1.17	0.9	0.51	0.83	0.22	50/200	----
46-924I	1/2"	0.39	2.18	1.26	0.9	0.61	0.98	0.32	30/120	----

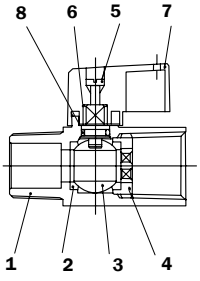


Male x Female

Part#	Size		Dimension Inches							
	G	DN	A	B	C	E	CH	WTG	Box/ Case	
46-903I	1/4"	0.31	1.75	1.17	0.9	.40	0.83	0.20	50/200	----
46-904I	3/8"	0.31	1.81	1.17	0.9	.41	0.83	0.20	50/200	----
46-905I	1/2"	0.39	2.14	1.26	0.9	.52	0.98	0.30	40/160	----



POS	Components	Materials	N
1	Body	CW517N Forged Brass	1
2	Ball Seats	P.T.F.E	2
3	Ball	CW517N CP Brass	1
4	Ring Unit	CW614N Brass	1
5	Stem	CW614N Brass	1
6	Screw	UNI 5771 Steel	1
7	Handle	Aluminum	1
8	O-Ring	NBR 80	1

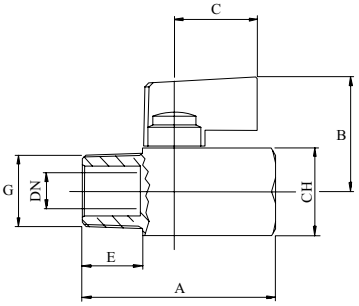


YELLOW BRASS 1/4" MINI MALE X FEMALE VALVE

- **Proprietary seal design extreme for low & high temperature applications**
- **-76° to +248°F temperature.**
- Nominal working pressure 235 psi will handle 300psi@75° F
- One piece drawn sand blasted brass plated body. Solid chrome plate brass ball
- Double seal system allows valve to be operated in both directions making installation easier.
- Blowout-proof brass stem.
- NPT taper ANSI B1.20.1 threads.
- **1/4 TURN BLACK METAL HANDLE WITH MECHANICAL STOP**.

MALE x FEMALE

MADE IN ITALY



Part#	Size		Dimension Inches						
	NPT	DN	A	B	C	E	CH	CASE	
46-903ISB	1/4"	0.315	1.75	1.18	0.91	0.48	0.83	200	----

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

MINI BALL VALVES

- Chrome plated forged brass body
- Chrome plated brass ball
- NPT taper ANSI B1.20.1 threads*
- 450 PSI working pressure
- At 212°F - 355 PSI
- At 356°F - 142 PSI
- 1/4 Turn Alumzinc handle
- Not lead free
- Made in China

FEMALE X FEMALE - FLAG HANDLE

Part #	Size	Dimensions (In)				Wt lbs	Box/ Case	
		A	D(FLOW)	F	G			
46-934	1/8	1.57	0.24	0.93	1.46	0.21	20/300	----
46-935	1/4	1.57	0.31	0.93	1.46	0.20	20/300	----
46-936	3/8	1.57	0.28	0.93	1.46	0.22	20/300	----
46-937	1/2	1.77	0.35	0.93	1.56	0.24	20/200	----

MINI BALL VALVES W/VITON SEALS

FEMALE X FEMALE - LEVER HANDLE

Part #	Size	Dimensions (In)				Wt lbs	Box/ Case	
		A	D(FLOW)	F	G			
46-934L	1/8	1.57	0.24	1.99	1.50	0.21	20/300	----
46-935L	1/4	1.57	0.31	1.99	1.50	0.20	20/300	----
46-936L	3/8	1.60	0.28	1.99	1.50	0.22	20/300	----
46-937L	1/2	1.77	0.35	1.99	1.59	0.24	20/200	----

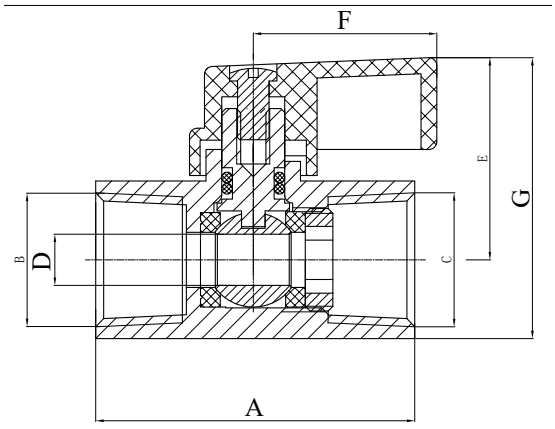
FEMALE X FEMALE - TEE HANDLE

Part #	Size	Dimensions (In)				Wt lbs	Box/ Case	
		A	D(FLOW)	Handle	G			
46-934LT	1/8	1.60	0.24	1.34	1.43	0.21	20/300	----
46-935LT	1/4	1.57	0.31	1.34	1.43	0.20	20/300	----
46-936LT	3/8	1.60	0.28	1.34	1.43	0.22	20/300	----
46-937LT	1/2	1.77	0.35	1.34	1.52	0.24	20/200	----

FEMALE X FEMALE - SCREWDRIVER

Part #	Size	Dimensions (In)		Wt lbs	Box/Case	
		A	D(FLOW)			
46-934LS	1/8	1.57	0.24	0.21	20/300	----
46-935LS	1/4	1.57	0.31	0.20	20/300	----
46-936LS	3/8	1.57	0.28	0.22	20/300	----
46-937LS	1/2	1.77	0.35	0.24	20/200	----

- Not lead free



Pos	Components	Materials	N
1	Body	CP Forged Brass	1
2	Ball Seats	P.T.F.E.	2
3	Ball	CP Brass	1
4	Ring Unit	Brass	1
5	Stern	Brass	1
6	O-Ring - flag handle	NBR 80	1
6	O-Ring - all others	Viton	1
7	Handle	Alumzinc	1
8	Screw	Steel	1

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

MINI BALL VALVE

MINI BALL VALVES

- Chrome plated forged brass body
- Chrome plated brass ball
- NPT taper ANSI B1.20.1 threads*
- 450 PSI working pressure
- At 212°F - 355 PSI
- At 356°F - 142 PSI
- 1/4 Turn Alumzinc handle
- Not lead free
- Made in China

MALE X FEMALE - FLAG HANDLE

Part #	Size	Dimensions (In)				Wt lbs	Box/ Case	
		A	D(FLOW)	F	G			
46-930	1/8	1.57	0.24	0.93	1.46	0.17	20/300	----
46-931	1/4	1.57	0.31	0.93	1.46	0.15	20/300	----
46-932	3/8	1.57	0.28	0.93	1.46	0.21	20/300	----
46-933	1/2	1.77	0.35	0.93	1.56	0.24	20/200	----

MINI BALL VALVES W/VITON SEALS

MALE X FEMALE - LEVER HANDLE

Part #	Size	Dimensions (In)				Wt lbs	Box/ Case	
		A	D(FLOW)	F	G			
46-930L	1/8	1.57	0.24	1.99	1.50	0.17	20/300	----
46-931L	1/4	1.57	0.31	1.99	1.50	0.15	20/300	----
46-932L	3/8	1.57	0.28	1.99	1.50	0.21	20/300	----
46-933L	1/2	1.77	0.35	1.99	1.59	0.24	20/200	----

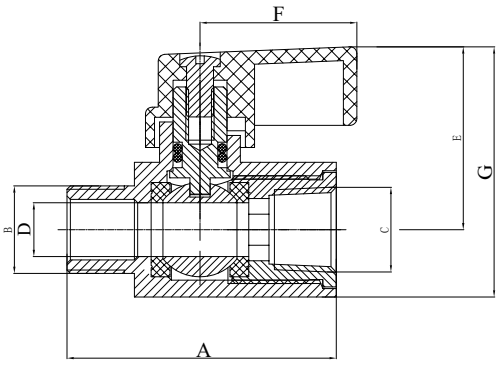
MALE X FEMALE - TEE HANDLE

Part #	Size	Dimensions (In)				Wt lbs	Box/ Case	
		A	D(FLOW)	Handle	G			
46-930T	1/8	1.57	0.24	1.34	1.46	0.17	20/300	----
46-931T	1/4	1.57	0.31	1.34	1.46	0.15	20/300	----
46-932T	3/8	1.57	0.28	1.34	1.40	0.21	20/300	----
46-933T	1/2	1.77	0.35	1.34	1.56	0.24	20/200	----

MALE X FEMALE - SCREWDRIVER

Part #	Size	Dimensions (In)		Wt lbs	Box/ Case	
		A	D(FLOW)			
46-930S	1/8	1.57	0.24	0.17	20/300	----
46-931S	1/4	1.57	0.31	0.15	20/300	----
46-932S	3/8	1.57	0.28	0.21	20/300	----
46-933S	1/2	1.77	0.35	0.24	20/200	----

- Not lead free



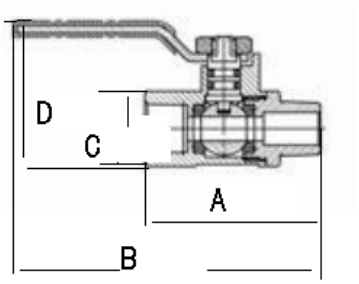
Pos	Components	Materials	N
1	Body	CP Forged Brass	1
2	Ball Seats	P.T.F.E.	2
3	Ball	CP Brass	1
4	Ring Unit	Brass	1
5	Stern	Brass	1
6	O-Ring - flag handle	NBR 80	1
6	O-Ring - all others	Viton	1
7	Handle	Alumzinc	1
8	Screw	Steel	1

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

FORGED BRASS MINI-BALL VALVES

- 180⁰ operational handle, blow out proof stem. Stem with double "O" Rings
- 200 WOG
- Temp rating -20°F - 250°F
- Generic Handles
- Not lead free

NO	Part Name	Material	QTY
1	Nut	Steel	1
2	Handle	Steel	1
3	Cover	PVC	1
4	O-Ring	NBR	2
5	Stem	Brass	1
6	Body	Brass	1
7	Seat	Teflon	2
8	Ball Disc	Brass	1
9	End Plug	Brass	1



FEMALE x FEMALE

Part #	Size	A	B	C	D	
944-113	1/8	1.53	2.80	0.73	1.42	----
944-116	1/4	1.53	2.80	0.73	1.42	----
944-117	3/8	1.73	2.90	0.87	1.50	----
944-140	1/2	2.20	3.08	0.98	1.45	----

FEMALE x MALE

Part #	Size	A	B	C	D	
944-106	1/8	1.69	3.02	0.73	1.46	----
944-100	1/4X1/8	1.28	2.90	0.66	1.32	----
944-101	1/4	1.70	3.00	0.73	1.46	----
944-103	3/8	1.78	3.02	0.87	1.50	----
944-102	3/8X1/4	1.78	2.50	0.89	1.50	----
944-104	1/2	2.34	3.35	0.98	1.45	----

MALE x MALE

Part #	Size	A	B	C	D	
944-107	1/8	1.70	2.94	0.65	1.42	----
944-109	1/4	1.25	2.66	0.65	1.42	----
944-110	3/8	1.90	2.98	0.73	1.42	----
944-112	1/2	2.56	4.93	1.02	2.21	----

HOSE BARB x MALE

Part #	Size	A	B	C	D	
944-132	1/4X1/8	2.05	2.91	0.73	1.51	----
944-138	1/4X1/4	2.08	2.98	0.73	1.51	----
944-128	3/8X1/4	2.08	3.04	0.73	1.51	----
944-130	3/8X3/8	2.12	3.06	0.73	1.51	----
944-139	1/2X1/2	2.15	3.19	0.73	1.51	----

HOSE BARB x FEMALE

Part #	Size	A	B	C	D	
944-135	1/8X1/8	1.78	2.44	0.62	1.38	----
944-136	1/4X1/4	1.97	2.87	0.73	1.55	----

HOSE BARB x HOSE BARB

Part #	Size	A	B	C	D	
944-142	1/4X1/4	2.47	3.19	0.73	1.55	----
944-134	3/8X3/8	2.47	3.18	0.73	1.55	----

LEAD FREE

Part #	Size	A	B	C	D	
944-142LF	1/4	2.49	3.19	0.73	1.55	----
944-134LF	3/8	2.47	3.18	0.73	1.55	----

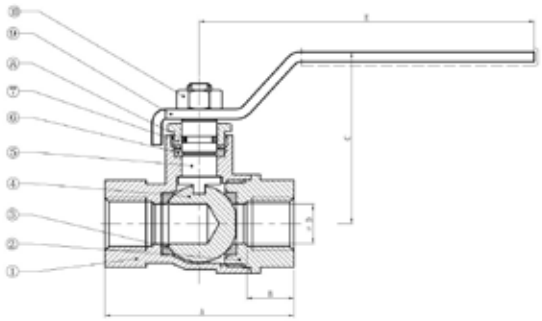
WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

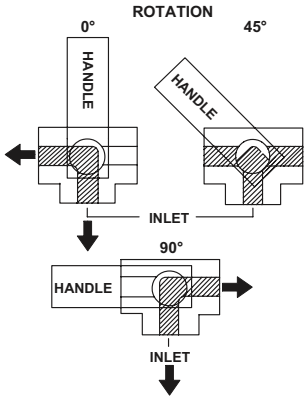
SIDE OUTLET 3-WAY BALL VALVE

• BRASS • 600WOG • FULL PORT

- Forged Brass
- 600 WOG
- Temp Rating 0-230°F

• Side outlet





- Full Port
- Blow-out proof stem
- double o-ring stem packing
- PTFE Seal
- Made in China
- Not lead free

Nomenclature & Materials

NO	Part Name	Material	Qty
1	Body	Brass	1
2	End Cap	Brass	1
3	Ball Seat	PTFE	1
4	Ball	Brass	1
5	Stem	Brass	2
6	Seal	PTFE	1
7	Impacted Nut	Brass	1
8	O-Ring	NBR	2
9	Lever Handle	Steel	1
10	Stem Nut	Steel	1

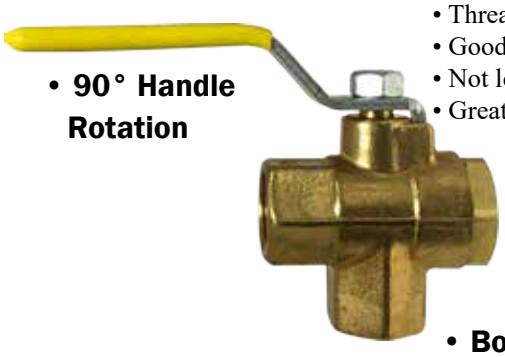
Part#	Size	I	H	D	L	A	WTG	Box/Case	
940-464	1/4"	1.89	1.73	0.39	3.58	0.47	0.51	50/100	----
940-465	3/8"	1.89	1.73	0.39	3.35	0.47	0.57	50/100	----
940-461	1/2"	2.11	1.80	0.50	3.58	0.51	0.65	30/60	----
940-462	3/4"	2.56	2.16	0.74	4.31	0.55	0.99	20/40	----

BOTTOM OUTLET 3 WAY BALL VALVE

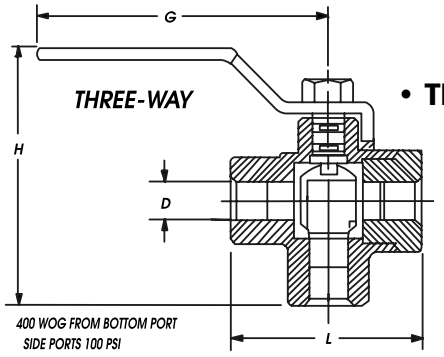
- Forged Brass
  Bottom Port is inlet 400 psi
  Side Ports are inlet 100 psi

- Teflon ball seats
- Double O-Ring Stem Seals - primary seal is Viton secondary seal is Aflas
- Blow out proof stem
- Made in USA
- Threaded ports
- Good for propane
- Not lead free
- Great for diesel fuel

• 90° Handle Rotation



• Bottom outlet



• Threaded

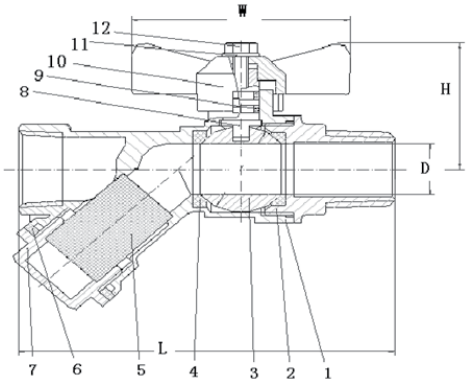
Part#	Size	D	G	H	L	Cv	WTG	
940-121	1/4"	.44	3.50	3.12	2.25	5.2	0.76	----
940-122	3/8"	.50	3.50	3.12	2.25	5.5	0.69	----
940-123	1/2"	.50	3.50	3.12	2.25	5.5	1.00	----

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

BRASS BALL VALVE WITH STRAINER

All-in-One design for economical ,compact and convenient .With stamped stainless Steel Screen . 600PSI WOG Forged brass body,Crome plated ball ,PTFE ball seats and cap seal , and rubber o-ring stem seals. Not lead free

Part #	Part Name	Material
1	Body	Brass
2	Caps	Brass
3	Ball	Brass,Cr.Plated
4	Seat	PTFE
5	Filter	SS
6	Gasket	PTFE
7	Caps	Brass
8	Stem	Brass
9	O-Ring	Viton
10	Handle	Zinc
11	Spring Washer	S.S
12	Nut	Steel



Item#	Size	L	D	W	H	WTG	Box/Case	
947-133	**1/2"x1/2"(MxF)**	3.77"	0.59"	2.00"	1.50"	0.60	8/64	----
947-134	**3/4"x3/4"(MxF)**	4.32"	0.75"	2.40"	1.85"	1.00	8/64	----

VACUUM BREAKER

- *Male hose and female hose threads can be broken off for permanent attachment*
- *Set screw*
- *Vandal proof*
- *Rough brass construction*
- *Prevents back-siphonage on hoses to prevent potable water from getting contaminated*
- *Certified under ASSE Std. 1011*
- *UPC*
- *CSA*

Part #	Size	
947-055	3/4" x 3/4"	4009612
947-055LF	3/4" x 3/4"	

HOSE BIBBS
3/4" Hose Thread Outlet

IPS

Part #	Size	WTG	Box/ Case	
942-170	1/2 (1/2"C)	0.33	10/100	
942-171	3/4	0.35	10/100	

RADIATOR AIR VALVE
COIN SLOT OR LOSSE KEY

Part #	Size	
943-284	1/8" MIP	----
943-287	Key only	----

BENT NOSE GARDEN VALVES

- Heavy brass construction
- Cast iron handle
- Stuffing box
- Neoprene seal disc

Part #	Size	Box	Case	
942-100	1/2"	12	72	----
942-101	3/4"	12	72	----
942-102	1"	12	72	----

ANGLE SILLCOCKS
3/4" Hose Thread Outlet

- Notched flange for convenient installation.
- Heavy brass construction.
- Cast Iron handle.
- Not lead free

FEMALE IPS

Part #	Size	Box	
942-142	1/2	12	4009008

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

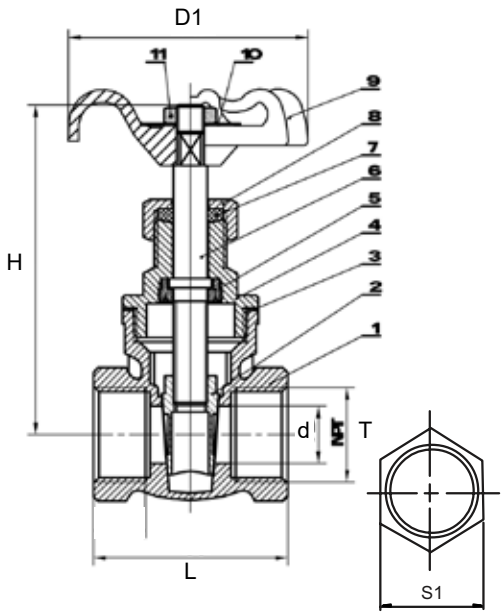
BRASS GATE VALVE

• BRASS • 200WOG • FULL PORT

- 200 WOG (cold water, oil, gas).
- 125 WSP (Saturated Steam).
- Full-port design for a better water flow.
- Screw-in Bonnet - Non-Rising Stem - Solid Wedge
- NPT Threaded ends to ANSI B1.20.1
- Cast iron handle.
- Each valve individually air tested under water.
- Good for diesel fuel.
- Made in Indonesia
- Not lead free
- Temp. 32°-320°F

BRASS GATE VALVES IPS

Part#	Size	L	H	D1	d	T	S1	Weight	Box/Case	
940-130	1/4	1.64	2.91	2.09	0.44	1/4-18 NPT	.85	0.60	10/120	4001004
940-131	3/8	1.71	2.91	2.09	0.48	3/8-18 NPT	.85	0.59	10/120	4001006
940-132	1/2	1.71	2.91	2.09	0.50	1/2-14 NPT	1.03	0.75	10/120	4001008
940-133	3/4	1.71	3.06	2.13	0.74	3/4-14 NPT	1.26	0.83	10/80	4001012
940-134	1	2.13	3.60	2.48	0.97	1-11.5 NPT	1.51	1.24	5/60	4001016
940-135	1-1/4	2.24	4.50	2.66	1.22	1-1/4-11.5 NPT	1.89	1.69	5/40	4001020
940-136	1-1/2	2.44	5.08	3.15	1.45	1-1/2-11.5 NPT	2.17	2.17	5/30	4001024
940-137	2	2.70	5.94	3.52	1.85	2-11.5 NPT	2.60	3.33	2/24	4001032
940-138	2-1/2	3.70	7.87	3.98	2.48	2-1/2-8 NPT	3.27	6.26	1/10	4001040
940-139	3	4.02	8.82	4.37	2.80	3-8 NPT	3.86	8.34	1/6	4001048
940-140	4	4.53	9.88	4.74	3.60	4-8 NPT	4.88	13.09	1/4	4001064



See Lead Free section page 172 for lead free Gate Valves.

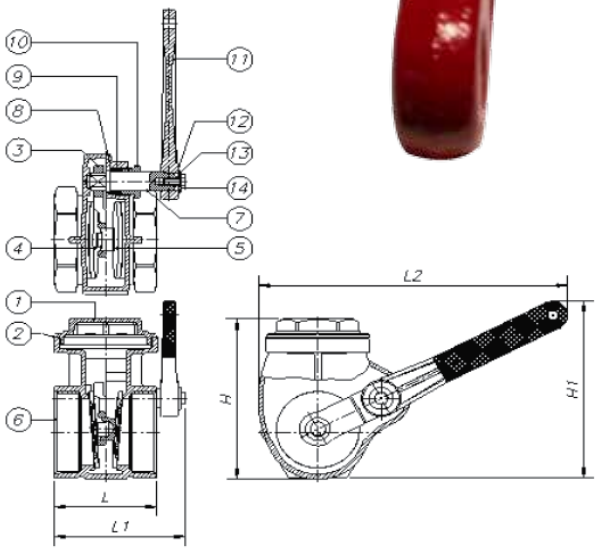
See page 207 for SS Gate Valve

NO	Description	Material
1	Body	C85700
2	Disk	C85700
3	Seat	PTFE
4	Cap	C85700
5	Packing	C85700
6	Stem	C85700
7	Rubber Seat	NBR
8	Packing Nut	C85700
9	Handle	Cast Iron
10	Nameplate	AL
11	Stem Nut	SAE 1010R

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

GATE VALVE QUICK OPENING

Features: Bronze Material, Threaded Ends



MATERIAL SPECIFICATION

No.	Part	Bronze
1	BONNET	BRASS (C85700)
2	PACKING	FIBRE
3	ARM	BRASS (C85700)
4	DISC MALE	BRASS (C85700)
5	DISC FEMALE	BRASS (C85700)
6	BODY	BRASS (C85700)
7	STEM	BRASS (C37700)
8	WASHER	BRASS (C37700)
9	PACKING	TEFLON POLYFLON (PTFE M-392)
10	PACKING NUT	BRASS (C37700)
11	HANDLE	CAST IRON (JIS ZZ2202) RUBBER COATING BRASS (C85700)
12	NAME PLATE	ALUMINIUM (A1100)
13	WASHER	HOT ROLLED (SAE 1010R)
14	HANDLE BOLT	HOT ROLLED (SAE 1010R)

Part #	Size	L	L1	L2	H	H1	Box	Case	
941-133	1/2"	45.6	60.6	119	56.8	52.8	10	50	----
941-134	3/4"	51	62	126.3	68	87.5	10	50	----
941-135	1"	58.3	72.3	155	78.7	90.2	10	30	----
941-136	1-1/4"	30.1	78	180.2	89.5	104	5	25	----
941-137	1-1/2"	66.7	85.3	196.6	99.2	131	6	18	----
941-138	2"	76.4	90.3	250.6	119.3	143.7	2	10	----
941-140	3"	101	129.2	305.6	172.2	191.3	2	6	----
941-141	4"	114.5	150.7	378.2	213.5	248.6	1	2	----

Ignorance, the root and stem of all evil. - Plato

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

CLASS 150 BRASS Y-PATTERN STRAINER

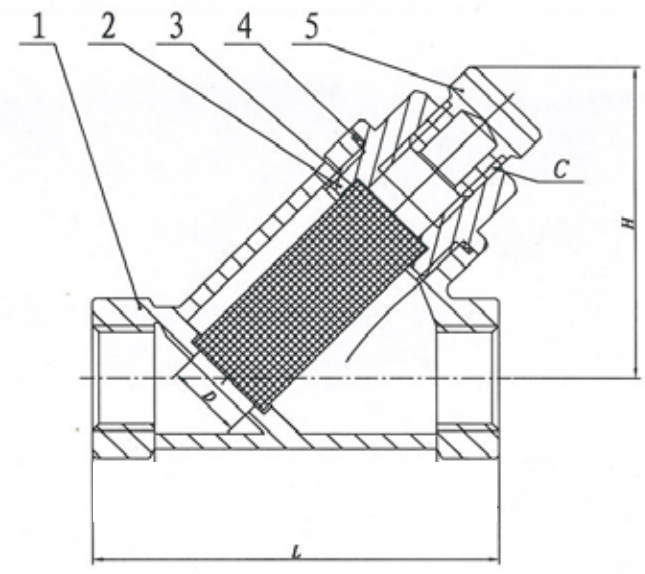
- Forged Brass body, size 1/4"-3".
- Pressure rating: 150 WOG (water, oil, gas)/PN25
  150 WSP (Saturated Stem)
- NPT Threaded ends to ANSI B1.20.1
- Protects regulators, pumps, meters and other controls from damage due to sediment scale, metal chips or other foreign materials.
- Screwed cap is threaded & gasketed.
- Tapped drain plug opening in cap.
- 304 stainless steel screen #20 mesh.
- Self cleaning.
- Self cleaning can be accomplished by opening the valve or plug connected to the blow-off outlet.
- Made in Indonesia
- NOT LEAD FREE
- w/20 Mesh Screen
- Temp 180°F

Part#	Size	L	H	C (Plug)	Weight	Box/Case	
940-521	1/4"	2.57	1.95	NPT 3/8	.53	10/100	----
940-522	3/8"	3.23	2.44	NPT 3/8	.71	12/48	----
940-523	1/2"	3.23	2.44	NPT 3/8	.66	12/48	----
940-524	3/4"	3.94	2.78	NPT 3/8	1.10	8/48	----
940-525	1"	4.53	3.19	NPT 1/2	1.71	8/32	----
940-526	1-1/4"	5.33	3.66	NPT 1/2	2.49	6/24	----
940-527	1-1/2"	6.20	3.82	NPT 1/2	3.24	2/16	----
940-528	2"	7.44	4.65	NPT 1/2	5.39	2/8	----
940-529	2-1/2"	9.50	5.39	NPT 3/4	9.56	1/6	----
940-530	3"	9.4	5.67	NPT 3/4	13.49	1/4	----

Add 'S' to part # for replacement screens

See page 172 for 1/2" Lead Free

See page 207 for SS Y Strainer

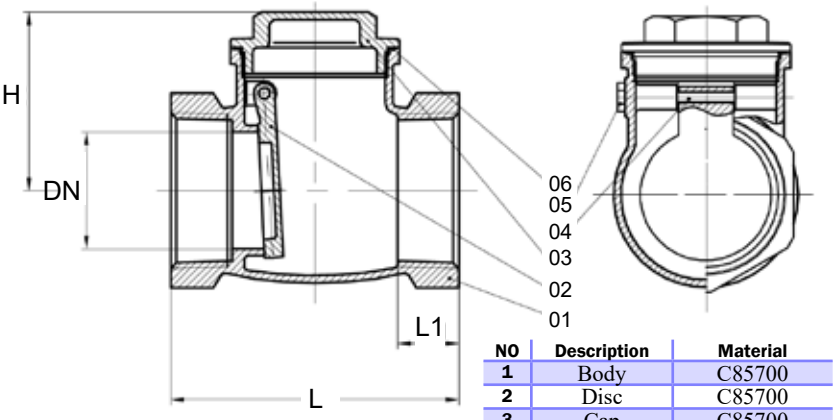


NO	Name	Material
1	BODY	C85700
2	BONNET	C85700
3	STRAINER	304 S.S.
4	SPRING SEAL	PTFE
5	END CAP	C85700

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

BRASS SWING CHECK VALVES

- Working pressure non-shock: 200 psi W.O.G. (cold water, oil, gas) 125 psi WSP (saturated steam)
- Swing type disc.
- Screwed Cap.
- Hard Seat.
- 90⁰ Straight Pattern.
- Used to prevent reverse flow in commercial and industrial applications.
- Threaded ends to ANSI B1.20.1
- Integral seat.
- Temp range -5° - 150F°
- NOT LEAD FREE
- Cracking pressure 3-5 psi
- Made in Indonesia



NO	Description	Material
1	Body	C85700
2	Disc	C85700
3	Cap	C85700
4	Brass Bar	C85700
5	Screw	C85700
6	Gasket	Fibre H

CAST BRASS SWING CHECK VALVES IPS SCREWED ENDS

Part #	Size	L	H	L1	DN	Weight	Box/Case	
940-352	1/2	2.09	1.42	0.531	0.512	.41	10/100	4003008
940-353	3/4	2.36	1.56	0.579	0.728	.56	10/80	4003012
940-354	1	2.62	1.77	0.748	0.925	.73	5/60	4003016
940-355	1-1/4	3.19	2.07	0.748	1.201	1.36	5/40	4003020
940-356	1-1/2	3.54	2.16	0.846	1.417	1.56	5/30	4003024
940-357	2	4.21	2.74	0.886	1.772	2.58	2/20	4003032
940-358	2-1/2	5.14	3.09	1.063	2.224	4.55	1/15	4003040
940-359	3	5.77	3.80	1.102	2.579	6.53	1/6	4003048
940-360	4	6.84	4.25	1.102	3.602	10.18	1/4	4003064

• See page 172 for Lead Free Brass Swing Check Valves

• See page 207 for SS Swing Check Valves

Y PATTERN BRASS SWING CHECK VALVE SCREWED ENDS

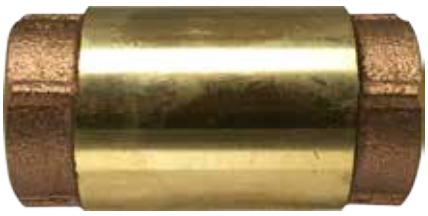
Part #	Size	
940-352B	1/2"	----
940-353B	3/4"	----
940-354B	1"	----
940-355B	1-1/4"	----
940-356B	1-1/2"	----
940-357B	2"	----

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

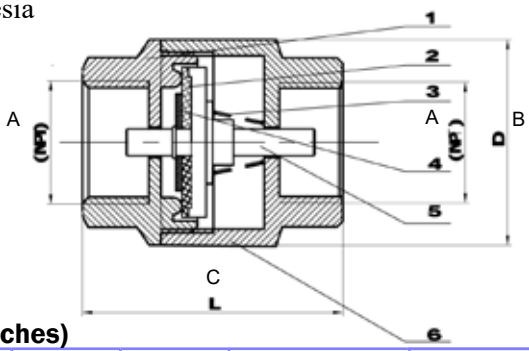
BRASS CHECK VALVES

S.S. SPRING LOADED BRONZE POPPET - For positive sealing & self-cleaning. Insures against leakage.

- Inline Lift Type - Resilient Discs - Spring Actuated - Threaded.
- Presure rating: 200 WOG (water, oil, gas) / 125 WSP (Saturated Steam)
- Spring in stainless steel AISI 304. • Resilient washer hold/ disc in brass. • Forged Brass Body for 1/2"-2"
- Corrosion resistant material. • Can be used vertically or horizontally. • Opens & Closes with flow of media.
- No cracking pressure. • NOT LEAD FREE • Made in Indonesia



Temp Range
-10°C - 110°C
14°F - 248°F



Brass Check Valve (Inches)

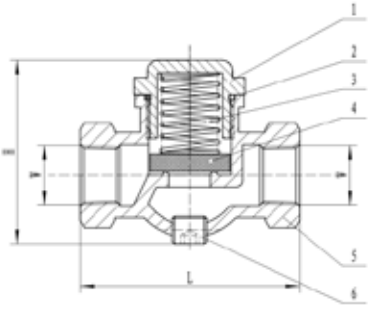
Part#	Size	Enters Pipe Size	A NPT	B	C	Weight	Box/Case	
944-428	1/4"	-	1/4"	1.00	2.29	.24	24/192	----
944-429	3/8"	-	3/8"	1.00	2.07	.23	10/100	----
944-430	1/2"	1-1/4"	1/2"	1.26	2.40	.42	10/100	4003408
944-431	3/4"	1-1/4"	3/4"	1.45	2.74	.53	10/80	4003412
944-432	1"	2"	1"	1.77	3.23	.80	6/60	4003416
944-433	1-1/4"	2-1/2"	1-1/4"	2.13	3.62	1.18	4/40	4003420
944-434	1-1/2"	3"	1-1/2"	2.29	4.04	1.40	5/30	4003424
944-435	2"	3-1/2"	2"	2.48	5.04	2.70	5/20	4003432

• See page 172 for Lead Free Brass Check Valves

• See page 203-207 for SS Check Valves

IN LINE CHECK VALVES VERTICAL OR HORIZONTAL

- Working Pressure: 250 PSI • Temperature Range: -40° to 450°F(-40°to 230°C)
- Cracking Pressure: 3 PSI • Made in China • Not lead free
- Applications:Air Compressor Discharge Lines, may also used on water or oil lines
- Construction:Cast Bronze Body,Corrosion Resistant Stainless Steel Spring to Ensure Long Life,15% Glass Filled • Teflon Poppet,C360 Machined Brass Cap,1/8 NPT Unloader Port is Standard • Repairable



Part#	Part Name	Material
6	Plug	Brass
5	Body	Bronze
4	Gasket	PTPF
3	Spring	S.Steel
2	O-ring	HNBR
1	Cap	Brass

Part #	Size	W	L	H	WTG	Box/Case	
947-140	1/8"	1/8	1.75	1.34	0.28	20/100	----
947-141	1/4"	1/4	1.75	1.37	0.29	20/100	----
947-142	3/8"	3/8	2.50	2.18	0.62	10/50	----
947-143	1/2"	1/2	2.50	2.13	0.54	10/50	----
947-144	3/4"	3/4	2.88	2.64	1.17	8/40	----
947-145	1"	1	3.61	3.30	1.98	2/20	----

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

BRASS IN-LINE CHECK VALVES

High Capacity, Size 1/4"-2" 400 WOG, 2 1/2"-4" 175 WOG

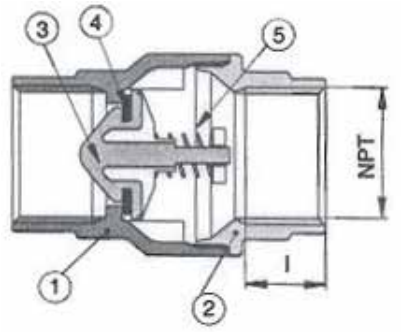
- Soft Seat for Bubble Tight Shutoff, Spring Loaded for Fast Seating Action.
- Compact design.
- Low Cracking Pressure 1/2 psi.
- Flow Profile Designed to Minimize Head Loss.
- Perfect Seating both at High and Low Pressure, Wide Temperature Range: +10° to 210°F.
- Polyethermide Disc to ensure the Best Resistance For Corrosion and Abrasion.
- Patented Disc Guide to Prevent Any Side Loading.
- Connection: FNPT x FNPT.
- Made in Italy • Not lead free

NBR for water, oils and general purpose.
With VITON® Seal for fuels and hydrocarbons. Max working TEMPERATURE 325°F/125 psi steam

Add V to part# for Viton®

Brass In-Line Check

Part#		Size	l	psi	Lbs	Case	Viton Part#	
944-401	----	1/4"	0.39	400	0.22	144		
944-402	----	3/8"	0.40	400	0.18	144	944-402V	----
944-403	----	1/2"	0.60	400	0.32	144	944-403V	----
944-404	----	3/4"	0.65	400	0.49	90	944-404V	----
944-405	----	1"	0.66	400	0.71	90	944-405V	----
944-406	----	1-1/4"	0.68	400	1.13	30	944-406V	----
944-407	----	1-1/2"	0.68	400	1.53	30	944-407V	----
944-408	----	2"	0.69	400	2.28	12	944-408V	----
944-409	----	2-1/2"	0.93	175	4.83	4	944-409V	
944-410	----	3"	1.01	175	6.70	4	944-410V	
944-411	----	4"	1.09	175	12.43	2	944-411V	

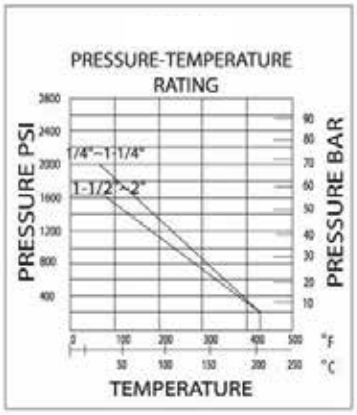


NO	Part	Material	PCS
1	BODY	BRASS	1
2	END CONNECTION	BRASS	1
3	DISC	POLYETHERIMIDE	1
4	SEAT	100002 NBR	1
		100003 Viton	1
5	SPRING	STAINLESS STEEL	1

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

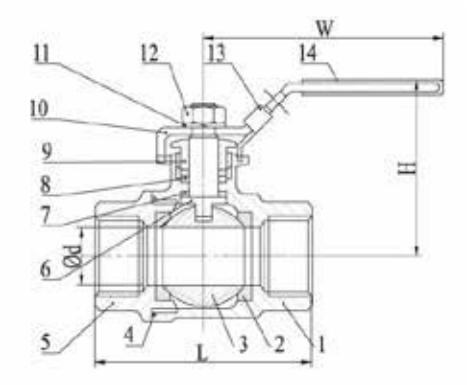
316 SS 2-PC BALL VALVE, FULL PORT, THREADED END, 2000 PSI

- Investment Castings for body and cap.
- Internal Entry blow-out proof stem.
- Pressure rating: 2000PSI.
- Threaded Ends: ANSI B2,1
- Material: CF8M (316SS)
- Pressure test: API 598
- Generic Handles



LOCKING HANDLE

Part#	Size	D	L	H	W	N.M	lbs/ pc	Case	
949-171	1/4"	0.36	2.13	2.13	4.33	.157	0.64	80	----
949-172	3/8"	0.50	2.13	2.16	4.33	.157	0.58	80	----
949-173	1/2"	0.59	2.24	2.28	4.53	.197	0.71	70	----
949-174	3/4"	0.79	2.76	2.40	4.53	.315	1.18	50	----
949-175	1"	0.98	3.50	3.03	6.04	.394	2.33	30	----
949-176	1-1/4"	1.25	4.12	3.19	6.04	.551	3.48	20	----
949-177	1-1/2"	1.50	4.05	3.54	6.10	.709	4.03	14	----
949-178	2"	1.96	4.90	4.25	6.10	.984	7.50	7	----



NO	Part	Material	QTY
1	BODY	316SS	1
2	BALL SEAT	PTFE	2
3	BALL	316SS	1
4	BODY SEAL	PTFE	1
5	CAP	316SS	1
6	STEM	SS316	1
7	THRUST WASHER	PTFE	1
8	PACKING	PTFE	1
9	GLAND NUT	SS304	1
10	HANDLE	SS304	1
11	WASHER	SS304	1
12	NUT	SS304	1
13	LOCK DEVICE	SS304	1
14	HANDLE COVER	PLASTIC	1

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

ONE PIECE STANDARD PORT BALL VALVE

316 Stainless Steel

1000 PSI

- Manufactured for harsh environments with female NPT threads.
- Locking handle for greater security.
- Standard port has restricted flow.
- Made with corrosion resistant stainless steel materials.
- PTFE seat and seals.
- Investment Castings for Body and Cap.
- Internal Entry Blow-out proof stem.
- Pressure rating: 1000PSI (PN63)
- Threaded Ends: ANSI B2.1
- Material: CF8M
- Pressure Test: API 598
- Generic handles

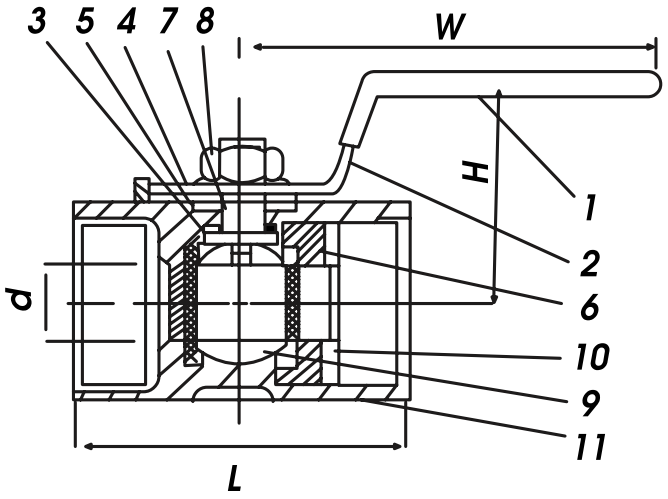
LOCKING HANDLE

Valves will accept a pad-lock on the handle.

dimensions (inches)

Part#	Size	D	L	H	W	Weight	Case	
949-101	1/4"	0.20	1.53	1.53	3.03	0.19	150	----
949-102	3/8"	0.27	1.74	1.53	3.03	0.23	150	----
949-103	1/2"	0.36	2.24	1.73	3.46	0.41	100	----
949-104	3/4"	0.50	2.32	1.89	3.46	0.63	70	----
949-105	1"	0.59	2.80	2.24	4.29	0.86	50	----
949-106	1-1/4"	0.79	3.07	2.32	4.29	1.34	30	----
949-107	1-1/2"	0.98	3.26	2.76	5.14	2.00	25	----
949-108	2"	1.25	3.94	2.24	6.50	2.88	15	----

Larger sizes available on special order basis



Item	Parts	Material
1	Plastic Cover	Plastic
2	Handle	AISI 304 SS
3	Thrust Washer	PTFE
4	Packing Ring	AISI 304 SS
5	Stem Packing	PTFE
6	Seat	PTFE
7	Seat	AISI 316 SS
8	Stem Nut	AISI 304 SS
9	Ball	316SS ASTM-A351 CF8M
10	Cap	316SS ASTM-A351 CF8M
11	Body	316SS ASTM-A351 CF8M

SS = Stainless Steel

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

316 SS TWO PIECE FULL PORT VALVES

TWO PIECE FULL PORT BALL VALVE

316 Stainless Steel

1000 PSI

Materials: CFM8M (SS316)

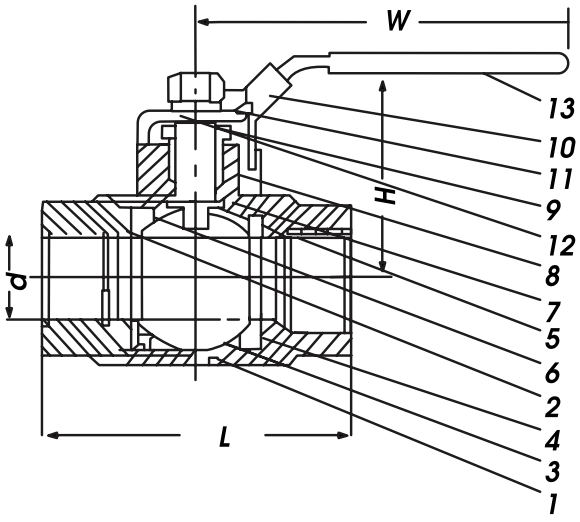
Features:

- Quality manufactured for harsh environments.
- Corrrosion resistant.
- Investment Casting body
- Working pressure 1000 psi for W.O.G.
- Adjustable stem packing
- Pure teflon seals and seats
- Temperature range: -60 to 450°F
- Blow-out proof stem and safe pressure-reducing hole
- 100% leakage tested at 100 psi air under water
- Hydrostatic test pressure: 1500 psi
- Locking handle w/ blue generic sleeve
- 125 Steam rated
- Generic Handles

Valves will accept a pad-lock on the handle.

dimensions (inches)

Part#	Size	D	L	H	W	Weight	Case	
949-161	1/4"	0.36	2.13	2.13	4.33	0.51	80	----
949-162	3/8"	0.50	2.13	2.16	4.33	0.49	80	----
949-163	1/2"	0.59	2.24	2.28	4.17	0.69	70	----
949-164	3/4"	0.79	2.68	2.40	4.17	1.03	50	----
949-165	1"	0.98	3.15	2.50	4.88	1.40	30	----
949-166	1-1/4"	1.26	3.58	3.19	5.04	2.17	20	----
949-167	1-1/2"	1.49	4.05	3.54	6.10	3.33	12	----
949-168	2"	1.97	4.88	4.25	6.13	6.02	7	----
949-170	3"	3.15	7.28	5.71	9.06	21.01	2	----
949-180	4"	3.94	8.84	7.28	11.10	36.18	1	----



Dimensions may change without notice. Please see our website if they are critical.

Item	Parts	Material
1	Body	316SS ASTM-A351 CF8M
2	Body Cap	316SS ASTM-A351 CF8M
3	Ball	316SS ASTM-A351 CF8M
4	Seat	Reinforced PTFE
5	Stem	AISI 316 SS
6	Seal	Reinforced PTFE
7	Thrust Washer	Reinforced PTFE
8	Packing	Reinforced PTFE
9	Gland Nut	AISI 304SS
10/11	Nut & Washer	AISI 304SS
12	Handle	AISI 304SS
13	Plastic Cover	Plastic

SS = Stainless Steel

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

STAINLESS STEEL MIN BALL VALVES

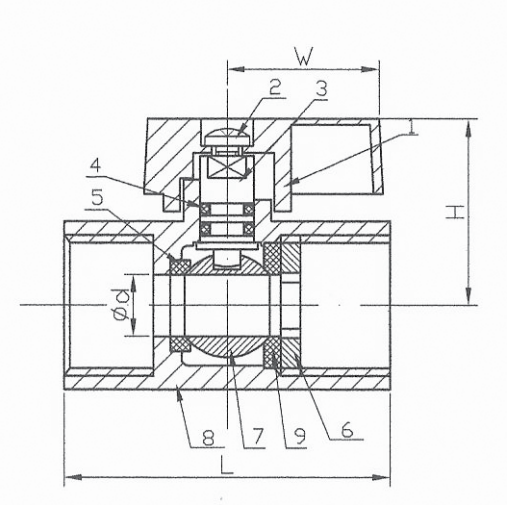
- 316 Stainless Steel
- Working pressure 400PSI
- Working Temperature -10°C to 150°C

FEMALE PIPE x FEMALE PIPE

Part#	Size	W	D	H	L	Weight	Case	
46934SS	1/8"	.898	.197	.985	1.693	.18	150	----
46935SS	1/4"	.898	.276	.984	1.693	.21	150	----
46936SS	3/8"	.898	.276	.984	1.693	.19	150	----
46937SS	1/2"	.898	.362	1.114	1.811	.26	100	----

MALE PIPE x FEMALE PIPE

Part#	Size	W	D	H	L	Weight	Case	
46930SS	1/8"	.898	.197	.985	1.693	.18	150	----
46931SS	1/4"	.898	.276	.984	1.693	.18	150	----
46932SS	3/8"	.898	.276	.984	1.693	.19	150	----
46933SS	1/2"	.898	.362	1.114	1.811	.26	100	----



NO	Part	Material	QTY
1	LEVER	ALUMINIUM ALLOY	1
	HANDLES	PLASTIC	
2	BOLT	304	1
3	STEM	304/ 316	1
4	"O" RING	NBR	1~2
5	BALL SEAT (A)	PTFE	1
6	CAP	CF8/ CF8M	1
7	BALL	CF8/ CF8M	1
8	BODY	CF8/ CF8M	1
9	BALL SEAT (B)	PTFE	1

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

316 SS MINI BALL VALVES

MINI STAINLESS STEEL BALL VALVE ,WITH BUTTERFLY HANDLE

1000PSI WOG , 150PSI WSP
Temperature Range: -36°F to + 368°F
Full Port for 1/4" , Standard port for 3/8" and 1/2"
316 Stainless Steel body and Ball
Teflon seats and sealing

- Viton O-Ring
- #316 Stainless Steel
- Made in China

FEMALE PIPE X FEMALE PIPE

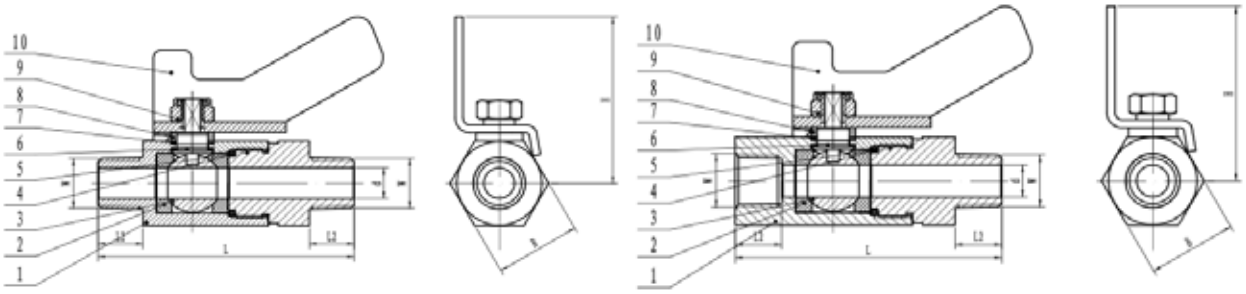
Part #	Size	Dimensions in						
	FIP x FIP	d	L	B (Hex)	H	WTG	Box	
46-922SS	1/4"×1/4"	0.314"	2.34"	22.1/0.87"	1.5"	0.33	36	----
46-923SS	3/8"×3/8"	0.314"	2.39"	22.1/0.87"	1.5"	0.39	36	----
46-924SS	1/2"×1/2"	0.314"	2.81"	24.9/0.98"	1.5"	0.43	36	----

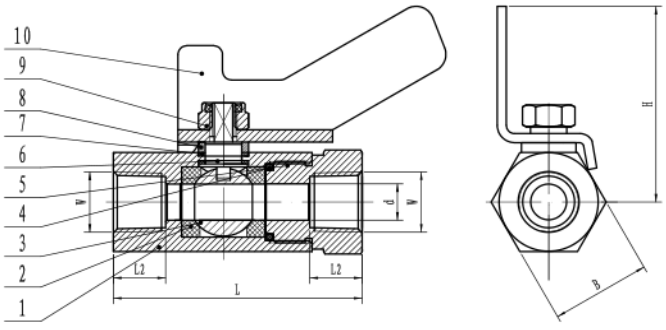
MALE PIPE X FEMALE PIPE

Part #	Size	Dimensions in						
	MIP x FIP	d	L	B (Hex)	H	WTG	Box	
46-903SS	1/4"×1/4"	0.314"	2.45"	0.87"	1.5"	0.39	36	----
46-904SS	3/8"×3/8"	0.314"	2.45"	0.87"	1.5"	0.36	36	----
46-905SS	1/2"×1/2"	0.314"	2.81"	0.98"	1.5"	0.41	36	----

MALE PIPE X MALE PIPE

Part #	Size	Dimensions in						
	MIP x MIP	d	L	B (Hex)	H	WTG	Box	
46-912SS	1/4"×1/4"	0.314"	2.59"	0.87"	1.5"	0.33	36	----
46-913SS	3/8"×3/8"	0.314"	2.65"	0.87"	1.5"	0.34	36	----
46-914SS	1/2"×1/2"	0.314"	2.47"	0.98"	1.5"	0.63	36	----





Part #	Part Name	Material
1	Body	S316
2	Seat	PTFE
3	Ball	S316
4	O-Ring	Viton
5	Cap	S316
6	Stem	S316
7	Stem Bottom Seal	PTFE
8	Stem Up Seal	PTFE
9	Nut	Steel
10	Handle	Steel

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm.
For more information, visit www.P65Warnings.ca.gov

#304 STAINLESS STEEL

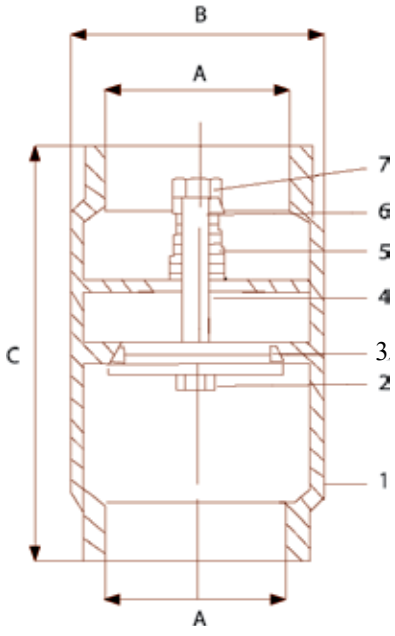
CHECK VALVE

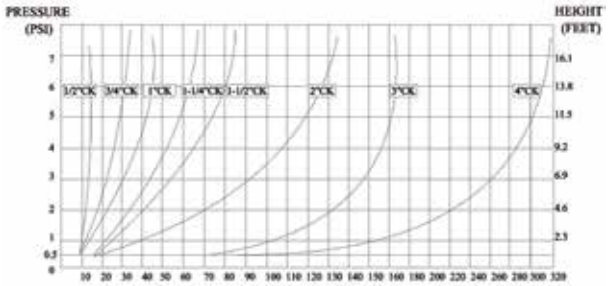
- No Lead.
- Water wells need a check valve installed above the pumps between lengths of drop pipes.
- Opens & Closes with flow of media.
- No cracking pressure.
- Working pressure unavailable.
- Made in Taiwan

Dimensions (Inches)

Part#	Size	A NPT	B	C	Box/Case	
949-430	1/2"	1/2"	1.26	2.43	10/100	----
949-431	3/4"	3/4"	1.50	2.72	10/80	----
949-432	1"	1"	1.77	3.23	10/60	----

More sizes available on a special order basis.





FLOW RATE GALLONS PER MINUTE

NO	Part	Material
1	Body	S.S 304
2	Stopper	S.S 304
3	O-Ring	Viton
4	Washer	PE
5	Spring	S.S 304
6	Cap	S.S 304
7	Nut	S.S 304

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

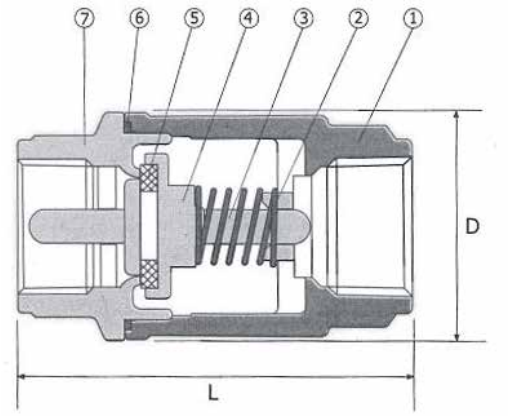
STAINLESS STEEL IN-LINE CHECK VALVE

High Capacity, Size 1/4"-2" 800 WOG

- Soft PTFE Seat for Bubble Tight Shutoff, Spring Loaded for Fast Seating Action
- Low Cracking Pressure 1/2 psi.
- Flow Profile Designed to Minimize Head Loss.
- Perfect Seating both at High and Low Pressure, Wide Temperature Range: +10° to 450°F.
- Corrosion Resistant-Excellent for use on Chemicals.
- ASTM A351-CF8M Investment Casting.
- Connection: FNPT x FNPT.
- 125WSP Saturated Steam.
- ANSI B1.20.1 Threads.
- Dual Guided Stem & Disc.
- Made in Italy

Stainless Steel In-Line Check

Part#	Size	D	L	psi	Lbs	
949-401	1/4"	1.15	2.25	800	0.36	----
949-402	3/8"	1.16	2.25	800	0.34	----
949-403	1/2"	1.35	2.31	800	0.40	----
949-404	3/4"	1.81	2.87	800	0.85	----
949-405	1"	2.13	3.50	800	1.30	----
949-406	1-1/4"	2.46	4.18	800	2.50	----
949-407	1-1/2"	2.88	4.93	800	3.40	----
949-408	2"	3.56	6.00	800	6.0	----



NO	Part	Material	PCS
1	BODY	ASTM A351-CF8M	1
2	SPRING	SS316	1
3	CENTER GUIDE	ASTM A351-CF8M	1
4	DISC	ASTM A351-CF8M	1
5	SEAT	PTFE	1
6	GASKET	PTFE	1
7	END CAP	ASTM A351-CF8M	1

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

SPRING CHECK VALVE

- Working Pressure: 1500PSI (PN100)
- Working Temperature: -10 -150°C
- Opening Pressure: 2~3PSI
- Suitable Medium: W.O.G.
- Threaded End: NPT
- Made in China

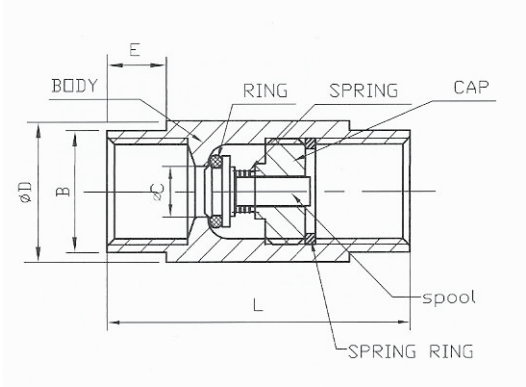
FEMALE PIPE x FEMALE PIPE

Part#	Size	L	C	D	B	E	lbs/ pc	Case	
949-451	1/4"	2.165	.217	.748	.699	.394	.19	200	----
949-452	3/8"	2.165	.295	.866	.787	.394	.21	160	----
949-453	1/2"	2.165	.413	1.063	.945	.472	.31	100	----
949-454	3/4"	2.677	.591	1.417	1.26	.472	.71	60	----
949-455	1"	3.268	.787	1.693	1.496	.591	1.14	36	----

MALE PIPE x FEMALE PIPE

Part#	Size	L	C	D	B	E	lbs/ pc	Case	
949-471	1/4"	2.165	.217	.748	.699	.394	.176	200	----
949-472	3/8"	2.165	.295	.866	.787	.394	.22	160	----
949-473	1/2"	2.165	.413	1.063	.945	.472	.27	100	----
949-474	3/4"	2.677	.591	1.417	1.26	.472	.62	65	----
949-475	1"	3.268	.787	1.693	1.496	.591	1.05	40	----

FLOWS MALE -> FEMALE



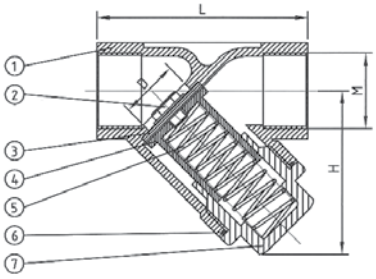
NO	Part	Material	QTY
1	BODY	316	1
2	RING	Rubber	1
3	SPRING	304	1
4	CAP	CF8M	1
5	SPOOL	304/316	1
6	SPRING RING	304	1

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

Y-SPRING CHECK VALVE

- Working Pressure: 800PSI (PN55)
- Working Temperature: -10 -150°C
- Opening Pressure: 1.5PSI
- Suitable Medium: W.O.G.
- Made in China

Part#	Size	L	H	D	lbs/ pc	Case	
949-481	1/4"	2.559	1.661	.472	.44	70	----
949-482	3/8"	2.559	1.661	.472	.51	70	----
949-483	1/2"	2.559	1.634	.591	.51	100	----
949-484	3/4"	3.15	2.067	.787	.93	80	----
949-485	1"	3.543	2.657	.984	1.25	40	----
949-486	1-1/4"	4.134	2.795	1.26	2.20	30	----
949-487	1-1/2"	4.724	3.169	1.575	3.24	24	----
949-488	2"	5.512	3.74	1.969	5.21	10	----

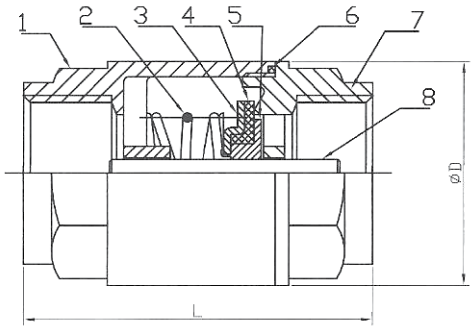


NO	Part	Material	QTY
1	BODY	CF8M/ CF8	1
2	BOLT	304	1
3	SEAT	Teflon	1
4	DISC	304	1
5	SPRING	304	1
6	GASKET	Teflon	1
7	CAP	CF8M/ CF8	1

2PC BARREL TYPE SPRING CHECK VALVE

- Working Pressure: 300PSI (PN20)
- Working Temperature: -10 -120°C
- Opening Pressure: 2PSI
- Suitable Medium: W.O.G.
- Threaded end: NPT
- Made in China

Part#	Size	L	D	lbs/pc	Case	
949-441	1/4"	2.00	1.142	.27	100	----
949-442	3/8"	2.00	1.142	.24	100	----
949-443	1/2"	2.24	1.28	.36	100	----
949-444	3/4"	2.44	1.594	.54	60	----
949-445	1"	2.95	1.89	.88	30	----
949-446	1-1/4"	3.23	2.362	1.39	18	----
949-447	1-1/2"	3.46	2.756	1.81	25	----
949-448	2"	3.94	3.425	2.86	14	----

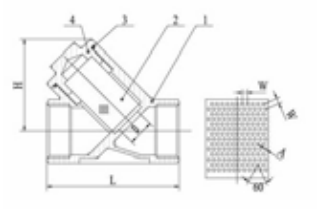


NO	Part	Material	QTY
1	BODY	CF8M/ CF8	1
2	BOLT	304	1
3	SEAT	PTFE	1
4	DISC	304	1
5	SPRING	316/ 304	1
6	GASKET	PTFE	1
7	CAP	CF8M/ CF8	1

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

#316 SS Y STRAINER

- Investment Castings for Body
- Pressure Rating: 800PSI (PN40)
- Threaded Ends: ANSI B2.1
- Material: CF8M (#316 SS)
- Pressure Test: API 598
- Made in China



- 40 Mesh screen

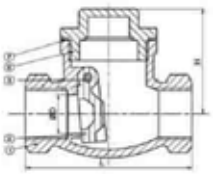
	Part	Material	QTY
1	BODY	CF8M	1
2	SCREEN	SS316	1
3	JOINT GASKET	PTFE	1
4	BONNET	CF8M	1

Part #	Size	d	L	H	W	ØA	Lbs	
949-521	1/4"	.38"	2.53	51	1.69	1	0.44	----
949-522	3/8"	.48"	2.53	51	1.69	1	0.38	----
949-523	1/2"	.59"	2.53	51	1.76	1	0.46	----
949-524	3/4"	.79"	3.12	60	2.07	1	0.69	----
949-525	1"	.98"	3.57	72	2.67	1	1.27	----
949-526	1-1/4"	1.26"	4.17	77	2.9	1	1.74	----
949-527	1-1/2"	1.57"	4.71	87	3.23	1	2.38	----
949-528	2"	1.96"	5.49	102	3.88	1	3.57	----

316 SS SWING CHECK VALVE

- 200PSI(PN16)
- Threaded Ends: ANSI B2.1
- Material: CF8M (#316 SS)
- Pressure Test: API 598
- Made in China

	Part	Material	QTY
1	BODY	CF8M	1
2	DISC	CF8M	1
3	PIPE PLUG	CF8	1
4	SCREW	CF8	1
5	SCREW GASKET	PTFE	1
6	CAP	CF8M	1
7	CAP GASKET	PTFE	1



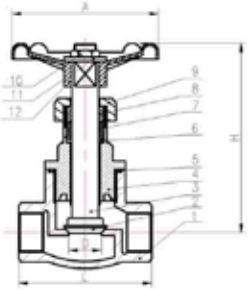
Part #	Size	D	L	W	Lbs	
949-353	1/2"	.59"	2.45	1.66	0.53	----
949-354	3/4"	.79"	2.92	1.82	0.73	----
949-355	1"	.98"	3.41	2.06	1.2	----
949-356	1-1/4"	1.26"	3.93	2.32	1.79	----
949-357	1-1/2"	1.57"	4.54	2.54	2.18	----
949-358	2"	1.96"	5.3	2.78	3.03	----

CF8 = 304SS
CF8M = 316SS

316 SS GLOBE VALVES

- 200PSI(PN16)
- Threaded Ends: ANSI B2.1
- Material: CF8M (#316 SS)
- Pressure Test: API 598
- Made in China

	Part	Material	QTY
1	BODY	CF8M	1
2	DISC	CF8M	1
3	STEM	304SS	1
4	CAP	CF8M	1
5	SEAL	PTFE	1
6	GASKET	304SS	1
7	PACKING	PTFE	1
8	GASKET	CF8	1
9	GLAND	304SS	1
10	NUT	304SS	1
11	SPRING WASHER	CF8	1
12	HANDLE WHEEL	Steel	1

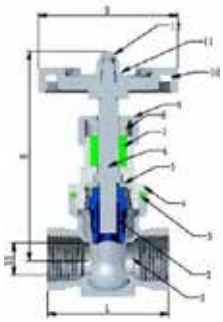


Part #	Size	L	Lbs	
949-303	1/2	2.64	0.89	----
949-304	3/4	3.19	1.3	----
949-305	1	3.46	1.72	----
949-306	1-1/4	3.81	2.33	----
949-307	1-1/2	4.25	3.11	----
949-308	2	5.1	4.38	----

316 SS GATE VALVES

- 200PSI(PN16)
- Threaded Ends: ANSI B2.1
- Material: CF8M (#316 SS)
- Pressure Test: API 598
- Made in China

	Part	Material	QTY
1	BODY	CF8M	1
2	DISC	CF8M	1
3	SEAL	CF8M	1
4	CAP	CF8M	1
5	SEAL	PTFE	1
6	STEM	304SS	1
7	SEAL	PTFE	1
8	GLAND	304SS	1
9	NUT	304SS	1
10	HANDLE WHEEL	Steel	1
11	GASKET	PTFE	1
12	CAP NUT	CF8	1



Part #	Size	L	D	D1	H	Lbs	
949-253	1/2	2.07	2.54	0.55	3.37	0.78	----
949-254	3/4	2.28	2.89	0.74	4.03	0.99	----
949-255	1	2.42	2.89	0.95	4.46	1.25	----
949-256	1-1/4	2.79	3.06	1.18	4.86	1.76	----
949-257	1-1/2	2.92	3.79	1.49	5.53	2.59	----
949-258	2	3.3	4.17	1.85	6.12	3.54	----

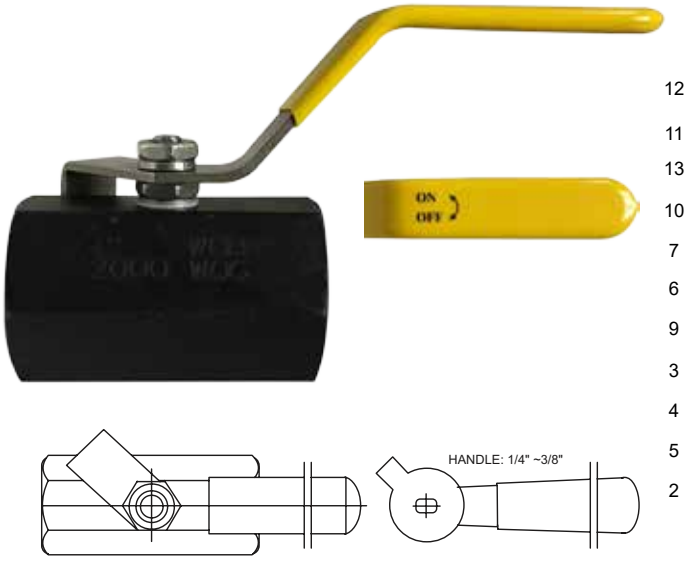
WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

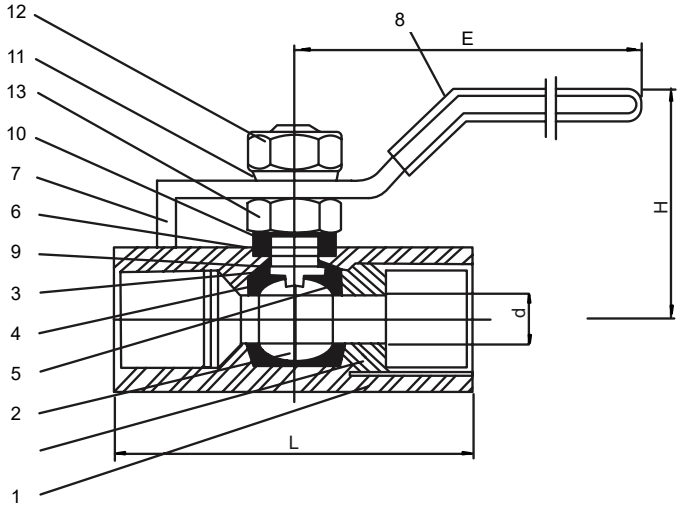
STANDARD PORT CARBON STEEL BALL VALVE

- For chemical and industrial applications.
- Blow-out proof stem design.
- 100% air tested under water, at 100 psi, open and closed positions.
- Made in China
- Generic handles

SPECIFICATIONS

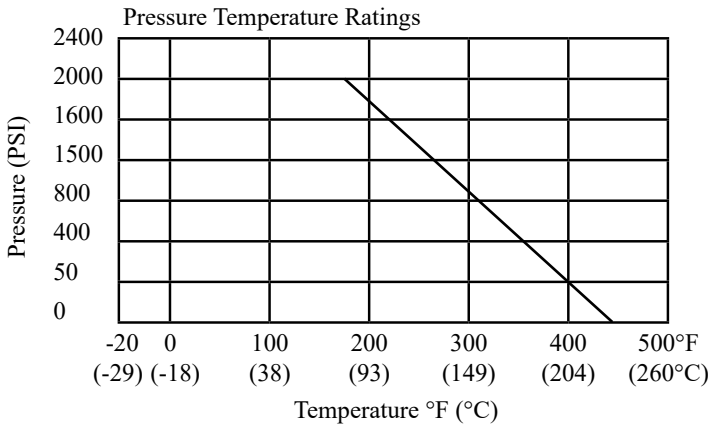
- Working Pressure: 1/4" ~ 1" 2000 psi WOG,
  1-1/4" ~ 2" 1500 psi WOG,
- Temperature Range: -60^0 to 450^{0}F
- End types: Threaded
- 1 piece ball valve
- Reinforced PTFE seat





2000 PSI STANDARD PORT

Part #	Size	d	H	E	L	WTG	Box/ Case	
949-121	1/4	.20	1.38	2.95	1.71	0.25	24/96	----
949-122	3/8	.28	1.30	3.27	1.87	0.32	100/200	----
949-123	1/2	.36	2.36	4.53	2.20	0.67	50/100	----
949-124	3/4	.49	2.72	4.53	2.58	1.06	50/100	----
949-125	1	.59	2.95	5.00	3.19	1.17	25/50	----
949-126	1-1/4	.78	3.07	5.29	3.94	3.15	15/30	----
949-127	1-1/2	0.98	3.39	5.29	3.94	2.15	15/30	----
949-128	2	1.26	3.86	5.29	4.49	6.21	10/20	----



Item	Parts	Material
1	Body	ASTM A216 WCB
2	Ball	ASTM A351 CF8
3	Stem	304
4	Ball Seat	PTFE
5	Cap Seal	PTFE
6	Packing	PTFE
7	Handle	SS304
8	Handle Sleeve	Vinyl Grip
9	Thrust Washer	PTFE
10	Gland	SS304
11	Washer	SS304
12	Handle Nut	SS304
13	Stem Nut	SS304

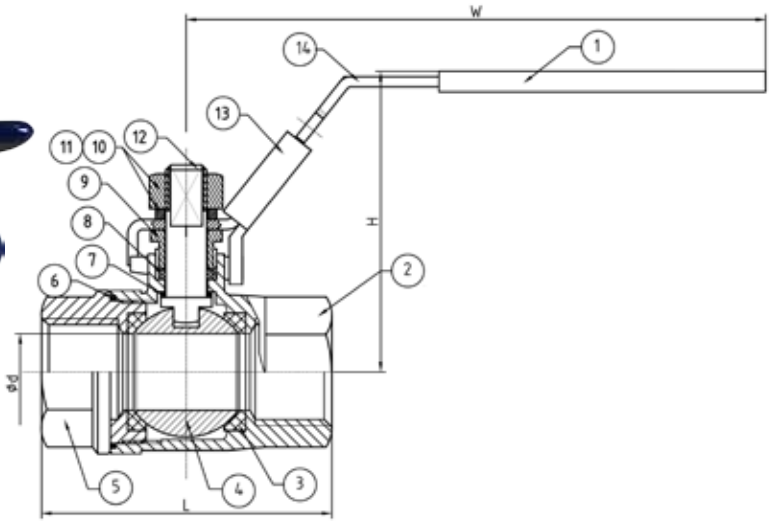
WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer.
For more information, visit www.P65Warnings.ca.gov

2000 PSI CARBON STEEL 2PC FULL PORT BALL VALVE

• 2 PIECE

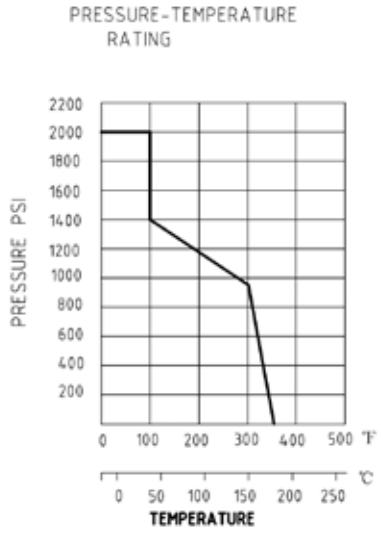
SPECIFICATIONS

- Working Pressure: 2000 PSI (138 Bar)
- Temperature Range: -10° C-150° C
- Suitable medium: WOG
- Threaded End conforms to ANSI B1.20.1
- Made in China
- Generic handle



2000 PSI FULL PORT

Part #	Size	d	L	H	W	WTG	Box/ Case	
949-111	1/4	0.36	2.13	2.13	4.33	0.59	70	----
949-112	3/8	0.50	2.13	2.17	4.33	0.59	70	----
949-113	1/2	0.59	2.24	2.28	4.33	0.75	60	----
949-114	3/4	0.79	2.76	2.40	4.33	1.17	50	----
949-115	1	0.98	3.25	3.03	5.04	1.88	30	----
949-116	1-1/4	1.26	3.58	3.19	5.04	2.45	20	----
949-117	1-1/2	1.50	4.06	3.54	6.10	4.06	20	----
949-118	2	1.97	4.90	4.25	6.10	2.43	7	----



Item	Parts	Material
1	Handle cover	Plastic
2	Body	CF8M
3	Ball seat	PTFE
4	Ball	CF8M
5	Cap	CF8M
6	Joint gasket	PTFE
7	Thrust washer	PTFE
8	Stem packing	PTFE
9	Gland nut	304
10	Spring washer	304
11	Stem nut	304
12	Stem	316
13	Lock device	304
14	Handle	304

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

HIGH PRESSURE FULL PORT 2-WAY VALVES

FULL PORT Two-Way

BKH

Part Number	Thread	Working Pressure	
GE2-14-NPT	1/4" NPT	7250 PSI	----
GE2-38-NPT	3/8" NPT	7250 PSI	----
GE2-12-NPT	1/2" NPT	7250 PSI	----
GE2-34-NPT	3/4" NPT	5800 PSI	----
GE2-1-NPT	1" NPT	5075 PSI	----
GE2-114T-NPT*	1-1/4" NPT	5000 PSI	----
GE2-112T-NPT*	1-1/2" NPT	5000 PSI	----
GE2-2T-NPT	2" NPT	5000 PSI	----

Part Number	Thread	Working Pressure	
GE2-04-SAE	7/16-20 UNF	7250 PSI	----
GE2-06-SAE	9/16-18 UNF	7250 PSI	----
GE2-08-SAE	3/4-16 UNF	7250 PSI	----
GE2-12-SAE	1-1/16-12 UNF	5800 PSI	----
GE2-16-SAE	1-5/16-12 UNF	5000 PSI	----
GB2-20T-SAE+	1-5/8-12 UNF	5000 PSI	----
GB2-24T-SAE+	1-7/8-12 UNF	5000 PSI	----
GB2-32T-SAE+	2-1/2-12 UNF	5000 PSI	----

*** Reduced Port**
+ 'L' flow pattern

Temp Rating = -22° - 212°F

Construction: Steel Body, Ball, Stem
Zinc Chromate Plate
Buna "O" Rings (Viton on request)
Delrin Ball Seats

FULL PORT Three-Way

BK3

Part Number	Thread	Working Pressure	
GE3L-14-NPT	1/4" NPT	5880 PSI	----
GE3L-38-NPT	3/8" NPT	5880 PSI	----
GE3L-12-NPT	1/2" NPT	5145 PSI	----
GE3L-34-NPT	3/4" NPT	5145 PSI	----
GE3L-1-NPT	1" NPT	5145 PSI	----
GE3L-114T-NPT	1 1/4" NPT	4500 PSI	----
GE3L-112T-NPT	1 1/2" NPT	4500 PSI	----
GE3L-2T-NPT	2" NPT	4500 PSI	----

Part Number	Thread	Working Pressure	
GE3L-04-SAE	7/16-20 UNF	5880 PSI	----
GE3L-06-SAE	9/16-18 UNF	5880 PSI	----
GE3L-08-SAE	3/4-16 UNF	5145 PSI	----
GE3L-12-SAE	1-1/16-12 UNF	5145 PSI	----
GE3L-16-SAE	1-5/16-12 UNF	5145 PSI	----
GB3L-20T-SAE+	1-5/8-12 UNF	4500 PSI	----
GB3L-24T-SAE+	1-7/8-12 UNF	4500 PSI	----
GB3L-32T-SAE+	2-1/2-12 UNF	4500 PSI	----

+ 'L' flow pattern

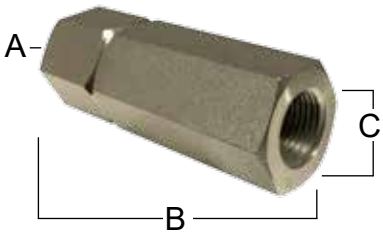
Temp Rating = -22° - 212°F

Construction: Steel Body, Ball, Stem
Zinc Chromate Plate
Buna "O" Rings (Viton on request)
Delrin Ball Seats

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer.
For more information, visit www.P65Warnings.ca.gov

CHECK VALVES - HARD SEAT CARBON STEEL CONSTRUCTION - 5lb Cracking Pressure

• w/ NPT threads



A (NPT Female both ends)

Part #	A Size	B Inches	C Inches	Rated Flow gpm	PSI	
100025	1/4 NPT	2.44	.87	6	5,000	----
100035	3/8 NPT	2.87	.95	10	5,000	----
100045	1/2 NPT	3.76	1.26	18	5,000	----
100065	3/4 NPT	4.30	1.50	30	5,000	----
100085	1 NPT	4.74	1.83	36	5,000	----
1000105	1-1/4 NPT	5.56	2.40	50	3,000	----
1000125	1-1/2 NPT	5.56	2.56	60	3,000	----

CHECK VALVES - HARD SEAT CARBON STEEL CONSTRUCTION - 65lb Cracking Pressure

Part #	A Size	B Inches	C Inches	Rated Flow gpm	PSI	
1000265	1/4NPT	2.45	.87	6	5,000	----
1000365	3/8NPT	2.91	.94	10	5,000	----
1000465	1/2NPT	3.74	1.18	18	5,000	----
1000665	3/4NPT	4.29	1.26	30	5,000	----
1000865	1NPT	5.00	1.81	36	5,000	----
10001065	1-1/4NPT	5.20	2.41	50	3,000	----
10001265	1-1/2NPT	5.20	2.56	60	3,000	----

CHECK VALVES - 5lb Cracking Pressure

• w/ SAE threads

Part #	A Size	B Inches	C Inches	Rated Flow gpm	PSI	
100145	7/16-20 SAE	2.56	.87	6	5,000	----
100165	9/16-18 SAE	2.91	.94	10	5,000	----
100185	3/4-16 SAE	3.74	1.18	18	5,000	----
1001125	1-1/6-12 SAE	4.29	1.50	30	3,000	----
1001165	1-5/16-12 SAE	5.00	1.81	36	3,000	----
1001205	1-5/8-12 SAE	5.20	2.41	50	3,000	----
1001245	1-7/8-12 SAE	5.20	2.56	60	3,000	----

CHECK VALVES - 65lb Cracking Pressure

• w/ SAE threads

Part #	A Size	B Inches	C Inches	Rated Flow gpm	PSI	
1001465	7/16-20 SAE	2.56	.87	6	5,000	----
1001665	9/16-18 SAE	2.91	.94	10	5,000	----
1001865	3/4-16 SAE	3.74	1.18	18	5,000	----
10011265	1-1/6-12 SAE	4.29	1.50	30	3,000	----
10011665	1-5/16-12 SAE	5.00	1.81	36	3,000	----
10012065	1-5/8-12 SAE	5.20	2.41	50	3,000	----
10012465	1-7/8-12 SAE	5.20	2.56	60	3,000	----

Rated Pressure: Sizes 2 thru 8 - 5000 psi / Sizes 10 thru 24 - 3000 psi

• Soft Seat available by special quote

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

WHITE PVC BALL VALVES

•Quarter turn
•Solvent ends comply with ASTM D2466
•Designed for use in residential, commercial & industrial system as well as waste water, chemical, agricultural applications, marine, food processing, swimming pools.
•Corrosion resistant
•EPDM seal • FULL PORT •EPDM O-ring
•Fits both Sch. 40 & 80 pipe
•Rated for 150 PSI at 73°F • Threaded ends comply with ANSI B1.20.1

MOLDED IN PLACE - WHITE PIPE THREADS

Part#	Size	Case	
940-284	1/2"	100	4202008
940-285	3/4"	100	4202012
940-286	1"	100	4202016
940-287	1-1/4"	100	4202020
940-288	1-1/2"	48	4202024
940-289	2"	24	4202032
940-291	3"	12	4202048
940-292	4"	6	4202064

WHITE SOCKET - SLIP X SLIP

Part #	Size	Case	
940-294	1/2"	100	4202208
940-295	3/4"	100	4202212
940-296	1"	100	4202216
940-297	1-1/4"	100	4202220
940-298	1-1/2"	48	4202224
940-299	2"	24	4202232
940-300	2-1/2"	12	4202240
940-301	3"	12	4202248
940-302	4"	6	4202264

GREY PVC BALL VALVES

FEATURES

- Sizes range from 1/2" to 4"
- Excellent flow characteristics
- Leak-tight shut-off
- EPPM O-Ring
- SCH 80
- Test pressure: 225 psi @ 73°F
- Working Pressure: 150 psi @ 73°F

FIP X FIP THREADED BALL VALVE

Part #	Size	Case	
899000	1/2"	100	4202008
899001	3/4"	100	4202012
899002	1"	100	4202016
899003	1-1/4"	100	4202020
899004	1-1/2"	48	4202024
899005	2"	24	4202032

SLIP X SLIP BALL VALVE

Part #	Size	Case	
899050	1/2"	100	4202208
899051	3/4"	100	4202212
899052	1"	100	4202216
899053	1-1/4"	100	4202220
899054	1-1/2"	48	4202224
899055	2"	24	4202232

CPVC BALL VALVE

Part #	Size	
940-281	1/2"	4202808
940-282	3/4"	4202812

WARNING: This product can expose you to chemicals, including Chloroethane, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

INLINE PLASTIC SPRING CHECK VALVE

Socket x Socket

• 200 PSI working pressure @ 77°F .5 PSI to open.

Part#	Size	
940-325	1/2"	4203608
940-326	3/4"	4203612
940-327	1"	4203616
940-328	1-1/4"	4203620
940-329	1-1/2"	4203624
940-330	2"	4203632

INLINE PLASTIC SPRING CHECK VALVE FEMALE THREADED ENDS

• 200 PSI working pressure @ 77°F .5 PSI to open.

Part#	Size	
940-331	1/2"	4203408
940-332	3/4"	4203412
940-333	1"	4203416
940-334	1-1/4"	4203420
940-335	1-1/2"	4203424
940-336	2"	4203432

PLASTIC DRUM FAUCETS

• Pipe threads to ANSI B1.20.1 • Hose threads to ANSI B 1.20.7

The FLO-RITE faucet has been engineered to meet the demand for greater chemical resistance, using linear polyethylene for the stem.

"FLO-RITE" DRUM FAUCET

Part #	Size	
46-277	3/4"	----

DRUM & BARREL FAUCET VALVE

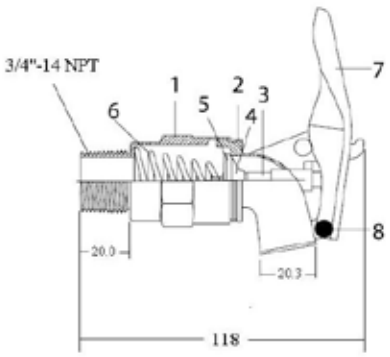
- Die cast body w/ nylon seat and steel spring.
- For use with all petroleum products except trichlorethylene.

G261N

Not suitable for potable water

SELF-CLOSING DRUM & BARREL FAUCET

Part #	Size	
46-270	3/4"	4030012



Part #	Part Name	Material
1	Body	Zinc
2	Bonnet	Zinc
3	Stem	Steel
4	Disc	Plastic
5	Seal	Rubber
6	Spring	Zinc plated steel
7	Handle	Aluminum
8	Rivet	Aluminum

WARNING: This product can expose you to chemicals, including Chloroethane, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

NIPPLES & FITTINGS

BRASS & BRONZE 215-234

Brass Nipples - Sch 40 215-221
EH Sch 80 .....
C/P Brass Nipples 222
Bronze Fittings 223-231
EH Bronze Fittings .....
Lead Free Bronze Fittings 223-230
C/P Fittings 231
Bronze Cleanout Plugs 232
Bronze Drop Ear Elbows 232
Bronze Barbs for PL. Pipe 233
Steel Barbs for PL. Pipe 233
Lead Free Bronze Barbs for PL. Pipe 234
Stainless Steel Barbs for PL. Pipe 234
Stainless Steel Well Couplings 234
Stainless Steel Merchant Couplings 234

STAINLESS STEEL 235

Stainless Nipples 235-240
Sch 80 SS Nipples .....
150# Cast SS Fittings 241-248
1,000# Barstock SS fittings NEW .....
3000# SS Fittings .....

BLACK & GALVANIZED 249-286

Sch. 40 Welded Steel Nipples 250-257
Sch. 80 Seamless Steel nipple 258-263
Sch. XXS Seamless Steel Nipple 264
Groove Nipples 265-266
Merchant Couplings 267
API Line Couplings 268
Malleable Fittings 269-278
Steel Fittings 279-280
300# Malleable 281-282
Forged Steel Fittings .....
Bull Plugs and Swages 283-284
Forged Steel Fanges 285-286

Copper Fittings 287-293

We hereby certify that to the best of our knowledge and belief the CDA 230 alloy seamless Red Brass Pipe from which our nipples are produced meet the requirements of ASTM Specifications B43 and is free of mercury contamination. The chemical analysis is 85% copper, 15% Zinc and conforms to federal Specifications WWN-351. Our brass nipples meet ANSI/ASTM B687-96 and MS51846 for standard brass nipples, and MS51872 for extra heavy brass nipples.

Threads: Nipples are threaded with American Standard taper pipe threads (NPT) in accordance with screw-thread standard for Federal Services Handbook H-58. ANSI B1.20.1

This product is certified by NSF to NSF/ANSI 61 for use in drinking water supplies of pH 6.5 and above.

- ASTM B43
- ANSI B1.20.1, WW-N-351
- ANSI/ ASTM B687-96
- NSF-61 Approved
- MS51846 STD Brass Nipples
- RoHS compliant

STANDARD RED BRASS 85%
PIPE WITH THREADED ENDS SPECIFICATIONS:

Pipe Size in Inches	Dimension in Inches		
	O.D.	I.D.	Wall Thickness
1/8"	.405	.281	.062
1/4"	.540	.376	.082
3/8"	.675	.495	.090
1/2"	.840	.626	.107
3/4"	1.050	.822	.114
1"	1.315	1.063	.126
1-1/4"	1.660	1.368	.146
1-1/2"	1.900	1.600	.150
2"	2.375	2.063	.156
2-1/2"	2.875	2.501	.187
3"	3.500	3.062	.219
3-1/2"	4.000	3.500	.250
4"	4.500	4.000	.250
4-1/2"	5.000	4.500	.250
5"	5.563	5.063	.250
6"	6.625	6.125	.250

Allowable Pressure POUNDS PER SQUARE INCH				
Standard Size (Inches)	@ 100° F	@ 200° F	@ 300° F	@ 400° F
1/8"	370	370	320	140
1/4"	870	870	760	330
3/8"	890	890	780	340
1/2"	900	900	790	340
3/4"	810	810	710	310
1"	630	630	560	240
1-1/4"	690	690	610	260
1-1/2"	630	630	560	240
2"	540	540	480	210
2-1/2"	450	450	390	170
3"	510	510	450	190
3-1/2"	570	570	500	220
4"	510	510	440	190
5"	410	410	360	160
6"	340	340	300	130

No-Lead 125LB seamless Threaded Red Brass Nipples - 2200

LEAD FREE

LEAD FREE

LEAD FREE

1/8" - 27

1/8" DIAMETER SCH 40 SEAMLESS

Part #	Size	Box/Case	Approx. Wt. Lbs.	
40-001	Close (3/4")	25/400	0.02	----
40-002	x 1-1/2"	25/400	0.03	----
40-003	x 2"	25/400	0.04	----
40-004	x 2-1/2"	25/400	0.05	----
40-005	x 3"	25/400	0.06	----
40-006	x 3-1/2"	25/400	0.07	----
40-007	x 4"	25/400	0.08	----
40-008	x 4-1/2"	25/400	0.10	----
40-009	x 5"	25/400	0.11	----
40-010	x 5-1/2"	25/400	0.12	----
40-011	x 6"	25/400	0.13	----
40-012	x 7"	25/400	0.15	----
40-013	x 8"	25/400	0.17	----
40-014	x 9"	25/400	0.19	----
40-015	x 10"	25/400	0.21	----
40-017	x 12"	25/400	0.25	----
40-018	x 14"	1/1	0.29	----
40-019	x 16"	1/1	0.34	----

LEAD FREE

1/4"-18

1/4" DIAMETER SCH 40 SEAMLESS

Part #	Size	Box/Case	Approx. Wt. Lbs.	
40-020	Close (7/8")	25/400	0.03	----
40-021	x 1-1/2"	25/400	0.05	----
40-022	x 2"	25/400	0.07	----
40-023	x 2-1/2"	25/400	0.09	----
40-024	x 3"	25/400	0.11	----
40-025	x 3-1/2"	25/400	0.13	----
40-026	x 4"	25/400	0.14	----
40-027	x 4-1/2"	25/400	0.16	----
40-028	x 5"	25/400	0.18	----
40-029	x 5-1/2"	25/400	0.20	----
40-030	x 6"	25/400	0.22	----
40-031	x 7"	25/200	0.25	----
40-032	x 8"	25/200	0.29	----
40-033	x 9"	25/200	0.33	----
40-034	x 10"	25/200	0.36	----
40-035	x 11"	25/200	0.40	----
40-036	x 12"	25/200	0.43	----

See page 7 for Yellow Brass Nipples

LEAD FREE

3/8"-18

3/8" DIAMETER SCH 40 SEAMLESS

Part #	Size	Box/Case	Approx. Wt. Lbs.	
40-040	Close (1")	25/400	0.05	----
40-041	x 1-1/2"	25/400	0.08	----
40-042	x 2"	25/400	0.10	----
40-043	x 2-1/2"	25/400	0.13	----
40-044	x 3"	25/400	0.16	----
40-045	x 3-1/2"	25/400	0.18	----
40-046	x 4"	25/400	0.21	----
40-047	x 4-1/2"	25/300	0.23	----
40-048	x 5"	25/300	0.26	----
40-049	x 5-1/2"	25/300	0.29	----
40-050	x 6"	25/300	0.31	----
40-051	x 7"	25/200	0.36	----
40-052	x 8"	25/150	0.42	----
40-053	x 9"	25/150	0.47	----
40-054	x 10"	25/100	0.52	----
40-055	x 11"	25/100	0.57	----
40-056	x 12"	25/100	0.62	----

LEAD FREE

1/2" - 14

1/2" DIAMETER SCH 40 SEAMLESS

Part #	Size	Box/Case	Approx. Wt. Lbs.	
40-060	Close (1-1/8")	25/400	0.09	----
40-061	x 1-1/2"	25/400	0.12	----
40-062	x 2"	25/400	0.16	----
40-063	x 2-1/2"	25/300	0.20	----
40-064	x 3"	25/300	0.23	----
40-065	x 3-1/2"	25/300	0.27	----
40-066	x 4"	25/200	0.31	----
40-067	x 4-1/2"	25/200	0.35	----
40-068	x 5"	25/200	0.39	----
40-069	x 5-1/2"	25/200	0.43	----
40-070	x 6"	25/200	0.47	----
40-071	x 7"	25/100	0.55	----
40-072	x 8"	25/100	0.62	----
40-073	x 9"	25/100	0.70	----
40-074	x 10"	25/75	0.78	----
40-075	x 11"	25/75	0.86	----
40-076	x 12"	25/75	0.94	----

LEAD FREE

3/4" - 14

3/4" DIAMETER SCH 40 SEAMLESS

Part #	Length	Box/Case	Approx. Wt. Lbs.	
40-080	Close (1- 3/8")	25/400	0.15	----
40-081	x 1-1/2"	25/400	0.16	----
40-082	x 2"	25/300	0.21	----
40-083	x 2-1/2"	25/300	0.27	----
40-084	x 3"	25/200	0.32	----
40-085	x 3-1/2"	25/200	0.37	----
40-086	x 4"	25/150	0.43	----
40-087	x 4-1/2"	25/150	0.48	----
40-088	x 5"	25/100	0.53	----
40-089	x 5-1/2"	25/100	0.59	----
40-090	x 6"	25/100	0.64	----
40-091	x 7"	25/75	0.75	----
40-092	x 8"	25/75	0.85	----
40-093	x 9"	25/75	0.96	----
40-094	x 10"	25/50	1.06	----
40-095	x 11"	25/50	1.17	----
40-096	x 12"	25/50	1.28	----
40-097	x 18"	1/1	1.92	----
40-098	x 24"	1/1	2.56	----
40-099	x 36"	1/1	3.84	----

LEAD FREE

1" - 11 1/2

1" DIAMETER SCH 40 SEAMLESS

Part #	Length	Box/Case	Approx. Wt. Lbs.	
40-100	Close (1-1/2")	25/200	0.23	----
40-101	x 2"	25/200	0.30	----
40-102	x 2-1/2"	25/150	0.38	----
40-103	x 3"	25/150	0.45	----
40-104	x 3-1/2"	25/100	0.53	----
40-105	x 4"	25/100	0.60	----
40-106	x 4-1/2"	25/100	0.68	----
40-107	x 5"	25/75	0.75	----
40-108	x 5-1/2"	25/75	0.83	----
40-109	x 6"	25/50	0.94	----
40-110	x 7"	25/50	1.05	----
40-111	x 8"	25/50	1.20	----
40-112	x 9"	25/50	1.35	----
40-113	x 10"	25/50	1.50	----
40-114	x 11"	25/50	1.65	----
40-115	x 12"	20/40	1.80	----

LEAD FREE

1 1/4" - 11 1/2

1-1/4" DIAMETER SCH 40 SEAMLESS

Part #	Length	Box/Case	Approx. Wt. Lbs.	
40-120	Close (1-5/8")	25/100	0.36	----
40-121	x 2"	25/100	0.44	----
40-122	x 2-1/2"	25/100	0.56	----
40-123	x 3"	25/100	0.67	----
40-124	x 3-1/2"	25/100	0.78	----
40-125	x 4"	25/50	0.89	----
40-126	x 4-1/2"	25/50	1.00	----
40-127	x 5"	25/50	1.11	----
40-128	x 5-1/2"	25/50	1.22	----
40-129	x 6"	25/50	1.33	----
40-130	x 7"	25/50	1.56	----
40-131	x 8"	25/50	1.78	----
40-132	x 9"	25/50	2.00	----
40-133	x 10"	25/50	2.22	----
40-134	x 11"	25/50	2.45	----
40-135	x 12"	25/50	2.67	----
40-136	x 18"	1/1	4.00	----

LEAD FREE

1-1/2" - 11 1/2

1-1/2" DIAMETER SCH 40 SEAMLESS

Part #	Length	Box/Case	Approx. Wt. Lbs.	
40-140	Close (1-3/4")	25/100	0.46	----
40-141	x 2"	25/100	0.53	----
40-142	x 2-1/2"	25/50	0.66	----
40-143	x 3"	25/50	0.79	----
40-144	x 3-1/2"	25/50	0.93	----
40-145	x 4"	25/50	1.06	----
40-146	x 4-1/2"	25/50	1.19	----
40-147	x 5"	20/40	1.32	----
40-148	x 5-1/2"	20/40	1.46	----
40-149	x 6"	20/40	1.59	----
40-150	x 7"	20/40	1.85	----
40-151	x 8"	20/40	2.12	----
40-152	x 9"	20/40	2.38	----
40-153	x 10"	20/40	2.65	----
40-154	x 11"	1/40	2.91	----
40-155	x 12"	1/15	3.18	----
40-156	x 18"	1/1	4.77	----

SCH 40 SEAMLESS — BRASS NIPPLES

LEAD FREE

2" - 11 1/2

2" DIAMETER SCH 40 SEAMLESS

Part #	Length	Box/Case	Approx. Wt. Lbs.	
40-160	Close (2")	25/50	0.69	----
40-161	x 2-1/2"	25/50	0.86	----
40-162	x 3"	25/50	1.03	----
40-163	x 3-1/2"	25/50	1.20	----
40-164	x 4"	1/25	1.37	----
40-165	x 4-1/2"	1/25	1.54	----
40-166	x 5"	1/25	1.72	----
40-167	x 5-1/2"	1/25	1.89	----
40-168	x 6"	1/25	2.06	----
40-169	x 7"	1/20	2.40	----
40-170	x 8"	1/18	2.74	----
40-171	x 9"	1/18	3.09	----
40-172	x 10"	1/18	3.43	----
40-173	x 11"	1/18	3.77	----
40-174	x 12"	1/14	4.12	----
40-175	x 18"	1/1	6.18	----
40-176	x 24"	1/1	8.24	----
40-178	x 36"	1/1	12.36	----
40-179	x 48"	1/1	16.48	----

LEAD FREE

2 1/2" - 8

2-1/2" DIAMETER SCH 40 SEAMLESS

Part #	Length	Box/Case	Approx. Wt. Lbs.	
40-180	Close (2-1/2")	1/36	1.26	----
40-181	x 3"	1/36	1.51	----
40-182	x 3-1/2"	1/30	1.76	----
40-183	x 4"	1/30	2.02	----
40-184	x 4-1/2"	1/30	2.27	----
40-185	x 5"	1/20	2.52	----
40-186	x 5-1/2"	1/20	2.77	----
40-187	x 6"	1/20	3.03	----

The best way to find yourself is to lose yourself in the service of others.
- Mahatma Gandhi

See our Valve section for 2-1/2, 3 and 4" Valves

LEAD FREE

3" DIAMETER SCH 40 SEAMLESS

Part #	Length	Box/Case	Approx. Wt. Lbs.	
40-200	Close (2-5/8")	1/24	1.89	----
40-201	x 3"	1/20	2.16	----
40-202	x 3-1/2"	1/18	2.52	----
40-203	x 4"	1/18	2.88	----
40-204	x 4-1/2"	1/18	3.24	----
40-205	x 5"	1/18	3.60	----
40-206	x 5-1/2"	1/18	3.96	----
40-207	x 6"	1/12	4.32	----
40-209	x 8"	1/1	5.76	----
40-213	x 12"	1/1		

LEAD FREE

4" DIAMETER SCH 40 SEAMLESS

Part #	Size	Box/Case	Approx. WT. Lbs.	
40-220	Close (2-7/8)	1/20	2.40	----
40-221	x 3"	1/10	2.72	----
40-222	x 3-1/2"	1/10	3.18	----
40-223	x 4"	1/10	3.71	----
40-224	x 4-1/2"	1/5	4.24	----
40-225	x 5"	1/5	4.77	----
40-226	x 5-1/2"	1/5	5.30	----
40-234	x 6"	1/5	6.36	----

LEAD FREE

6" DIAMETER SCH 40 SEAMLESS

Part #	Size	Box/Case	Approx. WT. Lbs.	
40-254	Close	1/1	4.94	----
40-256	x 4"	1/1	6.54	----
40-259	x 4-1/2"	1/1	7.12	----
40-260	x 5"	1/1	7.91	----
40-261	x 6"	1/1	9.49	----

LEAD FREE

3/8" DIAMETER CHROME PLATED

Part #	Size	Box/Case	Approx. Wt. Lbs.	
41-040	X Close	5/25	0.05	----
41-041	x 1-1/2"	5/25	0.08	----
41-042	x 2"	5/25	0.10	----
41-043	x 2-1/2"	5/25	0.13	----
41-044	x 3"	5/25	0.16	----
41-045	x 3-1/2"	5/25	0.18	----
41-046	x 4"	5/25	0.21	----
41-047	x 4-1/2"	5/25	0.23	----
41-048	x 5"	5/25	0.26	----
41-049	x 5-1/2"	5/25	0.29	----
41-050	x 6"	5/25	0.31	----

LEAD FREE

1/2" DIAMETER CHROME PLATED

Part #	Size	Box/Case	Approx. Wt. Lbs.	
41-060	X Close	5/25	0.09	----
41-061	x 1-1/2"	5/25	0.12	----
41-062	x 2"	5/25	0.16	----
41-063	x 2-1/2"	5/25	0.20	----
41-064	x 3"	5/25	0.23	----
41-065	x 3-1/2"	5/25	0.27	----
41-066	x 4"	5/25	0.31	----
41-067	x 4-1/2"	5/25	0.35	----
41-068	x 5"	5/25	0.39	----
41-069	x 5-1/2"	5/25	0.43	----
41-070	x 6"	5/25	0.47	----
41-074	x 10"	1/1	0.78	----

New Nickel Plated Brass Ball Valve with SS trim see page 177

See page 310 for Brass Cam & Groove Fittings

WARNING: This product can expose you to chemicals, including chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

BRONZE FITTINGS

UL842, UL258, UL125,FM

Class 125 (150) For steam, water, gas, oil and air service

Standard specifications

- UL/ FM Approved
- 1S0 9001:2000
- Not Lead Free
- RoHS Compliant

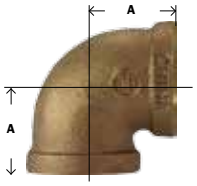
Materials - ASTM B62-93 (85,5,5,5) C83600
Dimensions - ANSI B 16.15
Threads - ANSI B2.1 or BA 21 and Fed. WW-P-460C, MSS-SP-106, ANSI/ASME B1.20.1

Bronze threaded fittings are manufactured from smooth-cored castings, designed to provide full flow with minimum restriction. All threads are accurately machined and gauged to ensure a perfect fit with the pipe. All fittings are individually tested under water to ensure quality. Bronze provides a tighter seal and is easier to install than other metals. Can be used for water, plumbing, heating, pneumatic and marine applications, able to resist the harmful effects of corrosion when coming into contact with salt water or fresh water polluted with mineral acids or peaty soils.

LEAD FREE BRASS FITTINGS

- Approved to ANSI/NSF 61-4 California AB 1953
- Meets Federal State Drinking Water Act, Lead Free Requirement
- Brass fittings conform to AWWA C800
- Brass castings conform to ASTM B584, UNS Alloy C8933
- Brass fittings dimensions conform to ASME B16.15
- NPT threads on all fittings conform to ASME B1.20.1
- Brass unions conform to specification A-A-59617
- Manufacturing facilities are ISO 9001:2008

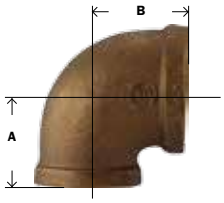
WARNING: This product can expose you to chemicals, including Nickel, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov



90° ELBOWS

LEAD FREE

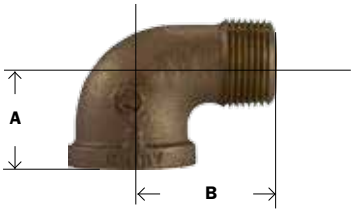
Part #		Approx. Wt. Lbs.	Box/Case	Size	A	Approx. Wt. Lbs.	Part #	
44-100	----	0.08	50/600	1/8”	0.55	0.06	44-100LF	----
44-101	----	0.12	35/420	1/4”	0.72	0.10	44-101LF	----
44-102	----	0.17	90/360	3/8”	0.83	0.15	44-102LF	----
44-103	----	0.24	50/200	1/2”	1.03	0.25	44-103LF	----
44-104	----	0.34	35/105	3/4”	1.19	0.41	44-104LF	----
44-105	----	0.61	20/60	1”	1.43	0.69	44-105LF	----
44-106	----	0.95	20/40	1-1/4”	1.71	1.02	44-106LF	----
44-107	----	1.30	15/30	1-1/2”	1.87	1.36	44-107LF	----
44-108	----	2.07	8/16	2”	2.14	2.14	44-108LF	----
44-109	----	3.80	1/12	2-1/2”	2.74	3.79	44-109LF	
44-110	----	4.76	1/4	3”	3.10	5.21	44-110LF	----
44-112	----	9.71	1/2	4”	3.80	8.59		



90° REDUCING ELBOWS

LEAD FREE

Part #		Approx. Wt. Lbs.	Box/Case	Size	A	B	Approx. Wt. Lbs.	Part #	
44-120				1/4" x 1/8"					
44-123	----	0.44	60/240	1/2" x 1/4"	0.93	0.90	0.19		
44-124	----	0.58	60/240	1/2” x 3/8”	0.93	0.90	0.22	44-124LF	----
44-127	----	0.80	40/160	3/4” x 1/2”	1.08	1.11	0.31	44-127LF	----
44-131	----	1.07	50/100	1” x 3/4”	1.30	1.31	0.56	44-131LF	----
44-134	----	0.80	25/50	1-1/4” x 1”	1.52	1.60	0.81	44-134LF	
44-137	----	1.07	10/40	1-1/2” x 1”	1.56	1.72	1.02	44-137LF	----
				2" x 1"				44-140LF	----

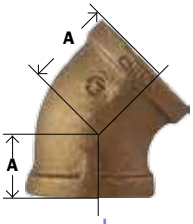


90° STREET ELLS

LEAD FREE

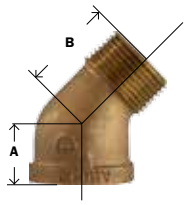
Part #		Approx. Wt. Lbs.	Box/Case	Size	A	B	Approx. Wt. Lbs.	Part #	
44-160	----	0.07	60/720	1/8”	0.55	0.92	0.06	44-160LF	----
44-161	----	0.11	35/420	1/4”	0.72	1.11	0.11	44-161LF	----
44-162	----	0.18	60/240	3/8”	0.83	1.24	0.16	44-162LF	----
44-163	----	0.24	60/180	1/2”	1.03	1.51	0.24	44-163LF	----
44-164	----	0.37	35/105	3/4”	1.19	1.66	0.38	44-164LF	----
44-165	----	0.67	45/90	1”	1.43	1.98	0.66	44-165LF	----
44-166	----	1.00	25/50	1-1/4”	1.71	2.26	0.99	44-166LF	----
44-167	----	1.37	9/27	1-1/2”	1.87	2.46	1.15	44-167LF	----
44-168	----	1.93	8/16	2”	2.14	2.98	2.07	44-168LF	----
44-169	----	4.05	5/10	2-1/2”	2.74	3.92	3.79	44-169LF	
44-170	----	6.16	1/8	3”	3.10	4.45	6.38		

WARNING: This product can expose you to chemicals, including Nickel, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov



45° ELBOWS

Part #		Approx. Wt. Lbs.	Box/Case	Size	A	Approx. Wt. Lbs.	Part #	
44-180	----	0.08	50/600	1/8”	0.43	0.05	44-180LF	----
44-181	----	0.13	30/360	1/4”	0.55	0.09	44-181LF	----
44-182	----	0.17	75/300	3/8”	0.63	0.14	44-182LF	----
44-183	----	0.21	50/200	1/2”	0.79	0.19	44-183LF	----
44-184	----	0.32	40/120	3/4”	0.91	0.36	44-184LF	----
44-185	----	0.52	20/60	1”	1.07	0.59	44-185LF	----
44-186	----	0.86	20/40	1-1/4”	1.23	0.87	44-186LF	----
44-187	----	1.10	10/30	1-1/2”	1.31	1.13	44-187LF	----
44-188	----	1.71	12/24	2”	1.47	1.65	44-188LF	----
44-189	----	3.24	1/12	2-1/2"	1.95	2.69		
44-190	----	4.12	1/10	3"	2.17	3.68		



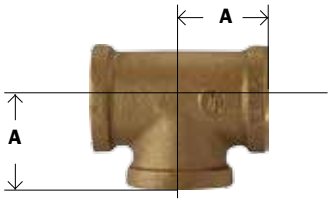
45° STREET ELBOWS

Part #		Approx. Wt. Lbs.	Box/Case	Size	A	B	Approx. Wt. Lbs.	Part #	
44-200	----	0.06	70/840	1/8”	0.26	0.43	0.06		
44-201	----	0.11	100/400	1/4”	0.35	0.56	0.09	44-201LF	----
44-202	----	0.13	100/400	3/8”	0.37	0.63	0.12	44-202LF	----
44-203	----	0.18	75/225	1/2”	0.45	0.79	0.22	44-203LF	----
44-204	----	0.28	40/120	3/4”	0.52	0.91	0.31	44-204LF	----
44-205	----	0.52	25/75	1”	0.60	1.07	0.52	44-205LF	----
44-206	----	0.77	10/40	1-1/4”	0.67	1.23	0.72	44-206LF	----
44-207	----	0.97	10/30	1-1/2”	0.70	1.31	1.05	44-207LF	----
44-208	----	2.04	12/24	2”	0.76	1.47	2.04	44-208LF	----

CROSSES

Part #		Approx. Wt. Lbs.	Box/Case	Size	A	Approx. Wt. Lbs.	Part #	
44-391	----	0.20	60/240	1/4”	0.72	0.15	44-391LF	----
44-392	----	0.15	50/150	3/8”	0.83	0.25	44-392LF	----
44-393	----	0.45	30/90	1/2”	1.03	0.38	44-393LF	----
44-394	----	0.76	20/60	3/4”	1.19	0.59	44-394LF	----
44-395	----	1.04	15/30	1”	1.19	0.94	44-395LF	----
44-396	----	1.63	10/20	1-1/4”	1.71	1.43	44-396LF	----
44-397	----	2.10	8/16	1-1/2”	1.87	1.89	44-397LF	----
44-398	----	3.28	5/10	2”	2.14	2.95	44-398LF	----

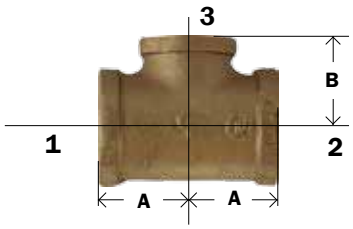
WARNING: This product can expose you to chemicals, including Nickel, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov



LEAD FREE

TEES

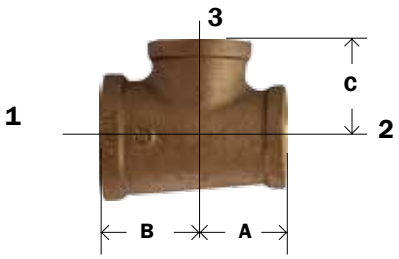
Part #		Approx. Wt. Lbs.	Box/Case	Size	A	Approx. Wt. Lbs.	Part #	
44-250	----	0.11	120/480	1/8”	0.55	0.09	44-250LF	----
44-251	----	0.17	75/300	1/4”	0.72	0.13	44-251LF	----
44-252	----	0.25	45/180	3/8”	0.83	0.21	44-252LF	----
44-253	----	0.31	40/120	1/2”	1.03	0.35	44-253LF	----
44-254	----	0.50	35/70	3/4”	1.19	0.55	44-254LF	----
44-255	----	0.85	20/40	1”	1.43	0.92	44-255LF	----
44-256	----	1.29	14/28	1-1/4”	1.71	1.34	44-256LF	----
44-257	----	1.68	12/24	1-1/2”	1.87	1.82	44-257LF	----
44-258	----	2.70	8/16	2”	2.14	2.80	44-258LF	----
44-259	----	5.14	1/6	2-1/2”	2.74	4.70		
44-260	----	7.59	1/6	3”	3.10	6.69		
				4"			44-261LF	



LEAD FREE

REDUCING TEES
REDUCING ON THE BRANCH

Part #		Approx. Wt. Lbs.	Box/Case	Size (1 & 2) x 3	A	B	Approx. Wt. Lbs.	Part #	
44-276	----	0.24	40/160	1/2” x 1/4”	0.87	0.87	0.28	44-276LF	----
44-280	----	0.46	40/160	1/2" x 3/4"	2.42	1.155	0.48	44-280LF	----
44-282	----	0.43	25/100	3/4” x 1/4”	1.05	1.08	0.38	44-282LF	----
44-283	----	0.45	25/100	3/4” x 3/8”	1.00	1.00	0.46		
44-286	----	0.53	20/80	3/4” x 1/2”	1.08	1.11	0.40	44-286LF	----
44-291	----	0.60	15/60	1” x 1/2”	1.20	1.24	0.73	44-291LF	----
44-298	----	0.80	12/48	1” x 3/4”	1.30	1.31	0.71	44-298LF	----
44-301	----	0.85	20/40	1-1/4” x 1/2”	1.34	1.53	1.18	44-301LF	----
44-303	----	0.90	20/40	1-1/4” x 3/4”	1.30	1.31	1.08	44-303LF	----
44-306	----	1.21	20/40	1-1/4” x 1”	1.58	1.67	1.23	44-306LF	----
				2" x 1"			1.88	44-330LF	----
				2" x 1-1/4"			2.03	44-334LF	----



REDUCING TEES
REDUCING ON THE RUN

Part #		Size 1x2x3	A	B	C	Box/Case	Approx. Wt. Lbs.	Part #	
44-287	----	3/4” x 1/2” x 1/2”	25/100	1.20	1.22	25/100	0.37	44-287LF	----
		3/4" x 1/2" x 3/4"					0.49	44-288LF	----
44-296	----	1” x 3/4” x 3/4”	15/60	1.37	1.45	10/40	0.71		

WARNING: This product can expose you to chemicals, including Nickel, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

COUPLINGS

Part #		Approx. Wt. Lbs.	Box/Case	Size	A	Approx. Wt. Lbs.	Part #	
44-410	----	0.12	70/840	1/8”	0.80	0.06	44-410LF	----
44-411	----	0.11	40/480	1/4”	0.80	0.09	44-411LF	----
44-412	----	0.15	40/480	3/8”	1.05	0.13	44-412LF	----
44-413	----	0.18	60/240	1/2”	1.29	0.21	44-413LF	----
44-414	----	0.28	50/150	3/4”	1.43	0.32	44-414LF	----
44-415	----	0.45	25/100	1”	1.68	0.53	44-415LF	----
44-416	----	0.63	16/64	1-1/4”	1.86	0.73	44-416LF	----
44-417	----	0.82	18/36	1-1/2”	1.92	0.97	44-417LF	----
44-418	----	1.38	12/24	2”	2.20	1.51	44-418LF	----
44-419	----	2.63	1	2-1/2"	2.88	2.20		
44-420	----	3.80	1	3”	3.18	3.63	44-420LF	----

REDUCING COUPLINGS

Part #		Approx. Wt. Lbs.	Box/Case	Size	A	Approx. Wt. Lbs.	Part #	
44-430	----	0.08	70/840	1/4” x 1/8”	0.88	0.08	44-430LF	----
44-431	----	0.11	35/420	3/8” x 1/8”	0.92	0.10	44-431LF	
44-432	----	0.13	30/360	3/8” x 1/4”	0.92	0.11	44-432LF	----
44-433	----	0.16	75/300	1/2” x 1/8”	1.17	0.14		
44-434	----	0.16	75/300	1/2” x 1/4”	1.17	0.16	44-434LF	----
44-435	----	0.18	60/240	1/2” x 3/8”	1.17	0.17	44-435LF	----
44-436	----	0.23	45/180	3/4” x 1/4”	1.35	0.20	44-436LF	----
44-437	----	0.24	45/180	3/4” x 3/8”	1.35	0.23	44-437LF	----
44-438	----	0.23	60/180	3/4” x 1/2”	1.35	0.26	44-438LF	----
44-440	----	0.40	30/120	1” x 3/8”	1.56	0.40		
44-441	----	0.33	30/120	1” x 1/2”	1.56	0.38	44-441LF	----
44-442	----	0.44	25/100	1” x 3/4”	1.56	0.43	44-442LF	----
44-444	----	0.62	25/75	1-1/4” x 1/2”	1.77	0.60	44-444LF	----
44-445	----	0.64	25/75	1-1/4” x 3/4”	1.77	0.57	44-445LF	----
44-446	----	0.54	15/60	1-1/4” x 1”	1.77	0.65	44-446LF	----
44-447	----	0.80	20/60	1-1/2” x 1/2”	1.80	0.77	44-447LF	
44-448	----	0.83	15/60	1-1/2” x 3/4”	1.80	0.74	44-448LF	----
44-449	----	0.68	25/50	1-1/2” x 1”	1.80	0.83	44-449LF	----
44-450	----	0.99	12/48	1-1/2” x 1-1/4”	1.80	0.87	44-450LF	----
44-458	----	1.28	12/36	2” x 1/2”	2.03	1.07		
44-451	----	0.97	12/36	2” x 3/4”	2.03	1.25	44-451LF	----
44-452	----	1.40	12/36	2” x 1”	2.03	1.19	44-452LF	----
44-453	----	1.09	9/27	2” x 1-1/4”	2.03	1.22	44-453LF	----
44-454	----	3.60	9/27	2” x 1-1/2”	2.03	1.28	44-454LF	----
44-461	----	1.26	1	2-1/2” x 1-1/2”	3.15	1.94		
44-462	----	2.29	1	2-1/2” x 2”	3.15	2.37	44-462LF	----
44-456	----	2.49	1	3” x 2”	3.69	2.46		
44-463	----	3.92	1	3” x 2-1/2”	3.69	3.82		

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LEAD FREE

CAPS

Part #		Approx. Wt. Lbs.	Box/Case	Size	A	Approx. Wt. Lbs.	Part #	
44-470	----	0.04	80/160	1/8”	0.53	0.03	44-470LF	----
44-471	----	0.06	80/960	1/4”	0.58	0.06	44-471LF	----
44-472	----	0.10	60/720	3/8”	0.66	0.09	44-472LF	----
44-473	----	0.13	75/300	1/2”	0.75	0.13	44-473LF	----
44-474	----	0.19	40/160	3/4”	0.87	0.21	44-474LF	----
44-475	----	0.30	25/100	1”	1.03	0.35	44-475LF	----
44-476	----	0.51	20/80	1-1/4”	1.10	0.52	44-476LF	----
44-477	----	0.66	18/54	1-1/2”	1.12	0.65	44-477LF	----
44-478	----	1.00	12/36	2”	1.35	1.14	44-478LF	----
44-480	----	2.74	1	3”	1.83	2.64		

LEAD FREE

UNIONS

Part #		Approx. Wt. Lbs.	Box/Case	Size	A	Approx. Wt. Lbs.	Part #	
44-600	----	0.17	40/160	1/8”	1.18	0.13	44-600LF	----
44-601	----	0.25	40/160	1/4”	1.26	0.27	44-601LF	----
44-602	----	0.37	40/160	3/8”	1.50	0.39	44-602LF	----
44-603	----	0.52	50/100	1/2”	1.57	0.44	44-603LF	----
44-604	----	0.78	35/70	3/4”	1.89	0.59	44-604LF	----
44-605	----	1.18	20/40	1”	2.13	0.90	44-605LF	----
44-606	----	1.64	15/30	1-1/4”	2.36	1.33	44-606LF	----
44-607	----	2.08	10/20	1-1/2”	2.68	1.80	44-607LF	----
44-608	----	3.24	6/12	2”	2.99	2.66	44-608LF	----
44-609	----	5.31	4/8	2-1/2”	3.35	4.80		
44-610	----	6.94	4/8	3”	3.74	6.49		

• Straight Thread

HEX LOCKNUTS

Part #	Box/Case	Size	A	Thickness	Approx. Wt. Lbs.	
44-700	180/720	1/8”	0.50	0.19	0.01	----
44-701	90/540	1/4”	0.66	0.25	0.03	----
44-702	90/540	3/8”	0.77	0.28	0.04	----
44-703	90/360	1/2”	0.97	0.31	0.09	----
44-704	90/360	3/4”	1.23	0.34	0.10	----
44-705	50/150	1”	1.50	0.38	0.17	----
44-706	45/180	1-1/4”	1.86	0.42	0.22	----
44-707	45/135	1-1/2”	2.12	0.47	0.29	----
44-708	25/75	2”	2.63	0.53	0.45	----

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Hex

LEAD FREE

HEX BUSHINGS

Part #		Approx. Wt. Lbs.	Box/Case	Size	A	Hex	Approx. Wt. Lbs.	Part #	
44-500	----	0.02	120/1440	1/4” x 1/8”	0.58	0.66	0.03	44-500LF	----
44-501	----	0.06	75/900	3/8” x 1/8”	0.64	0.72	0.06	44-501LF	----
44-502	----	0.04	75/900	3/8” x 1/4”	0.64	0.75	0.04	44-502LF	----
44-503	----	0.10	150/600	1/2” x 1/8”	0.75	0.92	0.09	44-503LF	----
44-504	----	0.09	150/600	1/2” x 1/4”	0.75	0.93	0.10	44-504LF	----
44-505	----	0.08	150/600	1/2” x 3/8”	0.75	0.92	0.08	44-505LF	----
44-506	----	0.17	75/300	3/4” x 1/8”	0.87	1.15	0.17	44-506LF	----
44-507	----	0.15	75/300	3/4” x 1/4”	0.85	1.14	0.18	44-507LF	----
44-508	----	0.14	75/300	3/4” x 3/8”	0.85	1.14	0.17	44-508LF	----
44-509	----	0.14	75/300	3/4” x 1/2”	0.85	1.15	0.14	44-509LF	----
44-510*	----	0.23	50/200	1” x 1/4”	1.05	1.43	0.28	44-510LF*	----
44-511*	----	0.22	50/200	1” x 3/8”	1.05	1.50	0.26	44-511LF	----
44-512	----	0.25	50/200	1” x 1/2”	1.00	1.40	0.30	44-512LF	----
44-513	----	0.21	50/200	1” x 3/4”	1.00	1.43	0.21	44-513LF	----
44-514	----	0.34	30/120	1-1/4” x 1/4”	1.22	1.10	0.34		
44-515	----	0.35	30/120	1-1/4” x 3/8”	1.19	1.84	0.29		
44-516*	----	0.34	30/120	1-1/4” x 1/2”	1.14	1.33	0.39	44-516LF*	----
44-517	----	0.40	30/120	1-1/4” x 3/4”	1.08	1.75	0.43	44-517LF	----
44-518	----	0.33	30/120	1-1/4” x 1”	1.08	1.76	0.42	44-518LF	----
44-519*	----	0.47	25/75	1-1/2” x 1/4”	1.09	2.12	0.29	44-519LF	----
44-520*	----	0.45	25/75	1-1/2” x 3/8”	1.35	2.16	0.44	44-520LF	----
44-521*	----	0.44	25/75	1-1/2” x 1/2”	1.20	2.10	0.51	44-521LF*	----
44-522*	----	0.48	25/75	1-1/2” x 3/4”	1.20	2.12	0.54	44-522LF*	----
44-523	----	0.53	25/75	1-1/2” x 1”	1.14	2.08	0.57	44-523LF	----
44-524	----	0.45	25/75	1-1/2” x 1-1/4”	1.14	2.12	0.46	44-524LF	----
44-527*	----	0.67	20/60	2” x 1/2”	1.27	1.32	1.10	44-527LF	----
44-528*	----	0.74	20/60	2” x 3/4”	1.27	1.62	0.77	44-528LF	----
44-529*	----	0.76	20/60	2” x 1”	1.29	1.95	0.77	44-529LF*	----
44-530	----	0.86	20/60	2” x 1-1/4”	1.22	2.47	0.88	44-530LF	----
44-531	----	0.83	20/60	2” x 1-1/2”	1.22	2.50	0.71	44-531LF	----
44-532	----	1.16	15/30	2-1/2” x 1”	1.53	1.94	1.19		
44-534	----	1.36	15/30	2-1/2” x 1-1/2”	1.50	2.38	1.15	44-534LF	----
44-535	----	1.13	15/30	2-1/2” x 2”	1.43	2.97	1.12	44-535LF	----
44-537	----	1.82	12/24	3” x 1-1/2”	1.61	2.68	2.44		
44-538	----	2.33	12/24	3” x 2”	1.61	3.70	1.82	44-538LF	----
44-539	----	2.19	12/24	3” x 2-1/2”	1.53	3.70	2.11		
44-541	----	3.51	12/24	4" x 2"			3.86		
44-543	----	4.22	12/24	4" x 3"	2.01	4.62	3.56	44-543LF	----

* INSIDE HEX

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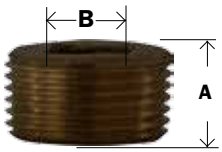
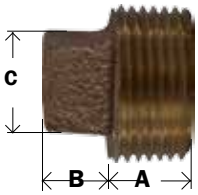


BRONZE COUNTERSUNK PLUGS

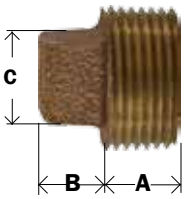
Part #	Size	A	Socket Size	Box/Case	Approx. Wt. Lbs.	
44-633	1/2”	0.57	0.43	120/1440	0.06	----
44-634	3/4”	0.58	0.47	70/840	0.11	----
44-635	1”	0.75	0.59	20/240	0.22	----
44-636	1-1/4”	0.74	0.72	40/120	0.33	----
44-637	1-1/2”	0.79	0.72	30/90	0.50	----
44-638	2”	0.80	0.85	20/60	0.88	----
44-639	2-1/2"	1.08	1.25	1/1	1.56	----
44-640	3"	1.13	1.38	1/1	2.47	----
44-641	4"	1.22	2.12	1/1	3.21	----



LEAD FREE

CORED SQUARE HEAD PLUGS

Part #		Approx. Wt. Lbs.	Box/Case	Size	A	B	C	Approx. Wt. Lbs.	Part #	
44-650	----	0.02	300/3600	1/8”	0.27	0.24	0.28	0.02		
44-651	----	0.04	150/1800	1/4”	0.41	0.28	0.37	0.04	44-651LF	----
44-652	----	0.06	100/1200	3/8”	0.41	0.31	0.43	0.06		
44-653	----	0.10	50/600	1/2”	0.54	0.38	0.56	0.10	44-653LF	----
44-654	----	0.13	30/360	3/4”	0.55	0.44	0.62	0.13	44-654LF	----
44-655	----	0.25	20/240	1”	0.69	0.50	0.81	0.22	44-655LF	----
44-656	----	0.39	40/120	1-1/4”	0.71	0.56	0.93	0.32	44-656LF	----
44-657	----	0.57	30/90	1-1/2”	0.73	0.62	1.12	0.47	44-657LF	----
44-658	----	0.77	20/60	2”	0.76	0.68	1.31	0.68	44-658LF	----
44-659	----	1.25	16/32	2-1/2”	1.07	0.74	1.50	1.26		
44-660	----	2.02	16/32	3”	1.13	0.80	1.68	1.49		
44-662	----	3.20	6/12	4”	1.22	0.92	2.25	3.20		



SOLID SQUARE HEAD PLUGS

Part #		Size	A	B	C	Box/Case	Approx. Wt. Lbs.	Part #	
44-670	----	1/8”	0.27	0.24	0.28	400/4800	0.02	44-670LF	----
44-671	----	1/4”	0.41	0.28	0.37	150/1800	0.04	44-671LF	----
44-672	----	3/8”	0.41	0.31	0.43	120/1440	0.06	44-672LF	----
44-673	----	1/2”	0.54	0.38	0.56	50/600	0.12	44-673LF	----
44-674	----	3/4”	0.55	0.44	0.62	35/420	0.18	44-674LF	----
44-675	----	1”	0.69	0.50	0.81	20/240	0.36	44-675LF	----
44-676	----	1-1/4”	0.71	0.56	0.93	30/120	0.63	44-676LF	----
44-677	----	1-1/2”	0.73	0.62	1.12	30/90	0.84	44-677LF	----
44-678	----	2”	0.76	0.68	1.31	10/60	1.27	44-678LF	----

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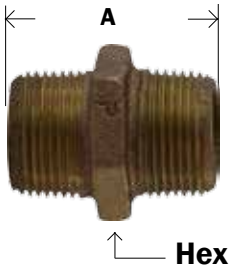
HEX NIPPLES



Part #	Size	A	Hex	Box/ Case	Approx. Wt. Lbs.	
44-720	1/8”	1.25	0.50	400/4800	0.05	----
44-721	1/4”	1.25	0.61	150/1800	0.06	----
44-722	3/8"	1.55	0.68	120/1440	0.11	----
44-723	1/2”	1.65	1.03	240/480	0.18	----
44-724	3/4”	1.77	1.21	80/320	0.24	----
44-725	1”	2.06	1.46	50/150	0.36	----
44-726	1-1/4”	2.12	1.81	50/100	0.47	----
44-727	1-1/2”	2.25	2.07	35/70	0.76	----
44-728	2”	2.50	2.41	20/40	1.50	----
44-729	2-1/2”	2.80	3.10	1	2.10	----

REDUCING HEX NIPPLES

Part #	Size	Box/Case	Approx. Wt. Lbs.	
44-740	1/4" x 1/8"	1/1	0.06	----
44-742	1/2" x 3/8"	1/1	0.16	----
44-750	1-1/2" x 1"	1/1	0.64	----
44-753	1-1/2" x 1-1/4"	1/1	0.68	----

See page 239 for Stainless Steel Reducing Hex Nipples

CHROME PLATED 90° ELBOW

LEAD FREE

Part #	Size	
45-102LF	3/8"	----
45-103LF	1/2"	----
45-104LF		

CHROME PLATED 90° ELBOW

LEAD FREE

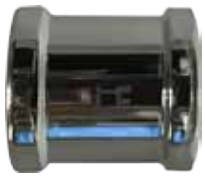
Part #	Size	
45-163LF	1/2"	----

CHROME PLATED TEE

LEAD FREE

Part #	Size	
45-252LF	3/8"	----
45-253LF	1/2"	----

CHROME PLATED COUPLING



LEAD FREE

Part #	Size	
45-412LF	3/8"	----
45-413LF	1/2"	----

WARNING: This product can expose you to chemicals, including chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

CLEANOUT PLUGS/ DROP EAR ELBOWS

• Southern Code

CAST BRASS SQUARE HEAD CLEANOUT PLUG

Part #	Size	Box/Case	
970-300	1-1/2"	100/200	----
970-301	2"	100/200	----
970-302	2-1/2"	50/200	----
970-303	3"	20/160	----
970-304	3-1/2"	20/120	----
970-305	4"	10/80	----
970-330	5"	10/60	----
970-331	6"	10/40	----
970-332	8"	5/20	----
970-333	10"	1/1	----

• Southern Code

CAST BRASS COUNTERSUNK HEAD CLEANOUT PLUG

Part #	Size	Box/Case	
970-306	1-1/2"	100/200	----
970-307	2"	100/200	----
970-308	2-1/2"	100/200	----
970-309	3"	50/200	----
970-310	3-1/2"	20/160	----
970-311	4"	20/120	----
970-312	5"	10/60	----
970-313	6"	10/40	----
970-314	8"	5/20	----

CAST BRASS COUNTERSUNK CLEANOUT W 1/4-20 TAP

Part #	Size	Box/Case	
970-700	1-1/2"	1/1	----
970-701	2"	1/1	----
970-702	2-1/2"	1/1	----
970-703	3"	1/1	----
970-704	3-1/2"	1/1	----
970-705	4"	1/1	----
970-706	5"	1/1	----
970-707	6"	1/1	----

DROP EAR ELBOWS

• Lead Free Brass

• Lead Free Bronze

Part #	Swt x FIP	
44840LF	1/2 x 1/2 Bronze	----
44841LF	1/2 x 1/2 Brass	----
44842LF	3/4 x 1/2 Brass	----
44843LF	3/4 x 3/4 Brass	----

• Lead Free Brass

Part #	Swt x Swt	
44844LF	1/2 x 1/2	----

• Lead Free Bronze

Part #	Pex x FIP	
44845LF	1/2 x 1/2	----

WARNING: This product can expose you to chemicals, including Nickel, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

BRONZE INSERT FITTINGS

150 PSI Genuine red brass - for plastic pipe
• Not Lead Free

HEX MALE ADAPTERS

(Barb x Male Pipe)

Part #	Barb x Male	
973-925	3/4" x 3/4"	----
973-927	1" x 1"	----
973-930	1" x 1-1/4"	----
973-929	1-1/4" x 1"	----
973-928	1-1/4" x 1-1/4"	----
973-948	1-1/2" x 1-1/2"	----
973-949	2" x 2"	----

BRONZE TEES ALL BARB

Part #	Size	
973-965	3/4"	----
973-966	1"	----
973-967	1-1/4"	----

ELBOWS

(Barb x Male Pipe)

Part #	Size	
973-980	3/4" x 3/4"	----
973-981	1" x 3/4"	----
973-982	1" x 1"	----

ELBOWS

(Barb x Barb)

Part #	Hose Size	
973-975	3/4"	----
973-976	1"	----
973-977	1-1/4" x 1"	----
973-978	1-1/4"	----
973-979	1-1/2"	----

STEEL INSERT FITTINGS FOR PLASTIC PIPE

MALE ADAPTER

• Galvanized

(Barb x Male Pipe)

Part #	Size	Box/Case	
973-906	1/2"	25/100	----
973-907	3/4"	25/10	----
973-908	1"	16/48	----
973-909	1-1/4"	12/36	----
973-910	1-1/2"	6/36	----
973-911	2"	5/25	----
973-912	2-1/2"	1/3	----
973-913	3"	1/3	----
973-914	4"	1/3	----

REDUCING ADAPTER

(Insert x NPT)

Part #	Size	
974-264	3/4 x 1/2	----
974-265	1 x 3/4	----
974-266	1-1/4 x 1	----
974-267	1-1/2 x 1-1/4	----

COUPLINGS

Part #	Size	Box/Case	
973-900	1/2	30/120	----
973-901	3/4	20/100	----
973-902	1	20/100	----
973-903	1-1/4	16/64	----
973-904	1-1/2	12/48	----
973-905	2	5/25	----

WARNING: This product can expose you to chemicals, including Nickel, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

SS & LEAD FREE BRONZE INSERT

STAINLESS STEEL #304

#304 INSERT X MALE PIPE

• For coiled plastic pipe to submersible pump

Part #	Size	
973947SS	1/2 x 1/2	----
973925SS	3/4 x 3/4	----
973926SS	1 x 3/4	----
973927SS	1 x 1	----
973930SS	1 x 1-1/4	----
973928SS	1-1/4 x 1-1/4	----
973948SS	1-1/2 x 1-1/2	----
973949SS	2 x 2	----

#304 INSERT X MIP ELBOW

• Hydrant elbow

Part #	Size	
973980SS	3/4 x 3/4	----
973982SS	1 x 1	----
973985SS	1-1/4 x 1-1/4	----

LEAD FREE BRONZE INSERT FITTINGS

INSERT X INSERT

Part #	Size	
973960LF	1/2	----
973961LF	3/4	----
973962LF	1	----
973963LF	1-1/4	----

INSERT TEE

Part #	Size	
973965LF	3/4	----
973966LF	1	----
973967LF	1-1/4	----

BRONZE FITTINGS

INSERT X MALE BRANCH TEE

Part #	Size	
973969LF	3/4	----
973970LF	1 x 3/4	----
973971LF	1	----

INSERT X INSERT ELBOW

Part #	Size	
973975LF	3/4	----
973976LF	1	----

WELL COUPLINGS

304 SS DROP WELL COUPLINGS STANDARD

Part #	Size	
62415DC	1	----
62416DC	1-1/4	----
62417DC	1-1/2	----
62418DC	2	----

HEAVY WALLED SS 304 DROP WELL COUPLINGS

Part #	Size	
62415HDDC	1	----
62416HDDC	1-1/4	----
62417HDDC	1-1/2	----
62418HDDC	2	----

#304 STAINLESS STEEL MERCHANT COUPLINGS

Part #	Size	
61775	1	----
61776	1-1/4	----
61777	1-1/2	----
61778	2	----

WARNING: This product can expose you to chemicals, including chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

STAINLESS STEEL NIPPLES

SCHEDULE 40 WELDED

Stainless steel pipe nipples are manufactured from stainless steel pipe that conforms to specification ASTM A312/ SA312.

All stainless steel nipples conform to specification ASTM A733. Threads conform to the requirements of ANSI B1.20.1.

SCHEDULE 80 SEAMLESS

- **SEAMLESS FOR UNRESTRICTED FLOW**
- **USE WITH AIR, WATER, OIL, NATURAL GAS, STEAM**
- **FITTINGS: USE THREADED CLASS 3000 HIGH-PRESSURE STAINLESS STEEL.**
- **ASTM A733** • **ASTM A312** • **ANSI/ ASME B1.20.1**
- **PSI 3000**

304

The basic alloy. Type 304 (18-8) is an austenitic steel possessing a minimum of 18% chromium and 8% nickel, combined with a maximum of 0.08% carbon. It is a nonmagnetic steel which cannot be hardened by heat treatment, but instead. must be cold worked to obtain higher tensile strengths.

Because of its ability to withstand the corrosive action of various acids found in fruits, meats, milk, and vegetables, Type 304 is especially suited for all types of dairy equipment piping and valves, the brewing industry, the citrus and fruit juice industry, and in food processing applications. Also used for the dye tanks, pipelines buckets, dippers, etc. that come in contact with the lormic, acetic, and other organic acids used in the dyeing industry.

In the marine environment, because of it slightly higher strength and wear resistance than type 316 it is also used for nuts, bolts, screws, and other fasteners. It is also used for springs, cogs, and other components where both wear and corrosion resistance is needed.

Both #304 and #316 nipples are NSF/ANSI 372 and NSF/ANSI 61 compliant.

316

For severe environments. Of course, there are many industrial processes that require a higher level of resistance to corrosion than Type 304 can offer. For these applications, Type 316 is the answer.

In type 316, the nickel content is increased slightly. What distinguishes Type 316 from Type 304 is the addition of molybdenum up to a maximum of 3%.

Molybdenum increases the corrosion resistance of this chromium-nickel alloy to withstand attack by many industrial chemicals and solvents, and, in particular, inhibits pitting caused by chlorides. As such, molybdenum is one of the single most useful alloying additives in the fight against corrosion.

Type 316 can withstand corrosive attack by sodium and calcium brines, hypochlorite solutions, phosphoric acid; and the sulfite liquors and sulfurous acids used in the paper pulp industry. This alloy, therefore, is specified for industrial equipment that handles the corrosive process chemicals used to produce inks, rayons, photographic chemicals, paper, textiles, bleaches, and rubber. Type 316 is also used extensively for surgical implants within the hostile environment of the body.

Type 316 is the main stainless used in the marine environment, with the exception of fasteners and other items where strength and wear resistance are needed, then Type 304 (18-8) is typically used.

SCH 40 STAINLESS STEEL NIPPLES

STAINLESS STEEL

#304 **#316**

1/8" - 27

1/8" DIAMETER
SCH 40 WELDED

Part # 304 S.S.		Length	Box	Approx. Wt. Lbs.	Part # 316 S.S.	
48-001	----	X Close (3/4")	25	0.01	49-001	----
48-002	----	x 1-1/2"	25	0.03	49-002	----
48-003	----	x 2"	25	0.04	49-003	----
48-004	----	x 2-1/2"	25	0.05	49-004	----
48-005	----	x 3"	25	0.06	49-005	----
48-006	----	x 3-1/2"	25	0.07	49-006	----
48-007	----	x 4"	25	0.07	49-007	----
48-008	----	x 4-1/2"	25	0.09	49-008	----
48-009	----	x 5"	25	0.10	49-009	----
48-010	----	x 5-1/2"	25	0.11	49-010	----
48-011	----	x 6"	25	0.12	49-011	----
48-015	----	x 10"	1	0.19		
		x 12"	1	0.24	49-017	----

1/4"-18

1/4" DIAMETER
SCH 40 WELDED

Part # 304 S.S.		Length	Box	Approx. Wt. Lbs.	Part # 316 S.S.	
48-020	----	X Close (7/8")	25	0.02	49-020	----
48-021	----	x 1-1/2"	25	0.04	49-021	----
48-022	----	x 2"	25	0.06	49-022	----
48-023	----	x 2-1/2"	25	0.07	49-023	----
48-024	----	x 3"	25	0.09	49-024	----
48-025	----	x 3-1/2"	25	0.11	49-025	----
48-026	----	x 4"	25	0.13	49-026	----
48-027	----	x 4-1/2"	25	0.14	49-027	----
48-028	----	x 5"	25	0.16	49-028	----
48-029	----	x 5-1/2"	25	0.18	49-029	----
48-030	----	x 6"	25	0.19	49-030	----
48-031	----	x 7"	1	0.22	49-031	----
48-032	----	x 8"	1	0.25	49-032	----
		x 9"	1	0.31	49-033	----
48-034	----	x 10"	1	0.35	49-034	----
		x 11"	1	0.40	49-035	----
48-036	----	x 12"	1	0.44	49-036	----
		x 14"	1	0.46	49-037	----
		x 16"	1	0.47	49-038	----

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

#304

3/8"-18

3/8" DIAMETER
SCH 40 WELDED

#316

Part # 304 S.S.		Length	Box	Approx. Wt. Lbs.	Part # 316 S.S.	
48-040	----	X Close (1")	25	0.03	49-040	----
48-041	----	x 1-1/2"	25	0.06	49-041	----
48-042	----	x 2"	25	0.07	49-042	----
48-043	----	x 2-1/2"	25	0.10	49-043	----
48-044	----	x 3"	25	0.12	49-044	----
48-045	----	x 3-1/2"	25	0.15	49-045	----
48-046	----	x 4"	25	0.17	49-046	----
48-047	----	x 4-1/2"	25	0.19	49-047	----
48-048	----	x 5"	25	0.22	49-048	----
48-049	----	x 5-1/2"	25	0.23	49-049	----
48-050	----	x 6"	25	0.26	49-050	----
48-052	----	x 8"	1	0.34	49-052	----
48-053	----	x 9"	1			
48-054	----	x 10"	1	0.43	49-054	----
48-056	----	x 12"	1			

1/2" - 14

1/2" DIAMETER
SCH 40 WELDED

Part # 304 S.S.		Length	Box	Approx. Wt. Lbs.	Part # 316 S.S.	
48-060	----	X Close 1-1/8"	25	0.05	49-060	----
48-061	----	x 1-1/2"	25	0.07	49-061	----
48-062	----	x 2"	25	0.10	49-062	----
48-063	----	x 2-1/2"	25	0.14	49-063	----
48-064	----	x 3"	25	0.18	49-064	----
48-065	----	x 3-1/2"	25	0.20	49-065	----
48-066	----	x 4"	25	0.25	49-066	----
48-067	----	x 4-1/2"	25	0.28	49-067	----
48-068	----	x 5"	25	0.31	49-068	----
48-069	----	x 5-1/2"	25	0.34	49-069	----
48-070	----	x 6"	25	0.39	49-070	----
48-071	----	x 7"	1	0.41		
48-072	----	x 8"	1	0.52	49-072	----
48-073	----	x 9"	1	0.54		
48-074	----	10"	1	0.58	49-074	----
48-075	----	x 11"	1	0.64		
48-076	----	x 12"	1	0.69		

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

SCH 40 STAINLESS STEEL NIPPLES

STAINLESS STEEL

#304

3/4" - 14

3/4" DIAMETER
SCH 40 WELDED

#316

Part # 304 S.S.		Length	Box	Approx. Wt. Lbs.	Part # 316 S.S.	
48-080	----	X Close (1-3/8")	25	0.08	49-080	----
48-081	----	x 1-1/2"	25	0.13	49-081	----
48-082	----	x 2"	25	0.14	49-082	----
48-083	----	x 2-1/2"	25	0.17	49-083	----
48-084	----	x 3"	25	0.22	49-084	----
48-085	----	x 3-1/2"	25	0.27	49-085	----
48-086	----	x 4"	25	0.32	49-086	----
48-087	----	x 4-1/2"	25	0.38	49-087	----
48-088	----	x 5"	25	0.40	49-088	----
48-089	----	x 5-1/2"	25	0.42	49-089	----
48-090	----	x 6"	25	0.48	49-090	----
48-091	----	x 7"	1	0.45		
48-092	----	x 8"	1	0.67	49-092	----
48-094	----	x 10"	1	0.94	49-094	----
48-096	----	x 12"	1	1.03		

1" - 11 1/2

1" DIAMETER
SCH 40 WELDED

Part # 304 S.S.		Length	Box	Approx. Wt. Lbs.	Part # 316 S.S.	
48-100	----	X Close (1-1/2")	25	0.13	49-100	----
48-101	----	x 2"	25	0.20	49-101	----
48-102	----	x 2-1/2"	25	0.25	49-102	----
48-103	----	x 3"	25	0.33	49-103	----
48-104	----	x 3-1/2"	25	0.40	49-104	----
48-105	----	x 4"	25	0.47	49-105	----
48-106	----	x 4-1/2"	25	0.53	49-106	----
48-107	----	x 5"	25	0.55	49-107	----
48-108	----	x 5-1/2"	25	0.60	49-108	----
48-109	----	x 6"	25	0.71	49-109	----
48-110	----	x 7"	1	0.57	49-110	----
48-111	----	x 8"	1	1.02	49-111	----
48-113	----	x 10"	1	1.16	49-113	----
48-115	----	x 12"	1	1.31		

1,000# 2 Piece FP #316 Stainless Steel Ball Valve on page 200

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm.
For more information, visit www.P65Warnings.ca.gov

1 1/4" - 11 1/2

1-1/4" DIAMETER
SCH 40 WELDED

Part # 304 S.S.		Length	Box	Approx. Wt. Lbs.	Part # 316 S.S.	
48-120	----	X Close (1-5/8")	10	0.17	49-120	----
48-121	----	x 2"	10	0.23	49-121	----
48-122	----	x 2-1/2"	10	0.35	49-122	----
48-123	----	x 3"	10	0.46	49-123	----
48-124	----	x 3-1/2"	10	0.52	49-124	----
48-125	----	x 4"	10	0.65	49-125	----
48-126	----	x 4-1/2"	10	0.53	49-126	----
48-127	----	x 5"	10	0.60	49-127	----
48-128	----	x 5-1/2"	10	0.61	49-128	----
48-129	----	x 6"	10	0.71	49-129	----
48-131	----	x 8"	1	1.34		
48-135	----	x 12"	1	1.54		

1-1/2" - 11 1/2

1-1/2" DIAMETER
SCH 40 WELDED

Part # 304 S.S.		Length	Box	Approx. Wt. Lbs.	Part # 316 S.S.	
48-140	----	X Close x 1-3/4"	10	0.25	49-140	----
48-141	----	x 2"	10	0.32	49-141	----
48-142	----	x 2-1/2"	10	0.41	49-142	----
48-143	----	x 3"	10	0.52	49-143	----
48-144	----	x 3-1/2"	10	0.62	49-144	----
48-145	----	x 4"	10	0.73	49-145	----
48-146	----	x 4-1/2"	10	0.86	49-146	----
48-147	----	x 5"	10	0.95	49-147	----
48-148	----	x 5-1/2"	10	1.01	49-148	----
48-149	----	x 6"	10	1.19	49-149	----
48-151	----	x 8"	1	1.63	49-151	----
48-152	----	x 9"	1	1.88		
48-153	----	x 10"	1	2.28	49-153	----
48-155	----	x 12"	1	2.43		

New SS Mini Ball Valves w/Viton O-Ring on page 202

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

SCH 40 STAINLESS STEEL NIPPLES

STAINLESS STEEL

2" DIAMETER
SCH 40 WELDED

Part # 304 S.S.		Length	Box	Approx. Wt. Lbs.	Part # 316 S.S.	
48-160	----	X Close (2")	10	0.37	49-160	----
48-161	----	x 2-1/2"	10	0.54	49-161	----
48-162	----	x 3"	10	0.65	49-162	----
48-163	----	x 3-1/2"	10	0.88	49-163	----
48-164	----	x 4"	10	1.02	49-164	----
48-165	----	x 4-1/2"	10	1.16	49-165	----
48-166	----	x 5"	10	1.29	49-166	----
48-167	----	x 5-1/2"	10	1.46	49-167	----
48-168	----	x 6"	10	1.57	49-168	----
48-169	----	x 7"	1	1.92	49-169	----
48-170	----	x 8"	1	2.01	49-170	----
48-171	----	x 9"	1	2.55		
48-172	----	x 10"	1	2.69		
48-174	----	x 12"	1	2.89		

2-1/2" DIAMETER
SCH 40 WELDED

Part # 304 S.S.	Length	Box	Approx. Wt. Lbs.	
48-180	X Close (2-1/2")	10	0.64	----
48-181	x 3"			
48-187	x 6"	1	2.37	----
48-193	x 12"	1	4.85	----

3" DIAMETER
SCH 40 WELDED

Part # 304 S.S.		Length	Box	Approx. Wt. Lbs.	Part # 316 S.S.	
48-200	----	X Close (2-5/8")	10	0.95	49-200	----
48-201	----	x 3"	10	1.32	49-201	----
48-203	----	x 4"	10	1.66	49-203	----
48-205	----	x 5"	5	1.72	49-205	----
48-207	----	x 6"	5	1.88	49-207	----
48-209	----	x 8"	1	1.91	49-209	----
48-213	----	x 12"	1	2.12	49-213	----

4" DIAMETER
SCH 40 WELDED

Part # 304 S.S.	List Price	Length	Box	Approx. Wt. Lbs.	Part # 316 S.S.	List Price
48-220	----	X Close (2-7/8")	8	1.15	49-220	----
		x 4"	1	2.98	49-223	----
48-227	----	x 6"	1	4.10	49-234	----
		x 8"	1	5.95	49-236	----
		x 12"	1	9.25	49-240	----

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

150# 304 & 316 Stainless Steel Fittings

Our high quality standard pattern 150lb rated stainless steel threaded fittings are manufactured to the highest standards. All stainless steel fittings are monitored by our quality control personnel for strict compliance with applicable standards and specifications.

These stainless steel pipe fittings are excellent for uses that involve chemicals or liquids that may be corrosive. Along with fighting corrosion, a stainless steel pipe fitting will prevent contamination making it useful to many professionals.

- Use with air, water, oil, natural gas, steam
- NPT and FNPT threads conform to ASME B1.20.1
- Maximum Pressure: 300 psi @ 72 F;150 psi @ 366 F for steam
- Maximum Steam Pressure: 150 psi
- Material Conforms to ASTM A-351. Class 150 Pressure Ratings
- Manufacturing facility is ISO 9001:2008
- 304 Stainless Steel is economically priced, chromium-nickel material that offers very good corrosion resistance. 316 Stainless Steel has higher nickel content and contains molybdenum for even better corrosion resistance.

HIGH PRESSURE 1000# BARSTOCK

1000#

- Stainless bar stock dimensions conform to MSS SP-114
- NPT threads conform to ASME B1.20.1
- Manufacturing facility is ISO 9001:2008
- Fittings meet applicable chemical & physical properties

HIGH PRESSURE 3000# FORGED

A182 and ANSI/ASME B16.11.

3000#

- Use with air, water, oil, natural gas, steam
- Maximum Pressure:

Type 304 SS: 2,570 psi @ 72°F;
1,965 psi @ 350°F for steam

Type 316 SS: 3,000 psi @ 72°F
2810 psi @ 350°F for steam

- Pipe Nipples and Pipe: Use threaded Schedule 80 thickwall stainless steel

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

304 & 316 150# SS FITTINGS

STAINLESS STEEL

90° ELBOW
304 & 316 150#

Part # 304 S.S		Size	Box	Approx. Wt. Lbs.	Part # 316 S.S.	
62-100	----	1/8”	25	0.06	63-100	----
62-101	----	1/4”	25	0.06	63-101	----
62-102	----	3/8”	25	0.11	63-102	----
62-103	----	1/2”	25	0.13	63-103	----
62-104	----	3/4”	25	0.20	63-104	----
62-105	----	1”	10	0.33	63-105	----
62-106	----	1-1/4”	10	0.55	63-106	----
62-107	----	1-1/2”	5	0.77	63-107	----
62-108	----	2”	5	1.10	63-108	----
62-109	----	2-1/2”	1	2.09	63-109	----
62-110	----	3”	1	2.84	63-110	----
62-112	----	4”	1	5.00	63-112	----

90° STREET ELBOW
304 & 316 150#

Part # 304 S.S		Size	Box	Approx. Wt. Lbs.	Part # 316 S.S.	
62-160	----	1/8”	25	0.04	63-160	----
62-161	----	1/4”	25	0.07	63-161	----
62-162	----	3/8”	25	0.09	63-162	----
62-163	----	1/2”	25	0.15	63-163	----
62-164	----	3/4”	25	0.24	63-164	----
62-165	----	1”	10	0.31	63-165	----
62-166	----	1-1/4”	10	0.51	63-166	----
62-167	----	1-1/2”	5	0.84	63-167	----
62-168	----	2”	5	1.26	63-168	----
62-169	----	3"	1	4.16	63-170	----
		4"	1	7.61	63-171	----

45° ELBOW
304 & 316 150#

Part # 304 S.S	List Price	Size	Box	Approx. Wt. Lbs.	Part # 316 S.S.	
62-180	----	1/8”	25	0.04	63-180	----
62-181	----	1/4”	25	0.07	63-181	----
62-182	----	3/8”	25	0.09	63-182	----
62-183	----	1/2”	25	0.13	63-183	----
62-184	----	3/4”	25	0.20	63-184	----
62-185	----	1”	10	0.33	63-185	----
62-186	----	1-1/4”	10	0.49	63-186	----
62-187	----	1-1/2”	5	0.66	63-187	----
62-188	----	2”	5	1.14	63-188	----
62-189	----	2-1/2"	1	2.82		
62-190	----	3"	1	2.91	63-190	----
62-191	----	4"	1	5.05	63-192	----

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm.
For more information, visit www.P65Warnings.ca.gov

TEE
304 & 316 150#

Part # 304 S.S		Size	Box	Approx. Wt. Lbs.	Part # 316 S.S.	
62-250	----	1/8”	25	0.07	63-250	----
62-251	----	1/4”	25	0.07	63-251	----
62-252	----	3/8”	25	0.11	63-252	----
62-253	----	1/2”	25	0.20	63-253	----
62-254	----	3/4”	25	0.29	63-254	----
62-255	----	1”	10	0.42	63-255	----
62-256	----	1-1/4”	5	0.66	63-256	----
62-257	----	1-1/2”	5	0.99	63-257	----
62-258	----	2”	3	1.43	63-258	----
62-259	----	2-1/2"	1	1.43		
62-260	----	3”	1	3.66	63-260	----
		4"	1	7.19	63-261	----

CROSS
304 & 316 150#

Part # 304 S.S		Size	Box	Approx. Wt. Lbs.	Part # 316 S.S.	
		1/8”	25	0.06	63-390	----
62-391	----	1/4”	25	0.09	63-391	----
62-392	----	3/8”	25	0.13	63-392	----
62-393	----	1/2”	25	0.29	63-393	----
62-394	----	3/4”	10	0.44	63-394	----
62-395	----	1”	10	0.74	63-395	----
62-396	----	1-1/4”	5	1.25	63-396	----
62-397	----	1-1/2”	5	1.53	63-397	----
62-398	----	2”	1	2.28	63-398	----
		3"	1	5.46	63-400	----
		4"	1	9.41	63-401	----

HEX NIPPLE
304 & 316 150#

Part # 304 S.S	List Price	Size	Box	Approx. Wt. Lbs.	Part # 316 S.S.	List Price
62-720	----	1/8”	1	0.02	63-720	----
62-721	----	1/4”	1	0.04	63-721	----
62-722	----	3/8”	1	0.07	63-722	----
62-723	----	1/2”	1	0.11	63-723	----
62-724	----	3/4”	1	0.18	63-724	----
62-725	----	1”	1	0.22	63-725	----
62-726	----	1-1/4”	1	0.37	63-726	----
62-727	----	1-1/2”	1	0.46	63-727	----
62-728	----	2”	1	0.61	63-728	----

REDUCING HEX NIPPLE
304 & 316 150#

Part # 304 S.S	List Price	Size	Box	Approx. Wt. Lbs.	Part # 316 S.S.	
62-740	----	1/4" x 1/8"	1	0.04	63-740	----
62-741	----	3/8" x 1/8"	1	0.07	63-741	----
62-742	----	3/8" x 1/4"	1	0.07	63-742	----
62-744	----	1/2" x 1/4"	1	0.09	63-744	----
62-745	----	1/2" x 3/8"	1	0.11	63-745	----
62-747	----	3/4" x 1/4"	1	0.15	63-747	----
62-748	----	3/4" x 3/8"	1	0.15	63-748	----
62-749	----	3/4" x 1/2"	1	0.15	63-749	----

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304 & 316 150# SS FITTINGS

STAINLESS STEEL

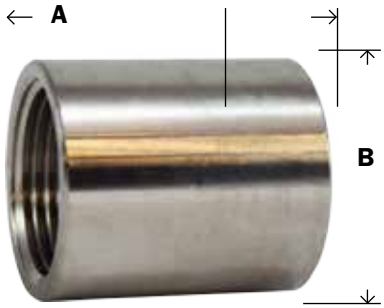
COUPLING
304 & 316 150#

Part # 304 S.S		Size*	Box	Approx. Wt. Lbs.	Part # 316 S.S.	
62-410	----	1/8"	25	0.03	63-410	----
62-411	----	1/4"	25	0.06	63-411	----
62-412	----	3/8"	25	0.07	63-412	----
62-413	----	1/2”	25	0.13	63-413	----
62-414	----	3/4”	25	0.18	63-414	----
62-415	----	1”	25	0.24	63-415	----
62-416	----	1-1/4”	10	0.44	63-416	----
62-417	----	1-1/2”	10	0.51	63-417	----
62-418	----	2”	5	0.79	63-418	----
62-419	----	2-1/2”	1	1.28	63-419	----
62-420	----	3”	1	1.87	63-420	----
62-421	----	4”	1	2.80	63-421	----

REDUCING COUPLING
304 & 316 150#

Part # 304 S.S		Size	Box	Approx. Wt. Lbs.	Part # 316 S.S.	
62-430	----	1/4” x 1/8”	25	0.04	63-430	----
62-431	----	3/8” x 1/8”	25	0.04	63-431	----
62-432	----	3/8” x 1/4”	25	0.04	63-432	----
62-433	----	1/2” x 1/8”	25	0.09	63-433	----
62-434	----	1/2” x 1/4”	25	0.09	63-434	----
62-435	----	1/2” x 3/8”	25	0.09	63-435	----
62-455	----	3/4” x 1/8”	25	0.13	63-455	----
62-436	----	3/4” x 1/4”	25	0.11	63-436	----
62-437	----	3/4” x 3/8”	25	0.13	63-437	----
62-438	----	3/4” x 1/2”	25	0.15	63-438	----
		1" x 1/4"	25	0.25	63-459	----
62-440	----	1” x 3/8”	25	0.22	63-440	----
62-441	----	1” x 1/2”	25	0.24	63-441	----
62-442	----	1” x 3/4”	25	0.24	63-442	----
62-445	----	1-1/4” x 3/4”	10	0.33	63-445	----
62-446	----	1-1/4” x 1”	10	0.35	63-446	----
62-447	----	1-1/2” x 1/2”	10	0.40	63-447	----
62-448	----	1-1/2” x 3/4”	10	0.42	63-448	----
62-449	----	1-1/2” x 1”	10	0.44	63-449	----
62-450	----	1-1/2” x 1-1/4”	10	0.46	63-450	----
62-451		2" x 3/4"				
62-452	----	2” x 1”	5	0.57	63-452	----
62-453	----	2” x 1-1/4”	5	0.62	63-453	----
62-454	----	2” x 1-1/2”	5	0.62	63-454	----
62-428	----	3" x 1"	1	1.82		
62-456	----	3" x 2"	1	2.25		

OD MACHINED COUPLING
304 & 316 150#



Part # 304 S.S	List Price	Size	A	B	Box	Approx. Wt. Lbs.	Part # 316 S.S.	
62-410B	----	1/8”	0.76	0.56	25	0.04	63-410B	----
62-411B	----	1/4”	0.94	0.71	25	0.04	63-411B	----
62-412B	----	3/8”	0.98	0.84	25	0.07	63-412B	----
62-413B	----	1/2”	1.33	1.01	25	0.09	63-413B	----
62-414B	----	3/4”	1.41	1.27	25	0.16	63-414B	----
62-415B	----	1”	1.69	1.54	10	0.21	63-415B	----
62-416B	----	1-1/4”	1.93	1.90	10	0.31	63-416B	----
62-417B	----	1-1/2”	1.93	2.16	5	0.41	63-417B	----
62-418B	----	2”	1.96	2.66	5	0.68	63-418B	----
62-420B	----	3"	3.23	3.76	1			

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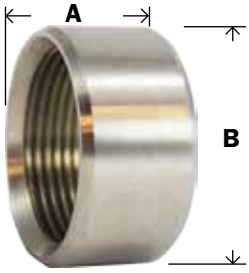
HALF COUPLING
304 & 316 150#



Part # 304 S.S	List Price	Size	A	B	Box	Approx. Wt. Lbs.	Part # 316 S.S.	
62-770		1/8"						
62-771	----	1/4”	0.39	0.70	25	0.02	63-771	----
62-772	----	3/8”	0.45	0.82	25	0.02	63-772	----
62-773	----	1/2”	0.57	1.02	25	0.09	63-773	----
62-774	----	3/4”	0.67	1.22	25	0.11	63-774	----
62-775	----	1”	0.79	1.47	25	0.13	63-775	----
62-776	----	1-1/4”	0.86	1.88	10	0.24	63-776	----
62-777	----	1-1/2”	0.94	2.10	10	0.26	63-777	----
62-778	----	2”	1.06	2.60	5	0.44	63-778	----

UNION
304 & 316 150#

- Stainless Steel Seat

Part # 304 S.S	List Price	Size	Box	Approx. Wt. Lbs.	Part # 316 S.S.	List Price
62-600	----	1/8”	25	0.09	63-600	----
62-601	----	1/4”	25	0.13	63-601	----
62-602	----	3/8”	25	0.22	63-602	----
62-603	----	1/2”	25	0.26	63-603	----
62-604	----	3/4”	25	0.46	63-604	----
62-605	----	1”	10	0.60	63-605	----
62-606	----	1-1/4”	5	0.90	63-606	----
62-607	----	1-1/2”	5	1.10	63-607	----
62-608	----	2”	1	1.81	63-608	----
62-610	----	3”	1	3.40	63-610	----

CAP - CAST
304 & 316 150#

Part # 304 S.S		Size	Box	Approx. Wt. Lbs.	Part # 316 S.S.	
62-470	----	1/8”	25	0.02	63-470	----
62-471	----	1/4”	25	0.02	63-471	----
62-472	----	3/8”	25	0.04	63-472	----
62-473	----	1/2”	25	0.07	63-473	----
62-474	----	3/4”	25	0.11	63-474	----
62-475	----	1”	10	0.18	63-475	----
62-476	----	1-1/4”	10	0.29	63-476	----
62-477	----	1-1/2”	10	0.40	63-477	----
62-478	----	2”	10	0.60	63-478	----
62-480	----	3”	1	1.28	63-480	----
62-481	----	4"	1	1.54		

HEX CAP - BARSTOCK
304 & 316 150#

Part # 304 S.S		Size	Box	Approx. Wt. Lbs.	Part # 316 S.S.	
62-075	----	1/8”	25	0.04	63-075	----
62-076	----	1/4”	25	0.09	63-076	----
62-077	----	3/8”	25	0.11	63-077	----
62-078	----	1/2”	25	0.13	63-078	----
62-079	----	3/4”	25	0.22	63-079	----
62-080	----	1”	10	0.22	63-080	----
62-081	----	1-1/4”	10	0.29	63-081	----
62-082	----	1-1/2”	5	0.40	63-082	----
62-083	----	2”	5	0.49	63-083	----

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

304 & 316 150# SS FITTINGS

STAINLESS STEEL

HEX BUSHING
304 & 316 150#

Part # 304 S.S		Size M x F	Box	Approx. Wt. Lbs.	Part # 316 S.S.	
62-500	----	1/4” x 1/8”	25	0.04	63-500	----
62-501	----	3/8” x 1/8”	25	0.04	63-501	----
62-502	----	3/8” x 1/4”	25	0.04	63-502	----
62-503	----	1/2” x 1/8”	25	0.09		
62-504	----	1/2” x 1/4”	25	0.09	63-504	----
62-505	----	1/2” x 3/8”	25	0.11	63-505	----
62-506	----	3/4" x 1/8"	25	0.13	63-506	----
62-507	----	3/4” x 1/4”	25	0.15	63-507	----
62-508	----	3/4” x 3/8”	25	0.15	63-508	----
62-509	----	3/4” x 1/2”	25	0.15	63-509	----
62-557	----	1" x 1/8"	25	0.27		
62-510	----	1" x 1/4"	25	0.22	63-510	----
62-511	----	1" x 3/8"	25	0.24	63-511	----
62-512	----	1” x 1/2”	25	0.24	63-512	----
62-513	----	1” x 3/4”	25	0.24	63-513	----
62-515	----	1-1/4” x 3/8”	25	0.37		
62-516	----	1-1/4” x 1/2”	25	0.37	63-516	----
62-517	----	1-1/4” x 3/4”	25	0.37	63-517	----
62-518	----	1-1/4” x 1”	25	0.37	63-518	----
62-521	----	1-1/2” x 1/2”	25	0.44	63-521	----
62-522	----	1-1/2” x 3/4”	25	0.46	63-522	----
62-532	----	1-1/2” x 1”	25	0.49	63-523	----
62-524	----	1-1/2” x 1-1/4”	25	0.46	63-524	----
62-559	----	2" x 1/4"	10	0.95		
62-527	----	2” x 1/2”	10	0.66	63-527	----
62-528	----	2” x 3/4”	10	0.66	63-528	----
62-529	----	2” x 1”	10	0.66	63-529	----
62-530	----	2” x 1-1/4”	10	0.68	63-530	----
62-531	----	2” x 1-1/2”	10	0.68	63-531	----
62-536	----	2-1/2" x 1"	5	1.70		
62-534	----	2-1/2” x 1-1/2”	5	1.23	63-534	----
62-535	----	2-1/2” x 2”	5	1.21	63-535	----
		3" x 1"	5	2.20	63-550	----
62-537		3" x 1-1/2"	5	1.97	63-537	----
62-538	----	3” x 2”	5	1.72	63-538	----
62-539	----	3” x 2-1/2”	5	1.81		
		4" x 1-1/2"	5	3.92	63-540	----
		4" x 2"	1	3.72	63-541	----
62-543	----	4” x 3”	1	2.43	63-543	----

- SEE PAGE 13 FOR STAINLESS STEEL BULKHEAD FITTINGS
- SEE PAGE 230 FOR STAINLESS STEEL:
  - BARBED FOR PLASTIC PIPE
  - WELL COUPLINGS
  - MERCHANT COUPLINGS

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

HEX LOCKNUT
304 & 316 150#

• Straight Thread

Part # 304 S.S		Size	Box	Approx. Wt. Lbs.	Part # 316 S.S.	
62-700	----	1/8"	25	0.02		
62-701	----	1/4”	25	0.05	63-701	----
62-702	----	3/8”	25	0.06	63-702	----
62-703	----	1/2”	25	0.07	63-703	----
62-704	----	3/4”	25	0.11	63-704	----
62-705	----	1”	25	0.15	63-705	----
62-706	----	1-1/4”	25	0.22	63-706	----
62-707	----	1-1/2”	25	0.29	63-707	----
62-708	----	2”	10	0.35	63-708	----

CORED SQUARE HEAD PLUG
304 & 316 150#

Part # 304 S.S		Size	Box	Approx. Wt. Lbs.	Part # 316 S.S.	
62-670	----	1/8”	25	0.02	63-670	----
62-671	----	1/4”	25	0.03	63-671	----
62-672	----	3/8”	25	0.04	63-672	----
62-653	----	1/2”	25	0.06	63-653	----
62-654	----	3/4”	25	0.13	63-654	----
62-655	----	1”	25	0.20	63-655	----
62-656	----	1-1/4”	25	0.32	63-656	----
62-657	----	1-1/2”	10	0.41	63-657	----
62-658	----	2”	10	0.65	63-658	----
62-659	----	2-1/2"	1	1.04		
62-660	----	3”	1	0.88		

CORED HEX HEAD PLUG
304 & 316 150#

Part # 304 S.S		Size	Box	Approx. Wt. Lbs.	Part # 316 S.S.	
62-630	----	1/8”	25	0.02	63-630	----
62-631	----	1/4”	25	0.02	63-631	----
62-632	----	3/8”	25	0.04	63-632	----
62-633	----	1/2”	25	0.07	63-633	----
62-634	----	3/4”	25	0.11	63-634	----
62-635	----	1”	25	0.20	63-635	----
62-636	----	1-1/4”	25	0.31	63-636	----
62-637	----	1-1/2”	10	0.44	63-637	----
62-638	----	2”	10	0.65	63-638	----
		4"	1	2.77	63-641	----

HOSE NIPPLE
304 & 316 150#

HOSE BARB X MALE PIPE

Part # 304 S.S		Hose I.D. x Male Pipe	Box	Approx. Wt. Lbs.	Part # 316 S.S.	
73-951	----	1/4”	1	0.04	973-951	----
73-952	----	3/8”	1	0.07	973-952	----
73-953	----	1/2”	1	0.13	973-953	----
73-954	----	3/4”	1	0.20	973-954	----
73-955	----	1”	1	0.33	973-955	----
73-956	----	1-1/4”	1	0.47	973-956	----
73-957	----	1-1/2”	1	0.67	973-957	----
73-958	----	2”	1	0.88	973-958	----
73-959	----	2-1/2”	1	1.45	973-959	----
73-960	----	3”	1	1.94	973-990	----
73-961	----	4”	1	3.57	973-991	----

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

304 & 316 150# SS FITTINGS — STAINLESS STEEL

REDUCING HOSE NIPPLE
304 150#

HOSE BARB X MALE PIPE

Part # 304 S.S	Hose I.D. x Male Pipe	Box	Approx. Wt. Lbs.	
73-970	1/4" x 1/8"	1	0.04	----
73-971	3/8" x 1/4"	1	0.07	----
73-972	1/2" x 3/8"	1	0.13	----
73-973	1/2" x 1/4"	1	0.13	----
73-974	3/4" x 1/2"	1	0.20	----
73-975	1" x 3/4"	1	0.33	----
73-976	1" x 1/2"	1	0.33	----
73-977	1-1/4" x 1"	1	0.46	----
73-979	1-1/2" x 1-1/4"	1	0.66	----
73-980	1-1/2" x 1"	1	0.66	----
73-981	2" x 1-1/2"	1	0.88	----
73-982	2" x 1-1/4"	1	0.88	----

SOLID HEX HEAD PLUG
316 150#

Part # 316 S.S	Size	Box	Approx. Wt. Lbs.	
63-660	1/8"	25	0.04	----
63-661	1/4"	25	0.06	----
63-662	3/8"	25	0.08	----
63-663	1/2"	25	0.12	----
63-664	3/4"	25	0.15	----
63-665	1"	25	0.24	----

HEX SOCKET PLUG - BARSTOCK
316 150#

Part # 316 S.S	Size	Box	Approx. Wt. Lbs.	
63-759	1/16"	1	0.03	----
63-760	1/8 "	1	0.05	----
63-761	1/4 "	1	0.07	----
63-762	3/8 "	1	0.10	----
63-763	1/2 "	1	0.14	----
63-764	3/4 "	1	0.21	----
63-765	1"	1	0.24	----

SOLID SQUARE HEAD PLUG
316 150#

Part # 316 S.S	Size	Box	Approx. Wt. Lbs.	
63-680	1/8"	25	0.04	----
63-681	1/4"	25	0.04	----
63-682	3/8"	25	0.05	----
63-683	1/2"	25	0.06	----
63-684	3/4"	25	0.12	----

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

BLACK AND GALVANIZED STEEL NIPPLES

Product Specifications

Welded steel pipe nipples both galvanized and black in diameters ranging from 1/8" up to 4" in lengths from close to 12" and cut-pipe up to 120". -200°-150° Temp Rating.

Technical Specifications

Standards: Product complies with ASTM A-53, A-733 and ANSI B1.20.1 for threading, dimensions and pipe specifications.

Pipe: Complies with ASTM A-53 mill tested schedule 40 and 80 for both Welded & Seamless Meets ANSI B36.1. All pipe is hydrostatic tested.

Galvanized: Zinc coating applied by hot dipped. Galvanized complying with ASTM A-123, NSF approved, RoHS compliant.

Black: Protected against oxidation with varnish coating.

Cutting Procedure: All pipe is roller cut. A visual inspection of seams, excessive galvanizing, mid-welds, poor galvanizing, bends, roundness, under and over weight of the pipe is made at the time it is cut. This is done for every length of pipe. Pipe lengths are cut to a tolerance of + or - 1/16" of the actual length.

Threading Procedure:

All pipe is chaser thread cut to American Standard Tapered Pipe Thread standards. This is 3/4" taper per foot. Pipe is visually inspected for roundness of threads and other visual faults as it is removed from the threading machine.

SCHEDULE 80 XXS SEAMLESS

XXS SEAMLESS

- ASTM A106 Grade B Seamless Pipe
- ASTM A 53
- WWN 351
- Standard NPT Tapered Pipe Threads as per ANSI B 1.20.1 Specification

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

BLACK & GALVANIZED SCH 40 STEEL NIPPLES

1/8" - 27

Wall Thickness 0.068 - GradeB - Test Pressure 700 PSI - Thread Length 0.39

1/8" DIAMETER
SCH 40 WELDED

Part # Galv		Length	Box/Case	Approx. Wt. Lbs.	Part # Black	
56-001	----	X Close (3/4")	50/600	0.02	57-001	----
56-002	----	x 1-1/2"	50/600	0.03	57-002	----
56-003	----	x 2"	50/500	0.04	57-003	----
56-004	----	x 2-1/2"	100/400	0.06	57-004	----
56-005	----	x 3	50/300	0.07	57-005	----
56-006	----	x 3-1/2"	50/300	0.08	57-006	----
56-007	----	x 4"	50/300	0.09	57-007	----
56-008	----	x 4-1/2"	50/300	0.10	57-008	----
56-009	----	x 5"	50/300	0.11	57-009	----
56-010	----	x 5-1/2"	50/300	0.12	57-010	----
56-011	----	x 6"	50/300	0.13	57-011	----
56-012	----	x 7"	50/300	0.15	57-012	----
56-013	----	x 8"	50/300	0.18	57-013	----
56-014	----	x 9"	50/300	0.21	57-014	----
56-015	----	x 10"	50/300	0.25	57-015	----
56-017	----	x 12"	50/300	0.29	57-017	----

1/4"-18

Wall Thickness 0.068 - GradeB - Test Pressure 700 PSI - Thread Length 0.39

1/4" DIAMETER
SCH 40 WELDED

Part # Galv		Length	Box/Case	Approx. Wt. Lbs.	Part # Black	
56-020	----	X Close (7/8")	50/600	0.04	57-020	----
56-021	----	x 1-1/2"	125/500	0.06	57-021	----
56-022	----	x 2"	125/500	0.06	57-022	----
56-023	----	x 2-1/2"	100/400	0.08	57-023	----
56-024	----	x 3	50/300	0.10	57-024	----
56-025	----	x 3-1/2"	50/300	0.12	57-025	----
56-026	----	x 4"	50/300	0.14	57-026	----
56-027	----	x 4-1/2"	50/300	0.17	57-027	----
56-028	----	x 5"	50/300	0.19	57-028	----
56-029	----	x 5-1/2"	50/300	0.21	57-029	----
56-030	----	x 6"	50/300	0.23	57-030	----
56-031	----	x 7"	50/100	0.27	57-031	----
56-032	----	x 8"	50/100	0.31	57-032	----
56-033	----	x 9"	50/100	0.35	57-033	----
56-034	----	x 10"	50/100	0.40	57-034	----
56-035	----	x 11"	50/100	0.44	57-035	----
56-036	----	x 12"	50/100	0.48	57-036	----
56-038	----	x 18"	50/100	0.54		

See page 208 for Standard port 2,000 Carbon Steel Ball Valve

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

3/8" DIAMETER
SCH 40 WELDED

Wall Thickness 0.091 - Grade B - Test Pressure 700 PSI - Thread Length 0.6

Part # Galv		Length	Box/Case	Approx. Wt. Lbs.	Part # Black	
56-040	----	X Close (1")	50/600	0.05	57-040	----
56-041	----	x 1-1/2"	125/500	0.07	57-041	----
56-042	----	x 2"	125/500	0.08	57-042	----
56-043	----	x 2-1/2"	100/400	0.11	57-043	----
56-044	----	x 3"	50/300	0.13	57-044	----
56-045	----	x 3-1/2"	50/300	0.16	57-045	----
56-046	----	x 4"	50/300	0.19	57-046	----
56-047	----	x 4-1/2"	50/200	0.21	57-047	----
56-048	----	x 5"	50/150	0.24	57-048	----
56-049	----	x 5-1/2"	50/150	0.27	57-049	----
56-050	----	x 6"	50/100	0.29	57-050	----
56-051	----	x 7"	50/100	0.35	57-051	----
56-052	----	x 8"	50/100	0.40	57-052	----
56-053	----	x 9"	50/100	0.45	57-053	----
56-054	----	x 10"	50/100	0.51	57-054	----
56-055	----	x 11"	50/100	0.56	57-055	----
56-056	----	x 12"	50/100	0.62	57-056	----
56-430	----	x 18"	5/10	0.71	57-430	----
		x 24"	1/1	1.02	57-431	----
		x 36"	1/1	1.54	57-433	----

1/2" DIAMETER
SCH 40 WELDED

Wall Thickness 0.109 - Grade B - Test Pressure 700 PSI - Thread Length 0.78

Part # Galv		Length	Box/Case	Approx. Wt. Lbs.	Part # Black	
56-060	----	X Close (1-1/8")	50/600	0.08	57-060	----
56-061	----	x 1-1/2"	125/500	0.08	57-061	----
56-062	----	x 2"	125/500	0.12	57-062	----
56-063	----	x 2-1/2"	100/400	0.15	57-063	----
56-064	----	x 3"	50/300	0.19	57-064	----
56-065	----	x 3-1/2"	50/300	0.23	57-065	----
56-066	----	x 4"	50/300	0.27	57-066	----
56-067	----	x 4-1/2"	50/200	0.30	57-067	----
56-068	----	x 5"	50/150	0.34	57-068	----
56-069	----	x 5-1/2"	50/150	0.38	57-069	----
56-070	----	x 6"	50/100	0.42	57-070	----
56-071	----	x 7"	50/100	0.49	57-071	----
56-072	----	x 8"	50/100	0.57	57-072	----
56-073	----	x 9"	50/100	0.65	57-073	----
56-074	----	x 10"	50/100	0.72	57-074	----
56-075	----	x 11"	50/100	0.80	57-075	----
56-076	----	x 12"	40/80	0.87	57-076	----
56-240	----	x 18"	1/3	1.29	57-240	----
56-241	----	x 24"	1/3	1.74	57-241	----
56-242	----	x 30"	1/3	2.16	57-242	----
56-243	----	x 36"	1/3	2.61	57-243	----
56-244	----	x 42"	1/3	3.03	57-244	----
56-245	----	x 48"	1/3	3.48	57-245	----
56-246	----	x 60"	1/3	4.35	57-246	----
56-247	----	x 72"	1/3	5.22	57-247	----

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

BLACK & GALVANIZED SCH 40 — STEEL NIPPLES

3/4" DIAMETER
SCH 40 WELDED

Wall Thickness 0.113 - Grade B - Test Pressure 700 PSI - Thread Length 0.79

Part # Galv		Length	Box/Case	Approx. Wt. Lbs.	Part # Black	
56-080	----	X Close (1-3/8")	50/300	0.13	57-080	----
56-081	----	x 1-1/2"	125/250	0.10	57-081	----
56-082	----	x 2"	125/250	0.15	57-082	----
56-083	----	x 2-1/2"	50/250	0.20	57-083	----
56-084	----	x 3"	50/200	0.24	57-084	----
56-085	----	x 3-1/2"	50/150	0.29	57-085	----
56-086	----	x 4"	50/150	0.34	57-086	----
56-087	----	x 4-1/2"	50/150	0.39	57-087	----
56-088	----	x 5"	50/150	0.43	57-088	----
56-089	----	x 5-1/2"	60/120	0.48	57-089	----
56-090	----	x 6"	50/100	0.53	57-090	----
56-091	----	x 7"	50/100	0.63	57-091	----
56-092	----	x 8"	50/100	0.72	57-092	----
56-093	----	x 9"	40/80	0.82	57-093	----
56-094	----	x 10"	40/80	0.91	57-094	----
56-095	----	x 11"	30/60	1.01	57-095	----
56-096	----	x 12"	30/60	1.10	57-096	----
56-250	----	x 18"	1/3	1.63	57-250	----
56-251	----	x 24"	1/3	2.20	57-251	----
56-252	----	x 30"	1/3	2.73	57-252	----
56-253	----	x 36"	1/3	3.30	57-253	----
56-254	----	x 42"	1/3	3.83	57-254	----
56-255	----	x 48"	1/3	4.40	57-255	----
56-256	----	x 60"	1/3	5.50	57-256	----
56-257	----	x 72"	1/3	6.60	57-257	----

See page 209 for Full port 2,000# Carbon Steel Ball Valve

Success consists of going from failure to failure without loss of enthusiasm.

- Winston Churchill

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

1" DIAMETER
SCH 40 WELDED

Wall Thickness 0.133 - Grade B - Test Pressure 700 PSI - Thread Length 0.98

Part # Galv		Length	Box/Case	Approx. Wt. Lbs.	Part # Black	
56-100	----	X Close (1-1/2")	50/200	0.16	57-100	----
56-101	----	x 2"	50/150	0.23	57-101	----
56-102	----	x 2-1/2"	50/150	0.29	57-102	----
56-103	----	x 3"	50/100	0.36	57-103	----
56-104	----	x 3-1/2"	50/100	0.43	57-104	----
56-105	----	x 4"	50/100	0.50	57-105	----
56-106	----	x 4-1/2"	50/100	0.56	57-106	----
56-107	----	x 5"	50/100	0.63	57-107	----
56-108	----	x 5-1/2"	50/100	0.70	57-108	----
56-109	----	x 6"	40/80	0.77	57-109	----
56-110	----	x 7"	25/50	0.90	57-110	----
56-111	----	x 8"	25/50	1.03	57-111	----
56-112	----	x 9"	15/30	1.17	57-112	----
56-113	----	x 10"	15/30	1.30	57-113	----
56-114	----	x 11"	15/30	1.44	57-114	----
56-115	----	x 12"	15/30	1.57	57-115	----
56-260	----	x 18"	1/3	2.34	57-260	----
56-261	----	x 24"	1/3	3.14	57-261	----
56-262	----	x 30"	1/3	3.91	57-262	----
56-263	----	x 36"	1/3	4.71	57-263	----
56-264	----	x 42"	1/3	5.48	57-264	----
56-265	----	x 48"	1/3	6.28	57-265	----
56-266	----	x 60"	1/3	7.85	57-266	----
56-267	----	x 72"	1/3	9.42	57-267	----

High Pressure 7,250 psi Full Port Ball Valves - see page 210

An early-morning walk is a blessing for the whole day.

- Henry David Thoreau

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

BLACK & GALVANIZED SCH 40 STEEL NIPPLES

1-1/4" DIAMETER
SCH 40 WELDED

Wall Thickness 0.14 - Grade B - Test Pressure 1300 PSI - Thread Length 1.01

Part # Galv		Length	Box/Case	Approx. Wt. Lbs.	Part # Black	
56-120	----	X Close (1-5/8")	50/100	0.25	57-120	----
56-121	----	x 2"	50/100	0.32	57-121	----
56-122	----	x 2-1/2"	50/100	0.41	57-122	----
56-123	----	x 3"	50/100	0.50	57-123	----
56-124	----	x 3-1/2"	30/60	0.60	57-124	----
56-125	----	x 4"	30/60	0.69	57-125	----
56-126	----	x 4-1/2"	30/60	0.78	57-126	----
56-127	----	x 5"	25/50	0.87	57-127	----
56-128	----	x 5-1/2"	25/50	0.96	57-128	----
56-129	----	x 6"	25/50	1.06	57-129	----
56-130	----	x 7"	15/30	1.24	57-130	----
56-131	----	x 8"	15/30	1.42	57-131	----
56-132	----	x 9"	15/30	1.61	57-132	----
56-133	----	x 10"	15/30	1.79	57-133	----
56-134	----	x 11"	10/20	1.97	57-134	----
56-135	----	x 12"	10/20	2.16	57-135	----
56-270	----	x 18"	1/3	3.22	57-270	----
56-271	----	x 24"	1/3	4.32	57-271	----
56-272	----	x 30"	1/3	3.22	57-272	----
56-273	----	x 36"	1/3	6.48	57-273	----
56-275	----	x 48"			57-275	----

1-1/2" DIAMETER
SCH 40 WELDED

Wall Thickness 0.145 - Grade B - Test Pressure 1300 PSI - Thread Length 1.03

Part # Galv		Length	Box/Case	Approx. Wt. Lbs.	Part # Black	
56-140	----	X Close (1-3/4")	50/100	0.31	57-140	----
56-141	----	x 2"	40/80	0.37	57-141	----
56-142	----	x 2-1/2"	40/80	0.47	57-142	----
56-143	----	x 3"	40/80	0.58	57-143	----
56-144	----	x 3-1/2"	25/50	0.68	57-144	----
56-145	----	x 4"	25/50	0.78	57-145	----
56-146	----	x 4-1/2"	25/50	0.89	57-146	----
56-147	----	x 5"	25/50	1.10	57-147	----
56-148	----	x 5-1/2"	20/40	1.10	57-148	----
56-149	----	x 6"	15/30	1.20	57-149	----
56-150	----	x 7"	15/30	1.41	57-150	----
56-151	----	x 8"	15/30	1.62	57-151	----
56-152	----	x 9"	15/30	1.83	57-152	----
56-153	----	x 10"	1/20	2.04	57-153	----
56-154	----	x 11"	1/20	2.25	57-154	----
56-155	----	x 12"	1/20	2.46	57-155	----
56-280	----	x 18"	1/3	3.66	57-280	----
56-281	----	x 24"	1/3	4.92	57-281	----
56-282	----	x 30"	1/3	6.12	57-282	----
56-283	----	x 36"	1/3	7.38	57-283	----
56-285	----	x 48"	1/3	9.84	57-285	----
		x 60"			57-286	----

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

2" DIAMETER
SCH 40 WELDED

Wall Thickness 0.154 - Grade B - Test Pressure 2500 PSI - Thread Length 1.06

Part # Galv		Length	Box/Case	Approx. Wt. Lbs.	Part # Black	
56-160	----	X Close (2")	40/80	0.55	57-160	----
56-161	----	x 2-1/2"	25/50	0.70	57-161	----
56-162	----	x 3"	25/50	0.86	57-162	----
56-163	----	x 3-1/2"	1/30	1.01	57-163	----
56-164	----	x 4"	1/30	1.16	57-164	----
56-165	----	x 4-1/2"	1/25	1.31	57-165	----
56-166	----	x 5"	1/30	1.47	57-166	----
56-167	----	x 5-1/2"	1/30	1.62	57-167	----
56-168	----	x 6"	1/20	1.77	57-168	----
56-169	----	x 7"	1/20	2.08	57-169	----
56-170	----	x 8"	1/20	2.39	57-170	----
56-171	----	x 9"	1/10	2.70	57-171	----
56-172	----	x 10"	1/10	3.00	57-172	----
56-173	----	x 11"	1/10	3.31	57-173	----
56-174	----	x 12"	1/10	3.62	57-174	----
56-290	----	x 18"	1/3	5.39	57-290	----
56-291	----	x 24"	1/3	5.26	57-291	----
56-292	----	x 30"	1/3	7.03	57-292	----
56-293	----	x 36"	1/3	10.86	57-293	----
56-294	----	x 42"	1/3	12.63	57-294	----
56-295	----	x 48"	1/3	14.48	57-295	----
56-296	----	x 60"	1/3	18.10	57-296	----
56-297	----	x 72"	1/3	18.10	57-297	----

2-1/2" DIAMETER
SCH 40 WELDED

Wall Thickness 0.203 - Grade B - Test Pressure 2500 PSI - Thread Length 1.57

Part # Galv		Length	Box/Case	Approx. Wt. Lbs.	Part # Black	
56-180	----	X Close (2-1/2")	1/20	1.09	57-180	----
56-181	----	x 3"	1/20	1.33	57-181	----
56-182	----	x 3-1/2"	1/20	1.57	57-182	----
56-183	----	x 4"	1/20	1.82	57-183	----
56-184	----	x 4-1/2"	1/20	2.06	57-184	----
56-185	----	x 5"	1/20	2.30	57-185	----
56-186	----	x 5-1/2"	1/10	2.54	57-186	----
56-187	----	x 6"	1/10	2.78	57-187	----
56-188	----	x 7"	1/10	3.27	57-188	----
56-189	----	x 8"	1/10	3.75	57-189	----
56-190	----	x 9"	1/10	4.24	57-190	----
56-191	----	x 10"	1/8	4.72	57-191	----
56-192	----	x 11"	1/8	5.21	57-192	----
56-193	----	x 12"	1/8	5.69	57-193	----

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

BLACK & GALVANIZED SCH 40 STEEL NIPPLES

3" DIAMETER
SCH 40 WELDED

Wall Thickness 0.216 - Grade B - Test Pressure 2500 PSI - Thread Length 1.64

Part # Galv		Length	Box/Case	Approx. Wt. Lbs.	Part # Black	
56-200	----	X Close (2-5/8")	1/20	1.52	57-200	----
56-201	----	x 3"	1/20	1.76	57-201	----
56-202	----	x 3-1/2"	1/10	2.08	57-202	----
56-203	----	x 4"	1/10	2.39	57-203	----
56-204	----	x 4-1/2"	1/10	2.71	57-204	----
56-205	----	x 5"	1/10	3.03	57-205	----
56-206	----	x 5-1/2"	1/10	3.35	57-206	----
56-207	----	x 6"	1/10	3.66	57-207	----
56-208	----	x 7"	1/8	4.30	57-208	----
56-209	----	x 8"	1/8	4.93	57-209	----
56-210	----	x 9"	1/8	5.57	57-210	----
56-211	----	x 10"	1/5	6.20	57-211	----
56-212	----	x 11"	1/5	7.20	57-212	----
56-213	----	x 12"	1/5	7.47	57-213	----
		x 24"	1	14.94	57-311	----

4" DIAMETER
SCH 40 WELDED

Wall Thickness 0.237 - Grade B - Test Pressure 2210 PSI - Thread Length 1.74

Part # Galv		Length	Box/Case	Approx. Wt. Lbs.	Part # Black	
56-220	----	X Close (2-7/8")	1/10	2.00	57-220	----
56-221	----	3-1/2"	1/8	2.21		
56-223	----	x 4"	1/8	3.41	57-223	----
56-224	----	x 4-1/2"	1/6	3.86	57-224	----
56-225	----	x 5"	1/6	4.31	57-225	----
56-226	----	x 5-1/2"	1/6	4.76	57-226	----
56-227	----	x 6"	1/6	5.21	57-227	----
56-330	----	x 7"	1/5	6.48	57-330	----
56-229	----	x 8"	1/5	7.01	57-229	----
56-331	----	x 9"	1/5	7.54	57-331	----
56-332	----	x 10"	1/5	8.14	57-332	----
56-228	----	x 12"	1/4	8.54	57-228	----

The secret of getting ahead is getting started. – Mark Twain

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

6" DIAMETER
SCH 40 WELDED

Wall Thickness 0.154 - Grade B - Test Pressure 2500 PSI - Thread Length 1.06

Part # Galv		Length	Box/Case	Approx. Wt. Lbs.	Part # Black	
56-300	----	X Close (3-1/8")	1/1	3.80	57-300	----
		x 4"	1/1	5.30	57-304	----
		x 6"	1/1	8.30	57-301	----
		x 8"	1/1	11.30	57-305	----
	—	x 10"			57-306	
		x 12"	1/1	17.20	57-308	----

8" DIAMETER
SCH 40 WELDED

Wall Thickness 0.154 - Grade B - Test Pressure 2500 PSI - Thread Length 1.06

Part #	Length	Box/Case	Approx. Wt. Lbs.	
57-320	X Close (3-1/8")	1/1	5.80	----
57-322	x 6"	1/1	6.50	----
57-324	x 8"	1/1	11.30	----
57-326	x 10"	1/1	19.00	----
57-328	x 12"	1/1	28.55	----

STEEL NIPPLE ASSORTMENTS

B "6" ASSORTMENTS

Black		LENGTH											Wt. Lbs.	Total Pieces	
		Close	1-1/2"	2"	2-1/2"	3"	3-1/2"	4"	4-1/2"	5"	5-1/2"	6"			
973-567	1/2"	6	6	6	6	6	6	6	6	6	6	6	20	66	----
973-568	3/4"	6	6	6	6	6	6	6	6	6	6	6	27	66	----
973-569	1"	6		6	6	6	6	6	6	6	6	6	34	60	----

Galv.		LENGTH											Wt. Lbs.	Total Pieces	
		Close	1-1/2"	2"	2-1/2"	3"	3-1/2"	4"	4-1/2"	5"	5-1/2"	6"			
973-667	1/2"	6	6	6	6	6	6	6	6	6	6	6	20	66	----
973-668	3/4"	6	6	6	6	6	6	6	6	6	6	6	27	66	----
973-669	1"	6		6	6	6	6	6	6	6	6	6	34	60	----

STEEL TOTE TRAYS

Part #	Size	Capacity	
990-781	1/2"	77pcs	----
990-782	3/4"	66pcs	----
990-783	1"	50pcs	----
990-786	1-1/4"	40pcs	----
990-784	1-1/2"	30pcs	----
990-785	2"	27pcs	----

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

EXTRA HEAVY SEAMLESS STEEL PIPE NIPPLES

1/8" - 27

1/8" DIAMETER SCHEDULE 80 SEAMLESS

Wall Thickness 0.094 - GradeB - Test Pressure850 PSI - Thread Length 0.39

Part #	Length	Box/Case	Approx. Wt. Lbs.	
59-001SMLS	x Close	40/480	0.02	----
59-002SMLS	x 1-1/2"	40/480	0.03	----
59-003SMLS	x 2"	100/400	0.05	----
59-004SMLS	2-1/2"	100/400	0.06	----
59-005SMLS	x 3"	40/240	0.08	----
59-006SMLS	x 3-1/2"	40/240	0.09	----
59-007SMLS	x 4"	40/240	0.11	----
59-009SMLS	x 5"	40/120	0.12	----
59-010SMLS	x 5-1/2"	40/120	0.13	----
59-011SMLS	x 6"	40/80	0.16	----

1/4"-18

1/4" DIAMETER SCHEDULE 80 SEAMLESS

Wall Thickness 0.119 - Grade B - Test Pressure 850 PSI - Thread Length 0.59

Part #	Length	Box/Case	Approx. Wt. Lbs.	
59-020SMLS	x Close (7/8")	40 / 480	0.03	----
59-021SMLS	x 1-1/2"	100 / 400	0.06	----
59-022SMLS	x 2"	100 / 400	0.08	----
59-023SMLS	x 2-1/2"	80 / 320	0.10	----
59-024SMLS	x 3"	40 / 240	0.12	----
59-025SMLS	x 3-1/2"	40 / 240	0.15	----
59-026SMLS	x 4"	40 / 240	0.17	----
59-027SMLS	x 4-1/2"	40 / 120	0.19	----
59-028SMLS	x 5"	40 / 120	0.21	----
59-029SMLS	x 5-1/2"	40 / 80	0.24	----
59-030SMLS	x 6"	40 / 80	0.26	----
59-031SMLS	x 7"	40 / 80	0.30	----
59-032SMLS	x 8"	40 / 80	0.35	----
59-033SMLS	x 9"	40 / 80	0.39	----
59-034SMLS	x 10"	40 / 80	0.44	----
59-036SMLS	x 12"	40 / 80	0.53	----

5,000# Carbon Steel Check Valves on page 211

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

3/8"-18

3/8" DIAMETER SCHEDULE 80 SEAMLESS

Wall Thickness 0.126 - Grade B - Test Pressure 850 PSI - Thread Length 0.6

Part #	Length	Box/Case	Approx. Wt. Lbs.	
59-040SMLS	X Close (3/8")	40 / 480	0.05	----
59-041SMLS	x 1-1/2"	100 / 400	0.08	----
59-042SMLS	x 2"	100 / 400	0.11	----
59-043SMLS	x 2-1/2"	80 / 320	0.14	----
59-044SMLS	x 3"	40 / 240	0.17	----
59-045SMLS	x 3-1/2"	40 / 240	0.20	----
59-046SMLS	x 4"	40 / 240	0.23	----
59-047SMLS	x 4-1/2"	40 / 160	0.26	----
59-048SMLS	x 5"	40 / 120	0.29	----
59-049SMLS	x 5-1/2"	40 / 120	0.32	----
59-050SMLS	x 6"	40 / 80	0.35	----
59-052SMLS	x 8"	40/80	0.47	----
59-054SMLS	x 10"	40/80	0.53	----
59-056SMLS	x 12"	40/80	0.65	----

1/2" - 14

1/2" DIAMETER SCHEDULE 80 SEAMLESS

Wall Thickness 0.147 - Grade B - Test Pressure 850 PSI - Thread Length 0.78

Part #	Length	Box/Case	Approx. Wt. Lbs.	
59-060SMLS	X Close (1-1/8")	40 / 480	0.07	----
59-061SMLS	x 1-1/2"	100 / 400	0.11	----
59-062SMLS	x 2"	100 / 400	0.15	----
59-063SMLS	x 2-1/2"	80 / 320	0.20	----
59-064SMLS	x 3"	40 / 240	0.24	----
59-065SMLS	x 3-1/2"	40 / 240	0.29	----
59-066SMLS	x 4"	40 / 240	0.33	----
59-067SMLS	x 4-1/2"	40 / 160	0.38	----
59-068SMLS	x 5"	40 / 120	0.42	----
59-069SMLS	x 5-1/2"	40 / 120	0.47	----
59-070SMLS	x 6"	40 / 80	0.51	----
59-071SMLS	x 7"	40 / 80	0.60	----
59-072SMLS	x 8"	40 / 80	0.69	----
59-073SMLS	x 9"	40/80	0.73	----
59-074SMLS	x 10"	40 / 80	0.88	----
59-075SMLS	x 11"	32/64	0.96	----
59-076SMLS	x 12"	32 / 64	1.06	----

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

3/4" - 14

3/4" DIAMETER SCHEDULE 80 SEAMLESS

Wall Thickness 0.154 - Grade B - Test Pressure 850 PSI - Thread Length 0.79

Part #	Length	Box/Case	Approx. Wt. Lbs.	
59-080SMLS	X Close (1-3/8")	40/240	0.13	----
59-081SMLS	x 1-1/2"	100/200	0.15	----
59-082SMLS	x 2"	100/200	0.21	----
59-083SMLS	x 2-1/2"	40/160	0.27	----
59-084SMLS	x 3"	40/160	0.33	----
59-085SMLS	x 3-1/2"	40/120	0.39	----
59-086SMLS	x 4"	40/120	0.45	----
59-087SMLS	x 4-1/2"	40/120	0.51	----
59-088SMLS	x 5"	40/120	0.57	----
59-089SMLS	x 5-1/2"	48/96	0.64	----
59-090SMLS	x 6"	40/80	0.69	----
59-091SMLS	x 7"	40/80	0.82	----
59-092SMLS	x 8"	40/80	0.94	----
59-094SMLS	x 10"	32/64	1.19	----
59-096SMLS	x 12"	24/48	1.44	----

1" - 11 1/2

1" DIAMETER SCHEDULE 80 SEAMLESS

Wall Thickness 0.179 - Grade B - Test Pressure 850 PSI - Thread Length 0.98

Part #	Length	Box/Case	Approx. Wt. Lbs.	
59-100SMLS	X Close (1-1/2")	40 / 160	0.21	----
59-101SMLS	x 2"	40 / 120	0.30	----
59-102SMLS	x 2-1/2"	40 / 120	0.37	----
59-103SMLS	x 3"	40 / 80	0.47	----
59-104SMLS	x 3-1/2"	40 / 80	0.56	----
59-105SMLS	x 4"	40 / 80	0.65	----
59-106SMLS	x 4-1/2"	40 / 80	0.74	----
59-107SMLS	x 5"	40 / 80	0.83	----
59-108SMLS	x 5-1/2"	40 / 80	0.92	----
59-109SMLS	x 6"	32 / 64	1.01	----
59-110SMLS	x 7"	20 / 40	1.19	----
59-111SMLS	x 8"	20 / 40	1.37	----
59-112SMLS	x 9"	20 / 40	1.55	----
59-113SMLS	x 10"	12 / 24	1.74	----
59-114SMLS	x 11"	12 / 24	1.92	----
59-115SMLS	x 12"	12 / 24	2.10	----

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

1-1/4" DIAMETER SCHEDULE 80 SEAMLESS

Wall Thickness 0.191 - Grade B - Test Pressure 1900 PSI - Thread Length 1.01

Part #	Length	Box/Case	Approx. Wt. Lbs.	
59-120SMLS	X Close (1-5/8")	40 / 80	0.31	----
59-121SMLS	x 2"	40 / 80	0.42	----
59-122SMLS	x 2-1/2"	40 / 80	0.52	----
59-123SMLS	x 3"	40 / 80	0.64	----
59-124SMLS	x 3-1/2"	24 / 48	0.77	----
59-125SMLS	x 4"	24 / 48	0.90	----
59-126SMLS	x 4-1/2"	24 / 48	1.02	----
59-127SMLS	x 5"	20 / 40	1.15	----
59-128SMLS	x 5-1/2"	20 / 40	1.27	----
59-129SMLS	x 6"	20 / 40	1.40	----
59-130SMLS	x 7"	20 / 40	1.65	----
59-131SMLS	x 8"	12 / 24	1.90	----
59-132SMLS	x 9"	12 / 24	2.15	----
59-133SMLS	x 10"	12 / 24	2.40	----
59-134SMLS	x 11"	8 / 16	2.65	----
59-135SMLS	x 12"	8 / 16	2.90	----

1-1/2" DIAMETER SCHEDULE 80 SEAMLESS

Wall Thickness 0.2 - Grade B - Test Pressure 1900 PSI - Thread Length 1.03

Part #	Length	Box/Case	Approx. Wt. Lbs.	
59-140SMLS	X Close (1-3/4")	40 / 80	0.41	----
59-141SMLS	x 2"	32 / 64	0.51	----
59-142SMLS	x 2-1/2"	32 / 64	0.64	----
59-143SMLS	x 3"	32 / 64	0.78	----
59-144SMLS	x 3-1/2"	20 / 40	0.94	----
59-145SMLS	x 4"	20 / 40	1.09	----
59-146SMLS	x 4-1/2"	20 / 40	1.23	----
59-147SMLS	x 5"	20 / 40	1.39	----
59-148SMLS	x 5-1/2"	16 / 32	1.54	----
59-149SMLS	x 6"	12 / 24	1.69	----
59-150SMLS	x 7"	12 / 24	2.00	----
59-151SMLS	x 8"	12 / 24	2.30	----
59-152SMLS	x 9"	12 / 24	2.61	----
59-153SMLS	x 10"	8 / 16	2.90	----
59-154SMLS	x 11"	8 / 16	3.20	----
59-155SMLS	x 12"	8 / 16	3.51	----

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

BLACK SCH 80 SEAMLESS — STEEL NIPPLES

2" DIAMETER SCHEDULE 80 SEAMLESS

Wall Thickness 0.218 - Grade B - Test Pressure 2500 PSI - Thread Length 1.06

Part #	Length	Box/Case	Approx. Wt. Lbs.	
59-160SMLS	X Close (2")	32/64	0.30	----
59-161SMLS	x 2-1/2"	20 / 40	0.80	----
59-162SMLS	x 3"	20 / 40	1.10	----
59-163SMLS	x 3-1/2"	12 / 24	1.31	----
59-164SMLS	x 4"	12 / 24	1.52	----
59-165SMLS	x 4-1/2"	12 / 24	1.72	----
59-166SMLS	x 5"	12 / 24	1.94	----
59-167SMLS	x 5-1/2"	12 / 24	2.15	----
59-168SMLS	x 6"	8 / 16	2.35	----
59-169SMLS	x 7"	8 / 16	2.78	----
59-170SMLS	x 8"	8 / 16	3.19	----
59-171SMLS	x 9"	1 / 8	3.62	----
59-172SMLS	x 10"	1 / 8	4.03	----
59-173SMLS	x 11"	1 / 8	4.44	----
59-174SMLS	x 12"	1 / 8	4.87	----
59-196SMLS	x 18"	1/1	7.22	----
59-197SMLS	x 24"	1/1	9.74	----
59-198SMLS	x 36"	1/1	14.61	----
59-199SMLS	x 48"	1/1	19.48	----

2-1/2" DIAMETER SCHEDULE 80 SEAMLESS

Wall Thickness 0.276 - Grade B - Test Pressure 2500 PSI - Thread Length 1.57

Part #	Length	Box/Case	Approx. Wt. Lbs.	
59-180SMLS	x Close (2-1/2")	1 / 16	1.25	----
59-181SMLS	x 3"	1 / 16	1.57	----
59-182SMLS	x 3-1/2"	1 / 16	1.82	----
59-183SMLS	x 4"	1 / 16	2.15	----
59-184SMLS	x 4-1/2"	1 / 16	1.75	----
59-185SMLS	x 5"	1 / 16	2.78	----
59-186SMLS	x 5-1/2"	1 / 8	2.25	----
59-187SMLS	x 6"	1 / 8	3.41	----
59-188SMLS	x 7"	1 / 8	3.89	----
59-189SMLS	x 8"	1 / 8	4.69	----
59-190SMLS	x 9"	1 / 8	5.34	----
59-191SMLS	x 10"	1 / 6	5.97	----
59-192SMLS	x 11"	1 / 6	4.89	----
59-193SMLS	x 12"	1 / 5	7.26	----

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

3" DIAMETER SCHEDULE 80 SEAMLESS

Wall Thickness 0.3 - Grade B - Test Pressure 2500 PSI - Thread Length 1.64

Part #	Length	Box/Case	Approx. Wt. Lbs.	
59-200SMLS	X Close (2-5/8")	1 / 16	1.79	----
59-201SMLS	x 3"	1 / 16	2.11	----
59-202SMLS	x 3-1/2"	1 / 16	2.55	----
59-203SMLS	x 4"	1 / 8	2.89	----
59-204SMLS	x 4-1/2"	1 / 8	3.30	----
59-205SMLS	x 5"	1 / 8	3.73	----
59-206SMLS	x 5-1/2"	1 / 8	4.17	----
59-207SMLS	x 6"	1 / 8	4.57	----
59-208SMLS	x 7"	1 / 6	5.45	----
59-209SMLS	x 8"	1 / 6	6.29	----
59-210SMLS	x 9"	1 / 6	7.17	----
59-211SMLS	x 10"	1 / 4	8.01	----
59-212SMLS	x 11"	1 / 4	8.85	----
59-213SMLS	x 12"	1 / 4	9.72	----

4" DIAMETER SCHEDULE 80 SEAMLESS

Wall Thickness 0.337 - Grade B - Test Pressure 2800 PSI - Thread Length 1.74

Part #	Length	Box/Case	Approx. Wt. Lbs.	
59-220SMLS	X Close (2-7/8")	1 / 8	2.91	----
59-221SMLS	x 4"	1 / 6	4.26	----
59-223SMLS	x 5"	1 / 5	5.49	----
59-224SMLS	x 5-1/2"			
59-225SMLS	x 6"	1 / 5	6.72	----
59-226SMLS	x 7"	1/3	7.33	----
59-227SMLS	x 8"	1 / 3	9.23	----
59-228SMLS	9"			
59-229SMLS	x 10"	1 / 3	11.73	----
59-231SMLS	x 12"	1 / 3	14.24	----

SCHEDULE 80 SEAMLESS

6" DIAMETER

8" DIAMETER

Part #		Length	Box/Case	Approx. Wt. Lbs.		Part #	
				6"	8"		
59-300SMLS	----	X Close	2	3.57	4.62	59-320SMLS	----
59-301SMLS	----	x 6"	2	14.29	16.91	59-322SMLS	----
59-305SMLS	----	x 8"	2	19.05	22.54	59-324SMLS	----
59-306SMLS	----	x 10"	2	23.81	27.47	59-326SMLS	----
59-308SMLS	----	x 12"	2	28.57	34.18	59-328SMLS	----

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

BLACK EXTRA HEAVY XXS SEAMLESS — STEEL NIPPLES

1/2" DIAMETER BLACK EXTRA HEAVY XXS SEAMLESS

Wall Thickness 0.294 - Grade B - Test Pressure 1000 PSI - Thread Length 0.79

Part #	Length	Box/Case	Approx. Wt. Lbs.	
59-060SMLSXX	x Close	100 / 200	0.31	----
59-062SMLSXX	x 2"	100 / 200	0.58	----
59-064SMLSXX	x 3"	50 / 100	0.62	----
59-066SMLSXX	x 4"	50 / 100	0.66	----
59-070SMLSXX	x 6"	25 / 50	0.75	----

3/4" DIAMETER DIAMETER BLACK EXTRA HEAVY XXS SEAMLESS

Wall Thickness 0.308 - Grade B - Test Pressure 1000 PSI - Thread Length 0.79

Part #	Length	Box/Case	Approx. Wt. Lbs.	
59-080SMLSXX	x Close	40/240	0.55	----
59-082SMLSXX	x 2"	50 / 100	0.62	----
59-086SMLSXX	x 4"	25 / 50	0.68	----
59-090SMLSXX	x 6"	25 / 50	0.71	----

1" DIAMETER DIAMETER BLACK EXTRA HEAVY XXS SEAMLESS

Wall Thickness 0.358 - Grade B - Test Pressure 1000 PSI - Thread Length 0.98

Part #	Length	Box/Case	Approx. Wt. Lbs.	
59-100SMLSXX	x close	50 / 100	0.88	----
59-101SMLSXX	x 2"	50 / 100	1.07	----
59-103SMLSXX	x 3"	20/40	1.10	----
59-105SMLSXX	x 4"	20 / 40	1.14	----
59-109SMLSXX	x 6"	20 / 40	1.75	----
59-111SMLSXX	x 8"	1 / 25	1.88	----
59-115SMLSXX	x 12"	1 / 15	2.15	----

2" DIAMETER DIAMETER BLACK EXTRA HEAVY XXS SEAMLESS

Wall Thickness 0.436 - Grade B - Test Pressure 2500 PSI - Thread Length 1.06

Part #	Length	Box/Case	Approx. Wt. Lbs.	
59-160SMLSXX	x close	1 / 25	1.36	----
59-161SMLSXX	x 2-1/2"	1 / 20	1.67	----
59-162SMLSXX	x 3"	1 / 20	2.09	----
59-163SMLSXX	x 3-1/2"	1 / 12	2.51	----
59-164SMLSXX	x 4"	1 / 12	2.86	----
59-166SMLSXX	x 5"	1/12	3.04	----
59-168SMLSXX	x 6"	1 / 11	3.20	----
59-169SMLSXX	x 7"	1 / 8	4.35	----
59-170SMLSXX	x 8"	1 / 8	5.86	----
59-171SMLSXX	x 9"	1 / 8	6.58	----
59-172SMLSXX	x 10"	1 / 8	7.31	----
59-174SMLSXX	x 12"	1 / 8	9.34	----
59-179SMLSXX	x 24"	1 / 1	14.77	----

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

GROOVE NIPPLES — SCH 40 AND SCH 80

THREAD X GROOVE

SCH 40

SCH 80

2" DIAMETER

Part #	List Price	Box	Wtg	Length	Wtg	Box	Part #	
57162TV	----	50	0.70	x 3	1.03	40	59162TV	----
57164TV	----	30	0.97	x 4	1.40	24	59164TV	----
57168TV	----	20	1.64	x 6	2.41	16	59168TV	----
57170TV	----	20	2.15	x 8	3.20	16	59170TV	----
57172TV	----	10	2.80	x 10	3.65	8	59172TV	----
57174TV	----	10	3.45	x 12	4.01	8	59174TV	----

3" DIAMETER

Part #	List Price	Box	Wtg	Length	Wtg	Box	Part #	
57201TV	----	20	1.26	x 3	2.01	16	59201TV	----
57203TV	----	10	1.80	x 4	3.01	8	59203TV	----
57207TV	----	10	3.17	x 6	4.87	8	59207TV	----
57209TV	----	8	4.13	x 8	5.86	6	59209TV	----
57211TV	----	5	5.48	x 10	6.19	4	59211TV	----
57213TV	----	5	6.24	x 12	6.37	4	59213TV	----

4" DIAMETER

Part #	List Price	Box	Wtg	Length	Wtg	Box	Part #	
57222TV	----	8	2.40	x 3	4.11	6	59222TV	----
57223TV	----	8	2.52	x 4	4.15	6	59221TV	----
57227TV	----	6	4.30	x 6	6.52	5	59225TV	----
57229TV	----	4	5.63	x 8	7.18	3	59229TV	----
57332TV	----	4	7.90	x 10	11.74	3	59231TV	----
57228TV	----	4	8.25	x 12	14.24	3	59227TV	----

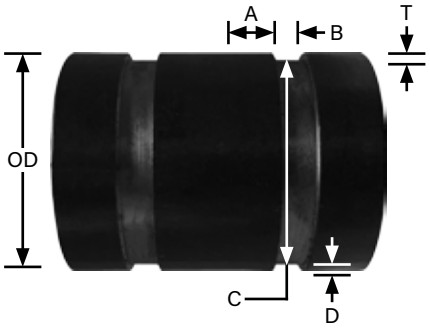
Nominal IPS Pipe Size	O.D. Actual	Gasket Seat "A"	Groove Width "B"	Groove Diameter "C"	Actual Groove Depth "D"
2	2.375	0.625	0.312	2.250	0.062
3	3.500	0.625	0.312	3.344	0.078
4	4.500	0.625	0.375	4.334	0.083

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

BLACK SCH 40 AND SCH 80 SEAMLESS | GROOVE NIPPLES

GROOVE X GROOVE

SCH 40



SCH 80

2" DIAMETER

Part #		Box	Wtg	Length	Wtg	Box	Part #	
57162V	----	50	0.70	x 3	1.03	40	59162V	----
57164V	----	30	0.97	x 4	1.40	24	59164V	----
57168V	----	20	1.64	x 6	2.41	16	59168V	----
57170V	----	20	2.15	x 8	3.20	16	59170V	----
57172V	----	10	2.80	x 10	3.65	8	59172V	----
57174V	----	10	3.45	x 12	4.01	8	59174V	----

3" DIAMETER

Part #		Box	Wtg	Length	Wtg	Box	Part #	
57201V	----	20	1.26	x 3	2.01	16	59201V	----
57203V	----	10	1.80	x 4	3.01	8	59203V	----
57207V	----	10	3.17	x 6	4.87	8	59207V	----
57209V	----	8	4.13	x 8	5.86	6	59209V	----
57211V	----	5	5.48	x 10	6.19	4	59211V	----
57213V	----	5	6.24	x 12	6.37	4	59213V	----

4" DIAMETER

Part #		Box	Wtg	Length	Wtg	Box	Part #	
57223V	----	8	2.52	x 4	4.15	6	59221V	----
57227V	----	6	4.35	x 6	6.52	5	59225V	----
57229V	----	4	5.63	x 8	7.18	3	59227V	----
57332V	----	4	7.90	x 10	11.74	3	59229V	----
57228V	----	4	8.25	x 12	14.24	3	59231V	----

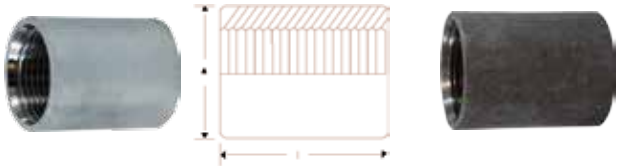
Nominal IPS Pipe Size	O.D. Actual	Gasket Seat "A"	Groove Width "B"	Groove Diameter "C"	Actual Groove Depth "D"
2	2.375	0.625	0.312	2.250	0.062
3	3.500	0.625	0.312	3.344	0.078
4	4.500	0.625	0.375	4.334	0.083

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer.
For more information, visit www.P65Warnings.ca.gov

Product Specifications
Welded steel couplings both galvanized and black in diameters from 1/8" up to 4".

Technical Specifications
Standards: Product complies with ASTM A865 and ANSI B1.20.1 for threading, dimensions and pipe specifications. Federal Spec WW-P-404
Pipe: Complies with ASTM A-53 milltested schedule 40 and 80. Meets ANSI B36.1. All pipe is hydrostatic tested.
Galvanized: Zinc coating applied by hot dipping. Galvanized complying with ASTM-A-123.

MERCHANT COUPLINGS



• Straight threads thru 2"

Part # Galv		Size	Part # Black	
64-770	----	1/8"	65-770	----
64-771	----	1/4"	65-771	----
64-772	----	3/8"	65-772	----
64-773	----	1/2"	65-773	----
64-774	----	3/4"	65-774	----
64-775	----	1"	65-775	----
64-776	----	1-1/4"	65-776	----
64-777	----	1-1/2"	65-777	----
64-778	----	2"	65-778	----
64-779	----	2-1/2"	65-779	----
64-780	----	3"	65-780	----
64-781	----	4"	65-781	----
		5"	65-782	----
		6"	65-783	----

HALF MERCHANT COUPLINGS

• Straight threads thru 2"

Part # Galv		Size	Part # Black	
		1/8"	65-770H	
		1/4"	65-771H	----
		3/8"	65-772H	----
64-773H	----	1/2"	65-773H	----
64-774H	----	3/4"	65-774H	----
64-775H	----	1"	65-775H	----
64-776H	----	1-1/4"	65-776H	----
64-777H	----	1-1/2"	65-777H	----
64-778H	----	2"	65-778H	----
		2-1/2"	65-779H	----
64-780H	----	3"	65-780H	----
64-781H	----	4"	65-781H	----

#304 STAINLESS STEEL MERCHANT COUPLINGS

Part #	Size	
61775	1	----
61776	1-1/4	----
61777	1-1/2	----
61778	2	----

Also available:
Extra Heavy Merchant Couplings

MERCHANT COUPLINGS SPECIFICATIONS

Size	Outside Diam.	Length Inches	Weight 100 pcs approx. Pounds	Quantity per box	Threads per Inch	Threads Type
1/8"	.59"	.78	3.5	1000	27	Straight
1/4"	.73"	1.18	7.5	500	18	Straight
3/8"	.86"	1.18"	9	600	18	Straight
1/2"	1.063"	1-9/16"	13.0	100	14	Straight
3/4"	1.313"	1-5/8"	28.3	50	14	Straight
1"	1.576"	2"	40.1	30	11-1/2	Straight
1-1/4"	1.900"	2-1/16"	49.5	25	11-1/2	Straight
1-1/2"	2.200"	2-1/16"	71.48	25	11-1/2	Straight
2"	2.750"	2-1/8"	112.0	20	11-1/2	Straight
2-1/2"	3.250"	3-1/8"	231.2	8	8	Taper Tapped
3"	4.000"	3-1/4"	353.8	5	8	Taper Tapped
4"	5.000"	3-1/2"	471.8	4	8	Taper Tapped
6"	7.32	4"	1000.05	4	8	Taper Tapped

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

A105 BLACK STEEL TAPER TAPPED COUPLINGS

Product Specifications
These couplings are manufactured in accordance with American Petroleum Institute specifications 5L & 5B.
All couplings are phosphated.
All sizes are taper tapped 3/4" per foot on the diameter.

*Certified by the American Petroleum Institute

A105
- **Black Steel**
- **API line API SL**

- Each end has a short, unthreaded recess before the threads start.
- Use with sch 80 & sch. 160 nipples & pipe.
- Max. pressure: 300PSI

API LINE PIPE COUPLINGS

Part #	NPT Size	Threads per Inch	Outside Diameter	Length	Unit Weight	
65770API	1/8"	27	0.563	1-1/16	0.04	----
65771API	1/4"	18	0.719	1-5/8	0.10	----
65772API	3/8"	18	0.875	1-5/8	0.13	----
65773API	1/2"	14	1.063	2-1/8	0.24	----
65774API	3/4"	14	1.313	2-1/8	0.35	----
65775API	1"	11.5	1.576	2-5/8	0.52	----
65776API	1-1/4"	11.5	2.054	2-3/4	1.00	----
65777API	1-1/2"	11.5	2.200	2-3/4	0.88	----
65778API	2"	11.5	2.875	2-7/8	1.83	----
65779API	2-1/2"	8	3.375	4-1/8	3.28	----
65780API	3"	8	4.000	4-1/4	4.09	----
65781API	4"	8	5.200	4-1/2	7.59	----
65783API	6"	8	7.390	4-5/8	12.92	----
65784API	8"	8	9.625	5-3/4	23.18	----

I'm sorry, if you were right, I'd agree with you.
- Robin Williams

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer.
For more information, visit www.P65Warnings.ca.gov

MALLEABLE FITTINGS

- Saturated steam pressure 150 PSI @ 350°F
- Max pressure 300 PSI @ 150°F
- Temp range -20°F to 350°F

ISO 9002 - CERTIFICATE OF QUALITY - UL/FM LISTED

Our quality fittings are made with care and attention to detail. With better molds we can reduce parting lines and rough edges resulting in better fluid flow. By using a low temperature galvanizing process the coating is more durable which means a longer lasting fitting. All Fittings are 100% Pressure Tested to 300# Class.

(Every fitting is subjected to an underwater fitness test to ensure the highest quality)

SPECIFICATIONS

- MATERIAL: ASTM A 197 - Cuppla Malleable Iron, ASTM A 153 - Hot dipped galvanizing • Coating ASTM A164 LS
- DIMENSIONS: ANSI B 16.3 - Malleable Iron threaded fittings, ANSI B 16.14 - Ferrous Pipe Plugs, Bushings etc..., ANSI B 16.39 - Malleable Iron threaded pipe unions.
- THREADS: ANSI B 2.1 or BS 21 ASME B1.20.1 • RoHS Compliant • Tapered Threads
- Pressure - Saturated steam 150 PSI @350°F: Max pressure 300 PSI - 150°F
- Temperature range -20 - 350°F

MALLEABLE IRON - ANSI B 16.3

F°	Class 150 PSIG	Sizes 1/4-1 300#	Sizes 1 1/4-2 300#	Sizes 2 1/4-3 300#
-200-150	300	2000	1500	1000
200	265	1785	1350	910
250	225	1575	1200	825
300	185	1360	1050	735
366*	150	1150	900	650

*Permissible for service temperature up to 366°F, reflecting the temperature of saturated steam at 150 psig.

STEEL FITTINGS

- 1010 Carbon Steel, 3/4 taper threads (see hydraulic section for 7/8 taper threads.)
- Finish or coating • Black Dipped in rust resistant
- Galvanized, Zinc Plated (Inside and Out)

300lb MALLEABLE FITTINGS

Max. pressure: 300 psi WOG @ 72°F; 150 psi WOG saturated steam

- Meet ANSI/ ASME B1.20.1 standards
- Black meet ASTM 197 standards

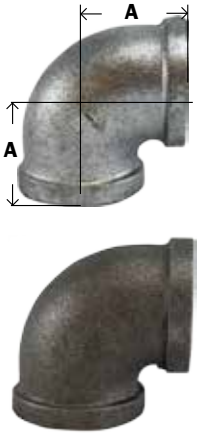
BULL PLUGS AND SWAGES

FLANGES

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

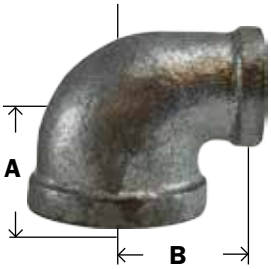
BLACK & GALVANIZED IRON #150 — MALLEABLE FITTINGS

ELBOWS 90°



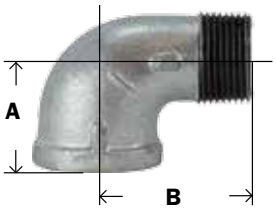
Part # Galvanized		Size	A	Box/ Case	Approx. Wt. Lbs.	Part # Black	
64-100	----	1/8”	0.69	50/600	0.07	65-100	----
64-101	----	1/4”	0.81	35/420	0.10	65-101	----
64-102	----	3/8”	0.95	90/360	0.16	65-102	----
64-103	----	1/2”	1.12	50/200	0.23	65-103	----
64-104	----	3/4”	1.31	35/105	0.35	65-104	----
64-105	----	1”	1.50	20/60	0.57	65-105	----
64-106	----	1-1/4”	1.75	20/40	0.86	65-106	----
64-107	----	1-1/2”	1.94	15/30	1.31	65-107	----
64-108	----	2”	2.25	8/16	1.79	65-108	----
64-109	----	2-1/2”	2.70	6/12	3.35	65-109	----
64-110	----	3”	3.08	4/8	5	65-110	----
64-112	----	4”	3.79	1/2	9.02	65-112	----
64-114	----	6”	5.13	1/1	23.68	65-114	----
		8"			41.1	65-115	----

REDUCING ELBOWS 90°



Part # Galvanized		Size	A	B	Box/ Case	Approx. Wt. Lbs.	Part # Black	
64-122	----	3/8” x 1/4”	0.88	0.90	90/360	0.16	65-122	----
64-123	----	1/2” x 1/4”	0.97	0.98	60/240	0.21	65-123	----
64-124	----	1/2” x 3/8”	1.04	1.03	60/240	0.24	65-124	----
64-126	----	3/4” x 3/8”	1.12	1.13	40/160	0.31	65-126	----
64-127	----	3/4” x 1/2”	1.20	1.22	40/160	0.44	65-127	----
64-130	----	1” x 1/2”	1.26	1.40	25/100	0.52	65-130	----
64-131	----	1” x 3/4”	1.37	1.45	50/100	0.58	65-131	----
64-133	----	1-1/4” x 3/4”	1.45	1.62	15/120	0.79	65-133	----
64-134	----	1-1/4” x 1”	1.58	1.67	10/40	0.80	65-134	----
64-136	----	1-1/2” x 3/4”	1.52	1.75	10/40	0.88	65-136	----
64-137	----	1-1/2” x 1”	1.65	1.80	10/40	1.07	65-137	----
64-138	----	1-1/2” x 1-1/4”	1.82	1.88	15/30	1.12	65-138	----
64-140	----	2” x 1”	1.73	2.02	14/28	1.41	65-140	----
64-141	----	2” x 1-1/4”	1.90	2.10	10/20	1.53	65-141	----
64-142	----	2” x 1-1/2”	2.02	2.16	10/20	1.65	65-142	----
64-145	----	2-1/2” x 1-1/2”	2.16	2.51	6/12	2.97	65-145	----
64-146	----	2-1/2” x 2”	2.39	2.60	6/12	3.18	65-146	----
64-148	----	3” x 1-1/2”	2.28	2.83	6/18	4.54	65-148	----
		3” x 2-1/2”	2.83	2.99	4/8	4.39	65-151	----
		3" x 2"	2.52	3.60	4/8	4.22	65-150	----

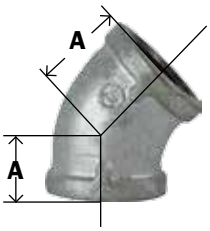
90° STREET ELBOWS



Part # Galvanized		Size	A	B	Box/ Case	Approx. Wt. Lbs.	Part # Black	
64-160	----	1/8”	0.69	1.00	60/720	.06	65-160	----
64-161	----	1/4”	0.80	1.17	35/420	.10	65-161	----
64-162	----	3/8”	0.95	1.48	40/240	.15	65-162	----
64-163	----	1/2”	1.10	1.59	60/180	.22	65-163	----
64-164	----	3/4”	1.28	1.85	35/105	.39	65-164	----
64-165	----	1”	1.47	2.10	35/105	.60	65-165	----
64-166	----	1-1/4”	1.75	2.57	25/50	.95	65-166	----
64-167	----	1-1/2”	1.90	2.63	9/27	1.37	65-167	----
64-168	----	2”	2.21	3.19	8/16	2.25	65-168	----
64-169	----	2-1/2”	2.65	3.78	5/10	3.32	65-169	----
64-170	----	3”	3.02	4.42	4/8	5.27	65-170	----
64-171	----	4”	3.72	5.57	2/4	8.94	65-171	----

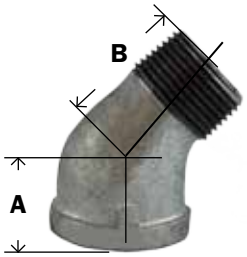
WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

ELBOWS 45°



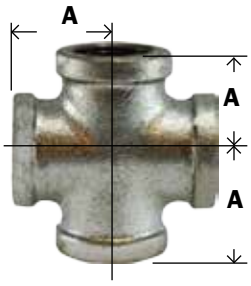
Part # Galvanized		Size	A	Box/ Case	Approx. Wt. Lbs.	Part # Black	
64-180	----	1/8”	0.63	50/600	.07	65-180	----
64-181	----	1/4”	0.73	30/360	.10	65-181	----
64-182	----	3/8”	0.80	75/300	.14	65-182	----
64-183	----	1/2”	0.88	50/200	.21	65-183	----
64-184	----	3/4”	0.98	40/120	.33	65-184	----
64-185	----	1”	1.12	20/60	.50	65-185	----
64-186	----	1-1/4”	1.29	20/40	.74	65-186	----
64-187	----	1-1/2”	1.43	10/30	1.01	65-187	----
64-188	----	2”	1.68	12/24	1.53	65-188	----
64-189	----	2-1/2”	1.95	9/18	2.78	65-189	----
64-190	----	3”	2.17	1/10	4.49	65-190	----
64-191	----	4”	2.61	2/4	7.44	65-191	----
64-192	----	6”	3.46	1/1	18.63	65-192	----
		8"			26.40	65-194	----

45° STREET ELBOWS



Part # Galvanized		Size	A	B	Box/ Case	Approx. Wt. Lbs.	Part # Black	
64-200	----	1/8”	0.63	0.83	70/840	.05	65-200	----
64-201	----	1/4”	0.73	0.94	40/480	.09	65-201	----
64-202	----	3/8”	0.80	1.03	100/400	.14	65-202	----
64-203	----	1/2”	0.86	1.30	75/225	.19	65-203	----
64-204	----	3/4”	0.96	1.48	40/120	.28	65-204	----
64-205	----	1”	1.10	1.69	25/75	.48	65-205	----
64-206	----	1-1/4”	1.26	1.87	10/40	.71	65-206	----
64-207	----	1-1/2”	1.40	2.05	10/30	1.02	65-207	----
64-208	----	2”	1.65	2.38	12/24	1.68	65-208	----
64-209	----	2-1/2”	1.95	2.72	6/12	2.69	65-209	----
64-210	----	3”	2.17	3.16	3/6	4.61	65-210	----
64-211	----	4”	2.61	3.90	2/4	7.74	65-211	----

CROSSES

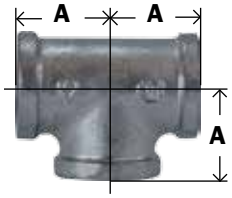


Part # Galvanized		Size	A	Box/ Case	Approx. Wt. Lbs.	Part # Black	
64-390	----	1/8”	0.65	50/600	.14	65-390	----
64-391	----	1/4”	0.80	60/240	.17	65-391	----
64-392	----	3/8”	0.95	50/150	.26	65-392	----
64-393	----	1/2”	1.12	30/90	.42	65-393	----
64-394	----	3/4”	1.31	20/60	.64	65-394	----
64-395	----	1”	1.50	15/30	.98	65-395	----
64-396	----	1-1/4”	1.75	10/20	1.45	65-396	----
64-397	----	1-1/2”	1.94	8/16	1.90	65-397	----
64-398	----	2”	2.25	5/10	2.96	65-398	----
64-399	----	2-1/2”	2.71	4/8	5.49	65-399	----
64-400	----	3”	3.06	2/4	7.71	65-400	----
		4"		1/1	14.77	65-401	----

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

BLACK & GALVANIZED IRON #150 — MALLEABLE FITTINGS

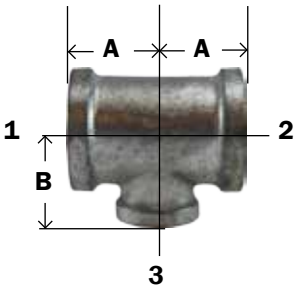
TEES



Part # Galvanized		Size	A	Box/Case	Approx. Wt. Lbs.	Part # Black	
64-250	----	1/8”	0.69	120/480	.11	65-250	----
64-251	----	1/4”	0.81	75/300	.15	65-251	----
64-252	----	3/8”	0.95	45/180	.22	65-252	----
64-253	----	1/2”	1.12	40/120	.36	65-253	----
64-254	----	3/4”	1.31	35/70	.48	65-254	----
64-255	----	1”	1.50	20/40	.83	65-255	----
64-256	----	1-1/4”	1.75	14/28	1.29	65-256	----
64-257	----	1-1/2”	1.94	12/24	1.66	65-257	----
64-258	----	2”	2.26	8/16	2.50	65-258	----
64-259	----	2-1/2”	2.70	4/8	4.45	65-259	----
64-260	----	3”	3.08	1/6	6.72	65-260	----
64-261	----	4”	3.79	1/2	11.31	65-261	----
64-262	----	6”	5.13	1/1	30.75	65-262	----
		8"			37.85	65-264	----

REDUCING TEES

(SAME SIZE ON RUN, REDUCING ON BRANCH)

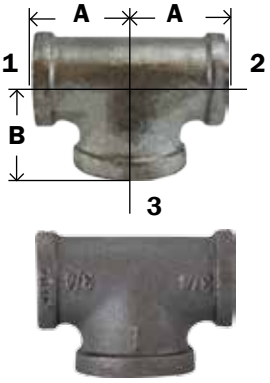


Part # Galvanized		Size (1&2) x 3	A	B	Box/ Case	Approx. Wt. Lbs.	Part # Black	
64-273	----	3/8” x 1/4”	0.81	0.90	25/300	.18	65-273	----
64-276	----	1/2” x 1/4”	0.97	0.98	40/160	.24	65-276	----
64-279	----	1/2” x 3/8”	1.04	1.03	40/160	.35	65-279	----
64-282	----	3/4” x 1/4”	1.05	1.08	25/100	.43	65-282	----
64-283	----	3/4” x 3/8”	1.12	1.13	25/100	.39	65-283	----
64-286	----	3/4” x 1/2”	1.20	1.18	20/80	.49	65-286	----
64-268	----	1” x 1/4”	1.11	1.22	20/80	.51	65-268	----
64-269	----	1” x 3/8”	1.18	1.27	15/60	.55	65-269	----
64-291	----	1” x 1/2”	1.26	1.40	15/60	.63	65-291	----
64-298	----	1” x 3/4”	1.37	1.45	12/48	.71	65-298	----
64-301	----	1-1/4” x 1/2”	1.34	1.45	20/40	.91	65-301	----
64-303	----	1-1/4” x 3/4”	1.45	1.62	20/40	.99	65-303	----
64-306	----	1-1/4” x 1”	1.58	1.66	20/40	1.07	65-306	----
64-721		1-1/2" x 1/2"				1.12	65-721	----
64-316	----	1-1/2” x 3/4”	1.41	1.75	15/30	1.23	65-316	----
64-318	----	1-1/2” x 1”	1.65	1.88	10/30	1.33	65-318	----
64-322	----	1-1/2” x 1-1/4”	1.65	1.88	12/24	1.52	65-322	----
64-327	----	2” x 1/2”	1.49	1.88	10/20	1.64	65-327	----
64-328	----	2” x 3/4”	1.60	1.97	10/20	1.71	65-328	----
64-330	----	2” x 1”	1.73	2.02	10/20	1.88	65-330	----
64-334	----	2” x 1-1/4”	1.86	2.06	8/16	2.03	65-334	----
64-336	----	2” x 1-1/2”	1.98	2.12	8/16	2.22	65-336	----
		2-1/2" x 1"				2.85	65-342	----
64-343	----	2-1/2” x 1-1/2”	2.16	2.51	5/10	2.97	65-343	----
64-729	----	3" x 1"	2.00	2.00	3/6	4.15		
		3" x 1-1/2"				5.19	65-359	----
64-351	----	3” x 2”	2.52	2.89	3/6	5.35	65-351	----

Quick Disconnects - see pages 348-355

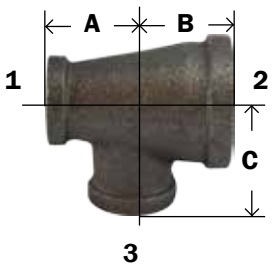
WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

BULLHEAD TEES



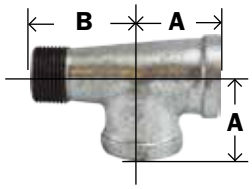
Part #		Size (1&2) x 3	A	B	Box/ Case	Approx. Wt. Lbs.	Part # Black	
64-280	----	1/2" x 3/4"	1.22	1.20	30/120	.4	65-280	----
64-733	----	1/2" x 1"	1.36	1.26	25/100	.50	65-733	----
64-289	----	3/4" x 1"	1.45	1.37	20/120	.60	65-289	----
64-299	----	1" x 1-1/4"	1.67	1.58	15/30	.96	65-299	----
64-300	----	1" x 1-1/2"	1.80	1.65	9/36	1.11	65-300	----
64-317	----	1-1/4" x 1-1/2"	1.88	1.82	12/24	1.07	65-317	----
64-319	----	1-1/2" x 2"	2.12	1.98	8/32	2.10	65-319	----

REDUCING TEES
REDUCING ON RUN



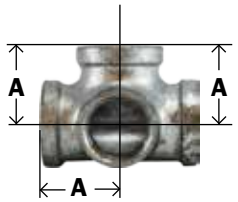
Part # Black	Size 1 x 2 x 3	A	B	C	Box/Case	Approx. Wt. Lbs.	
65-287	3/4" x 1/2" x 1/2"	1.18	1.18	1.20	25/100	0.39	----
65-288	3/4" x 1/2" x 3/4"	1.28	1.20	1.28	20/80	0.49	----
65-292	1" x 1/2" x 1/2"	1.31	1.22	1.31	20/80	0.51	----
65-293	1" x 1/2" x 3/4"	1.22	1.37	1.45	20/80	0.53	----
65-294	1" x 1/2" x 1"	1.40	1.50	1.50	15/60	0.54	----
65-295	1" x 3/4" x 1/2"	1.20	1.26	1.40	20/80	0.58	----
65-296	1" x 3/4" x 3/4"	1.34	1.28	1.42	15/60	0.63	----
65-297	1" x 3/4" x 1"	1.45	1.50	1.50	15/60	0.62	----
65-347	1-1/4" x 3/4" x 3/4"	1.31	1.45	1.64	10/40	0.66	----
65-305	1-1/4" x 3/4" x 1-1/4"	1.62	1.75	1.75	10/40	1.14	----
65-309	1-1/4" x 1"x 1"	1.55	1.47	1.63	20/40	1.00	----
65-346	1-1/4" x 3/4" x 1/2"	1.31	1.45	1.64	20/40	1.05	----
65-349	1-1/4" x 1" x 1/2"	1.26	1.34	1.53	20/40	1.10	----
65-350	1-1/4" x 1" x 3/4"						
65-310	1-1/4" x 1" x 1-1/4"	1.30	1.36	1.44	15/30	1.21	----
65-372	1-1/2" x 1" x 1"	1.50	1.65	1.78	15/30	1.28	----
65-375	1-1/2" x 1-1/4" x 3/4"	1.43	1.52	1.25	15/30	1.30	----
65-377	1-1/2" x 1-1/4" x 1-1/4"	1.75	1.82	1.88	15/30	1.35	----
65-267	2" x 3/4" x 2"						
65-312	2" x 1-1/2" x 1-1/4"	1.82	1.90	2.10	10/30	1.21	----
65-313	2" x 1-1/2" x 1-1/2"	1.94	2.02	2.16	10/30	1.79	----

MALLEABLE SERVICE TEE (STREET TEE)



Part # Galvanized		Size	A	B	Box/ Case	Approx. Wt. Lbs.	Part # Black	
64-363	----	1/2"	1.12	1.62	40/12	0.31	65-363	----
64-364	----	3/4"	1.31	1.89	25/75	0.49	65-364	----

SIDE OUTLET TEES



Part # Galvanized		Size	A	Box/ Case	Approx. Wt. Lbs.	Part # Black	
64-383	----	1/2"	1.12	25/100	.39	65-383	----
64-384	----	3/4"	1.31	15/60	.58	65-384	----
64-385	----	1"	1.50	20/40	.88	65-385	----
64-386	----	1-1/4"	1.75	12/24	1.32	65-386	----
		1-1/2"	1.97	1/1	1.56	65-387	----
		2"	2.29	1/1	1.81	65-388	----

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

BLACK & GALVANIZED IRON #150 — MALLEABLE FITTINGS

COUPLINGS

Part # Galvanized		Size	A	Box/ Case	Approx. Wt. Lbs.	Part # Black	
64-410	----	1/8”	0.96	70/840	.07	65-410	----
64-411	----	1/4”	1.06	40/480	.09	65-411	----
64-412	----	3/8”	1.16	40/480	.13	65-412	----
64-413	----	1/2”	1.34	60/240	.19	65-413	----
64-414	----	3/4”	1.52	50/150	.28	65-414	----
64-415	----	1”	1.67	25/100	.45	65-415	----
64-416	----	1-1/4”	1.93	16/64	.66	65-416	----
64-417	----	1-1/2”	2.15	18/36	.84	65-417	----
64-418	----	2”	2.54	12/24	1.39	65-418	----
64-419	----	2-1/2”	2.88	8/16	2.42	65-419	----
64-420	----	3”	3.18	1/12	3.49	65-420	----
64-421	----	4”	3.69	3/6	5.81	65-421	----
64-422	----	6”	4.23	1/2	28.62	65-422	----

REDUCING COUPLINGS

Part # Galvanized		Size	A	Box/ Case	Approx. Wt. Lbs.	Part # Black	
64-430	----	1/4” x 1/8”	1.00	50/600	.07	65-430	----
64-431	----	3/8” x 1/8”	1.13	35/420	.09	65-431	----
64-432	----	3/8” x 1/4”	1.13	30/360	.11	65-432	----
64-433	----	1/2” x 1/8”	1.25	75/300	.13	65-433	----
64-434	----	1/2” x 1/4”	1.25	75/300	.11	65-434	----
64-435	----	1/2” x 3/8”	1.25	60/240	.15	65-435	----
64-439	----	3/4” x 1/8”	1.44	60/240	.18	65-439	----
64-436	----	3/4” x 1/4”	1.44	45/18	.19	65-436	----
64-437	----	3/4” x 3/8”	1.44	45/18	.21	65-437	----
64-438	----	3/4” x 1/2”	1.44	60/180	.25	65-438	----
64-459	----	1” x 1/4”	1.69	45/135	.34	65-459	----
64-440	----	1” x 3/8”	1.69	30/120	.35	65-440	----
64-441	----	1” x 1/2”	1.69	30/120	.36	65-441	----
64-442	----	1” x 3/4”	1.69	25/100	.39	65-442	----
64-460	----	1-1/4” x 3/8”	2.06	25/75	.55	65-460	----
64-444	----	1-1/4” x 1/2”	2.06	25/75	.53	65-444	----
64-445	----	1-1/4” x 3/4”	2.06	25/75	.57	65-445	----
64-446	----	1-1/4” x 1”	2.06	15/60	.61	65-446	----
64-443	----	1-1/2” x 3/8”	2.31	20/60	.71	65-443	----
64-447	----	1-1/2” x 1/2”	2.31	20/60	.69	65-447	----
64-448	----	1-1/2” x 3/4”	2.31	15/60	.71	65-448	----
64-449	----	1-1/2” x 1”	2.31	25/50	.78	65-449	----
64-450	----	1-1/2” x 1-1/4”	2.31	12/48	.87	65-450	----
64-458	----	2” x 1/2”	2.81	12/36	1.14	65-458	----
64-451	----	2” x 3/4”	2.81	12/36	1.14	65-451	----
64-452	----	2” x 1”	2.81	12/36	1.21	65-452	----
64-453	----	2” x 1-1/4”	2.81	9/27	1.19	65-453	----
64-454	----	2” x 1-1/2”	2.81	9/27	1.38	65-454	----
64-461	----	2-1/2” x 1-1/2”	3.25	20/40	2.07	65-461	----
64-462	----	2-1/2” x 2”	3.25	7/14	2.23	65-462	----
64-486	----	3” x 1-1/2”	3.69	6/12	3.23	65-486	----
64-456	----	3” x 2”	3.69	6/12	3.30	65-456	----
64-463	----	3” x 2-1/2”	3.69	5/10	3.55	65-463	----
64-464	----	4” x 2”	4.38	3/6	5.55	65-464	----
64-465	----	4” x 2-1/2”	4.38	3/6	5.90	65-465	----
64-457	----	4” x 3”	4.38	3/6	6.05	65-457	----
		6” x 4”	4.24	1/2	10.86	65-491	----

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HEX BUSHING

* INSIDE HEX

Part # Galvanized		Size M x F	A	Hex	Box/ Case	Approx. Wt. Lbs.	Part # Black	
64-500	----	*1/4" x 1/8"	0.79	0.67	1/25	.03	65-500	----
64-501	----	*3/8" x 1/8"	0.79	0.75	1/25	.06	65-501	----
64-502	----	*3/8" x 1/4"	0.79	0.75	1/25	.05	65-502	----
64-503	----	1/2" x 1/8"	0.84	1.03	150/600	.09	65-503	----
64-504	----	1/2" x 1/4"				.08	65-504	----
64-505	----	1/2" x 3/8"	0.75	1.03	150/600	.07	65-505	----
64-506	----	3/4" x 1/8"	0.85	1.15	75/300	.14	65-506	----
64-507	----	3/4" x 1/4"	0.85	1.15	75/300	.13	65-507	----
64-508	----	3/4" x 3/8"	0.85	1.15	75/300	.12	65-508	----
64-509	----	3/4" x 1/2"	0.93	1.15	75/300	.10	65-509	----
64-510*	----	1" x 1/4"	1.13	1.12	50/200	.20	65-510*	----
64-511*	----	1" x 3/8"	1.13	1.12	50/200	.18	65-511*	----
64-512	----	1" x 1/2"	1.10	1.42	50/200	.21	65-512	----
64-513	----	1" x 3/4"	1.10	1.42	50/200	.17	65-513	----
64-514*	----	1-1/4" x 1/4"	1.24	1.12	30/120	.29	65-514*	----
64-515*	----	1-1/4" x 3/8"	1.24	1.12	30/120	.29	65-515*	----
64-516*	----	1-1/4" x 1/2"	1.24	1.24	30/120	.31	65-516*	----
64-517	----	1-1/4" x 3/4"	1.08	1.76	30/120	.35	65-517	----
64-518	----	1-1/4" x 1"	1.08	1.76	30/120	.29	65-518	----
64-519*	----	1-1/2" x 1/4"	1.30	1.12	25/75	.40	65-519*	----
64-520*	----	1-1/2" x 3/8"	1.30	1.12	25/75	.38	65-520*	----
64-521*	----	1-1/2" x 1/2"	1.30	1.34	25/75	.38	65-521*	----
64-522*	----	1-1/2" x 3/4"	1.30	1.44	25/75	.40	65-522*	----
64-523	----	1-1/2" x 1"	1.23	2.00	25/75	.45	65-523	----
64-524	----	1-1/2" x 1-1/4"	1.23	2.00	25/75	.34	65-524	----
64-526	----	2" x 1/4"	1.29	1.12	20/60	.57	65-526	----
64-525*	----	2" x 3/8"	1.28	1.12	20/60	.57	65-525*	----
64-527*	----	2" x 1/2"	1.39	1.34	20/60	.57	65-527*	----
64-528*	----	2" x 3/4"	1.39	1.63	20/60	.63	65-528*	----
64-529*	----	2" x 1"	1.39	1.77	20/60	.66	65-529*	----
64-530	----	2" x 1-1/4"	1.50	2.48	20/60	.74	65-530	----
64-531	----	2" x 1-1/2"	1.50	2.48	20/60	.61	65-531	----
64-546*	----	2-1/2" x 1/2"	1.51	1.34	15/30	.97	65-546*	----
64-547*	----	2-1/2" x 3/4"	1.51	1.63	15/30	.91	65-547*	----
64-532*	----	2-1/2" x 1"	1.51	1.95	15/30	.97	65-532*	----
64-533*	----	2-1/2" x 1-1/4"	1.51	2.39	15/30	1.03	65-533*	----
64-534	----	2-1/2" x 1-1/2"	1.51	2.98	15/30	1.16	65-534	----
64-535	----	2-1/2" x 2"	1.54	2.98	15/30	1.01	65-535	----
64-550	----	3" x 1"	1.61	1.95	12/24	1.41	65-550	----
64-549*	----	3" x 1-1/4"	1.61	2.39	12/24	1.42	65-549*	----
64-537*	----	3" x 1-1/2"	1.61	2.68	12/24	1.51	65-537*	----
64-538	----	3" x 2"	1.61	3.86	12/24	1.71	65-538	----
64-539	----	3" x 2-1/2"	1.61	3.86	12/24	1.68	65-539	----
		3-1/2" x 3"	1.86	4.20	5/10	2.17	65-555	----
64-551	----	4" x 3/4"	2.15	4.90	5/10	3.88	65-551	----
64-553*	----	4" x 1"	2.00	4.75	5/10	3.79	65-553*	----
64-552	----	4" x 1-1/4"	1.82	2.39	5/10	2.39	65-552	----
64-540	----	4" x 1-1/2"	1.82	2.68	5/10	2.39	65-540	----
64-541*	----	4" x 2"	1.82	3.31	5/10	2.52	65-541*	----
64-542*	----	4" x 2-1/2"	2.06	3.87	5/10	2.87	65-542*	----
64-543	----	4" x 3"	2.17	4.96	5/10	2.95	65-543	----
		5" x 4"	2.16	5.34	2/4	6.80	65-544	----
64-545*	----	6" x 4"	2.33	5.79	2/4	7.11	65-545*	----

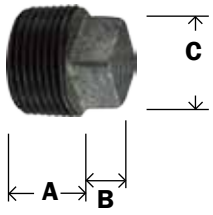
WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

UNIONS

• Brass Seat

Part # Galvanized		Size	A	Box/ Case	Approx. Wt. Lbs.	Part # Black	
64-600	----	1/8”	1.26	60/240	.17	65-600	----
64-601	----	1/4”	1.44	20/240	.25	65-601	----
64-602	----	3/8”	1.61	40/160	.37	65-602	----
64-603	----	1/2”	1.72	50/100	.52	65-603	----
64-604	----	3/4”	1.94	35/70	.78	65-604	----
64-605	----	1”	2.06	20/40	1.18	65-605	----
64-606	----	1-1/4”	2.26	15/30	1.64	65-606	----
64-607	----	1-1/2”	2.41	10/20	2.08	65-607	----
64-608	----	2”	2.75	6/12	3.24	65-608	----
64-609	----	2-1/2”	3.22	4/8	5.31	65-609	----
64-610	----	3”	3.50	4/8	6.94	65-610	----
64-611	----	4”	3.85	2/4	12.02	65-611	----

SQUARE HEAD PLUGS



• Cored

Part # Galvanized		Size	A	B	C	Box/ Case	Approx. Wt. Lbs.	Part # Black	
		*1/8"	0.41	0.23	0.30	1/25	.02	65-650	----
64-651	----	*1/4”	0.48	0.28	0.38	1/25	.03	65-651	----
64-652	----	*3/8”	0.53	0.31	0.43	1/25	.04	65-652	----
64-653	----	1/2”	0.58	0.38	0.56	50/600	.08	65-653	----
64-654	----	3/4”	0.65	0.44	0.63	30/360	.13	65-654	----
64-655	----	1”	0.75	0.50	0.82	20/240	.22	65-655	----
64-656	----	1-1/4”	0.82	0.56	0.94	40/120	.33	65-656	----
64-657	----	1-1/2”	0.85	0.62	1.13	30/90	.41	65-657	----
64-658	----	2”	0.91	0.68	1.31	20/60	.68	65-658	----
64-659	----	2-1/2”	1.26	0.74	1.50	16/64	.89	65-659	----
64-660	----	3”	1.16	0.80	1.69	16/32	1.68	65-660	----
64-661	----	4”	1.22	1.00	2.28	6/12	3.02	65-661	----
		6"	1.85	1.13	5.97	5/10	11.41	65-662	----
		8"				1/1		65-664	----

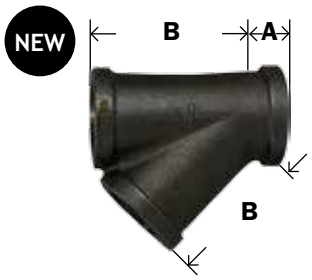
CAPS

Part # Galvanized		Size	A	Box/ Case	Approx. Wt. Lbs.	Part # Black	
64-470	----	1/8"	0.55	1/25	.03	65-470	----
64-471	----	1/4"	0.62	80/960	.07	65-471	----
64-472	----	3/8”	0.74	60/720	.08	65-472	----
64-473	----	1/2”	0.87	75/300	.13	65-473	----
64-474	----	3/4”	0.97	40/160	.18	65-474	----
64-475	----	1”	1.16	25/100	.30	65-475	----
64-476	----	1-1/4”	1.28	20/80	.47	65-476	----
64-477	----	1-1/2”	1.33	18/54	.66	65-477	----
64-478	----	2”	1.45	12/36	.99	65-478	----
64-479	----	2-1/2”	1.70	20/40	1.58	65-479	----
64-480	----	3”	1.80	12/24	2.51	65-480	----
64-481	----	4”	2.08	6/12	4.09	65-481	----
64-482	----	6”	2.55	2/4	5.18	65-482	----

* Use steel fittings for smaller sizes. See page 279-280 for Galvanized and Black Steel Fittings.

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

LATERAL Ys

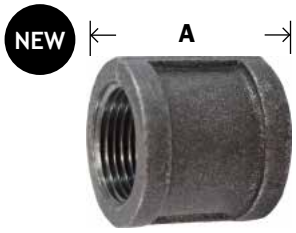


Part #	Size	A	B	Case	Weight	
65-963	1/2	2.32	1.71	120	.35	----
65-964	3/4	2.77	2.05	60	.58	----
65-965	1	3.28	2.42	40	.97	----
65-966	1-1/4	3.94	2.92	24	1.44	----
65-967	1-1/2	4.38	3.28	16	1.93	----
65-968	2	5.41	3.98	8	3.12	----
65-969	2-1/2	6.25	4.73	4	5.61	----
65-970	3	7.26	5.55	2	8.36	----
65-971	4	8.98	6.97	2	14.88	----

LOCKNUTS

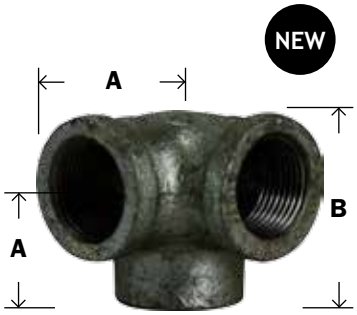
Part # Galv		Size	A Hex	Thickness	Box/ Case	Weight	Part # Black	
64-703	----	1/2		0.31	150/600	0.08	65-703	----
64-704	----	3/4		0.34	90/360	0.13	65-704	----
64-705	----	1		0.38	60/240	0.19	65-705	----
64-706	----	1-1/4		0.42	45/180	0.27	65-706	----
64-707	----	1-1/2		0.47	45/135	0.47	65-707	----
64-708	----	2		0.53	25/75	0.56	65-708	----

RIGHT & LEFT COUPLINGS



Part # Galv		Size	A	Case	Weight	Part # Black	
64-573	----	1/2	1.34	240	0.19	65-573	----
64-574	----	3/4	1.52	150	0.28	65-574	----
64-575	----	1	1.67	100	0.45	65-575	----
64-576	----	1-1/4	1.93	64	0.66	65-576	----
64-577	----	1-1/2	2.15	36	0.84	65-577	----
64-578	----	2	2.53	24	1.39	65-578	----

SIDE OUTLET ELBOW



Part # Galv		Size	A	B	Case	Part # Black	
64-583	----	1/2	1.10		135	65-583	----
64-584	----	3/4	1.30		80	65-584	----
64-585	----	1	1.50		40	65-585	----
64-586	----	1-1/4	1.77		30	65-586	----
64-587	----	1-1/2	1.97		24	65-587	----
64-588	----	2	2.29		10	65-588	----

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

FLOOR FLANGES

Part # Galvanized		Size	A	Thickness	Hole Size	Box/ Case	Approx. Wt. Lbs.	Part # Black	
64-692	----	1/2”	3.50	0.50	0.25	25/100	.63	65-692	----
64-693	----	3/4”	3.50	0.63	0.25	15/45	.73	65-693	----
64-694	----	1”	4.00	0.69	0.25	15/45	1.02	65-694	----
64-695	----	1-1/4”	4.00	0.75	0.25	15/30	1.00	65-695	----
64-696	----	1-1/2”	4.50	0.87	0.31	8/24	1.37	65-696	----
64-697	----	2”	5.50	1.00	0.31	8/16	2.11	65-697	----

EXTENSION FIP X MIP

Part #	Size	Approx. WT. Lbs.	Box/Case	
65-621	1/2"	0.12	75 / 300	----
65-622	3/4"	0.23	40 / 160	----
65-623	1"	0.32	30 / 90	----

MUSHROOM VENT CAP

Cast Iron Galvanized Threaded Cap. 30 Mesh screen. Protects against driving rain, snow, sleet and insects.

Part #	Size	
21-174	3/4"	----
21-175	1"	----
21-176	1-1/2"	----
21-177	1-1/2"	----
21-178	2"	----
21-179	3"	----
21-180	4"	----

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STEEL FITTINGS — BLACK & GALVANIZED

This will certify that the material was manufactured in accordance with ASME B16.14 - 1991 Standards. All Threads are Dryseal (NPTF) - 3/4 inch taper per foot and are made of Carbon Steel 12L14. Pressure rating: 150/300 PSI

• Clear Zinc plating specifications ASTM B633-07 • Federal Specification QQ-Z-325 (Zinc Plate)
• Type III with supplemental clear Trivalent chromate • .00015" Zinc (Minimum) • ROHS Compliant • Lead Free

HEX BUSHINGS

Part # Zinc		Size M x F	A	Hex	Approx. Wt. Lbs.	Part # Black	
66-500	----	1/4” x 1/8”	0.63	0.62	0.02	67-500	----
66-501	----	3/8” x 1/8”	0.66	0.68	0.04	67-501	----
66-502	----	3/8” x 1/4”	0.66	0.68	0.02	67-502	----
66-503	----	1/2” x 1/8”	0.80	0.87	0.10	67-503	----
66-504	----	1/2” x 1/4”	0.80	0.87	0.08	67-504	----
66-505	----	1/2” x 3/8”	0.80	0.87	0.06	67-505	----
66-506	----	3/4” x 1/8”	0.94	1.06	0.18	67-506	----
66-507	----	3/4” x 1/4”	0.94	1.06	0.14	67-507	----
66-508	----	3/4” x 3/8”	0.94	1.06	0.14	67-508	----
66-509	----	3/4” x 1/2”	0.94	1.06	0.10	67-509	----
66-510	----	1” x 1/4”	1.00	1.31	0.16	67-510	----
66-511	----	1” x 3/8”	1.00	1.31	0.26	67-511	----
66-512	----	1” x 1/2”	1.00	1.31	0.22	67-512	----
66-513	----	1” x 3/4”	1.00	1.31	0.14	67-513	----
		1-1/4" x 1/8"	1.08	1.31	0.16	67-514	----

FACE BUSHING

Part # Zinc		Size M x F	A	Approx. Wt. Lbs.	Part # Black	
66-700	----	1/4” x 1/8”	0.44	0.01	67-700	----
66-701	----	3/8” x 1/8”	0.48	0.02	67-701	----
66-702	----	3/8” x 1/4”	0.48	0.02	67-702	----
		1/2” x 1/8”	0.56	0.04	67-703	----
66-704	----	1/2” x 1/4”	0.56	0.04	67-704	----
66-705	----	1/2” x 3/8”	0.56	0.04	67-705	----
		3/4” x 1/4”	0.62	0.12	67-707	----
66-708	----	3/4” x 3/8”	0.62	0.10	67-708	----
66-709	----	3/4” x 1/2”	0.62	0.10	67-709	----
		1” x 3/8”	0.75	0.18	67-711	----
66-712	----	1” x 1/2”	0.75	0.16	67-712	----
66-713	----	1” x 3/4”	0.75	0.16	67-713	----

CAPS

Part # Zinc		Size NPTF	A	Hex	Approx. Wt. Lbs.	Part # Black	
66-470	----	1/8”	0.53	0.56	0.02	67-470	----
66-471	----	1/4”	0.63	0.62	0.04	67-471	----
66-472	----	3/8”	0.69	0.81	0.06	67-472	----
66-473	----	1/2”	0.87	1.00	0.12	67-473	----
66-474	----	3/4”	0.97	1.18	0.16	67-474	----
66-475	----	1”	1.16	1.50	0.30	67-475	----
66-476	----	1-1/4"	1.28	2.00	0.68	67-476	----
66-477	----	1-1/2"	1.35	2.25	0.83	67-477	----
66-478	----	2"	1.45	2.625	1.36		

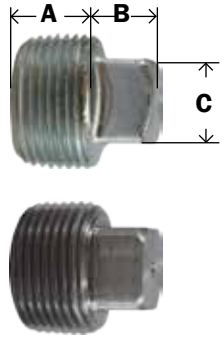
WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

BLACK & GALVANIZED STEEL FITTINGS

This will certify that the plugs are dimensional per SAE J531 MAY 95 Standards. All threads are Dryseal (NPTF) - 3/4"Taper per foot and are made of SAE J403 Low Carbon Steel 1010 Cold headed.

SQUARE HEAD PLUGS

• Solid



Part # Zinc		Size NPTF	A	B	C	Approx. Wt. Lbs.	Part # Black	
		1/16”	0.33	0.18	0.22	0.01	67-669	----
66-670	----	1/8”	0.33	0.24	0.28	0.01	67-670	----
66-671	----	1/4”	0.45	0.28	0.37	0.02	67-671	----
66-672	----	3/8”	0.50	0.31	0.43	0.04	67-672	----
66-653	----	1/2”	0.59	0.38	0.55	0.12	67-653	----
66-654	----	3/4”	0.63	0.44	0.62	0.18	67-654	----
66-655	----	1"	0.75	0.5	0.81	0.34	67-655	----
66-656	----	1-1/4"	0.80	0.56	0.93	0.62	67-656	----
66-657	----	1-1/2"	0.83	0.62	1.12	0.82	67-657	----
66-658	----	2"	0.88	0.68	1.31	1.36	67-658	----

HEX HEAD PLUGS

• Solid

Part # Zinc		Size NPTF	A	Hex	Approx. Wt. Lbs.	Part # Black	
66-770	----	1/8”	0.55	0.43	0.01	67-770	----
66-771	----	1/4”	0.74	0.56	0.04	67-771	----
66-772	----	3/8”	0.67	0.68	0.06	67-772	----
66-773	----	1/2”	0.80	0.70	0.12	67-773	----
66-774	----	3/4”	0.94	1.06	0.18	67-774	----
66-775	----	1”	1.00	1.31	0.22	67-775	----
66-776	----	1-1/4"	1.17	1.75	0.7	67-776	----
66-777	----	1-1/2"	1.51	2.00	1.2	67-777	----
66-778	----	2"	1.65	2.50	2.06	67-778	----

COUNTERSUNK PLUG - Square Socket

Part # Zinc		Size NPTF	A	Socket Size	Approx. Wt. Lbs.	Part # Black	
66-630	----	1/8”	0.29	0.19	0.01	67-630	----
66-631	----	1/4”	0.45	0.25	0.02	67-631	----
66-632	----	3/8”	0.45	0.31	0.04	67-632	----
66-633	----	1/2”	0.59	0.38	0.08	67-633	----
66-634	----	3/4”	0.60	0.50	0.12	67-634	----
66-635	----	1”	0.75	0.50	0.16	67-635	----
66-636	----	1-1/4"	0.80	0.75	0.32	67-636	----
66-637	----	1-1/2"	0.83	0.75	0.45	67-637	----
66-638	----	2"	0.88	0.875	2.06	67-638	----

COUNTERSUNK PLUG - Hex Socket

Part # Zinc		Size NPTF	A	Socket Size	Approx. Wt. Lbs.	Part # Black	
66-760	----	1/16”	0.29	0.15	0.01	67-760	----
66-761	----	1/8”	0.29	0.18	0.01	67-761	----
66-762	----	1/4”	0.44	0.25	0.02	67-762	----
66-763	----	3/8”	0.44	0.31	0.04	67-763	----
66-764	----	1/2”	0.59	0.37	0.08	67-764	----
66-765	----	3/4”	0.60	0.56	0.14	67-765	----
66-766	----	1”	0.75	0.625	0.22	67-766	----
66-767	----	1-1/4"	0.80	0.75	0.37	67-767	----
66-768	----	1-1/2"	0.83	1.0	0.45	67-768	----
66-769	----	2"	0.88	1.0	0.86	67-769	----

• Slotted and Flush plugs available upon request

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

MALLEABLE FITTINGS — BLACK EXTRA HEAVY 300# IRON

90° ELBOW

Part #	Size	
69-101	1/4"	----
69-102	3/8"	----
69-103	1/2"	----
69-104	3/4"	----
69-105	1"	----
69-106	1-1/4"	----
69-107	1-1/2"	----
69-108	2"	----

45° ELBOW

Part #	Size	
69-181	1/4"	----
69-182	3/8"	----
69-183	1/2"	----
69-184	3/4"	----
69-185	1"	----
69-186	1-1/4"	----
69-187	1-1/2"	----
69-188	2"	----

90° STREET ELBOW

Part #	Size	
69-161	1/4"	----
69-162	3/8"	----
69-163	1/2"	----
69-164	3/4"	----
69-165	1"	----
69-166	1-1/4"	----
69-167	1-1/2"	----
69-168	2"	----

TEE

Part #	Size	
69-252	3/8"	----
69-253	1/2"	----
69-254	3/4"	----
69-255	1"	----
69-256	1-1/4"	----
69-257	1-1/2"	----
69-258	2"	----

COUPLING

Part #	Size	
69-411	1/4"	----
69-412	3/8"	----
69-413	1/2"	----
69-414	3/4"	----
69-415	1"	----
69-416	1-1/4"	----
69-417	1-1/2"	----
69-418	2"	----

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BLACK EXTRA 300# IRON — MALLEABLE FITTINGS

REDUCING COUPLING

Part #	Size	
69-432	3/8 x 1/4"	----
69-434	1/2 x 1/4"	----
69-435	1/2 x 3/8"	----
69-438	3/4 x 1/2"	----
69-441	1 x 1/2"	----
69-442	1 x 3/4"	----

CAP

Part #	Size	
69-471	1/4"	----
69-472	3/8"	----
69-473	1/2"	----
69-474	3/4"	----
69-475	1"	----
69-476	1-1/4"	----
69-477	1-1/2"	----
69-478	2"	----

UNION

• Brass Seat

Part #	Size	
69-600	1/8"	----
69-601	1/4"	----
69-602	3/8"	----
69-603	1/2"	----
69-604	3/4"	----
69-605	1"	----
69-606	1-1/4"	----
69-607	1-1/2"	----
69-608	2"	----

STEEL MAGNETIC PLUGS

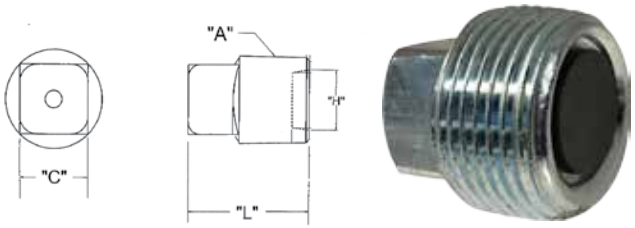
Steel Magnetic Drain Plugs - NPT Threaded

Magnetic Drain Plugs are similar to standard pipe or straight thread drain plugs with one important difference - a permanent magnet is fastened to the plug body. This magnet attracts and holds abrasive, ferrous metal particles preventing their circulation through the lubrication or hydraulic system.

These abrasive, ferrous metal particles appear in lubricating or hydraulic systems as a result of the following conditions:
• The constant flaking effect of normal wear of moving parts.
• Particles not removed by flushing operations after boring or machining.
• Chipping due to sub-surface casting flaws.
• Minute component breakdown caused by stress usage.

Magnetic Drain Plugs prevent excessive wear to the system's components.

Magnetic Plugs are used by numerous manufacturers of gear boxes, transmissions, engines, and hydraulic systems for the automotive, aircraft, agricultural and machinery industries.
Typical applications include:
• Outboard Engines
• Earthmoving Equipment
• Combines
• Balers
• Crawler Tractors
• Lift Trucks
• Mining Equipment
• Military Vehicles
• Turbine Engines
• Truck Axles
• Heavy-Duty Transmissions



Part	Size "A"	Head Width "C"	Recess Dia. "H"	O/L Length "L"	
28-996	3/8 - 18	.428 - .440	.435 - .445	.805 - .860	----
28-997	1/2 - 14	.553 - 565	.560 - .570	.970 -1.04	----
28-998	3/4 - 14	.615 - .627	.725 - .735	1.120 - 1.170	----
28-999	1-11 1/2	.803 - 815	.895 - .905	1.25 - 1.33	----

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm.
For more information, visit www.P65Warnings.ca.gov

STANDARD BULL PLUG

- Sch 40 150#
- Zinc plated

Part #	Description	
91-008	2"	----
91-007	2" w/ 1/2" TAP	----
91-009	2-1/2"	----
91-010	3"	----
91-011	4"	----

XH BULL PLUG

- Made from sch. 80 pipe.
- Zinc plated
- Hollow

Part #	Description	
90-001	1/4"	----
90-002	3/8"	----
90-003	1/2"	----
90-004	3/4"	----
90-005	1"	----
90-006	1-1/4"	----
90-007	1-1/2"	----
90-008	2"	----
93-001*	2"	----
90-213	2" w/ 1/4" TAP	----
90-212	2" w/ 1/2" TAP	----
93-212*	2"XXH w/1/2" TAP	----
90-009	2-1/2"	----
90-010	3"	----
90-215	3" w/ 1/2" TAP	----
90-011	4"	----

* XXH

STANDARD SCH. 40 SWAGE

MIP X MIP

- Zinc plated

Part #	Description	
93-113	1-1/4" x 1"	----
93-121	2" x 1"	----
93-122	2" x 1-1/4"	----
93-123	2" x 1-1/2"	----
93-124	2-1/2" x 2"	----
93-125	3" x 1"	----
93-127	3" x 1-1/2"	----
93-128	3" x 2"	----
93-129	3" x 2-1/2"	----
93-130	4" x 2"	----
93-131	4" x 3"	----
93-139	6" x 3"	----

Pressure Ratings: Due to the wide variation in service conditions, temperature, vibrations, etc...We can make no recommendations as to allowable working pressure of swage nipples and bull plugs. There are a number of working pressure formulas from which the end user may choose to determine the required wall thickness of the piping system. It is our responsibility only to furnish a fitting with end dimensions equal to those of the pipe size and schedule ordered.

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

SWAGES

SCH 80 XH SWAGES
MIP X MIP

* Hex Style

Part #	Description	
90-100*	1/4" x 1/8"	----
90-102*	1/2" x 1/4"	----
90-103*	1/2" x 3/8"	----
90-104*	3/8" x 1/4"	----
90-105*	3/4" x 1/4"	----
90-106*	3/4" x 3/8"	----
90-107*	3/4" x 1/2"	----
90-108*	1" x 1/4"	----
90-109*	1" x 3/8"	----
90-110*	1" x 1/2"	----
90-111*	1" x 3/4"	----
90-140	1-1/4" x 3/4"	----
90-141	1-1/4" x 1"	----
90-114	1-1/2" x 1/2"	----
90-115	1-1/2" x 3/4"	----
90-116	1-1/2" x 1"	----
90-117	1-1/2" x 1-1/4"	----
90-118	2" x 1/4"	----
90-119	2" x 1/2"	----
90-120	2" x 3/4"	----
90-121	2" x 1"	----
90-122	2" x 1-1/4"	----
90-123	2" x 1-1/2"	----
90-124	2-1/2" x 2"	----
90-125	3" x 1"	----
90-126	3" x 1-1/4"	----
90-127	3" x 1-1/2"	----
90-128	3" x 2"	----
90-129	3" x 2-1/2"	----
90-133	4" x 1"	----
90-130	4" x 2"	----
90-131	4" x 3"	----
90-132	6" x 4"	----
90-150	6" x 2"	----
90-152	6" x 3"	----

XXH SWAGE

Part #	Description	
92-102*	1/2" x 1/4"	----
92-107*	3/4" x 1/2"	----
92-108*	1" x 1/4"	----
92-109*	1" x 3/8"	----
92-110*	1" x 1/2"	----
92-111*	1" x 3/4"	----
92-114	1-1/2" x 1/2"	----
92-115	1-1/2" x 3/4"	----
92-116	1-1/2" x 1"	----
92-119	2" x 1/2"	----
92-120	2" x 3/4"	----
92-121	2" x 1"	----
92-122	2" x 1-1/4"	----
92-123	2" x 1-1/2"	----
92-128	3" x 2"	----

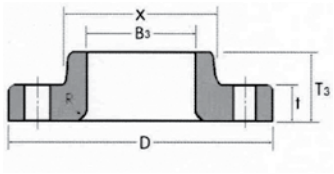
WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer.
For more information, visit www.P65Warnings.ca.gov

ASTMA105
ASME SA105
ANSI B16.5

Forged Steel Flanges

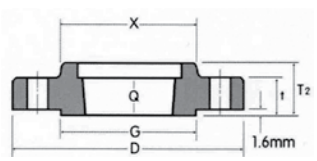
• A105 Forged Steel • CLASS 150

(1-1/2 thru 6" available in #316 Stainless Steel add SS to part#)



SLIP-ON 1/16" RAISED FACE FORGED STEEL FLANGE

Part #	Size	
107-020	1/2"	----
107-021	3/4"	----
107-022	1"	----
107-023	1-1/4"	----
107-024	1-1/2"	----
107-025	2"	----
107-026	2-1/2"	----
107-027	3"	----
107-029	4"	----
107-031	6"	----
107-032	8"	----
107-033	10"	----
107-034	12"	----



THREADED 1/16" RAISED FACE FORGED STEEL FLANGE

Part #	Size	
107-060	1/2"	----
107-061	3/4"	----
107-062	1"	----
107-063	1-1/4"	----
107-064	1-1/2"	----
107-065	2"	----
107-066	2-1/2"	----
107-067	3"	----
107-069	4"	----
107-071	6"	----
107-072	8"	----
107-073	10"	----
107-074	12"	----

Nominal Pipe Size	Depth of Socket in.	DRILLING			BOLTING				APPROXIMATE WEIGHT		
		Bolt Circle Diameter	Number of Holes	Diameter of Holes	Diameter of Bolts (inch)	Machine Bolt Length	Stud Bolt Length		Welding Neck	Slip-on and Threaded	Blind
						Raised Face	Raised Face	Ring Joint			
	Y								LBS	LBS	LBS
1/2	.382	2.382	4	.618	1/2	2.00	2.252	-	1.146	1.036	1.036
3/4	.441	2.752	4	.618	1/2	2.00	2.50	-	2.028	1.653	1.389
1	.500	3.118	4	.618	1/2	2.252	2.50	3.00	2.425	1.893	2.094
1-1/4	.559	3.50	4	.618	1/2	2.252	2.752	3.252	3.086	3.086	3.086
1-1/2	.618	3.882	4	.618	1/2	2.50	2.752	3.252	3.99	3.109	3.571
2	.689	4.752	4	.752	5/8	2.752	3.252	3.752	6.173	4.982	5.82
2-1/2	.752	5.5	4	.752	5/8	3.00	3.50	4.00	9.436	7.562	8.951
3	.811	6.0	4	.752	5/8	3.00	3.50	4.00	11.42	8.818	11.023
4	.941	7.50	8	.752	5/8	3.00	3.50	4.00	16.138	12.677	16.535
6	1.059	9.50	8	.882	3/4	3.252	4.00	4.50	24.824	17.196	26.455
8	1.252	11.752	8	.882	3/4	3.50	4.252	4.752	39.683	28.66	44.092
10	1.311	14.252	12	1.00	7/8	4.00	4.50	5.00	55.116	37.699	66.139
12	1.559	17	12	1.00	7/8	4.00	4.752	5.252	85.936	61.024	97.003

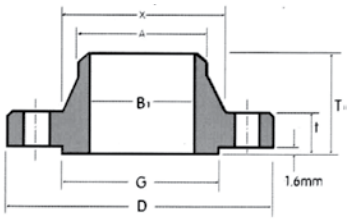
WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

ASTMA105
ASME SA105
ANSI B16.5

Forged Steel Flanges

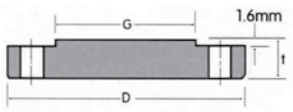
- **A105 Forged Steel**
- **CLASS 150**

(1-1/2 thru 6" available in #316 Stainless Steel add SS to part#)



WELD NECK FORGED STEEL FLANGE

Part #	Size	
107-000	1/2"	----
107-001	3/4"	----
107-002	1"	----
107-003	1-1/4"	----
107-004	1-1/2"	----
107-005	2"	----
107-006	2-1/2"	----
107-007	3"	----
107-009	4"	----
107-011	6"	----
107-012	8"	----
107-013	10"	----
107-014	12"	----



BLIND 1/16" RAISED FACE FORGED STEEL FLANGE

Part #	Size	
107-040	1/2"	----
107-041	3/4"	----
107-042	1"	----
107-043	1-1/4"	----
107-044	1-1/2"	----
107-045	2"	----
107-046	2-1/2"	----
107-047	3"	----
107-049	4"	----
107-051	6"	----
107-052	8"	----
107-053	10"	----
107-054	12"	----

Nominal Pipe Size	Outside Diameter	O.D of Raised Face	Diameter at Base of Hub	Thickness	BORE	LENGTH THRU HUB	
					Welding Neck Socket Welding	Welding Neck	Slip-on Threaded Socket Welding
	D	G	X	T	B1	T1	T2
1/2	3.504	1.382	1.189	.441	.618	1.882	.618
3/4	3.898	1.689	1.50	.50	.819	2.059	.618
1	4.252	2.00	1.941	.559	1.051	2.189	.689
1-1/4	4.606	2.50	2.311	.618	1.382	2.252	.811
1-1/2	5.00	2.882	2.559	.689	1.610	2.441	.882
2	5.984	3.618	3.059	.752	2.071	2.50	1.00
2-1/2	7.008	4.118	3.559	.882	2.469	2.752	1.118
3	7.52	5.00	4.252	.941	3.071	2.752	1.189
4	9.016	6.189	5.311	.941	4.031	3.00	1.311
6	10.984	8.50	7.559	1.00	6.071	3.50	1.559
8	13.504	10.618	9.689	1.118	7.980	4.00	1.752
10	15.984	12.752	12.00	1.189	10.02	4.00	1.941
12	19.016	15.00	14.382	1.252	12.00	4.50	2.189

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

COPPER FITTINGS

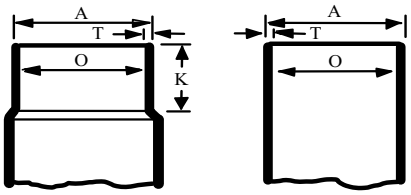
SYMBOL OF JOINT ENDS

C Solder joint fitting end made to receive copper tube diameter
Ftg. Solder joint fitting end made to copper tube diameter
F Internal ANSI Standard Taper Pipe Thread-Female
M External ANSI Standard Taper Pipe Thread-Male
Threaded ends ANSI/ ASME B1. Solder ends ASTM B88

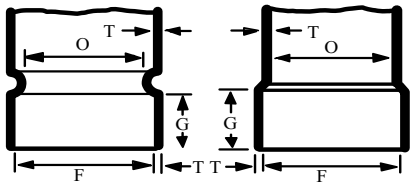
- Temp range 32° to 200°F
- Pressure @100° - 1/8-1 : 500 PSI
  - 1-1/4-2 : 400 PSI
  - 2-1/2 - 3: 300 PSI

NSF - 61 CERTIFIED
ALLOY C12200

THE ABOVE CONFORMS TO ASTM B 88 & ASTM B 306, A 306

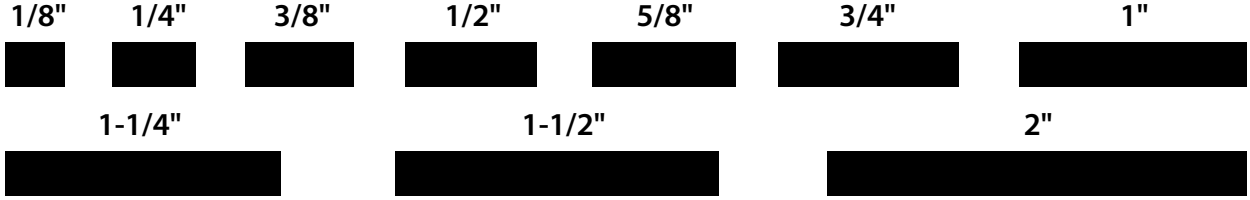


MALE (FITTING)



FEMALE (COPPER)

Nominal Size	Joint Ends										Metal Thickness T (in)	Inside Diameter O (in)
	Male End					Female End						
	Outside Diameter (A) in	Average Tolerance (mm)	Actual MIN in	O.D. MAX in	Length (Min) H (in)	Inside Diameter F (in)	Average Tolerance (mm)	Actual MIN in	O.D. MAX in	Length (Min) G (in)		
1/8	2/8	0.03	2/8	2/8	3/8	2/8	0.03	2/8	2/8	3/8	0	2/8
1/4	3/8		3/8	3/8	3/8	3/8		3/8	3/8	3/8	0	2/8
3/8	4/8		4/8	4/8	3/8	4/8		4/8	4/8	3/8	0	3/8
1/2	5/8		5/8	5/8	4/8	5/8		5/8	5/8	3/8	0	4/8
5/8	6/8		6/8	6/8	5/8	6/8		6/8	6/8	5/8	0	4/8
3/4	7/8		7/8	7/8	6/8	7/8		7/8	7/8	5/8	0	5/8
1	1-1/8	0.04	1-1/8	1-1/8	7/8	1-1/8	0.04	1-1/8	1-1/8	7/8	0	7/8
1-1/4	1-3/8		1-3/8	1-3/8	1	1-3/8		1-3/8	1-3/8	1	0	1-1/8
1-1/2	1-5/8	0.05	1-5/8	1-5/8	1-1/8	1-5/8	0.05	1-5/8	1-5/8	1-1/8	0	1-3/8
2	2-1/8		2-1/8	2-1/8	1-3/8	2-1/8		2-1/8	2-1/8	1-2/8	0	1-6/8
2-1/2	2-5/8		2-5/8	2-5/8	1-4/8	2-5/8		2-5/8	2-5/8	1-4/8	1/8	2-1/8
3	3-1/8		3-1/8	2-1/8	1-6/8	3-1/8		3-1/8	3-1/8	1-5/8	1/8	2-5/8
4	4-1/8		4-1/8	4-1/8	2-1/8	4-1/8		4-1/8	4-1/8	2-1/8	1/8	3-4/8



90° ELL C X C

Part#	Nominal (ID)	OD	Approx Net Wt.	Ind #	
77-100	1/8"	1/4"	0.01	W 02003	----
77-101	1/4"	3/8"	0.01	W 02009	----
77-102	3/8"	1/2"	0.03	W 02017	----
77-104	1/2"	5/8"	0.04	W 02022	----
77-107	5/8"	3/4"	0.07	W 02028	----
77-108	3/4"	7/8"	0.09	W 02034	----
77-110	1"	1-1/8"	0.17	W 02047	----
77-113	1-1/4"	1-3/8"	0.27	W 02077	----
77-114	1-1/2"	1-5/8"	0.41	W 02085	----
77-116	2"	2-1/8"	0.73	W 02086	----

WE-500-R 607-R 107-C

90° STREET ELL FTG. X C

77-124	1/4"	3/8"	0.01	W 02312	----
77-125	3/8"	1/2"	0.03	W 02321	----
77-126	1/2"	5/8"	0.05	W 01652	----
77-127	5/8"	3/4"	0.07	W 02330	----
77-128	3/4"	7/8"	0.12	W 01654	----
77-129	1"	1-1/8"	0.22	W 02344	----
77-130	1-1/4"	1-3/8"	0.33	W 02384	----
77-131	1-1/2"	1-5/8"	0.45	W 02385	----
77-132	2"	2-1/8"	0.87	W 02386	----

90° LONG TURN ELL C X C

77-139	1/8"	1/4"	0.01	W 02715	----
77-140	1/4"	3/8"	0.02	W 02716	----
77-141	5/16"		0.03		----
77-142	3/8"	1/2"	0.04	W 02717	----
77-143	1/2"	5/8"	0.06	W 02722	----
77-144	5/8"	3/4"	0.10	W 02728	----
77-145	3/4"	7/8"	0.15	W 02734	----

WE-500-L 607-LT 107-L

90° LONG TURN ST. ELL FTG. X C

77-154	3/8"	1/2"	0.04	W 02817	----
77-155	1/2"	5/8"	0.06	W 02822	----
77-156	5/8"	3/4"	0.11		----
77-157	3/4"	7/8"	0.15		----
77-158	1"	1-1/8"	0.33		----
77-159	1-1/4"	1-3/8"	0.46	W 02828	----
77-160	1-1/2"	1-5/8"	0.64	W 02834	----

WE-503-L 607-2LT

45° ELL C X C

Part#	Nominal	Approx Net Wt.	Ind #	
77-161	1/8"	0.01	W 03005	----
77-162	1/4"	0.01	W 03012	----
77-163	3/8"	0.02	W 03021	----
77-164	1/2"	0.04	W 03026	----
77-165	5/8"	0.06	W 03030	----
77-166	3/4"	0.10	W 03034	----
77-167	1"	0.19	W 03044	----
77-168	1-1/4"	0.27	W 03050	----
77-169	1-1/2"	0.39	W 03055	----
77-170	2"	0.75	W 03059	----

WE-504 606 106

STREET 45° FTG. X C

77-177	1/4"	0.01	W 03312	----
77-178	3/8"	0.02	W 03321	----
77-179	1/2"	0.06	W 03326	----
77-180	5/8"	0.06	W 03330	----
77-181	3/4"	0.10	W 03334	----
77-182	1"	0.18	W 03344	----
77-183	1-1/4"	0.27	W 03350	----
77-184	1-1/2"	0.38	W 03355	----
77-185	2"	0.75	W 03359	----

WE-505 606-2

COUPLING (SOCKET) W/ ROLLED UP TUBE STOP C X C

77-201	1/8"	0.01	W 01003	----
77-202	1/4"	0.01	W 01009	----
77-203	3/8"	0.02	W 01017	----
77-204	1/2"	0.03	W 01022	----
77-205	5/8"	0.04	W 01028	----
77-206	3/4"	0.06	W 01034	----
77-207	1"	0.10	W 01047	----
77-208	1-1/4"	0.15	W 01055	----
77-209	1-1/2"	0.22	W 01063	----
77-210	2"	0.39	W 01072	----

WC-400 100

COUPLING (SOCKET) LESS TUBE STOP C X C

77-219	1/8"	0.01	W 01900	----
77-220	1/4"	0.01	W 01901	----
77-222	1/2"	0.03	W 01903	----
77-223	3/4"	0.06	W 01905	----
77-224	1"	0.10	W 01906	----
77-225	1-1/4"	0.15	W 01907	----
77-226	1-1/2"	0.22	W 01908	----
77-227	2"	0.39	W 01909	----

WC-400NS 601

See page 169-171 for SWT x SWT LF Ball Valves

WROT SOLDER JOINT — COPPER FITTINGS

COUPLING (SOCKET) W/ DIMPLED TUBE STOP C X C

Part#	Nominal	Approx Net Wt.	Ind #	
77-238	1/2"	0.03		----
77-240	3/4"	0.06		----
77-241	1"	0.10		----
77-242	1-1/4"	0.15		----
77-244	2"	0.39		----

WC-400S

REDUCER COUPLING W/ STOP C X C

77-252	1/4" x 1/8"	0.01	W 01011	----
77-254	3/8" x 1/8"			----
77-253	3/8" x 1/4"	0.02	W 01019	----
77-256	1/2" x 1/4"	0.03	W 01023	----
77-255	1/2" x 3/8"	0.03	W 01021	----
77-258	5/8" x 1/2"	0.04	W 01025	----
77-263	3/4" x 3/8"	0.06	W 01036	----
77-262	3/4" x 1/2"	0.06	W 01029	----
77-267	1"x1/2"	0.10	W 01049	----
77-265	1"x3/4"	0.12	W 01038	----
77-270	1 -1/4" x 1/2"	0.14	W 01058	----
77-269	1 -1/4" x 3/4"	0.17	W 01056	----
77-268	1-1/4" x 1"	0.17	W 01051	----
77-273	1 -1/2" x 3/4"	0.25	W 01065	----
77-272	1-1/2" x1"	0.24	W 01064	----
77-271	1-1/2" x 1-1/4"	0.24	W 01060	----
77-277	2" x 1"	0.48	W 01074	----
77-276	2 x 1-1/4"	0.46	W 01073	----
77-275	2" x 1-1/2"	0.42	W 01069	----
77-280	2-1/2"x2"	0.79	W 01075	----

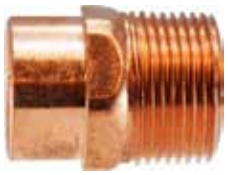
WC-400R 600-R

FITTING REDUCER FTG. C X C

77-292	3/8" x 1/8"	0.01	W 01314	----
77-291	3/8" x 1/4"	0.02	W 01312	----
77-294	1/2" x 1/4"	0.03	W 01317	----
77-293	1/2" x 3/8"	0.03	W01315	----
77-295	5/8" X 1/2"	0.03	W 01320	----
77-298	3/4" x 3/8"	0.05	W 01327	----
77-297	3/4" x 1/2"	0.06	W 01326	----
77-296	3/4" x 5/8"	0.08	W 01325	----
77-352	1" x 1/2"	0.10	W 01265	----
77-300	1"x3/4"	0.11	W 01337	----
77-355	1 -1/4" x 3/4"	0.15	W 01345	----
77-354	1-1/4" x1"	0.17	W 01343	----
77-360	1 -1/2" x 1/2"	0.21	W 01355	----
77-359	1 -1/2" x 3/4"	0.21	W 01353	----
77-358	1-1/2"x1"	0.22	W 01351	----
77-357	1 -1/2" X 1-1/4"	0.21	W 01350	----
77-365	2" x 1/2"	0.44	W 01364	----
77-363	2" x 1"	0.40	W 01360	----
77-361	2" x 1-1/2"	0.39	W 01358	----

WC-403 600-2

MALE ADAPTER
C X M



Part#	Nominal	Approx Net Wt.	Ind #	
77-393	1/8"	0.02		----
77-394	1/4"	0.04		----
77-398	3/8"	0.06	W 01125	----
77-401	1/2"	0.08	WB01131	----
77-306	3/4"	0.14	WB01146	----
77-309	1"	0.24	WB01163	----
77-314	1-1/4"	0.41	W 01171	----
77-318	1-1/2"	0.50	W 01179	----
77-322	2"	0.87	W 01187	----
77-395	1/4" x 1/2"	0.09	W 01113	----
77-311	1/2" x 3/8"	0.18		----
77-303	1/2" x 3/4"	0.16	W 01130	----
77-308	3/4" x 1/2"	0.31		----
77-307	3/4" x 1"	0.29	W 01145	----
77-312	1" x 3/4"	0.18	W 01164	----

• 14 more reducing sizes available

WC-401 604

FTG. MALE ADAPTER
FTG. X M

77-331	1/2"	0.09	W 01431	----
77-333	3/4"	0.15	W 01446	----
77-334	1"	0.15	W 01463	----
77-335	1-1/4"	0.41	W 01471	----
77-336	1-1/2"	0.41	W 0147X9	----
77-337	2"	0.86	W 01487	----

WC-404 604-2

COPPER TUBING

SEE COPPER TUBING FOR REFRIGERATION AND DRINKING WATER ON PAGE 341

Well done is better than well said. - Benjamin Franklin

FEMALE ADAPTERS
C X F

Part#	Nominal	Approx Net Wt.	Ind #	
77-343	1/2"	0.10	WB01231	----
77-349	3/4"	0.14	WB01246	----
77-402	1"	0.24	WB01263	----
77-406	1-1/4"	0.43	W 01271	----
77-410	1-1/2"	0.58	W 01279	----
77-413	2"	0.74	W 01287	----
77-341	3/8" x 1/2"	0.10	W 01224	----
77-347	1/2" x 1/4"	0.05	W 01233	----
77-346	1/2"x3/8"	0,70	W 01232	----
77-345	1/2" x 3/4"	0.15	WB01230	----

FEMALE FTG.
ADAPT. FTG. X F

77-419	3/8"	0.05	W 01525	----
77-420	1/2"	0.11	W 01531	----
77-423	3/4"	0.19	W 01546	----
77-424	1			----

• More sizes available

WC402 603 WC402R 603R

CAP

77-429	1/4"	0.01	W 07004	----
77-430	3/8"	0.01	W 07006	----
77-431	1/2"	0.02	WB07007	----
77-432	5/8"	0.03	W 07008	----
77-433	3/4"	0.04	WB07009	----
77-434	1"	0.08	WB07011	----
77-435	1-1/4"	0.11	W 07012	----
77-436	1-1/2"	0.18	W 07013	----
77-437	2"	0.30	W 07014	----

WC405 603-2 WC405R 603R

UNIONS C X C

• LF = Lead Free

77-453	1/4"	0.11	W 08001	----
77-454	3/8"	0.11	W 08002	----
77-455LF	1/2"	0.17	W 08003	----
77-456LF	3/4"	0.37	W 08004	----
77-457LF	1"	0.51	W 08005	----
77-606LF	1-1/4"	0.98	W08006	----
77-607LF	1-1/2"	1.21	W08007	----
77-608LF	2"		W08008	----

WC-415 617

U-TYPE STRAP

77-461	1/2"	0.03	A 02529	----
77-462	3/4"	0.03	A 02574	----
77-463	1"	0.04	A 02614	----
77-464	1-1/4"	0.04	A 02650	----

WC-407

WS-1100

TEE
C X C X C

Part#	Nominal 1 x 2 x 3	Approx Net Wt.	Ind #	
77-467	1/8"	0.02	W 40306	----
77-468	1/4"	0.03	W 04000	----
77-470	3/8"	0.05	W 04001	----
77-473	1/2"	0.08	WB04006	----
77-481	5/8"	0.12	W 04017	----
77-483	3/4"	0.18	WB04031	----
77-490	1"	0.35	WB04048	----
77-504	1-1/4"	0.58	W 04068	----
77-519	1-1/2"	0.72	W 04084	----
77-543	2"	1.35	W 40102	----
77-489	3/4"x1/2"x1/2"	0.15	WB04043	----
77-488	3/4" x 1/2" x 3/4"	0.19	WB04041	----
77-486	3/4" x 3/4" x 1/2"	0.15	WB04033	----
77-485	3/4"x3/4"x1"	0.25	W 04065	----
77-501	1"x1/2"x1"	0.34	W 04061	----
77-499	1"x3/4"x3/4"	0.31	W 04056	----
77-498	1"x3/4"x1"	0.38	W 04055	----
77-496	1"x1"x1/2"	0.24	WB04051	----
77-493	1"x1"x3/4"	0.29	WB04049	----
77-518	1 -1 /4"x 1/2" x 1-1/4"	0.58	W 04083	----
77-514	1 -1/4" x 3/4" x 1-1/4"	0.63	W 04078	----
77-508	1-1/4" x 1-1/4" x 3/4"	0.39	W 04070	----
77-507	1-1/4"x1-1/4"x1"	0.47	W 04069	----
77-506	1 -1/4" x1 -1/4" x 1-1/2"	0.79	W 40100	----
77-523	1 -1/2" x 1-1/2" x 3/4"	0.51	W 04087	----
77-522	1-1/2" x 1-1/2" x1"	0.60	W 04086	----
77-549	2"x2"x1/2"	0.77	W 40107	----
77-548	2" x 2" x 3/4"	0.90	W 40106	----
77-547	2"x2"x1"	0.99	W 40105	----

DROP EAR ELBOWS

• Lead Free Bronze

• Lead Free Brass

Part #	SWT x FIP	
44840LF	1/2 x 1/2 Bronze	----
44841LF	1/2 x 1/2 Brass	----
44842LF	3/4 x 1/2 Brass	----
44843LF	3/4 x 3/4 Brass	----

• Lead Free Brass

Part #	SWT x SWT	
44844LF	1/2 x 1/2	----

• Lead Free Bronze

Part #	Pex x FIP	
44845LF	1/2 x 1/2	----

WARNING: This product can expose you to chemicals, including Nickel, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

Sometimes the road less traveled is less traveled for a reason. - *Jerry Seinfeld*

PLASTIC FITTINGS

PIPE FITTINGS

- Nylon
- Polyethylene
- Polypropylene

HOSE BARB FITTINGS

- Nylon
- Polyethylene
- Polypropylene

GARDEN HOSE FITTINGS

- Nylon

NYLON & POLYPROPYLENE COMPRESSION FITTINGS

Machined Schedule 80 PVC nipples comply fully with ASTM D2464,

POLYPROPYLENE PUSH-IN TUBE FITTINGS AND VALVES

- NSF 61 certified for use with drinking (potable) water
- Max Temperature: 140°F
- Max Pressure: Not Rated

SCH 80 PVC NIPPLES

Machined Schedule 80 PVC nipples comply fully with ASTM D2464, threads conform to ASTM F1498, and the pipe is extruded from PVC 1120-1220 meeting ASTM D1784 and meets ASTM D1785, products standard 21-70

SCH 40 PVC FITTINGS

- NSF 61 certified for use with drinking (potable) water
- Max Temperature: 140°F
- Max Pressure: Not Rated

Resistant to corrosion, strong and rigid - commonly used in low pressure plumbing applications. ASTM D1784 and D2466.

SCH 80 PVC FITTINGS

PVC Material is Type 1 according to the American Society for Testing Materials (ASTM) D-1784. Fittings conform to ASTM D-2464 & ASTM D-2467. Temperature rating is 140°F. PSI is based on water at 73°F. Derate 50% at 110°F and 78% at 140°F. Not recommended for use in compressed air or gas systems.

AVAILABLE IN THREE TYPES OF PLASTIC

(W) White Nylon

Made from virgin grade formulated to resist physical stress and abrasion. This material meets F.D.A. requirements of Code of Federal Regulation part 177.1500 and is therefore suitable for food contact surfaces.

Temperature Range: -40^{0}F to 200^0 F

Working Pressure: 125 PSI maximum.

(B) Black Polyethylene

Made from a high molecular weight linear polyethylene formulated for chemical compatibility and high impact resistance at lower temeratures. Polyethylene is NSF approved for potable water.

Temperature Range: -65^{0}F to 190^{0}F

Working Pressure: 125 PSI maximum.

(P) Polypropylene

Made from the finest polypropylene resins. Polypropylene is used for its resistance to a wide range of chemicals. Working pressures decrease as temperatures increase.

- **NSF-approved materials**
- **FDA-approved materials**

Note: Do not use with compressed air or gas.

- 10% Fiberglass fill for extra strength

ELBOW

P

POLYPROPYLENE ELBOWS

Part #	Size	
28-702P	3/8"	----
28-704P	3/4"	----

W

NYLON ELBOWS

Part #	Size	
28-701W	1/4"	----
28-703W	1/2"	----
28-704W	3/4"	----
28-705W	1"	----
28-706W	1-1/4"	----
28-707W	1-1/2"	----
28-708W	2"	----

TEE

P

POLYPROPYLENE TEES

Part #	Size	
28-741P	1/4"	----
28-742P	3/8"	----
28-743P	1/2"	----
28-744P	3/4"	----

W

NYLON TEES

Part #	Size	
28-741W	1/4"	----
28-743W	1/2"	----
28-744W	3/4"	----
28-745W	1"	----
28-746W	1-1/4"	----
28-747W	1-1/2"	----
28-748W	2"	----

STREET ELBOW

P

POLYPROPYLENE STREET ELBOW

Part #	Size	
28-819P	1/8"	----
28-723P	1/2"	----
28-820P	2"	----
28-821P	3"	----

W

NYLON STREET ELBOW

Part #	Size	
28-819W	1/8"	----
28-720W	1/4"	----
28-721W	3/8"	----
28-723W	1/2"	----
28-724W	3/4"	----
28-725W	1"	----
28-726W	1-1/4"	----
28-727W	1-1/2"	----
28-820W	2"	----

HEX HEAD PLUGS

- Cored

B

POLYETHYLENE PLUGS

Part #	Size	
28-601B	1/8"	----
28-602B	1/4"	----
28-603B	3/8"	----
28-604B	1/2"	----
28-605B	3/4"	----

W

NYLON PLUGS

Part #	Size	
28-601W	1/8"	----
28-602W	1/4"	----
28-603W	3/8"	----
28-604W	1/2"	----
28-605W	3/4"	----
28-606W	1"	----
28-607W	1-1/4"	----
28-608W	1-1/2"	----
28-609W	2 "	----

PLASTIC PIPE

PLASTIC FITTINGS

HEX BUSHING

P

POLYPROPYLENE BUSHINGS

Part #	Size	
28-659P	1/4 x 1/8"	----
28-660P	3/8 x 1/8"	----
28-661P	3/8 x 1/4"	----
28-811P	1/2 x 1/8"	----
28-663P	1/2 x 1/4"	----
28-664P	1/2 x 3/8"	----
28-666P	3/4 x 1/4"	----
28-668P	3/4 x 1/2"	----
28-812P	1 x 3/8"	----
28-671P	1 x 1/2"	----
28-672P	1 x 3/4"	----
28-675P	1-1/4" x 1"	----
28-814P	1-1/2" x 1/2"	----
28-678P	1-1/2 x 3/4"	----
28-680P	1-1/2 x 1-1/4"	----
28-816P	2 x 1-1/4"	----
28-818P	3 x 2"	----

W

NYLON BUSHINGS

Part #	Size	
28-659W	1/4 x 1/8"	----
28-660W	3/8 x 1/8"	----
28-661W	3/8 x 1/4"	----
28-811W	1/2 x 1/8"	----
28-663W	1/2 x 1/4"	----
28-664W	1/2 x 3/8"	----
28-665W	3/4 x 1/8"	
28-666W	3/4 x 1/4"	----
28-667W	3/4 x 3/8"	----
28-668W	3/4 x 1/2"	----
28-671W	1 x 1/2"	----
28-672W	1 x 3/4"	----
28-674W	1-1/4 x 3/4"	----
28-675W	1-1/4 x 1"	----
28-678W	1-1/2 x 3/4"	----
28-679W	1-1/2 x 1"	----
28-680W	1-1/2 x 1-1/4"	----
28-815W	2" x 1/2"	----
28-682W	2 x 3/4"	----
28-683W	2 x 1"	----
28-685W	2 x 1-1/2"	----
28-818W	3" x 2"	----

HEX NIPPLES

B

POLYETHYLENE HEX NIPPLES

Part #	Size	
28-611B	1/8"	----
28-612B	1/4"	----
28-613B	3/8"	----
28-614B	1/2"	----

P

POLYPROPYLENE HEX NIPPLES

Part #	Size	
28-612P	1/4"	----
28-613P	3/8"	----
28-614P	1/2"	----
28-615P	3/4"	----
28-619P	2"	----

W

NYLON HEX NIPPLES

Part #	Size	
28-611W	1/8"	----
28-612W	1/4"	----
28-613W	3/8"	----
28-614W	1/2"	----
28-615W	3/4"	----
28-616W	1"	----
28-617W	1 1/4 "	----
28-618W	1 1/2"	----
28-619W	2"	----

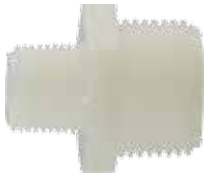
REDUCER NIPPLES

B

POLYETHYLENE HEX NIPPLES

Part #	Size	
28-623B	1/2 x 1/4"	----
28-624B	1/2 x 3/8"	----
28-628B	3/4 x 3/8"	----
28-625B	3/4 x 1/2"	----

W



NYLON REDUCING HEX NIPPLES

Part #	Size	
28-620W	1/4 x 1/8"	----
28-621W	3/8 x 1/8"	----
28-622W	3/8 x 1/4"	----
28-623W	1/2 x 1/4"	----
28-624W	1/2 x 3/8"	----
28-628W	3/4 x 3/8"	----
28-625W	3/4 x 1/2"	----
28-663W	1-1/4 x 1"	36100804

P = Polypropylene
W = White Nylon
B = Black Polyethylene

COUPLING

P

POLYETHYLENE COUPLINGS

Part #	Size	
28-761P	1/4"	----
28-762P	3/8"	----
28-763P	1/2"	----
28-764P	3/4"	----

W

NYLON COUPLINGS

Part #	Size	
28-761W	1/4"	----
28-762W	3/8"	----
28-763W	1/2"	----
28-764W	3/4"	----
28-765W	1"	----
28-803W	1-1/4"	----
28-767W	1-1/2"	----
28-768W	2"	----

Thank you... motion sensor hand towel machine. You never work, so I just end up looking like I'm waving hello to a wall robot.

-Jimmy Fallon

PIPE CAP

W

NYLON CAPS

Part #	Size	
28-640W	1/4"	----
28-641W	3/8"	----
28-642W	1/2"	----
28-643W	3/4"	----

PLASTIC BULKHEAD FITTINGS

P

20% Glass Filled Polypropylene w/ Santoprene Gasket

Part #	Fpt	Hole	
28-693P	1/2"	1-3/8"	----
28-694P	3/4"	1-3/8"	----
28-695P	1"	1-3/4"	----
28-696P	1-1/4"	2"	----
28-697P	1-1/2"	3"	----
28-698P	2"	3"	----
28-699P	3"	4-1/2"	----

P = Polypropylene
W = White Nylon
B = Black Polyethylene

MALE ADAPTERS

B

POLYETHYLENE BARB X MALE PIPE

Part #	Size	
33-002B	3/16 x 1/8"	----
33-003B	3/16 x 1/4"	----
33-004B	1/4 x 1/8"	----
33-005B	1/4 x 1/4"	----
33-006B	1/4 x 3/8"	----
33-007B	1/4 x 1/2"	----
33-008B	5/16 x 1/8"	----
33-009B	5/16 x 1/4"	----
33-012B	3/8 x 1/4"	----
33-013B	3/8 x 3/8"	----
33-014B	3/8 x 1/2"	----
33-026B	3/8 x 3/4"	----
33-015B	1/2 x 1/4"	----
33-016B	1/2 x 3/8"	----
33-017B	1/2 x 1/2"	----
33-018B	1/2 x 3/4"	----
33-019B	5/8 x 3/8"	----
33-020B	5/8 x 1/2"	----
33-021B	5/8 x 3/4"	----
33-022B	3/4 x 1/2"	----
33-023B	3/4 x 3/4"	----
33-024B	1 x 3/4"	----
33-025B	1 x 1"	----

P

POLYPROPYLENE HOSE BARB
Hose ID x MIP

Part #	Size	
33-012P	3/8 x 1/4"	----
33-013P	3/8 x 3/8"	----
33-014P	3/8 x 1/2"	----
33-015P	1/2 x 1/4"	----
33-016P	1/2 x 3/8"	----
33-017P	1/2 x 1/2"	----
33-018P	1/2 x 3/4"	----
33-303P	1/2" x 1"	----
33-020P	5/8 x 1/2"	----
33-022P	3/4 x 1/2"	----
33-023P	3/4 x 3/4"	----
33-000P	3/4 x 1"	----
33-024P	1 x 3/4"	----
33-025P	1 x 1"	----
33-323P	3" x 3"	----

PLASTIC BARBS

W

NYLON BARB MALE ADAPTERS
Hose ID x MIP

Part #	Size	
33-002W	3/16 x 1/8"	----
33-003W	3/16 x 1/4"	----
33-004W	1/4 x 1/8"	----
33-005W	1/4 x 1/4"	----
33-006W	1/4 x 3/8"	----
33-007W	1/4 x 1/2"	----
33-380W	1/4 x 3/4"	----
33-008W	5/16 x 1/8"	----
33-009W	5/16 x 1/4"	----
33-010W	5/16 x 3/8"	----
33-011W	3/8 X 1/8"	----
33-012W	3/8 x 1/4"	----
33-013W	3/8 x 3/8"	----
33-014W	3/8 x 1/2"	----
33-026W	3/8 x 3/4"	----
33-015W	1/2 x 1/4"	----
33-016W	1/2 x 3/8"	----
33-017W	1/2 x 1/2"	----
33-018W	1/2 x 3/4"	----
33-303W	1/2" x 1"	----
33-019W	5/8 x 3/8"	----
33-020W	5/8 x 1/2"	----
33-021W	5/8 x 3/4"	----
33-306W	3/4" x 3/8"	----
33-022W	3/4 x 1/2"	----
33-023W	3/4 x 3/4"	----
33-000W	3/4 x 1"	----
33-318W	3/4" x 1-1/4"	----
33-319W	3/4" x 1-1/2"	----
33-307W	1" x 1/2"	----
33-024W	1 x 3/4"	----
33-025W	1 x 1"	----
33-029W	1 x 1-1/4"	----
33-320W	1" x 1-1/2"	----
33-349W	1-1/4" x 3/4"	----
33-028W	1-1/4 x 1"	----
33-030W	1-1/4 x 1-1/4"	----
33-032W	1-1/4 x 1-1/2"	----
33-321W	1-1/2" x 1-1/4"	----
33-033W	1-1/2 x 1-1/2"	----
33-322W	2" x 1-1/2"	----
33-035W	2 x 2"	----

ELBOWS

B

POLYETHYLENE ELBOWS
Hose ID x MALE PIPE

Part #	Size	
33-308B	3/16 x 1/8	----
33-038B	1/4 x 1/8	----
33-039B	1/4 x 1/4	----
33-309B	1/4 x 3/8	----
33-046B	3/8 x 1/8	----
33-041B	3/8 x 1/4	----
33-042B	3/8 x 3/8	----
33-047B	3/8 x 1/2	----
33-043B	1/2 x 3/8	----
33-311B	1/2 x 1/2	----
33-385B	1/2 x 3/4	----
33-044B	5/8 x 3/8	----
33-045B	5/8 x 1/2	----
33-312B	5/8 x 3/4	----
33-313B	3/4 x 1/2	----
33-314B	3/4 x 3/4	----
33-316B	1 x 1	----

P

POLYPROPYLENE BARB ELBOW

Part #	Size	
33-048P	1/2 x 1/4	----
33-311P	1/2 x 1/2	----
33-385P	1/2 x 3/4	----
33-313P	3/4 x 1/2	----
33-314P	3/4 x 3/4	----
33-316P	1 x 1	----
33-334P	1-1/4 x 1	----
33-461P	1-1/4 x 1-1/4	----
33-463P	1-1/2 x 1-1/2	----

W

NYLON BARB X MIP ELBOWS

Part #	Size	
33-381W	3/16 x 1/4	----
33-038W	1/4 x 1/8	----
33-039W	1/4 x 1/4	----
33-309W	1/4 x 3/8	----
33-351W	1/4 x 1/2	----
33-040W	5/16 x 1/4	----
33-310W	5/16 x 3/8	----
33-046W	3/8 x 1/8	----
33-041W	3/8 x 1/4	----
33-042W	3/8 x 3/8	----
33-047W	3/8 x 1/2	----
33-384W	3/8 x 3/4	----
33-048W	1/2 x 1/4	----
33-043W	1/2 x 3/8	----
33-311W	1/2 x 1/2	----
33-385W	1/2 x 3/4	----
33-044W	5/8 x 3/8	----
33-045W	5/8 x 1/2	----
33-312W	5/8 x 3/4	----
33-329W	5/8" x 1"	----
33-313W	3/4 x 1/2	----
33-314W	3/4 x 3/4	----
33-315W	3/4 x 1	----
33-386W	1x3/4	----
33-316W	1 x 1	----
33-460W	1 x 1-1/4	----
33-461W	1-1/4 x 1-1/4	----
33-462W	1-1/2 x 1-1/4	----
33-463W	1-1/2 x 1-1/2	----
33-464W	2 x 2	----

P = Polypropylene
W = White Nylon
B = Black Polyethylene

HOSE BARB X FE ADAPTERS

B

POLYETHYLENE ADAPTER
Hose ID x FIP

Part #	Size	
33-053B	1/4 x 1/4"	----

W

NYLON ADAPTER
Barb x FIP

Part #	Size	
33-052W	1/4 x 1/8"	----
33-053W	1/4 x 1/4"	----
33-058W	3/8 x 1/4"	----
33-059W	3/8 x 3/8"	----
33-060W	3/8 x 1/2"	----
33-442W	3/8 x 3/4"	----
33-066W	1/2 x 1/4"	----
33-062P	1/2 x 3/8"	----
33-061W	1/2 x 1/2"	----
33-067W	1/2 x 3/4"	----
33-068W	5/8 x 1/2"	----
33-063W	5/8 x 3/4"	----
33-064W	3/4 x 1/2"	----
33-065W	3/4 x 3/4"	----

HOSE BARB X FE ELBOW

P

W

NYLON ELBOW
Hose ID x Female Pipe

Part #	Size	
33-342W	3/8 x 1/2"	----
33-402W	1/2 x 3/8"	----
33-403W	1/2 x 3/4"	----
33-343P	1/2 x 1/2"	----
33-343W	1/2 x 1/2"	----
33-344P	5/8 x 3/4"	----
33-344W	5/8 x 3/4"	----
33-470W	5/8 x 1/2"	----
33-345W	3/4 x 1/2"	----
33-471W	3/4 x 3/4"	----
33-471P	3/4 x 3/4"	----

UNION ELBOWS

B

POLYETHYLENE ELBOW

Part #	Size	
33-390B	1/4	----
33-391B	3/8	----
33-394B	1/2	----
33-395B	5/8	----
33-396B	3/4	----

W

NYLON ELBOW

Part #	Size	
33-390W	1/4	----
33-391W	3/8	----
33-394W	1/2	----
33-395W	5/8	----
33-396W	3/4	----
33-397W	1	----
33-398W	1-1/4	----
33-399W	1-1/2	----
33-389W	2	----

SPLICERS

B

POLYETHYLENE SPLICER

Part #	Size	
33-091B	1/8	----
33-092B	3/16	----
33-093B	1/4	----
33-095B	3/8	----
33-096B	1/2	----
33-097B	5/8	----
33-098B	3/4	----

POLYPROPYLENE SPLICER

Part #	Size	
33-095P	3/8	----
33-096P	1/2	----
33-098P	3/4	----
33-099P	1	----

SPLICERS

W

NYLON SPLICES

Part #	Size	
33-091W	1/8	----
33-092W	3/16	----
33-093W	1/4	----
33-094W	5/16	----
33-095W	3/8	----
33-096W	1/2	----
33-097W	5/8	----
33-098W	3/4	----
33-099W	1	----
33-480W	1-1/4	----
33-481W	1-1/2	----
33-482W	2	----

REDUCING SPLICERS

B

POLYETHYLENE SPLICES

Part #	Size	
33-406B	3/8 x 1/4	----
33-407B	1/2 x 1/4	----
33-408B	1/2 x 3/8	----
33-410B	5/8 x 1/2	----

W

NYLON SPLICES

Part #	Size	
33-079W	1/4 x 1/8	----
33-347W	1/4 x 3/16	----
33-406W	3/8 x 1/4	----
33-348W	3/8 x 5/16	----
33-407W	1/2 x 1/4	----
33-408W	1/2 x 3/8	----
33-409W	5/8 x 3/8	----
33-410W	5/8 x 1/2	----
33-089W	3/4 x 1/2	----

PLASTIC BARBS

PLASTIC FITTINGS

TEES BARBED ON ALL SIDES

B

POLYETHYLENE TEE

Part #	Size	
33-415B	1/8	----
33-418B*	3/16	----
33-420B	3/16	----
33-422B	1/4	----
33-426B	5/16	----
33-429B	3/8	----
33-433B	1/2	----
33-436B	5/8	----
33-437B	3/4	----
33-438B	1	----

P

POLYPROPYLENE TEE

Part #	Size	
33-429P	3/8	----
33-440P	1-1/2	----

ALL HOSE BARB "Y"

P

POLYPROPYLENE WYE

Part #	Size	
33-300P*	1/4"	----
33-301P*	3/8"	----
33-302P*	1/2"	----

**Natural Polypro*

W

NYLON WYE

Part #	Size	
33-301W	3/8"	----

W

NYLON TEE

Part #	Size	
33-415W	1/8	----
33-417W	5/32	----
33-420W	3/16	----
33-422W	1/4	----
33-426W	5/16	----
33-429W	3/8	----
33-433W	1/2	----
33-436W	5/8	----
33-437W	3/4	----
33-438W	1	----
33-439W	1-1/4	----
33-440W	1-1/2	----
33-441W	2	----

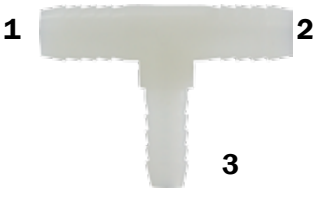
REDUCING TEES

B

POLYETHYLENE TEE

Part #	Size	
33-423B	3/8 x 3/8 x 1/4	----
33-430B	1/2 x 1/2 x 3/8	----
33-432B	3/8 x 3/8 x 1/2	----
33-434B	1/2 x 1/2 x 5/8	----
33-435B	3/4 x 3/4 x 1/2	----

W



NYLON TEE

Part #	Size	
33-430W	1/2 x 1/2 x 3/8	----
33-431W	5/8 x 5/8 x 3/8	----
33-432W	3/8 x 3/8 x 1/2	----
33-435W	3/4 x 3/4 x 1/2	----

MALE BRANCH TEE

W

NYLON BRANCH TEE

Part #	Size	
33-448W	1/4 x 1/4	----
33-450W	3/8 x 1/4	----
33-451W	3/8 x 3/8	----
33-453W	1/2 x 1/4	----
33-454W	1/2 x 3/8	----
33-455W	1/2 x 1/2	----
33-458W	5/8" x 3/4"	----
33-456W	3/4 x 3/4	----

Thank you, hard taco shells, for surviving the long journey from factory, to supermarket, to my plate and then breaking the moment I put something inside you. Thank you.

- Jimmy Fallon

PLASTIC GARDEN HOSE FITTINGS

FITTINGS WITH GARDEN HOSE THREAD

GARDEN HOSE CAP

- Washer not included

- White Nylon

P

Part #	Size	
30-103P	3/4"	----

GARDEN HOSE THREAD ADAPTERS

BARB X MALE GARDEN HOSE

- White Nylon

Part #	Size	
31-038	1/4"	----
31-039	3/8"	----
31-040	1/2"	----
31-041	5/8"	----
31-042	3/4"	----

Victorious warriors win first and then go to war, while defeated warriors go to war first and then seek to win.

- Sun Tzu

GARDEN HOSE ADAPTER INSERTS

- for assembly with 31-022

- White Nylon

Part #	Size	
31-030	1/4"	----
31-031	3/8"	----
31-032	1/2"	----
31-033	5/8"	----
31-034	3/4"	----
31-035	1/2" MPT	----

GARDEN HOSE NUT

- White Nylon

Part #	Size	
31-022	3/4"	----
31-023	3/4" FIP	----

MALE GARDEN HOSE X FEMALE PIPE

- White Nylon

Part #	Size	
31-067	MGH X 1/4	----
31-068	MGH X 1/2 FIP	----
31-069	MGH X 3/4	----

FEMALE GARDEN HOSE X MALE PIPE

- White Nylon

Part #	Size	
31-093	FGH X 3/4 MPT	----
31-095	FGH X 3/4 MGH	----

FEMALE GARDEN HOSE X FEMALE PIPE

- White Nylon

Part #	Size	
31-096	FGH X 1/2 FIP	----
31-097	FGH X 3/4 FIP	----

MALE GARDEN HOSE X MALE PIPE

- White Nylon

Part #	Size	
31-055	GHT X 3/8 MPT	----
31-058	GHT X 1/2 MPT	----
31-063	GHT X 3/4 MPT	----
31-064	GHT X 1 MPT	----

PLASTIC COMPRESSION

PLASTIC COMPRESSION FITTINGS

Corrosion resistant thermoresins designed to resist vibration, provide good electrical insulation, low flow resistance, and resistance to scale buildup.

The letter on the end of part no. denotes the type.

N = Nylon
P = Polypropylene

Standard nut and sleeves will be provided (sleeve is integral part of nut). Other sizes available upon request.

FDA and NSF Listed

UNION & REDUCING UNION CONNECTORS

P

Part #	Size	
17-064P	1/4"	----
17-066P	3/8"	----
17-079P	3/8" x 1/4"	----
17-068P	1/2"	----
17-081P	1/2" x 3/8"	----

• Nylon

Part #	Size	
17-064N	1/4"	----
17-065N	5/16"	----
17-078N	5/16" x 1/4"	----
17-066N	3/8"	----
17-079N	3/8" x 1/4"	----
17-068N	1/2"	----

BULKHEAD UNIONS

• Nylon

Part #	Size	
17-088N	1/4"	----
17-090N	3/8"	----
17-091N	1/2"	----

UNION TEES

• Nylon

Part #	Size	
17-103N	1/4"	----
17-105N	3/8"	----
17-106N	1/2"	----

UNION ELBOWS

P

Part #	Size	
17-124P	1/4"	----
17-126P	3/8"	----
17-127P	1/2"	----

• Nylon

Part #	Size	
17-124N	1/4"	----
17-126N	3/8"	----

FEMALE CONNECTORS

P

Part #	Size	
17-145P	1/4 x 1/8	----
17-153P	3/8 x 1/4	----
17-154P	3/8 x 3/8	----
17-158P	1/2 x 3/8	----
17-159P	1/2 x 1/2	----

• Nylon

Part #	Size	
17-146N	1/4 x 1/4	----
17-153N	3/8 x 1/4	----
17-154N	3/8 x 3/8	----

MALE CONNECTORS

P

Part #	Size	
17-179P	1/4 x 1/8	----
17-180P	1/4 x 1/4	----
17-188P	3/8 x 1/4	----
17-189P	3/8 x 3/8	----
17-190P	3/8 x 1/2	----
17-193P	1/2 x 1/4	----
17-194P	1/2 x 3/8	----
17-195P	1/2 x 1/2	----

• Nylon

Part #	Size	
17-176N	1/8 x 1/8"	
17-179N	1/4 x 1/8	----
17-180N	1/4 x 1/4	----
17-188N	3/8 x 1/4	----
17-189N	3/8 x 3/8	----
17-190N	3/8 x 1/2	----
17-193N	1/2 x 1/4	----
17-194N	1/2 x 3/8	----
17-195N	1/2 x 1/2	----

MALE ELBOWS

P

Part #	Size	
17-225P	1/4 x 1/4	----
17-233P	3/8 x 1/4	----
17-234P	3/8 x 3/8	----
17-237P	1/2 x 3/8	----
17-238P	1/2 x 1/2	----

• Nylon

Part #	Size	
17-224N	1/4 x 1/8	----
17-225N	1/4 x 1/4	----
17-233N	3/8 x 1/4	----
17-234N	3/8 x 3/8	----
17-237N	1/2 x 3/8	----
17-238N	1/2 x 1/2	----

PLASTIC PUSH-IN TUBE FITTINGS

Manufactured from safe, non-toxic materials meeting the requirements of the US FDA, WRAS, ANSI/NSF-51, 61, and SK Zert. Our products are widely used in water purification, food/beverage and pneumatic systems.

- Function & Quality : provides quick and convenient assembly - saving time & expense. Our ISO9001, 14001 registered quality system ensures our customers a superior level of product quality. Defects are easily detectable and maintenance is easy with its easy dismantling for access.
- Collet Design : Unique oval collet design is superior and more practical.
- Applications : Beyond water and food use, fittings can be used with air, gases, vacuum, & liquids. And all connections can be assembled & disassembled repeatedly.
- Material : Grey Acetal Copolymer, also known as POM. Highly durable and resistant to fatigue and creep. It has high resistance to a wide range of organic & inorganic chemicals and detergents. Not recommended for use with strong acids or repeated exposure to strong oxidizers. (polypropylene may be subbed)

SIZE / Temperature	Small Size						Large Size				
	5/32"	3/16"	1/4"	5/16"	3/8"	1/2"	5/8"	7/8"			28mm
	4mm	5mm	6mm	8mm	10mm	12mm	15mm	16mm	18mm	22mm	
1°C (34°F)	16bar (230PSI)				11bar (170PSI)		11bar (170PSI)				
20°C (68°F)	16bar (230PSI)				11bar (170PSI)		11bar (170PSI)				
65°C (150°F)	10bar (150PSI)				7bar (100PSI)		7bar (100PSI)				

- Fittings are not recommended for use with liquids other than water and food or beverage products.
- Do not use pipe dope or other liquid thread sealers. Use only Teflon tape to seal threaded connections.
- After assembling a tube connection, tug with moderate force to check for proper gripping of the tube.
- Before disassembling tube connections, always verify that pressure has been removed from the system.

UNION CONNECTOR

Part #	Tube OD	
20-018P	5/32"	----
20-702P	3/16"	----
20-019P	1/4"	----
20-020P	3/8"	----
20-021P	1/2"	----

UNION TEE

Part #	Tube OD	
20-028P	1/4"	----
20-029P	3/8"	----
20-030P	1/2"	----

REDUCING ELBOW

Part #	Tube OD	Tube OD	
20-733P	3/8"	3/16"	----
20-734P	3/8"	1/4"	----
20-736P	1/2"	3/8"	----

REDUCING UNION

Part #	Tube OD	Tube OD	
20-750P	1/4"	3/16"	----
20-754P	3/8"	3/16"	----
20-755P	3/8"	1/4"	----
20-756P	3/8"	5/16"	----
20-758P	1/2"	3/8"	----

REDUCING BRANCH TEE

Part #	Tube OD	Tube OD	
20-725P	3/8"	1/4"	----
20-724P	1/2"	3/8"	----

FEMALE CONNECTOR

Part #	Tube OD	Thread NPTF	
20-993P	1/4"	1/8"	----
20-035P	1/4"	1/4"	----
20-944P	3/8"	1/8"	----
20-036P	3/8"	1/4"	----

BULKHEAD UNION

Part #	Tube OD	
20-127P	1/4"	----
20-128P	3/8"	----
20-129P	1/2"	----

UNION ELBOW

Part #	Tube OD	
20-152P	1/4"	----
20-153P	3/8"	----
20-154P	1/2"	----

PLASTIC PUSH-IN | PLASTIC FITTINGS

MALE CONNECTOR

Part #	Tube OD	Thread NPTF	
20-050P	5/32"	1/8"	----
20-054P	1/4"	1/8"	----
20-055P	1/4"	1/4"	----
20-056P	1/4"	3/8"	----
20-057P	3/8"	1/8"	----
20-058P	3/8"	1/4"	----
20-059P	3/8"	3/8"	----
20-062P	3/8"	1/2"	----
20-061P	1/2"	3/8"	----
20-063P	1/2"	1/2"	----

STEM ADAPTER

Part #	Tube OD	Thread NPTF	
20-524P	1/4"	1/8"	----
20-525P	1/4"	1/4"	----
20-528P	3/8"	1/4"	----
20-529P	3/8"	3/8"	----

REDUCER

Part #	Tube OD	Tube OD	
20-512P	3/8"	1/4"	----
20-763P	3/8"	5/16"	----
20-514P	1/2"	3/8"	----

FIXED ELBOW

Part #	Tube OD	Thread NPTF	
20-068P	1/4"	1/8"	----
20-069P	1/4"	1/4"	----
20-070P	1/4"	3/8"	----
20-072P	3/8"	1/4"	----
20-073P	3/8"	3/8"	----

PLUG-IN ELBOW

Part #	Tube OD	Tube OD	
20-740P	5/32"	5/32"	----
20-742P	1/4"	1/4"	----
20-745P	3/8"	1/4"	----
20-747P	3/8"	3/8"	----
20-748P	1/2"	1/2"	----

2-WAY DIVIDER

Part #	Tube OD	List Price
20-776P	5/16"	----
20-777P	3/8"	----

PLUG

Part #	Tube OD	
20-876P	5/32"	----
20-878P	1/4"	----
20-880P	3/8"	----
20-881P	1/2"	----

TUBE END STOP

Part #	Tube OD	
20-925P	1/4"	----
20-927P	3/8"	----

PL X PL

Part #	Tube OD	
20-900P	1/4"	----
20-901P	3/8"	----

PL X MALE NPTF

Part #	Tube OD	Thread NPTF	
20-904P	1/4"	1/4"	----
20-905P	3/8"	3/8"	----

CHECK VALVE

Part #	Tube OD	
20-779P	3/8"	----

See Polyethylene Tubing on pages 332

HOSE ACCESSORIES

CAM AND GROOVE

ALUMINIUM

POLYPROPLYENE

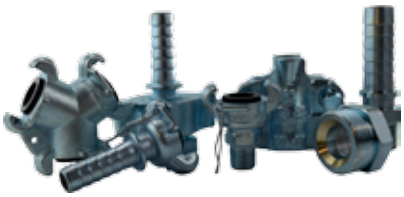
STAINLESS STEEL

BRASS

COMBINATION HOSE NIPPLES

FIRE HOSE FITTINGS

UNIVERSAL/ GROUND JOINT COUPLINGS



WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

ALUMINUM

SEE PAGES 332 FOR JUMP SIZES IN ALUMINUM

MALE ADAPTER X FEMALE NPT

TYPE A

Part#	Size	
61-911	3/4"	----
61-912	1"	----
61-913	1-1/4"	----
61-914	1-1/2"	----
61-915	2"	----
61-916	2-1/2"	----
61-917	3"	----
61-918	4"	----
61-919	5”	----
61-920	6”	----
61-910	8”	----

FEMALE COUPLER X MALE NPT

TYPE B

Part#	Size	
61-921	3/4"	----
61-922	1"	----
61-923	1-1/4"	----
61-924	1-1/2"	----
61-925	2"	----
61-926	2-1/2"	----
61-927	3"	----
61-928	4"	----
61-929	5”	----
61-930	6”	----

FEMALE COUPLER X HOSE SHANK

TYPE C

Part#	Size	
61-931	3/4"	----
61-932	1"	----
61-933	1-1/4"	----
61-934	1-1/2"	----
61-935	2"	----
61-936	2-1/2"	----
61-937	3"	----
61-938	4"	----
61-939	5”	----
61-940	6"	----
61-907	8"	----

FEMALE COUPLER X FEMALE NPT

TYPE D

Part#	Size	
61-941	3/4"	----
61-942	1"	----
61-943	1-1/4"	----
61-944	1-1/2"	----
61-945	2"	----
61-946	2-1/2"	----
61-947	3"	----
61-948	4"	----
61-950	5”	----
61-949	6”	----
61-904	8"	----

MALE ADAPTER X HOSE SHANK

TYPE E

Part#	Size	
61-951	3/4"	----
61-952	1"	----
61-953	1-1/4"	----
61-954	1-1/2"	----
61-955	2"	----
61-956	2-1/2"	----
61-957	3"	----
61-958	4"	----
61-959	5”	----
61-905	6”	----
61-906	8"	----

MALE ADAPTER X MALE NPT

TYPE F

Part#	Size	
61-961	3/4"	----
61-962	1"	----
61-963	1-1/4"	----
61-964	1-1/2"	----
61-965	2"	----
61-966	2-1/2"	----
61-967	3"	----
61-968	4"	----
61-970	5”	----
61-969	6”	----
61-999	8”	----

DUST CAP

TYPE DC

Part#	Size	
61-971	3/4"	----
61-972	1"	----
61-973	1-1/4"	----
61-974	1-1/2"	----
61-975	2"	----
61-976	2-1/2"	----
61-977	3"	----
61-978	4"	----
61-980	5”	----
61-979	6”	----
61-998	8”	----

DUST PLUG

TYPE DP

Part#	Size	
61-981	3/4"	----
61-982	1"	----
61-983	1-1/4"	----
61-984	1-1/2"	----
61-985	2"	----
61-986	2-1/2"	----
61-987	3"	----
61-988	4"	----
61-909	5”	----
61-908	6”	----

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ALUMINUM JUMP SIZES

MALE ADAPTER X MALE ADAPTER

ALUMINUM SPOOL ADAPTER

Part#	Size	
61-872	1”	----
61-873	1-1/2”	----
61-874	2”	----
61-875	2” x 3”	----
61-876	2-1/2”	----
61-877	3”	----
61-878	3” x 4”	----
61-879	4”	----

FEMALE COUPLER X FEMALE COUPLER

ALUMINUM TYPE DD

Part#	Size	
619-440	1-1/2”	----
619-450	2”	----
619-470	3”	----
619-480	4”	----

FEMALE COUPLER X MALE ADAPTER

ALUMINUM TYPE DA

Part#	Size	
619-001	1-1/2” x 1”	----
619-002	1-1/2” x 2”	----
619-003	2” x 1-1/2”	----
619-004	2” x 3”	----
619-005	2” x 4”	----
619-006	3” x 1-1/2”	----
619-007	3” x 2”	----
619-008	3” x 4”	----
619-009	4” x 2”	----
619-010	4” x 3”	----
619-011	4” x 6”	----
619-012	6” x 4”	----

MALE ADAPTER X FEMALE NPT

ALUMINUM JUMP SIZE A

Part#	Size	
61-851	2” x 3”	----
61-853	3” x 4”	----
61-854	4” x 3”	----

FEMALE COUPLER X MALE NPT

ALUMINUM JUMP SIZE B

Part#	Size	
61-859	3” x 2”	----
61-860	3” x 4”	----
61-861	4” x 3”	----

FEMALE COUPLER X FEMALE NPT

ALUMINUM JUMP SIZE D

Part#	Size	
61-867	3” x 2”	----
61-868	4” x 3”	----

MALE ADAPTER X MALE NPT

ALUMINUM JUMP SIZE F

Part#	Size	
61-870	3” x 2”	----
61-871	3” x 4”	----

TYPE A MALE COUPLER X FIP
TYPE B FEMALE COUPLER X MIP
TYPE C FEMALE COUPLER X HOSE SHANK
TYPE D FEMALE COUPLER X FIP
TYPE E MALE COUPLER X HOSE SHANK
TYPE F MALE COUPLER X MIP
TYPE DC DUST CAP
TYPE DP DUST PLUG

TEMPERATURE RATINGS								
Gasket Material	Temperature Range in °F							
	500	400	300	275	250	200	150	0
Buna N				x				-40
Neoprene					x			-65
*Vitron A		x						-40
Silicone	x							-30
*Teflon	x							-40
Nat. Rubber						x		-60
Butyl			x					-40
Hypalon					x			-65
EPDM							x	

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POLYPROPYLENE

MALE ADAPTER X FEMALE NPT

TYPE A

Part#	Size	
35-910	1/2"	----
35-911	3/4"	----
35-912	1"	----
35-913	1-1/4"	----
35-914	1-1/2"	----
35-915	2"	----
35-917	3"	8.47

FEMALE COUPLER X MALE NPT

TYPE B

Part#	Size	
35-920	1/2"	----
35-921	3/4"	----
35-922	1"	----
35-923	1-1/4"	----
35-924	1-1/2"	----
35-925	2"	----
35-927	3"	----

FEMALE COUPLER X HOSE SHANK

TYPE C

Part#	Size	
35-930	1/2"	----
35-931	3/4"	----
35-932	1"	----
35-933	1-1/4"	----
35-934	1-1/2"	----
35-935	2"	----
35-937	3"	----

FEMALE COUPLER X FEMALE NPT

TYPE D

Part#	Size	
35-940	1/2"	----
35-941	3/4"	----
35-942	1"	----
35-943	1-1/4"	----
35-944	1-1/2"	----
35-945	2"	----
35-947	3"	----

MALE ADAPTER X HOSE SHANK

TYPE E

Part#	Size	
35-950	1/2"	----
35-951	3/4"	----
35-952	1"	----
35-953	1-1/4"	----
35-954	1-1/2"	----
35-955	2"	----
35-957	3"	----

MALE ADAPTER X MALE NPT

TYPE F

Part#	Size	
35-960	1/2"	----
35-961	3/4"	----
35-962	1"	----
35-963	1-1/4"	----
35-964	1-1/2"	----
35-965	2"	----
35-967	3"	----

DUST CAP

TYPE DC

Part#	Size	
35-970	1/2"	----
35-971	3/4"	----
35-972	1"	----
35-973	1-1/4"	----
35-974	1-1/2"	----
35-975	2"	----
35-977	3"	----

DUST PLUG

TYPE DP

Part#	Size	
35-980	1/2"	----
35-981	3/4"	----
35-982	1"	----
35-983	1-1/4"	----
35-984	1-1/2"	----
35-985	2"	----
35-987	3"	----

316 STAINLESS STEEL

MALE ADAPTER X FEMALE NPT

TYPE A

Part#	Size	
63-911	3/4"	----
63-912	1"	----
63-913	1-1/4"	----
63-914	1-1/2"	----
63-915	2"	----
63-916	2-1/2"	----
63-917	3"	----
63-918	4"	----
63-919	5”	----

FEMALE COUPLER X MALE NPT

TYPE B

Part#	Size	
63-921	3/4"	----
63-922	1"	----
63-923	1-1/4"	----
63-924	1-1/2"	----
63-925	2"	----
63-926	2-1/2"	----
63-927	3"	----
63-928	4"	----
63-929	5”	----

FEMALE COUPLER X HOSE SHANK

TYPE C

Part#	Size	
63-931	3/4"	----
63-932	1"	----
63-933	1-1/4"	----
63-934	1-1/2"	----
63-935	2"	----
63-936	2-1/2"	----
63-937	3"	----
63-938	4"	----
63-939	5”	----

FEMALE COUPLER X FEMALE NPT

TYPE D

Part#	Size	
63-941	3/4"	----
63-942	1"	----
63-943	1-1/4"	----
63-944	1-1/2"	----
63-945	2"	----
63-946	2-1/2"	----
63-947	3"	----
63-948	4"	----
63-949	5”	----
63-950	6”	----

MALE ADAPTER X HOSE SHANK

TYPE E

Part#	Size	
63-951	3/4"	----
63-952	1"	----
63-953	1-1/4"	----
63-954	1-1/2"	----
63-955	2"	----
63-956	2-1/2"	----
63-957	3"	----
63-958	4"	----
63-959	5”	----
63-960	6”	----

MALE ADAPTER X MALE NPT

TYPE F

Part#	Size	
63-961	3/4"	----
63-962	1"	----
63-963	1-1/4"	----
63-964	1-1/2"	----
63-965	2"	----
63-966	2-1/2"	----
63-967	3"	----
63-968	4"	----
63-969	5”	----
63-999	6”	----

DUST CAP

TYPE DC

Part#	Size	
63-971	3/4"	----
63-972	1"	----
63-973	1-1/4"	----
63-974	1-1/2"	----
63-975	2"	----
63-976	2-1/2"	----
63-977	3"	----
63-978	4"	----
63-979	5”	----
63-980	6”	----

DUST PLUG
TYPE DP

Part#	Size	
63-981	3/4"	----
63-982	1"	----
63-983	1-1/4"	----
63-984	1-1/2"	----
63-985	2"	----
63-986	2-1/2"	----
63-987	3"	----
63-988	4"	----
63-989	6”	----

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BRASS

MALE ADAPTER X FEMALE NPT

TYPE A

Part#	Size	
44-911	3/4"	----
44-912	1"	----
44-913	1-1/4"	----
44-914	1-1/2"	----
44-915	2"	----
44-916	2-1/2"	----
44-917	3"	----
44-918	4"	----
44-919	5”	----
44-920	6”	----

FEMALE COUPLER X MALE NPT

TYPE B

Part#	Size	
44-921	3/4"	----
44-922	1"	----
44-923	1-1/4"	----
44-924	1-1/2"	----
44-925	2"	----
44-926	2-1/2"	----
44-927	3"	----
44-928	4"	----
44-929	5”	----
44-930	6”	----

FEMALE COUPLER X HOSE SHANK

TYPE C

Part#	Size	
44-931	3/4"	----
44-932	1"	----
44-933	1-1/4"	----
44-934	1-1/2"	----
44-935	2"	----
44-936	2-1/2"	----
44-937	3"	----
44-938	4"	----
44-939	5”	----
44-940	6”	----

FEMALE COUPLER X FEMALE NPT

TYPE D

Part#	Size	
44-941	3/4"	----
44-942	1"	----
44-943	1-1/4"	----
44-944	1-1/2"	----
44-945	2"	----
44-946	2-1/2"	----
44-947	3"	----
44-948	4"	----
44-949	5”	----
44-950	6”	----

MALE ADAPTER X HOSE SHANK

TYPE E

Part#	Size	
44-951	3/4"	----
44-952	1"	----
44-953	1-1/4"	----
44-954	1-1/2"	----
44-955	2"	----
44-956	2-1/2"	----
44-957	3"	----
44-958	4"	----
44-959	5”	----
44-960	6”	----

MALE ADAPTER X MALE NPT

TYPE F

Part#	Size	
44-961	3/4"	----
44-962	1"	----
44-963	1-1/4"	----
44-964	1-1/2"	----
44-965	2"	----
44-966	2-1/2"	----
44-967	3"	----
44-968	4"	----
44-969	5”	----
44-970	6”	----

DUST CAP

TYPE DC

Part#	Size	
44-971	3/4"	----
44-972	1"	----
44-973	1-1/4"	----
44-974	1-1/2"	----
44-975	2"	----
44-976	2-1/2"	----
44-977	3"	----
44-978	4"	----
44-979	5”	----
44-980	6”	----

DUST PLUG

TYPE DP

Part#	Size	
44-981	3/4"	----
44-982	1"	----
44-983	1-1/4"	----
44-984	1-1/2"	----
44-985	2"	----
44-986	2-1/2"	----
44-987	3"	----
44-988	4"	----
44-989	5”	----
44-990	6”	----

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STAINLESS STEEL AND BRASS JUMP SIZES

MALE ADAPTER X MALE ADAPTER

316 SS SPOOL ADAPTER

Part#	Size	
63-850	1”	----
63-851	1-1/2”	----
63-852	1-1/2” x 2”	----
63-853	2”	----
63-854	2” x 3”	----
63-855	3”	----
63-856	3” x 4”	----
63-857	4”	----

FEMALE COUPLER X FEMALE COUPLER

316 SS TYPE DD

Part#	Size	
639-440	1-1/2”	----
639-450	2”	----
639-470	3”	----
639-480	4”	----

FEMALE COUPLER X MALE ADAPTER

316 SS TYPE DA

Part#	Size	
639-001	2” x 1-1/2”	----
639-002	3” x 2”	----
639-003	4” x 3”	----
639-004	6” x 4”	----

MALE ADAPTER X MALE ADAPTER

BRASS SPOOL ADAPTER

Part#	Size	
44-212	1-1/2”	----
44-213	2”	----
44-214	2-1/2”	----
44-215	3”	----
44-216	4”	----

FEMALE COUPLER X MALE ADAPTER

BRASS TYPE DA

Part#	Size	
449-450	2” x 3”	----
449-470	3” x 2”	----
449-480	4” x 2”	----
449-481	4” x 3”	----
449-482	6” x 4”	----

INVESTMENT CAST STAINLESS STEEL HANDLE, RING & PIN

Part#	Size	
61-447	3/4”	----
61-448	1”	----
61-449	1-1/4” - 2-1/2”	----
61-452	3” & 4”	----
61-454	6”	----

FORGED BRASS HANDLE - RING & PIN STEEL

Part#	Size	
61-455	3/4”	----
61-450	1”	----
61-451	1-1/4” - 2-1/2”	----
61-453	3” & 4”	----
61-457	6”	----

SAFETY CLIP

Part #	Size	
66-015	1-1/4" - 2-1/2"	----

BUNA-N GASKET

Part#	Size	
BG-50	1/2”	----
BG-75	3/4”	----
BG-100	1”	----
BG-125	1-1/4”	----
BG-150	1-1/2”	----
BG-200	2”	----
BG-250	2-1/2”	----
BG-300	3”	----
BG-400	4”	----
BG-500	5”	----
BG-600	6”	----
BG-800	8”	----

SILICONE GASKET

Part#	Size	
SG300	3"	----
SG400	4"	----

VITON GASKET

Part#	Size	
VG100	1"	----
VG150	1-1/2"	----
VG200	2"	----
VG250	2-1/2"	----
VG300	3"	----

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KING NIPPLES

HOSE ACCESSORIES

STEEL HOSE NIPPLES

• Black

(Barb x Male Pipe)

Part #	Hose Size	
973-850	1/2"	----
973-851	3/4"	----
973-852	1"	----
973-853	1-1/4"	----
973-854	1-1/2"	----
973-855	2"	----
973-856	2-1/2"	----
973-857	3"	----
973-858	4"	----
973-861	8"	

ZINC PLATED STEEL

Part #	Size	
973-870	1/2"	----
973-871	3/4"	----
973-872	1"	----
973-873	1-1/4"	----
973-874	1-1/2"	----
973-875	2"	----
973-876	2-1/2"	----
973-877	3"	----
973-878	4"	----
973-879	5"	----
973-880	6"	----
973-881	8"	----

ZINC PLATED STEEL EXPANDER & REDUCER

NEW

Hose x MIP

Part #	Size	
973-862	3/4 x 1	----
973-884	1 x 3/4	----
973-863	1 x 1-1/4	----
973-885	1-1/4 x 1	----
973-886	1-1/4 x 1-1/2	----
973-887	1-1/2 x 1-1/4	----
973-864	1-1/2 x 2	----
973-888	2 x 1-1/2	----
973-859	2 x 2-1/2	----
973-869	2-1/2 x 2	----
973-865	2-1/2 x 3	----
973-867	3 x 2-1/2	----
973-866	3 x 4	----
973-868	4 x 3	----

316 STAINLESS STEEL

Part #	Size	
973-700	1/2"	----
973-701	3/4"	----
973-702	1"	----
973-703	1-1/4"	----
973-704	1-1/2"	----
973-705	2"	----
973-706	2-1/2"	----
973-707	3"	----
973-708	4"	----

BRASS

• Lead Free

Part #	Size	
973-600	1/2"	----
973-601	3/4"	----
973-602	1"	----
973-603	1-1/4"	----
973-604	1-1/2"	----
973-605	2"	----
973-606	2-1/2"	----
973-607	3"	----

ALUMINUM

Part #	Size	
973-620	1/2"	----
973-621	3/4"	----
973-622	1"	----
973-623	1-1/4"	----
973-624	1-1/2"	----
973-625	2"	----
973-626	2-1/2"	----
973-627	3"	----
973-628	4"	----

MENDERS

STEEL HOSE MENDERS

Part #	Hose Size	
973-890	1/2"	----
973-891	3/4"	----
973-892	1"	----
973-893	1-1/4"	----
973-894	1-1/2"	----
973-895	2"	----

PLATED STEEL MENDER

• Zinc

Part #	Size	
973-650	3/8"	----
973-651	1/2"	----
973-652	3/4"	----
973-653	1"	----
973-654	1-1/4"	----
973-655	1-1/2"	----
973-656	2"	----
973-657	2-1/2"	----
973-658	3"	----
973-659	4"	----

316 STAINLESS STEEL HOSE MENDER

Part #	Size	
73-670	3/4"	----
73-671	1"	----
73-672	1-1/4"	----
73-673	1-1/2"	----
73-674	2"	----

• Lead Free

BRASS HOSE MENDER

Part #	Size	
73-983	3/4"	----
73-984	1"	----
73-985	1-1/4"	----
73-986	1-1/2"	----
73-987	2"	----

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MALE NPT ENDS

• Twist claw/ universal/ chicago

• Malleable iron
• ISO PSI

* Safety clip included

Part #	Size	
66005	3/8"	----
66006	1/2"	----
66007	3/4"	----
66008	1"	----

WASHER

Part #	
66000	----

FEMALE NPT ENDS

* Safety clip included

Part #	Size	
66009	3/8"	----
66010	1/2"	----
66011	3/4"	----
66012	1"	----

HOSE END

* Safety clip included

Part #	Size	
66001	3/8"	----
66002	1/2"	----
66003	3/4"	----
66004	1"	----

SAFETY CLIP

Part #	Size	
66-015	1-1/4" - 2-1/2"	----

TRIPLE CONNECTIONS

Part #	
66013	----

FOR SHOP USE ONLY,
NOT FOR STEAM OR
HYDRAULIC APPLICATIONS

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GROUND JOINT COUPLINGS

For high pressure air and water service, steam, sanitary, high pressure spray, LPG and anhydrous ammonia service, petroleum products and chemicals: All parts plated malleable iron. Insert and spud may be either steel or malleable iron. NPT Male and Female spud. Female wing nut-to-spud connection is NPSM ground joint.

HEAVY DUTY COUPLINGS - GROUND JOINT TYPE - PLATED

HOSE STEM W/ WING NUT AND FEMALE SPUD

Part #	Size	
73-003	1/2"	----
73-004	3/4"	----
73-005	1"	----
73-006	1-1/4"	----
73-007	1-1/2"	----
73-008	2"	----
73-009	2-1/2"	----
73-010	3"	----
73-011	4"	----

HOSE STEM ONLY

Part #	Size	
73-023	1/2"	----
73-024	3/4"	----
73-025	1"	----
73-026	1-1/4"	----
73-027	1-1/2"	----
73-028	2"	----
73-029	2-1/2"	----
73-030	3"	----
73-031	4"	----

WING NUT ONLY

Part #	Size	
73-033	1/2"	----
73-035	1"	----
73-036	1-1/4"	----
73-037	1-1/2"	----
73-038	2"	----
73-039	2-1/2"	----
73-040	3"	----
73-041	4"	----

FEMALE SPUD ONLY

Part #	Size	
73-063	1/2"	----
73-064	3/4"	----
73-065	1"	----
73-066	1-1/4"	----
73-067	1-1/2"	----
73-068	2"	----
73-069	2-1/2"	----
73-070	3"	----
73-071	4"	----

MALE PIPE STEM ONLY (NPT)

Part #	Size	
73-043	1/2"	----
73-044	3/4"	----
73-045	1"	----
73-046	1-1/4"	----
73-047	1-1/2"	----
73-048	2"	----
73-049	2-1/2"	----
73-050	3"	----
73-051	4"	----

2, 4, 6 BOLT CLAMPS

Part #	Size	# Bolts	
73-056	3/4"	2	----
73-057	1"	4	----
73-058	1-1/2"	4	----
73-059	2"	4	----
73-060	3"	4	----

Danger: Failure or improper selection or improper use of hose couplings or related accessories can cause death, personal injury and property damage. Possible consequences of failure or improper selection or improper use of hose couplings or related accessories include but are not limited to:

- Coupling or parts thrown off at high speed.
- High velocity fluid discharge.
- Explosion or burning of the conveyed fluid.
- Contact with suddenly moving or falling objects that are to be held in position or moved by the conveyor fluid.
- Dangerously whipping hose.
- Contact with conveyed fluids that may be hot, cold, toxic or otherwise injurious.
- Sparking or explosion while paint or flammable liquid spraying.

Before selecting or using any of our products, it is important to check with our offices for more detailed specifications regarding use.

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

HYDRANT ADAPTERS - BRASS

FEMALE X MALE

Part #	Description	
444-011	1-1/2" NST x 3/4" GHT	----
444-000	2-1/2" NST x 3/4" GHT	----
444-001	2-1/2" NST x 3/4" NPT	----
444-002	2-1/2" NST x 1" NPT	----
444-005	2-1/2" NST x 1-1/2" NPT	----
444-007	2-1/2" NST x 2" NPSH	----
444-008	2-1/2" NST x 2" NPT	----
444-006	2-1/2" NST x 1-1/2" NST	----

FEMALE TO MALE HEX ADAPTER - BRASS

FEMALE X MALE

Part #	Description	
444-021	1-1/2" NST x 1-1/2" NPSH	----
444-023	1-1/2" NPT x 1-1/2" NPSH	----
444-020	1-1/2" NST x 1-1/2" NPT	----
444-318	2 NPT x 2-1/2" NST	----

DOUBLE MALE HEX NIPPLE - BRASS

Part #	Description	
444-042	1-1/2" NPT x 1-1/2" NPSH	----
444-040	1-1/2" NPT x 1-1/2" NST	----
444-048	2" NPT x 2-1/2" NST	----
444-095	2-1/2" NST x 1-1/2" NST	----
444-045	2-1/2" NPT x 2-1/2" NST	----
444-049	3" NPT x 2-1/2" NST	----

MALE SWIVEL ADAPTER - BRASS W/LUGS

Part #	Description Female x Male	
444-111	2-1/2" NST x 2" NPT	----
444-112	2-1/2" NST x 2-1/2" NPT	----
444-113	2-1/2" NST x 3" NPT	----

CAP - BRASS

Part #	Description	
444-062	2-1/2" NST	----
444-313	4-1/2" NST	----
444-320	2-1/2" NST PLUG	----
444-060	1-1/2" NST	

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

HOSE CLAMPS

HOSE CLAMPS

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1 EAR, 2 EAR, GAPLESS
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PRE-FORMED
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TOOLS
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NON-PERFORATED OR LINED BAND
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RUBBER LINED
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HOSE FERRULES
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WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

MINIATURE CLAMPS - 5/16" BAND

Stainless Steel band with Carbon Steel Housing and Screw

300 Series
- 1/4" Hex Slotted Carbon Steel Screw
- 5/16" Wide 301 Stainless Steel Band
- Carbon Steel Housing

Applications: For marine, agricultural, industrial and automotive uses. Corrosion resistance varies with stainless components.

Mechanically interlocked, 3 piece construction for service sealing pressure without spot welding.

5/16" band, 1/4" screw

Part #	Dia. Range		Box/Case	
	Min.	Max.		
300-0004	7/32"	5/8"	200/2400	----
300-005	7/16"	11/16"	200/2400	----
300-0006	5/16"	7/8"	200/2400	----
300-0008	7/16"	1"	200/1200	----
300-010	1/2"	1-1/16"	200/1200	----
300-012	9/16"	1-1/4"	200/1200	----
300-016	11/16"	1-1/2"	200/1200	----
300-0020	7/8"	1-3/4"	200/1200	----

1/2" BAND CLAMPS

Stainless Steel band with Carbon Steel Housing and Screw

600 Series
- 5/16" Hex Slotted Carbon Steel Screw
- 1/2" Wide 201 Stainless Steel Band
- Carbon Steel Housing

Applications: A general purpose clamp for automobiles, plumbing, home and garden general clamping applications, with anti-corrosive properties varying with the number of components made from stainless steel.

- No PSI Rating
- 50lb/ Inch Torque Rating Die Set Function

1/2" band, 5/16" screw

Part #	#	Dia. Range		Bag/Case	
		Min.	Max.		
600-006	6	3/8"	7/8"	100/600	----
600-008	8	7/16"	1"	100/600	----
600-010	10	9/16"	1-1/16"	100/600	----
600-012	12	9/16"	1-1/4"	100/600	----
600-016	16	11/16"	1-1/2"	100/600	----
600-020	20	3/4"	1-3/4"	100/300	----
600-024	24	1-1/16"	2"	100/300	----
600-028	28	1-5/16"	2-1/4"	100/300	----
600-032	32	1-9/16"	2-1/2"	100/300	----
600-036	36	1-13/16"	2-3/4"	50/200	----
600-040	40	2-1/16"	3"	50/200	----
600-044	44	2-5/16"	3-1/4"	50/200	----
600-048	48	2-9/16"	3-1/2"	50/200	----
600-052	52	2-13/16"	3-3/4"	25/100	----
600-056	56	3-1/16"	4"	25/100	----
600-060	60	3-5/16"	4-1/4"	25/100	----
600-064	64	2-1/2"	4-1/2"	25/100	----
600-072	72	3"	5"	25/100	----
600-080	80	3-1/2"	5-1/2"	10/100	----
600-088	88	4"	6"	10/100	----
600-096	96	4-1/2"	6-1/2"	10/100	----
600-104	104	5"	7"	10/100	----

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

only I can change my life. No one can do it for me.- Carol Burnett

325 & 611 WORM GEAR CLAMPS | HOSE CLAMPS

MINIATURE CLAMPS - 5/16" BAND

325 Series

- 1/4" Hex Slotted Carbon Steel Screw
- 5/16" Wide 301 Stainless Steel Band
- 301 Stainless Steel Housing

Stainless Steel band and housing with Carbon Steel Screw

5/16" band, 1/4" screw

Part #	Dia. Range		Box/Case	
	Min.	Max.		
325-004	7/32"	5/8"	200/2400	----
325-005	7/16"	11/16"	200/2400	----
325-006	5/16"	7/8"	200/2400	----
325-008	7/16"	1"	200/1200	----
325-010	1/2"	1-1/16"	200/1200	----
325-012	9/16"	1-1/4"	200/1200	----
325-016	11/16"	1-1/2"	200/1200	----
325-020	7/8"	1-3/4"	200/1200	----

Lightweight, low profile, compact design allows ease of installation in restricted applications. The 5/16 band width generates significant sealing pressure with relatively low installationi torque levels. 300 series stainless band and housing

Applications: For agricultural, industrial and automotive uses. Corrosion resistance varies with stainless components.

Mechanically interlocked, 3 piece construction for service sealing pressure without spot welding.

1/2" BAND CLAMPS

611 Series

- 5/16" Hex Slotted Carbon Steel Screw
- 1/2" Wide 201 Stainless Steel Band
- 301 Stainless Steel Housing

Applications: The perfect clamp for automobiles, plumbing, home and garden general clamping applications, with anti-corrosive properties varying with the number of components made from stainless steel.

- No PSI Rating
- 50lb/ Inch Torque Rating Die Set Function

Stainless Steel band and housing with Carbon Steel Screw

1/2" band, 5/16" screw

Part #	#	Dia. Range		Bag/Case	
		Min.	Max.		
611-006	6	3/8"	7/8"	100/600	----
611-008	8	7/16"	1"	100/600	----
611-010	10	9/16"	1-1/16"	100/600	----
611-012	12	9/16"	1-1/4"	100/600	----
611-016	16	11/16"	1-1/2"	100/600	----
611-020	20	3/4"	1-3/4"	100/300	----
611-024	24	1-1/16"	2"	100/300	----
611-028	28	1-5/16"	2-1/4"	100/300	----
611-032	32	1-9/16"	2-1/2"	100/300	----
611-036	36	1-13/16"	2-3/4"	50/200	----
611-040	40	2-1/16"	3"	50/200	----
611-044	44	2-5/16"	3-1/4"	50/200	----
611-048	48	2-9/16"	3-1/2"	50/200	----
611-052	52	2-13/16"	3-3/4"	25/100	----
611-056	56	3-1/16"	4"	25/100	----
611-060	60	3-5/16"	4-1/4"	25/100	----
611-064	64	2-1/2"	4-1/2"	25/100	----
611-072	72	3"	5"	25/100	----
611-080	80	3-1/2"	5-1/2"	10/100	----
611-088	88	4"	6"	10/100	----
611-096	96	4-1/2"	6-1/2"	10/100	----
611-104	104	5"	7"	10/100	----
611-116	116	5-3/4"	7-3/4"	100/100	----
611-128	128	6-1/2"	8-1/2"	100/100	----
611-152	152	2"	10"	100/100	----
611-164	164	1-3/4"	10-3/4"	100/100	----
611-176	176	9-1/4"	11-1/4"	100/100	----
611-188	188	2-1/16"	12-1/4"	100/100	----
611-200	200	11"	13"	100/100	----
611-212	212	11-3/4"	13-3/4"	100/100	----
611-224	224	12-1/2"	14-1/2"	100/100	----
611-248	248	10-3/4"	16"	100/100	----
611-270	270	15-3/8"	17-3/8"	100/100	----
611-312	312	18"	20"	100/100	----
611-332	332	19-1/8"	21-1/4"	100/100	----
611-390	390	22-7/8"	24-7/8"	100/100	----

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

MINIATURE CLAMPS - 5/16" BAND

350 Series

- 1/4" Hex Slotted 410 Stainless Steel Screw
- 5/16" Wide 301 Stainless Steel Band
- 301 stainless Steel Housing
- 6mm thick

All Stainless Steel

5/16" band, 1/4" screw

Part #	Dia. Range		Box/Case	
	Min.	Max.		
350-004	7/32"	5/8"	200/2400	----
350-005	7/16"	11/16"	200/2400	----
350-006	5/16"	7/8"	200/2400	----
350-008	7/16"	1"	200/1200	----
350-010	1/2"	1-1/16"	200/1200	----
350-012	9/16"	1-1/4"	200/1200	----
350-016	11/16"	1-1/2"	200/1200	----
350-020	7/8"	1-3/4"	200/1200	----

Applications: For agricultural, industrial and automotive uses. Corrosion resistance varies with stainless components.

Mechanically interlocked, 3 piece construction for service sealing pressure without spot welding.

1/2" WIDE BAND CLAMPS (12.70mm)

620 Series

- 5/16" Hex Slotted 305 Stainless Steel Screw
- 1/2" Wide 301 Stainless Steel Band
- 301 Stainless Steel Housing

- 60mm Thickness
- Use for underground and other high corrosive applications.
- For a sure grip application.
- Especially suited to industrial applications

All Stainless Steel

1/2" band, 5/16" screw

Part #	#	Dia. Range		Box/Case	
		Min.	Max.		
620-006	6	3/8"	7/8"	100/600	----
620-008	8	7/16"	1"	100/600	----
620-010	10	9/16"	1-1/16"	100/600	----
620-012	12	9/16"	1-1/4"	100/600	----
620-016	16	11/16"	1-1/2"	100/600	----
620-020	20	3/4"	1-3/4"	100/300	----
620-024	24	1-1/16"	2"	100/300	----
620-028	28	1-5/16"	2-1/4"	100/300	----
620-032	32	1-9/16"	2-1/2"	100/300	----
620-036	36	1-13/16"	2-3/4"	50/200	----
620-040	40	2-1/16"	3"	50/200	----
620-044	44	2-5/16"	3-1/4"	50/200	----
620-048	48	2-9/16"	3-1/2"	50/200	----
620-052	52	2-13/16"	3-3/4"	25/100	----
620-056	56	3-1/16"	4"	25/100	----
620-060	60	3-5/16"	4-1/4"	25/100	----
620-064	64	2-1/2"	4-1/2"	25/100	----
620-072	72	3"	5"	25/100	----
620-080	80	3-1/2"	5-1/2"	10/100	----
620-088	88	4"	6"	10/100	----
620-096	96	4-1/2"	6-1/2"	10/100	----
620-104	104	5"	7"	10/100	----
620-116	116	5-3/4"	7-3/4"	100/100	----
620-128	128	6-1/2"	8-1/2"	100/100	----
620-152	152	2"	10"	100/100	----
620-164	164	1-3/4"	10-3/4"	100/100	----
620-176	176	9-1/4"	11-1/4"	100/100	----
620-188	188	9.9"	12-1/4"	100/100	----
620-200	200	11"	13"	100/100	----
620-212	212	11-3/4"	13-3/4"	100/100	----
620-224	224	12-1/2"	14-1/2"	100/100	----
620-248	248	10-3/4"	16"	100/100	----
620-270	270	15-3/8"	17-3/8"	100/100	----
620-312	312	18"	20"	100/100	----
620-332	332	19-1/8"	21-1/4"	100/100	----
620-390	390	22-7/8"	24-7/8"	100/100	----

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

#316 MARINE WORM GEAR CLAMPS | HOSE CLAMPS

MINIATURE CLAMPS - 5/16" BAND

All #316 SS for Marine Environments

5/16" band, 1/4" screw

Part #	Dia. Range		Box/Case	
	Min.	Max.		
350-004SS	7/32"	5/8"	200/2400	----
350-005SS	7/16"	11/16"	200/2400	----
350-006SS	5/16"	7/8"	200/2400	----
350-008SS	7/16"	1"	200/1200	----
350-010SS	1/2"	1-1/16"	200/1200	----
350-012SS	9/16"	1-1/4"	200/1200	----
350-016SS	11/16"	1-1/2"	200/1200	----
350-020SS	7/8"	1-3/4"	200/1200	----

350SS Series

- 1/4" Hex Slotted 316 Stainless Steel Screw
- 316 Stainless Steel Band
- 8mm wide
- 60 mm thick
- 316 stainless Steel Housing

Applications: For marine, agricultural, industrial and automotive uses. Corrosion resistance varies with stainless components.

Mechanically interlocked, 3 piece construction for service sealing pressure without spot welding.

1/2" WIDE BAND CLAMPS (12.70mm)

All #316 SS for Marine Environments

1/2" band, 5/16" screw

All 316SS Part #	#	Dia. Range		Box/Case	
		Min.	Max.		
620-006SS	6	3/8"	7/8"	100/600	----
620-008SS	8	7/16"	1"	100/600	----
620-010SS	10	9/16"	1-1/16"	100/600	----
620-012SS	12	9/16"	1-1/4"	100/600	----
620-016SS	16	11/16"	1-1/2"	100/600	----
620-020SS	20	3/4"	1-3/4"	100/300	----
620-024SS	24	1-1/16"	2"	100/300	----
620-028SS	28	1-5/16"	2-1/4"	100/300	----
620-032SS	32	1-9/16"	2-1/2"	100/300	----
620-036SS	36	1-13/16"	2-3/4"	50/200	----
620-040SS	40	2-1/16"	3"	50/200	----
620-044SS	44	2-5/16"	3-1/4"	50/200	----
620-048SS	48	2-9/16"	3-1/2"	50/200	----
620-052SS	52	2-13/16"	3-3/4"	25/100	----
620-056SS	56	3-1/16"	4"	25/100	----
620-060SS	60	3-5/16"	4-1/4"	25/100	----
620-064SS	64	2-1/2"	4-1/2"	25/100	----
620-072SS	72	3"	5"	25/100	----

620SS Series

- 5/16" Hex Slotted 316 Stainless Steel Screw
- 1/2" Wide 316 Stainless Steel Band
- 316 Stainless Steel Housing

- 60mm Thickness
- Use for marine, underground and other high corrosive applications.

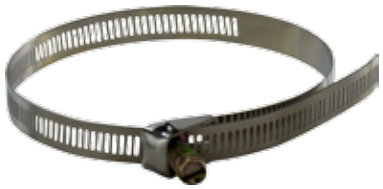
Yesterday is not ours to recover, but tomorrow is ours to win or lose. - *Lyndon B. Johnson*

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

QUICK RELEASE 500/550 SERIES

These clamps feature a unique quick release design between the one piece housing and band allowing for quick and easy installation in restricted or difficult areas.

Applications: Quick release action permits easy installation in applications where clamp must be opened to be applied. Quick release clamps are used extensively in the telecommunications industry on cable enclosures where open air application demands durability.



Open/Close design allows easy installation.

500 Series
- 5/16" Hex Slotted Carbon Steel Screw
- 1/2" 301 Stainless Steel band
- 301 Stainless Steel Housing
- 410 Stainless Steel Bridge

550 Series
- 5/16" Hex Slotted 410 Stainless Steel Screw
- 1/2" 301 Stainless Steel band
- 301 Stainless Steel Housing
- 410 Stainless Steel Bridge

Part #		#	Dia. Range		Part #	
			Min.	Max.		
500-012	----	12	1/2"	1-1/4"	550-012	----
500-020	----	20	3/4"	1-3/4"	550-020	----
500-028	----	28	1"	2-1/4"	550-028	----
500-036	----	36	1"	2-3/4"	550-036	----
500-048	----	48	1-1/2"	3-1/2"	550-048	----
500-056	----	56	1"	4"	550-056	----
500-072	----	72	2"	5"	550-072	----
500-088	----	88	2-1/16"	6"	550-088	----
500-104	----	104	1-3/4"	7"	550-104	----
500-128	----	128	1-3/4"	8-9/16"	550-128	----
500-152	----	152	2"	10"	550-152	----
500-188	----	188	2-1/16"	12-5/16"	550-188	----
500-216	----	216	10-3/16"	14"	550-216	----
500-248	----	248	10-3/4"	16"	550-248	----
500-280	----	280	14-1/4"	18"	550-280	----
		312	14"	20"	550-312	----

I believe if you keep your faith, you keep your trust, you keep the right attitude, if you're grateful, you'll see God open up new doors.

-Joel Osteen

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

T-Bolt Clamps

- All designs meet SAE J1508 specifications.
- .025” Band Thickness
- 3/4” Wide Band
- Band Material: 301 Series Stainless Steel
- Bolt Material: 304 Series Stainless Steel
- Nut Material: 304 Series Stainless Steel
- Nuts are Self-locking
- Torque Rating 75 in/lb

Opens 1/16" above and tightens 1/8" smaller then nominal I.D. for a total of 3/16" range for clamps sizes 150 through 250. Opens 1/16" above and tightens 7/32" smaller then nominal I.D. for clamps sizes 256 through 750.

Purpose: To provide a quick, yet effective means of clamping a variety of fittings to a wide range of hose. T-Bolts can be applied with a standard 7/16” socket wrench. They provide 360^0 sealing surface by using a shoe or formed bridge.

Services: The T-Bolt clamp is a high strength, reliable clamp with numerous applications in both the commercial and industrial markets including hose and ductwork connections for air, oil, water, other types of low pressure fluid lines, engine air intake, exhaust, hose and filters.

ALL STAINLESS STEEL

Nominal Size	O.D. Range		Part#	
	From:	To:		
1-1/4	1-5/32"	1-15/32"	840-131	----
1-1/2	1-3/8"	1-9/16"	840-150	----
1-3/4	1-5/8"	1-13/16"	840-175	----
1-7/8	1-3/4"	1-15/16"	840-188	----
2	1-7/8"	2-1/16"	840-200	----
2-1/4	2-1/8"	2-5/16"	840-225	----
2-3/8	2-1/4"	2-7/16"	840-238	----
2-1/2	2-3/8"	2-9/16"	840-250	----
2-9/16	2-11/32"	2-5/8"	840-256	----
2-5/8	2-13/32"	2-11/16"	840-263	----
2-3/4	2-17/32"	2-13/16"	840-275	----
2-7/8	2-21/32"	2-15/16"	840-288	----
3	2-25/32"	3-1/16"	840-300	----
3-1/8	2-29/32"	3-3/16"	840-312	----
3-1/4	3-1/32"	3-5/16"	840-325	----
3-1/2	3-9/32"	3-9/16"	840-350	----
3-3/4	3-17/32"	3-13/16"	840-375	----
3-53/64	3-19/32"	3-7/8"	840-382	----
4	3-25/32"	4-1/16"	840-400	----
4-1/4	4-1/32"	4-5/16"	840-425	----
4-1/2	4-9/32"	4-9/16"	840-450	----
4-3/4	4-17/32"	4-13/16"	840-475	----
5	4-25/32"	5-1/16"	840-500	----
5-1/4	5-1/32"	5-5/16"	840-525	----
5-1/2	5-9/32"	5-9/16"	840-550	----
5-3/4	5-17/32"	5-13/16"	840-575	----
6	5-25/32"	6-1/16"	840-600	----
6-1/4	6-1/32"	6-5/16"	840-625	----
6-1/2	6-9/32"	6-9/16"	840-650	----
6-3/4	6-17/32"	6-13/16"	840-675	----
7	6-25/32"	7-1/16"	840-700	----
7-1/2	7-9/32"	7-9/16"	840-750	----
8	7-25/32"	8-1/16"	840-800	----
8-1/4	8-9/32"	8-9/16"	840-850	----
8-7/8	8-21/32"	8-15/16"	840-888	----
10-7/8	10-21/32"	10-15/16"	840-1088	----

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

Spring Loaded T-Bolt Hose Clamp

- Per SAE standard J1508 Type "SLTB"
- .025 Band Thickness
- 3/4 (19mm) band width
- Heavy duty springs
- Band Material: 300 stainless
- T-bolt: Carbon steel w/ zinc plating
- Housing (Bridge): 300 Stainless
- Hex nut: Carbon Steel, Nylon insert
- Torque rating: 150 in-lbs (8.5 mm)

Purpose: To provide constant tension performance to compensate for the expansion and contraction when temperatures fluctuate. Provides high strength and a 360° seal. Tighten with a 7/16" wrench or hex nutdriver.

Services: Designed for use in high vibration and large diameter applications common in heavy trucks, industrial machinery, off road equipment, agricultural irrigation and machinery, for air intake and coolant adapter

Part #	SAE #	Min - Max	WGT	Box Qty	
844-213	40	2.13 - 2.44	0.170	100	----
844-225	44	2.25 - 2.56	0.174	100	----
844-238	48	2.38 - 2.69	0.179	100	----
844-250	52	2.50 - 2.81	0.181	100	----
844-263	56	2.63 - 2.94	0.183	100	----
844-275	60	2.75 - 3.06	0.185	100	----
844-300	68	3 - 3.31	0.187	100	----
844-306	70	3.06 - 3.38	0.190	100	----
844-313	72	3.13 - 3.44	0.192	100	----
844-325	76	3.25 - 3.56	0.194	100	----
844-338	80	3.38 - 3.69	0.196	100	----
844-350	84	3.50 - 3.81	0.196	100	----
844-356	86	3.56 - 3.88	0.196	100	----
844-363	88	3.63 - 3.94	0.198	100	----
844-375	92	3.75 - 4.06	0.198	100	----
844-406	102	4.06 - 4.38	0.203	100	----
844-413	104	4.13 - 4.44	0.209	100	----
844-425	108	4.25 - 4.56	0.214	100	----
844-456	118	4.56 - 4.88	0.216	100	----
844-500	132	5 - 5.31	0.218	100	----
844-525	140	5.25 - 5.56	0.220	100	----
844-600	164	6 - 6.31	0.223	100	----
844-625	172	6.25 - 6.56	0.225	100	----

Automatically adjust diameter for hose expansioin and contraction due to temperature changes.

Always turn a negative situation into a positive situation.

– Michael Jordan

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

Constant Torque Hose Clamps

- All designs meet SAE J1508 specifications type "SLHD"
- .028 Band thickness
- Band material: 304 thickness
- Band width: 9/16" for 45in-lb
  5/8" for 90in-lb
- Band material: 304 stainless
- Housing: 304 stainless steel
- Bridge: 410 stainless steel
- Hex screw: 410 stainless steel

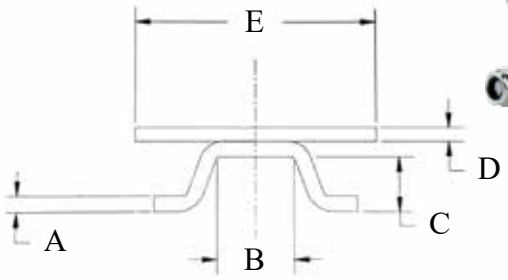
Purpose: To eliminate leaks by automatically incerasing or decreasing the clamps diameter, decreasing the need for retightening. Constant torque clamps have an extended tail on the band to protect soft hose or tube from being cut.

Services: Constant torque clamps are an excellent choice for fluctuating and extreme temperature applications and thermal compensation.

Part #	Clamping Range	Band Width	Torque	Screw Size	WGT	Box Qty	
842-010	9/16" - 1 1/16"	9/16"	72 in-lb	5/16"	0.106	100	----
842-012	11/16" - 1 1/4"	9/16"	72 in-lb	5/16"	0.108	100	----
842-016	13/16" - 1 1/2"	9/16"	72 in-lb	5/16"	0.112	100	----
842-020	13/16" - 1 3/4"	9/16"	72 in-lb	5/16"	0.119	100	----
842-024	1 1/16" - 2"	9/16"	72 in-lb	5/16"	0.121	100	----
842-200	1 1/4" - 2 1/8"	5/8"	130 in-lb High	3/8"	0.207	100	----
842-250	1 3/4" - 2 5/8"	5/8"	130 in-lb High	3/8"	0.216	100	----
842-300	2 1/4" - 3 1/8"	5/8"	130 in-lb High	3/8"	0.220	100	----
842-350	2 3/4" - 3 5/8"	5/8"	130 in-lb High	3/8"	0.225	100	----
842-400	3 1/4" - 4 1/8"	5/8"	130 in-lb High	3/8"	0.231	100	----
842-450	3 3/4" - 4 5/8"	5/8"	130 in-lb High	3/8"	0.238	100	----
842-500	4 1/4" - 5 1/8"	5/8"	130 in-lb High	3/8"	0.256	100	----

V-Band Hose Clamps

- Band thickness: see chart
- Band width: see chart
- Band material: 300 stainless
- Trunnion: 300 stainless
- 1/4" T-bolt: 300 stainless
- 7/16" Hex nut: 300 stainless



Purpose: to provide a fast, secure cupling for connecting flanged joints.

Services: V-Band clamps feature high strength and positive sealing integrity for applications including: heavy duty diesel engine exhaust and turbochargers, filter housings, emissions and general industrial applications.

Part#	Nominal Diameter	V-Insert Sections			Bands		WGT	Box Qty	
		A	B	C	D	E			
843-321	3.21	0.050	0.262	0.141	0.035	0.750	0.525	100	----
843-382	3.82	0.077	0.207	0.281	0.040	0.875	0.531	100	----
843-388	3.88	0.050	0.400	0.281	0.040	0.875	0.536	100	----
843-450	4.50	0.077	0.207	0.281	0.040	0.875	0.547	100	----
843-461	4.61	0.050	0.156	0.281	0.035	0.750	0.549	100	----
843-475	4.75	0.050	0.400	0.281	0.040	0.875	0.553	100	----
843-525	5.25	0.050	0.262	0.141	0.035	0.750	0.567	100	----
843-588	5.88	0.050	0.400	0.281	0.040	0.875	0.575	100	----

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

MUFFLER CLAMPS

Muffler Clamps are designed with elongated and tapered holes that pulls the legs around the pipe as the nuts tighten, making a tight seal. Other clamps legs do not wrap around the pipe, they stay straight and the clamp only connects at two points.

- Carbon steel band, housing and bridge
- All muffler clamps are zinc plated for superior corrosion resistance
- Heavy duty U-Bolt and band construction
- 3/8 U-bolt
- Base 2.4mm

SADDLE

Part #	Size	WGT	Box Qty	
841-175	1-3/4"	0.335	50	----
841-200	2"	0.410	50	----
841-250	2-1/2"	0.448	50	----
841-300	3"	0.582	50	----
841-350	3-1/2"	0.741	50	----
841-400	4"	0.847	25	----
841-450	4-1/2"	1.023	25	----
841-500	5"	1.067	25	----

FLAT BAND

Part #	Size	WGT	Box Qty	
841-004	4"	0.847	25	----
841-005	5"	1.093	25	----

GUILLOTINE - provides a complete 360° heavy duty seal

Part #	Size	WGT	Box Qty	
841-040	4"	0.820	25	----
841-045	4-1/2"	0.847	25	----
841-050	5"	0.988	25	----

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

EXHAUST CLAMPS

Complete with:
- One metal band - 76mm width
- One spacer
- Two bolts
- Two reaction blocks
- Individually boxed

- Pre-attached hardware for easy and accurate installation.

- Conforms to pipe and flex tubing to create the best seal available without distorting any pipes.

ALUMINIZED STEEL BUTT CLAMPS

- .7mm band thickness
- 76mm band width

Part #	Size	WGT	Box Qty	
845-200	2"	0.970	50	----
845-300	3"	1.058	50	----
845-350	3.50"	1.102	50	----
845-400	4"	1.146	50	----
845-500	5"	1.235	50	----
845-600	6"	1.323	50	----
845-500SS*	5"	1.190	50	----

*Light pattern .5mm band thickness

ALUMINIZED STEEL LAP CLAMPS

- .7mm band thickness
- 76mm band width

Part #	Size	WGT	Box Qty	
846-200	2"	0.970	50	----
846-250	2.50"	1.014	50	----
846-275	2.75"	1.036	50	----
846-300	3"	1.058	50	----
846-350	3.50"	1.102	50	----
846-400	4"	1.146	50	----
846-500	5"	1.235	50	----

STAINLESS STEEL LAP CLAMPS

- .5mm band thickness
- 76mm band width

Part #	Size	WGT	Box Qty	
847-200	2"	0.926	50	----
847-250	2.50"	0.970	50	----
847-275	2.75"	0.992	50	----
847-300	3"	1.014	50	----
847-350	3.50"	1.058	50	----
847-400	4"	1.102	50	----
847-500	5"	1.190	50	----
847-600	6"	1.279	50	----

STAINLESS STEEL EASY-FORM CLAMPS

- .5mm band thickness
- 76mm band width

Part #	Size	WGT	Box Qty	
848-200	2"	0.926	50	----
848-225	2.25"	0.948	50	----
848-250	2.50"	0.970	50	----
848-275	2.75"	0.992	50	----
848-300	3"	1.014	50	----
848-350	3.50"	1.058	50	----
848-400	4"	1.102	50	----
848-500	5"	1.190	50	----
848-600	6"	1.279	50	----
848-700	7"	1.367	50	----

WARNING: This product can expose you to chemicals, including chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

CARBON STEEL 1-EAR CLAMPS

1-Ear Clamps are intended for low pressure applications such as automotive (not fuel lines), appliances, industrial machinery, underground irrigation systems and beverage dispensing equipment. They are specifically designed for mass production applications where inexpensive clamps are needed.

Pressure:

As a guideline, 1-Ear Clamps have held
30 bar - 441 psi.
This was done using a static water pressure test.

- 100 PER BAG

Material:

Hot dipped galvanized carbon steel band - G90

Part #	Ref#	Nominal Size	Inches		
			Close	Open	
1050000	105	3/8"	0.350	0.414	----
1050001	113	7/16"	0.381	0.444	----
1050002	123	15/32"	0.394	0.486	----
1050003	133	1/2"	0.453	0.524	----
1050006	140	35/64"	0.472	0.551	----
1050007	145	9/16"	0.496	0.571	----
1050008	157	5/8"	0.543	0.618	----
1050009	170	11/16"	0.594	0.669	----
1050010	185	23/32"	0.618	0.728	----
1050011	198	3/4"	0.669	0.779	----
1050012	210	13/16"	0.716	0.827	----
1050013	226	7/8"	0.779	0.890	----
1050014	241	15/16"	0.839	0.949	----
1050015	256	1"	0.898	1.008	----
1050016	271	1-1/16"	0.945	1.067	----
1050017	286	1-1/8"	1.004	1.126	----
1050018	301	1-3/16"	1.063	1.185	----
1050020	331	1-5/16"	1.181	1.303	----
1050021	346	1-3/8"	1.240	1.362	----
1050023	376	1-15/32"	1.358	1.480	----
1050025	396	1-9/16"	1.437	1.559	----
1050026	410	1-5/8"	1.492	1.614	----
1050029	455	1-3/4"	1.669	1.791	----
1050030	470	1-16/16"	1.728	1.850	----
1050032	500	1-15/16"	1.846	1.968	----
1050033	515	2"	1.905	2.028	----

The art of communication is the language of leadership. - James Humes

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer.
For more information, visit www.P65Warnings.ca.gov

2-EAR CLAMPS

2-Ear Clamps are especially suited for industrial use and with heavily vibrating equipment.

This is a medium pressure clamp and is widely used for maintenace and OEM applications. Rubber hose, plastic tubing, coaxial and electrical cable, rope, etc. are all easily clamped. These clamps are installed on air, fluid, gas and steam lines. The one piece design offers a positive, tamper-proof seal without damaging the hose.

PRESSURE:

As a guideline, 2-Ear Clamps successfully seal at 54 bar - 800 psi with 35 pulsating strokes a minute.

MATERIAL:

Zinc plated carbon steel
SAE 1008/1010 or DIN 1.0338
Stainless steel tubing
UNS S30400 or DIN 1.4301

• 100 PER BAG

Note: When ordering your 2-Ear Clamps select nominal clamp size nearest to, but always larger than, O.D. of material to be clamped after insert has been fitted.

ZINC PLATED CARBON STEEL

Part #	Nominal Size	Inches Close	Inches Open	
1010002	3/16"	0.134	0.197	----
1010008	5/16"	0.276	0.354	----
1010011	3/8"	0.319	0.433	----
1010016	1/2"	0.425	0.512	----
1010019	9/16"	0.492	0.591	----
1010022	19/32"	0.551	0.669	----
1010024	5/8"	0.591	0.709	----
1010027	3/4"	0.638	0.787	----

STAINLESS STEEL

Part #	Nominal Size	Inches Close	Inches Open	
1510003	1/4"	0.197	0.276	----
1510004	5/16"	0.276	0.354	----
1510023	3/8"	0.319	0.433	----
1510006	1/2"	0.425	0.512	----
1510007	9/16"	0.492	0.591	----
1510008	19/32"	0.551	0.669	----
1510009	5/8"	0.591	0.709	----
1510010	3/4"	0.638	0.787	----
1510011	13/16"	0.709	0.866	----
1510012	7/8"	0.748	0.906	----
1510013	15/16"	0.827	0.984	----
1510014	1"	0.886	1.063	----
1510016	1-1/8"	1.035	1.221	----
1510019	1-9/16"	1.260	1.457	----
1510020	1-1/2"	1.378	1.575	----

Minimum QTYs may apply

GAPLESS EAR CLAMPS

Features

•Assured clamping seal
• For low durometer and/ or thin-walled hose/ tubing
• Perfect for silicon, vinyl, polyurethane or other high tech materials used in all industries.
• Once installed, smooth inner band circumference prevents damage to the hose while the unique tongue-in-groove design provides a 360° seal
• There are no steps or gaps inside clamp

Material

- Stainless steel tubing UNS S30400 or DIN 1.4301

• 100 PER BAG

Part #	Nominal Size	Band Width	Inches Close	Inches Open	
16700001	9/32"	5mm	0.228	0.276	----
16700004	3/8"	5mm	0.307	0.374	----
16700007	7/16"	5mm	0.378	0.445	----
16700010	1/2"	7mm	0.425	0.524	----
16700012	35/64"	7mm	0.453	0.551	----
16700013	9/16"	7mm	0.472	0.571	----
16700016	5/8"	7mm	0.520	0.618	----
16700017	11/16"	7mm	0.571	0.669	----
16700022	3/4"	7mm	0.654	0.780	----
16700024	13/16"	7mm	0.701	0.827	----

obstacles are things a person sees when he takes his eyes off his goal.

– E. Joseph Cossman

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HOSE CLAMPS PERFORMED

TO ORDER the correct size Fast Lok Clamps, measure the outside diameter of the hose or article and then select the next larger inside diameter clamp by catalog number.
• Minimum Qty may apply

Preformed Clamps are double wrapped and formed to a given diameter. Used primarily where one end of the hose or article is free to allow the clamps to be slid over the hose end before the fitting is inserted. All clamps may be pulled down to a smaller diameter but cannot be adjusted to a larger diameter.

PREFORMED CLAMPS
(3/8" AND 5/8" (NOMINAL) WIDTH) - 100/BOX

Catalog Number Galv	Band Width & Thick-ness		Clamp I.D. Inches	Catalog Number SS	Band Width & Thick-ness	
F-3	3/8 x .025	----	13/16			----
F-311	3/8 x .025	----	1 3/8			----
F-4	5/8 x .025	----	1	FS-4	5/8 x .022	----
F-5	5/8 x .025	----	1 1/4	FS-5	5/8 x .022	----
F-6	5/8 x .031	----	1 1/2	FS-6	5/8 x .022	----
F-7	5/8 x .031	----	1 3/4	FS-7	5/8 x .022	----
F-8	5/8 x .031	----	2	FS-8	5/8 x .022	----
F-9	5/8 x .031	----	2 1/4	FS-9	5/8 x .022	----

WITH STAINLESS STEEL LOK - 50/BOX

F-10	5/8 x .031	----	2 1/2	FS-10	5/8 x .022	----
F-11	5/8 x .031	----	2 3/4	FS-11	5/8 x .022	----
F-12	5/8 x .031	----	3	FS-12	5/8 x .022	----
F-14	5/8 x .031	----	3 1/2	FS-14	5/8 x .022	----
25/ BOX						
F-16	5/8 x .031	----	4	FS-16	5/8 x .022	----
F-18	5/8 x .031	----	4 1/2	FS-18	5/8 x .022	----
F-20	5/8 x .031	----	5	FS-20	5/8 x .022	----
	5/8 x .031		6	FS-24	5/8 x .022	----
	5/8 x .031		7	FS-28	5/8 x .022	----

Double-wrapped, Triple Punched, Holds Permanently

Galvanized Preformed Clamps 2 1/2 inch I.D. and above, and 5/8" wide open end clamps have a stainless steel lock for greater strength and rigidity.

K-CLAMP PREFORMED HOSE CLAMPS

Each clamp is a double wrapped metal band formed to a given diameter. The clamp is designed to be slid over the hose end before the fitting is inserted. A punch-type or fold-up tool is then used to apply the clamp.

Punch Indentation for ease of center punching

Heavy Duty Lock for greater strength and rigidity

Heavy Duty Clamp

K-Clamps may be secured by either a punch or fold-up method. (See cross sectioned views)

• Minimum Qty may apply

Center Punched

Less tension loss. Patented hole in inner band gives better internal mechanical locking after punching

Fold-up

PREFORMED CLAMPS
(3/8" AND 5/8" (NOMINAL) WIDTH) - 100/BOX

GALVANIZED STEEL — **STAINLESS STEEL TYPE 301**

Catalog Number		Clamp I.D. Inches	Band Width & Thickness	Catalog Number	
K-3	----	13/16"	3/8" x .025	KS-3	----
K-311	----	1-3/8"	3/8" x .025	KS-311	----
K-4	----	1"	5/8" x .030	KS-4	----
K-5	----	1-1/4"	5/8" x .030	KS-5	----
K-6	----	1-1/2"	5/8" x .030	KS-6	----
K-7	----	1-3/4"	5/8" x .030	KS-7	----
K-8	----	2"	5/8" x .030	KS-8	----
K-9	----	2-1/4"	5/8" x .030	KS-9	----
50/BOX					
K-10	----	2-1/2"	5/8" x .030	KS-10	----
K-11	----	2-3/4"	5/8" x .030	KS-11	----
K-12	----	3"	5/8" x .030	KS-12	----
K-14	----	3-1/2"	5/8" x .030	KS-14	----
25/BOX					
K-16	----	4"	5/8" x .030	KS-16	----
K-18	----	4-1/2"	5/8" x .030	KS-18	----
K-20	----	5"	5/8" x .030	KS-20	----
K-24	----	6"	5/8" x .030		
K-28	----	7"	5/8" x .030		

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

TO ORDER the correct size Fast Lok Clamps, measure the outside diameter of the hose or article and then select the next larger inside diameter clamp by catalog number.

STAINLESS STEEL

FLJS-Clamp

SMOOTH I.D. CLAMPS

• Minimum Qty may apply

FLJS - Clamps are double wrapped clamps with a more smooth inside diameter, intended for your thermoplastic and other thinner wall hose clamping applications. The JS series clamps slide on the hose prior to inserting the fitting.

Preformed JS - Clamps are available in 5/8" and 3/4" widths, 1" I.D. to 8" I.D. in 1/4" increments.

The FLJS - Clamp is intended to be applied with a KS001 tool or other comparable fold-up locking tool.

5/8" (NOMINAL WIDTH) - 100/BOX

Catalog #	Clamp I.D. Inches	Band Width & Thickness	
FLJS-203	1"	5/8" x .030	----
FLJS-204	1-1/4"	5/8" x .030	----
FLJS-205	1-1/2"	5/8" x .030	----
FLJS-207	2"	5/8" x .030	----
FLJS-208	2-1/4"	5/8" x .030	----
FLJS-209	2-1/2"	5/8" x .030	----

100' CLAMP-IT STRAPPING

Catalog #	Width	Thickness	Material 100'/CTN.	
SS-3751	3/8"	.025	301 Stainless	----
SS-5001	1/2"	.030	301 Stainless	----
SS-6251	5/8"	.030	301 Stainless	----
SS-7501	3/4"	.030	301 Stainless	----
SG-5000	1/2"	.030	Galvanized	----

CLAMP-IT

The multi-sized clamps all rolled up in one..for your unknown requirements for 1 inch to 30 feet, be they round or otherwise. Clamp-It products will fill your needs. This Strapping in widths of 3/8", 1/2", 5/8", and 3/4" stainless or galvanized steel, as are the clamps (buckles).

CLAMPS (BUCKLES)

Catalog #	Width	Material	Qty per box	
CS-3751	3/8"	301 Stainless	100	----
CS-5001	1/2"	301 Stainless	100	----
CS-6251	5/8"	301 Stainless	100	----
CS-7501	3/4"	301 Stainless	50	----

Be the attitude you want to be around. -Tim DeTellis

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Model 1098 I
Standard Jaw Pincers

Part #		
1410118		----

SIDE JAW PINCERS

This dual purpose, side jaw design allows clamps to be applied or removed in confined areas with pincers held parallel to the hose. Also used like standard Pincers.

Part #		
1410083	Model 1099 I	----

HOSE CRIMPER

HOSE RULE CRIMPING TOOL
Tool is equipped with mounting holes for permanent installation or may be used as a portable tool assembly in the field.

IMPORTANT! BEFORE USING THIS TOOL
Make sure the crimping arm is in the closed (down) position and then set the adjusting screw so it touches the end stop.

OPERATION:
A. FERRULE - The proper ferrule should fit easily over the hose. It is better to use a slightly oversized ferrule as an undersized ferrule may make inserting the barbed fitting difficult.
B. BARBED FITTING - Dip the ferrule end of the hose into soapy water. Insert the chosen barbed fitting into the hose with a fair amount of force. A barbed fitting that slides into a hose too easily will not crimp properly.
C. CRIMPING DIE - To find the proper crimping die find the smallest die opening which the hose will just pass through freely. Use the next smallest die and depress the crimping arm fully, keep fingers free from the crimper. Open the crimper and rotate the hose one quarter turn and repeat to finish the crimp.

• Provides production capability and "big tool" crimping advantages at just a fraction of the cost of other tools offering comparable results.

HOSE CRIMPER COMES WITH 5 DIES

Die Sizes = 5/8", 37/64", 12/32", 31/64", 11/16"

Part #		
308-070	Hose Crimper	----

LOKING TOOL

Part #		
F-38	Portable hand tool used to apply punch Type 3/8 & 5/8 Clamps	----

LOKING TOOL

Part #		
F-40		----

Used to apply Punch Type 3/8 & 5/8 clamps. Order mallet separately

LOKING TOOL

Part #		
F-100	Used to apply Punch Type 3/8 & 5/8 clamps. Order mallet separately	----

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

LINED BAND CLAMPS

Features unique one-piece housing, rolled-up band edges and a non-perforated (embossed) band that protects the hose. For added corrosion resistance, the band in the 12mm Standard is made of Aluzinc which gives three times the protection offered by conventional galvanized steel.
• Features high clamping force and high durability torque.
• Stainless: All parts in AISI 304 Stainless Steel.
A non-perforated band with rolled up edges eliminates hose damage while increasing clamping force.
Per SAE standard J1508 Type "FEO"

GENERAL PURPOSE EMBOSSED WORM-GEAR HOSE CLAMPS

• Minimum Qty may apply

Part # Aluzinc		SAE Size	Clamping Range Inches	Clamping Range mm	Bag	Part# 304 SS	
88-024	----	8	5/8-1	15-24	1000	89-024	----
88-028	----	10	3/4-1-1/8	19-28	500	89-028	----
88-032	----	12	7/8-1-1/4	22-32	500	89-032	----
88-038	----	16	1-1/16-1-1/2	26-38	500	89-038	----
		20	1-1/4-1-3/4	32-44	500	89-044	----
88-050	----	24	1-1/2-2	38-50	500	89-050	----
88-056	----	28	1-3/4-2-1/4	44-56	500	89-056	----
88-065	----	32	2-2-9/16	50-65	200	89-065	----
88-075	----	40	2-5/16-3	58-75	200	89-075	----
88-085	----	44	2-11/16-3-3/8	68-85	200	89-085	----
88-095	----	52	3-3-3/4	77-95	200	89-095	----
88-112	----	64	3-7/16-4-7/16	87-112	200	89-112	----

MINI CLAMPS

Sure seal for small, thin walled hoses. The nut is secured to the clamp, making installation easier and the hexagonal head can be tightened with a socket wrench or screw driver. Bandwidth is 9mm.

PAINTED ALUZINC STANDARD MINI CLAMPS

Part # Aluzinc	Clamping Range Inches	Clamping Range mm	Qty per Bag	
92-010	.36-.41	9-10.5	1000	----
92-011	.37-.45	9.5-11.5	900	----
92-012	.41-.49	10.5-12.5	800	----
92-013	.45-.53	11.5-13.5	800	----
92-014	.49-.57	12.5-14.5	700	----
92-015	.53-.61	13.5-15.5	600	----
92-016	.55-.65	14-16.5	500	----
92-017	.59-.69	15-17.5	500	----

HOSE CLAMPS

MARINE - EMBOSSED NON-PERFORATED WORM GEAR CLAMPS

• Meets the DIN 3017 Standard
• Replaces the Ultra Clamps 316 stainless steel
• 12mm band widths
• Installation torque 60lbs
• General purpose non perforated band especially suited for most hoses and soft silicone hoses.
• Band edges rolled to protect soft hoses from shearing and fraying
• Common applications include: vehicular, industrial, mechanical engineering, plumbing and marine.
• ROLLED EDGES
• BAND WILL NOT DAMAGE SOFT HOSES

ALL #316 SS MATERIAL

12MM WIDE EMBOSSED ALL 316 BAND CLAMPS

Part #	Range of Adjust (in mm)	Range of Adjust (inches)	
96022	12-22	.469-.859	
96027	16-27	.625-1.06	----
96032	20-32	.787-1.26	----
96040	25-40	.984-1.575	----
96050	35-50	1.26-1.969	----
96060	40-60	1.575-2.362	----
96070	50-70	1.969-2.756	----
96080	60-80	2.362-3.15	----
96090	70-90	2.756-3.543	----
96100	80-100	3.15-3.937	----
96110	90-110	3.543-4.33	----
96120	100-120	3.937-4.724	----
96130	110-130	4.33-5.118	----
96140	120-140	4.72-5.512	----
96150	130-150	5.118-5.906	----
96160	140-160	5.512-6.299	----

MINI CLAMPS

304 SS MINI CLAMPS

Part # 304 SS	Clamping Range Inches	Clamping Range mm	Qty per Bag	
93-008	.30-.34	7.5-8.5	1000	----
93-009	.34-.37	8.5-9.5	1000	----
93-011	.41-.47	10.5-12	900	----
93-013	.49-.55	12.5-14	800	----
93-014	.53-.59	13.5-15	700	----
93-016	.59-.67	15-17	1000	----
93-017	.63-.71	16-18	500	----

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

RUBBER LINED CLAMPS

Multiple uses for holding cable, wire, pipe and hose. The rubber cushion absorbs vibration, provides protection against scratching and is made of black EPDM type rubber.

Rubber cushion clamps are used in a variety of industries and applications including automotive, truck, hydraulics and pneumatics, ship building, refrigeration, large equipmetnt packaging etc.

Bandwidths and mounting hose sizes vary by diameter and material.

- Aluzinc clamps have a .26 hole diameter
- Stainless Steel .20 diameter

Part # Aluzinc	Qty per Bag		Clamping Range		Part# 304 SS	Qty per Bag	
			Inches	mm			
95-300	100	----	1/8	3			
95-301	100	----	3/16	5	96-301	1000	----
95-302	100	----	1/4	6	96-302	200	----
95-303	100	----	5/16	8	96-303	1000	----
95-304	100	----	3/8	10	96-304	100	----
95-305	100	----	7/16	11	96-305	1000	----
95-306	100	----	1/2	13	96-306	100	----
95-307	100	----	9/16	14	96-307	100	----
95-308	100	----	5/8	16	96-308	100	----
95-309	50	----	11/16	18			
95-310	50	----	3/4	19	96-310	500	----
95-311	50	----	13/16	21			
95-312	50	----	7/8	22	96-312	500	----
95-313	50	----	15/16	24			
95-314	50	----	1	25	96-314	500	----
95-315	50	----	1-1/16	27			
95-316	50	----	1-1/8	29	96-316	500	----
95-317	50	----	1-3/16	30			
95-318	50	----	1-1/4	32	96-318	500	----
95-319	50	----	1-5/16	33			
95-320	50	----	1-3/8	35	96-320	500	----
95-321	50	----	1-7/16	36			
95-322	500	----	1-1/2	38	96-322	100	----
95-326	50	----	1-5/8	41			
95-323	25	----	1-3/4	45	96-323	500	----
95-328	25	----	1-7/8	47			
95-324	25	----	2	51			
95-325	25	----	2-1/8	54			
95-329	25	----	2-3/8	60			
95-327	25	----	2-1/2	65			
95-330	15	----	2-15/16	74			
95-331	10	----	4-5/16	110			

RUBBER CUSHIONED CLAMP, ZINC PLATED STEEL

Part #	Mounting Dia	Clamp Dia	
95402	3/8"	1/4"	----
95404	3/8"	3/8"	----
95406	3/8"	1/2"	----
95408	3/8"	5/8"	----
95410	3/8"	3/4"	----
95414	3/8"	1"	----
95418	3/8"	1 1/4"	----
95422	3/8"	1 1/2"	----
95424	3/8"	2"	----
95427	3/8"	2 1/2"	----
95432	3/8"	3"	----
95433	3/8"	4"	----
95434	3/8"	5"	----

GALVANIZED STEEL VINYL COATED CLAMP

Part #	Mounting Dia	Clamp Dia	
95504	1/4"	3/8"	----
95506	1/4"	1/2"	----
95508	1/4"	5/8"	----
95510	1/4"	3/4"	----
95512	1/4"	7/8"	----
95514	1/4"	1"	----
95516	1/4"	1 1/8"	----
95518	1/4"	1 1/4"	----
95522	1/4"	1 1/2"	----
95523	1/4"	1 3/4"	----
95524	1/4"	2"	----

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

HOSE FERRULES

SMOOTH BRASS HOSE FERRULES

Brass Hose Ferrules offer an alternative to hose clamps. After crimping, the ferrule will provide a permanent clamping force on both the hose and fitting.

I.D. Pierce/ Hole

• ASTMB36 Alloy 268

Part #	Ferrule #	I.D.	Length	Pierce	Gauge	
32-500	6231	0.330	0.49	0.250	0.020	----
32-501	833	0.358	0.500	0.265	0.020	----
32-503	833B	0.375	0.718	0.265	0.025	----
32-502	622	0.380	0.500	0.265	0.020	----
32-550	619	0.400	0.47	0.27	0.020	----
32-504	620	0.410	0.500	0.265	0.020	----
32-551	769R	0.450	0.562	0.343	0.020	----
32-552	4750	0.478	0.687	0.328	0.025	----
32-553	624R	0.500	0.500	0.343	0.020	----
32-506	7322A	0.500	1.000	0.343	0.025	----
32-554	7322	0.500	1.000	0.328	0.025	----
32-555	625	0.525	0.47	0.36	0.020	----
32-517	625A	0.525	0.56	0.360	0.020	----
32-556	7323	0.525	1.000	0.375	0.025	----
32-521	9974	0.525	1.000	0.437	0.025	----
32-557	7324	0.531	1.000	0.375	0.025	----
32-558	626	0.550	0.484	0.375	0.020	----
32-507	3588	0.56	0.75	0.375	0.020	----
32-559	7325	0.56	1.000	0.437	0.025	----
32-561	7326	0.593	1.000	0.437	0.025	----
32-563	JJ	0.600	0.500	0.500	0.020	----
32-526	II	0.625	0.500	0.500	0.020	----
32-564	7327	0.625	1.000	0.437	0.025	----
32-565	HH	0.650	0.500	0.500	0.020	----
32-566	7328	0.656	1.000	0.437	0.025	----
32-567	GG	0.675	0.515	0.500	0.020	----
32-568	7329	0.69	1.000	0.500	0.025	----

Part #	Ferrule #	I.D.	Length	Pierce	Gauge	
32-570	7330	0.718	1.000	0.500	0.025	----
32-508	7330A	0.718	1.000	0.625	0.025	----
32-571	EE	0.725	0.530	0.500	0.020	----
32-572	DD	0.750	0.531	0.500	0.020	----
32-510	7331B	0.75	1.00	0.500	0.025	----
32-573	7331	0.750	1.000	0.625	0.025	----
32-574	CC	0.775	0.531	0.500	0.020	----
32-533	7332B	0.781	1.000	0.500	0.025	----
32-575	7332	0.781	1.000	0.625	0.025	----
32-576	BB	0.800	0.546	0.562	0.020	----
32-577	7333	0.812	1.000	0.625	0.025	----
32-578	AA	0.825	0.546	0.562	0.020	----
32-535		0.85	0.968	0.687	0.025	----
32-579	7244	0.875	0.843	0.687	0.025	----
32-539	5029A	0.900	0.875	0.687	0.025	----
32-580	7113	0.925	0.968	0.750	0.025	----
32-543	5028A	0.975	0.843	0.687	0.025	----
32-545	5235A	1.000	0.843	0.687	0.025	----
32-549	7145A	1.050	0.843	0.687	0.025	----
32-584	5027	1.100	0.843	0.812	0.025	----
32-586	7104A	1.15	0.843	0.875	0.025	----
32-588	7088A	1.175	0.875	0.875	0.025	----
32-590	875L	1.200	0.843	0.875	0.025	----
32-591	7291	1.225	0.968	0.875	0.025	----
32-592	7255	1.25	0.968	1.000	0.04	----
32-596	8000	1.425	0.875	1.062	0.025	----
32-597	1500	1.50	0.875	1.125	0.025	----

STAINLESS STEEL FERRULES

Part #	Cross #	I.D.	Length	Hole	Metal Thickness	
32552SS	x4750	.478	.687	.328	.020	----
32557SS	7324	.531	1.00	.438	.020	----
32559SS	7325	.56	1.00	.437	.020	----
32561SS	7326	.593	1.00	.437	.020	----
32564SS	7327	.625	1.00	.437	.020	----
32566SS	7328	.656	1.00	.437	.020	----
32568SS	7329	.69	1.00	.50	.020	----
32570SS	7330	.718	1.00	.625	.020	----
32575SS	7332	.781	1.00	.625	.020	----
32577SS	7333	.812	1.00	.625	.020	----
32588SS	7088A	1.175	.844	.875	.020	----

MORE SIZES AVAILABLE

AVAILABLE IN ALUMINUM AND STEEL ALSO

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

TUBING

POLYURETHANE

POLYETHYLENE

Sold individually boxed

Natural, Black, Blue, Green, Red, Yellow, Orange

NYLON

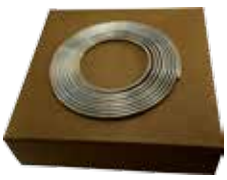
Sold individually boxed

PVC

- Clear

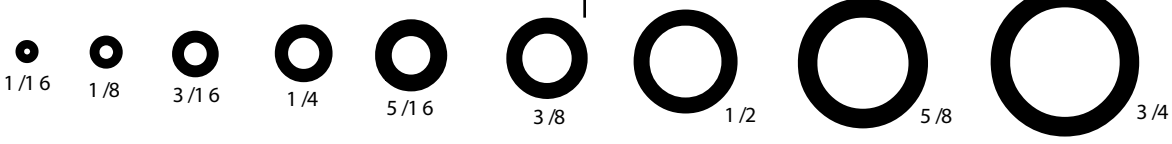
Sold individually boxed

COPPER AND ALUMINUM



TYPE L AND REFRIGERATION

ALUMINUM



POLYURETHANE TUBING

POLYURETHANE NSF 51®

NSF 51® polyurethane (PUR) Shore A 98 tubing is made from the highest quality raw materials available. it is etherbased to provide excellent hydrolysis, oil and cold resistance. Polyurethane NSF 51® is strong and flexible and offers superior kink resistance compared to other tubing. It is 5 to 10 times more wear resistant and lighter in weight than any rubber hose.

Polyurethane NSF 51® tubing has an outside diameter made to extremely tight tolerances. It is ideal for use with push-to-connect fittings, as well as barb-type and compression fittings for simple installation.

Features

- Strong
- Lightweight
- Flexible
- Abrasion Resistant
- Heat & Cold Resistant
- Chemical Resistant
- Kink Resistant
- NSF 51® Certified
- Meets NSF 61® Requirements

Specifications

Temperature Range: -40°F to +160°F

Hardness: Shore A 98

Vacuum Rating:

To 28" Hg

Tolerances:

1/8"-1/2" O.D. +/- .005

9/16"-3/4" O.D. +/- .006

RoHS Compliant

Applications

Pneumatic Tools
Pneumatic Piping
Vacuum
Laboratories
Robotics
Motion Control
Instrumentation
Agriculture
Lube Lines
Painting Systems
Food & Beverages

100' FOOT LENGTHS

CLEAR

Part #	O.D. (IN)	I.D. (IN)	Wall Thickness (IN)	Bend Radius (IN)	W.P. @70°F (PSI)	W.P. @150°F (PSI)	3:1 Burst Pressure	Package Weight (lbs)	
973-341	4mm, 5/32	.093	.031	.250	200	85	600	.70	----
973-343	.250	.156	.047	.476	180	70	540	1.50	----
973-345	.375	.250	.063	1.000	150	70	450	3.40	----
973-346	.500	.328	.086	1.102	150	70	450	5.60	----

BLACK

Part #	O.D. (IN)	I.D. (IN)	Wall Thickness (IN)	Bend Radius (IN)	W.P. @70°F (PSI)	W.P. @150°F (PSI)	3:1 Burst Pressure	Package Weight (lbs)	
73-341B	4mm, 5/32	.093	.031	.250	200	85	600	.70	----
73-343B	.250	.156	.047	.476	180	70	540	1.50	----
73-345B	.375	.250	.063	1.000	150	70	450	3.40	----
73-346B	.500	.328	.086	1.102	150	70	450	5.60	----

BLUE

Part #	O.D. (IN)	I.D. (IN)	Wall Thickness (IN)	Bend Radius (IN)	W.P. @70°F (PSI)	W.P. @150°F (PSI)	3:1 Burst Pressure	Package Weight (lbs)	
73-341U	4mm, 5/32	.093	.031	.250	200	85	600	.70	----
73-343U	.250	.156	.047	.476	180	70	540	1.50	----
73-345U	.375	.250	.063	1.000	150	70	450	3.40	----
73-346U	.500	.328	.086	1.102	150	70	450	5.60	----

RED

Part #	O.D. (IN)	I.D. (IN)	Wall Thickness (IN)	Bend Radius (IN)	W.P. @70°F (PSI)	W.P. @150°F (PSI)	3:1 Burst Pressure	Package Weight (lbs)	
73-341R	4mm, 5/32	.093	.031	.250	200	85	600	.70	----
73-343R	.250	.156	.047	.476	180	70	540	1.50	----
73-345R	.375	.250	.063	1.000	150	70	450	3.40	----
73-346R	.562	.375	.093	1.142	140	60	420	5.60	----

OD Sizes Available

.125, .187, 1/4(1/8), 8mm(5/16)
.562, .625 and .750

Other sizes, Lengths and Colors available

- Available in longer lengths upon request
- Other colors available

LINEAR LOW DENSITY POLYETHYLENE TUBING (LLDPE)

Features

- Chemically Inert
- Chemical Resistant
- Lightweight & Flexible
- Good Dielectric Properties
- Impermeable to Gases
- Meets FDA Requirements
- Multiple Colors Available
- Vacuum rating to 28" Hg

Polyethylene is made from 100% non-toxic ingredients. It's inert nature and FDA compliant status makes it perfect for food, water and beverage piping. It is ideal for use in pneumatic, drain piping, lab use and chemical transfer applications which require an inexpensive tubing

Polyethylene is highly-resistant to stress cracking from chemicals, aging and ultraviolet exposure. For use with barb-type, push-to-connect or compression-style fittings.

Specifications

Temperature Range: -50°F to +140°F

Hardness: Shore A 93A
Shore D 45D

Applications

Food & Beverage
Pneumatic Tools
Pneumatic Piping
Electrical Jacketing
Drain Lines
Instrumentation
Chemical Transfer
Process Control
Laboratories

100' LENGTH

500' LENGTH

1000' LENGTH

100' LENGTH - Natural

Part #	Tube O.D.	Tube ID	Tube Wall	Working Pressure	
973-200	1/8"	0.08	0.022	250	----
973-201	4mm/5/32"	0.106	0.025	180	----
973-203	1/4"	0.17	0.040	150	----
973-204	1/4"	0.125	0.0625	350	----
973-205	8mm/5/16"	0.236	0.038	150	----
973-206	3/8"	0.25	0.0625	150	----
973-207	1/2"	0.375	0.0625	125	----
973-208	5/8"	0.50	0.0625	100	----
973-211	3/4"	0.625	0.0625	100	----
973-210	1"	0.75	0.125	150	----

500' LENGTH

Part #	Tube O.D.	Tube ID	Tube Wall	Working Pressure	
73-200N5	1/8"	0.085	0.020	250	----
73-203N5	1/4"	0.17	0.040	150	----
73-204N5	1/4"	0.125	0.0625	350	----
73-206N5	3/8"	0.25	0.0625	150	----
73-207N5	1/2"	0.375	0.0625	125	----

1000' LENGTH

Part #	Tube O.D.	Tube ID	Tube Wall	Working Pressure	
73-203N1	1/4"	0.17	0.040	150	----
73-206N1	3/8"	0.25	0.0625	150	----

LLDPE POLYETHYLENE TUBING - COLORS

BLACK

- 100'
- 500'
- 1000'

Part #	Color	Length	Nominal O.D.	
73-200B	Black	100'	1/8"	----
73-201B	Black	100'	5/32"	----
73-203B	Black	100'	1/4"	----
73-204B	Black	100'	1/4"	----
73-205B	Black	100'	5/16"	----
73-206B	Black	100'	3/8"	----
73-207B	Black	100'	1/2"	----
73-208B	Black	100'	5/8"	----
73-203B5	Black	500'	1/4"	----
73-205B5	Black	500'	5/16"	----
73-206B5	Black	500'	3/8"	----
73-207B5	Black	500'	1/2"	----
73-203B1	Black	1000'	1/4"	----
73-206B1	Black	1000'	3/8"	----

GREEN

- 100'
- 500'
- 1000'

Part #	Color	Length	Nominal O.D.	
73-201G	Green	100'	5/32"	----
73-203G	Green	100'	1/4"	----
73-204G	Green	100'	1/4"	----
73-205G	Green	100'	5/16"	----
73-206G	Green	100'	3/8"	----
73-207G	Green	100'	1/2"	----
73-203G5	Green	500'	1/4"	----
73-203G1	Green	1000'	1/4"	----

WHITE

- 100'
- 500'

Part #	Color	Length	Nominal O.D.	
73-203W	White	100'	1/4"	----
73-206W	White	100'	3/8"	----
73-207W	White	100'	1/2"	----
73-207W5	White	500'	1/2"	----

BLUE

- 100'
- 500'
- 1000'

Part #	Color	Length	Nominal O.D.	
73-200U	Blue	100'	1/8"	----
73-201U	Blue	100'	5/32"	----
73-203U	Blue	100'	1/4"	----
73-204U	Blue	100'	1/4"	----
73-205U	Blue	100'	5/16"	----
73-206U	Blue	100'	3/8"	----
73-207U	Blue	100'	1/2"	----
73-203U5	Blue	500'	1/4"	----
73-206U5	Blue	500'	3/8"	----
73-203U1	Blue	1000'	1/4"	----

RED

- 100'
- 500'
- 1000'

Part #	Color	Length	Nominal O.D.	
73-203R	Red	100'	1/4"	----
73-205R	Red	100'	5/16"	----
73-206R	Red	100'	3/8"	----
73-207R	Red	100'	1/2"	----
73-203R5	Red	500'	1/4"	----
73-206R5	Red	500'	3/8"	----
73-203R1	Red	1000'	1/4"	----

YELLOW

- 100'

Part #	Color	Length	Nominal O.D.	
73-203Y	Yellow	100'	1/4"	----
73-204Y	Yellow	100'	1/4"	----
73-205Y	Yellow	100'	5/16"	----
73-206Y	Yellow	100'	3/8"	----
73-207Y	Yellow	100'	1/2"	----

ORANGE

Part #	Color	Length	Nominal O.D.	
73-203O	Orange	100'	1/4"	----

NYLON 12 TUBING

Nylon 12 tubing is recognized as an industry standard for applications which require higher working pressures and higher heat and/or chemical resistance. It is ideal for outdoor use applications because of its superior stress crack resistance. Nylon 12 is strong, lightweight and has a very low moisture absorption rate compared to other nylons. By not absorbing moisture, Nylon 12 remains more flexible, which in turn extends it's service life. Nylon 12 tubing can be used with standard push-to-connect fittings and compression fittings for simple installation.

Because of it's semi-rigid properties, a thinner tube wall provides higher flow rates and working pressure.

Features

- Strong
- Lightweight
- Flexible
- Abrasion Resistant
- Heat Resistant
- Chemical Resistant
- Heat/ Light Stabilized
- Black - UV Rated

Specifications

Temperature Range: -60°F to +200°F
Hardness: Rockwell 78 R
Shore D 70
Vacuum Rating: To 28" Hg
Higher Flow Rates & Working Pressure
Tolerances: 1/8'-1/4" +/- .004
3/4"-1/2" +/- .006

Applications

Pneumatic Tools
Pneumatic Piping
Instrumentation
Lube Lines
Coolants
Refrigeration
Chemical Transfer
Vacuum
Process Control
Fuel Lines
Paint Supply Lines
Laboratories

Part #'s shown are for natural. 500' and 1000' reels available on request.

100' LENGTH

BLACK TUBING & MISC.

METRIC LENGTH

100' LENGTH

Part #	Tube O.D.	Tube ID	Tube Wall	Working Pressure	
973-230	1/8"	0.08	.022	420	----
973-231	5/32"	0.106	.025	350	----
973-232	1/4"	0.18	.035	290	----
973-238	1/4"	0.15	.05	800	----
973-226	5/16"				
973-233	3/8"	0.275	.050	250	----
973-234	1/2"	0.375	.062	240	----

BLACK TUBING & MISC.

Part #	O.D.	Tube ID	Wall	Working Pressure	
73-230B	1/8	0.08	0.022	420	----
73-231B	5/32	0.106	0.025	350	----
73-232B	1/4	0.18	0.035	290	----
73-238B	1/4	0.15	0.05	800	----
73-233B	3/8	0.275	0.05	250	----
73-232N5*	1/4	0.18	0.035	290	----
73-238U**	1/4	0.15	0.075	800	----

• 500' Natural **Blue

*METRIC LENGTH - 100 ft. coils

• available in natural color only

Part #	MM O.D.	MM I.D.	MM Wall	Working Pressure	
973-323	4	2.7	0.65	350	----
973-326	6	3.5	1.25	350	----
973-325	6	4	1	340	----
973-327	8	6	1	250	----
973-329	10	8	1	225	----
973-332	12	10	1	200	----
973-334	14	11	1.5	175	----

PVC TUBING AND TUBING CUTTERS

PVC POLYVINYLCHLORIDE TUBING - NSF61

PVC is suited for general, low-pressure, industrial applications for the conveyance of liquids and solids of suitable granular size. Made from a PVC compound that complies with FDA regulations. Although it is primarily intended for applications where pressure is not essential, it will withstand the pressures shown.

The clear PVC Tubing provides good chemical resistance, is lightweight, flexible and economically priced.

Features

- Lightweight
- Flexible
- Food Grade
- Clear Color/ Blue tint

Specifications

Temperature Range: +25°F to +150°F
Hardness: Shore A 75 PVC
Meets FDA requirements
NSF 61 Certified
USP Class VI rated materials
RoHS Compliant

Applications

Beverage Dispensing
Drain Tubing
Potable Water
Laboratory Tubing
Wine Transfer
Low Pressure Air Line
Distilled Water Transfer
Light Vacuum
Wire Harness
3:1 Burst Pressure

Colors Available: Clear

Package Lengths: 100'

100' LENGTH

Part #	Tube I.D.	Tube O.D.	Tube Wall	Working Pressure	
973-224	1/8 (.125)	1/4 (.25)	1/16 (.032)	50	----
973-223	3/16 (.187)	5/16 (.313)	1/16 (.062)	55	----
973-215	1/4 (.25)	3/8 (.375)	1/16 (.062)	55	----
973-252	5/16 (.312)	7/16 (.438)	1/16 (.062)	50	----
973-253	5/16 (.312)	1/2 (.500)	3/32 (.094)	55	----
973-216	3/8 (.375)	1/2 (.500)	1/16 (.062)	45	----
973-255	3/8 (.375)	5/8 (.625)	1/8 (.125)	55	----
973-262	3/8 (.375)	9/16 (.563)	3/32 (.094)	50	----
973-217	1/2 (.500)	5/8 (.625)	1/16 (.062)	30	----
973-219	3/4 (.750)	1 (1.00)	1/8 (.125)	35	----
973-221	1 (1.00)	1-1/4 (1.25)	1/8 (.125)	25	----

TUBING ACCESSORIES

MINI-TUBING CUTTER

• Great for tight places

Part #	Size	
990-571	3mm-22mm (1/8"-7/8")	----

TUBING CUTTER

Part #	Size	
990-570	1/8"-1-1/8"	----

PLASTIC TUBE CUTTER

Range: 1/8" - 3/8" I.D. (3mm-10mm)

Part #	Description	
91-707	Cutter w/Blade	----

MOUNTING RACKS

- Route and secure multiple tubing lines
- Mounting versatility
  - Racks can be easily hand separated down to single holders.
  - Thru holes provided (all sizes)
- Standard color is BLACK.

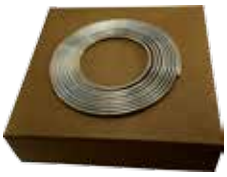
Other colors available on special request.

NOTE: MOUNTING SCREWS NOT PROVIDED

Part #	Tubing OD	Description	Channels	
28-988	1/4	non-adhesive	10	----
28-989	1/4	adhesive	10	----
28-990	3/8	non-adhesive	7	----
28-991	1/2	non-adhesive	5	----

ALUMINUM TUBING - EASY BEND

Alloy 3003-0 ASTM B-483



Material to ASTM B-483

900 PSI max
3700 Burst PSI

Bend this tubing into the shape you need without special tools or elbow fittings. It is also known as Alloy 3003. Tubing has seamless construction, which provides a smooth interior and allows it to be flared without splitting. Use with water, air, alcohol and oil. Tubing meets ASTM B483 and has a soft (annealed) temper. OD tolerance is ±0.004"

ALUMINUM VERSATUBE 50' COILS

Part #	O.D.	Wall Thick	ID	Max PSI @ 100°F	Case	50' Coils
972-190	1/8	.025	.075"	2,300	10 coils	----
972-191	3/16	.028	.132"	1,600	10 coils	----
972-192	1/4	.032	.186"	1,400	10 coils	----
972-193	5/16	.035	.243"	1,200	10 coils	----
972-194	3/8	.035	.305"	1,000	10 coils	----
972-195	1/2	.035	.43"	740	10 coils	----

COPPER TUBING - REFRIGERATION TUBING

ASTMB280

- Temp range: 32° to 400°F
- Bend with a bending tool
- Use with copper solder-connect fittings

This copper Alloy 122 tube comes cleaned and capped to prevent moisture and dirt from contaminating the inside. It's often called refrigeration and air conditioning tubing. Use with water, natural gas, oil and R22 refrigerant. Tubing meets ASTM B280. It has seamless construction, which provides a smooth interior. Tubing has a soft (annealed) temper.

REFRIGERATION COPPER TUBE 50' COILS

Part #	Tube Size	OD	Wall	ID	Max PSI @ 100°F	Weight per 50' Coil	50' Coils
972-180	-	1/8	.030	.065"	3,000	1.74	----
972-181	-	3/16	.030	.128"	1,900	2.88	----
972-182	1/8	1/4	.030	.19"	1,400	4..02	----
972-183	-	5/16	.032	.248"	1,100	5.45	----
972-184	1/4	3/8	.032	.311"	980	6.70	----
972-185	3/8	1/2	.032	.436"	720	9.10	----
972-186	1/2	5/8	.035	.555"	610	12.55	----
972-187	5/8	3/4	.035	.68'	510	15.25	----

COPPER TUBING - DRINKING WATER

For residential water lines

- Temp range: 32° to 180°F
- Bend with a bending tool
- Use with copper solder-connect fittings

NSF 61 certified for drinking (potable) water, this copper Alloy 122 tubing is also called type L. Tubing meets ASTM B88. It has seamless construction, which porovides a smooth interior. Coils - Have a soft (annealed) temper.

• Water service • Natural, liquified and petroleum gases • Fire protection • Solar • Fuel/ Fuel oil • HVAC • Snow melting - Air Brake

TYPE L SOFT COPPER TUBING 60' COILS

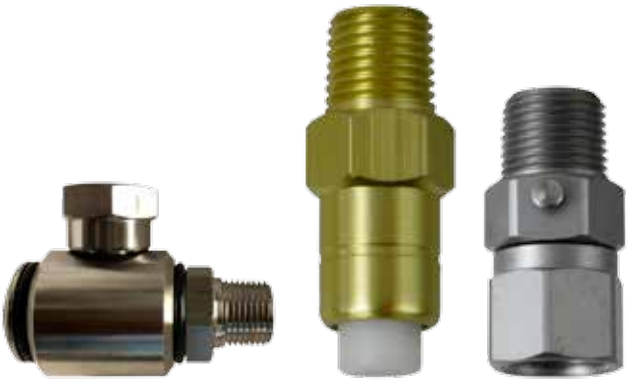
Part #	TUBE SIZE	OD	WALL	ID	Max PSI @ 100°F	Weight per 60' Coil	60' Coils
972-171	1/4	3/8"	.03"	.315"	910	7.56	----
972-172	3/8	1/2	.035"	.43"	770	11.88	----
972-173	1/2	5/8"	.04"	.545"	720	17.10	----

WARNING: This product can expose you to chemicals, including Lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

HIGH PRESSURE SPRAYERS

STRAIGHT THROUGH QDS

FITTINGS AND SWIVELS



NOZZLES

SPRAY GUNS AND WANDS

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

QUICK DISCONNECT NOZZLE

0-degree red tip nozzle, 15-degree yellow tip nozzle, 25-degree green tip nozzle, 40-degree white tip nozzle, and 65-degree black tip detergent nozzle. All nozzles are 4000 PSI and stainless steel, except for detergent nozzle, which is 600 PSI and brass. All Nozzles are rated for temperatures up to 300°F. Nozzles attach with ¼" quick disconnect plug.

Part #	Degree of Spray	GPM @ 4000PSI	
DX250030	0	3.0	----
DX251530	15	3.0	----
DX252530	25	3.0	----
DX254030	40	3.0	----
DX250040	0	4.0	----
DX251540	15	4.0	----
DX252540	25	4.0	----
DX254040	40	4.0	----
DX250050	0	5.0	----
DX251550	15	5.0	----
DX252550	25	5.0	----
DX254050	40	5.0	----
DX250060	0	6.0	----
DX251560	15	6.0	----
DX252560	25	6.0	----
DX254060	40	6.0	----
DX256500	65		----

MEG NOZZLE

Available in 0-degree nozzle, 15-degree nozzle, 25-degree nozzle, or 40-degree nozzle. Nozzle sizes 3.0, 4.0, 5.0, 6.0 or 7.0. All nozzles are 7250 PSI 300°F, stainless steel and ¼" male pipe thread.

Part #	Degree of Spray	GPM @ 4000PSI	
DX140030MG	0	3.0	----
DX141530MG	15	3.0	----
DX142530MG	25	3.0	----
DX144030MG	40	3.0	----
DX140040MG	0	4.0	----
DX141540MG	15	4.0	----
DX142540MG	25	4.0	----
DX144040MG	40	4.0	----
DX140050MG	0	5.0	----
DX141550MG	15	5.0	----
DX142550MG	25	5.0	----
DX144050MG	40	5.0	----
DX140060MG	0	6.0	----
DX141560MG	15	6.0	----
DX142560MG	25	6.0	----
DX144060MG	40	6.0	----
DX140070MG	0	7.0	----
DX141570MG	15	7.0	----
DX142570MG	25	7.0	----
DX144070MG	40	7.0	----

QUICK DISCONNECT NOZZLE 5-PIECE KIT

Part #	GPM @ 4000PSI	
DX259520	2.0	----
DX259530	3.0	----
DX259540	4.0	----
DX259550	5.0	----
DX259560	6.0	----
DX259570	7.0	----

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

OFFERED EXCLUSIVELY THROUGH MFG

DREXEL PRESSURE

RUBBER-TIP TURBO NOZZLE

Rubber tip, rotating turbo nozzle, ¼" NPT with steel male quick disconnect plug adaptor, rated for temperatures up to 300°F.

Part #	PSI	GPM @ 4000PSI	
DX722530	2500	3.0	----
DX722540	2500	4.0	----
DX722550	2500	5.0	----
DX722560	2500	6.0	----
DX723230	3200	3.0	----
DX723240	3200	4.0	----
DX723250	3200	5.0	----
DX723260	3200	6.0	----
DX724030	4000	3.0	----
DX724040	4000	4.0	----
DX724050	4000	5.0	----
DX724060	4000	6.0	----
DX725030	5000	3.0	----
DX725040	5000	4.0	----
DX725050	5000	5.0	----
DX725060	5000	6.0	----

STAINLESS STEEL LIVE SWIVEL

MxF straight through live swivel, NBR or Viton seal, 416 SS, 10.6 gpm, 180F max, 3500 PSI

Part #	Seal	Size	
DX60021	NBR	1/4"	----
DX60022	NBR	3/8"	----
DX60023	NBR	1/2"	----
DX60021V	Viton	1/4"	----
DX60022V	Viton	3/8"	----
DX60023V	Viton	1/2"	----

THERMAL RELIEF VALVE

140F Thermal Relief Valve, Brass, 300 PSI

Part #	Size	
DX35TR25	1/4"	----
DX35TR38	3/8"	----

90° BOOM SWIVEL

Male x Female 90° Boom swivel, Stainless Steel, 5000 PSI, 7GPM, 300°F

Part #	Size	
DX60092	3/8"	----

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

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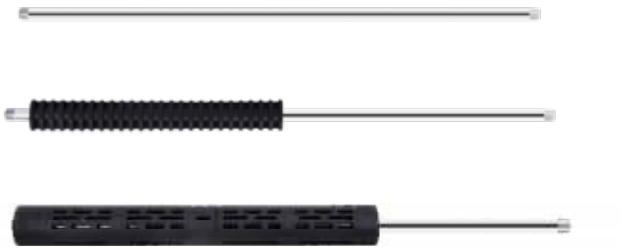
CHROMED STEEL WAND

1/4" MNPT x 1/4" Extension Wands, 10.5 GPM, 300F



Part #	Size	Grip	
DX4324	24"	No Grip	----
DX4336	36"	No Grip	----
DX4424	24"	Molded Grip	----
DX4436	36"	Molded Grip	----
DX4524VG	24"	Vented Grip	----
DX4536VG	36"	Vented Grip	----

SPRAY GUN

Rear entry spray gun, 4000 PSI, 7 GPM, 212F max

Part #	Pressure	Flow	Temperature	
DX5090	4000	7	212	----
DX5022	4000	6.6	300	----
DX5005	5075	10.5	300	----

WEEPING SPRAY GUN

Rear entry spray gun, weeping, 5000 PSI, 10.5 GPM, 300F

Weep style spray guns allow for a continuous flow of water by way of a small hole in the bottom of the gun that produces a slight leak, or a weeping effect. This helps prevent lines freezing in cold weather or scalding water temperatures in hot weather that could damage the pumps.

Part #	
DX5006	----

SPRAY GUN WITH EXTENSION

Rear entry spray gun with 12” extension, 4000psi, 7gpm, 300F max

Part #	
DX5190	----

SPRAY GUN WITH EXTENSION

Rrear entry spray gun with 12” extension, 5075psi, 10.5gpm, 300F max

Part #	
DX5197	----

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

COUPLERS/ PLUGS

STRAIGHT THROUGH STYLE

- Brass couplers have brass bodies and brass valves, 8 steel locking balls, Buna-N seal, and stainless steel springs
- Stainless steel couplers have stainless steel bodies, 8 stainless steel locking balls, Buna-N seal, and stainless steel springs
- Plugs are steel with green blue zinc plating or stainless steel
- Straight through design means there is no positive shut-off after disconnect
- Fully interchangeable with Parker, Hansen, Foster and Adams
- Use with liquids, hydraulic service, compressed air, gases, water and vacuum
- Ideal for applications such as high pressure water, steam washers, and carpet cleaners
- Max. Temp. 212°F for Couplers/ 300°F for Plugs • Max Flow: 10.5 GPM

MALE BRASS COUPLERS

Part #	Body Size	Thread Size	PSI	
86-030	1/4	1/4	4000	----
86-031	3/8	3/8	4000	----
86-032	1/2	1/2	4000	----

MALE STEEL PLUGS

Part #	Body Size	Thread Size	PSI	
86-040	1/4	1/4	4000	----
86-041	3/8	3/8	4000	----
86-042	1/2	1/2	4000	----

FEMALE BRASS COUPLERS

Part #	Body Size	Thread Size	PSI	
86-035	1/4	1/4	4000	----
86-036	3/8	3/8	4000	----
86-037	1/2	1/2	4000	----

FEMALE STEEL PLUGS

Part #	Body Size	Thread Size	PSI	
86-045	1/4	1/4	4000	----
86-046	3/8	3/8	4000	----
86-047	1/2	1/2	4000	----

MALE STAINLESS STEEL COUPLERS

Part #	Body Size	Thread Size	PSI	
86-030SS	1/4	1/4	6000	----
86-031SS	3/8	3/8	6000	----

MALE STAINLESS STEEL PLUGS

Part #	Body Size	Thread Size	PSI	
86-040SS	1/4	1/4	6000	----
86-041SS	3/8	3/8	6000	----

FEMALE STAINLESS STEEL COUPLERS

Part #	Body Size	Thread Size	PSI	
86-035SS	1/4	1/4	6000	----
86-036SS	3/8	3/8	6000	----

FEMALE STAINLESS STEEL PLUGS

Part #	Body Size	Thread Size	PSI	
86-045SS	1/4	1/4	6000	----
86-046SS	3/8	3/8	6000	----

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

MOLDED GRIP MALE BRASS COUPLER

Part #	Thread Size	Thread Size	PSI	
86-030RG	1/4	1/4	4000	----
86-031RG	3/8	3/8	4000	----

MOLDED GRIP FEMALE BRASS COUPLER

Part #	Thread Size	Plug	PSI	
86-035RG	1/4	1/4	4000	----
86-036RG	3/8	3/8	4000	----

M22 SCREW TYPE X MNPT

Part #	Thread Size	Male	PSI	
86-001	M22	1/4	4000	----
86-002	M22	3/8	4000	----

M22 SCREW TYPE X FNPT

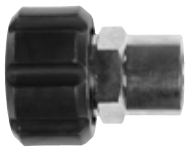
Part #	Thread Size	Female Size	PSI	
86-005	M22	1/4	4000	----
86-006	M22	3/8	4000	----

INSUALTED KNOB

M22 INSULATED KNOB X MNPT

Part #	Thread Size	Male Size	PSI	
86-012	M22	1/4	4000	----
86-013	M22	3/8	4000	----

M22 INSULATED KNOB X FNPT

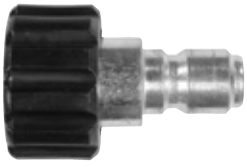


Part #	Thread Size	Female Size	PSI	
86-017	M22	1/4	4000	----
86-018	M22	3/8	4000	----

M22 X M22 FNPT

Part #	Thread Size	Thread Size	PSI	
86-022	M22	M22	4000	----

M22 INSULATED KNOB X QC PLUG



Part #	Thread Size	Plug	PSI	
86-020	M22	3/8	4000	----

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

PNEUMATICS

PNEUMATICS

1/4" 3/8" 1/2" 1/4" 1/4" 3/8" 1/4" 1/4" 3/8"
INDUSTRIAL INTERCHANGE ARO AUTO AUTO LINCOLN STRAIGHT THRU STRAIGHT THRU

QUICK DISCONNECTS

- Universal
- ARO 210
- Lincoln
- Industrial
- Automotive
- ST Series - High Flow

BREATHER VENTS, MUFFLERS

- Mufflers
- Snubbers
- In-line filters
- Breather vents
- Control valves
- Manifolds

PNEUMATIC ACCESSORIES

- Kits NEW
- Tire gauge
- Tank and vent valves
- Blow guns
- Air chucks
- Inflators

GAUGES

- Liquid filled & Dry
- Lower mount & center mount
- Water test
- Syphons

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

INDUSTRIAL INTERCHANGE

• Couplers are brass or plated steel body with brass or steel valves, 6 steel locking balls, NBR seal and stainless steel springs

6 Steel locking balls (1/2" body size has 8 steel locking balls)

• Plugs are brass or steel with green blue zinc plating

• Industry standard design for compressed air, water, grease, paint, limited vacuum and limited gases

• Manual retract for connecting and disconnecting

• Maximum working pressure is 250 PSI

BRASS FEMALE COUPLER

Part#	Body Size	Thread Size	
28-540	1/4"	1/4"	----
28-541	1/4"	3/8"	----

BRASS MALE COUPLER

Part#	Body Size	Thread Size	
28-552	1/4"	1/4"	----
28-553	1/4"	3/8"	----

STEEL FEMALE COUPLER

Part#	Body Size	Thread Size	
28-540S	1/4"	1/4"	----
28-541S	1/4"	3/8"	----
98-810	3/8"	1/4"	----
98-811	3/8"	3/8"	----
98-812	3/8"	1/2"	----
99-812	1/2"	1/2"	----
99-813	1/2"	3/4"	----

STEEL MALE COUPLER

Part#	Body Size	Thread Size	
28-552S	1/4"	1/4"	----
28-553S	1/4"	3/8"	----
98-823	3/8"	1/4"	----
98-824	3/8"	3/8"	----
98-825	3/8"	1/2"	----
99-825	1/2"	1/2"	----
99-826	1/2"	3/4"	----

BRASS HOSE ID COUPLER

Part#	Body Size	Barb Size	
28-562	1/4"	1/4"	----
28-564	1/4"	3/8"	----

STEEL HOSE ID COUPLER

Part#	Body Size	Barb Size	
28-562S	1/4"	1/4"	----
28-564S	1/4"	3/8"	----
98-840	3/8"	1/4"	----
98-841	3/8"	3/8"	----
99-841	1/2"	3/8"	----
99-843	1/2"	1/2"	----

BRASS PUSH-ON HOSE COUPLER

Part#	Body Size	Barb Size	
28-565	1/4"	1/4"	----
28-566	1/4"	3/8"	----

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

STEEL PUSH-ON HOSE COUPLER

Part#	Body Size	Barb Size	
28-565S	1/4"	1/4"	----
28-566S	1/4"	3/8"	----
98-842	3/8"	3/8"	----

STEEL MALE PLUG

Part#	Body Size	Thread Size	
28-545	1/4"	1/8"	----
28-546	1/4"	1/4"	----
28-547	1/4"	3/8"	----
98-814	3/8"	1/4"	----
98-815	3/8"	3/8"	----
99-816	1/2"	1/2"	----
99-817	1/2"	3/4"	----

STEEL FEMALE PLUG

Part#	Body Size	Thread Size	
28-533	1/4"	1/8"	----
28-534	1/4"	1/4"	----
28-535	1/4"	3/8"	----
98-801	3/8"	1/4"	----
98-802	3/8"	3/8"	----
99-803	1/2"	1/2"	----
99-804	1/2"	3/4"	----

BRASS MALE PLUG

Part#	Body Size	Thread Size	
28-546B	1/4"	1/4"	----

BRASS FEMALE PLUG

Part#	Body Size	Thread Size	
28-534B	1/4"	1/4"	----

STEEL HOSE ID PLUG

Part#	Body Size	Barb Size	
28-557	1/4"	1/4"	----
28-559	1/4"	3/8"	----
98-828	3/8"	3/8"	----
99-828	1/2"	3/8"	----
99-830	1/2"	1/2"	----

STEEL PUSH-ON HOSE PLUG

Part#	Body Size	Barb Size	
28-558	1/4"	1/4"	----
28-561	1/4"	3/8"	----
98-830	3/8"	3/8"	----

STEEL SWIVEL MALE PLUG

Part#	Body Size	Thread Size	
320-065	1/4"	1/4"	----

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

UNIVERSAL SERIES COUPLERS

• Automatic Coupler means flow will cut off automatically at time of disconnect
• Brass Couplers have brass body and brass sleeve with brass valve, 6 steel locking balls, NBR seal and 6 stainless steel springs.
• Stainless Steel Couplers have stainless steel body and stainless steel sleeve with stainless steel valve, 6 steel locking balls, FKM seal, and stainless steel springs
• Coupler compatible with ARO 210, Parker Interchange and Industrial Interchange plugs
• Maximum working pressure is 250 PSI

BRASS MALE COUPLER

Part#	Body Size	Thread Size	
28-579	1/4"	1/4"	----
28-589	1/4"	3/8"	----

BRASS FEMALE COUPLER

Part#	Body Size	Thread Size	
28-560	1/4"	1/4"	----

BRASS HOSE ID COUPLER

Part#	Body Size	Barb Size	
28-690	1/4"	1/4"	----
28-691	1/4"	3/8"	----

STAINLESS STEEL MALE COUPLER

Part#	Body Size	Thread Size	
28-579SS	1/4"	1/4"	----

STAINLESS STEEL FEMALE COUPLER

Part#	Body Size	Thread Size	
28-560SS	1/4"	1/4"	----

STAINLESS STEEL INDUSTRIAL MALE PLUG

Part#	Body Size	Thread Size	
28-546SS	1/4"	1/4"	----

STAINLESS STEEL INDUSTRIAL FEMALE PLUG

Part#	Body Size	Thread Size	
28-534SS	1/4"	1/4"	----

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

ARO 210 INTERCHANGE

• Couplers have brass bodies and brass valves, 6 steel locking balls, NBR seal, and stainless steel springs
• Plugs are steel with green blue zinc plating
• Couplers have a full opening tubular valve for maximum flow and a built-in sleeve guard to minimize accidental disconnect
• Maximum working pressure is 250 PSI

MALE COUPLER

Part#	Body Size	Thread Size	
28-592	1/4"	1/8"	----
28-593	1/4"	1/4"	----
28-594	1/4"	3/8"	----

MALE PLUG

Part#	Body Size	Thread Size	
28-586	1/4"	1/8"	----
28-587	1/4"	1/4"	----

FEMALE COUPLER

Part#	Body Size	Thread Size	
28-583	1/4"	1/8"	----
28-584	1/4"	1/4"	----
28-585	1/4"	3/8"	----

FEMALE PLUG

Part#	Body Size	Thread Size	
28-578	1/4"	1/4"	----

HOSE ID COUPLER

Part#	Body Size	Barb Size	
28-601	1/4"	1/4"	----
28-603	1/4"	3/8"	----

HOSE ID PLUG

Part#	Body Size	Barb Size	
28-595	1/4"	1/4"	----
28-597	1/4"	3/8"	----

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

AUTOMOTIVE/ PARKER INTERCHANGE (Tru-Flate)

- Brass couplers are brass bodies with brass valves, 6 steel locking balls, NBR seal, and stainless steel springs. Steel couplers are steel bodies with steel valves, 6 stainless steel locking balls, NBR seal, and stainless steel springs.
- Plugs are brass or steel with green blue zinc plating
- Unique design has been field proven as a long-lasting, high performance coupling especially when used with pneumatic tools
- Maximum working pressure is 300 PSI

BRASS MALE COUPLER

Part#	Body Size	Thread Size	
28-515	1/4"	1/8"	----
28-516	1/4"	1/4"	----
28-517	1/4"	3/8"	----

BRASS FEMALE COUPLER

Part#	Body Size	Thread Size	
28-507	1/4"	1/4"	----
28-508	1/4"	3/8"	----

STEEL MALE COUPLER

Part#	Body Size	Thread Size	
28-516S	1/4"	1/4"	----
28-514S	3/8"	1/4"	----
28-519S	3/8"	3/8"	----

STEEL FEMALE COUPLER

Part#	Body Size	Thread Size	
28-507S	1/4"	1/4"	----
28-525S	3/8"	1/4"	----
28-526S	3/8"	3/8"	----

BRASS MALE PLUG

Part#	Body Size	Thread Size	
28-510B	1/4"	1/4"	----

BRASS FEMALE PLUG

Part#	Body Size	Thread Size	
28-501B	1/4"	1/4"	----

STEEL MALE PLUG

Part#	Body Size	Thread Size	
28-509	1/4"	1/8"	----
28-510	1/4"	1/4"	----
28-511	1/4"	3/8"	----
28-512	3/8"	1/4"	----
28-513	3/8"	3/8"	----

STEEL FEMALE PLUG

Part#	Body Size	Thread Size	
28-500	1/4"	1/8"	----
28-501	1/4"	1/4"	----
28-502	1/4"	3/8"	----
28-503	3/8"	1/4"	----
28-504	3/8"	3/8"	----

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

AUTOMOTIVE/ PARKER INTERCHANGE — QUICK DISCONNECTS

HOSE ID COUPLER

Part#	Body Size	Barb Size	
28-528	1/4"	1/4"	----
28-530	1/4"	3/8"	----
28-536	3/8"	1/4"	----
28-538	3/8"	3/8"	----

HOSE ID PLUG

Part#	Body Size	Barb Size	
28-518	1/4"	1/4"	----
28-520	1/4"	3/8"	----
28-523	3/8"	1/4"	----
28-524	3/8"	3/8"	----

PUSH-ON HOSE COUPLER

Part#	Body Size	Barb Size	
28-531	1/4"	1/4"	----
28-532	1/4"	3/8"	----

PUSH-ON HOSE PLUG

Part#	Body Size	Barb Size	
28-521	1/4"	1/4"	----
28-522	1/4"	3/8"	----

LINCOLN INTERCHANGE

- Couplers have brass bodies with steel sleeves, Acetal valves, 6 steel locking balls, Nitrile seal and stainless steel springs
- Plugs are steel with green blue zinc plating
- Manual style
- Unique design includes long nose and short ball groove
- Maximum working pressure is 250 PSI

MALE COUPLER

Part#	Body Size	Thread Size	
28-683	1/4"	1/4"	----

STEEL MALE PLUG

Part#	Body Size	Thread Size	
28-685	1/4"	1/8"	----
28-686	1/4"	1/4"	----

FEMALE COUPLER

Part#	Body Size	Thread Size	
28-684	1/4"	1/4"	----

STEEL FEMALE PLUG

Part#	Body Size	Thread Size	
28-687	1/4"	1/4"	----

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

ST SERIES...HIGH FLOW

SPECIFICATIONS

Brass - Coupler & Steel Plug

Temperature Range	-40° to 250°	
Rated Pressure	4650	2350

- Non-valved couplings for applications where maximum flow is required. Ideal for applications such as high pressure water and steam washers, carpet cleaners and mold coolant lines. They are often used in food processing, on fluid and dye transfer lines.
- Standard seals are Buna-N (Nitrile).

MALE PIPE COUPLER

BRASS

Part #	Body & Thread Size	
28-667	1/8"	----
28-665	1/4"	----
28-666	3/8"	----
28-668	1/2"	----
28-669	3/4"	----
28-670	1"	----

FEMALE PIPE COUPLER

BRASS

Part #	Body & Thread Size	
28-671	1/8"	----
28-651	1/4"	----
28-652	3/8"	----
28-672	1/2"	----
28-673	3/4"	----

MALE PLUG

STEEL

Part #	Size	
28-675	1/8"	----
28-639	1/4"	----
28-640	3/8"	----
28-676	1/2"	----
28-677	3/4"	----

FEMALE PLUG

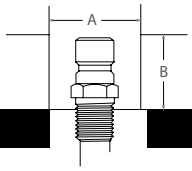
STEEL

Part #	Size	
28-688	1/8"	----
28-619	1/4"	----
28-620	3/8"	----
28-679	1/2"	----
28-680	3/4"	----
28-681	1"	----

MOLD COOLANT-LINE QUICK COUPLERS

OPERATING PRESSURE:
200 PSIG (14.06 Kg/sq. cm)
Standard Seal:
SILICONE: -90°F to 400°F (-68°C to + 205°C)

- Our coolant couplers are engineered for optimum speed and performance in connecting coolant lines to molds used for thermoplastic, thermosetting, blow molding, diecasting and on other types of tooling and equipment utilizing a constant fluid flow pumped through cooling channels.



MALE PLUG (BRASS)

1/4" BASIC SIZE

Part #	Size	A	B	
29-900	1/8"	0.69	0.69	----
29-901	1/4"	0.84	0.94	----
29-902	3/8"	1.00	0.97	----

3/8" BASIC SIZE

Part #	Size	A	B	
29-906	1/4"	1.00	0.94	----
29-907	3/8"	1.00	1.13	----
29-908	1/2"	1.81	1.25	----

1/2" BASIC SIZE

Part #	Size	A	B	
29-911	1/2"	1.25	1.50	----
29-912	3/4"	1.50	1.56	----

FEMALE PLUG (STEEL)

1/4" BASIC SIZE

Part #	Size	
29-903	1/8"	----
29-904	1/4"	----
29-905	3/8"	----

3/8" BASIC SIZE

Part #	Size	
29-909	1/4"	----
29-910	3/8"	----

1/2" BASIC SIZE

Part #	Size	
29-913	1/2"	----
29-914	3/4"	----

MINI TYPE QUICK DISCONNECTS

MALE COUPLER

Part #	Size	
28-605	1/8"	----

FEMALE PLUG

Part #	Size	
28-608	1/8"	----

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

MUFFLERS/ VENTS

PNEUMATIC ACCESSORIES

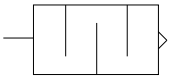
BRASS MUFFLERS

Materials:
Body: Brass
Element: Sintered Bronze
Max Operating Pressure: 300PSI
Temperature: 35° to 300°F
• Application: Designed to diffuse Air & Muffler noise to acceptable levels within OSHA noise requirements.
• Used on exhaust ports, valves, cylinders and air tools.
• Construction: Porous sintered bronze 40 micron filter element secured to a brass body

Part #	Size	
300-020	10/32"	----
300-021	1/8"	----
300-022	1/4"	----
300-023	3/8"	----
300-024	1/2"	----
300-026	3/4"	----
300-028	1"	----

40 Micron element

STAINLESS MUFFLERS



Materials:
Body: 303 Grade Stainless Steel
Element: 316 Grade Stainless Steel
Max Operating Pressure: 300PSI
Temperature: 35° to 392°F

Part #	Size	
300-031	10/32"	----
300-032	1/8"	----
300-033	1/4"	----
300-034	3/8"	----
300-035	1/2"	----
300-036	3/4"	----
300-037	1"	----

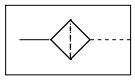
BRASS BREATHER VENT

Materials:
Body: Brass
Element: Sintered Bronze
Max Operating Pressure: 150PSI
Temperature: 35° to 300°F
• Application: Prevents Dirt and Foreign Particles from Entering Ports Open to Atmosphere. Typically used on Acting Cylinders
• Additional Use is Vacuum Relief or Pressure Equalization on Storage Vessels or Tanks
• Construction: Porous Sintered Bronzed 40 Micron Filter Element Secured to a brass body

Part #	Size	
300-000	10-32"	----
300-001	1/8"	----
300-002	1/4"	----
300-003	3/8"	----
300-004	1/2"	----
300-006	3/4"	----
300-008	1"	----

40 Micron element

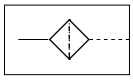
STAINLESS BREATHER VENT



Materials:
Body: 303 Grade Stainless Steel
Element:316 Grade Stainless Steel
Max Operating Pressure: 150PSI
Temperature: 35° to 390°F

Part #	Size	
300-014	1/8"	----
300-015	1/4"	----
300-017	3/8"	----
300-018	1/2"	----
300-019	3/4"	----
300-007	1"	----

PRESSURE SNUBBER

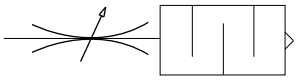


Materials:
Body: Brass
Element: Sintered Bronze
Max Operating Pressure: 9000PSI
Temperature: 35° to 300°F
• Applications: Protect pressure instruments from sudden pressure surges and fluctuations providing more accurate gauge readings
• Construction: Solid brass housing with porous bronze element
• Can be used for mini in-line filters
• 5 different porosity elements per package, allows each user to adjust snubbing capacity for the specific application

Part #	Size	Porosity	
28-354	1/4"	40 um	----
28-353	1/4"	30 um	----
28-352	1/4"	25 um	----
28-351	1/4"	20 um	----
28-350	1/4"	10 um	----

Recommended Element Porosity Rating		
Rating	Color	Recommended Application
40 um	None	Viscous Fluids (over 500 ssu)
30 um	Black	Med. Type Oils (225 to 500 ssu)
25 um	Brown	Water & LT. Oils (30 to 25 ssu)
20 um	Green	Low Viscosity Fluids Fluids (under 30 ssu)
10 um	Red	Air and Other Gases
5 um	Purple	

SPEED CONTROL VALVE

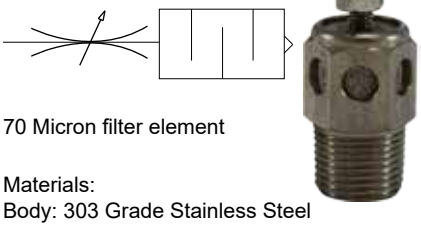


Materials:
Body: Brass
Element: 40 Micron Sintered Bronze
Max Operating Pressure: 300PSI
Temperature: 35° to 300°F
• Application: Provide infinite variation of metering air flow at acceptable sound levels on air valve exhaust ports with complete safety
• The speed of an operating cylinder or air tool may be increased or decreased with the adjusting screw, the final position is locked in place by a lock nut
• Objectionable exhaust air noise is eliminated by the surrounding sleeve - 40 µm sintered bronze
• Brass Body
• Max operating pressure: 300PSI
• Operating temperature: 35° F to 300° F

Part #	Size	
940-800	1/8"	----
940-801	1/4"	----
940-803	3/8"	----
940-804	1/2"	----
940-805	3/4"	----
940-806	1"	----

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

STAINLESS SPEED CONTROL VALVE

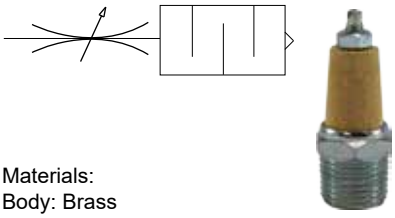


70 Micron filter element

Materials:
Body: 303 Grade Stainless Steel
Element: 316 Grade Stainless Steel
Max Operating Pressure: 300PSI
Temperature: 35° to 392°F

Part #	Size	
940-810	1/8"	----
940-811	1/4"	----
940-812	3/8"	----
940-813	1/2"	----
940-814	3/4"	----
940-815	1"	----

MUFFLER W/ FLOW ADJUSTMENT

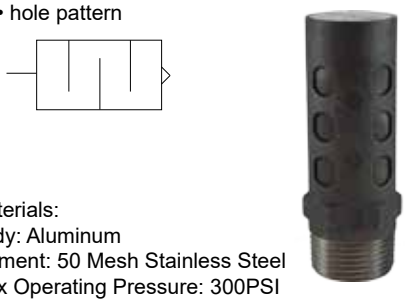


Materials:
Body: Brass
Element: Sintered Bronze
Max Operating Pressure: 300PSI
Temperature: 35° to 300°F

Part #	Size	
28-379	1/8"	----
28-380	1/4"	----
28-381	3/8"	----
28-382	1/2"	----

HIGH FLOW ALUMINUM MUFFLER

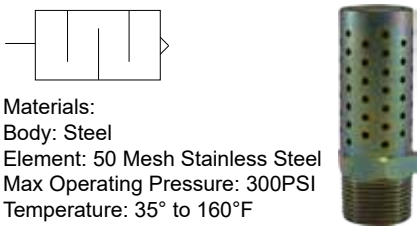
• hole pattern



Materials:
Body: Aluminum
Element: 50 Mesh Stainless Steel
Max Operating Pressure: 300PSI
Temperature: 35° to 160°F

Part #	Size	
940-822	1/8"	----
940-823	1/4"	----
940-824	3/8"	----
940-825	1/2"	----
940-826	3/4"	----
940-827	1"	----

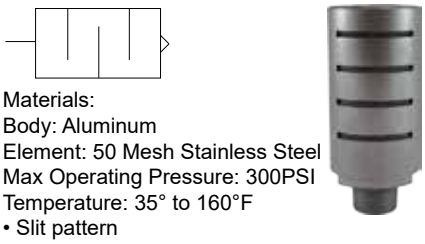
HIGH FLOW STEEL MUFFLER



Materials:
Body: Steel
Element: 50 Mesh Stainless Steel
Max Operating Pressure: 300PSI
Temperature: 35° to 160°F

Part #	Size	
28-373	1/8"	----
28-374	1/4"	----
28-375	3/8"	----
28-376	1/2"	----
28-377	3/4"	----
28-378	1"	----

ALUMINUM HIGH FLOW MUFFLER



Materials:
Body: Aluminum
Element: 50 Mesh Stainless Steel
Max Operating Pressure: 300PSI
Temperature: 35° to 160°F
• Slit pattern
• Application: Used exhaust ports of Pneumatic valves or manifolds to reduce work area noise
• Construction: Aluminum body, 50 mesh self cleaning stainless steel screen corrosion resistant aluminum shell
• High flow & minimal back pressure

Part #	Size	
28-367	1/8"	----
28-368	1/4"	----
28-369	3/8"	----
28-370	1/2"	----
28-371	3/4"	----
28-372	1"	----

PLASTIC HIGH FLOW MUFFLER

Materials:
Body: Black Nylon
Element:50 Mesh Stainless Steel
Max Operating Pressure: 150PSI
Temperature: 35° to 120°F

Part #	Size	
28-363	1/8"	----
28-364	1/4"	----
28-365	3/8"	----
28-366	1/2"	----

NIPPLE INLINE FILTER

Materials:
Body: Brass
Element: 40 Micron Sintered Bronze
Max Operating Pressure: 300PSI
Temperature: 35° to 300°F

Part #	Size	
940-845	1/8"	----
940-846	1/4"	----
940-847	3/8"	----
940-848	1/2"	----

REPAIRABLE AIR/ OIL INLINE FILTER

Materials:
Body: Anodized Aluminum
Element: 40 Micron Sintered Bronze
Max Operating Pressure: 300PSI
Temperature: 35° to 200°F
• Application: Protect small air tools i.e. impact wrench grinders, screwdrivers and low pressure hydraulic applications
• Construction: All anodized, lightweight aluminum housing
• Can be installed directly before the air tool
• Features cleanable or replaceable 40 micron filter element

Part #	Size	
940-840	1/8"	----
940-841	1/4"	----
940-842	3/8"	----
940-843	1/2"	----
940-844	3/4"	----

I have never let my schooling interfere with my education.

– Mark Twain

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

MANIFOLDS & AIR REGULATORS

CHROME PLATED BRASS MANIFOLDS

NEW

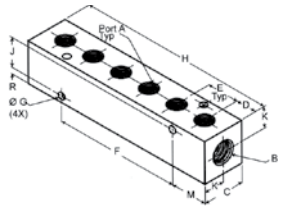
• 1/4" inlet and outlets

Part #	Description	
28-444	2 Port	----
28-445	3 Port	----
28-446	4 Port	----

• 1/4" Inlet on each end

MANIFOLDS - Aluminum with Black Anodizing

Materials:
Aluminum with black anodizing for corrosion resistance.
Specifications:
Max Operating Pressure: 1000PSI
Temperature: -10° to 200°F
Media: Air and liquids compatible with materials of construction.
• Ports column = # of ports in top of manifold



THREADED PORTS

Part #	Ports		A - out NPT	B - in NPT	C	D	E	F	G	H	J	K	M	R
28-450	4	----	1/8"	1/4"	1.00	0.50	0.75	1.5	0.17	3.25	0.70	0.50	0.88	0.15
28-452	6	----						3.00		4.75				
28-456	10	----						6.00		7.75				
28-457	2	----	1/4"	3/8"	1.25	0.63	0.88		0.20		0.89	0.63	1.06	0.18
28-458	3	----						0.88		3.00				
28-460	5	----						2.63		4.75				
28-464	9	----						6.13		8.25				
28-465	10	----						7.00		9.13				
28-467	3	----	3/8"	3/8"	1.25	1.00	1.13	1.13	0.20	4.25	0.89	0.63	1.56	0.18
28-468	4	----						2.25		5.38				
28-469	5	----						3.38		6.50				
28-470	6	----						4.50		7.63				

3 IN 1 ALUMINUM AIR MANIFOLD

No need to connect and disconnect every time you want to change tools. Supply 3 air tools from one outlet. These manifolds have one inlet with three 1/4 outlets.

Part #	Size	
320-120	1/4" Inlet	----
320-121	3/8" Inlet	----
320-122	1/2" Inlet	----

three 1/4" Outlets

AIR REGULATOR

• Rated for Inlet Pressrue up to 140PSI(10bar).
• Ambient and Fluid Tempreature:5~60°C(41~140°F)
• Port Threads:NPT
• Flow Capacity:See Below,at 0.7Mpa Inlet Pressure and set at 0.5Mpa.
• Assembly Bracket is included.

Part #	Size	Gauge Port	Regulating Range	
AR2	1/4"	1/8	0.05~0.85Mpa(0.5~8.5kgf/cm2)(7.25psi~123psi)	----

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

ASME CODED SAFETY VALVES

• Valves are manufactured to ASME standards and certified by the national board of boiler and pressure vessel inspectors.
• Bubble tight to 10% of set pop-off pressure.
• ASME safety valves are interchangeable with all other ASME valves of same size and pressure.
• Brass construction. Marked ASME, NB
• 1/ Blister card.

Part #	Male NPT	Pop-off Pressure	Air Flow	
87001	1/4"	70 PSI	70 CFM	----
87002	1/4"	125 PSI	120 CFM	----
87003	1/4"	150 PSI	140 CFM	----
87004	1/4"	200 PSI	170 CFM	----

Note: Valve resets after pressure drops 50%

NON-CODED SAFETY RELIEF VALVES

• Non-coded safety valves are constructed of the same materials as the AMSE safety valves but are not national board certified and cannot be used on applications requiring ASME components.
• Valves are equipped with a lift ring for instant relief and are staked at the factory at the pre set pop-off pressure.
• Marked ASME, UV, NB

Part #	Male NPT	Pop-off Pressure	
87008	1/4"	125 PSI	----
87009	1/4"	150 PSI	----

Warning: These valves are not to be used on compressors with a capacity over 15 CFM or 3 HP or 12 gallon storage tank.

COMPRESSOR TANK CHECK VALVES

• Used in compressor tanks to prevent air volume and pressure from escaping back into compressor heads while the compressor is not operating.
• Brass body with Teflon poppet.
• 1/8" Female NPT side port for pressure switch application.
• Maximum working pressure: 450 PSI
• Maximum temperature: 400°F

Part #	Tank Bung Hole Size	Compressor Air Line Size	SCFM	
87020	1/2" NPT Male	3/8" Tube Compression male	20	----
87021	1/2" NPT Male	1/2" Tube Compression male	20	----
87023	1/2" NPT Male	1/2" NPT Female	20	----

The memories we make with our family is everything.– Candace Cameron Bure

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MULTI-PURPOSE AIR VENT

Part #	Size	
46-048	1/8"	----
46-048S*	1/8" SS	----

#303 SS

705

BRASS BICYCLE PUMP FITTING

Screw on swivel chuck for most hand operated tire pumps.
Buna-N-Seal • Deflator

INT x 3/16 Barb

Part #	Size	
32-782	3/16"	----

INFLATOR

INT x 3/16

Part #	Size	
32-783	3/16"	----

PNEUMATIC SLIDE VALVE

- Max Operating Pressure: 200 psig
- Temperatures:-20°F to +200°F

Manually operated slide valves provide simple on/off airflow control. They can be mounted horizontally, vertically or at any angle.

Open Position

MALE X FEMALE

Part #	Size	L	Hex	
20-780	1/8"	2.15	9/16"	----

INT = Inflation needle thread .305 in. OD x 32 threads per inch
(see page 371)

TANK & VENT VALVE

Three standard styles of valve bodies, complete with short core, for air lifts, water pumps, vacuum, pressurized containers, air jacks, and other pneumatic devices.
REGULAR: 300 PSI and cracking pressure 80 PSI

1/8" NPT - .9" LONG SPRING CORE

7/16" Hex

1/8 x INT

Part #	Size	
46-620	1/8	----

1/8" NPT 1.207"LONG SPRING CORE

7/16" Hex

1/8 x INT

Part #	Size	
46-621	1/8	----

1/4" NPT 1.46" LONG SPRING CORE

9/16" Hex

w/ Black cap

1/4 x INT

Part #	Size	
46-622	1/4	----

TANK VALVE ACCESSORIES

BLACK PLASTIC CAP

No gasket

Inflation needle theads

Part #	
46-630	----

SHORT NICKEL PLATED DOME CAP

Dome skirted type

Inflation needle thead

Part #	
46-631	----

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

COMPACT BLOW GUN W/RUBBER TIP

- Includes One Rubber Tip and One Safety Tip
- Zinc Alloy Body
- 1/4" FPT Inlet
- Maximum 150 psi (Recommended Working Pressure 90-120 psi)
- Safety Tip Limits Air Pressure to 30 psi When Dead-Ended per OSHA requirement
- Maximum 87 dba
- 1/8" Outlet

Part #	Size	
320-053	1/4"	----

SAFETY BLOW GUN

- Heavy-Duty Design
- Internal Safety Valve that Limits Air Pressure to Less than 30 psi When dead-ended per OSHA
- Aluminium Alloy Body
- 1/4" FPT Inlet
- Maximum 150 psi (Recommended Working Pressure 90-120 psi)
- Safety Tip Limits Air Pressure to 30 psi When Dead-Ended per OSHA Requirement
- Maximum 87 dba
- 1/8" Outlet

Part #	Size	
320-054	1/4"	----

SAFETY BLOW GUN

- N/P steel handle with plastic sleeve
- Brass Valve
- Zinc body
- Aluminum nozzle

90 PSI

1/8" Outlet

Part #	Size	
320-050	1/4" Inlet	----

5114 51-124 401 20430AD S148 D204-30 6475

COMPACT BLOW GUN

- With standard tip and safety tip
- Zinc Alloy Body
- 1/4" FPT Inlet
- Maximum 150 psi (Recommended Working Pressure 90-120 psi)
- Safety Tip Limits Air Pressure to 30 psi When Dead-Ended per OSHA Requirement
- Maximum 87 dba

Part #	Size	
320-055	1/4"	----

PISTOL GRIP BLOW GUN

- Lightweight, Ergonomic Design
- Delrin® Body
- Trigger Air Flow Control
- 1/4" FPT Inlet
- 3" Nozzle Ideal for Tight Spaces
- Recommended Working Pressure 90-120 psi
- Maximum 87 Dba

Part #	Size	
320-036	1/4"	----

PISTOL GRIP BLO-GUN

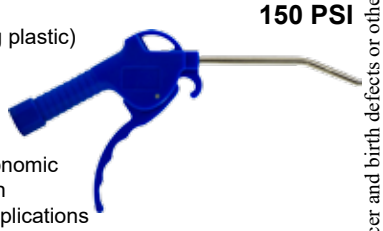
Material

150 PSI

- Body: POM (engineering plastic)
- Nozzle: nickel plated carbon steel
- Blue Handle Color

Features

- Simple construction, economic
- Global thread connection
- Durable and versatile applications
- 4 inch nozzle



Part #	Size	
320-035	1/4"	----

RUBBER TIPPED NOZZLE

Makes positive seal between gun and fuel line or other openings. Use only on air line regulated to 30 PSI or less.

Part #	Thread Size	
320-070	1/8 - 27	----

51-521 2058 D201RT 411R

HIGH FLOW SAFETY NOZZLE

Meets OSHA regulations of 30 PSI maximum outlet pressure when line pressure is 150 PSI or less. Has an air pressure bypass which prevents build up of tip pressure even if nozzle is blocked. Adapts to any blow gun with a 1/8" NPT nozzle port

Part #	Size	
320-075	1/8 MIP x Female Neelde Thread	----

51-338 SST10 411BT 2056

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

TIRE GAUGES

POCKET TIRE GAUGES

M - TIRE GAUGE

320-021

HEAVY DUTY DUAL FOOT TIRE GAUGE

320-022

DUEL ANGLE FOOT TRUCK PENCIL GAUGE

320-023

Part #	Pressure Range	Increment	Head	Body	Bar(psi/kPa)	
320-021	20-120psi	2 psi	Metal	Metal	4 sided plastic	----
320-022	10-120psi	2 psi	Plastic	Metal	4 sided plastic	----
320-023	20-120psi	2 psi	Metal	Metal	4 sided plastic	----

INFLATION NEEDLE

• See thread note below

Part #	
320-095	----

1 PIECE BLOW GUN TAPERED NOZZLE

Part #	Size	
320-076	NT	----

1 PIECE BLOW GUN STANDARD NOZZLE

Part #	Size	
320-077		----

VOLUME REGULATOR

Part #	FIP X MIP	
46-615	1/4	----

What size thread is an inflation needle (INT)?
Metric: 7.7mm OD, thread reoot diameter is 6.9mm x 0.794 pitch
English: 0.305 OD, threadroot diameter 0.302 in x 32 tpi (threads per inch)

1 PIECE DIAL TIRE GAUGE

Part #	
320-410	----

1 PIECE EXTENSION

Part #	Size	
320-080	NT	----

1 PIECE BLOW GUN ADAPTER

Part #	Size	
320-078	Female NT x 1/8 MPT	----

NYLON COIL AIR HOSE

- 200 psi working pressure
- 4:1 Safety factor (burst vs working pressure)
- Spring end sleeves to prevent kinking
- 1/4 MPT Brass fittings on both ends
- Temperature range 32°F to 120°F
- Packaged for retail sale

Part #	Description	Size	
307-030	25'	1/4" NPT	----
307-031	50'	1/4" NPT	----

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

HEX BALL FOOT CHUCK

Part #		
46-600	1/4 FPT Live Air	----

MALE BALL FOOT CHUCK

Part #		
46-605	1/4 MIP Live Air	----

BALL FOOT CHUCK W/ 1/4 ID HOSE BARB

Part #		
46-607	1/4 ID Live Air	----

DUAL HEAD STRAIGHT AIR CHUCK

Dual Head Air Chuck 1/4"FNPT,the length is 6.08",the head is Zinc-alloy,and the nut is brass with chrome plated.

Part #		
320-000	1/4	----

DUAL HEAD ANGLE FOOT AIR CHUCK

Dual Head Straight Foot Air Chuck 1/4"FNPT For inner duals;both ends lock on valve core threads,the length is 6.66",the head is Zinc-alloy,and the nut is brass with chrome plated.

Part #		
320-005	1/4	----

INFLATORS WITH GAUGE

INFLATOR/ GAUGE

- Rugged Zinc Cast Body with Brass Internals for long life
- Solid Brass Gauge Bar
- Built-in Air Relief Valve
- 6"Dual-Foot Air Chuck

320-010

INFLATOR/ GAUGE

- Rugged Zinc Cast Body with Brass Internals for Long Life
- Easy to View Built-In Sight Gauge
- Full Swivel Hose Fittings
- Protective Rubber Bumper
- Built-in Air Relief Valve
- 6"Dual-Foot Air Chuck

320-011

Part #	Pressure Range	Increment	Inlet	Hose Length	
320-010	10-120 psi	2 psi	1/4 FPT	12"	----
320-011	10-120 psi	2 psi	1/4 FPT	12"	----

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

AIR ACCESSORY SET

16PCS-AIR ACCESSORY SET

PART# 87-400

LIST PRICE: —

Contents of blister card package

Components and part#'s		Page #
1pc-1/4"FNPT industrial coupler	28-540	349
2pcs-1/4"FNPT industrial plugs	28-534	350
2pcs-1/4"MNPT industrial plugs	28-546	350
1pc-1/4" male connector	28-212	8
1pc-1/4" double female connector	28-059	3
1pc-ball foot chuck	46-600	363
1pc-blow gun	320-050	361
1pc-dial tire gauge	320-410	362
1pc-tapered rubber tip	320-070	361
1pc-blow gun safety nozzle	320-075	361
1pc-blow gun tapered nozzle	320-076	362
2pcs-inflation needles	320-095	362
1pc-25ft. nylon recoil hose	307-030	362

10PCS-AIR ACCESSORY SET

PART# 87-402

LIST PRICE: —

Contents of blister card package

Components and part#'s		Page #
1pc-1/4"female connector	28-059	3
1pc-blow gun safety nozzle	320-075	361
1pc-blow gun tapered nozzle	320-076	362
1pc-ball foot chuck	46-605	363
1pc-blow gun	320-050	361
1pc-1/4"FNPT industrial coupler	28-540	349
1pc-1/4" FNPT industrial plug	28-534	350
1pc-1/4"MNPT industrial plug	28-546	350
2pcs-inflation needles	320-095	362

7PCS-AIR ACCESSORY SET

PART# 87-404

LIST PRICE: —

Contents of blister card package

Components and part#'s		Page #
1pc-blow gun rubber tip	320-070	361
1pc-blow gun safety nozzle	320-075	361
1pc-blow gun tapered nozzle	320-076	362
1pc-extension	320-080	362
1pc-blow gun	320-050	361
2pcs-inflation needles	320-095	362

11PCS-AIR ACCESSORY SET

PART# 87-406

LIST PRICE: —

Contents of blister card package

Components and part#'s		Page #
1pc-blow gun rubber tip	320-070	361
1pc-blow gun safety nozzle	320-075	361
1pc-blow gun tapered nozzle	320-076	362
1pc-blow gun standard nozzle	320-077	362
1pc-blow gun adapter	320-078	362
1pc-hose&chuck assembly	320-414	362
1pc-blow gun	320-050	362
1pc-inflation needle	320-095	362
1pc-1/4"FNPT industrial coupler	28-540	349
1pc-1/4" FNPT industrial plug	28-534	350
1pc-1/4"MNPT industrial plug	28-546	350

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

17PCS-AIR ACCESSORY SET

PART# 87-408

LIST PRICE: —

Contents of blister card package

Components and part#'s		Page #
1pc-1/4" double female connector	50004	409
2pcs-1/4" double male connectors	54044	409
1pc-blow gun safety nozzle	320-075	361
1pc-blow gun tapered nozzle	320-076	362
1pc-dual-foot tire chuck	320-005	363
1pc-tire gauge	320-021	362
1pc-blow gun	320-050	361
1pc-1/4" FNPT industrial coupler	28-540S	349
2pcs-1/4" FNPT industrial plug	28-534	350
4pcs-1/4" MNPT industrial plug	28-546	350
2pcs-inflation needles	320-095	362

12PCS-AIR ACCESSORY SET

PART# 87-410

LIST PRICE: —

Contents of blister card package

Components and part#'s		Page #
1pc-blow gun safety nozzle	320-075	361
1pc-blow gun tapered nozzle	320-076	362
1pc-blow gun rubber nozzle	320-070	361
1pc-ball foot tire chuck	46-600	363
1pc-blow gun	320-050	361
1pc-1/4"FNPT industrial coupler	28-540	349
1pc-1/4" MNPT industrial coupler	28-552	349
2pcs-1/4"FNPT industrial plug	28-534B	350
2pcs-1/4"MNPT industrail plug	28-546B	350
1pc-inflation needle	320-095	362

20PCS-AIR ACCESSORY SET

PART# 87-412

LIST PRICE: —

Contents of blister card package

Components and part#'s		Page #
1pc-dual-foot tire chuck	320-005	363
1pc-tire gauge	320-021	362
1pc-blow gun rubber nozzle	320-070	361
1pc-blow gun adapter	320-078	362
1pc-1/4" double male connector	54044	409
1pc-1/4" double female connector	50004	409
1pc-blow gun safety nozzle	320-075	361
1pc-blow gun tapered nozzle	320-076	362
1pc-thread seal tape	982-107	370
1pc-blow gun	320-050	361
2pcs-1/4"FNPT industrial coupler	28-540S	349
2pcs-1/4"FNPT industrial plug	28-534	350
3pcs-1/4"MNPT industrial plug	28-546	350
2pcs-inflation needles	320-095	362
1pc-1/4"x 25Ft coil Nylon hose	307-030	362

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

1/4" X 1/4" NPT INDUSTRIAL 7PCS
PART# 87-414

LIST PRICE: —

Contents of blister card package

Components and part#'s		Page #
2pc-1/4"x1/4" FNPT T I/M coupler	28-540S	345
2pcs-1/4"x1/4" FNPT I/M plugs	28-534	350
2pcs-1/4"x1/4"MNPT I/M plugs	28-546	350
1pc-double 1/4" MNPT fitting	54044	409

1/4" X 1/4" NPT INDUSTRIAL 5PCS
PART# 87-416

LIST PRICE: —

Contents of blister card package

Components and part#'s		Page #
1pc-1/4"x1/4"FNPT I/M coupler	28-540S	349
4pc-1/4"X1/4" MNPT I/M plug	28-546	350

1/4" X 1/4" NPT INDUSTRIAL 5PCS
PART# 87-418

LIST PRICE: —

Contents of blister card package

Components and part#'s		Page #
1pc-1/4"x1/4"FNPT I/M coupler	28-540S	349
1pc-1/4"x1/4"FNPT I/M plug	28-534	350
1pc-1/4"X1/4" MNPT I/M plug	28-546	350
1pc-double 1/4" MNPT fitting	54-044	409

1/4" X 1/4" NPT INDUSTRIAL 3PCS
PART# 87-420

LIST PRICE: —

Contents of blister card package

Components and part#'s		Page #
1pc-1/4"x1/4" FNPT I/M coupler	28-540S	349
1pc-1/4"x1/4" FNPT I/M plug	28-534	350
1pc-1/4"x1/4" MNPT I/M plug	28-546	350

3/8" X 1/4" NPT AUTOMOTIVE 5PCS KIT
PART# 87-422

LIST PRICE: —

Contents of blister card package

Components and part#'s		Page #
1pc-3/8"x1/4" FNPT Automotive coupler	28-525S	353
2pcs-3/8"x1/4"MNPT Automotive plugs	28-512	353
1pc-double 1/4"MNPT fitting	28-212	8
1pc-double 1/4"FNPT fitting	28-059	3

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

STANDARD DRY GAUGES

STEEL CASE

All the gauges supplied by us are designed for long, reliable service under rugged conditions.
Typical applications include compressors, filter regulators, water pumps, beverage dispensing equipment, hydraulic and pneumatic systems, and other applications, where the media does not corrode brass. ALL CONNECTIONS ARE BRASS.

LOWER MOUNT

• Plastic lens (window)

1-1/2" FACE
1/8" NPT LOWER MOUNT

Part #	PSI	
80-501	0-15	----
80-502	0-30	----
80-503	0-60	----
80-504	0-100	----
80-505	0-160	----
80-506	0-200	----

2" FACE
1/4" LOWER MOUNT

Part #	PSI	
80-001	0-15	----
80-002	0-30	----
80-003	0-60	----
80-004	0-100	----
80-005	0-160	----
80-006	0-200	----
80-007	0-300	----
80-020	30-0 Vacuum	----

2-1/2" FACE
1/4" LOWER MOUNT

Part #	PSI	
80-031	0-15	----
80-032	0-30	----
80-033	0-60	----
80-034	0-100	----
80-035	0-160	----
80-036	0-200	----

CENTER BACK MOUNT

1-1/2" FACE
1/8" NPT CENTER BACK MOUNT

Part #	PSI	
80-511	0-15	----
80-512	0-30	----
80-513	0-60	----
80-514	0-100	----
80-515	0-160	----
80-516	0-200	----

2" FACE
1/4" CENTER BACK MOUNT

Part #	PSI	
80-301	0-15	----
80-302	0-30	----
80-303	0-60	----
80-304	0-100	----
80-305	0-160	----
80-306	0-200	----
80-307	0-300	----

2-1/2" FACE
1/4" CENTER BACK MOUNT

Part #	PSI	
80-331	0-15	----
80-332	0-30	----
80-333	0-60	----
80-334	0-100	----
80-335	0-160	----
80-336	0-200	----

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

LIQUID FILLED GAUGES

STAINLESS CASE

Liquid filled gauges enhance the reliability and integrity of the measuring system for long periods. The glycerine filling helps dampen the effects of vibration and pulsation. It also lubricates the movement which extends the life of the gauge. ALL CONNECTIONS ARE BRASS.

1-1/2" FACE
1/8" LOWER MOUNT

Part #	PSI	
80-601	0-15	----
80-602	0-30	----
80-603	0-60	----
80-604	0-100	----
80-605	0-160	----
80-606	0-200	----

- Liquid Filled Gauges with a stainless case are used for protection in harsh environments.
- Stainless Steel Case
- Copper Alloy Wetted parts
- Polycarbonate window
- ± 1.5% of span accuracy
- Temp. Range -104°F to 158°F

2-1/2" FACE
1/4" LOWER MOUNT

Part #	PSI	
80-061	0-15	----
80-062	0-30	----
80-063	0-60	----
80-064	0-100	----
80-065	0-160	----
80-066	0-200	----
80-067	0-300	----
80-068	0-400	----
80-069	0-600	----
80-100	0-1000	----
80-101	0-1500	----
80-102	0-2000	----
80-103	0-3000	----
80-104	0-5000	----
80-105	0-10000	----
80-080	30-0 Vacuum	----
80-081	-30 to +30	----

4" FACE
1/4" LOWER MOUNT

Part #	PSI	
80-463	0-100	----

CENTER BACK MOUNT

1-1/2" FACE
1/8" CENTER BACK MOUNT

Part #	PSI	
80-611	0-15	----
80-612	0-30	----
80-613	0-60	----
80-614	0-100	----
80-615	0-160	----
80-616	0-200	----

2-1/2" FACE
1/4" CENTER BACK MOUNT

Part #	PSI	
80-201	0-15	----
80-202	0-30	----
80-204	0-60	----
80-203	0-160	----
80-205	0-100	----
80-206	0-200	----
80-207	0-300	----
80-208	0-400	----
80-209	0-600	----

Keep your mind open to change all the time. Welcome it. Court it. It is only by examining and re-examining your opinions and ideas that you can progress.

-Dale Carnegie

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

Water Test Gauge

0-300 PSI DIAL
3/4" FEMALE HOSE CONNECTION

Part #	Face Size	
991-249	2"	----
991-250	2-1/2"	----

Water Test Gauge w/Lazy Hand (Maximum pointer)

2-1/2" GAUGE
0-300 PSI DIAL
3/4" FEMALE HOSE CONNECTION

Regular pressure hand pushes LAZY hand to peak operating or surge pressure point where it remains until you manually reset it. Excellent to determine if P/T valve is leaking from failure or if leaking is caused by surge of excessive pressures. (Attach gauge to Boiler Drain Valve overnight.) LAZY hand operates over entire gauge range of 0-300psi

Part #	
991-251	----

GAS TEST GAUGE

Pressure test residential and commerical pipe systems

Part #	Face Size	
GT15	0-15	----
GT30	0-30	----
GT60	0-60	----

BODY ONLY

Part #	Face Size	
991-259	3/4" FIP x 1/4" TAP	----

SYPHON

BRASS

Syphons protect instruments from effects of hot pressure media commonly used in steam applications

Part #	Size	
995-210	1/4" 90°	----
995-211	1/4" 180°	----
995-212	1/4" 270°	----
995-213	1/4" 360°	----

STEEL

Syphons protect instruments from effects of hot pressure media commonly used in steam applications

Part #	Size	
995-214	1/4" 90°	----
995-215	1/4" 180°	----
995-216	1/4" 270°	----
995-217	1/4" 360°	----

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TAPES/ SEALANT

PTFE THREAD SEAL TAPE

- Density 0.4
- Thickness 3.5 MIL
- Meets MIL specs T-27730A

Part #	Size	Case Qty	
982-107	1/2" x 260"	500	----
982-108	1/2" x 520"	500	----
982-109	3/4" x 260"	350	----
982-110	3/4" x 520"	350	----

POP OUT COVERED SPOOL

GREY STAINLESS STEEL

- Density 1.2
- Thickness 4MIL
- Meets MIL specs T-27730A & CID A-A 58092

Part #	Size	Case Qty	
982-135	1/2" x 260"	250	----
982-136	1/2" x 520"	150	----
982-137	3/4" x 260"	150	----
982-138	3/4" x 520"	150	----

GREEN OXYGEN TAPE

- Density 1.2
- Thickness 3.5MIL
- Meets MIL specs T-27730A & CID A-A 58092

Part #	Size	Case Qty	
982-130	1/2" x 260"	250	----
982-131	1/2" x 520"	150	----
982-132	3/4" x 520"	150	----

PTFE BLUE SEAL TAPE

- Professional grade top -450 to +450°F
- Super long roll
- Twice the density of standard tape for less passes, lasts longer
- Density 0.8
- Thickness 3.5 MIL
- Meets MIL Spec T-27730A

Part #	Size	Case Qty	
982-120	1/2" x 1368"	250	----
982-121	3/4" x 1368"	150	----
982-122	1" x 1296"	150	----

YELLOW GAS LINE TAPE

- Density 0.9
- Thickness 4MIL
- Meets MIL specs T-27730A

Part #	Size	Case Qty	
982-125	1/2" x 260"	250	----
982-126	1/2" x 520"	150	----
982-127	3/4" x 520"	150	----

PVC ELECTRICAL TAPE

Rated to 176 degrees fahrenheit
Suitable for use up to 600V
UL Listed
Individually wrapped in cellophane

Part #	Size	
982140	3/4" X 60' Black	----

THREAD SEALANT

GASOILA SOFT-SET THREAD SEALANT WITH PTFE

Part#	Size	Units per case	
983100	1/4 pt. Brush	24	----
983101	1/2 pt. Brush	24	----
983102	1 pt. Brush	12	----

PLS 2 PREMIUM THREAD AND GASKET SEALER

Part#	Size	Units per case	
983110	1/4 pt. Brush	12	----
983111	1 pt. Brush	6	----

GASOILA NT NON-PTFE THREAD SEALANT

Part#	Size	Units per case	
983120	1/2 pt. Brush	12	----
983121	1 pt. Brush	6	----

JC-30 GASOILA HIGH-FILL

Part#	Size	Units per case	
983115	1/4 pt. Brush	12	----
983116	1 pt. Brush	6	----

FREE ALL DEEP PENETRATING OIL

Part#	Size	Units per case	
983125	6 oz. Aerosol	12	----
983126	11 oz. Aerosol	12	----

LUBE-IT ALL DEEP LUBRICATING OIL

Part#	Size	Units per case	
983130	6 oz. Aerosol	12	----

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TRUCK AND TRAILER

INDUSTRY GRADE NYLON AIR COIL ASSEMBLY - SET

- Each kit contains one Emergency (Red) and one service (Blue) 1/2" O.D. nylon tubing assembly.
- 1/2" -14 NPTF end fitting with heavy gauge spring.
- Assemblies meet SAE J844 and DOT FMVSS 106 requirements.
- Temp rating -40° - +208°

Part #	Length	Pigtail Length Tractor end	Pigtail Length Trailer end	
39404	12'	6"	6"	----
39400	15'	12"	12"	----
39402	15'	40"	12"	----
39406	20'	12"	12"	----

FIFTH WHEEL SLIDER COIL

- Temperatures range -40 to 208°F
- 150 psi max pressure rating
- Meets SAE J844 and DOT FMVSS 106 requirements.
- (2) ¼" OD fittings assembled

Part #	Description	Length	Fittings	
39839	5th Wheel slider coil	up to 54"	(2) 1/4" MPT	----
39838	5th Wheel slider coil	up to 72"	(2) 1/4" MPT	----

3-IN-1 AND 4-IN-1 COMBINATION AIRLINE CABLE

- (2) 3/8" ID SAE J1402 rubber service and emergency with blue (service) and red (emergency) gladhand grip handle
- Color-coded grip helps to minimize incorrect tractor/trailer connections have glad handle with Vibraseal
- ABS power line (green) – meets SAE J2222 requirements
- Auxiliary power line (yellow) – fitted with SAESS60 plugs that have an inverted (male) ground pin 4-in-1 only
- SAE J560 Plugs with sleeves for superior corrosion protection and strain relief
- Corrosion resistant all brass fittings 1/2" male NPT w/ Vibraseal
- Tapered grip flexes with airline during tight turns for kink protection
- Temp rating -40 - 208°F

Part #	Description	
39825	Combo 3 in 1 assembly 15 ft.	----
39962	Combo 4 in 1 assembly 15 ft.	----

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AIRBRAKE HOSE REPAIR KIT

- Fittings to repair hose with a minimum 3/4" OD
- Meets DOT 106 SAE j1402
- Brass sleeve and barb
- Pre-applied sealant

Part #	Description	
39855	3/8" Quick fix hose fitting	----
*39856	3/8" Quick fix hose kit- clam pack	----
39857	1/2" Quick fix hose fitting	----

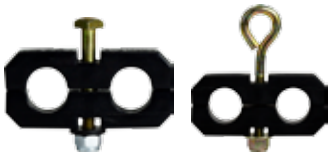
*Supplied with hex tool

POGO STICKS CANNISTER STYLE

39425 39426

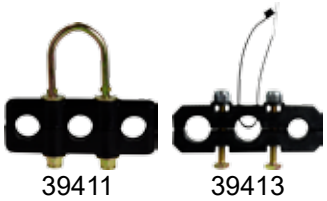
- Large diameter housing eliminates spring binding
- Increased resistance to sagging and bending
- Thick gauge heavy duty spring
- Used for all nylon and rubber air brake hose
- Forged steel mounting stud 7/16-20 thread
- All Pogo Sticks include Eyebolt and Nut

Part #	Size	Description	
39425	40"	Chrome finish	----
39426	40"	Zinc Plated Steel	----

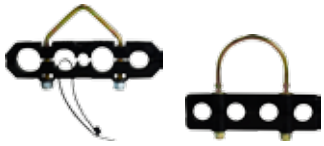


39409 39410

HOSE HOLDERS



39411 39413

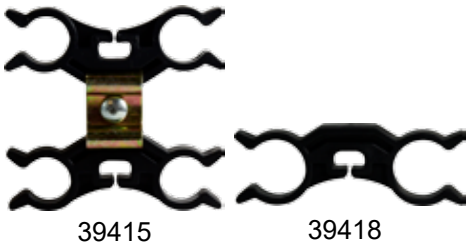


39416 39412

- ABS Plastic
- 2, 3 and 4 Hold

Part #	Size	Description	
39409	1/2"	2-Hose Holder Hex Head	----
39410	1/2"	2-Hose Holder	----
39411	1/2"	3-Hose Holder	----
39413	1/2"	3-Hose Hex Head w Cable tie	----
39416	1/2"	4-Hose V Bolt w Cable Tie	----
39412	1/2"	4-Hose Holder	----

HOSE SEPARATORS



39415 39418

- ABS Plastic

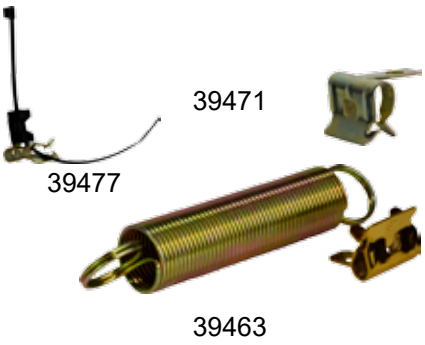
Part #	Size	Description	
39414	3/8"	2-Hose Separator	----
39415	3/8"	4-Hose Separator	----
39418	1/2"	2-Hose Separator	----
39419	1/2"	4-Hose Separator	----

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

TENDER KIT COMPONENTS

Part #	Description	
39411	3 hole holder	----
39469	Clip Carabiner	----
39472	1-1/2" ID Hanger Bracket	----
39473	Yoke	----

• Sold individually

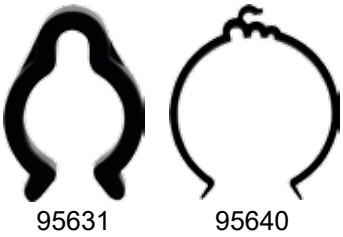


SPRING WITH TANDEM FRAME CLIP

- Steel spring and clip - yellow dichromate finish
- 3/4" OD
- Beam clip

Part #	Description	
39477	Frame Clip with Cable Tie	----

Part #	Length	Description	
39463	6“ Spring	Tandem frame clip	----
39464	3“ Spring	Tandem frame clip	----
39471	Frame clip only		----



CLIPS

Part #	Description	
95631	ABS Clip for 1/2" Air Hose	----
95640	5" Axle Clip	----
95641	5-3/4" Axle Clip	----

Success is no accident. It is hard work, perseverance, learning, studying, sacrifice and most of all, love of what you are doing or learning to do.

– *Pele*

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TENDER KIT

Complete Tender Kit includes:

- Large snap Clip
- Heavy duty spring
- Protective tube

Part #	Spring & Tube Length/ #pcs	One Clip	3 Hole Clamp	Yoke	
39442	16" / 1pc	1pc	1pc		----
39444	16" / 2 pcs	1pc	1pc	2pcs	----
39446	20"/ 1pc	1pc	1pc		----
39448	20"/ 2pcs	1pc	1pc	2pcs	----
39452	25" / 1pc	1pc	1pc		----
39453	25" / 2pcs	1pc	1pc	2pcs	----

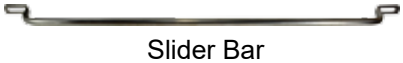
HYDRAULIC TENDER KIT

Part #	Spring & Tube Length/ #pcs	Large Clip	Hanger Bracket	Yoke	
39457	25" / 2pcs	1pcs	1pc	2pcs	----

SLIDER BAR KITS

Part #	Spring & Tube Length/ #pcs	Large Clip	3 Hole Clamp	Slider Bar Length	Yoke	
39437	16" / 1pc	1pc	1pc	43"		----
39438	16" / 2pcs	1pc	1pc	43"	2pcs	----
39459	20"/ 2pcs	1pc	1pc	43"	2pcs	----
39460	25" / 1pc	1pc	1pc	43"		----
39461	25" / 2pcs	1pc	1pc	43"	2pcs	----
39470	16" / 1pc	1pc	1pc	38"		----
39462	16" / 2pcs	1pc	1pc	38"	2pcs	----
39451	25" / 1pc	1pc	1pc	38"		----
39454	25" / 2pcs	1pc	1pc	38"	2pcs	----

Spring & Tube



Slider Bar

BARS, SPRINGS, TUBES

Part #	Spring & Tube Length/ #pcs	
39443	16" Tube only	----
39447	20" Tube only	----
39436	25" Tube only	----
39466	16" Spring only	----
39467	20" Spring only	----
39468	25" Spring only	----
39474	38" Slider Bar	----
39475	43" Slider Bar	----

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

ALUMINUM GLADHANDS

PORT A

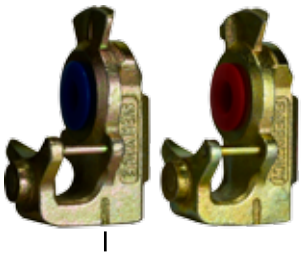
- ½ " FPT port
- Aluminum Casting
- Permanent Clamp Screw
- Black rubber seals
- Stainless Steel filter
- Meet SAE J318 requirements

Part #	Description	Material	Seal	Filter	Port A	
39870	Universal	Aluminum	Blk Rubber	No	1/2"	----
39871	Universal with filter	Aluminum	Blk Rubber	Yes	1/2"	----
39877	Emergency Red	Aluminum	Blk Rubber	No	1/2"	----
39878	Emergency with filter	Aluminum	Blk Rubber	Yes	1/2"	----
39874	Service Blue	Aluminum	Blk Rubber	No	1/2"	----
39875	Service with filter	Aluminum	Blk Rubber	Yes	1/2"	----

PLATED ALUMINUM GLADHANDS

Part #	Description	Material	Seal	Filter	Port A	
39832	Universal Standard	Plated Aluminum	Blk Rubber	No	1/2"	----
39833	Service - Blue	Plated Aluminum	Blk Rubber	No	1/2"	----
39834	Emergency - Red	Plated Aluminum	Blk Rubber	No	1/2"	----
39828	Service 38 degree	Plated Aluminum	Blk Rubber	No	1/2"	----
39829	Emergency 38 drgree	Plated Aluminum	Blk Rubber	No	1/2"	----
39830	Service 38 degree	Plated Aluminum	Blk Rubber	No	3/8"	----
39831	Emergency 38 drgree	Plated Aluminum	Blk Rubber	No	3/8"	----

CAST IRON GLADHANDS



PORT A

- ½ " FPT port
- One-piece casting eliminates problems with clamp separation
- "Positive-stop" post, assures a perfect connection
- Polyurethane seal resist oils, chemicals & provide improved sealing & service life
- Gladhands meet SAE J318 requirements including breakaway requirement.

Part #	Description	Material	Seal	Filter	Port A	
39506	Universal	Cast Iron	Black Polyurethane	No	1/2"	----
39507	Emergency	Cast Iron	Red Polyurethane	No	1/2"	----
39508	Service	Cast Iron	Blue Polyurethane	No	1/2"	----

ANGLE MOUNT ALUMINUM GLADHANDS

PORT A

PORT B

- For use in trailer mounting locations
- Dual port provides connection options
- Powder-coated clamp plates are color coded for easy identification
- Port "A" comes standard as unplugged
- (2) 3/8 inch FPT Ports (one plugged).
- (2) 11/32 inch diameter mounting holes.
- Available with Port "B" plugged or unplugged (plug is included, loose in bag)
- Meet SAE J318

Part #	Type	Material	Seal	Filter	Port A	Port B	
39511	Emergency	Aluminum	Blk Rubber	No	Unplugged	Plugged	----
39512	Service	Aluminum	Blk Rubber	No	Unplugged	Plugged	----

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

POWDER COATED IRON GLADHAND

- Tough powder coating improves wear & corrosion resistance
- Vividly colored to provide improved identification of service & emergency lines
- Stainless steel plate eliminates corrosion of the mating surface
- Polyurethane seal resist oil, chemicals, provide improved sealing & service life
- Meet or exceeds SAE J318 standard

Part #	Description	Filter	Port A	
39509	Service with blue poly seal	Yes	1/2"	----
39510	Emergency with red poly seal	Yes	1/2"	----

BRACKET MOUNT SWING AWAY GLADHAND

- Bracket allows 180° rotation allowing for easy hookups, eliminating the need to twist lines during connections
- Helps protect rear-trailer gladhands when not in use
- Filter and closed seal are recommended
- Spring design provides consistent tension throughout rotation
- Design provides both back port and bottom port capabilities
  Gladhand mount - 1/2" Male Thread

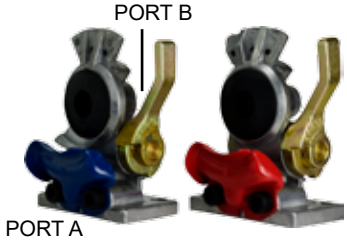
Part #	Description	Material	Seal	Filter	
39515	Service (Blue)	Aluminum	Blk Rubber	yes	----
39516	Emergency (Red)	Aluminum	Blk Rubber	yes	----

KNOB STYLE SHUTOFF GLADHAND

- Economical trailer shutoff gladhand
- Centered low-profile “snap-stop” knob
- Full face rubber seal
- Available with assembled or separate fittings.
- Meets SAE J318

Part #	Description	Material	Seal	Filter	
39520	1/2" Service (Blue)	Aluminum	Blk Rubber	No	----
39521	3/8" Service (Blue)	Aluminum	Blk Rubber	No	----
39522	1/2" Emergency (Red)	Aluminum	Blk Rubber	No	----
39524	3/8" Emergency (Red)	Aluminum	Blk Rubber	No	----

LEVER STYLE SHUTOFF GLADHAND



- Flange mount
- Metel handle shutoff
- Full face rubber seal
- Tough metal Ball valve
- Color coded
- Meets SAE J318

Part #	Description	Material	Seal	Filter	Port A NPT	Port B NPT	
39531	Emergency (Red)	Aluminum	Blk Rubber	No	3/8"	1/4"	----
39530	Service (Blue)	Aluminum	Blk Rubber	No	3/8"	1/4"	----

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GLADHAND GRIPS

1/2" NPTF.

- Comes with hardware and sealant
- Color-coded red and blue for easy air line identification - clamshell
- Handles are heat, oil and UV-resistant.
- Meet SAE J318

Part #	Description	
39535	Poly grip hardware	----

ALUMINUM GLADHAND GRIPS

- 1/2" NPTF
- Each pack contains (1) red and (1) blue - clamshell
- One piece design
- No screws or plastic parts
- Easy to install
- Class II anodized coating provides greater corrosion resistance

Part #	Description	
39537	Sure grip	----

GLADHAND PACIFIER SEAL

- Seals Gladhand from moisture, dirt and debris

Part #	Description	
39566	Gladhand pacifier	----

GLADHAND SEALS

Seal Options:

- Rubber
- Polyurethane
- With screen filter
- Double lip
- Filter screen only

Part #	Description	
39541	Blue, Polyurethane	----
39542	Red, Polyurethane	----
39543	Black, Polyurethane	----
39556	Blue with a screen filter Polyurethane	----
39557	Red with a screen filter Polyurethane	----
39558	Black with a screen filter Polyurethane	----
39550	Blue Double lip, Polyurethane	----
39551	Red Double Lips, Polyurethane	----
39552	Double Lip, Polyurethane	----
39544	Grey, Closed Style, Polyurethane	----
39560	Filter, Screen, Gladhand	----
39559	Filter, Screen, Gladhand	----

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39565

DUMMY GLADHAND COUPLING KIT

• 6 ½" coupling length

Part #	Connection	Vent	Material	
39563	Chain	Yes	Steel Yellow Zinc plated	----
39564	Chain	No	Steel Yellow Zinc plated	----
39565	Cable	N/A	Aluminum	----

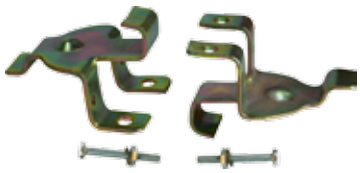
NYLON GLADHAND AND PLUG HOLDER

39574 39575

• Stores Gladhand and electrical hook ups at a 45° angle.
• Can accept heavy ABS plug
• Standard mounting holes to install on back of cab.
• Glass-filled nylon, non-corrosive construction.

Part #	Description	
39574	1 plug slot	----
39575	2 plug slot	----

GLADHAND HOLDER KIT



• Steel - Zinc Yellow Dichromate
• Holds gladhands when disconnected

Part #	Description	
39573	Holder Kit	----
39572	Bracket only	----

GLADHAND LOCK

• Red molded plastic
• Prevents unwanted connections with trailers
• Protects idle units
• Universal for Aluminum and Iron Gladhands
• Supplied with 2-keys

Part #	Description	
39570	Gladhand Lock w/ 2 keys	----

**** Not an Anti theft device***

KING PIN LOCK-ANTI HOOK UP

• Cast, Zinc plated
• Anti-tractor, trailer hook-up
• Supplied with 2 keys

Part #	Description	
39860	King Pin Lock w/ 2 keys	----

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

AIR CYLINDER

- 300 series stainless steel cylinder shafts provide excellent corrosion resistance and extended cycle life -cylinders tested to over 500,000 cycles.
- Lightweight, corrosion resistant aluminum tube with die cast aluminum end caps.
- Rear clevis cast as integral part of the rear cover for improved durability and mounting integrity.
- Double acting, Emralon-coated piston cup assures smooth long lasting operation even in cold weather conditions to (- 40°F).
- Front end cap assembly includes pressure seal, dirt seal and oil impregnated bronze bushing.
- Cylinder tube imprinted with part number and date code for quick identification.
- All cylinders are factory pressure and leak tested prior to shipping.
- Front Cover Kit-Includes front cover with bushing and seals installed and two cylinder gaskets.
- Rear Cover Kit-Includes rear cover with two cylinder gaskets.
- Piston Cup Kit-Includes piston cup, lock nut and two cylinder gaskets.
- Shaft Kit-Includes shaft, lock nut and two cylinder gaskets.

Part #	Size	Stroke	Retracted	Extended	Type	
39672	2 1/2"	4.0"	9.89"	13.89"	push/pull	----
39673	2 1/2"	6.0"	11.89"	17.89"	push/pull	----
39674	2 1/2"	8.0"	13.89"	21.89"	push/pull	----
39675	2 1/2"	6.0"	13.75"	19.75"	Spring return	----
39676	3 1/2"	8.0"	15.60"	24.28"	push/pull	----
39677	3 1/2"	10.0"	16.92"	26.95"	push/pull	----

HIGH LIFT AIR CYLINDERS

- Aluminum tube with 16 RMS finish
- Temp rating -40 to 185°F
- Recommended working pressure 150 psi
- Minimum bursting pressure 150 psi
- 1275 lb. thrust at 100 psi
- 1158 lb. draw at 100 psi

Part #	Dia.	Stroke	Retracted	Extended	Type	
39654	4"	24"	34.5"	58.5"	push/pull	----

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

TAILGATE AIR CYLINDERS

39657 39660

- Die cast aluminum with mount hole for ½" pin and ¼" NPT port
- Molded piston cup
- Stainless steel piston rod with 5/8" – 18 thread
- 10 PSI – 120 PSI
- 10 psi min-120 psi max

Part #	Dia.	Stroke	Length	Type	
39655	2-1/2"	4.0"	13.37	Push/Pull	----
39656	2-1/2"	6.0"	17.37	Push/Pull	----
39657	2-1/2"	8.0"	21.37	Push/Pull	----
39658	2-1/2"	4.0"	14.71	Spring Ret	----
39659	2-1/2"	6.0"	19.75	Spring Ret	----
39660	3-1/2"	6.0"	20.23	Push/Pull	----
39661	3-1/2"	8.0"	24.23	Push/Pull	----
39662	3-1/2"	8.0"	26.98	Push/Pull	----
39663	3-1/2"	10.0"	28.98	Push/Pull	----

TAILGATE AIR CYLINDERS

39665 39667

- Machined aluminum, 5/8" diameter ,stainless steel shaft with 5/8" - 18 threads, "O" rings and a UHMW polyethylene wear band
- Direct replacements to Haldex and MGM
- Standard operating pressure 100 psi
- 90psi min to 150 psi max

Part #	Dia.	Stroke	Bracket	Type	
39665	6"	3"	Yes	Spring Ret	----
39667	6"	4.38"	No	Spring Ret	----

FIFTH WHEEL AIR CYLINDER

- 1/4" FPT port cast aluminum front and rear
- 2-1/2" Bore
- 6-3/4" stroke
- Front and rear mounting hole for 17/32" clevis,
- 100 psi
- Gold anodized tube for corrosion resistance

Part #	Description	
39669	Fifth Wheel Air Cylinder	----

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

AIR TANK DRAIN PULL VALVE

Part #	Size	Description	
39595	1/4" male	5ft nylon coated pull cable	----
39596	1/4" male	4ft nylon coated pull cable	----
39597	1/4" male	3ft nylon coated pull cable	----
39600	1/4" male	Air valve only	----

AIR TANK CHECK VALVE

- Single check valves allow air to pass from a single source to its destination, and prevent air travel in the opposite direction.

Part #	Male x Female	
39604	1/4"	----
39605	3/8"	----
39606	1/2"	----

D-2 STYLE AIR BRAKE GOVERNOR

- Opening and closing pressures of 100 to 120 psi
- High temperature O-ring construction
- Gasket and plugs included
- Replaces Bendix 275491 & KN18530

Part #	Thread	Description	
39592	6-1/8" NPT	Air Brake Governors D-2 style	----

IN-LINE QUICK RELEASE VALVE

- Quick release for the air break system
- 3/8” female exhaust port
- 2-3/8” female delivery port
- Cracking pressure: 1 PSI
- Helps meet the FMVSS -121 requirement for timing

Part #	Description	
39610*	3/8" NPT In-Line quick release valve	----
39611**	1/2" NPT In-Line quick release valve	----

* Replaces Bendix 229859, 288351 & KN32005
** Replaces Bendix 229860 & KN32011

R-12 RELAY VALVE

- ¼” Relay Valve with multiple delivery ports

Replaces Bendix 102166, 102626, 103009

Part #	Supply Port	Delivery Port	Description	
39613	1/2" NPT	4, 1/2"NPT	4 psi no Bracket	----
39614	1/2" NPT	4, 1/2"NPT	4 psi Relay Valve	----
39615	3/4" NPT	2, 1/2" NPT	4 psi Relay Valve	----

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

R-14 RELAY VALVE

- ¼" Relay Valve with two delivery and supply ports
- Replaces Bendix 103010

Part #	Supply Port	Delivery Port	Description	
39616	2-3/4"NPT	2-1/2"NPT	4 psi Relay Valve	----

THREE WAY SOLENOID

- Operates a minimum GF 50,000 cycles
- Inlet port normally closed
- Must be mounted vertically with the air inlet port facing up
- 1/4" female NPT ports
- 12 Volts
- 100-120 psi operating pressure
- Attached mounting bracket with two 9/32" diameter mounting holes on 2-1/2" centers

Part #	Supply Port	Description	
39684	2, 1/4" FPT	Three way Solenoid	----

UNIVERSAL SOLENOID

- Operates a minimum of 50,000 cycles.
- 125 amps at 12 volts.
- Continuous voltage.
- One on/off circuit
- 5/16 inch side studs, No. 10 top stud(s).
- 2 1/8 on Center
- 5/16 x 19/32
- Hardware included.
- Normally open

Part #	Description	
39687	4 stud Solenoid	----
39688	3 stud Solenoid	----

AIR SOLENOID VALVE

- Operates a minimum of 50,000 cycles.
- 100 psi max pressure.
- 1/4" Thread
- 10 Watts, 12 VDC
- Replaces Neway 90054075

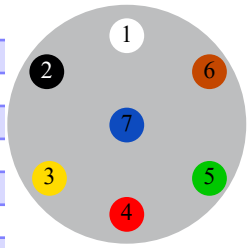
Part #	Description	
39689	12V Closed	----
39690	12V Open	----

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

SEVEN-WAY COILED CABLE ASSEMBLIES

- ABS assemblies are heavy duty to power trailers
- HD Green gives clear ABS identification
- Resists abrasion, great coil retention
- Heavy duty plugs with spring guards
- ABS Cable meets SAE J2394
- Operating temperature range of -55° to +185°F

Pin Location	Color code	Gauge	Circuit
1	White	8	Ground
2	Black	12	Clearance, side and ID lamps
3	Yellow	12	Left turn and Hazard
4	Red	10	Stop lamp and Anti-lock
5	Green	12	Right turn and Hazard
6	Brown	12	Tail and Plate lamp
7	Blue	10	ABS Power Aux



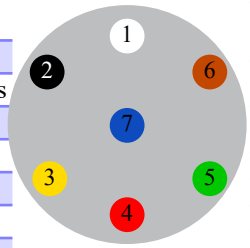
ABS

Part #	Length	Description	
39736	12'	Coiled Electrical Cord, ABS w/12 in lead, w/plugs, Green	----
39737	15'	Coiled Electrical Cord, ABS w/12 in lead, w/plugs, Green	----

SEVEN-WAY COILED CABLE BLACK

- This high quality, durable construction is recommended for single-trailer configurations using standard lighting on non-ABS vehicles.
- Durable black outer jacket with heavy duty zinc die cast plugs and two spring guards included.

Pin	Color code	HD Gauge	Eco Gauge	Circuit
1	White	10	12	Ground
2	Black	12	14	Clearance, side and ID lamps
3	Yellow	12	14	Left turn and Hazard
4	Red	12	14	Stop lamp and Anti-lock
5	Green	12	14	Right turn and Hazard
6	Brown	12	14	Tail and Plate lamp
7	Blue	12	14	ABS Power Aux



STANDARD - HEAVY DUTY

Part #	Length	Description	
39738	12'	Coiled Electrical Cord, w/12 in lead, w/plugs, Black	----
39739	15'	Coiled Electrical Cord, w/15 in lead, w/plugs, Black	----

STANDARD - ECONOMY

Part #	Length	Description	
39740	12'	Coiled Electrical Cord, w/12 in lead, w/plugs, Black	----
39741	15'	Coiled Electrical Cord, w/12 in lead, w/plugs, Black	----

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

SIX WAY COILED ELECTRIC CABLE ASSEMBLY

- 6', 8', 12' Length
- Includes 2 Thermoseal 6-way plugs
- For light duty towing applications such as boats and utility trailers
- Plugs are molded for moisture and corrosion resistance
- 4/14 Gauge cable
- Flexible from -55°F to 150°F (-66°C to 66°C)

Part #	Description	
39752	6ft, 14awg w/12" Lead at 2 ends	----
39753	8 ft, 14awg w/12" Lead at 2 ends	----
39754	12ft,14awg w/12" Lead at 2 ends	----

FOUR WAY COILED ELECTRIC CABLE ASSEMBLY

- 4/14 Gauge cable
- 12' & 15' length
- Includes 2 Thermoseal 4-way plugs
- For light duty towing applications such as boats and utility trailers
- Plugs are molded for moisture and corrosion resistance
- Flexible from -55°F to 150°F (-66°C to 66°C)

Part #	Description	
39748	12' with 12" Lead, both ends 4/14awg	----
39749	15' with 12" Lead, both ends 4/14awg	----

DUEL POLE COILED ELECTRIC CABLE ASSEMBLY

- Black Jacket
- 12' & 15' length
- 200 Amp at 12 VDC.
- Zinc die cast plugs.
- 4 gauge cable.

Part #	Description	
39744	12' Coil With 12" Lead at 2 ends 4awg	----
39745	15' Coil With 12" Lead at 2 ends 4awg	----

SINGLE POLE COILED ELECTRIC CABLE ASSEMBLY

- Black Jacket
- 12' & 15' length
- For applications that require direct electrical power to trailer lift gates.
- Rated at 265 amps on/off service (30 seconds on/50 seconds off).
- Zinc die cast plugs with spring guards included.
- 4 gauge cable.

Part #	Description	
39742	12' Coil With 12" Lead both ends 4awg	----
39743	15' Coil With 12" Lead both ends 4awg	----

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

7 WAY PLUGS AND SOCKETS

39758

39757

39772

- Heavy-duty, nickel-plated zinc die cast housings
- Brass terminal pins for maximum current carrying ability
- Field repairable with standard tools
- Fully interchangeable with other SAE-type, 7-way connectors
- ATA marked wire terminals.
- Internal clamp holds cable securely in place.
- Standard seven-way plugs meet ATA and SAE J560 requirements
- ISO plugs meet ISO 3731:1997 requirements.
- ISO socket prevents connections with Non-ISO plugs - Used in tractor/ trailer systems
- ISO color-coded yellow, non-corrosive reinforced nylon housing.

PLUGS

Part #	Description	
39757	7-Way Single Grip Plug w/Spring Guard	----
39758	7-Way Single Grip Plug NO Spring.	----
39772	7-Way Double Grip Plug w/Spring.	----
39773	7-Way Double Grip Plug NO Spring Guard	----
39788	7-way ISO plug	----

SOCKETS

Part #	Description	
39774	Solid Pin 7-Way Metal Socket	----
39775	Split Pin 7-Way Metal Socket	----
39789	7-way, ISO socket	----

7 WAY DOUBLE GRIP PLUG

- T-Grip weather guard
- Plastic grip

Part #	Description	
39818	7-Way Double Grip Plug, Plastic	----

6 AND 7 WAY ADAPTER

Part #	Description	
39786	Seven way plug to Six Way Socket Adapter	----
39787	Six way plug to Seven Way socket Adapter	----

RV 7-WAY PLUG

- Primarily used in RV applications.
- Constructed of molded PVC for impact resistance
- Blade Style Pin

Part #	Description	
39819	7-way Plastic plug	----

RV 7-WAY SOCKET

- RV Screw-type socket
- 6-24 VDC.
- Mounting 2-1/4" inch on center .
- Constructed of molded PVC

Part #	Description	
39820	7-way socket	----

WARNING: This product can expose you to chemicals, including Nickel, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

6 - WAY PLUGS AND SOCKETS

Part #	Description	
39782	6-Way Double Grip Metal Plug w/Spring Guard.	----
39783	6-Way Metal Socket.	----

4 WAY PLUGS AND SOCKETS

- Heavy-duty zinc die cast housings on plugs and sockets.
- Plug locking system works with socket door to ensure proper hookup and prevent unintentional disconnections.
- Spring guard supports and protects cable.

4 - WAY

Part #	Description	
39778	4-Way Double Grip Metal Plug w/Spring Guard.	----
39779	4-Way Metal Socket.	----

2 POLE PLUGS AND SOCKETS

- 200 amp 4 gauge wire capacity.
- Heavy-duty zinc die cast housing.
- Internal ground.
- Spring guard supports and protects cable.

Part #	Description	
39768	2 Pole Double Grip Metal Plug w/Spring Guard.	----
39769	2 Pole Metal Socket	----

SINGLE POLE PLUGS AND SOCKETS

- Used to provide power to heavy draw auxiliary trailer equipment.
- Heavy-duty zinc die cast housings.
- Power and ground terminals hold up to 1/0 gauge wire.

Part #	Description	
39764	1-Way Double Grip Plug w/Spring Guard.	----
39765	1-Way Double Grip Plug w/Spring Guard and Ground Kit	----
39766	1-Way Metal Socket	----
39767	1-Way Metal Socket and Ground Kit	----

GROUND KIT

Part #	Description	
39809	Ground Kit (Bolt, Nut and Wire Lug) for 1-Way Plug or Socket	----

PROTECTOR BOOT FOR PLUG

- Protective rubber boot seals out moisture and contaminants

Part #	Description	
39807	Protector Boot	----

WARNING: This product can expose you to chemicals, including Nickel, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

7 WAY SOCKET WITH CIRCUIT BREAKER

- Non-corrosive, reinforced nylon housing for added durability.
- Designed for No. 8 ring terminals.
- ATA color-coded contacts.
- Solid brass split pins are zinc-plated for corrosion resistance.
- Each socket includes automatic reset circuit breakers with positive snap action to eliminate arcing (unless otherwise noted).
- Mounting holes are 4 1/2 inch on center and include steel bushings for added housing protection.
- Adhesive-backed mounting gasket included.
- Circuit breaker sockets meet SAE J560 requirements.

Part #	Description	
39792	No circuit breakers	----
39793	15amp Plastic with circuit breakers	----
39794	20amp Plastic with circuit breakers	----
39795	30amp Plastic with circuit breakers	----

7 WAY CIRCUIT CHASER

- Instantly finds short or faulty circuits
- Portable

Part #	Description	
39805	7 way circuit	----

CIRCUIT BREAKERS - PLASTIC

- Colored Battery molded Stud
- 12 Volt
- Meets SAE j553 requirements
- Nuts included

Part #	Description	
39800	15 AMP	----
39801	20 AMP	----
39802	25 AMP	----
39803	30 AMP	----

NOSE BOX - DEEP

- Zinc - extra deep

Part #	Description	
39814	Deep Nose Box	----

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

BATTERY GROUND STRAP

- 4 gauge wire.
- Molded zinc-plated steel lugs and tin-plated copper stranding.
- 7/16 inch diameter bolt hole.
- 12" Long

Part #	Description	
39712	12", 4 Gauge ground strap	----

STAINLESS STEEL BATTERY NUT

Part #	Type	
39713	3/8"	----

RUBBER GROMMET

- Black Rubber

Part #	ID	OD	
95450	5/16"	9/16"	----
95451	5/8"	1 1/4"	----
95452	3/4"	1 3/4"	----

Put your heart, mind, and soul into even your smallest acts. This is the secret of success.

–Swami Sivananda

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DEER WHISTLES

- Produces two separate and unique frequencies
- High output airflow activated
- Can be removed from base for cleaning and car washes
- Mounts with high bond tape **(included)**
- Lowers risk for vehicle-animal collisions

Part #	Description	
39465	2 pack whistle	----

CABLE TIE STRAPS - NYLON

- Used to secure and bundle
- CSA Certified
- RoHs Compliant
- UV or Standard

STANDARD

Part #	Length	Strength	Package Qty	
95601	7 1/2"	50lb	100	----
95602	11"	50 lb	100	----
95603	14.5"	50 lb	100	----
95604	24"	175 lb	50	----
95605	36"	175lb	50	----
95606	48"	175 lb	50	----

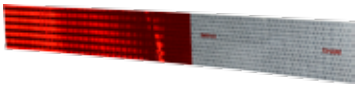
UV BLACK

Part #	Length	Strength	Package Qty	
95610	7 1/2"	50lb	100	----
95611	14"	50 lb	100	----
95612	24"	175lb	50	----
95613	36"	175lb	50	----

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

CONSPICUITY TAPE

95620

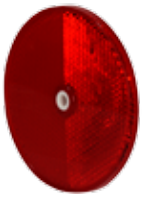


Tape is designed for trucks, trailers, and other vehicles for easy nighttime vehicle recognition and increased road safety. It is a high quality, durable microprismatic retroreflective material with a pressure sensitive adhesive. The solid construction does not require edge sealing. Conspicuity tape provides superior reflectivity and may help reduce accidents.

- DOT -C2 Certified
- Meets or exceeds NHTSA, FMVSS 108 & ASTM D4956
- Meets Canada TSD 108
- 10 year durability

Part #	Description	App. Wt.	
95620	2" x 150' Roll of 11" Red / 7" White	0.32	----
95621	2" x 150' Roll of 6" Red / 6" White	0.32	----
95622	2" x 150' Roll of solid white	0.32	----
95623	2" x 18", kiss cut strip, white	0.03	----
95624	2" x 18" kiss cut strip of 11" Red / 7" White	0.03	----

95625



95627

- Meets or exceeds ANSI/ASAE S279, ANSI/ASAE S276 & ASTM D-4956
- 7 year durability

Part #	Description	App. Wt.	
95625	1" X 150' Roll of solid yellow	0.17	----
95626	2" X 150' Roll of solid yellow	0.32	----
95627	3" round all plastic reflector, Red	0.06	----
95628	3 3/4" x 6 1/2" American flag, type IV HIP	0.02	----

95628

TARP STRAPS

- Heavy Duty EPDM tarp straps
- Longer lasting than rubber
- Greater stretch length
- Ozone and weather resilient
- Made in the USA

Part #	Strap Length	Material	Description	Qty	
990790	10"	EPDM	Tarp strap with S hook	50	----
990791	15"	EPDM	Tarp strap with S hook	50	----
990792	21"	EPDM	Tarp strap with S hook	50	----
990793	31"	EPDM	Tarp strap with S hook	50	----
990794	41"	EPDM	Tarp strap with S hook	50	----

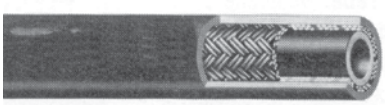
NYLON DOT AIR BRAKE TUBING

- Air Brake Tubing available from inventory in a large variety of colors and sizes
- Superior cold weather flexibility and abrasion resistance
- UV and ozone resistant nylon
- Meets or exceeds SAEJ844 (Type A - non-reinforced & Type B - reinforced)
- Meets or exceeds DOT requirements for use with compression fittings (NOTE: SAE does not recognize 1/8", 5/32" or 3/16" O.D. tubing for use with air brake systems)
- Air Brake Tubing identified per SAE J844 & FMVSS No. 106 Brake Hoses, 49 CFR 571.106
- Conforms to our own rigorous qualification and inspection testing which exceeds SAE and DOT requirements
- Designed to operate at up to 150 psi in air brake systems
- Resistant to attack by gasoline, diesel fuel and commonly used road and cleaning chemicals
- Air Brake Tubing available on bulk spools or by packages
- Operating range: -40°- 200°F - Not made for fuel

Part Number	Color	Length	Nominal O.D.	Nominal Wall	
38-950B2	Black	2000'	1/8"	0.023"	----
38-950	Black	100'	1/8"	0.023"	----
38-95BA	Black	50'	1/8"	0.023"	----
38-951B1	Black	1000'	5/32"	0.032"	----
38-951	Black	100'	5/32"	0.032"	----
38-951BA	Black	50'	5/32"	0.032"	----
38-953B1	Black	1000'	3/16"	0.035"	----
38-953	Black	100'	3/16"	0.035"	----
38-953BA	Black	50'	3/16"	0.035"	----
38-9523	Black	1000'	1/4"	0.040"	----
38-9522	Black	500'	1/4"	0.040"	----
38-952	Black	100'	1/4"	0.040"	----
38-952BA	Black	50'	1/4"	0.040"	----
38-952U1	Blue	1000'	1/4"	0.040"	----
38-952U	Blue	100'	1/4"	0.040"	----
38-952UA	Blue	50'	1/4"	0.040"	----
38-952O	Orange	100'	1/4"	0.040"	----
38-952OA	Orange	50'	1/4"	0.040"	----
38-952G1	Green	1000'	1/4"	0.040"	----
38-952G	Green	100'	1/4"	0.040"	----
38-952GA	Green	50'	1/4"	0.040"	----
38-952R1	Red	1000'	1/4"	0.040"	----
38-952R	Red	100'	1/4"	0.040"	----
38-952RA	Red	50'	1/4"	0.040"	----
38-952Y1	Yellow	1000'	1/4"	0.040"	----
38-952Y	Yellow	100'	1/4"	0.040"	----
38-952YA	Yellow	50'	1/4"	0.040"	----
38-954B5	Black	500'	5/16"	0.040"	----
38-954	Black	100'	5/16"	0.040"	----
38-954BA	Black	50'	5/16"	0.040"	----
38-960B5	Black	500'	3/8"	0.062"	----
38-960	Black	100'	3/8"	0.062"	----
38-960BA	Black	50'	3/8"	0.062"	----
38-960U5	Blue	500'	3/8"	0.062"	----
38-960U	Blue	100'	3/8"	0.062"	----
38-960UA	Blue	50'	3/8"	0.062"	----
38-960O5	Orange	500'	3/8"	0.062"	----
38-960O	Orange	100'	3/8"	0.062"	----
38-960OA	Orange	50'	3/8"	0.062"	----
38-960G5	Green	500'	3/8"	0.062"	----
38-960G	Green	100'	3/8"	0.062"	----
38-960GA	Green	50'	3/8"	0.062"	----
38-960R5	Red	500'	3/8"	0.062"	----
38-960R	Red	100'	3/8"	0.062"	----
38-960RA	Red	50'	3/8"	0.062"	----

Part Number	Color	Length	Nominal O.D.	Nominal Wall	
38-960Y5	Yellow	500'	3/8"	0.062"	----
38-960Y	Yellow	100'	3/8"	0.062"	----
38-960YA	Yellow	50'	3/8"	0.062"	----
38-965B5	Black	500'	1/2"	0.062"	----
38-965	Black	100'	1/2"	0.062"	----
38-965BA	Black	50'	1/2"	0.062"	----
38-965U5	Blue	500'	1/2"	0.062"	----
38-965U	Blue	100'	1/2"	0.062"	----
38-965UA	Blue	50'	1/2"	0.062"	----
38-965O5	Orange	500'	1/2"	0.062"	----
38-965O	Orange	100'	1/2"	0.062"	----
38-965OA	Orange	50'	1/2"	0.062"	----
38-965G5	Green	500'	1/2"	0.062"	----
38-965G	Green	100'	1/2"	0.062"	----
38-965GA	Green	50'	1/2"	0.062"	----
38-965R5	Red	500'	1/2"	0.062"	----
38-965R	Red	100'	1/2"	0.062"	----
38-965RA	Red	50'	1/2"	0.062"	----
38-965Y5	Yellow	500'	1/2"	0.062"	----
38-965Y	Yellow	100'	1/2"	0.062"	----
38-965YA	Yellow	50'	1/2"	0.062"	----
38-970BC	Black	250'	5/8"	0.092"	----
38-970	Black	100'	5/8"	0.092"	----
38-970BA	Black	50'	5/8"	0.092"	----
38-970GC	Green	250'	5/8"	0.092"	----
38-970G	Green	100'	5/8"	0.092"	----
38-970GA	Green	50'	5/8"	0.092"	----
38-970RC	Red	250'	5/8"	0.092"	----
38-970R	Red	100'	5/8"	0.092"	----
38-970RA	Red	50'	5/8"	0.092"	----
38-975BC	Black	250'	3/4"	0.092"	----
38-975	Black	100'	3/4"	0.092"	----
38-975BA	Black	50'	3/4"	0.092"	----
38-975GC	Green	250'	3/4"	0.092"	----
38-975G	Green	100'	3/4"	0.092"	----
38-975GA	Green	50'	3/4"	0.092"	----

FUEL LINE AND VAPOR EMISSION



•SAE 30R7
•Nitrile tube w/ spiral synthetic cord, hypalon cover.
•50 p.s.i. working pressure. 1/2 -35 PSI
•-40^0 F to + 257^0 F temperature range.
•Low pressure/ high temperature fuel for cars, light trucks, and small engines.
• Meets SAE J1402

Part #	ID	OD	Length	
38-920	3/16	13/32	25'	----
38-926	5/16	9/16	25'	----
38-923	1/4	1/2	25'	----
38-927	3/8	5/8	50'	----

AIR BRAKE HOSE

• Black

•Spiral synthetic cord reinforcement with neoprene cover.
•-40^0 F to +200^0 F temperature range.
•Max opperating pressure 255 psi
•Max burst pressure 900 psi
• Meets SAE J1402

Part #	ID	OD	Length	
38-910	3/8	3/4	50'	----
38-915	1/2	7/8	50'	----

Work hard, stay positive, and get up early. It's the best part of the day.

– George Allen, Sr.

HYDRAULIC ADAPTERS & ACCESSORIES

STEEL ADAPTERS

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37° JIC Flare Shapes 406
Bulkhead Adapters 407
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ISO A Interchange 427
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Flush Face ISO 428
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AG Interchange 429
Hydraulic Jack Q/D 429

HYDRAULIC VALVES & ACCESSORIES

Flow Control Valve 430
Variable Flow Control 431
Air Breathers 431

PLATING SPECIFICATION

Our standard Trivalent, Cr^{+3} plating performs at nearly double the S.A.E. corrosion resistance requirement. The plating meets ASTM B633, Fe/Zn 5. The thickness is 5um-13um. This plating is silver in appearance and has been testing at 96 hours to white rust and 120 hours to red rust.

WORKING PRESSURE

The tables on the following pages list the recommended working pressure for a variety of hydraulic fittings made in accordance with certain industry standards. Many factors such as impulse, vibration, mechanical shock, and improper assembly may affect the integrity of the fitting connection.

We recommends sufficient testing be conducted to ensure that performance levels will be safe and satisfactory, especially if installed in systems operating at elevated pressures or in severe conditions. Working pressure ratings are capable of a 4 to 1 minimum burst. All steel fittings meet or exceed the minimum SAE pressure ratings. Always consider application and maximum pressure requirements when selecting fittings.

METHODS FOR INSTALLING FITTINGS

There are three methods for installing a fitting:

- Torque wrench
- Flats From Wrench Resistance
- Turns From Finger Tight

For Flare and NPSM Fittings, recommends the flats from wrench resistence method be used whenever possible.

The differences in material, plating, and surface finish impacts the coefficient of friction when installing or connecting fittings. To minimize these variances, We recommends that fitting connections are lubricated when installed. Connections that are lubricated provide a more accurate installation torque, which results in fewer leaks.

USING A TORQUE WRENCH

The torque values given in the tables on the following pages are for reference purposes only based on industry standard practice and for low carbon steel mating with steel/iron components. Actual torque values may need to be adjusted due to variances described above.

SAE recommends always making a wet (lubricated) installation or connection to reduce friction on moving parts, O-rings, and variances in material and plating. The torque values in these tables are based off SAE values using a .17 coefficient of friction as per SAE J2593. Many hydraulic leaks are a result of over-torque, which causes excessive deformation of material or exceeds the yield strength of the material, which may reduce the load or clamping force between seal contacts.

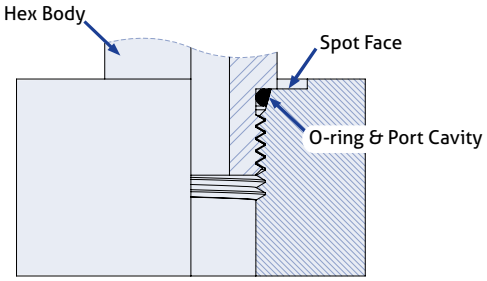
If more than one value or range is given, use the lower value first and increase only if required. Over-torquing can damage a fitting or mating component.

SAE O-Ring Boss Port Specifications

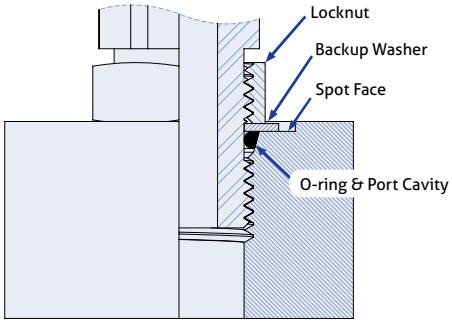
O-ring Boss ports (ORB) provide a seal by trapping the fitting's O-ring inside a port cavity. When a fitting is installed into the port, the O-ring is trapped between the fitting body hex or washer and port cavity.

Straight fittings include a hex, and sometimes an additional cylindrical shoulder below the hex and above the threads, to trap the O-ring in the port cavity.

Elbow and Tee fittings require a backup washer and a locknut above the O-ring on the threaded stud to permit a 360° orientation of the fitting around the port.



Straight SAE ORB



Adustable SAE ORB

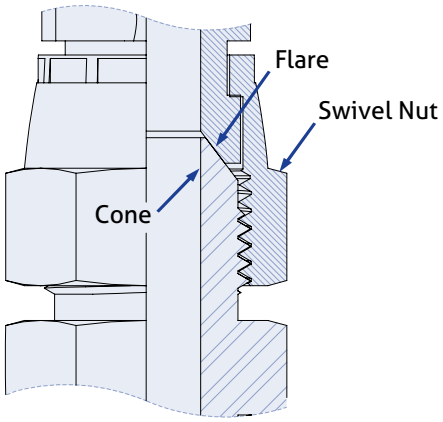
The following table lists the specifications for SAE O-Ring Boss Ports.

SAE O-Ring Boss Specifications								
Dash Size	Tube Size	Thread	SAE-ORB to JIC and Pipe Fittings*			SAE-ORB to ORFS Fittings**		
			Torque	Working Pressure		Torque	Working Pressure	
			Adjustable & Non- Adjustable	Adjustable	Non-Adjustable	Adjustable & Non- Adjustable	Adjustable	Non- Adjustable
			(ft-lbs) +25% -0%	*(psi)*	*(psi)*	*(ft-lbs) +25% -0%*	*(psi)*	*(psi)*
02	*1/8*	*5/16-24*	*6*	*4500*	*4500*	-	-	-
03	*3/16*	*3/8-24*	*7*	*4500*	*4500*	*7*	*5800*	*9100*
04	*1/4*	*7/16-20*	*13*	*4500*	*4500*	*15*	*5800*	*9100*
05	*5/16*	*1/2-20*	*18*	*4500*	*4500*	*18*	*5800*	*9100*
06	*3/8*	*9/16-18*	*22*	*3600*	*4500*	*26*	*5800*	*9100*
08	*1/2*	*3/4-16*	*37*	*3600*	*4500*	*52*	*5800*	*9100*
10	*5/8*	*7/8-14*	*44*	*2900*	*3600*	*74*	*5800*	*9100*
12	*3/4*	*1-1/16-12*	*70*	*2900*	*3600*	*125*	*5800*	*5800*
14	*7/8*	*1-3/16-12*	*92*	*2300*	*2900*	*158*	*5800*	*5800*
16	*1*	*1-5/16-12*	*111*	*2300*	*2900*	*199*	*4500*	*5800*
20	*1 1/4*	*1-5/8-12*	*147*	*1800*	*2300*	*210*	*3600*	*3600*
24	*1 1/2*	*1-7/8-12*	*155*	*1800*	*2300*	*273*	*2900*	*3600*
32	*2*	*2-1/2-12*	*221*	*1450*	*1800*	-	-	-
* = Light duty studs included on JIC, NPTF and NPSM fittings per SAE J1926/3 & J514 ** = Heavy duty studs included on ORFS fittings per SAE J1926/2 & J1453								
Note: Torque values are for wet torque and are allowed up to 25% the listed value according to SAE J2593.								

JIC Adapter Specifications

Male flared fittings include a conical nose with external threads for clamping.

A flared fitting or tube assembly is tightened against the cone with a swivel nut. By forcing the flare against the cone during the torquing process, the nose cone is slightly deformed and meshes to create a metal to metal seal between the flare and the cone.



The following table lists the specifications for JIC adapters.

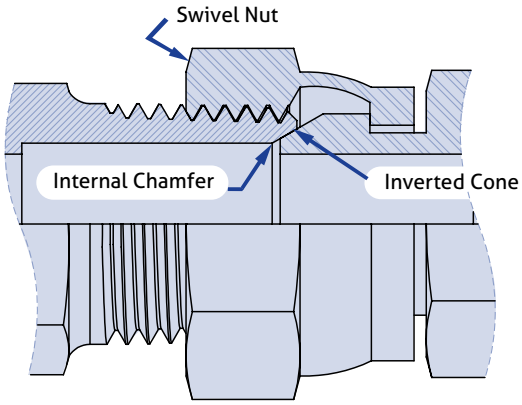
JIC Specifications							
Dash Size	Tube Size	Thread	Working Pressure		Torque		
			Male	Female Swivel Nut	JIC Rigid	JIC Swivel	Bulkhead Locknut
			(psi)	(psi)	(FFWR)	(FFWR)	(ft-lbs) +25% -0%
02	1/8	5/16-24	5000	5000	1/4 - 1/2	2	4
03	3/16	3/8-24	5000	5000	1/4 - 1/2	2	6
04	1/4	7/16-20	5000	4500	1/4 - 1/2	2	10
05	5/16	1/2-20	5000	4000	1/4 - 1/2	2	13
06	3/8	9/16-18	5000	4000	1/4 - 1/2	2	16
08	1/2	3/4-16	4500	4000	1/4 - 1/2	2	27
10	5/8	7/8-14	3500	3000	1/4 - 1/2	1 1/2	32
12	3/4	1-1/16-12	3500	3000	1/4 - 1/2	1 1/2	52
14	7/8	1-3/16-12	3000	2500	1/4 - 1/2	1 1/2	66
16	1	1-5/16-12	3000	2500	1/4 - 1/2	1 1/2	85
20	1 1/4	1-5/8-12	2500	2000	1/4 - 1/2	1	111
24	1 1/2	1-7/8-12	2000	1500	1/4 - 1/2	1	114
32	2	2-1/2-12	1500	1125	1/4 - 1/2	1	162
Values are per SAE J514							

It has been my observation that most people get ahead during the time that others waste. -*Henry Ford*

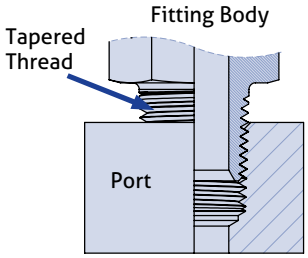
Pipe & Pipe Swivel Adapter Specifications

NPSM fittings include an inverted 60° cone inside an internally threaded swivel union nut. Male NPTF fittings that have a 30° internal chamfer that make a 60° inverted cone, will mate with NPSM swivel unions.

NOTE: THE MATING MALE THREADS MUST INCLUDE AN INSIDE CHAMFER ON THE END OF THE FITTING THAT MATES WITH THE INVERTED CONE. THREADS ARE FOR CLAMPING FORCE ONLY AND THE SEALING OCCURS ON A SMALL RADIAL SECTION BETWEEN THE MALE FITTING INTERNAL CHAMFER AND THE SWIVEL UNION INVERTED CONE.



Fi F & NPSM Union



Fi & NPTF Assembly

N NPT and NPTF pipe threads seal by wedging the tapered threads through deformation into each other. Both t of these threads require thread sealants to complete a seal.

The following table lists the specifications for NPT, NPTF, and NPSM Pipe adapters.

NPT, NPTF, and NPSM Pipe Specifications						
Dash Size	Thread Size	Major OD* (inch)	Working Pressure		Torque	
			NPT, NPTF Male and Female	NPSM Female Swivel Nut	NPT, NPTF	NPSM Swivel Union
			(psi)	*(psi)*	*(TFFT)*	*(FFWR)*
02	*1/8-27*	*.405*	*5000*	*5000*	*2-3*	*2*
04	*1/4-18*	*.540*	*4000*	*5000*	*2-3*	*2*
06	*3/8-18*	*.675*	*3000*	*4000*	*2-3*	*2*
08	*1/2-14*	*.84*	*3000*	*3500*	*2-3*	*2*
12	*3/4-14*	*1.050*	*2500*	*2250*	*2-3*	*2*
16	*1-11 1/2*	*1.315*	*2000*	*2000*	*1 1/2 - 2 1/2*	*1 1/2*
20	*1 1/4-11 1/2*	*1.660*	*1150*	*1625*	*1 1/2 - 2 1/2*	*1 1/2*
24	*1 1/2-11 1/2*	*1.900*	*1000*	*1250*	*1 1/2 - 2 1/2*	*1 1/2*
32	*2-11 1/2*	*2.375*	*1000*	*1125*	*1 1/2 - 2 1/2*	*1 1/2*
Values are per SAE J514 & J2593						

Ta , NPTF, and NPSM Pipe Specifications

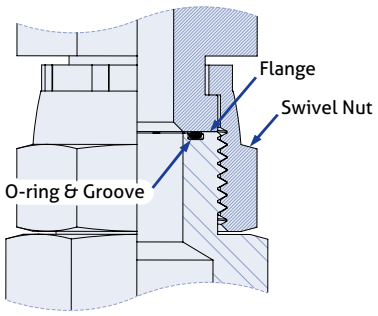
Folks who never do any more than they are paid for, never get paid for any more than they do.

-Elebert Hubbard

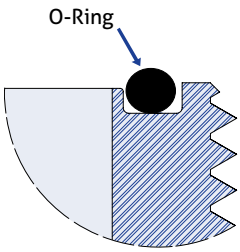
O-ring Face Seal Adapter Specifications

O-ring face seal fittings include a precision groove in the face of the male fitting. Sealing occurs when an O-ring is trapped in the groove by a smooth flat flange that is clamped against the face with a nut or nut and sleeve. The flat flange may be formed or brazed onto the end of a tube, or is machined on a fitting.

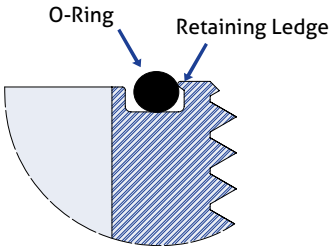
There are two SAE groove types:
- Type A: The original style A O-ring has no retaining ledge.
- Type B: The Type B groove has a retaining ledge (half dovetail) that improves O-ring retention. The Type B style is more commonly found and is a design improvement over the Type A.



e 9 : ORFS Fitting Assembly



: 10: Detail View of Cross Section of Groove Type A



11 : View of Groove Type B

The following table lists the specifications for O-ring Face Seal adapters.

ORFS Specifications								
Dash Size	Tube Size	Thread Size	Working Pressure		Torque			
			Male	Female Swivel Nut	Male & Female	Bulkhead Locknut	Tube Nuts	Swivel Nuts
			(psi)	*(psi)*	*(ft-lbs) +25% -0%*	*(ft-lbs) +25% -0%*	*FWR*	*FWR*
04	*1/4*	*9/16-18*	*6000*	*6000*	*18*	*16*	*1/4-1/2*	*1/2-3/4*
06	*3/8*	*11/16-16*	*6000*	*6000*	*29*	*22*	*1/4-1/2*	*1/2-3/4*
08	*1/2*	*13/16-16*	*6000*	*6000*	*41*	*29*	*1/4-1/2*	*1/2-3/4*
10	*5/8*	*1-14*	*6000*	*6000*	*44*	*44*	*1/4-1/2*	*1/2-3/4*
12	*3/4*	*1-3/16-12*	*6000*	*6000*	*66*	*66*	*1/4-1/2*	*1/3-1/2*
16	*1*	*1-7/16-12*	*6000*	*5000*	*92*	*92*	*1/4-1/2*	*1/3-1/2*
20	*1 1/4*	*1-11/16-12*	*4000*	*4000*	*125*	*111*	*1/4-1/2*	*1/3-1/2*
24	*1 1/2*	*2-12*	*4000*	*3000*	*147*	*125*	*1/4-1/2*	*1/3-1/2*
Note: Values are per SAE J2593 & J1453								
Torque values are for wet installation of steel components. Reduce torque values for softer material components.								

.e 4 : ORFS Specifications

BSPT, BSPP and Metric Adapter Specifications

BSPT and Metric tapered threads install and work in the same manner as NPT and NPTF.

Male BSPP fittings include an inverted 60° cone inside an internally threaded swivel union nut. Male BSPP fittings that have a 30° internal chamfer that make a 60° inverted cone, will mate with Female BSPP swivel unions.

NOTE: THE MATING MALE THREADS MUST INCLUDE AN INSIDE CHAMFER ON THE END OF THE FITTING THAT MATES WITH THE INVERTED CONE. THREADS ARE FOR CLAMPING FORCE ONLY AND THE SEALING OCCURS ON A SMALL RADIAL SECTION BETWEEN THE MALE FITTING INTERNAL CHAMFER AND THE SWIVEL UNION INVERTED CONE.

DIN swivel unions have a 24° inverted cone and may be installed into DIN bite-ring compression fittings. To provide enhanced performance, an O-ring is sometimes included in the cone of some DIN swivel unions.

British Standard Pipe Parallel (BSPP) and Metric Parallel threaded ports do not include a port cavity like the O-ring Boss or ISO 6149 port. Instead, an O-ring sits on top of the spot face or external surface and is surrounded by a metal retaining ring or other retaining component to trap the O-ring between the fitting hex, body, and spot face.

Elbow and Tee fittings have a locknut, backup washer, O-ring and retaining washer to permit 360° orientation around the axis of the port.

The following table lists the specifications for **BSPP & BSPT Adapters**

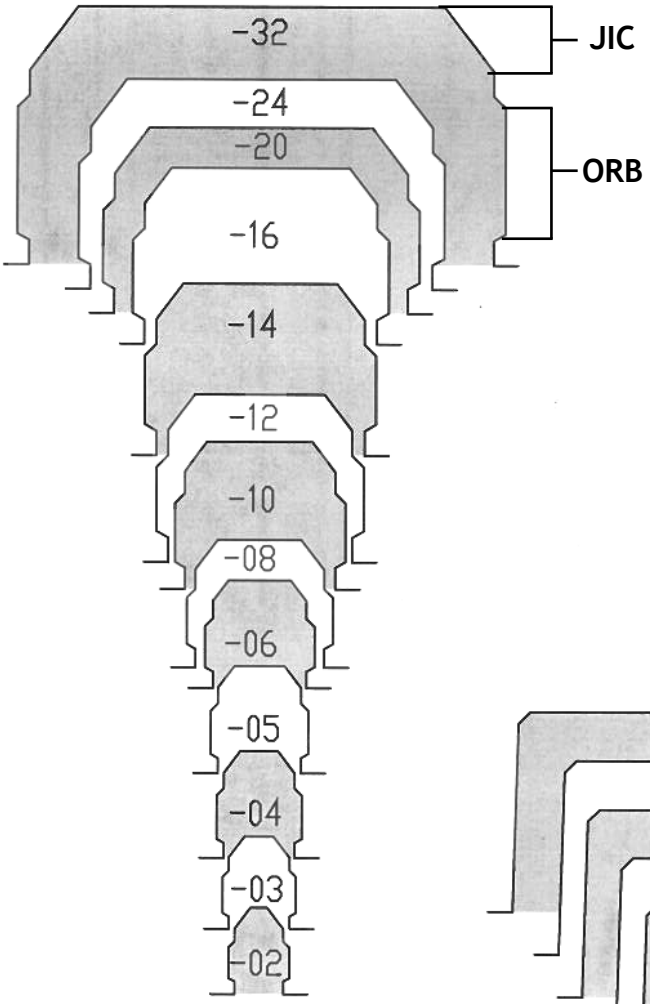
BSPP & BSPT Specifications				
Dash Size	BSPT & BSPP		Torque	
	THREAD SIZE	MAJOR OD* (inch)	BSPP Swivel Union	BSPT
02	1/8-28	0.383	2	2-3
04	1/4-19	0.518	2	2-3
06	3/8-19	0.656	2	2-3
08	1/2-14	0.825	2	2-3
10	5/8-14	0.929	2	2-3
12	3/4-14	1.041	2	2-3
16	1-11	1.309	1 1/2	1 1/2 - 2 1/2
20	1 1/4-11	1.650	1 1/2	1 1/2 - 2 1/2
24	1 1/2-11	1.882	1 1/2	1 1/2 - 2 1/2
32	2-11	2.347	1 1/2	1 1/2 - 2 1/2

The following table lists the specifications for **Metric Adapters**

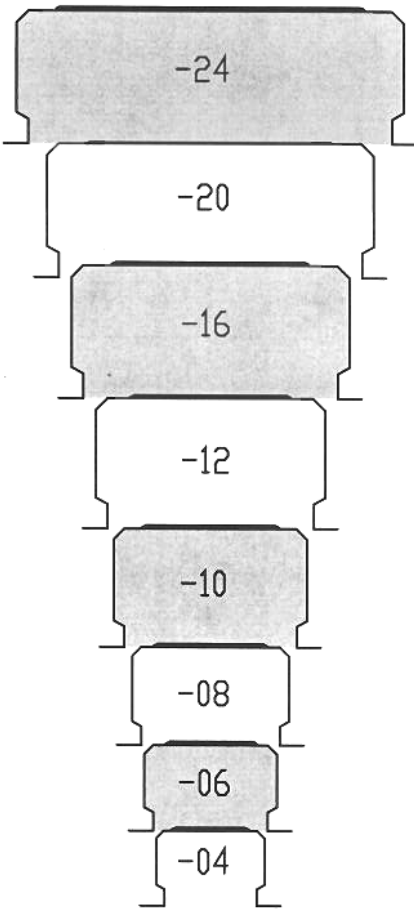
Metric DIN 3852-1 Threads	
Dash Size	THREAD SIZE (mm)
08	8 x 1.0
10	10 x 1.0
12	12 x 1.5
14	14 x 1.5
16	16 x 1.5
18	18 x 1.5
20	20 x 1.5
22	22 x 1.5
24	24 x 1.5
26	26 x 1.5
27	27 x 2.0
30	30 x 2.0
33	33 x 2.0
39	39 x 2.0
42	42 x 2.0
48	48 x 2.0
60	60 X 2.0
Values are from DIN 3852-1	

PROFILE SIZE CHART

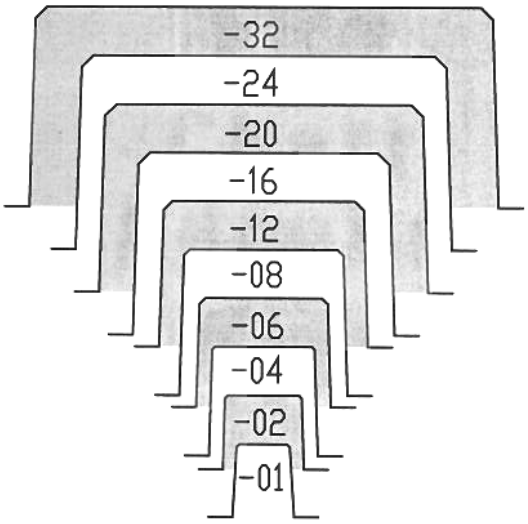
MALE JIC/ MALE O-RING BOSS

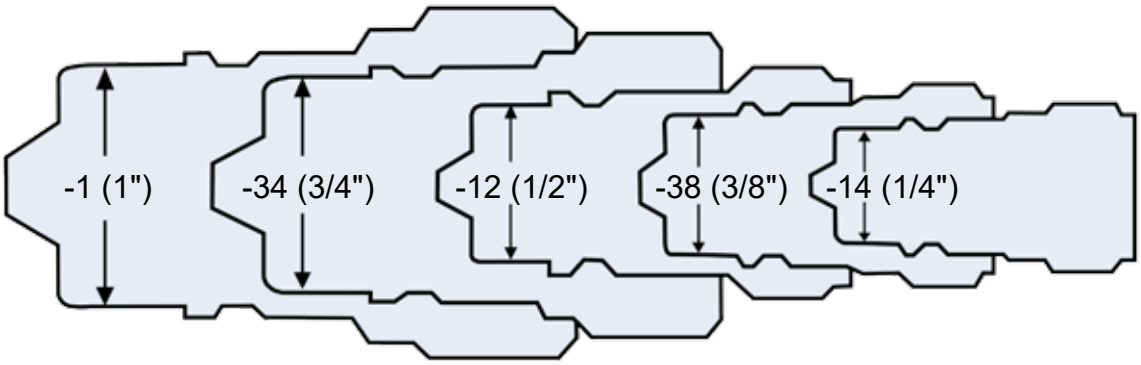


O-RING FACE SEAL

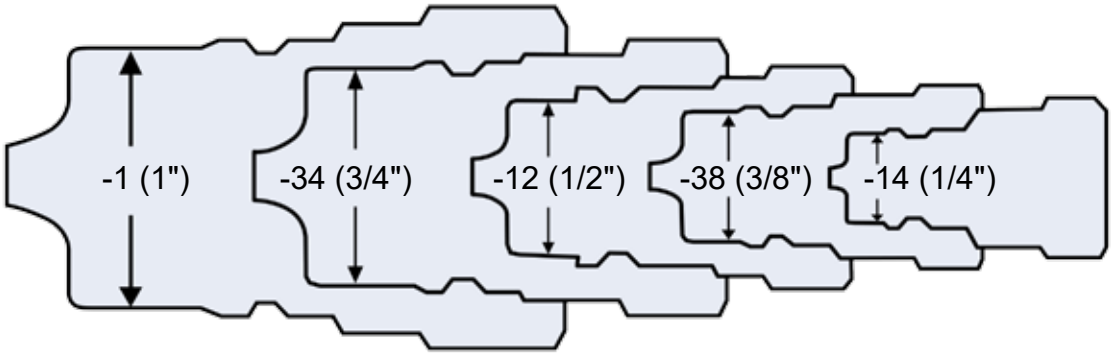


MALE PIPE

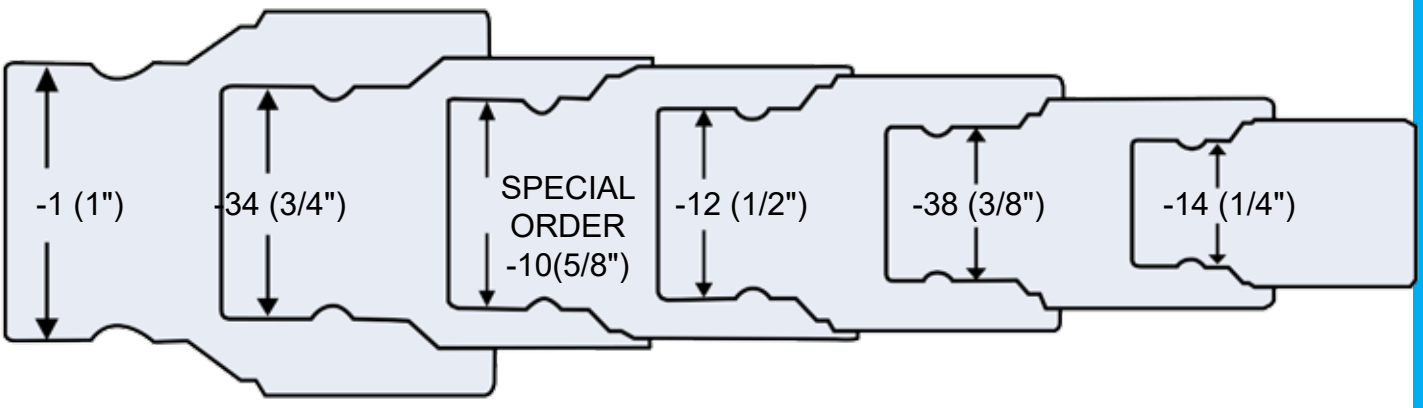




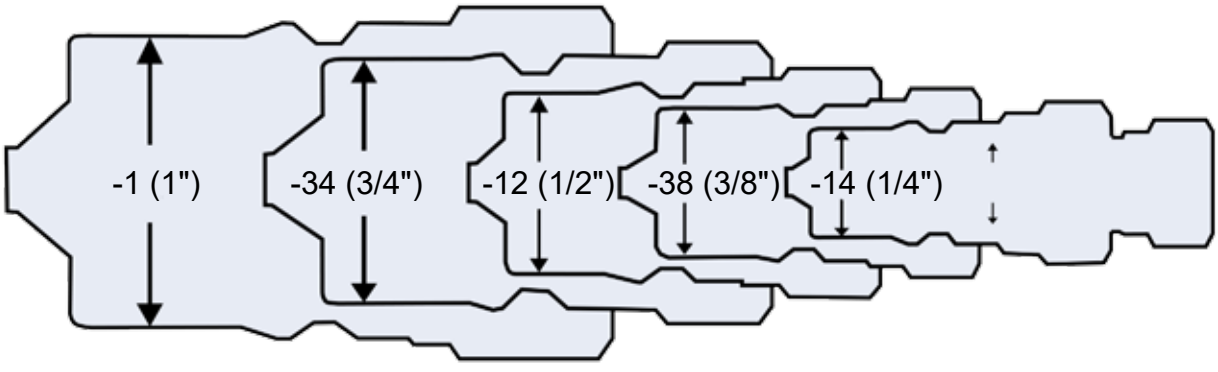
AG INTERCHANGE - NV SERIES



ISO 7241 - 1 - ISO A - ANV SERIES



ISO 16028 - FF SERIES



ISO 7241 - 1 ISO B - HNV SERIES

FEMALE PIPE SWIVELS

STEEL PIPE SWIVEL ADAPTERS

MALE PIPE SWIVEL ADAPTER

SAE 140130

Part #	Male Pipe 1	Female NPSM 2	
1404-2-2	1/8	1/8	----
1404-4-2	1/4	1/8	----
1404-4-4	1/4	1/4	----
1404-6-6	3/8	3/8	----
1404-6-8	3/8	1/2	----
1404-8-4	1/2	1/4	----
1404-8-6	1/2	3/8	----
1404-8-8	1/2	1/2	----
1404-12-8	3/4	1/2	----
1404-12-12	3/4	3/4	----
1404-12-16	3/4	1	----
1404-16-12	1	3/4	----
1404-16-16	1	1	----
1404-20-16	1-1/4	1	----
1404-20-20	1-1/4	1-1/4	----
1404-24-24	1-1/2	1-1/2	----
1404-32-32	2	2	----

1404 2045R 1210 9205R 0107

FEMALE PIPE SWIVEL ADAPTER

SAE 140131

Part #	Female Pipe 1	Female NPSM 2	
1405-2-2	1/8	1/8	----
1405-4-4	1/4	1/4	----
1405-6-4	3/8	1/4	----
1405-6-6	3/8	3/8	----
1405-6-8	3/8	1/2	----
1405-8-4	1/2	1/4	----
1405-8-8	1/2	1/2	----
1405-12-12	3/4	3/4	----
1405-16-12	1	3/4	----
1405-16-16	1	1	----
1405-20-20	1-1/4	1-1/4	----
1405-24-24	1-1/2	1-1/2	----
1405-32-32	2	2	----

1405 2046R 1212 9255 C207

MALE PIPE ELBOW SWIVEL ADAPTER

SAE 140230

Part #	Male Pipe 1	Female NPSM 2	
1501-2-2	1/8	1/8	----
1501-4-2	1/4	1/8	----
1501-4-4	1/4	1/4	----
1501-6-4	3/8	1/4	----
1501-6-6	3/8	3/8	----
1501-8-6	1/2	3/8	----
1501-8-8	1/2	1/2	----
1501-12-8	3/4	1/2	----
1501-12-12	3/4	3/4	----
1501-16-12	1	3/4	----
1501-16-16	1	1	----
1501-20-20	1-1/4	1-1/4	----
1501-32-32	2	2	----

1501 2047R 1218 9405 2107

FEMALE UNION ELBOW SWIVEL ADAPTER

SAE 140231

Part #	Female Pipe 1	Female NPSM 2	
1502-2-2	1/8	1/8	----
1502-4-4	1/4	1/4	----
1502-6-4	3/8	1/4	----
1502-6-6	3/8	3/8	----
1502-6-8	3/8	1/2	----
1502-8-6	1/2	3/8	----
1502-8-8	1/2	1/2	----
1502-12-12	3/4	3/4	----
1502-16-16	1	1	----
1502-20-20	1-1/4	1-1/4	----
1502-24-24	1-1/2	1-1/2	----

1502 2207 1216 94SSR

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer.
For more information, visit www.P65Warnings.ca.gov

MALE 45° PIPE ELBOW SWIVEL ADAPTER

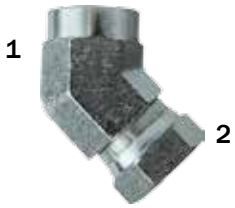
SAE 140330

Part #	Male Pipe 1	Female NPSM 2	
1503-2-2	1/8	1/8	----
1503-4-4	1/4	1/4	----
1503-6-4	3/8	1/4	----
1503-6-6	3/8	3/8	----
1503-8-6	1/2	3/8	----
1503-8-8	1/2	1/2	----
1503-12-8	3/4	1/2	----
1503-12-12	3/4	3/4	----
1503-16-12	1	3/4	----
1503-16-16	1	1	----

1503 2049R 3107 1214 9355R

FEMALE 45° UNION ELBOW SWIVEL ADAPTER

SAE 140331



Part #	Female Pipe 1	Female NPSM 2	
1504-2-2	1/8	1/8	----
1504-4-4	1/4	1/4	----
1504-6-6	3/8	3/8	----
1504-8-8	1/2	1/2	----
1504-12-12	3/4	3/4	----
1504-16-16	1	1	----

1504 2050R 1249 9385R

MALE SWIVEL BRANCH TEE

Part #	Female NPSM 1 & 2	Male Pipe 3	
1601-2-2	1/8	1/8	----
1601-4-4	1/4	1/4	----
1601-6-6	3/8	3/8	----
1601-8-8	1/2	1/2	----
1601-12-12	3/4	3/4	----
1601-16-16	1	1	----

1601 2254R 1258 9406R

FEMALE SWIVEL TEE

Part #	Female NPSM 1 & 2	Female Pipe 3	
1602-4-4	1/4	1/4	----
1602-6-6	3/8	3/8	----
1602-8-8	1/2	1/2	----
1602-12-12	3/4	3/4	----
1602-16-16	1	1	----

1602 2253R 1259 9456R

FEMALE SWIVEL UNION TEE

Part #	Female NPSM 1,2 & 3	
1603-4-4	1/4	----
1603-6-6	3/8	----
1603-8-8	1/2	----
1603-12-12	3/4	----
1603-16-16	1	----

1603 2255 1223 9705R

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

STRAIGHTS STEEL JIC FLARE 37°

LONG JIC TUBE NUT

SAE 070111

Part #	Tube O.D	JIC Thread Size	
0304-4	1/4	7/16-20	----
0304-6	3/8	9/16-18	----
0304-8	1/2	3/4-16	----
0304-10	5/8	7/8-14	----
0304-12	3/4	1-1/16-12	----
0304-16	1	1-5/16-12	----

304 221000 0304 C5115

JIC CAP

SAE 070112
MS 51532

Part #	Tube O.D.	JIC Thread Size	
0304-C-2	1/8	5/16-24	----
0304-C-3	3/16	3/8-24	----
0304-C-4	1/4	7/16-20	----
0304-C-5	5/16	1/2-20	----
0304-C-6	3/8	9/16-18	----
0304-C-8	1/2	3/4-16	----
0304-C-10	5/8	7/8-14	----
0304-C-12	3/4	1-1/16-12	----
0304-C-14	7/8	1-3/16-12	----
0304-C-16	1	1-5/16-12	----
0304-C-20	1-1/4	1-5/8-12	----
0304-C-24	1-1/2	1-7/8-12	----
0304-C-32	2	2-1/2-12	----

820 304 210292 FNTX 1329 C5129

JIC TUBE NUT (SLEEVE REQUIRED)

SAE 070110
MS 51531

Part #	Tube O.D	JIC Thread Size	
0318-2	1/8	5/16-24	----
0318-3	3/16	3/8-24	----
0318-4	1/4	7/16-20	----
0318-5	5/16	1/2-20	----
0318-6	3/8	9/16-18	----
0318-8	1/2	3/4-16	----
0318-10	5/8	7/8-14	----
0318-12	3/4	1-1/16-12	----
0318-14	7/8	1-3/16-12	----
0318-16	1	1-5/16-12	----
0318-20	1-1/4	1-5/8-12	----
0318-24	1-1/2	1-7/8-12	----
0318-32	2	2-1/2-12	----

318 1290 BTX 1311 C5105

JIC TUBE SLEEVE

SAE 070115
MS 51533

Part #	Tube O.D	
0319-2	1/8	----
0319-3	3/16	----
0319-4	1/4	----
0319-5	5/16	----
0319-6	3/8	----
0319-8	1/2	----
0319-10	5/8	----
0319-12	3/4	----
0319-14	7/8	----
0319-16	1	----
0319-20	1-1/4	----
0319-24	1-1/2	----
0319-32	2	----

319 900605 TX 1253 C5165

JIC TUBE UNION

SAE 070101
MS 51501

1 2

Part #	JIC Thread Size 1	JIC Thread Size 2	
2403-2-2	5/16-24	5/16-24	----
2403-3-3	3/8-24	3/8-24	----
2403-4-4	7/16-20	7/16-20	----
2403-5-5	1/2-20	1/2-20	----
2403-6-6	9/16-18	9/16-18	----
2403-6-4	9/16-18	7/16-20	----
2403-8-8	3/4-16	3/4-16	----
2403-8-6	3/4-16	9/16-18	----
2403-10-10	7/8-14	7/8-14	----
2403-10-8	7/8-14	3/4-16	----
2403-12-12	1-1/16-12	1-1/16-12	----
2403-12-8	1-1/16-12	3/4-16	----
2403-12-10	1-1/16-12	7/8-14	----
2403-14-14	1-3/16-12	1-3/16-12	----
2403-16-16	1-5/16-12	1-5/16-12	----
2403-16-12	1-5/16-12	1-1/16-12	----
2403-20-20	1-5/8-12	1-5/8-12	----
2403-24	1-7/8-12	1-7/8-12	----
2403-32	2-1/2-12	2-1/2-12	----

2403 2027 HTX 1204 C5305

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

JIC MALE CONNECTOR

SAE 070102
MS 51500

Part #	JIC Thread Size 1	MalePipe Thread 2	
2404-2-2	5/16-24	1/8	----
2404-4-2	7/16-20	1/8	----
2404-4-4	7/16-20	1/4	----
2404-4-6	7/16-20	3/8	----
2404-4-8	7/16-20	1/2	----
2404-6-2	9/16-18	1/8	----
2404-6-4	9/16-18	1/4	----
2404-6-6	9/16-18	3/8	----
2404-6-8	9/16-18	1/2	----
2404-8-4	3/4-16	1/4	----
2404-8-6	3/4-16	3/8	----
2404-8-8	3/4-16	1/2	----
2404-8-12	3/4-16	3/4	----
2404-8-16	3/4-16	1	----
2404-10-8	7/8-14	1/2	----
2404-10-12	7/8-14	3/4	----
2404-12-6	1-1/16-12	3/8	----
2404-12-8	1-1/16-12	1/2	----
2404-12-12	1-1/16-12	3/4	----
2404-12-16	1-1/16-12	1	----
2404-16-12	1-5/16-12	3/4	----
2404-16-16	1-5/16-12	1	----
2404-20-16	1-5/8-12	1	----
2404-20-20	1-5/8-12	1-1/4	----
2404-24-16	1-7/8-12	1	----
2404-24-20	1-7/8-12	1-1/4	----
2404-24-24	1-7/8-12	1-1/2	----
2404-32-24	2-1/2-12	1-1/2	----
2404-32-32	2-1/2-12	2	----

2404 2021R FTX 1202R C5205 816

My dream is of a place and a time where America will once again be seen as the last best hope of earth.

- Abraham Lincoln

JIC FEMALE CONNECTOR

SAE 070103
MS 51503

Part #	JIC Thread Size 1	Female Pipe Size 2	
2405-2-2	5/16-24	1/8	----
2405-3-2	3/8-24	1/8	----
2405-4-2	7/16-20	1/8	----
2405-4-4	7/16-20	1/4	----
2405-6-4	9/16-18	1/4	----
2405-6-6	9/16-18	3/8	----
2405-8-4	3/4-16	1/4	----
2405-8-6	3/4-16	3/8	----
2405-8-8	3/4-16	1/2	----
2405-10-6	7/8-14	3/8	----
2405-10-8	7/8-14	1/2	----
2405-12-8	1-1/16-12	1/2	----
2405-12-12	1-1/16-12	3/4	----
2405-16-12	1-5/16-12	3/4	----
2405-16-16	1-5/16-12	1	----
2405-20-20	1-5/8-12	1-1/4	----
2405-24-24	1-7/8-12	1-1/2	----
2405-32-32	2-1/2-12	2	----

2405 2022R GTX 1230R C5255

JIC REDUCER/ EXPANDER

SAE 070123

Part #	Female JIC Thread Size 1	Male JIC Thread Size 2	
2406-6-4	9/16-18	7/16-20	----
2406-6-8	9/16-18	3/4-16	----
2406-8-4	3/4-16	7/16-20	----
2406-8-6	3/4-16	9/16-18	----
2406-8-12	3/4-16	1-1/16-12	----
2406-10-4	7/8-14	7/16-20	----
2406-10-6	7/8-14	9/16-18	----
2406-10-8	7/8-14	3/4-16	----
2406-12-4	1-1/16-12	7/16-20	----
2406-12-6	1-1/16-12	9/16-18	----
2406-12-8	1-1/16-12	3/4-16	----
2406-12-10	1-1/16-12	7/8-14	----
2406-16-4	1-5/16-12	7/16-20	----
2406-16-12	1-5/16-12	1-1/16-12	----
2406-16-20	1-5/16-12	1-5/8-12	----
2406-20-12	1-5/8-12	1-1/16-12	----
2406-20-16	1-5/8-12	1-5/16-12	----
2406-24-16	1-7/8-12	1-5/16-12	----
2406-32-24	2-1/2-12	1-7/8-12	----

2406 C5015 2215 TRTX 1246

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

STRAIGHTS STEEL JIC FLARE 37°

PLUG

SAE 070109
MS 51518

Part #	Tube O.D.	JIC Thread Size	
2408-2	1/8	5/16-24	----
2408-3	3/16	3/8-24	----
2408-4	1/4	7/16-20	----
2408-5	5/16	1/2-20	----
2408-6	3/8	9/16-18	----
2408-8	1/2	3/4-16	----
2408-10	5/8	7/8-14	----
2408-12	3/4	1-1/16-12	----
2408-14	7/8	1-3/16-12	----
2408-16	1	1-5/16-12	----
2408-20	1-1/4	1-5/8-12	----
2408-24	1-1/2	1-7/8-12	----
2408-32	2	2-1/2-12	----

2408 430549 PNTX 1254 C5229

JIC UNION ELBOW

SAE 070201
MS 51505

Part #	JIC Thread Size 1	JIC Thread Size 2	
2500-2-2	5/16-24	5/16-24	----
2500-4-4	7/16-20	7/16-20	----
2500-5-5	1/2-20	1/2-20	----
2500-6-6	9/16-18	9/16-18	----
2500-6-4	9/16-18	7/16-20	----
2500-8-8	3/4-16	3/4-16	----
2500-8-6	3/4-16	9/16-18	----
2500-10-10	7/8-14	7/8-14	----
2500-12-12	1-1/16-12	1-1/16-12	----
2500-16-16	1-5/16-12	1-5/16-12	----
2500-20-20	1-5/8-12	1-5/8-12	----
2500-24-24	1-7/8-12	1-7/8-12	----
2500-32-32	2-1/2-12	2-1/2-12	----

2500 2039 1234 C5505 821

STEEL 37° JIC FLARE SHAPES

JIC MALE ELBOW

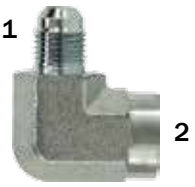
SAE 070202
MS 51504

Part #	JIC Thread Size 1	Male Pipe Size 2	
2501-4-2	7/16-20	1/8	----
2501-4-4	7/16-20	1/4	----
2501-4-8	7/16-20	1/2	----
2501-6-2	9/16-18	1/8	----
2501-6-4	9/16-18	1/4	----
2501-6-6	9/16-18	3/8	----
2501-6-8	9/16-18	1/2	----
2501-8-4	3/4-16	1/4	----
2501-8-6	3/4-16	3/8	----
2501-8-8	3/4-16	1/2	----
2501-8-12	3/4-16	3/4	----
2501-10-6	7/8-14	3/8	----
2501-10-8	7/8-14	1/2	----
2501-12-8	1-1/16-12	1/2	----
2501-12-12	1-1/16-12	3/4	----
2501-12-16	1-1/16-12	1	----
2501-16-12	1-5/16-12	3/4	----
2501-16-16	1-5/16-12	1	----
2501-16-20	1-5/16-12	1-1/4	----
2501-20-20	1-5/8-12	1-1/4	----
2501-24-24	1-7/8-12	1-1/2	----
2501-32-32	2-1/2-12	2	----

1208R C5405 2501 2024R CTX 822

JIC FEMALE ELBOW

SAE 070203
MS 51506



Part #	JIC Thread Size 1	Female Pipe Size 2	
2502-4-2	7/16-20	1/8	----
2502-4-4	7/16-20	1/4	----
2502-6-4	9/16-18	1/4	----
2502-6-6	9/16-18	3/8	----
2502-8-6	3/4-16	3/8	----
2502-8-8	3/4-16	1/2	----
2502-12-12	1-1/16-12	3/4	----
2502-16-16	1-5/16-12	1	----
2502-20-20	1-5/8-12	1-1/4	----

2502 2025R DTX 1240R C5455

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer.
For more information, visit www.P65Warnings.ca.gov

JIC MALE 45° ELBOW

SAE 070302
MS 51508

Part #	JIC Thread Size 1	Male Pipe Size 2	
2503-2-2	5/16-24	1/8	----
2503-4-4	7/16-20	1/4	----
2503-6-4	9/16-18	1/4	----
2503-6-6	9/16-18	3/8	----
2503-6-8	9/16-18	1/2	----
2503-8-6	3/4-16	3/8	----
2503-8-8	3/4-16	1/2	----
2503-10-8	7/8-14	1/2	----
2503-12-12	1-1/16-12	3/4	----
2503-12-16	1-1/16-12	1	----
2503-16-16	1-5/16-12	1	----
2503-16-20	1-5/16-12	1-1/4	----
2503-20-16	1-5/8-12	1	----
2503-20-20	1-5/8-12	1-1/4	----

2503 2023R VTX 1206R C5355 823

JIC MALE BRANCH TEE

Part #	JIC Thread Size 1&2	Pipe Thread Size 3	
2601-4-4	7/16-20	1/4	----
2601-6-6	9/16-18	3/8	----
2601-8-8	3/4-16	1/2	----
2601-12-12	1-1/16-12	3/4	----

2601 2030R STX 1221R C5605

JIC FEMALE BRANCH TEE

SAE 070427
MS 51513

Part #	JIC Thread Size 1 & 2	Female Pipe Size 3	
2602-4-4	7/16-20	1/4	----
2602-6-6	9/16-18	3/8	----
2602-8-8	3/4-16	1/2	----

2602 2031R OTX 1228R C6566

JIC UNION TEE

SAE 070401
MS 51510

Part #	JIC Thread Size 1 & 2	JIC Thread Size 3	
2603-2-2	5/16-24	5/16-24	----
2603-3-3	3/8-24	3/8-24	----
2603-4-4	7/16-20	7/16-20	----
2603-6-6	9/16-18	9/16-18	----
2603-8-8	3/4-16	3/4-16	----
2603-10-10	7/8-14	7/8-14	----
2603-12-12	1-1/16-12	1-1/16-12	----
2603-16-16	1-5/16-12	1-5/16-12	----

2603 2033 JTX 1220 C5705

STEEL BULKHEAD FITTINGS

LOCK NUT

SAE 070118
MS 51860

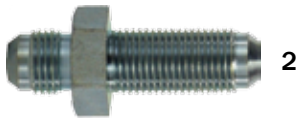
*** Lock Nut no longer included on fittings**

Part #	Thread Size	
0306-2	5/16-24	----
0306-4	7/16-20	----
0306-5	1/2-20	----
0306-6	9/16-18	----
0306-8	3/4-16	----
0306-10	7/8-14	----
0306-12	1-1/16-12	----
0306-14	1-3/16-12	----
0306-16	1-5/16-12	----
0306-20	1-5/8-12	----

1306 894 210212 WLN 1332 C5624

JIC BULKHEAD UNION

SAE 070601
MS 51520



Part #	JIC Thread Size 1	JIC Thread Size 2	
2700-2-2	5/16-24	5/16-24	----
2700-4-4	7/16-20	7/16-20	----
2700-5-5	1/2-20	1/2-20	----
2700-6-6	9/16-18	9/16-18	----
2700-8	3/4-16	3/4-16	----
2700-10	7/8-14	7/8-14	----
2700-12	1-1/16-12	1-1/16-12	----
2700-14	1-3/16-12	1-3/16-12	----
2700-16	1-5/16-12	1-5/16-12	----

2700 2041R WTX 1260 C5325

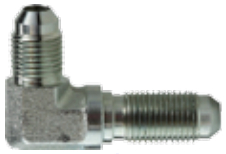
WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

STEEL BULKHEAD FITTINGS

HYDRAULIC ADAPTERS

JIC BULKHEAD UNION ELBOW

SAE 070701
MS 51507



Part #	JIC Thread Size 1	JIC Bulkhead Thread 2	
2701-4	7/16-20	7/16-20	----
2701-5	1/2-20	1/2-20	----
2701-6	9/16-18	9/16-18	----
2701-8	3/4-16	3/4-16	----
2701-10	7/8-14	7/8-14	----
2701-12	1-1/16-12	1-1/16-12	----
2701-16	1-5/16-12	1-5/16-12	----
2701-20	1-5/8-12	1-5/8-12	----

2701 2043R WETX 1262 C5525

JIC BULKHEAD UNION 45° ELBOW

SAE 070801
MS 51509

Part #	JIC Thread Size 1	JIC Thread Size 2	
2702-4	7/16-20	7/16-20	----
2702-6	9/16-18	9/16-18	----
2702-8	3/4-16	3/4-16	----
2702-10	7/8-14	7/8-14	----
2702-12	1-1/16-12	1-1/16-12	----
2702-16	1-5/16-12	1-5/16-12	----

2702 2042 WNTX 1261 C5375

JIC BULKHEAD BRANCH TEE

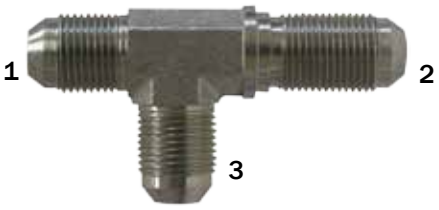
SAE 070959
MS 51515

Part #	JIC Thread Size 1&2	JIC Thread Size 3	
2703-4	7/16-20	7/16-20	----
2703-6	9/16-18	9/16-18	----
2703-8	3/4-16	3/4-16	----
2703-10	7/8-14	7/8-14	----
2703-12	1-1/16-12	1-1/16-12	----
2703-16	1-5/16-12	1-5/16-12	----

2703 203002 WJT 1283 C5725

JIC BULKHEAD RUN TEE

SAE 070958
MS 51516



Part #	JIC Thread Size 1&3	JIC Thread Size 2	
2704-4	7/16-20	7/16-20	----
2704-6	9/16-18	9/16-18	----
2704-8	3/4-16	3/4-16	----
2704-10	7/8-14	7/8-14	----
2704-12	1-1/16-12	1-1/16-12	----
2704-16	1-5/16-12	1-5/16-12	----

2704 203008 WJJT 1284 C5726

JIC TO FEMALE PIPE BULKHEAD

Part #	JIC Thread	Female Pipe Size 2	
2705-4-4	7/16-20	1/4	----
2705-6-6	9/16-18	3/8	----
2705-8-8	3/4-16	1/2	----
2705-12-12	1-1/16-12	3/4	----
2705-16-16	1-5/16-12	1	----
2705-20-20	1-5/8-12	1-1/4	28.45

2705 2239 WGTX C5275

JIC TO MALE PIPE BULKHEAD

Part #	JIC Thread Size 1	Pipe Thread Size 2	
2706-4-4	7/16-20	1/4	----
2706-6-6	9/16-18	3/8	----
2706-8-8	3/4-16	1/2	----
2706-12-12	1-1/16-12	3/4	----
2706-16-16	1-5/16-12	1	----

2706 2240

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

** Lock Nuts sold separately - pg. 403*

PIPE COUPLING

910

SAE 140138

Part #	Female Pipe 1	Female Pipe 2	
5000-2	1/8	1/8	----
5000-4-2	1/4	1/8	----
5000-4	1/4	1/4	----
5000-6-4	3/8	1/4	----
5000-6-6	3/8	3/8	----
5000-8-4	1/2	1/4	----
5000-8-6	1/2	3/8	----
5000-8	1/2	1/2	----
5000-12-12	3/4	3/4	----
5000-16-12	1	3/4	----
5000-16	1	1	----
5000-20-20	1-1/4	1-1/4	----
5000-24	1-1/2	1-1/2	----
5000-32	2	2	----

5000 2096 GG 1273 C3309

HEX PIPE NIPPLES

SAE 140137

Part #	Male Pipe 1	Male Pipe 2	
5404-2	1/8	1/8	----
5404-4-2	1/4	1/8	----
5404-4	1/4	1/4	----
5404-6-2	3/8	1/8	----
5404-6-4	3/8	1/4	----
5404-6	3/8	3/8	----
5404-8-4	1/2	1/4	----
5404-8-6	1/2	3/8	----
5404-8	1/2	1/2	----
5404-12-6	3/4	3/8	----
5404-12-8	3/4	1/2	----
5404-12	3/4	3/4	----
5404-16-12	1	3/4	----
5404-16	1	1	----
5404-20-16	1-1/4	1	----
5404-20	1-1/4	1-1/4	----
5404-24-20	1-1/2	1-1/4	----
5404-24	1-1/2	1-1/2	----
5404-32-24	2	1-1/2	----
5404-32	2	2	----

5404 2083 FF 1252 C3069 911

EXPANDING PIPE ADAPTER

SAE 140139

Part #	Male Pipe 1	Female Pipe 2	
5405-2-2	1/8	1/8	----
5405-2-4	1/8	1/4	----
5405-4-2	1/4	1/8	----
5405-4-4	1/4	1/4	----
5405-6-4	3/8	1/4	----
5405-6-6	3/8	3/8	----
5405-6-8	3/8	1/2	----
5405-8-8	1/2	1/2	----
5405-8-12	1/2	3/4	----
5405-12-12	3/4	3/4	----
5405-16-16	1	1	----
5405-16-20	1	1-1/4	----
5405-20-20	1-1/4	1-1/4	----
5405-20-24	1-1/4	1-1/2	----
5405-24-24	1-1/2	1-1/2	----

920 5405 2040 FG-(R) 1274 C3209(R)

HEX REDUCER BUSHING

SAEF1
140140

Part #	Male Pipe	Female Pipe	
5406-4-2	1/4	1/8	----
5406-6-2	3/8	1/8	----
5406-6-4	3/8	1/4	----
5406-8-2	1/2	1/8	----
5406-8-4	1/2	1/4	----
5406-8-6	1/2	3/8	----
5406-12-4	3/4	1/4	----
5406-12-6	3/4	3/8	----
5406-12-8	3/4	1/2	----
5406-16-4	1	1/4	----
5406-16-6	1	3/8	----
5406-16-8	1	1/2	----
5406-16-12	1	3/4	----
5406-20-16	1-1/4	1	----
5406-24-20	1-1/2	1-1/4	----
5406-32-20	2	1-1/4	----
5406-32-24	2	1-1/2	----

5406 2081 PTR 1250 C3109 912

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

STEEL PIPE FITTINGS

HYDRAULIC ADAPTERS

HEX HEAD PLUG

SAE 130109E

Part #	Male Pipe	
5406-P-2	1/8	----
5406-P-4	1/4	----
5406-P-6	3/8	----
5406-P-8	1/2	----
5406-P-12	3/4	----
5406-P-16	1	----
5406-P-20	1-1/4	----
5406-P-24	1-1/2	----
5406-P-32	2	----

933 5406P 2082 HP 1251 C3159

HOLLOW HEX PLUG

SAE 130109

Part #	Male Pipe	
5406-HHP-2	1/8	----
5406-HHP-4	1/4	----
5406-HHP-6	3/8	----
5406-HHP-8	1/2	----
5406-HHP-12	3/4	----
5406-HHP-16	1	----
5406-HHP-20	1-1/4	----
5406-HHP-24	1-1/2	----

C3169 2222

FLUSH HOLLOW HEX PLUG W/ 7/8 TAPER

Part #	Male Pipe	
5406-FLP-2	1/8	----
5406-FLP-4	1/4	----
5406-FLP-6	3/8	----
5406-FLP-8	1/2	----
5406-FLP-12	3/4	----

SQUARE HEAD PLUG

SAE 130109A

Part #	Male Pipe	
5406-SHP-2	1/8	----
5406-SHP-4	1/4	----
5406-SHP-6	3/8	----
5406-SHP-8	1/2	----
5406-SHP-12	3/4	----
5406-SHP-16	1	----
5406-SHP-20	1-1/4	----
5406-SHP-24	1-1/2	----
5406-SHP-32	2	----

C3179

PIPE CAP

Part #	Female Pipe	
5406-C-2	1/8	----
5406-C-4	1/4	----
5406-C-6	3/8	----
5406-C-8	1/2	----
5406-C-12	3/4	----
5406-C-16	1	----

HPC

MALE ELBOW

SAE 140237

Part #	Male Pipe 1	Male Pipe 2	
5500-2	1/8	1/8	----
5500-4	1/4	1/4	----
5500-6	3/8	3/8	----
5500-8-4	1/2	1/4	----
5500-8	1/2	1/2	----
5500-12-8	3/4	1/2	----
5500-12-12	3/4	3/4	----
5500-16	1	1	----
5500-16-12	1	3/4	----
5500-20-20	1-1/4	1-1/4	----

919 5500 2085 CR 1275 C3529

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

45° MALE ELBOW

Part #	Male Pipe 1	Male Pipe 2	
5501-2-2	1/8	1/8	----
5501-4-4	1/4	1/4	----
5501-6-6	3/8	3/8	----
5501-8	1/2	1/2	----
5501-12-12	3/4	3/4	----
5501-16-16	1	1	----

5501 2247

90° STREET ELBOW

SAE 140239

Part #	Male Pipe 1	Female Pipe 2	
5502-2	1/8	1/8	----
5502-4	1/4	1/4	----
5502-6-4	3/8	1/4	----
5502-6	3/8	3/8	----
5502-8-4	1/2	1/4	----
5502-8-6	1/2	3/8	----
5502-8-8	1/2	1/2	----
5502-12	3/4	3/4	----
5502-16-16	1	1	----
5502-20	1-1/4	1-1/4	----
5502-24	1-1/2	1-1/2	----

5502 2089 CD 1234R C3409 914

45° STREET ELBOW

SAE 140339

Part #	Male Pipe 1	Female Pipe 2	
5503-2	1/8	1/8	----
5503-4	1/4	1/4	----
5503-6	3/8	3/8	----
5503-8	1/2	1/2	----
5503-12-12	3/4	3/4	----
5503-16	1	1	----

5503 CD45 1244

FEMALE ELBOW

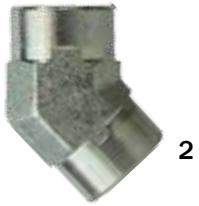
SAE 140238

Part #	Female Pipe 1	Female Pipe 2	
5504-2	1/8	1/8	----
5504-4	1/4	1/4	----
5504-6	3/8	3/8	----
5504-8-6	1/2	3/8	----
5504-8	1/2	1/2	----
5504-12	3/4	3/4	----
5504-16	1	1	----
5504-20	1-1/4	1-1/4	----
5504-24	1-1/2	1-1/2	----

5504 2087 DD 1245 C3509 916

45° FEMALE ELBOW

SAE 140338



Part #	Female Pipe 1	Female Pipe 2	
5505-4	1/4	1/4	----
5505-6	3/8	3/8	----
5505-8	1/2	1/2	----
5505-12	3/4	3/4	----
5505-16	1	1	----
5505-20	1-1/4	1-1/4	----

5505 DD45 1241 C3559

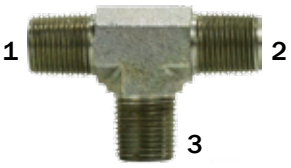
WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

STEEL PIPE FITTINGS

HYDRAULIC ADAPTERS

MALE PIPE TEE

SAE 140437

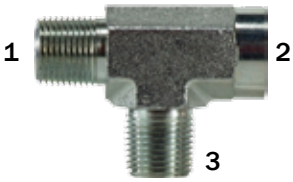


Part #	Male Pipe 1 & 2	Male Pipe 3	
5600-2-2	1/8	1/8	----
5600-4-4	1/4	1/4	----
5600-6-6	3/8	3/8	----
5600-8-8	1/2	1/2	----
5600-12	3/4	3/4	----
5600-16	1	1	----

5600 2257 RRS

FEMALE RUN PIPE TEE

SAE 1404276



Part #	Male Pipe 1 & 3	Female Pipe 2	
5603-2-2	1/8	1/8	----
5603-4-4	1/4	1/4	----
5603-6-6	3/8	3/8	----
5603-8-8	1/2	1/2	----
5603-12	3/4	3/4	----
5603-16	1	1	----

5603 2093 MMO 1277

FEMALE BRANCH PIPE TEE

SAE 140427

Part #	Male Pipe 1 & 2	Female Pipe 3	
5601-2-2	1/8	1/8	----
5601-4-4	1/4	1/4	----
5601-6-6	3/8	3/8	----
5601-12	3/4	3/4	----
5601-16	1	1	----

901 5601 2256

MALE BRANCH PIPE TEE

Part #	Female Pipe 1 & 2	Male Pipe 3	
5604-2-2	1/8	1/8	----
5604-4-4	1/4	1/4	----
5604-6-6	3/8	3/8	----
5604-8-8	1/2	1/2	----
5604-12	3/4	3/4	----
5604-16	1	1	----

904 5604 2091 MMS 1278 C3609

STREET PIPE TEE

SAE 140424

Part #	Male Pipe 1	Female Pipe 2 & 3	
5602-2-2	1/8	1/8	----
5602-4-4	1/4	1/4	----
5602-6-6	3/8	3/8	----
5602-8-8	1/2	1/2	----
5602-12	3/4	3/4	----
5602-16	1	1	----

902 5602 2092 MRO 1276 C3759

FEMALE PIPE TEE

SAE 140438

Part #	Female Pipe	
5605-2-2	1/8	----
5605-4-4	1/4	----
5605-6-6	3/8	----
5605-8	1/2	----
5605-12	3/4	----
5605-16	1	----
5605-20	1-1/4	----

917 5605 2090 1225 C3709

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

JIC TO O-RING CONNECTOR

SAE 070120
MS 51525

Part #	JIC Thread Size 1	O-Ring Thread 2	
6400-2	5/16-24	5/16-24	----
6400-4	7/16-20	7/16-20	----
6400-4-2	7/16-20	5/16-24	----
6400-4-6	7/16-20	9/16-18	----
6400-4-8	7/16-20	3/4-16	----
6400-5	1/2-20	1/2-20	----
6400-6	9/16-18	9/16-18	----
6400-6-4	9/16-18	7/16-20	----
6400-6-8	9/16-18	3/4-16	----
6400-6-10	9/16-18	7/8-14	----
6400-6-12	9/16-18	1-1/16-12	----
6400-8	3/4-16	3/4-16	----
6400-8-4	3/4-16	7/16-20	----
6400-8-6	3/4-16	9/16-18	----
6400-8-10	3/4-16	7/8-14	----
6400-8-12	3/4-16	1-1/16-12	----
6400-10	7/8-14	7/8-14	----
6400-10-8	7/8-14	3/4-16	----
6400-10-12	7/8-14	1-1/16-12	----
6400-12	1-1/16-12	1-1/16-12	----
6400-12-8	1-1/16-12	3/4-16	----
6400-12-10	1-1/16-12	7/8-14	----
6400-12-14	1-1/16-12	1-3/16-12	----
6400-12-16	1-1/16-12	1-5/16-12	----
6400-16	1-5/16-12	1-5/16-12	----
6400-16-12	1-5/16-12	1-1/16-12	----
6400-16-20	1-5/16-12	1-5/8-12	----
6400-20	1-5/8-12	1-5/8-12	----
6400-20-24	1-5/8-12	1-7/8-12	----
6400-24-32	1-7/8-12	2-1/2-12	----

6400 202702R F50X 1231 C5315

O-RING HEX NIPPLE UNION

Part #	O-Ring Thread 1	O-Ring Thread 2	
6403-O-6	9/16-18	9/16-18	----
6403-O-8	3/4-16	3/4-16	----
6403-O-12	1-1/16-12	1-1/16-12	----

O-RING TO PIPE ADAPTER

Part #	O-Ring Thread 1	Male Pipe Thread 2	
6401-4-4	7/16-20	1/4	----
6401-6-4	9/16-18	1/4	----
6401-6-6	9/16-18	3/8	----
6401-8-6	3/4-16	3/8	----
6401-8-8	3/4-16	1/2	----
6401-10-8	7/8-14	1/2	----
6401-12-8	1-1/16-12	1/2	----
6401-12-12	1-1/16-12	3/4	----
6401-16-16	1-5/16-12	1	----
6401-20-20	1-5/8-12	1-1/4	----

6401 F5X 1264R C3249

O-RING TO 37° JIC - SWIVEL ADAPTER

Part #	O-Ring Thread 1	JIC Thread Size 2	
6402-O-4-4	7/16-20	7/16-20	----
6402-O-6-6	9/16-18	9/16-18	----
6402-O-8-8	3/4-16	3/4-16	----
6402-O-10-10	7/8-14	7/8-14	----
6402-O-12-12	1-1/16-12	1-1/16-12	----

6402 2266 F65X 1213 9316

FEMALE O-RING TO MALE PIPE ADAPTER

Part #	O-Ring Thread 1	Male Pipe Thread 2	
6404-4-4	7/16-20	1/4	----
6404-6-4	9/16-18	1/4	----
6404-6-6	9/16-18	3/8	----
6404-6-8	9/16-18	1/2	----
6404-8-8	3/4-16	1/2	----
6404-10-8	7/8-14	1/2	----
6404-12-12	1-1/16-12	3/4	----

6404 2246R 1267R C3239 FHG5

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

STEEL O-RING ADAPTERS

O-RING TO FEMALE PIPE ADAPTER

Part #	O-Ring Thread 1	Female Pipe Thread 2	
6405-O-4-2	7/16-20	1/8	----
6405-O-4-4	7/16-20	1/4	----
6405-O-6-4	9/16-18	1/4	----
6405-O-6-6	9/16-18	3/8	----
6405-O-8-6	3/4-16	3/8	----
6405-O-8-8	3/4-16	1/2	----
6405-O-10-6	7/8-14	3/8	----
6405-O-10-8	7/8-14	1/2	----
6405-O-12-8	1-1/16-12	1/2	----
6405-O-12-12	1-1/16-12	3/4	----
6405-O-16-12	1-5/16-12	3/4	----
6405-O-16-16	1-5/16-12	1	----
6405-O-20-20	1-5/8-12	1-1/4	----
6405-O-24-24	1-7/8-12	1-1/2	----
6405-O-32-32	2-1/2-12	2	----

6405 2216R F50G 1268R C3269

O-RING HEX HEAD PLUG

SAE 090109A

***Not all sizes are solid**

Part #	O-Ring Thread	
6408-O-2	5/16-24	----
6408-O-4	7/16-20	----
6408-O-5	1/2-20	----
6408-O-6	9/16-18	----
6408-O-8	3/4-16	----
6408-O-10	7/8-14	----
6408-O-12	1-1/16-12	----
6408-O-14	1-3/16-12	----
6408-O-16	1-5/16-12	----
6408-O-20	1-5/8-12	----
6408-O-24	1-7/8-12	----

6408 900598 P50N 1265 7237

O-RING HOLLOW - HEX HEAD PLUG

SAE 090109B

Part #	O-Ring Thread	
6408-H-O-2	5/16-24	----
6408-H-O-4	7/16-20	----
6408-H-O-5	1/2-20	----
6408-H-O-6	9/16-18	----
6408-H-O-8	3/4-16	----
6408-H-O-10	7/8-14	----
6408-H-O-12	1-1/16-12	----
6408-H-O-14	1-3/16-12	----
6408-H-O-16	1-5/16-12	----
6408-H-O-20	1-5/8-12	----
6408-H-O-24	1-7/8-12	----
6408-H-O-32	2-1/2-12	----

6408HHP FF2138 HP50N 1256 7238 6409

O-RING PORT REDUCER/EXPANDER

Part #	O-Ring Thread 1	O-Ring Thread 2	
6410-O-8-4	3/4-16	7/16-20	----
6410-O-8-6	3/4-16	9/16-18	----
6410-O-8-8	3/4-16	3/4-16	----
6410-O-12-8	1-1/16-12	3/4-16	----

6410 FF1010 F50G5 1270 7033

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer.
For more information, visit www.P65Warnings.ca.gov

JIC SWIVEL NUT ELBOW

SAE 070221
MS 51521

Part #	JIC Thread Size 1	JIC Thread Size 2	
6500-4	7/16-20	7/16-20	----
6500-6	9/16-18	9/16-18	----
6500-8	3/4-16	3/4-16	----
6500-10	7/8-14	7/8-14	----
6500-12	1-1/16-12	1-1/16-12	----
6500-16	1-5/16-12	1-5/16-12	----
6500-24	1-7/8-12	1-7/8-12	----

6500 2071R C6X 1236 G5506

JIC SWIVEL TO MALE PIPE ELBOW

Part #	JIC Thread Size 1	Male Pipe Thread 2	
6501-4-4	7/16-20	1/4	----
6501-6-6	9/16-18	3/8	----
6501-8-8	3/4-16	1/2	----
6501-10-8	7/8-14	1/2	----
6501-12-12	1-1/16-12	3/4	----
6501-16-16	1-5/16-12	1	----

6501 2250 1247R TF5406

JIC SWIVEL 45° ELBOW

SAE 070321
MS 51522

Part #	JIC Thread	JIC Thread Size 2	
6502-4	7/16-20	7/16-20	----
6502-6	9/16-18	9/16-18	----
6502-8	3/4-16	3/4-16	----
6502-10	7/8-14	7/8-14	----
6502-12	1-1/16-12	1-1/16-12	----
6502-16	1-5/16-12	1-5/16-12	----

6502 2070R V6X 1237 C5356

JIC SWIVEL TO FEMALE - PIPE ELBOW

Part #	JIC Thread Size 1	Female Pipe Thread 2	
6503-4-4	7/16-20	1/4	----
6503-6-6	9/16-18	3/8	----
6503-8-8	3/4-16	1/2	----
6503-12-12	1-1/16-12	3/4	----

JIC SWIVEL CONNECTOR

Part #	JIC Thread	JIC Thread Size 2	
6504-4-4	7/16-20	7/16-20	----
6504-6-6	9/16-18	9/16-18	----
6504-8-8	3/4-16	3/4-16	----
6504-10-10	7/8-14	7/8-14	----
6504-12-12	1-1/16-12	1-1/16-12	----
6504-16-16	1-5/16-12	1-5/16-12	----
6504-20-20	1-5/8-12	1-5/8-12	----

6504 1205

JIC SWIVEL TO MALE - PIPE ADAPTER

Part #	JIC Thread Size 1	Male Pipe Thread 2	
6505-4-2	7/16-20	1/8	----
6505-4-4	7/16-20	1/4	----
6505-4-6	7/16-20	3/8	----
6505-6-4	9/16-18	1/4	----
6505-6-6	9/16-18	3/8	----
6505-8-6	3/4-16	3/8	----
6505-8-8	3/4-16	1/2	----
6505-12-12	1-1/16-12	3/4	----
6505-16-16	1-5/16-12	1	----
6505-24-24	1-7/8-12	1-1/2	----

6505 2018 F6X 1211 9100R

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

FEMALE SWIVELS

HYDRAULIC ADAPTERS

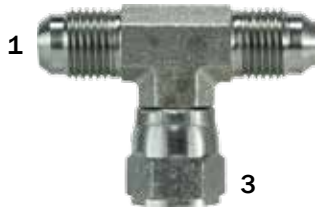
JIC SWIVEL TO FEMALE PIPE ADAPTER

Part #	JIC Thread Size 1	Female Pipe Thread 2	
6506-4-2	7/16-20	1/8	----
6506-4-4	7/16-20	1/4	----
6506-6-4	9/16-18	1/4	----
6506-6-6	9/16-18	3/8	----
6506-6-8	9/16-18	1/2	----
6506-8-6	3/4-16	3/8	----
6506-8-8	3/4-16	1/2	----
6506-10-6	7/8-14	3/8	----
6506-12-12	1-1/16-12	3/4	----
6506-16-16	1-5/16-12	1	----
6506-20-20	1-5/8-12	1-1/4	----

6506 2242 1215

JIC SWIVEL BRANCH TEE

SAE 070433
MS 51524



Part #	JIC Thread Size 1 & 2	JIC Female Thread 3	
6600-4-4	7/16-20	7/16-20	----
6600-6-6	9/16-18	9/16-18	----
6600-8-8	3/4-16	3/4-16	----
6600-10	7/8-14	7/8-14	----
6600-12	1-1/16-12	1-1/16-12	----
6600-16	1-5/16-12	1-5/16-12	----
6600-20	1-5/8-12	1-5/8-12	----

6600 203101R 55X 1227 C5707

JIC SWIVEL RUN TEE

SAE 070432
MS 51523

Part #	JIC Thread Size 1 & 3	JIC Female Thread 2	
6602-4	7/16-20	7/16 -20	----
6602-5	1/2-20	1/2-20	----
6602-6	9/16-18	9/16-18	----
6602-8	3/4-16	3/4-16	----
6602-12	1-1/16-12	1-1/16-12	----
6602-16	1-5/16-12	1-5/16-12	----
6602-24	1-7/8-12	1-7/8-12	----

6602 203102R R6X 1248 C5706

NWO = Nut, Washer & O-Ring

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

JIC TO O-RING ELBOW CONNECTOR

SAE 070220
MS 51527

Part #	JIC Thread Size 1	O-Ring Thread Size 2	
6801-NWO-4	7/16-20	7/16-20	----
6801-NWO-4-6	7/16-20	9/16-18	----
6801-NWO-6	9/16-18	9/16-18	----
6801-NWO-6-4	9/16-18	7/16-20	----
6801-NW0-6-8	9/16-18	3/4-16	
6801-NWO-8	3/4-16	3/4-16	----
6801-NWO-8-6	3/4-16	9/16-18	----
6801-NWO-8-10	3/4-16	7/8-14	----
6801-NWO-8-12	3/4-16	1-1/16-12	----
6801-NWO-10	7/8-14	7/8-14	----
6801-NWO-10-8	7/8-14	3/4-16	----
6801-NWO-12	1-1/16-12	1-1/16-12	----
6801-NWO-12-10	1-1/16-12	7/8-14	----
6801-NWO-12-16	1-1/16-12	1-5/16-12	----
6801-NWO-16	1-5/16-12	1-5/16-12	----
6801-NWO-20	1-5/8-12	1-5/8-12	----

6801 2062R C50X 1238L C5515

JIC TO O-RING 45° ELBOW

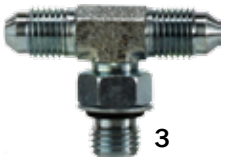
SAE 070320
MS 51528

Part #	JIC Thread Size 1	O-Ring Thread Size 2	
6802-NWO-2	5/16-24	5/16-24	----
6802-NWO-4	7/16-20	7/16-20	----
6802-NWO-6	9/16-18	9/16-18	----
6802-NWO-8	3/4-16	3/4-16	----
6802-NWO-8-6	3/4-16	9/16-18	----
6802-NWO-8-10	3/4-16	7/8-14	----
6802-NWO-10	7/8-14	7/8-14	----
6802-NWO-10-8	7/8-14	3/4-16	----
6802-NWO-12	1-1/16-12	1-1/16-12	----
6802-NWO-16	1-5/16-12	1-5/16-12	----
6802-NWO-20	1-5/8-12	1-5/8-12	----

6802 2061 V50X 1240R C5365

JIC TO O-RING - BRANCH TEE

SAE 070429
MS 51529



Part #	JIC Thread Size 1 & 2	O-Ring Thread Size 3	
6803-NWO-4	7/16-20	7/16-20	----
6803-NWO-6	9/16-18	9/16-18	----
6803-NWO-8	3/4-16	3/4-16	----
6803-NWO-10	7/8-14	7/8-14	----
6803-NWO-12	1-1/16-12	1-1/16-12	----
6803-NWO-16	1-5/16-12	1-5/16-12	----

6803 203003X S50X 1265R C5715

JIC TO O-RING RUN TEE

SAE 070428
MS 51530

Part #	JIC Thread Size 1 & 3	O-Ring Thread Size 2	
6804-NWO-4	7/16-20	7/16-20	----
6804-NWO-6	9/16-18	9/16-18	----
6804-NWO-8	3/4-16	3/4-16	----
6804-NWO-10	7/8-14	7/8-14	----
6804-NWO-12	1-1/16-12	1-1/16-12	----
6804-NWO-16	1-5/16-12	1-5/16-12	----

6804 203005R R50X 1266R C5716

O-RING TO - FEMALE PIPE ELBOW

Part #	O-Ring Thread Size 1	Pipe Thread Size 2	
6805-NWO-4-4	7/16-20	1/4	----
6805-NWO-6-6	9/16-18	3/8	----
6805-NWO-8-8	3/4-16	1/2	----
6805-NWO-10-8	7/8-14	1/2	----
6805-NWO-12-8	1-1/16-12	1/2	----
6805-NWO-12-12	1-1/16-12	3/4	----
6805-NWO-16-16	1-5/16-12	1	----

6805 206801R AE0G 1264 C3459

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

STEEL O-RINGS

HYDRAULIC ADAPTERS

O-RING TO MALE PIPE ELBOW

Part #	O-Ring Thread Size 1	Pipe Thread Size 2	
6806-NWO-4-4	7/16-20	1/4	----
6806-NWO-6-6	9/16-18	3/8	----
6806-NWO-8-8	3/4-16	1/2	----
6806-NWO-12-12	1-1/16-12	3/4	----
6806-NWO-16-16	1-5/16-12	1	----

6806 1263 TF3569

O-RING TO 37° JIC SWIVEL NUT TO O-RING ELBOW

Part #	O-Ring Thread Size 1	JIC Thread Size 2	
6809-NWO-4-4	7/16-20	7/16-20	----
6809-NWO-6-6	9/16-18	9/16-18	----
6809-NWO-8-8	3/4-16	3/4-16	----
6809-NWO-12-12	1-1/16-12	1-1/16-12	----

FEMALE O-RING TO MALE O-RING ELBOW

Part #	O-Ring Thread Size 1	O-Ring Thread Size 2	
6815-NWO-4-4	7/16-20	7/16-20	----
6815-NWO-6-6	9/16-18	9/16-18	----
6815-NWO-8-8	3/4-16	3/4-16	----
6815-NWO-10-10	7/8-14	7/8-14	----
6815-NWO-12-12	1-1/16-12	1-1/16-12	----

MALE O-RING SWIVEL ADAPTER

SAE 140157

Part #	O-Ring Thread Size 1	Female NPSM Size 2	
6900-O-4-2	7/16-20	1/8	----
6900-O-4-4	7/16-20	1/4	----
6900-O-6-4	9/16-18	1/4	----
6900-O-6-6	9/16-18	3/8	----
6900-O-6-8	9/16-18	1/2	----
6900-O-8-6	3/4-16	3/8	----
6900-O-8-8	3/4-16	1/2	----
6900-O-8-12	3/4-16	3/4	----
6900-O-10-8	7/8-14	1/2	----
6900-O-10-12	7/8-14	3/4	----
6900-O-12-8	1-1/16-12	1/2	----
6900-O-12-12	1-1/16-12	3/4	----
6900-O-16-16	1-5/16-12	1	----

6900 2066R 1235 9315

90° O-RING SWIVEL ADAPTER

SAE 140257

Part #	O-Ring Thread Size 1	Female NPSM Size 2	
6901-NWO-4-4	7/16-20	1/4	----
6901-NWO-6-4	9/16-18	1/4	----
6901-NWO-6-6	9/16-18	3/8	----
6901-NWO-6-8	9/16-18	1/2	----
6901-NWO-8-4	3/4-16	1/4	----
6901-NWO-8-6	3/4-16	3/8	----
6901-NWO-8-8	3/4-16	1/2	----
6901-NWO-8-12	3/4-16	3/4	----
6901-NWO-10-6	7/8-14	3/8	----
6901-NWO-10-8	7/8-14	1/2	----
6901-NWO-12-6	1-1/16-12	3/8	----
6901-NWO-12-8	1-1/16-12	1/2	----
6901-NWO-12-12	1-1/16-12	3/4	----
6901-NWO-16-12	1-5/16-12	3/4	----
6901-NWO-16-16	1-5/16-12	1	----
6901-NWO-20-20	1-5/8-12	1-1/4	----

6401 2068R 1271 9515

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

45° O-RING SWIVEL ADAPTER

SAE 140357

Part #	O-Ring Thread Size 1	Female NPSM Size 2	
6902-NWO-4-4	7/16-20	1/4	----
6902-NWO-6-4	9/16-18	1/4	----
6902-NWO-6-6	9/16-18	3/8	----
6902-NWO-8-8	3/4-16	1/2	----
6902-NWO-10-8	7/8-14	1/2	----
6902-NWO-12-8	1-1/16-12	1/2	----
6902-NWO-12-12	1-1/16-12	3/4	----
6902-NWO-16-16	1-5/16-12	1	----

6902 2067R 1272 9365

O-RINGS

VITON 75 SAE BOSS O-RING

Fluorocarbon

Part #	O-Ring Thread	
4001-2-2	5/16-24	----
4001-4-4	7/16-20	----
4001-6-6	9/16-18	----
4001-8-8	3/4-16	----
4001-10	7/8-14	----
4001-12	1-1/16-12	----
4001-16	1-5/16-12	----
4001-20	1-5/8-12	----
4001-24	1-7/8-12	----
4001-32	2-1/2-12	----

NITRILE 90 SAE BOSS O-RING

Part #	O-Ring Thread	
4000-2-2	5/16-24	----
4000-4-4	7/16-20	----
4000-6-6	9/16-18	----
4000-8-8	3/4-16	----
4000-10	7/8-14	----
4000-12	1-1/16-12	----
4000-14	1-3/16-12	----
4000-16	1-5/16-12	----
4000-20	1-5/8-12	----
4000-24	1-7/8-12	----
4000-32	2-1/2-12	----

BRAZE TUBE NUT (SLEEVE REQUIRED)

SAE 520110

Part #	Tube O.D.	Braze Tube O.D.	
FSO318-4	1/4	.25	----
FSO318-6	3/8	.38	----
FSO318-8	1/2	.50	----
FSO318-10	5/8	.62	----
FSO318-12	3/4	.72	----
FSO318-16	1	1.00	----
FSO318-20	1 1/4	1.25	----
FSO318-24	1 1/2	1.50	----

FF318 FF1311

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

O-RING FACE SEAL ADAPTERS

BRAZE TUBE SLEEVE

SAE 520115

Part #	Tube O.D.	
FSO319-4	1/4	----
FSO319-6	3/8	----
FSO319-8	1/2	----
FSO319-10	5/8	----
FSO319-12	3/4	----
FSO319-16	1	----
FSO319-20	1-1/4	----
FSO319-24	1-1/2	----

FF319 FF3019

See Page 414 for JIC Nut and Sleeve

CAP

SAE 520112

• Two Piece Nut/ Insert

Part #	Tube O.D.	Face Seal Thread	
FSO304-C-4	1/4	9/16-18	----
FSO304-C-6	3/8	11/16-16	----
FSO304-C-8	1/2	13/16-16	----
FSO304-C-10	5/8	1-14	----
FSO304-C-12	3/4	1-3/16-12	----
FSO304-C-16	1	1-7/16-12	----
FSO304-C-20	1-1/4	1-11/16-12	----
FSO304-C-24	1-1/2	2-12	----

FF304C

BULKHEAD LOCKNUT

SAE 520118

Part #	Thread Size	
FSO306-4	9/16-18	----
FSO306-6	11/16-16	----
FSO306-8	13/16-16	----
FSO306-12	1-3/16-12	----
FSO306-16	1-7/16-12	----

FF403

MALE UNION CONNECTOR

SAE 520102

Part #	Tube O.D.	Face Seal Thread 1&2	
FSO2403-4-4	1/4	9/16-18	----
FSO2403-6-6	3/8	11/16-16	----
FSO2403-8-8	1/2	13/16-16	----
FSO2403-12-12	3/4	1-3/16-12	----
FSO2403-16-16	1	1-7/16-12	----

FF2403 FF1203

MALE O-RING FACE SEAL ADAPTER

Part #	Face Seal Thread 1	Male Pipe Size 2	
FSO2404-4-4	9/16-18	1/4-18	----
FSO2404-6-4	11/16-16	1/4-18	----
FSO2404-6-6	11/16-16	3/8-18	----
FSO2404-8-4	13/16-16	1/4-18	----
FSO2404-8-8	13/16-16	1/2-14	----
FSO2404-12-12	1-3/16-12	3/4-14	----
FSO2404-16-16	1-7/16-12	1-11-1/2	----

FF2404 4205 FLO

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

FEMALE ORFS TO MALE ORFS REDUCER

Part #	Female Face Seal Size 1	Male Face Seal Thread 2	
FSO2406-6-4	11/16-16	9/16-18	----
FSO2406-8-4	13/16-16	9/16-18	----
FSO2406-10-6	1-14	11/16-16	----
FSO2406-10-8	1-14	13/16-16	----
FSO2406-12-6	1-3/16-12	11/16-16	----

FF2406 TRLON

PLUG

SAE 520109

Part #	Tube O.D.	Face Seal Thread	
FSO2408-4	1/4	9/16-18	----
FSO2408-6	3/8	11/16-16	----
FSO2408-8	1/2	13/16-16	----
FSO2408-10	5/8	1-14	----
FSO2408-12	3/4	1-3/8-12	----
FSO2408-16	1	1-7/16-12	----
FSO2408-20	1-1/4	1-11/16-12	----
FSO2408-24	1-1/2	2-12	----

FF2408 FF1254 4229 PNLO

ORFS UNION ELBOW 90°

Part #	Face Seal Thread 1	Face Seal Thread 2	
FS2500-4-4	9/16-18	9/16-18	----
FS2500-6-6	11/16-16	11/16-16	----
FS2500-10-10	1-14	1-14	----
FS2500-12-12	1-3/16-12	1-3/16-12	----
FS2500-16-16	1-7/16-12	1-7/16-12	----

FF2500 4505 ELO

ORFS TO MALE ELBOW

SAE 520202

Part #	Face Seal Thread 1	Male Pipe Thread 2	
FS2501-4-4	9/16-18	1/4	----
FS2501-6-4	11/16-16	1/4	----
FS2501-6-6	11/16-16	3/8	----
FS2501-8-6	13/16-16	3/8	----
FS2501-8-8	13/16-16	1/2	----
FS2501-12-12	1-3/8-12	3/4	----
FS2501-16-16	1-7/16-12	1	----
FS2501-20-20	1-11/16-12	1-1/4	----

FF2501 FF1208 4405 CLO

ORFS TO PIPE ELBOW 45°

Part #	Face Seal Thread 1	Male Pipe Thread 2	
FS2503-4-4	9/16-18	1/4	----
FS2503-6-6	11/16-16	3/8	----
FS2503-8-8	13/16-16	1/2	----
FS2503-12-12	1-3/16-12	3/4	----
FS2503-16-16	1-7/16-12	1	----

FF2503 4355 VLO

ORFS UNION TEE

Part #	Face Seal Thread 1+2+3	
FS2603-4-4	9/16-18	----
FS2603-6-6	11/16-16	----
FS2603-8-8	13/16-16	----
FS2603-12-12	1-3/16-12	----

FF2603 4705 JLO

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

O-RING FACE SEAL ADAPTERS

MALE ORFS TO ORB CONNECTOR

SAE 520120

Part #	Face Seal Thread 1	O-Ring Thread 2	
FS6400-O-4-4	9/16-18	7/16-20	----
FS6400-O-4-6	9/16-18	9/16-18	----
FS6400-O-6-4	11/16-16	7/16-20	----
FS6400-O-6-6	11/16-16	9/16-18	----
FS6400-O-6-8	11/16-16	3/4-16	----
FS6400-O-8-6	13/16-16	9/16-18	----
FS6400-O-10-8	1-14	3/4-16	----
FS6400-O-10-10	1-14	7/8-14	----
FS6400-O-12-8	1-3/16-12	3/4-16	----
FS6400-O-12-10	1-3/16-12	7/8-14	----
FS6400-O-12-12	1-3/16-12	1-1/16-12	----
FS6400-O-12-16	1-3/16-12	1-5/16-12	----
FS6400-O-16-12	1-7/16-12	1-1/16-12	----
FS6400-O-16-16	1-7/16-12	1-5/16-12	----
FS6400-O-20-20	1-11/16-12	1-5/8-12	----
FS6400-O-24-24	2-12	1-7/8-12	----

4315 FF6400 FF1231

MALE FLAT FACE TO FEMALE 37 ° SWIVEL

Part #	Face Seal Thread 1	JIC Thread 2	
FS6402-4-4	9/16-18	7/16-20	----
FS6402-6-6	11/16-16	9/16-18	----
FS6402-8-8	13/16-16	3/4-16	----
FS6402-10-10	1-14	7/8-14	----
FS6402-12-12	1-3/16-12	1-1/16-12	----

FF6402 FF1294

SWIVEL NUT ELBOW

Part #	Face Seal Thread 1	Face Seal Thread 2	
FS6500-4-4	9/16-18	9/16-18	----
FS6500-6-6	11/16-16	11/16-16	----
FS6500-8-8	13/16-16	13/16-16	----
FS6500-12-12	1-3/16-12	1-3/16-12	----

FF6500 FF1236

MALE JIC 37° FLARE TO FEMALE FLAT FACE SWIVEL

Part #	JIC Thread Size 1	Face Seal Thread 2	
FS6504-4-4	7/16-20	9/16-18	----
FS6504-6-6	9/16-18	11/16-16	----
FS6504-8-8	3/4-16	13/16-16	----
FS6504-10-10	7/8-14	1-14	----
FS6504-16-16	1-5/16-12	1-7/16-12	----

FF6504 FF1296

O-RING ELBOW CONNECTOR

Part #	Face Seal Thread 1	O-Ring Thread 2	
FS6801-4-4	9/16-18	7/16-20	----
FS6801-6-6	11/16-16	9/16-18	----
FS6801-8-6	13/16-16	9/16-18	----
FS6801-8-8	13/16-16	3/4-16	----
FS6801-12-12	1-3/16-12	1-1/16-12	----
FS6801-16-16	1-7/16-12	1-5/16-12	----
FS6801-20-20	1-11/16-12	1-5/8-12	----

FF6801 FF1238 4515

ORFS TO O-RING ELBOW 45°

Part #	Face Seal Thread 1	O-Ring Size 2	
FS6802-4-4	9/16-18	7/16-20	----
FS6802-6-6	11/16-16	9/16-18	----
FS6802-8-8	13/16-16	3/4-16	----
FS6802-10-10	1-14	7/8-14	----
FS6802-12-12	1-3/16-12	1-1/16-12	----
FS6802-16-16	1-7/16-12	1-5/16-12	----
FS6802-20-20	1-11/16-12	1-5/8-12	----

FF6802 4365 V5OLO

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

STEEL BSPT ADAPTERS

STRAIGHT THREAD SWIVEL NUT ELBOW

Part #	O-Ring Thread 1	Face Seal Thread 2	
FS6809-4-4	7/16-20	9/16-18	----
FS6809-6-6	9/16-18	11/16-16	----
FS6809-8-8	3/4-16	13/16-16	----
FS6809-12-12	1-1/16-12	1-3/16-12	----

FF6809 FF1239 4535 AOELC

STEEL BSPT ADAPTERS

JIC MALE CONNECTOR BSPT

Part #	JIC Thread Size 1	Male BSPT 2	
7000-4-2	7/16-20	1/8-28	----
7000-4-4	7/16-20	1/4-19	----
7000-6-4	9/16-18	1/4-19	----
7000-6-6	9/16-18	3/8-19	----
7000-6-8	9/16-18	1/2-14	----
7000-8-6	3/4-16	3/8-19	----
7000-8-8	3/4-16	1/2-14	----
7000-8-12	3/4-16	3/4-14	----
7000-10-8	7/8-14	1/2-14	----
7000-10-12	7/8-14	3/4-14	----
7000-12-8	1-1/16-12	1/2-14	----
7000-12-12	1-1/16-12	3/4-14	----
7000-16-16	1-5/16-12	1-11	----
7000-20-20	1-5/8-12	1-1/4-11	----

3404 3O5

JIC MALE ELBOW BSPT

Part #	JIC Thread Size 1	Male BSPT 2	
7200-4-2	7/16-20	1/8-28	----
7200-4-4	7/16-20	1/4-19	----
7200-6-4	9/16-18	1/4-19	----
7200-6-6	9/16-18	3/8-19	----
7200-6-8	9/16-18	1/2-14	----
7200-8-6	3/4-16	3/8-19	----
7200-8-8	3/4-16	1/2-14	----
7200-12-12	1-1/16-12	3/4-14	----
7200-16-16	1-5/16-12	1-11	----

3501 315

BSPT HEX NIPPLE

Part #	Male BSPT 1	Male BSPT 2	
7520-2-2	1/8-28	1/8-28	----
7520-4-4	1/4-19	1/4-19	----
7520-6-6	3/8-19	3/8-19	----
7520-8-8	1/2-14	1/2-14	----
7520-10-10	5/8-14	5/8-14	----
7520-12-12	3/4-14	3/4-14	----

3520 MBT

BSPT PLUG

Part #	BSPT	
9508-2	1/8-28	----
9508-4	1/4-19	----
9508-6	3/8-19	----
9508-8	1/2-14	----
9508-12	3/4-14	----
9508-16	1-11	----

100B-Y KA-RM MHL 296

STEEL BSPP ADAPTERS

BSPP HEX NIPPLE

Part #	Male BSPP 1	Male BSPP 2	
7420-2-2	1/8-28	1/8-28	----
7420-4-2	1/4-19	1/8-28	----
7420-6-4	3/8-19	1/4-19	----
7420-6-6	3/8-19	3/8-19	----
7420-8-6	1/2-14	3/8-19	----
7420-8-8	1/2-14	1/2-14	----
7420-10-8	5/8-14	1/2-14	----
7420-12-8	3/4-14	1/2-14	----
7420-12-12	3/4-14	3/4-14	----
7420-16-12	1-11	3/4-14	----
7420-16-16	1-11	1-11	----

3420 MB 9022

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

STEEL BSPP ADAPTERS

BSPP COUPLING

Part #	BSPP	
7425-2	1/8-28	----
7425-4	1/4-19	----
7425-8	1/2-14	----
7425-10	5/8-14	----
7425-12	3/4-14	----
7425-16	1-11	----

3425 FB

JIC TO FEMALE BSPP STRAIGHT SWIVEL

Part #	JIC Thread Size 1	Female BSPP Swivel 2	
7240-4	7/16-20	1/4-19	----
7240-6	9/16-18	3/8-19	----
7240-8	3/4-16	1/2-14	----
7240-10	7/8-14	5/8-14	----
7240-12	1-1/16-12	3/4-14	----
7240-16	1-5/16-12	1-11	----

3240 MJFBS

JIC TO BSPP MALE ELBOW

Part #	JIC Thread Size 1	Male BSPP 2	
7202-NWO-4-2	7/16-20	1/8-28	----
7202-NWO-4-4	7/16-20	1/4-19	----
7202-NWO-6-4	9/16-18	1/4-19	----
7202-NWO-6-6	9/16-18	3/8-19	----
7202-NWO-6-8	9/16-18	1/2-14	----
7202-NWO-8-6	3/4-16	3/8-19	----
7202-NWO-8-8	3/4-16	1/2-14	----
7202-NWO-8-12	3/4-16	3/4-14	----
7202-NWO-10-8	7/8-14	1/2-14	----
7202-NWO-12-12	1-1/16-12	3/4-14	----
7202-NWO-12-16	1-1/16-12	1-11	----
7202-NWO-16-16	1-5/16-12	1-11	----

3801 315

JIC TO BSPP 45° ELBOW

Part #	JIC Thread Size 1	Male BSPP 2	
7802-4	7/16-20	1/4-19	----
7802-6	9/16-18	3/8-19	----
7802-8	3/4-16	1/2-14	----
7802-12	1-1/16-12	3/4-14	----
7802-16	1-5/16-12	1-11	----

3802 35J

BSPP TO MALE PIPE NIPPLE

Part #	Male BSPP Size 1	Male Pipe Thread Size 2	
7825-2	1/8-28	1/8	----
7825-4	1/4-19	1/4	----
7825-6	3/8-19	3/8	----
7825-8	1/2-14	1/2	----
7825-12	3/4-14	3/4	----
7825-16	1-11	1	----

MBMP 3825

JIC TO BSPP MALE CONNECTOR

Part #	JIC Thread Size 1	Male BSPP 2	
7002-4-2	7/16-20	1/8-28	----
7002-4-4	7/16-20	1/4-19	----
7002-4-6	7/16-20	3/8-19	----
7002-4-8	7/16-20	1/2-14	----
7002-6-4	9/16-18	1/4-19	----
7002-6-6	9/16-18	3/8-19	----
7002-6-8	9/16-18	1/2-14	----
7002-8-6	3/4-16	3/8-19	----
7002-8-8	3/4-16	1/2-14	----
7002-8-12	3/4-16	3/4-14	----
7002-10-8	7/8-14	1/2-14	----
7002-12-12	1-1/16-12	3/4-14	----
7002-12-16	1-1/16-12	1-11	----
7002-16-16	1-5/16-12	1-11	----

30J 3800

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

STEEL BSPP ADAPTERS

JIC TO BSPP STRAIGHT SWIVEL

Part #	JIC Thread Size 1	Male BSPP 2	
7022-4-2	7/16-20	1/8-28	----
7022-4-4	7/16-20	1/4-19	----
7022-6-6	9/16-18	3/8-19	----
7022-8-8	3/4-16	1/2-14	----
7022-10-8	7/8-14	1/2-14	----
7022-12-12	1-1/16-12	3/4-14	----
7022-16-16	1-5/16-12	1-11	----

3402 3055

HEX HEAD PLUG BSPP

Part #	Male BSPP	
9522-P-2	1/8-28	----
9522-P-4	1/4-19	----
9522-P-6	3/8-19	----
9522-P-8	1/2-14	----
9522-P-12	3/4-14	----
9522-P-16	1-11	----

3408

HOLLOW HEX PLUG BSPP

Part #	Male BSPP	
9522-H-2	1/8-28	----
9522-H-4	1/4-19	----
9522-H-6	3/8-19	----
9522-H-8	1/2-14	----
9522-H-12	3/4-14	----
9522-H-16	1-11	----

3408 HHP

FEMALE ADAPTER BSPP

Part #	Female Pipe 1	Male BSPP 2	
7042-2-2	1/8	1/8-28	----
7042-4-2	1/4	1/8-28	----
7042-4-4	1/4	1/4-19	----
7042-6-6	3/8	3/8-19	----
7042-8-8	1/2	1/2-14	----
7042-12-12	3/4	3/4-14	----
7042-16-16	1	1-11	----

3455 MMFP

STEEL METRIC ADAPTERS

MALE CONNECTOR

Part #	JIC Thread Size 1	Metric Thread 2	
7005-4-10	7/16-20	10x1.0	----
7005-4-12	7/16-20	12x1.5	----
7005-4-14	7/16-20	14x1.5	----
7005-4-18	7/16-20	18x1.5	----
7005-5-12	1/2-20	12x1.5	----
7005-5-14	1/2-20	14x1.5	----
7005-6-14	9/16-18	14x1.5	----
7005-6-16	9/16-18	16x1.5	----
7005-6-18	9/16-18	18x1.5	----
7005-8-16	3/4-16	16x1.5	----
7005-8-18	3/4-16	18x1.5	----
7005-8-22	3/4-16	22x1.5	----
7005-10-18	7/8-14	18x1.5	----
7005-10-20	7/8-14	20x1.5	----
7005-10-22	7/8-14	22x1.5	----
7005-12-22	1-1/16-12	22x1.5	----
7005-12-27	1-1/16-12	27x1.5	----

Port-seal crush washer and O-ring included 7400 30J (R) 7011

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

STEEL METRIC ADAPTERS

MALE ELBOW

Part #	JIC Thread Size 1	Metric Thread 2	
7205-NWO-4-10	7/16-20	10x1.0	----
7205-NWO-4-12	7/16-20	12x1.5	----
7205-NWO-4-14	7/16-20	14x1.5	----
7205NWO-5-12	1/2-20	12x1.5	----
7205-NWO-6-14	9/16-18	14x1.5	----
7205-NWO-6-16	9/16-18	16x1.5	----
7205-NWO-8-16	3/4-16	16x1.5	----
7205-NWO-8-18	3/4-16	18x1.5	----
7205-NWO-8-22	3/4-16	22x1.5	----
7205-NWO-10-18	7/8-14	18x1.5	----

Port-seal crush washer and O-ring included

7801 315 (R)

STRAIGHT SWIVEL

Part #	JIC Thread Size 1	Metric Thread 2	
7025-4-10	7/16-20	10x1.0	----
7025-4-12	7/16-20	12x1.5	----
7025-5-12	1/2-20	12x1.5	----
7025-6-14	9/16-18	14x1.5	----
7025-6-16	9/16-18	16x1.5	----
7025-8-16	3/4-16	16x1.5	----
7025-10-22	7/8-14	22x1.5	----
7025-12-27	1-1/16-12	27x2.0	----
7025-16-33	1-5/16-12	33x2.0	----

7402 30JS (R)

HEX HEAD PLUG METRIC PARALLEL

Part #	Metric Thread	
8555-P-10	10x1.0	----
8555-P-12	12x1.5	----
8555-P-14	14x1.5	----
8555-P-16	16x1.5	----
8555-P-18	18x1.5	----
8555-P-20	20x1.5	----
8555-P-22	22x1.5	----
8555-P-26	26x1.5	----
8555-P-30	30x1.5	----

7408

HYDRAULIC ADAPTERS

HOLLOW HEX HEAD PLUG METRIC PARALLEL

Part #	Metric Thread	
8555-H-10	10x1.0	----
8555-H-12	12x1.5	----
8555-H-14	14x1.5	----
8555-H-16	16x1.5	----
8555-H-18	18x1.5	----
8555-H-20	20x1.5	----
8555-H-22	22x1.5	----
8555-H-26	26x1.5	----
8555-H-30	30x1.5	----

7408 HHP

FEMALE ADAPTER

Part #	Female Pipe Thread 1	Metric Thread 2	
7045-2-10	1/8	10x1.0	----
7045-4-12	1/4	12x1.5	----
7045-4-14	1/4	14x1.5	----
7045-6-12	3/8	12x1.5	----
7045-6-16	3/8	16x1.5	----
7045-6-18	3/8	18x1.5	----
7045-8-16	1/2	16x1.5	----
7045-8-18	1/2	18x1.5	----
7045-8-22	1/2	22x1.5	----
7045-12-27	3/4	27x2.0	----
7045-16-33	1	33x2.0	----

MMFP (R)

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

HYDRAULIC ADAPTERS — QUICK DISCONNECT

THREAD TO CONNECT, DRYBREAK NO-SPILL QUICK CONNECT

- Brass Body
- Steel Wing Nut
- Buna-Seal (-40° to +250°F)

Aeroquip 5100
Parker 6100
Snaptite B78

- Bonded Face Seal
- External ORing Alleviates Full Connection

Part #	Body Size	Female NPT	Max PSI	
61-150	3/4	1/2	3000	----
61-152	3/4	3/4	3000	----
61-153	1	1	3000	----
61-154	1-1/4	1-1/4	2750	----
61-155	1-1/2	1-1/2	2500	----

Part #	Body Size	Female NPT	Max PSI	
61-050	3/4	1/2	3000	----
61-052	3/4	3/4	3000	----
61-053	1	1	3000	----
61-054	1-1/4	1-1/4	2750	----
61-055	1-1/2	1-1/2	2500	----

FEATURES - **ISO A and ISO B**

- Poppet valves to prevent uncoupled leakage
- Critical parts are induction hardened for durability
- Dependable ball-locking mechanism holds the maling halves together
- Socket and plug are precision machined from solid barstock
- Standard nitrile seals temp range -40°F to +250°F

ISO 7241-1 ISO-A Interchange (Connected)				
Body Size	*Steel Coupler/ Plug*			
	Maximum Working		*Burst*	
	PSI	Bar	PSI	Bar
1/4"	5,000	345	18,270	1,200
3/8"	4,000	275	18,270	1,200
1/2"	4,000	275	16,500	1,100
3/4"	4,000	275	14,800	1,000
1"	4,000	275	12,400	850

INTERCHANGE DATA:

- Parker 6600, Aeroquip/ Eaton FD56, Dixon 'K' Series.
- Hansen HA 15000, Safeway S56

ISO-A FEMALE PIPE COUPLER

Part #	Body Size	NPT	
ANV-14-F	1/4"	1/4"	----
ANV-38-F	3/8"	3/8"	----
ANV-12-F	1/2"	1/2"	----
ANV-34-F	3/4"	3/4"	----
ANV-1-F	1"	1"	----

ISO-A FEMALE PIPE PLUG

Part #	Body Size	NPT	
ANV-14-M	1/4"	1/4"	----
ANV-38-M	3/8"	3/8"	----
ANV-12-M	1/2"	1/2"	----
ANV-34-M	3/4"	3/4"	----
ANV-1-M	1"	1"	----

ISO 7241-1 Series B ISO-B Interchange (Connected)								
Body Size	*Steel Coupler/ Plug*				*Brass Coupler/ Plug*			
	Max. Working		*Burst*		*Max. Working*		*Burst*	
	PSI	Bar	PSI	Bar	PSI	Bar	PSI	Bar
1/4"	5,000	345	22,500	1,550	3,000	200	15,000	1,000
3/8"	4,000	275	16,500	1,150	2,500	175	12,000	800
1/2"	4,000	275	16,000	1,100	2,500	175	11,500	750
3/4"	4,000	275	16,500	1,150	2,000	150	12,000	800
1"	4,000	275	16,000	1,100	1,500	100	8,500	800

INTERCHANGE DATA:

- Parker 60 Series, Snap-tite 72 series, Dixon 'H' series
- Hansen HK - series, Aeroquip/ Eaton FDH5

B=BRASS

BRASS - HNV SERIES PLUG

BRASS - HNV SERIES COUPLER

ISO-B FEMALE PIPE COUPLER

Part #	Body Size	NPT	
HNV-14-F	1/4"	1/4"	----
HNV-14-F-B	1/4"	1/4"	----
HNV-38-F	3/8"	3/8"	----
HNV-38-F-B	3/8"	3/8"	----
HNV-12-F	1/2"	1/2"	----
HNV-12-F-B	1/2"	1/2"	----
HNV-34-F	3/4"	3/4"	----
HNV-34-F-B	3/4"	3/4"	----
HNV-1-F	1"	1"	----
HNV-1-F-B	1"	1"	----

ISO-B FEMALE PIPE PLUG

Part #	Body Size	NPT	
HNV-14-M	1/4"	1/4"	----
HNV-14-M-B	1/4"	1/4"	----
HNV-38-M	3/8"	3/8"	----
HNV-38-M-B	3/8"	3/8"	----
HNV-12-M	1/2"	1/2"	----
HNV-12-M-B	1/2"	1/2"	----
HNV-34-M	3/4"	3/4"	----
HNV-34-M-B	3/4"	3/4"	----
HNV-1-M	1"	1"	----
HNV-1-M-B	1"	1"	----

WARNING: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

QUICK DISCONNECT — HYDRAULIC ADAPTERS

FEATURES
• Steel construction, zinc plated trivalent finish. Hardened Nipples and sleeves and solid barstock construction for maximum resistance to damage from hydraulic and mechanical shock.
• This Anti-Blowout Nitrile/ PTFE bonded seal is designed to prevent blow out or damage during servere service conditions.
• Durable ball-locking mechanism assures reliable connection everytime.
• Temp Range -65° to +250°

ISO 16028

FLUSH FACE

Body Size	Steel Coupler/ Plug Coupled			
	Maximum Working		Burst	
	PSI	Bar	PSI	Bar
1/4"	5,000	345	18,270	1,200
3/8"	4,000	275	18,270	1,200
1/2"	4,000	275	16,500	1,100
5/8"	4,000	275	14,800	1,000
3/4"	4,000	275	12,400	850
1"	3,000	200	12,600	850

FF Series
HTMC
74C

FEMALE PIPE COUPLER

Part #	Body Size	NPT	
FF-14-F	1/4"	1/4"	----
FF-38-F	3/8"	3/8"	----
FF-12-F	1/2"	1/2"	----
FF-3812-F	3/8"	1/2"	----
FF-1234-F	1/2"	3/4"	----
FF-1012F	5/8"	3/4"	
FF-3416-F	3/4"	1"	----
FF-34-F	3/4"	3/4"	----
FF-1-F	1"	1"	----

FF Series
HTMN
74N

FEMALE PIPE PLUG

Part #	Body Size	NPT	
FF-14-M	1/4"	1/4"	----
FF-38-M	3/8"	3/8"	----
FF-12-M	1/2"	1/2"	----
FF-3812-M	3/8"	1/2"	----
FF-1234-M	1/2"	3/4"	----
FF-3416-M	3/4"	1"	----
FF-34-M	3/4"	3/4"	----
FF-1-M	1"	1"	----

FLAT FACE THREAD LOCK - VEP QUICK COUPLING

SPECIFICATIONS

Body Size (in)	1/2(12)	3/4(34)	1(1)	1-1/2(24)
Rated Pressure (PSI)	7000	7000	6000	5000
Rated Flow (GPM)	12	50	88	152
Temperature Range	-20°C +120°C			

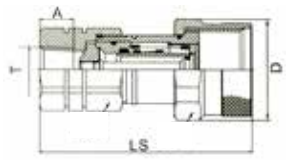
Standard seal material is **NBR**

Test Fluid-Oil = 200 SUS

APPLICATIONS
• Widely used in public equipment
• Portable construction equipment.
• Hydraulic tools
• Vehicles

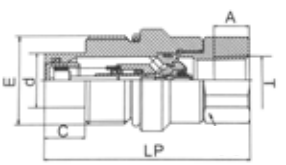
FEATURES
• New valve design provides better resistance from high flow and the pressure of impulse, thus providing advanced performance.
• Special nipple design for connecting under pressure, allows connection and disconnection with high residual pressures.
• The LSQ-VEP series employs a threaded sleeve locking mechanism, mates with matching male threads on the coupler.
• New plating treatment provides advanced anti-rust performance.
• LSQ-VEP series couplings employ flush valving when connecting or disconnecting, therefore only a small amount of fluid can be lost during disconnecting or air inclusion during reconnection.
• The Anti-Blowout bonded seal is designed to prevent blow-out or damage during severe service conditions.
• Machined form solid steel barstock for durability. Compatible with most other VEP series.

• O-Ring SAE Boss Thread available with import lead time (same list price)



FEMALE COUPLER

Part #	LS	D	A	NPT	
LSQ-VEP-12-SF	4.09	1.13	0.67	1/2	----
LSQ-VEP-34-SF	4.49	2.13	0.79	3/4	----
LSQ-VEP-1-SF	5.28	2.33	0.83	1	----
LSQ-VEP-20-SF	5.71	2.72	0.83	1-1/4	----
LSQ-VEP-24-SF	7.41	3.63	0.83	1-1/2	----



FEMALE PLUG

Part #	LS	D	A	NPT	
LSQ-VEP-12-PF	4.09	1.13	0.67	1/2	----
LSQ-VEP-34-PF	4.49	2.13	0.79	3/4	----
LSQ-VEP-1-PF	5.28	2.33	0.83	1	----
LSQ-VEP-20-PF	5.71	2.72	0.83	1-1/4	----
LSQ-VEP-24-PF	7.41	3.63	0.83	1-1/2	----

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

AG - Series Agricultural Interchange (Connected)				
Nominal Size	*Steel Coupler/ Plug*			
	Maximum Working		*Burst*	
	PSI	Bar	PSI	Bar
1/4"	4,000	275	21,000	1,500
3/8"	4,000	275	23,100	1,600
1/2"	4,000	275	16,500	1,100
3/4"	3,000	200	10,300	700
1"	3,000	200	13,000	900

Snap-Tite 60 Series

FEMALE PIPE COUPLER

Part #	Body Size	NPT	
NV-14-F	1/4"	1/4"	----
NV-38-F	3/8"	3/8"	----
NV-12-F	1/2"	1/2"	----
NV-34-F	3/4"	3/4"	----
NV-1-F	1"	1"	----

FEMALE PIPE PLUG

Part #	Body Size	NPT	
NV-14-M	1/4"	1/4"	----
NV-38-M	3/8"	3/8"	----
NV-12-M	1/2"	1/2"	----
NV-34-M	3/4"	3/4"	----
NV-1-M	1"	1"	----

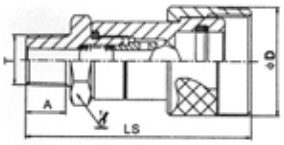
FEATURES

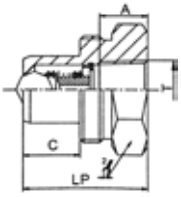
- Heavy duty heat treated poppet: valves are standard with rugged, specially-designed seals made of nitrite for leak-free performance in the toughest application.
- High-strength steel valve guides designed for high flow rates and made extra tough for agricultural service.
- Dependable hardened chrome alloy steel locking balls. Heat treated plugs and sleeves.
- Standard seals temp range -40°F to +250°F

THREAD LOCK HYDRAULIC JACK COUPLING

APPLICATIONS

- Thread lock couplings with their threaded union locking system and precision ball-type check valves are designed for extreme high pressure applications such as portable hydraulic jacks.
- **Ball Type.**





SPECIFICATIONS

Body Size	1/4(14)	3/8(38)
Rated Pressure	10.000	
Rated Flow (GPM)	3	6
Temperature Range	-20°C +120°C	

Standard seal material is **NBR**

MALE COUPLER

Part #	LS	D	Hex	A	NPT	
KZE-B-14-SM	2.40	1.14	0.87	0.55	1/4	----
KZE-B-38-SM	2.91	1.38	0.98	0.57	3/8	----

FEMALE COUPLER

Part #	LS	D	Hex	A	NPT	
KZE-B-14-PF	1.30	0.44	0.75	0.51	1/4	----
KZE-B-38-PF	1.38	0.63	1.26	0.55	3/8	----

WARNING: This product can expose you to chemicals, including Cobalt, which are known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

MM-FC SERIES FLOW CONTROL VALVES

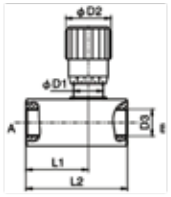
FEATURES:
- Micrometer adjustment knob for accurate valve setting.
- Rugged construction.

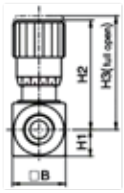
TECHNICAL DATA:
- Materials

Body:	Carbon steel w/ black oxide plating
Handle:	Zinc Alloy
Set Screw:	Steel
Packing:	Buna O-Ring/ PTFE stem packing
Maximum Pressure:	5000PSI
Temperature Ratings:	-4°F to 176°F (-20°C to 80°C)
Flow Rate: 0-42 GPM	

INLET

<< FREE FLOW





Part#	B	D1	D2	D3	H1	H2	H3	L1	L2	WEIGHT (lbs)	
MMFC4NPT	1.10	0.76	1.18	1/4 NPT	0.55	2.41	2.67	1.54	2.52	0.90	----
MMFC6NPT	1.10	0.76	1.18	3/8 NPT	0.55	2.41	2.67	1.69	2.75	0.90	----
MMFC8NPT	1.50	0.95	1.46	1/2 NPT	0.75	3.07	3.41	2.05	3.27	2.00	----
MMFC12NPT	1.50	0.95	1.46	3/4 NPT	0.75	3.08	3.41	2.19	3.50	2.00	----
MMFC16NPT	1.89	1.38	1.89	1 NPT	0.94	4.03	4.50	2.79	4.60	4.20	----
MMFC20NPT	2.38	1.96	2.28	1-1/4 NPT	1.18	5.25	5.88	3.39	6.07	9.55	----

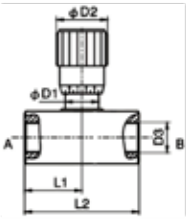
MM-NV SERIES NEEDLE VALVES

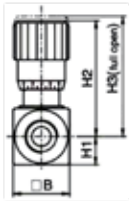
FEATURES:
- Micrometer adjustment knob for accurate valve setting.
- Rugged construction.

TECHNICAL DATA:
- Materials

Body:	Carbon steel w/ black oxide plating
Handle:	Zinc Alloy
Set Screw:	Steel
Packing:	Buna O-Ring/ PTFE stem packing
Maximum Pressure:	5000PSI
Temperature Ratings:	-4°F to 176°F (-20°C to 80°C)
Flow Rate: 0-42 GPM	

▪ FULL SHUT-OFF





Part#	B	D1	D2	D3	H1	H2	H3	L1	L2	WEIGHT (lbs)	
MMNV4NPT	1.10	0.76	1.18	1/4 NPT	0.55	2.41	2.67	1.07	2.13	0.90	----
MMNV6NPT	1.10	0.76	1.18	3/8 NPT	0.55	2.41	2.67	1.07	2.13	0.90	----
MMNV8NPT	1.50	0.95	1.46	1/2 NPT	0.75	3.07	3.41	1.34	2.38	2.00	----
MMNV12NPT	1.50	0.95	1.46	3/4 NPT	0.75	3.08	3.41	1.54	3.09	2.00	----
MMNV16NPT	1.89	1.38	1.89	1 NPT	0.94	4.03	4.50	1.81	3.62	4.20	----

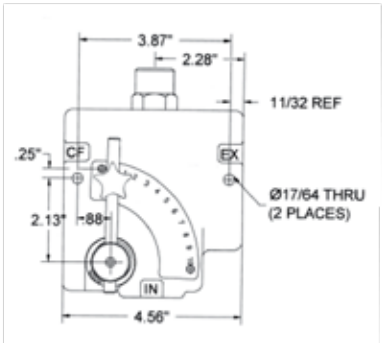
WARNING: This product can expose you to chemicals, including cobalt, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

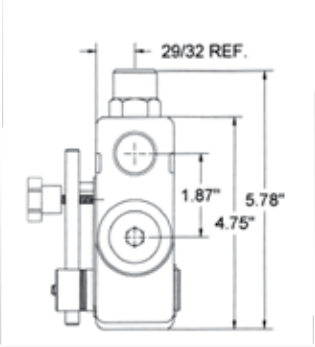
PRESSURE COMPENSATING VARIABLE FLOW CONTROL

FEATURES:

MFC-51 model is a full range pressure compensating variable flow control. It is designed so that the orifice area varies as the lever is rotated. The outlet flw is smooth and constant regardless of the pressure on the control flow or excess flow ports. An adjustable ball spring relief allows for pressure compensated flow up to the pressure setting on the relief. Relief valves are preset at 1500 PSI and field adjustable from 750 to 3000 PSI.

- Materials: Cast Iron Body, Heat Treated Compensator Spool, Stainless Steel Rotary Spool, Buna N "O" Rings (Standard)
- **ALL ARE STANDARD FLOW CONTROL**
- **ALL HAVE ADJUSTABLE BALL SPRING RELIEF**
- **SAE PORT AVAILABLE. MINIMUM ORDER REQUIRED**





Part#	Size	Flow	
MFC-38-N	3/8" - NPT	0-8 gpm	----
MFC-12-N	1/2" - NPT	0-16 gpm	----
MFC-34-N	3/4" - NPT	0-30 gpm	----

SCREW-ON TYPE AIR BREATHERS

• Chrome Plated Steel • 1/4 To 1 Inch NPT • 40 Micron Breather

Part Number	Flow cfm	NPT	
MB40-04	10	1/4	----
MB40-06	10	3/8	----
MB40-08	10	1/2	----
MB40-12	25	3/4	----
MB40-16	25	1	----

WARNING: This product can expose you to chemicals, including Chromium, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov

Part#	Page	Part#	Page	Part#	Page	Part#	Page	Part#	Page	Part#	Page
0304-10	404	100045	211	10-046	51	10-108LF	163	10-212	55	10-259L	56
0304-12	404	1000465	211	10-047	51	10-109	53	10-213	55	10-260	56
0304-16	404	10-005	50	10-048	51	10-109L	53	10-214	55	10-260L	56
0304-4	404	10-006	50	10-049	51	10-109LF	163	10-215	55	10-261	56
0304-6	404	100065	211	10-051	51	10-110	53	10-216	55	10-262	56
0304-8	404	1000665	211	10-052	51	10-110L	53	10-217	55	10-262LF	163
0304-C-10	404	10-007	50	10-053	51	10-110LF	163	10-218	55	10-263	56
0304-C-12	404	10-008	50	10-054	51	10-111	53	10-219	55	10-263L	56
0304-C-14	404	100085	211	10-055	51	10-112	53	10-220	55	10-263LF	163
0304-C-16	404	1000865	211	10-056	51	10-115	54	10-221	55	10-264	56
0304-C-2	404	1001125	211	10-058	51	10-116	54	10-227	55	10-264L	56
0304-C-20	404	10011265	211	10-062	52	10-117	54	10-228	55	10-264LF	163
0304-C-24	404	1001165	211	10-063	52	10-118	54	10-228L	55	10-265	56
0304-C-3	404	10011665	211	10-064	52	10-118LF	163	10-228LF	163	10-265L	56
0304-C-32	404	1001205	211	10-065	52	10-119	54	10-229	55	10-265LF	163
0304-C-4	404	10012065	211	10-066	52	10-120	54	10-229L	55	10-266	56
0304-C-5	404	1001245	211	10-067	52	10-121	54	10-229LF	163	10-266LF	163
0304-C-6	404	10012465	211	10-068	52	10-121LF	163	10-230	55	10-267	56
0304-C-8	404	10-013	50	10-069	52	10-122	54	10-230LF	163	10-267LF	163
0306-10	407	10-013	88	10-073	52	10-123	54	10-231	55	10-268	56
0306-12	407	10-013LF	163	10-074	52	10-123LF	163	10-232	55	10-268L	56
0306-14	407	10-014	50	10-075	52	10-126	54	10-233	55	10-268LF	163
0306-16	407	100145	211	10-075EH	52	10-127	54	10-234	55	10-269	56
0306-2	407	1001465	211	10-075LF	163	10-131	53	10-235	55	10-269L	56
0306-20	407	10-014LF	163	10-076	52	10-132	53	10-235L	55	10-269LF	163
0306-4	407	10-015	50	10-077	52	10-133	53	10-235LF	163	10-270	56
0306-5	407	10-015L	50	10-077LF	163	10-135	60	10-236	55	10-270LF	163
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0318-16	404	10-017	50	10-080LF	163	10-158	54	10-238	55	10-273L	56
0318-2	404	10-017L	50	10-081	52	10-159	54	10-239	55	10-273LF	163
0318-20	404	10-017LF	163	10-082	52	10-159LF	164	10-240	55	10-274	56
0318-24	404	10-018	50	10-084	52	10-160	54	10-240L	55	10-274LF	163
0318-3	404	100185	211	10-085	52	10-161	54	10-240LF	163	10-275	56
0318-32	404	1001865	211	10-086	52	10-161LF	164	10-241	55	10-275LF	163
0318-4	404	10-018LF	163	10-087	52	10-162	54	10-241L	55	10-276	56
0318-5	404	10-019	50	10-088	52	10-163	54	10-241LF	163	10-276LF	163
0318-6	404	10-019L	50	10-089	52	10-164	54	10-242	55	10-277	56
0318-8	404	10-019LF	163	10-090	52	10-165	54	10-242L	55	10-278	56
0319-10	404	10-020	50	10-094	53	10-170	54	10-242LF	163	10-278LF	163
0319-12	404	10-020L	50	10-095	53	10-171	54	10-243	55	10-279	56
0319-14	404	10-020LF	163	10-097	53	10-172	54	10-244	55	10-280	56
0319-16	404	10-021	50	10-098	53	10-173	54	10-244L	55	10-283	57
0319-2	404	10-021LF	163	10-099	53	10-174	54	10-244LF	163	10-283B	57
0319-20	404	10-022	50	10-100	53	10-175	54	10-245	55	10-284	57
0319-24	404	10-023	50	1010002	328	10-176	54	10-245LF	163	10-284B	57
0319-3	404	10-024	50	1010008	328	10-178	54	10-246	55	10-285	57
0319-32	404	10-025	50	1010011	328	10-179	54	10-247	55	10-286	57
0319-4	404	10-026	50	1010016	328	10-180	54	10-247LF	163	10-286B	57
0319-5	404	10-028	51	1010019	328	10-181	54	10-248	55	10-286L	57
0319-6	404	10-030	51	1010022	328	10-182	54	10-253	56	10-286LF	164
0319-8	404	10-031	51	1010024	328	10-187	54	10-254	56	10-287	57
10-001	50	10-032	51	1010027	328	10-188	54	10-255	56	10-287B	57
1000105	211	10-033	51	10-104	53	10-189	54	10-255EH	56	10-287LF	164
10001065	211	10-038	51	10-104LF	163	10-197	54	10-255L	56	10-288	57
1000125	211	10-039	51	10-105	53	10-203	55	10-255LF	163	10-288LF	164
10001265	211	10-039LF	163	10-105LF	163	10-204	55	10-256	56	10-289	57
10-002	50	10-040	51	10-106	53	10-204LF	163	10-256L	56	10-290	57
100025	211	10-041	51	10-106EH	53	10-205	55	10-256LF	163	10-290B	57
1000265	211	10-041LF	163	10-106L	53	10-206	55	10256WC	53	10-291	57
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