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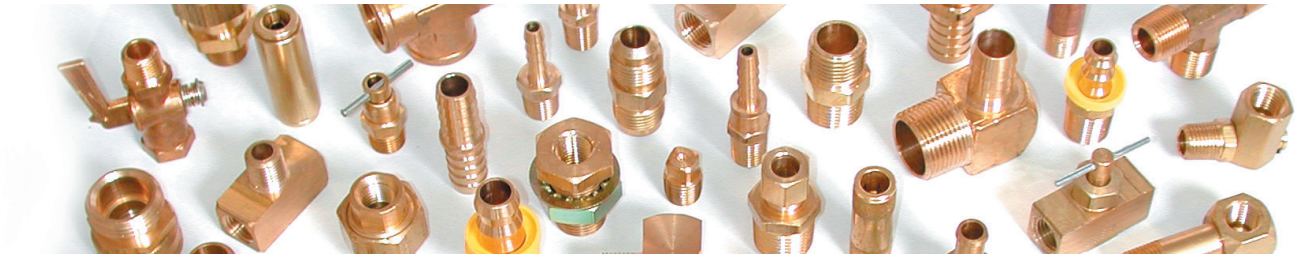

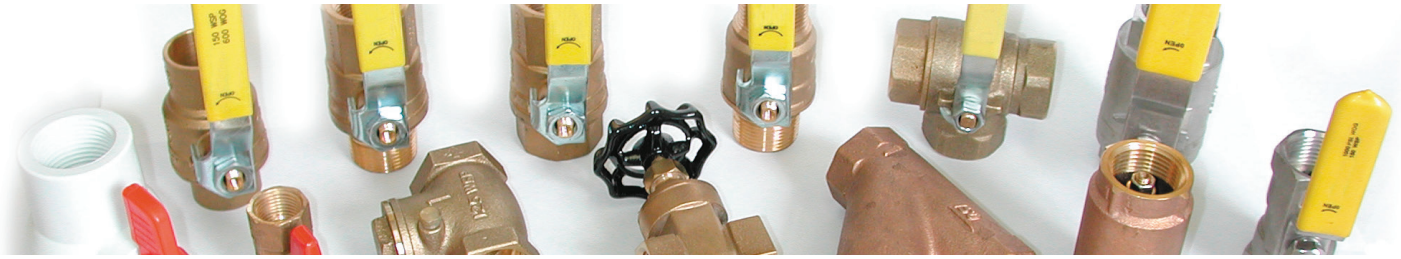

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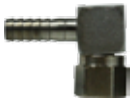
FLARE ADAPTER PG 28	BEVERAGE PG 28	SWIVEL EL-BOW  PG 28	NPT ELBOW PG 28	SPLICER ELBOW PG 28	**PUSH-ON BARB PGS 30-35**	MALE ADAPTER PG 30	MALE SWIVEL PG 30	FEMALE SWIVEL PG 30

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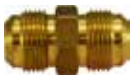
HEATER MALE PG 61	SPACE FE- MALE PG 61	HEATER UNION  PG 61	**GAS RANGE PG 61**	GAS MALE PG 61	RANGE FE- MALE PG 61	DRUM ADTR PG 61	RANGE CAP 61	**PUSH-ON BARB PGS 30-35**
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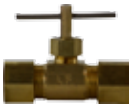
COMP X COMP  PG 147	FLARE X MALE PG 147	FLARE X MALE PG 148	FLARE X FLARE PG 148	AIR VENT PG 148	MALE TO MALE PG 148	F X F PG 148	MALE X FE-MALE PG 148	**TRUCK VALVES PG 149**
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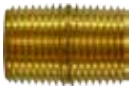
COUPLING PG 155	RED COUPLING PG 155	HEX BUSHING PG 155	FACE BUSHING PG 155	HEX CAP PG 156	SOLID SQ PLUG PG 156	COUNTERSUNK PG 156	CORED HEX PLUG PG 156	CLOSE NIPPLE  PG 156
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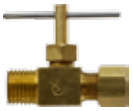
FEMALE PG 162	NEEDLE VALVE  PG 163	M X F PIPE	COMP X M PG 163	DISHWASHER PG 163	DISHWASHER PG 163	ICE MAKER KIT PG 163	ICE MAKER KIT PG 163	SADDLE VALVE PG 163
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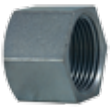
EXTENSION PG 273	SHROOM CAP PG 273	STEEL FITTINGS PG 274-275	GALV HEX BUSH PG 274	BLK HEX BUSH PG 274	GALV CAP  PG 274	BLK CAP PG 274	GALV SQR PLUG PG 274	BLK SQR PLUG PG 274
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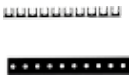
ORANGE POLY PG 333	NYLON 12 PG 334	PVC PG 335	MINITUBING CUT PG 335	TUBING CUT-TER PG 335	PLASTIC TUBE CUT PG 335	MOUNTING RACK  PG 335	ALUMINUM PG 336	COPPER TUBE PG 336
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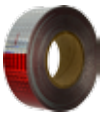
NOSE BOX-DEEP PG 382	BATT GRND STRAP PG 383	SS BATTERY NUT PG 383	RUB GROM-MET PG 383	DEER WHISTLE PG 384	CONSP TAPE  PG 385	CONSP TAPE PG 385	CONSP TAPE PG 385	REFLECTOR PG 385
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PIPE FITTINGS PG 404-407	PIPE COU-PLING PG 404	HEX PIPE NIPPLE PG 404	EXP/ PIPE ADAP PG 404	HEX RED/ BUSH PG 404	HEX HEAD PLUG PG 405	HOLLOW HEX PLG PG 405	FLUSH HLW PLUG PG 405	SQR HEAD PLUG PG 405
PIPE CAP PG 405	MALE ELBOW PG 405	45° M. ELBOW PG 406	90° ST ELBOW PG 406	45° ST ELBOW PG 406	FE. ELBOW PG 406	45° FE. ELBOW PG 406	MALE PIPE TEE PG 407	FE. PIPE TEE PG 407
ST PIPE TEE PG 407	FE. RUN PIPE T PG 407	MALE PIPE TEE PG 407	FE. PIPE TEE PG 407	**O-RING ADAPTERS PG 408-409**	JIC TO O-RING PG 408	O-RING TO PIPE PG 408	O-RING TO 37° PG 408	FE. O-RING PG 408
O-RING TO FE. PG 409	O-RING PLUG PG 409	O-RING HLW PLG PG 409	O-RING PORT PG 409	**FEMALE SWIVELS PG 410-411**	JIC SWL ELBOW PG 410	JIC SWL ELBOW PG 410	JIC SWL 45° PG 410	JIC SWL TO F 90° PG 410
JIC SWL CONN PG 410	JIC SWL TO M PG 410	JIC SWL TOF ADP PG 411	JIC SWL BRANCHT PG 411	JIC SWL RUN T PG 411	**SAE O-RING ADAPTERS PG 412-414**	JIC TO ORING 90° PG 412	JIC TO ORING 45° PG 412	JIC BRANCH TEE PG 412
JIC RUN TEE PG 412	ORING TO F 90° PG 412	ORING TO M 90° PG 413	ORING JIC 90° PG 413	F TO M ORING 90° PG 413	M ORING SWL AD PG 413	90° ORING SWL PG 413	45° ORING SWL PG 414	VITON O-RING PG 414

PICTORIAL INDEX

HYDRAULICS

NITRILE O- PG 414	**O-RING FACE SEAL** **PGS 414-418**	BRAZE TUBE PG 414	BRAZETUBE PG 415	CAP PG 415	BULKHEAD PG 415	FACE SEAL PG 415	PLUG PG 416	ORFS UNION PG 416
ORFS TO M 90° PG 416	ORFS TO PIPE PG 416	ORFS UNION T PG 416	M ORFS TO PG 417	M TO F 37° SWL PG 417	SWL NUT PG 417	37° SWIVEL PG 417	O-RING ELBOW PG 417	ORFS TO 45° PG 417
SWIVEL EL-BOW PG 418	**BSPT, BSPP METRIC** **PGS 418-421**	JIC BSPT PG 418	BSPT ELBOW PG 418	HEX NIPPLE PG 418	PLUG PG 418	HEX NIPPLE PG 418	COUPLING PG 419	FEMALE SWIVEL PG 419
ELBOW PG 419	45° ELBOW PG 419	MALE NIPPLE PG 419	MALE BSPP PG 419	SWIVEL BSPP PG 420	PLUG BSPP PG 420	HOLLOW BSPP PG 420	FEMALE BSPP PG 420	MALE ELBOW PG 421
STRAIGHT SWIVEL PG 421	METRIC PAR-ALLEL PG 421	HOLLOW PG 421	FEMALE ADAPTER PG 421	**QUICK DISCONNECTS** **PGS 422-424**	NO SPILL PG 422	DRYBREAK PG 422	ISO-A COU-PLER PG 422	ISO-A PLUG PG 422
ISO-B COU-PLER PG 422	ISO-B PLUG PG 422	FLUSH FACE PG 423	FLUSH FACE PG 423	LSQ SERIES PG 423	LSQ SERIES PG 423	AG SERIES PG 424	AG SERIES PG 424	KZE SERIES PG 424
KZE SERIES PG 424	MOTOR PG 425	MOTOR PG 425	PUMP PG 426	PUMP PG 427	FLOW VALVE PG 428	NEEDLE VALVE PG 428	PRESSURE VALVE PG 429	AIR BREATHER PG 429

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	$1\text{-}11^{1/2}$
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
-65^0F to $+250^0$F (-53^0C 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.

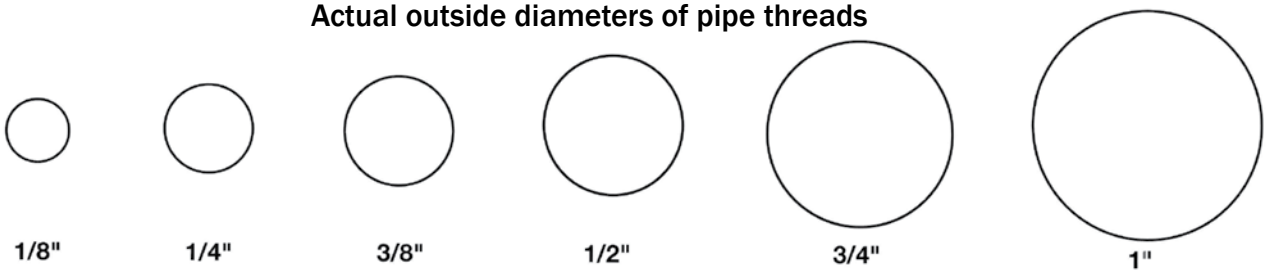
• see page 310-312 for plastic pipe fittings.

• Lead Free Fittings
see pages 162-164

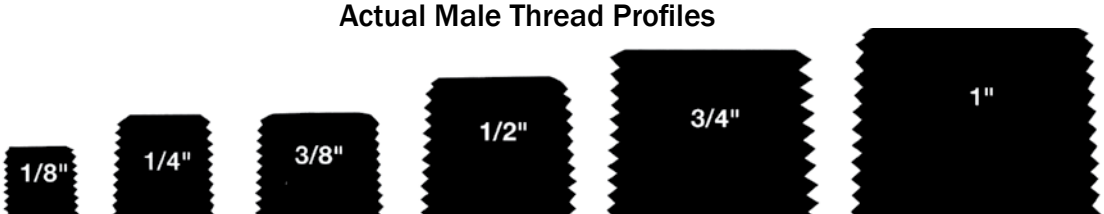
• For Bronze & Larger Sizes
see pages 224-232

• For BSPT/ BSPP
see pages 117-118

Actual outside diameters of pipe threads

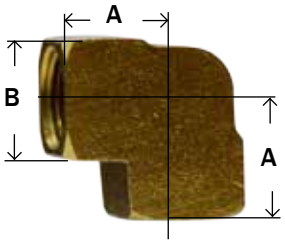


Actual Male Thread Profiles



90⁰ FEMALE ELBOW

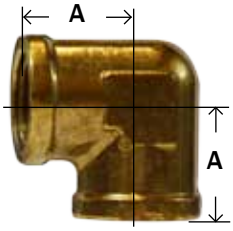
SAE# 130238



Part #	Thread Size NPTF	A	B	Approx. Wt. Lbs.	List Price
28-001	1/8”	0.55	0.56	0.09	3.14
28-002	1/4”	0.78	0.68	0.13	4.92
28-003	3/8”	0.84	0.81	0.16	6.14
28-004	1/2”	1.09	1.00	0.34	9.01
28-005	3/4”	1.16	1.25	0.60	18.77

100 2200P 3500 302 200

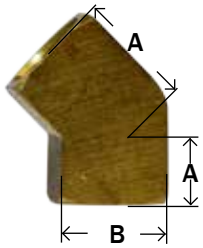
90⁰ FORGED FEMALE ELBOW



Part #	Thread size NPTF	A	Body Width	Approx. Wt. Lbs.	List Price
28-009	1/8”	0.57	0.50	0.04	3.36
28-010	1/4”	0.70	0.68	0.10	4.56
28-011	3/8”	0.81	0.81	0.12	6.52
28-012	1/2”	1.00	1.00	0.23	10.90
28-013	3/4”	1.13	1.25	0.42	23.42
28-014	1/4” x 1/8”	0.72	0.65	0.12	7.39
28-015	3/8” x 1/4”	0.81	0.81	0.15	5.72
28-016	1/2” x 3/8”	1.00	1.00	0.28	15.87
28-017	1"	1.42	1.50	0.75	27.00

1200P E7 100AF 100B

45⁰ FEMALE ELBOW

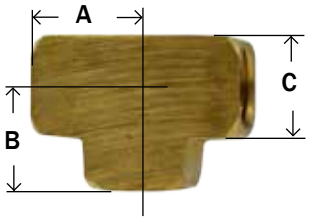


Part #	Thread size NPTF	A	B	Approx. Wt. Lbs.	List Price
28-018	1/8”	0.45	0.56	0.06	4.99
28-019	1/4”	0.66	0.68	0.12	6.13
28-020	3/8"	0.69	0.81	0.16	9.07

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

UNION TEE

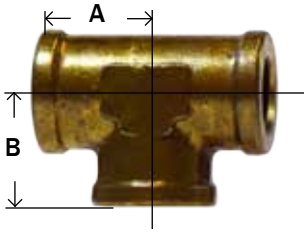
SAE# 130438



Part #	Thread size NPTF	A	B	C	Approx. Wt. Lbs.	List Price
28-024	1/8”	0.55	0.55	0.56	0.08	3.55
28-025	1/4”	0.78	0.78	0.68	0.17	5.24
28-026	3/8”	0.84	0.84	0.81	0.22	8.36
28-027	1/2”	1.09	1.09	1.00	0.43	13.39
28-028	3/4”	1.16	1.16	1.25	0.64	25.71

311 101A 322 2203P 3700 203

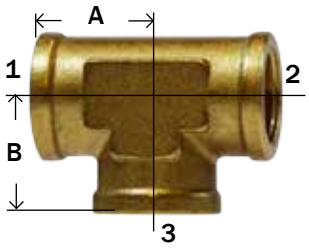
UNION FORGED TEE



Part #	Thread size NPTF	A & B	Body Width	Approx. Wt. Lbs.	List Price
28-032	1/8”	0.56	0.50	0.06	3.34
28-033	1/4”	0.71	0.68	0.13	5.38
28-034	3/8”	0.81	0.81	0.16	6.37
28-035	1/2”	1.00	1.00	0.27	12.67
28-036	3/4”	1.16	1.25	0.53	19.39
28-023	1”	1.42	1.50	.924	39.01

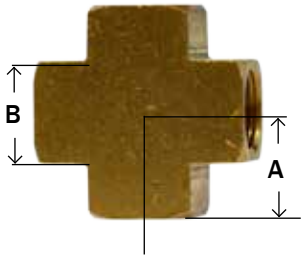
1203P LT7 101AF 101B

REDUCING FORGED TEES



Part #	1 NPT	2 NPT	3 NPT	A & B	Body Width	Approx. Wt. Lbs.	List Price
28-029	1/8”	1/8”	1/4”	0.72	0.69	0.16	9.04
28-030	1/4”	1/4”	1/8”	0.72	0.69	0.14	7.69
28-031	1/4”	1/4”	3/8”	0.81	0.81	0.21	14.97
28-038	3/8”	1/4”	3/8”	0.81	0.81	0.18	13.23
28-039	3/8”	3/8”	1/4”	0.81	0.81	0.18	13.83
28-046	1/2”	1/2”	3/8”	1.00	1.00	0.30	14.42
28-047	3/4"	1/2"	3/4"	1.20	1.25	0.59	32.67
28-048	3/4”	3/4”	1/2”	1.16	1.25	0.59	36.79

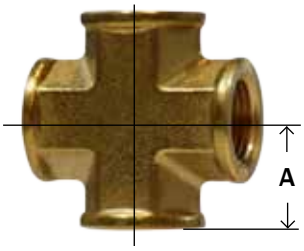
CROSS



Part #	Thread size NPTF	A	B	Approx. Wt. Lbs.	List Price
28-041	1/8”	0.55	0.56	0.10	8.00
28-042	1/4”	0.78	0.68	0.21	8.22
28-043	3/8”	0.84	0.81	0.25	10.02
28-044	1/2”	1.09	1.00	0.51	19.00
28-045	3/4”	1.16	1.25	0.75	29.74

2205P 3950 228 102A 102BE

FORGED CROSS

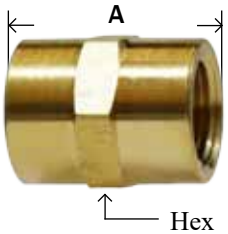


Part #	Thread size NPTF	A	Body Width	Approx. Wt. Lbs.	List Price
28-049	1/8”	0.56	0.50	0.06	6.78
28-050	1/4”	0.72	0.69	0.15	8.46
28-051	3/8”	0.81	0.81	0.18	12.12
28-052	1/2”	1.00	1.00	0.34	18.37

C7 105 102AF 102B

COUPLING

SAE# 130138



Part #	Thread size NPTF	A	Hex	Approx. Wt. Lbs.	List Price
28-058L	1/8”	0.75	0.50	0.02	0.92
28-058	1/8”	0.75	0.56	0.03	1.98
28-059L	1/4”	0.88	0.63	0.03	1.38
28-059	1/4”	1.12	0.75	0.09	3.19
28-060L	3/8”	1.00	0.81	0.06	2.33
28-060	3/8”	1.12	0.87	0.10	4.17
28-061L	1/2”	1.19	0.93	0.09	4.55
28-061	1/2”	1.50	1.06	0.19	6.83
28-062L	3/4”	1.19	1.25	0.18	6.56
28-062	3/4”	1.53	1.25	0.24	15.89
28-063	1"	1.89	1.50	.357	19.47

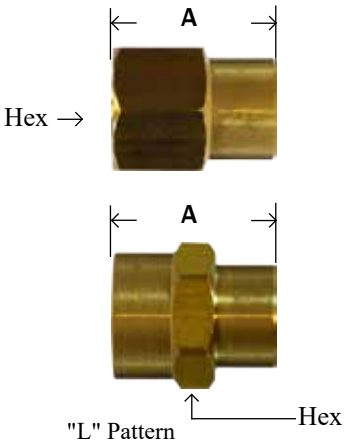
207P 371 3300 103AH 103B

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

See hydraulic pipe fittings pg 410

REDUCING COUPLING

SAE# 130138

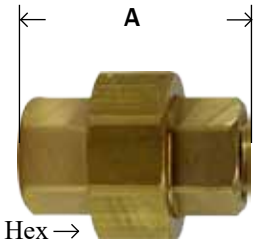


Part #	Thread size NPTF	A	Hex	Approx. Wt. Lbs.	List Price
28-181L	1/4" x 1/8"	0.94	0.62	0.04	2.03
28-181	1/4" x 1/8"	0.97	0.75	0.08	2.85
28-182	3/8" x 1/8"	0.94	0.87	0.10	5.96
28-183L	3/8" x 1/4"	1.00	0.81	0.06	2.82
28-183	3/8" x 1/4"	1.16	0.87	0.12	4.23
28-180*	1/2" x 1/8"	1.19	0.93	0.15	14.52
28-184L	1/2" x 1/4"	1.11	1.00	0.10	6.15
28-184	1/2" x 1/4"	1.28	1.06	0.20	8.26
28-185L	1/2" x 3/8"	1.19	0.93	0.10	5.55
28-185	1/2" x 3/8"	1.38	1.06	0.20	10.35
28-188*	3/4" x 3/8"	1.32	1.37	0.20	24.45
28-189*	3/4" x 1/2"	1.19	1.18	0.14	10.54

*Not to SAE specs

377 3300 208P 108 119B 119AH

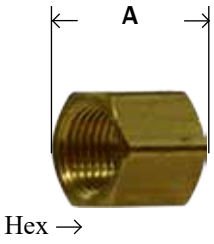
UNION



Part #	Thread size NPTF	A	Hex	Approx. Wt. Lbs.	List Price
28-067	1/8"	1.25	0.94	0.13	23.91
28-068	1/4"	1.31	1.06	0.18	21.86
28-069	3/8"	1.75	1.25	0.33	44.46
28-070	1/2"	1.79	1.56	0.50	31.87

3250 212P 104A 104B

CAP

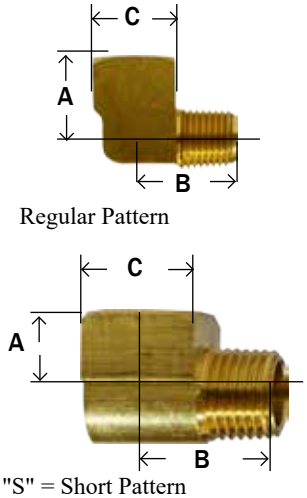


Part #	Thread size NPTF	A	Hex	Approx. Wt. Lbs.	List Price
28-075	1/8"	0.47	0.56	0.03	1.05
28-076	1/4"	0.60	0.68	0.04	1.92
28-077	3/8"	0.69	0.81	0.06	2.77
28-078	1/2"	0.78	0.93	0.08	4.20
28-079	3/4"	0.94	1.25	0.16	9.06
28-080	1"	1.13	1.50	0.23	12.83

3129 213P 23129 108A 108B

90⁰ STREET ELBOW

SAE# 130239

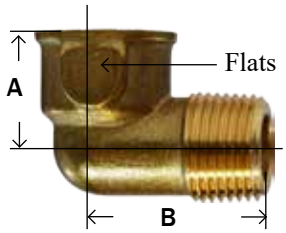


Part #	Thread size NPTF	A	B	C	Approx. Wt. Lbs.	List Price
28-156	1/8"	0.48	0.66	0.56	0.05	2.31
28-156S	1/8" short	0.34	0.57	0.50	0.03	1.53
28-157	1/4"	0.72	0.91	0.68	0.09	4.11
28-157S	1/4" short	0.45	0.78	0.68	0.07	2.70
28-158	3/8"	0.78	0.97	0.81	0.16	5.57
28-159	1/2"	1.03	1.25	1.00	0.33	9.78
28-160	3/4"	1.12	1.38	1.25	0.52	17.71

2202P 304 115 202 3400 116A

See hydraulic pipe fittings pg 410

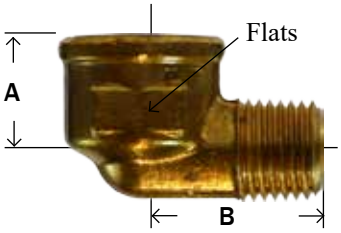
FORGED 90° STREET ELBOW



Part #	Thread size NPTF	A	B	Wrench Flats	Approx. Wt. Lbs.	List Price
28-165	1/8”	0.61	0.85	0.62	0.06	3.67
28-166	1/4”	0.50	0.86	0.72	0.08	3.46
28-167	3/8”	0.70	1.00	0.88	0.10	5.35
28-168	1/2”	0.96	1.43	1.00	0.20	8.02
28-169	3/4”	0.90	1.40	1.25	0.25	12.72

5E8 1202P 116AF 116B

FORGED REDUCING 90° STREET ELBOW

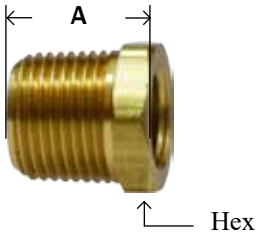


Part #	Thread size NPTF FxM	A	B	Wrench flats	Approx. Wt. Lbs.	List Price
28-260	1/8” x 1/4”	0.50	0.87	0.71	0.08	5.15
28-261B*	1/4” x 1/8”	0.53	0.72	0.69	0.07	3.61
28-261	1/4” x 1/8”	0.50	0.81	0.72	0.06	5.16
28-262	1/4” x 3/8”	0.93	1.06	0.59	0.12	6.47
28-263	3/8” x 1/4”	0.58	0.94	0.81	0.07	8.60
28-264	3/8” x 1/2”	0.97	1.36	1.00	0.28	13.58
28-265	1/2” x 3/8”	0.96	1.37	1.00	0.22	14.98

*Barstock

HEX BUSHING

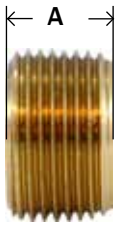
SAE# 130140



Part #	Thread size NPTF MxF	A	Hex	Approx. Wt. Lbs.	List Price
28-102L	1/4” x 1/8”	0.62	0.56	0.02	0.74
28-102	1/4” x 1/8”	0.75	0.56	0.04	1.18
28-103	3/8” x 1/8”	0.75	0.68	0.05	1.83
28-104L	3/8” x 1/4”	0.69	0.68	0.03	1.31
28-104	3/8” x 1/4”	0.75	0.75	0.05	2.17
28-105L	1/2” x 1/8”	0.81	0.81	0.08	3.05
28-105	1/2” x 1/8”	1.00	0.87	0.10	3.93
28-106L	1/2” x 1/4”	0.81	0.81	0.08	2.54
28-106	1/2” x 1/4”	1.00	0.87	0.11	3.62
28-107L	1/2” x 3/8”	0.81	0.81	0.05	1.84
28-107	1/2” x 3/8”	1.00	0.87	0.10	2.69
28-108	3/4” x 1/8”	0.94	1.06	0.20	11.16
28-109L	3/4” x 1/4”	0.94	1.06	0.18	4.55
28-110L	3/4” x 3/8”	0.94	1.06	0.15	5.35
28-111L	3/4” x 1/2”	0.94	1.06	0.11	3.90
28-111	3/4” x 1/2”	1.00	1.12	0.14	5.10
28-112	1” x 1/4”	1.15	1.37	0.32	10.69
28-113	1” x 3/8”	1.12	1.37	0.30	10.12
28-114	1” x 1/2”	1.31	1.44	0.29	9.96
28-115	1” x 3/4”	1.31	1.37	0.20	7.82

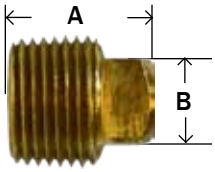
373 3220 209P 110A 110B

FACE BUSHING



Part #	Thread size NPTF MxF	A	Approx. Wt. Lbs.	List Price
28-121	1/4" x 1/8"	0.45	0.01	2.16
28-122	3/8" x 1/8"	0.50	0.03	2.58
28-116	3/8" x 1/4"	0.50	0.02	2.68
28-090	1/2" x 1/8"	0.56	0.06	5.23
28-128	1/2" x 1/4"	0.56	0.05	3.85
28-117	1/2" x 3/8"	0.56	0.03	2.33
28-129	3/4" x 1/4"	0.62	0.11	7.74
28-130	3/4" x 3/8"	0.62	0.08	7.04
28-118	3/4" x 1/2"	0.64	0.03	6.72
28-119	1" x 3/4"	0.77	0.10	12.31

SQUARE HEAD PLUG
1/8 - 1/2 Solid

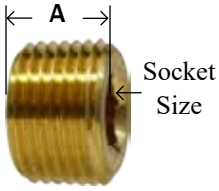


Part #	Thread size NPTF	A	B	Approx. Wt. Lbs.	List Price
28-084	1/8"	0.58	0.27	0.02	0.82
28-085	1/4"	0.80	0.37	0.03	1.21
28-086	3/8"	0.80	0.43	0.06	2.03
28-087	1/2"	1.07	0.55	0.13	3.30
28-088**	3/4"	1.09	0.61	0.20	5.19
28-089**	1"	1.24	0.81	0.35	12.10

** Cored

3151 211P 109A 109B

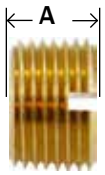
COUNTERSUNK HEX PLUG
3/4" taper thread



Part #	Thread size NPTF	A	Socket size	Approx. Wt. Lbs.	List Price
28-092	1/16"	0.30	0.12	0.01	1.16
28-093	1/8"	0.30	0.18	0.01	0.93
28-094	1/4"	0.45	0.26	0.02	1.01
28-095	3/8"	0.45	0.31	0.03	1.29
28-096	1/2"	0.61	0.39	0.05	2.52
28-097	3/4"	0.62	0.56	0.10	4.63

3153 219P 109CS 118

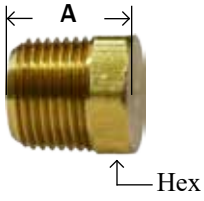
SLOTTED-HEAD PLUG



Part #	Thread size NPTF	A	Approx. Wt. Lbs.	List Price
28-174	1/8"	0.31	0.01	1.03
28-175	1/4"	0.42	0.02	1.28
28-176	3/8"	0.45	0.05	3.13

220P 3150 117A 117B

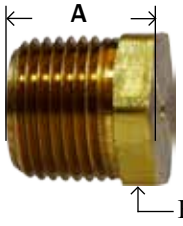
CORED HEX PLUGS



Part #	Thread size NPTF	A	Hex	Approx. Wt. Lbs.	List Price
28-201	1/8"	0.55	0.43	0.01	0.82
28-202	1/4"	0.62	0.56	0.02	1.16
28-203	3/8"	0.72	0.68	0.06	1.63
28-204	1/2"	0.81	0.87	0.09	3.04
28-205	3/4"	0.94	1.06	0.16	4.28
28-206	1"	1.16	1.37	0.28	14.36

218P 3152 121A 103 121B PPH 218P

SOLID HEX HEAD PLUGS



Part #	Thread size NPTF	A	Hex	Approx. Wt. Lbs.	List Price
28-201S	1/8’	0.55	0.43	0.02	1.60
28-202S	1/4”	0.75	0.56	0.05	1.83
28-203S	3/8”	0.66	0.68	0.07	3.60
28-204S	1/2”	0.81	0.87	0.12	3.74
28-205S	3/4”	0.92	1.06	0.24	6.82
28-206S	1”	1.00	1.31	0.38	19.01

121AS

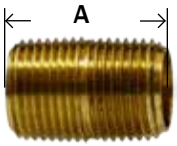
LOCKNUT

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

Part #	Thread size NPSL	Hex	Thickness	Approx. Wt. Lbs.	List Price
28-123	1/8”	0.68	0.19	0.02	0.99
28-124	1/4”	0.87	0.25	0.04	1.39
28-125	3/8”	1.00	0.31	0.04	1.62
28-126	1/2”	1.125	0.25	0.04	2.18

210P 21102 111A 111B

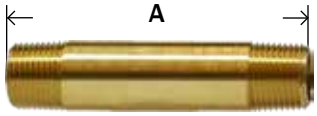
CLOSE NIPPLE



Part #	Thread size NPTF	A	Approx. Wt. Lbs.	List Price
28-131	1/8”	0.75	0.01	0.60
28-132	1/4”	0.88	0.02	1.12
28-133	3/8”	1.00	0.05	1.90
28-134	1/2”	1.12	0.06	2.31
28-135	3/4”	1.31	0.11	4.31

165 215PN 3326 112A 112B

LONG NIPPLE



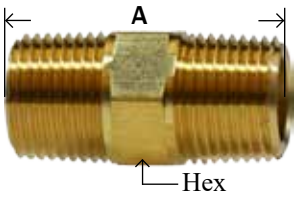
Part #	Thread size NPTF	A Length	Approx. Wt. Lbs.	List Price
28-140	1/8”	1.50	0.03	1.50
28-141	1/8”	2.00	0.04	1.60
28-142	1/8”	2.50	0.06	2.82
28-143	1/8”	3.00	0.06	3.09
28-475	1/8"	3.50	0.07	6.31
28-144	1/4”	1.50	0.03	2.15
28-145	1/4”	2.00	0.05	2.29
28-146	1/4”	2.50	0.08	4.10
28-147	1/4”	3.00	0.10	5.26
28-481	1/4"	3.50	0.12	8.79
28-148	3/8”	1.50	0.06	2.66
28-149	3/8”	2.00	0.10	3.84
28-150	3/8”	2.50	0.10	5.20
28-151	3/8”	3.00	0.13	5.23
28-487	3/8"	3.50	0.17	13.26
28-152	1/2”	1.50	0.08	2.85
28-153	1/2”	2.00	0.12	4.40
28-154	1/2”	2.50	0.16	6.20
28-155	1/2”	3.00	0.20	8.17
28-493	1/2"	3.50	0.24	8.79
28-136	3/4"	1.50	0.12	8.99
28-497	3/4"	2.00	0.18	12.68
28-498	3/4"	2.50	0.23	16.21
28-499	3/4"	3.00	0.28	21.37

• NOTE: For longer lengths and larger diameters, see our red brass nipples section, pg. 212-218

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

HEX NIPPLE

SAE# 130137

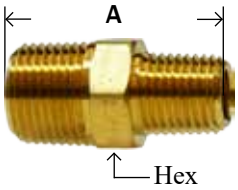


Part #	Thread size NPTF	A	Hex	Approx. Wt. Lbs.	List Price
28-211L	1/8”	0.91	0.43	0.02	1.04
28-211	1/8”	0.97	0.43	0.03	1.04
28-212L	1/4”	1.12	0.56	0.04	1.33
28-212	1/4”	1.38	0.56	0.06	1.77
28-213L	3/8”	1.25	0.68	0.07	2.05
28-213	3/8”	1.41	0.68	0.07	2.81
28-214L	1/2”	1.50	0.87	0.11	3.55
28-214	1/2”	1.81	0.87	0.17	4.33
28-215L	3/4"	1.55	1.07	0.17	9.12
28-215	3/4”	1.96	1.13	0.23	8.28
28-216L	1"	1.75	1.39	0.22	12.00
28-216	1”	2.30	1.37	0.43	13.57

216P 3325 379 122AH 122B

REDUCING HEX NIPPLE

SAE# 130137



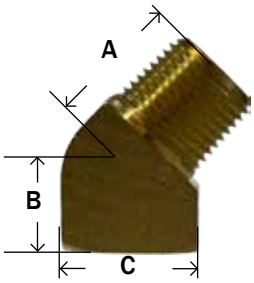
Part #	Thread size NPTF	A	Hex	Approx. Wt. Lbs.	List Price
28-220L	1/4” x 1/8”	1.00	0.56	0.04	1.37
28-220	1/4” x 1/8”	1.19	0.56	0.04	1.77
28-221L	3/8” x 1/8”	1.11	0.68	0.06	3.27
28-221	3/8” x 1/8”	1.22	0.68	0.07	3.01
28-222L	3/8” x 1/4”	1.19	0.68	0.06	1.89
28-222	3/8” x 1/4”	1.41	0.68	0.07	2.62
28-223L	1/2” x 1/4”	1.34	0.87	0.09	3.38
28-223	1/2” x 1/4”	1.62	0.87	0.12	3.75
28-224L	1/2” x 3/8”	1.41	0.87	0.11	3.97
28-224	1/2” x 3/8”	1.62	0.87	0.12	4.66
28-225	3/4” x 1/2”	1.50	1.06	0.15	6.12

See page 410 for steel hydraulic pipe adapters

216P 3325 379 122AH 122B

45° STREET ELBOW

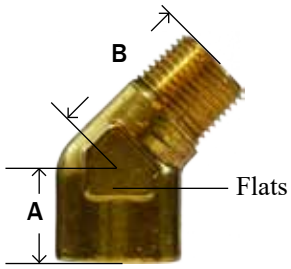
SAE# 130339



Part #	Thread size NPTF	B	A	C	Approx. Wt. Lbs.	List Price
28-230	1/8”	0.38	0.50	0.56	0.03	2.69
28-231	1/4”	0.56	0.72	0.68	0.09	3.60
28-232	3/8”	0.56	0.78	0.81	0.12	6.15
28-233	1/2”	0.75	1.00	1.00	0.20	9.55
28-234	3/4”	0.75	1.06	1.25	0.34	31.26

306 3350 2214P 224

45⁰ FORGED STREET ELBOW

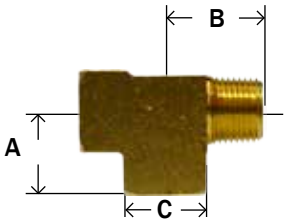


Part #	Thread size NPTF	A	B	Wrench flats	Approx. Wt. Lbs.	List Price
28-238	1/8”	0.63	0.81	0.56	0.05	5.44
28-239	1/4”	0.63	1.06	0.81	0.11	6.91
28-240	3/8”	0.72	1.06	0.93	0.17	9.85

45E8 124B

STREET TEE/ SERVICE TEE/ MALE RUN TEE

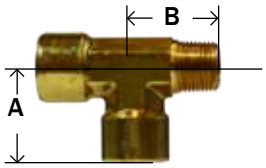
SAE# 130424



Part #	Thread size NPTF	A	B	C	Approx. Wt. Lbs.	List Price
28-245	1/8”	0.55	0.66	0.56	0.08	3.39
28-246	1/4”	0.78	0.91	0.68	0.17	6.43
28-247	3/8”	0.84	0.97	0.81	0.22	7.20
28-248	1/2”	1.09	1.25	1.00	0.40	13.10
28-249	3/4”	1.16	1.39	1.25	0.60	21.03

225 2225P 3750 326 225 127A

FORGED STREET TEE

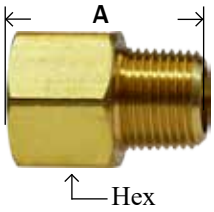


Part #	Thread size NPTF	A	B	Body Width	Approx. Wt. Lbs.	List Price
28-253	1/8”	0.56	0.75	0.50	0.05	5.21
28-254	1/4”	1.03	1.00	0.46	0.13	5.78
28-255	3/8”	1.19	1.09	0.68	0.24	7.46
28-256	1/2”	1.52	1.40	0.88	0.45	22.59
28-257	3/4”	1.34	1.73	1.25	0.65	54.76

107 T8 127B

EXTENDER ADAPTER

SAE# 130139

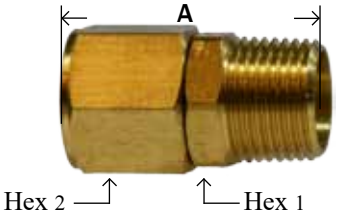


Part #	Thread size NPTF FxM	A	Hex	Approx. Wt. Lbs.	List Price
28-190L	1/8” x 1/8”	0.83	0.50	0.03	1.63
28-190	1/8” x 1/8”	0.88	0.56	0.04	1.33
28-191L	1/4” x 1/8”	0.94	0.62	0.04	1.38
28-191	1/4” x 1/8”	1.06	0.75	0.07	3.22
28-192L	1/4” x 1/4”	1.00	0.62	0.04	1.52
28-192	1/4” x 1/4”	1.25	0.75	0.07	3.14
28-198	3/8” x 1/8”	1.00	0.81	0.06	4.15
28-193L	3/8” x 1/4”	1.12	0.81	0.08	2.56
28-193	3/8” x 1/4”	1.25	0.87	0.09	4.16
28-194L	3/8” x 3/8”	1.24	0.81	0.10	3.41
28-194	3/8” x 3/8”	1.25	0.87	0.11	3.84
28-197	1/2" x 1/8"				11.38
28-199	1/2” x 1/4”	1.46	1.06	0.08	5.60
28-195L	1/2” x 3/8”	1.19	0.93	0.09	4.94
28-195	1/2” x 3/8”	1.47	1.06	0.18	7.20
28-196L	1/2" x 1/2"	1.25	0.94	0.10	5.00
28-196	1/2” x 1/2”	1.66	1.06	0.12	6.88
28-207	3/4” x 3/8”	1.59	1.25	0.26	15.50
28-208	3/4” x 1/2”	1.69	1.37	0.14	15.76
28-208L	3/4” x 1/2”	1.22	1.25	0.13	14.76
28-209	3/4” x 3/4”	1.69	1.37	0.34	20.15

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.	List Price
28-424	1/8"	1.10	0.43	0.50	0.05	4.81
28-425	1/4”	1.34	0.56	0.62	0.06	10.81
28-426	3/8”	1.36	0.68	0.75	0.08	23.69
28-427	1/2"	1.87	0.87	0.95	0.10	32.20

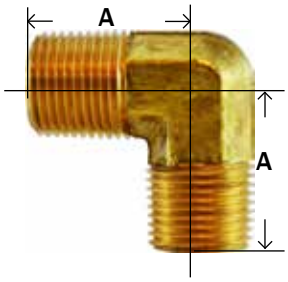
Male NPT x Female NPT

- 360° Turning
- Swivels

Part #	Size	List Price
320-061	1/4	12.14

344R 3183

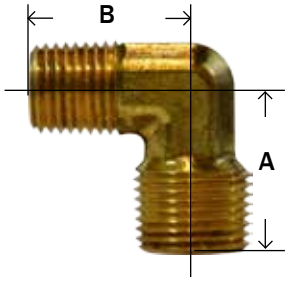
FORGED 90° MALE ELBOW



Part #	Thread size NPTF	A	Body Width	Approx. Wt. Lbs.	List Price
28-266	1/8”	0.79	0.38	0.04	3.40
28-267	1/4”	0.87	0.45	0.06	3.40
28-268	3/8”	1.06	0.59	0.12	6.54
28-269	1/2”	1.38	0.78	0.21	9.09

LE5 3455 116AMF

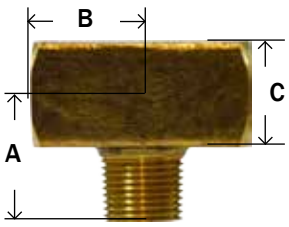
FORGED 90° MALE REDUCING ELBOW



Part #	Thread size NPTF	A	B	Body Width	Approx. Wt. Lbs.	List Price
28-274	1/4”x 1/8”	0.88	0.78	0.47	0.06	4.89
28-275	3/8” x 1/4”	0.90	0.90	0.46	0.06	5.02
28-276	1/2” x 3/8”	1.12	1.00	0.59	0.12	9.00

MALE BRANCH TEE

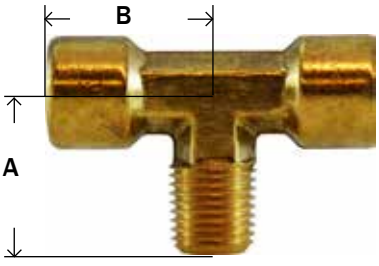
SAE# 130425



Part #	Thread size NPTF	A	B	C	Approx. Wt. Lbs.	List Price
28-281	1/8”	0.66	0.55	0.56	0.08	3.50
28-282	1/4”	0.91	0.78	0.68	0.15	6.37
28-283	3/8”	0.97	0.84	0.81	0.22	8.39
28-284	1/2”	1.25	1.09	1.00	0.40	19.26
28-285	3/4”	1.38	1.16	1.25	0.62	23.47

T9 X106 23601 3600 2224P 226 329 128

FORGED MALE BRANCH TEE

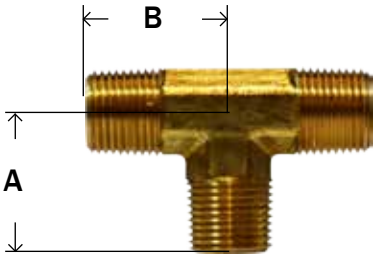


Part #	Thread size NPTF	A	B	Body Width	Approx. Wt. Lbs.	List Price
28-281F	1/8”	0.75	0.56	0.50	0.06	4.77
28-282F	1/4”	1.00	1.03	0.46	0.12	7.80

T9

The foolish man seeks happiness in the distance; the wise grows it under his feet.- *James Oppenheim*

FORGED ALL MALE TEE

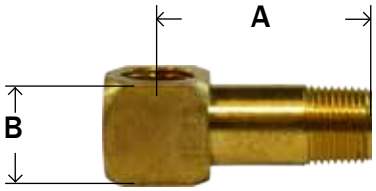


Part #	Thread size NPTF	A	B	Body Width	Approx. Wt. Lbs.	List Price
28-290	1/8”	0.75	0.75	0.43	0.06	5.24
28-291	1/4”	0.86	0.86	0.43	0.08	5.13
28-292	3/8”	1.09	1.09	0.60	0.16	8.56
28-293	1/2”	1.22	1.22	0.68	0.22	10.25
28-294	3/4”	1.43	1.43	0.87	0.38	33.05

T12 M101

LONG STREET ELLS

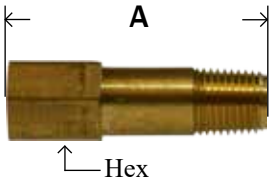
D.O.T. Approved



Part #	Thread size NPTF	A	B	Approx. Wt. Lbs.	List Price
28-440	1/8”	1-3/16”	0.50	0.06	10.30
28-441	1/8”	1-7/16”	0.50	0.06	5.37
28-442	1/8”	1-11/16”	0.50	0.06	8.51
28-443	1/8”	1-7/8”	0.50	0.16	14.95
28-328	1/4”	1-3/16”	0.75	0.12	17.29
28-329	1/4”	1-7/16”	0.75	0.14	14.08
28-330	1/4”	1-11/16”	0.75	0.15	14.05
28-331	1/4"	1-7/8"	0.62	0.09	13.30
28-332	1/4”	2-1/4”	0.75	0.17	19.15
28-333	3/8”	1-3/4”	0.87	0.22	21.93

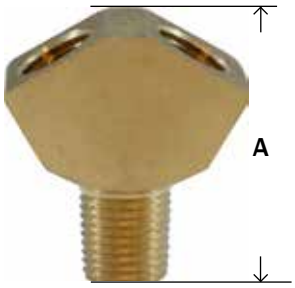
LONG EXTENSION ADAPTERS

D.O.T. Approved

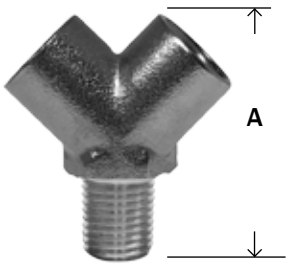


Part #	Thread size NPTF	A	Hex	Approx. Wt. Lbs.	List Price
28-335	1/8”	1-1/4”	0.50	0.04	11.33
28-336	1/8”	1-3/4”	0.50	0.05	12.33
28-337	1/8”	3”	0.50	0.09	22.22
28-338	1/4”	1-9/16”	0.62	0.07	6.80
28-339	1/4”	1-13/16”	0.62	0.08	8.66
28-340	1/4”	2-1/16”	0.62	0.10	8.04

PIPE WYE FIP x MIP



28-295



28-296

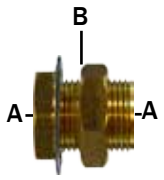
Part #	Thread Size NPT	A	Approx. Wt. Lbs.	List Price
28-295	1/4"	1.56	.15	7.00
28-296	1/4 N/P	1.4	.12	5.76

PIPE WYE FIP x FIP - NICKEL PLATED

Part #	Thread Size NPT	A	Approx. Wt. Lbs.	List Price
28-298	1/4	1.4	.12	5.76

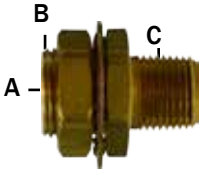
BULKHEAD / ANCHOR / FRAME COUPLINGS

FEMALE PIPE X FEMALE PIPE



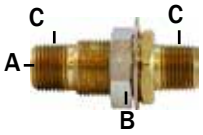
Part #	Terminal Bolts/ Frame A	B	Hole Size	Length (in.)	List Price
28-299	1/8-27 NPTF	5/8-18 UNS	5/8	0.96	19.66
28-300	1/8-27 NPTF	5/8-18 UNS	5/8	1-1/2	7.72
28-301	1/4-18 NPTF	3/4-16 UNS	3/4	15/16	7.39
28-302	1/4-18 NPTF	3/4-16 UNS	3/4	1-1/2	8.32
28-315*	1/4-18 NPTF	3/4-16 UNS	3/4	1-1/2	9.81
28-303	3/8-18 NPTF	1-14 UNS	1	1-5/16	10.92
28-304	1/2-14 NPTF	1-1/8-14 UNS	1-1/8	1-1/2	13.70
28-311	3/4-14 NPTF	1-5/16-12	1-5/16	1-1/2	95.55
28-316**	1-11/1/2	1-5/8-14	1-5/8	1.68	256.49

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



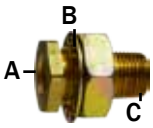
FEMALE PIPE X MALE PIPE

	A	B	C		
28-317	1/4-18 NPTF	1-14 UNS	1/2-14 NPTF	2-1/8	29.43
28-318	3/8-18 NPTF	1-14 UNS	1/2-14 NPTF	1-11/16	15.46
28-319	3/8-18 NPTF	1-14 UNS	1/2-14 NPTF	1-29/32	15.40



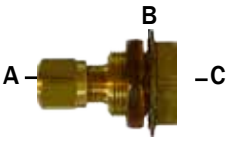
FEMALE PIPE X MALE PIPE

28-313	1/4-18 NPTF	1-14 UNS	1/2-14 NPTF	2-7/8	29.14



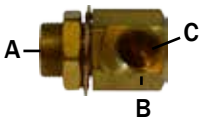
FEMALE PIPE X MALE PIPE

28-346	3/8-18 NPTF	1-14 UNS	1/2-14 NPTF	1-7/8	19.27
28-347	1/2-14 NPTF	1-14 UNS	1/2-14 NPTF	2-3/8	26.86



TUBE X FEMALE PIPE

28-321	1/2-O.D. Tube	7/8-20 UNCF	3/8-18 NPTF	1-5/16	13.34
28-322	3/8-O.D. Tube	7/8-20 UNCF	3/8-18 NPTF	1-3/8	12.70



FEMALE PIPE X CLAMPING STUD ELBOW

28-348	3/8-18 NPTF	7/8-20 UNEF	3/8-18 NPTF	2-5/16	25.90

BRASS MARINE BULKHEAD

46-540	5/16 Hose ID	----	----	2.37	22.10
46-541	3/8 Hose ID	----	----	2.37	22.98

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															

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	10.70
28-307	1/4-18 NPTF	3/4 - 16 UNS		1.50	10.95
28-308	3/8-18 NPTF	1 - 14 UNS		1.31	12.54

FEMALE PIPE X MALE PIPE

28-309	1/4-18 NPTF	3/4 - 16 UNS	1/2-14 NPTF	2.16	21.49
28-310	1/4-18 NPTF	3/4 - 16 UNS	1/2-14 NPTF	2.53	38.59
28-345*	1/4-18 NPTF	3/4 - 16 UNS	1/2-14 NPTF	2-5/32	20.78
28-324	3/8-18NPTF	1-14 UNS	1/2-14 NPTF	1-11/16	26.22

* Steel

FEMALE PIPE X MALE PIPE

28-325	1/4-18 NPTF	3/4 - 16 UNS	1/2-14 NPTF	1-11/16	22.45

28-312	1/4-18 NPTF	1-14 UNS	1/2-14 NPTF	2.94	26.50
28-320	1/4-18 NPTF	1-14 UNS	1/2-14 NPTF	3-15/16	41.46

STAINLESS STEEL BULKHEAD FITTINGS

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

NEW

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

Part #	Size	Hole Size	Hex	Length	List Price
28300SS	1/8"	0.701	0.866	0.748	29.21
28301SS	3/4"	0.858	1.063	0.748	34.34
28303SS	3/8"	1.055	1.260	1.102	48.40
28304SS	1/2"	1.173	1.417	1.378	62.48

NEW

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

Part #	Size	Hole Size	Hex	Length	List Price
63214	3/4"	1-5/8"	2-15/32"	1-13/16"	118.30
63215	1"	2-1/4"	3-1/16"	2-7/8"	259.00
63216	1-1/4"	2-1/4"	3-1/16"	2-3/8"	224.00
63217	1-1/2"	3"	4-1/4"	2-5/8"	339.50
63218	2"	3"	4-1/4"	2-5/8"	327.74

It is not how much we have, but how much we enjoy, that makes happiness. – Charles H. Spurgeon

HOSE BARB FITTINGS

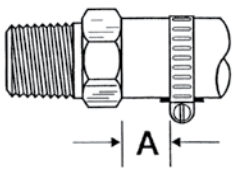
• **Temperature and Working Pressure Ranges**
From -40^{0}F to + 160^{0}F at 150 PSI maximum.

• **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 157-158
Other Barbs available

See page 292-295 for plastic hose barb fittings

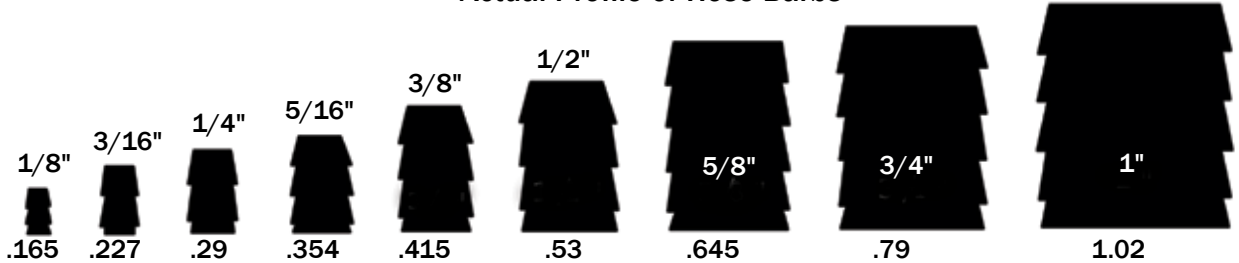
See page 27-28 for stainless steel hose barbs

See page 307 for King Nipples

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

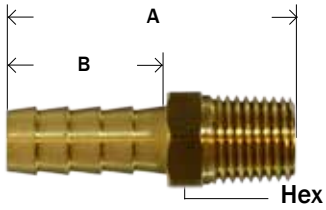
Hose Size	A
3/16"	1/4"
1/4"	1/4"
5/16"	1/4"
3/8"	1/8"
1/2"	1/8"
5/8"	1/8"
3/4"	1/8"

Actual Profile of Hose Barbs



RIGID MALE ADAPTER

• These are not Lead Free



Part #	Hose I.D. x Male NPTF	A	B	Hex	Approx. Wt. Lbs.	List Price
32-001 *	1/8” x 1/8”	1.19	0.69	0.43	0.02	1.04
32-027	1/8” x 1/4”	1.16	0.46	0.56	0.02	1.43
32-002 *	3/16” x 1/8”	1.19	0.75	0.43	0.02	0.99
32-003 *	3/16” x 1/4”	1.37	0.69	0.56	0.04	1.70
32-301	1/4” x 1/16”	1.44	0.88	0.43	0.02	3.10
32-004 *	1/4” x 1/8”	1.47	0.97	0.43	0.02	1.25
32-005 *	1/4” x 1/4”	1.72	0.97	0.56	0.04	1.39
32-006 *	1/4” x 3/8”	1.72	0.97	0.68	0.05	2.08
32-007	1/4” x 1/2”	1.72	0.81	0.87	0.10	3.66
32-008 *	5/16” x 1/8”	1.47	0.97	0.43	0.02	1.17
32-009 *	5/16” x 1/4”	1.72	0.97	0.56	0.04	1.63
32-010 *	5/16” x 3/8”	1.76	0.97	0.68	0.06	2.17
32-390	5/16” x 1/2”	1.88	0.95	0.87	0.10	4.10
32-011 *	3/8” x 1/8”	1.53	0.97	0.56	0.03	1.52
32-012 *	3/8” x 1/4”	1.75	0.97	0.56	0.05	1.41
32-013 *	3/8” x 3/8”	1.72	0.96	0.68	0.06	1.97
32-014 *	3/8” x 1/2”	1.87	0.97	0.87	0.09	3.57
32-026 *	3/8” x 3/4”	1.97	0.97	1.06	0.16	4.78
32-302	1/2” x 1/8”	1.57	0.95	0.56	0.06	3.95
32-015 *	1/2” x 1/4”	1.72	0.97	0.56	0.04	2.04
32-016 *	1/2” x 3/8”	1.76	0.97	0.68	0.07	2.46
32-017 *	1/2” x 1/2”	1.87	0.96	0.87	0.11	3.14
32-018 *	1/2” x 3/4”	1.94	0.97	1.06	0.16	5.14
32-303	1/2” x 1”	2.31	0.99	1.37	0.33	14.75
32-304	5/8” x 1/4”	1.67	0.92	0.68	0.06	4.83
32-019 *	5/8” x 3/8”	1.76	0.97	0.68	0.08	2.72
32-020 *	5/8” x 1/2”	1.87	0.96	0.87	0.11	3.38
32-021 *	5/8” x 3/4”	1.87	0.96	1.06	0.14	4.69
32-305	5/8” x 1”	2.31	0.96	1.37	0.36	17.68
32-306	3/4” x 3/8”	1.65	0.87	0.81	0.12	5.93
32-022 *	3/4” x 1/2”	1.87	0.96	0.87	0.14	4.69
32-023 *	3/4” x 3/4”	1.87	0.96	1.06	0.15	5.66
32-316	3/4” x 1”	2.55	1.15	1.37	0.38	13.06
32-307	1” x 1/2”	1.80	0.87	1.06	0.18	7.90
32-024 *	1” x 3/4”	2.19	1.19	1.06	0.32	7.05
32-025 *	1” x 1”	2.48	1.19	1.37	0.39	12.25
32-029	1-1/4" x 3/4"	2.37	1.19	1.37	0.35	16.56
32-028	1-1/4” x 1”	2.55	1.19	1.37	0.46	15.74

4244 PGH 101 102 201A 125HBL 105B-1 KF-PS MPB

See blanket order program for more sizes.

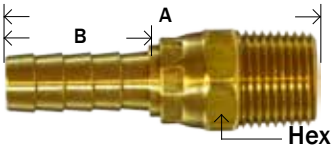
* See page 27 for stainless steel.

See page 28 for beverage #303 stainless fittings

BRASS RIGID MALE BSPT BARB ADAPTER

Part #	Hose I.D. x MALE BSPT	List Price
32-450	1/4" x 1/8"	1.47
32-451	1/4" x 1/4"	2.10
32-452	3/8" x 1/4"	2.43
32-453	3/8" x 3/8"	6.15
32-454	3/8" x 1/2"	4.12
32-455	1/2" x 3/8"	3.17
32-456	1/2" x 1/2"	4.57
32-457	3/4" x 3/4"	7.90
32-458	1" x 1"	14.66

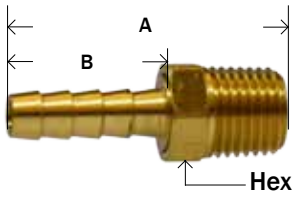
SWIVEL MALE ADAPTER



Rotation 360°

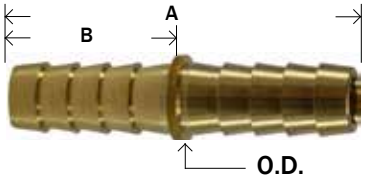
Part #	Hose I.D. x Male NPTF	A	B	Hex	Approx. Wt. Lbs.	List Price
32-329	3/16" x 1/8"	2.00	0.78	0.56	0.06	6.16
32-331	3/16" x 1/4"	1.95	0.78	0.56	0.06	6.04
32-332	1/4" x 1/8"	2.19	0.97	0.56	0.06	5.83
32-349	1/4" x 1/4"	2.12	0.97	0.56	0.06	5.26
32-351	3/8" x 1/8"	2.12	0.97	0.56	0.07	6.06
32-201	3/8" x 1/4"	2.12	0.97	0.56	0.07	4.26
32-360	3/8" x 3/8"	2.12	0.97	0.69	0.08	6.47
32-355	1/2" x 3/8"	2.12	0.97	0.68	0.10	6.81
32-356	1/2" x 1/2"	2.33	0.97	0.87	0.14	9.44
32-357	3/4" x 3/4"	2.33	0.97	1.06	0.20	11.11
32-386	1" x 1"	2.88	1.19	1.38	0.40	72.18

SMS 103



Part #	Hose I.D. x Male NPTF	A	B	Hex	Approx. Wt. Lbs.	List Price
32-200	1/4" x 1/4"	1.65	.89	0.56	0.04	4.16
32-202	3/8" x 3/8"	1.75	1.00	0.68	0.08	5.66

MENDER/ SPLICER



Part #	Hose I.D. x Hose I.D.	A	B	O.D.	Approx. Wt. Lbs.	List Price
32-091 *	1/8"	0.98	0.45	0.31	0.01	1.36
32-092	3/16"	1.62	0.77	0.36	0.02	1.82
32-093 *	1/4"	2.00	0.96	0.37	0.02	1.52
32-079 *	1/4" x 1/8"	1.50	0.97	0.37	0.02	3.48
32-094 *	5/16"	2.00	0.96	0.39	0.02	1.44
32-090 *	5/16" x 1/4"	2.00	0.97	0.50	0.03	2.41
32-095 *	3/8"	2.00	0.97	0.51	0.04	1.53
32-080 **	3/8" x 1/4"	2.06	0.97	0.56	0.03	4.18
32-375 *	3/8" x 5/16"	2.00	0.97	0.50	0.03	2.34
32-096 *	1/2"	2.00	0.96	0.62	0.06	2.22
32-087 *	1/2" x 3/8"	2.06	0.97	0.71	0.06	6.01
32-097	5/8"	2.05	0.96	0.75	0.08	3.00
32-088	5/8" x 3/8"	2.06	0.97	0.75	0.06	6.85
32-376	5/8" x 1/2"	2.06	0.97	0.75	0.07	6.78
32-098 *	3/4"	2.50	1.15	0.87	0.10	5.22
32-089	3/4" x 1/2"	2.28	1.19	0.87	0.10	9.43
32-379	3/4" x 5/8"	2.02	0.96	0.87	0.10	5.44
32-380	1" x 3/4"	2.58	1.19	1.12	0.18	5.94
32-099	1"	3.00	1.44	1.02	0.23	9.94

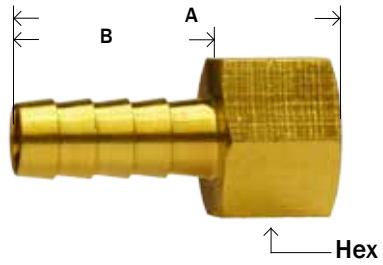
* Add SS to the end of the part number for Stainless.

** See hose splicers on page 27 for Stainless.

• See future program for many more sizes

MSB 122HBL HM 129 178 73 108

RIGID FEMALE ADAPTER



Part #	Hose I.D. x Female NPTF	A	B	Hex	Approx. Wt. Lbs.	List Price
32-050	1/8” x 1/8”	0.96	0.46	0.50	0.02	1.69
32-317	1/8” x 1/4”	1.15	0.46	0.62	0.04	5.14
32-051	3/16” x 1/8”	1.10	0.68	0.50	0.02	1.46
32-062	3/16” x 1/4”	1.44	0.75	0.62	0.04	5.85
32-052	1/4” x 1/8”	1.35	0.93	0.50	0.02	1.87
32-053	1/4” x 1/4”	1.60	0.97	0.62	0.06	1.88
32-054	1/4” x 3/8”	1.65	1.03	0.75	0.04	2.66
32-441	1/4" x 1/2"	1.66	0.97	0.93	0.08	8.17
32-055	5/16” x 1/8”	1.47	0.97	0.56	0.04	2.93
32-056	5/16” x 1/4”	1.66	0.97	0.62	0.04	2.55
32-318	5/16” x 3/8”	1.66	0.97	0.75	0.06	5.75
32-320	5/16” x 1/2”	1.67	0.96	0.93	0.08	6.50
32-057	3/8” x 1/8”	1.47	0.97	0.56	0.04	2.59
32-058	3/8” x 1/4”	1.61	0.97	0.62	0.06	2.21
32-059	3/8” x 3/8”	1.63	1.00	0.81	0.08	2.42
32-063	3/8” x 1/2”	1.72	0.94	0.93	0.12	4.35
32-442	3/8" x 3/4"	1.97	0.97	1.18	0.20	14.65
32-064	1/2” x 1/4”	1.66	0.96	0.62	0.08	2.98
32-060	1/2” x 3/8”	1.66	0.97	0.75	0.08	5.51
32-061	1/2” x 1/2”	1.76	0.96	0.93	0.12	4.39
32-443	1/2" x 3/4"	1.97	0.97	1.18	0.26	14.91
32-444	5/8" x 3/8"	1.66	0.97	0.75	0.08	6.53
32-445	5/8" x 1/2"	1.66	0.97	0.93	0.10	8.27
32-446	5/8" x 3/4"	1.97	0.97	1.18	0.21	14.80
32-447	3/4" x 1/2"	1.88	1.19	0.93	0.13	9.25
32-065	3/4” x 3/4”	2.19	1.21	1.18	0.22	7.86
32-049	1” x 3/4”	2.19	1.19	1.18	0.26	19.43
32-321	1" x 1"	2.32	1.19	1.44	0.35	25.29
32-448	1-1/4" x 1"	2.32	1.19	1.43	0.44	24.67

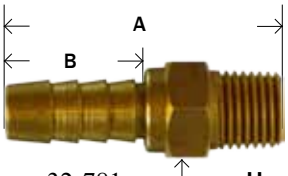
209A 128 29A 29F 126HB 126 FPB 105B-2 KF-RS 104 144

SWIVEL FEMALE ADAPTER NPTF

Part #	Hose I.D. x Female NPTF	A	B	Hex	Approx. Wt. Lbs.	List Price
32-470	1/4" x 1/4"	1.80	0.97	0.62	0.06	10.22
32-472	3/8" x 1/4"	1.80	0.97	0.62	0.06	10.50
32-473	3/8" x 3/8"	1.82	0.97	0.75	0.09	10.89
32-475	1/2" x 3/8"	1.82	0.97	0.75	0.09	13.04
32-476	1/2" x 1/2"	1.86	0.97	0.93	0.14	13.63

HIGH VOLUME MALE SWIVEL

- 300 PSI
- Nitrile Buna (NBR) O-Ring



32-781

NEW

28-415

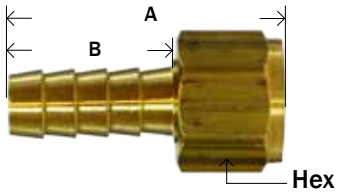
Part #	Hose I.D. x Male NPTF	A	B	Hex	Approx. Wt. Lbs.	List Price
32-781	3/8” x 1/4”	1.83	0.87	0.62	0.07	17.80
28-415	1/4" x 1/4"	1.30	0.94	0.81	0.14	35.18

4065

SWIVEL FEMALE ADAPTER - With Gasket

• NPSM Thread

National Pipe Straight Gasket Seal Swivel

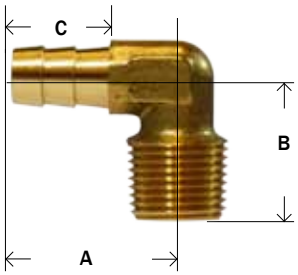


• Not recommend for water due to fiber gasket - for air service only.

Part #	Hose I.D. x Female NPSM	A	B	Hex	Approx. Wt. Lbs.	List Price
32-131	1/8" x 1/8"	0.90	0.46	0.50	0.02	7.98
32-132	3/16" x 1/8"	1.19	0.75	0.50	0.03	7.74
32-133	3/16" x 1/4"	1.28	0.75	0.62	0.04	8.56
32-120	1/4” x 1/8”	1.41	0.97	0.50	0.02	9.55
32-121	1/4” x 1/4”	1.50	0.97	0.62	0.02	3.15
32-129	1/4” x 3/8”	1.63	0.97	0.75	0.04	9.46
32-130	5/16” x 1/4”	1.50	0.97	0.62	0.04	11.89
32-122	3/8” x 1/4”	1.54	1.00	0.62	0.06	5.20
32-123	3/8” x 3/8”	1.60	0.97	0.75	0.06	9.77
32-354	3/8” x 1/2”	1.66	0.97	0.93	0.10	11.30
32-124	1/2” x 3/8”	1.60	0.97	0.75	0.08	11.84
32-125	1/2” x 1/2”	1.66	0.97	0.93	0.12	8.48
32-117	1/2” x 3/4”	1.82	1.19	1.18	0.16	12.12
32-118	5/8” x 3/4”	1.82	1.19	1.18	0.18	13.00
32-119	3/4” x 3/4”	1.82	1.19	1.18	0.14	8.46

130 126 29FSG KF-RN NPSM Gasket Seat

FORGED HOSE BARB 90° ELBOW



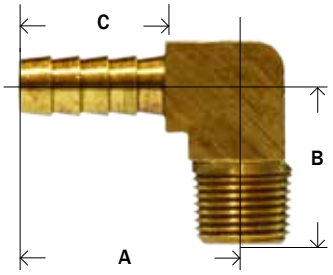
32-330
**Square Barstock Body

Part #	Hose I.D. x Male NPTF	A	B	C	Body Size	Approx. Wt. Lbs.	List Price
32-308	3/16” x 1/8”	0.95	0.70	0.66	0.37	0.02	2.94
32-391	3/16” x 1/4”	1.00	0.84	0.63	0.46	0.10	3.77
32-038 *	1/4” x 1/8”	1.01	0.81	0.71	0.47	0.06	2.52
32-039 *	1/4” x 1/4”	1.01	0.87	0.63	0.47	0.06	3.49
32-309 **	1/4” x 3/8”	1.08	0.97	0.73	0.69	0.12	4.47
32-036	5/16” x 1/8”	1.01	0.81	0.63	0.47	0.04	3.08
32-040	5/16” x 1/4”	1.01	0.87	0.63	0.47	0.06	4.06
32-310	5/16” x 3/8”	1.06	0.94	0.63	0.50	0.06	6.62
32-046 *	3/8” x 1/8”	1.01	0.81	0.63	0.47	0.06	2.74
32-041 *	3/8” x 1/4”	1.02	0.88	0.65	0.47	0.06	3.49
32-042 *	3/8” x 3/8”	1.09	0.93	0.68	0.50	0.08	4.20
32-047 *	3/8” x 1/2”	1.11	1.09	0.63	0.59	0.10	4.50
32-048	1/2” x 1/4”	1.06	1.00	0.68	0.59	0.10	4.29
32-043 *	1/2” x 3/8”	1.06	1.09	0.69	0.59	0.10	5.20
32-311 *	1/2” x 1/2”	1.31	1.19	0.87	0.56	0.12	6.47
32-044	5/8” x 3/8”	1.12	1.06	0.61	0.56	0.12	7.03
32-045	5/8” x 1/2”	1.12	1.12	0.61	0.63	0.14	6.39
32-312	5/8” x 3/4”	1.46	1.26	0.93	1.06	0.32	11.45
32-313	3/4” x 1/2”	1.31	1.28	0.87	0.85	0.22	8.75
32-314 *	3/4” x 3/4”	1.46	1.26	0.91	1.06	0.32	14.03
32-330 **	3/4” x 1”	1.57	1.64	0.90	1.34	0.64	27.06
32-315	1” x 3/4”	1.60	1.40	0.95	1.06	0.32	12.90
32-319	1" x 1"	1.69	1.64	0.98	1.30	0.43	52.77

129 HBE1 KF-PS90 HE-1 29E 146

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

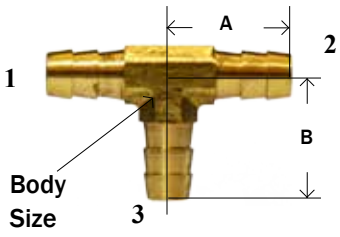
BARSTOCK HOSE BARB 90° ELBOW



Part #	Hose I.D. x Male NPTF	A	B	C	Body Size	Approx. Wt. Lbs.	List Price
32-038B	1/4" X 1/8"	1.00	0.75	0.75	0.50	0.02	5.52
32-039B	1/4" X 1/4"	1.02	0.91	0.74	0.56	0.04	6.12
32-041B	3/8" X 1/4"	1.32	0.89	0.97	0.58	0.08	8.75
32-042B	3/8" X 3/8"	1.50	1.06	0.97	0.75	0.14	14.91
32-043B	1/2" X 3/8"	1.53	1.07	0.97	0.72	0.16	13.99

129HB

HOSE BARB TEES

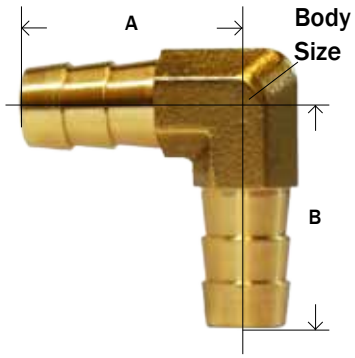


32-128

Part #	Hose Barb Size (1 & 2) x 3	A	B	Body Size	Approx. Wt. Lbs.	List Price
32-367 *	1/8"	0.84	0.83	0.25	0.02	3.99
32-368	3/16"	1.02	1.02	0.37	0.03	3.73
32-365 **	1/4"	1.00	1.00	0.44	0.06	3.37
32-350 *	(1/4") x 1/8"	0.94	0.94	0.44	0.04	8.09
32-366	5/16"	1.00	1.00	0.44	0.06	4.19
32-126 **	3/8"	1.01	1.01	0.43	0.06	4.22
32-400 *	1/2"	1.02	1.00	0.43	0.08	5.13
32-352 *	(1/2") x 3/8"	1.26	1.26	0.43	0.10	13.81
32-361	5/8"	1.26	1.26	0.75	0.16	19.55
32-363	3/4"	1.26	1.26	0.88	0.18	26.91
32-353	(3/4") x 1/2"	1.41	1.41	0.88	0.23	28.32
32-128 *	3/8"HB x 1/4" MIP	1.00	0.94	0.43	0.06	11.95

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

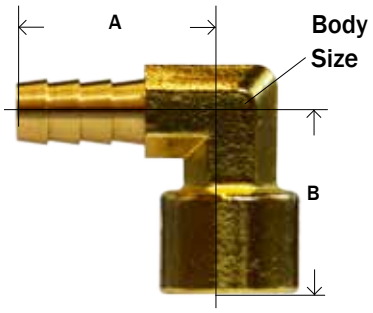
90° HOSE BARB ELBOW



Part #	Hose I.D. x Hose I.D.	A	B	Body Size	Approx. Wt. Lbs.	List Price
32-429	1/8" x 1/8"	0.55	0.55	0.37	0.03	7.02
32-433	3/16" x 3/16"	0.90	0.90	0.37	0.03	5.90
32-412	1/4" x 1/8"	1.02	1.02	0.44	0.04	3.67
32-413 *	1/4" x 1/4"	1.01	1.01	0.44	0.04	3.87
32-425	5/16" x 5/16"	1.15	1.15	0.48	0.05	9.03
32-414	3/8" x 1/8"	1.01	1.01	0.44	0.04	5.05
32-415	3/8" x 1/4"	1.00	1.00	0.44	0.04	4.20
32-416 *	3/8" x 3/8"	1.02	1.02	0.44	0.04	6.95
32-417	3/8" x 1/2"	1.24	1.10	0.50	0.06	6.37
32-418	1/2" x 1/4"	1.24	1.08	0.50	0.06	5.57
32-419	1/2" x 3/8"	1.22	1.09	0.50	0.06	9.69
32-420 *	1/2" x 1/2"	1.24	1.24	0.50	0.06	5.83
32-434	5/8" x 5/8"	1.20	1.20	0.75	0.16	20.27
32-435	3/4" x 1/2"	1.41	1.41	0.88	0.21	21.08
32-436	3/4" x 3/4"	1.41	1.41	0.88	0.21	25.22

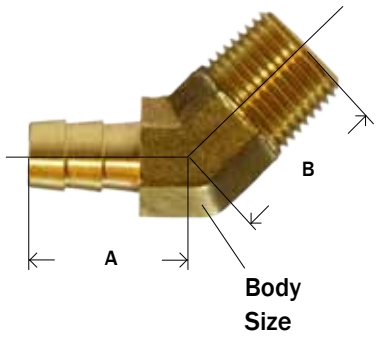
* Add SS to the end of the part number for Stainless.
See beverage fittings on page 28

90° FEMALE HOSE BARB ELBOW



Part #	Hose I.D. x Female NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
32-401	1/4” x 1/8”	1.01	0.82	0.47	0.06	4.88
32-402	1/4” x 1/4”	1.13	0.91	0.56	0.10	6.25
32-403	3/8” x 1/8”	1.01	0.82	0.47	0.06	5.77
32-404	3/8” x 1/4”	1.15	0.91	0.56	0.10	6.29
32-405	3/8” x 3/8”	1.15	1.11	0.68	0.14	14.02
32-406	3/8” x 1/2”	1.26	1.39	0.75	0.20	12.43
32-407	1/2” x 1/4”	1.26	0.91	0.56	0.10	7.37
32-410	1/2” x 3/8”	1.24	1.11	0.68	0.14	10.15
32-411	1/2” x 1/2”	1.37	1.39	0.75	0.20	11.55
32-409	3/4" x 3/4"	1.52	1.75	0.81	0.50	16.20

45° ELBOW



Part #	Hose I.D. x Male NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
32-110	1/4” x 1/8”	0.91	0.62	0.53	0.04	3.88
32-109*	1/4” x 1/4”	1.00	0.62	0.57	0.06	7.94
32-111	3/8” x 1/8”	0.83	0.66	0.53	0.04	5.48
32-112	3/8” x 1/4”	0.82	0.84	0.53	0.06	4.93
32-113	3/8” x 3/8”	0.93	0.87	0.59	0.08	6.31
32-346	1/2” x 1/4”	1.00	0.84	0.59	0.08	10.06
32-114	1/2” x 3/8”	1.00	0.88	0.59	0.08	8.26
32-116	1/2" x 1/2"	1.15	0.94	0.59	0.12	13.61
32-115	5/8” x 3/8”	0.97	0.88	0.59	0.10	8.80
32-345	3/4" x 1/2"	1.15	0.94	0.81	0.13	25.37

* Barstock

140 HE145 139HB KF-PS45 13945

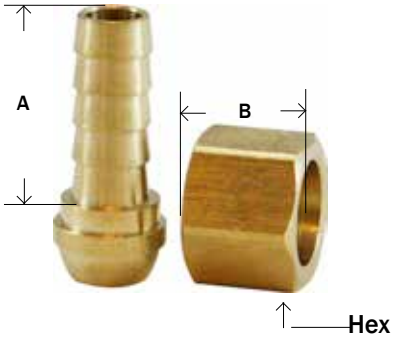
CROSSES

Part #	Hose ID	List Price
32-608	1/4	3.68
32-609	5/16	4.27
32-610	3/8	5.47

HOSE WYES AVAILABLE WITH EXTENDED LEAD TIME.

BALL END SWIVEL

NPSM - Ball seat type

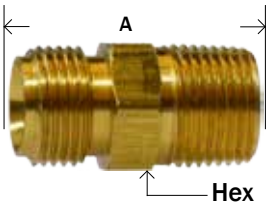


Part #	Hose I.D. x NPSM	A	B	Hex	Approx. Wt. Lbs.	List Price
32-066	1/8" x 1/8"	0.46	0.44	0.50	0.03	5.64
32-067	3/16" x 1/8"	0.75	0.44	0.50	0.03	4.45
32-068	3/16" x 1/4"	0.75	0.52	0.62	0.04	3.04
32-069	1/4" x 1/8"	0.97	0.44	0.50	0.04	2.80
32-070	1/4" x 1/4"	0.97	0.53	0.62	0.06	2.90
32-078	1/4" x 3/8"	0.97	0.63	0.75	0.06	6.32
32-071	5/16" x 1/4"	0.97	0.52	0.62	0.05	3.90
32-389	5/16" x 3/8"	0.97	0.63	0.75	0.07	8.94
32-072	3/8" x 1/4"	0.97	0.53	0.62	0.06	2.62
32-073	3/8" x 3/8"	0.97	0.59	0.75	0.08	3.14
32-074	3/8" x 1/2"	0.97	0.69	0.94	0.14	9.38
32-075	1/2" x 3/8"	0.97	0.59	0.75	0.08	3.18
32-076	1/2" x 1/2"	0.97	0.69	0.94	0.10	4.19
32-077	3/4" x 3/4"	0.97	0.70	1.12	0.14	7.30

128HBLSV 29FS 209AS 124 131

BALLSEAT MALE ADAPTER

Beveled seat

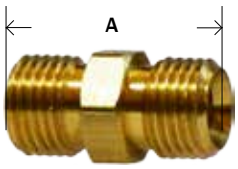


30° Seat

Part #	NPSM x Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
32-359	1/8" x 1/8"	0.94	0.43	0.03	4.78
32-034	1/4" x 1/8"	1.06	0.56	0.04	3.90
32-030	1/4" x 1/4"	1.25	0.56	0.06	3.69
32-362	3/8" x 1/4"	1.28	0.68	0.08	6.12
32-031	3/8" x 3/8"	1.30	0.68	0.08	5.15
32-392	3/8" x 1/2"	1.47	0.88	0.13	11.68
32-364	1/2" x 3/8"	1.35	0.87	0.10	8.87
32-032	1/2" x 1/2"	1.53	0.87	0.14	6.87
32-033	3/4" x 3/4"	1.53	1.06	0.20	10.45

172 134 127HB 122AS

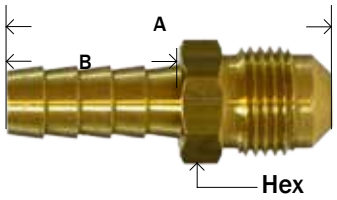
BALLSEAT UNION



30° Seat

Part #	NPSM x NPSM	A	Hex	Approx. Wt. Lbs.	List Price
32-460	1/8"	0.79	0.43	0.02	4.45
32-461	1/4"	1.09	0.56	0.04	5.30
32-462	3/8"	1.19	0.68	0.07	8.65
32-463	1/2"	1.31	0.87	0.10	10.15

45° FLARE ADAPTER



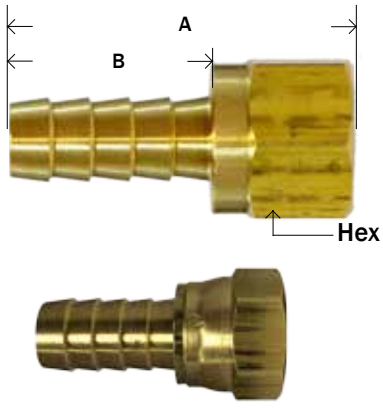
Part #	Hose I.D. x 45° Flare	Thread	A	B	Hex	Approx. Wt. Lbs.	List Price
32-322	3/16" x 1/4"	7/16-20	1.5	0.75	0.43	0.03	6.46
32-081 *	1/4" x 1/4"	7/16-20	1.72	0.97	0.43	0.03	3.62
32-082 *	1/4" x 3/8"	5/8-18	1.82	0.97	0.62	0.07	4.84
32-083	5/16" x 5/16"	1/2-20	1.75	0.97	0.50	0.08	6.24
32-084 *	3/8" x 3/8"	5/8-18	1.82	0.97	0.62	0.08	5.24
32-085	3/8" x 1/2"	3/4-16	1.97	0.97	0.75	0.10	8.44
32-086	1/2" x 1/2"	3/4-16	1.97	0.97	0.75	0.10	7.22

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

142 201BF KF-MS KDS

Every man is the maker of his own fortune. - *Appius Claudius Caecus*

DUAL 45°/ 37° FLARE SWIVEL



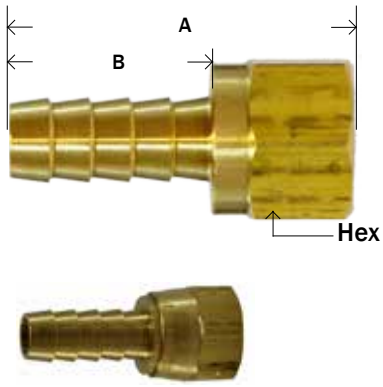
CRIMP STYLE

Part #	Hose ID x Dual Seat	Thread	A	B	Hex	Approx. Wt. Lbs.	List Price
32-107	3/16” x 1/4”	7/16-20	1.34	0.75	0.56	0.04	3.53
32-107C**	3/16 X 1/4	7/16-20	1.42	0.78	0.56	0.04	3.79
32-337	1/4” x 1/4”	7/16-20	1.56	0.97	0.56	0.04	2.73
32-337C**	1/4" X 1/4"	7/16-20	1.60	0.97	0.56	0.04	2.98
32-102	1/4” x 5/16”	1/2-20	1.61	0.97	0.62	0.06	3.20
32-339	5/16” x 5/16”	1/2-20	1.60	0.97	0.62	0.06	3.97
32-340	3/8” x 1/2”	3/4-16	1.68	0.97	0.87	0.10	5.52
32-341	1/2” x 1/2”	3/4-16	1.68	0.97	0.87	0.10	4.93
32-341C**	1/2" X 1/2"	3/4-16	1.75	0.97	0.87	0.09	5.97
32-342	1/2” x 5/8”	7/8-14	1.76	0.97	1.00	0.12	7.07
32-394**	5/8" x 5/8"	7/8-14	1.83	0.97	1.00	0.14	7.57

** Swivel crimp style

KDS

FEMALE 45° FLARE SWIVEL



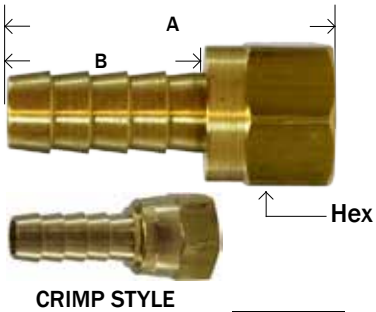
CRIMP STYLE

Part #	Hose I.D. x Female 45° Flare	UNF Thread	A	B	Hex	Approx. Wt. Lbs.	List Price
32-326	3/16” x 3/16”	3/8-24	1.19	0.75	0.43	0.04	7.41
30-295**	3/16" x 3/8"	5/8-18	1.82	0.90	0.75	0.04	4.26
32-101	1/4” x 1/4”	7/16-20	1.57	0.97	0.56	0.04	2.27
32-103	1/4” x 3/8”	5/8-18	1.64	0.97	0.75	0.08	2.73
32-104	5/16” x 5/16”	1/2-20	1.61	0.97	0.62	0.05	5.58
32-327	5/16” x 3/8”	5/8-18	1.67	0.97	0.75	0.08	3.98
32-105	3/8” x 3/8”	5/8-18	1.64	0.97	0.75	0.08	3.64
32-105C**	3/8" x 3/8"	5/8-18	1.71	0.97	0.75	0.07	4.55
32-106	3/8” x 1/2”	3/4-16	1.81	0.97	0.87	0.10	8.85
32-100	1/2” x 1/2”	3/4-16	1.68	0.97	0.87	0.12	4.59
32-328	3/4" x 3/4"	1-1/16-14	2.00	0.97	1.25	0.20	18.90

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.	List Price
32-334	1/4” x 3/8”	9/16-18	1.60	0.97	0.68	0.06	4.14
32-335	5/16” x 3/8”	9/16-18	1.60	0.97	0.68	0.06	4.28
32-336	3/8” x 3/8”	9/16-18	1.60	0.97	0.68	0.10	3.76
32-336C**	3/8" X 3/8"	9/16-18	1.66	0.97	0.68	0.06	3.80
32-338*	3/4" x 3/4"	1-1/16-12	2.00	0.97	1.25	0.20	19.56
32-338SS	3/4" x 3/4"	1-1/16-12	2.00	0.97	1.25	0.24	23.94
32-338C	3/4" x 3/4"	1-1/16-12	2.13	1.19	1.25	0.20	12.29
32-397**	1" x 1"	1-5/16-12	2.31	1.19	1.50	0.33	18.14

KJS

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

** Swivel crimp style

The belief that youth is the happiest time of life is founded on a fallacy. The happiest person is the person who thinks the most interesting thoughts, and we grow happier as we grow older.

- William Lyon Phelps

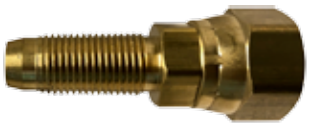
REUSABLE MALE FITTINGS

NEW

Part #	Hose ID	Hose OD	Male NPTF	List Price
32-727	1/4"	1/2"	1/4"	4.83
32-728	1/4"	9/16"	1/4"	5.89
32-726	1/4"	5/8"	1/4"	5.89
32-742	3/8"	5/8"	1/4"	6.38
32-744	3/8"	11/16"	1/4"	7.33
32-725	3/8"	3/4"	1/4"	6.42
32-747	3/8"	5/8"	3/8"	7.44
32-750	3/8"	11/16"	3/8"	8.38
32-746	1/2"	7/8"	1/2"	12.66

REUSABLE FEMALE SWIVEL STEMS

NEW



Part #	Hose ID	Female NPSM	List Price
32-770	1/4"	1/4"-18	4.17
32-771	3/8"	3/8"-18	5.89

REUSABLE FEMALE SWIVELS

NEW

Part #	Hose ID	Hose OD	Female NPSM	List Price
32-772	1/4"	1/2"	1/4"	5.86
32-773	3/8"	5/8"	3/8"	8.29
32-774	3/8"	11/16"	3/8"	8.57
32-775	1/2"	7/8"	3/8"	14.00

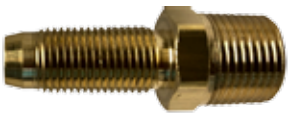
REUSABLE FERRULES

NEW

Part #	Hose ID	Hose OD	List Price
32-749	1/4"	1/2"	1.99
32-751	1/4"	9/16"	2.95
32-752	1/4"	5/8"	2.95
32-753	3/8"	5/8"	2.95
32-754	3/8"	11/16"	3.81
32-755	3/8"	3/4"	2.99
32-756	1/2"	7/8"	5.77

REUSABLE MALE STEMS

NEW



Part #	Hose ID	Male NPT Thread	List Price
32-758	1/4"	1/4"	2.40
32-759	3/8"	1/4"	2.85
32-760	3/8"	3/8"	3.81
32-761	1/2"	1/2"	5.74

I am more and more convinced that our happiness or unhappiness depends far more on the way we meet the events of life than on the nature of those events themselves.

—Wilhelm Von Humboldt

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 #	List Price
38-800	3/16	1/8	1541	2.66
38-802	1/4	1/8	1537	2.09
32-377	1/4	1/4	1581	2.18
38-806	5/16	1/8	1551	2.80
38-808	5/16	1/4	1555	2.57
38-810	3/8	1/8	1565	4.02
32-381	3/8	1/4	1564	2.57
32-382	3/8	3/8	1566	4.70
32-383	1/2	3/8		3.97
32-384	1/2	1/2		6.26
32-385	5/8	1/2	1431	7.32
32-387	3/4	1/2	1430	6.66
32-388	3/4	3/4		10.05

68HB

BUBBLE BARB MALE ADAPTER

BUBBLE X MIP

NEW

Part #	Bubble x MIP	List Price
32176	3/8 x 3/8	4.49
32177	1/2 x 1/4	4.84
32178	1/2 x 3/8	10.60
32179	1/2 x 1/2	7.44
32182	5/8 x 3/8	7.51
32183	5/8 x 1/2	8.10
32184	3/4 x 1/2	6.00
32180	3/4 x 3/4	12.20
32185	1 x 3/4	17.14
32181	1 x 1	22.00

INVERTED FLARE MALE CONNECTOR

HOSE BARB X INVERTED FLARE

Part #	Hose ID	Inv. Flare	Ind #	List Price
38-828	5/16	1/4	1598	4.01
38-830	5/16	5/16	1560	2.95
38-832	5/16	3/8	1561	6.33
38-834	3/8	5/16	1568	4.41
38-836	3/8	3/8	1570	7.59

269HB

90° MALE ELBOW

HOSE BARB X MALE PIPE

Part #	Hose ID	MIP	Ind #	List Price
38-860	1/4	1/8	1582	6.42
38-862	5/16	1/8	1556	10.80
38-864	5/16	1/4	1557	7.20
38-866	3/8	1/8	1572	11.40
38-868	3/8	1/4	1571	6.43

BUBBLE BARB

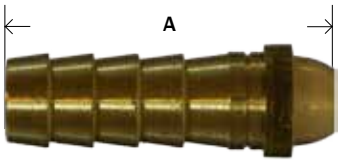
Part #	Hose ID	MIP	List Price
32-186	3/8	3/8	11.39
32-194	1/2	1/4	10.50
32-187	1/2	3/8	15.37
32-191	1/2	1/2	20.79
32-195	5/8	1/4	11.00
32-188	5/8	3/8	10.56
32-189	5/8	1/2	12.26
32-190	3/4	1/2	17.32
32-192	3/4	3/4	19.00

INVERTED FLARE MALE SWIVEL 90° ELBOW

HOSE BARB X TUBE O.D.

Part #	Hose ID	Inv. Flare	Ind #	List Price
38-873	5/16	5/16	1405	46.08
38-874	3/8	3/8	1407	15.42

STEM ONLY - WELDING HOSE CONNECTOR

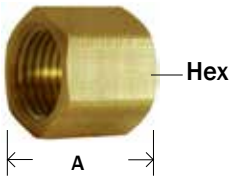


Part #	Hose I.D.	A	Approx. Wt. Lbs.	List Price
30-410	3/16”	1.43	0.02	4.25
30-411	1/4”	1.43	0.02	1.79
30-413	3/8”	1.43	0.04	2.31

Assemble with nuts below.

201RWA WRS WLS

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

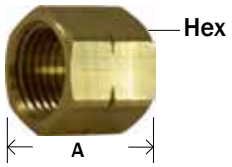


Part #	Size	A	Hex	Approx. Wt. Lbs.	List Price
30-420	R.H. Nut only	0.63	0.68	0.04	2.14

Assemble with stem above.

201RWA WRS KF-PE 152

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

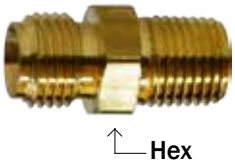


Part #	Size	A	Hex	Approx. Wt. Lbs.	List Price
30-421	L.H. Nut only	0.63	0.68	0.04	2.00

Assemble with stem above.

209LWA WLS 154 KF-RE

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

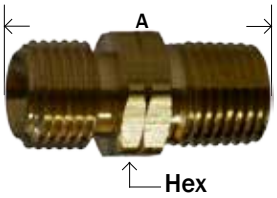


Part #	Size	A	Hex	Approx. Wt. Lbs.	List Price
30-401	1/4”-18	1.30	0.62	0.06	3.14
32-437	3/8"-18	1.30	0.68	0.09	12.34
32-438*	9/16"-18	1.25	0.68	0.07	5.94

* Right UNF thread

156

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



Part #	Size	A	Hex	Approx. Wt. Lbs.	List Price
30-406	1/4”-18	1.30	0.62	0.06	3.09
32-439	3/8"-18	1.30	0.68	0.09	13.54
32-440*	9/16"-18	1.25	0.68	0.07	6.28

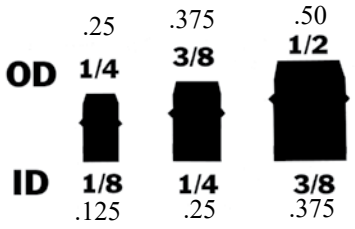
* Left UNF thread

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	List Price
21-003	1/4(1/8) x 1/4(1/8)	6.42
21-007	3/8(1/4) x 1/4(1/8)	7.99
21-009	3/8(1/4) x 3/8(1/4)	3.41

1062 962

MALE ADAPTER

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

Part #	Size	List Price
21-021	1/4(1/8) x 1/16	7.06
21-023	1/4(1/8) x 1/8	2.69
21-025	1/4(1/8) x 1/4	7.14
21-027	3/8(1/4) x 1/8	5.38

1068 968 688

FEMALE ADAPTER

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

Part #	Size	List Price
21-043	1/4(1/8) x 1/8	19.66

1066 966 26 668

BULKHEAD UNION

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

Part #	Size	List Price
21-082	1/4(1/8)	20.49
21-083	3/8(1/4)	39.29

1074

UNION ELBOW

1065
965

TUBE O.D (I.D.)

Part #	Size	List Price
21-095	1/4(1/8)	10.71
21-097	3/8(1/4)	11.29
21-099	1/2(3/8)	20.95

MALE 90° ELBOW

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

Part #	Size	List Price
21-111	1/4(1/8) x 1/16	20.40
21-113	1/4(1/8) x 1/8	3.83
21-115	1/4(1/8) x 1/4	10.45
21-117	3/8(1/4) x 1/8	9.16
21-119	3/8(1/4) x 1/4	5.21
21-109	1/2(3/8) x 1/4-28	1.46
21-121	1/2(3/8) x 3/8	34.13

1069 969 229

FEMALE 90° ELBOW

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

Part #	Size	List Price
21-133	1/4(1/8) x 1/8	14.61

1070 970 230

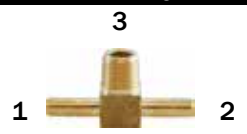
UNION TEE

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

Part #	Size	List Price
21-151	1/4(1/8)	9.68
21-153	3/8(1/4)X 3/8(1/4)X1/4(1/8)	10.80
21-155	3/8(1/4)	1.79
21-159	1/2(3/8)X1/2(3/8)X3/8(1/4)	69.39
21-161	1/2(3/8)	19.56

1064 964 224

MALE BRANCH TEE

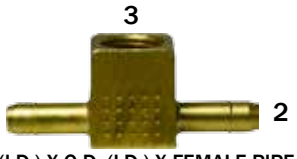


O.D. (I.D.) X O.D. (I.D.) X MALE PIPE

Part #	Size	List Price
21-193	1/4(1/8) x 1/4(1/8) x 1/8	5.89
21-195	3/8(1/4) x 3/8(1/4) x 1/8	12.69
21-197	3/8(1/4) x 3/8(1/4) x 1/4	15.88

1072 972 232

FEMALE BRANCH TEE



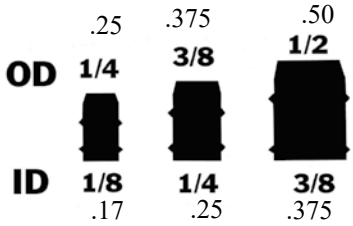
O.D. (I.D.) X O.D. (I.D.) X FEMALE PIPE

Part #	Size	List Price
21-207	1/4(1/8) x 1/4(1/8) x 1/8	14.98

1077 978

TWO BARB FITTINGS

More Sizes Available - Please Ask!



MALE ADAPTER PIPE

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

Part #	Size	List Price
32-150	1/4(1/8) x 1/8	4.41
32-151	1/4(1/8) x 1/4	9.21
32-153	3/8(1/4) x 1/4	8.48

28

UNION TEE

Part #	Tube O.D. (I.D.)	List Price
32-159	1/4(1/8 ID)	7.06
32-160	3/8(1/4 ID)	12.79

90° ELBOW

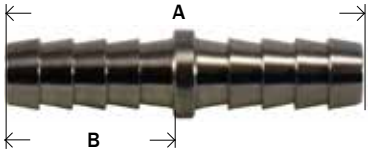
Part #	Tube O.D. (I.D.)	List Price
32-170	1/4(1/8 ID)	7.68
32-171	3/8(1/4 ID)	14.22

225

316 STAINLESS STEEL MACHINED RIGID MALE ADAPTER

Part #	Hose I.D. x NPT	List Price
32-001SS	1/8" x 1/8"	6.86
32-002SS	3/16" x 1/8"	7.39
32-003SS	3/16" x 1/4"	9.83
32-004SS	1/4" x 1/8"	8.91
32-005SS	1/4" x 1/4"	9.90
32-006SS	1/4" x 3/8"	18.46
32-008SS	5/16" x 1/8"	8.00
32-009SS	5/16" x 1/4"	10.89
32-010SS	5/16" x 3/8"	15.15
32-011SS	3/8" x 1/8"	8.92
32-012SS	3/8" x 1/4"	11.02
32-013SS	3/8" x 3/8"	14.06
32-014SS	3/8" x 1/2"	23.52
32-015SS	1/2" x 1/4"	12.21
32-016SS	1/2" x 3/8"	19.07
32-017SS	1/2" x 1/2"	18.47
32-018SS	1/2" x 3/4"	25.08
32-019SS	5/8" x 3/8"	13.68
32-020SS	5/8" x 1/2"	22.11
32-021SS	5/8" x 3/4"	29.04
32-022SS	3/4" x 1/2"	19.56
32-023SS	3/4" x 3/4"	27.90
32-024SS	1" x 3/4"	28.12

316 STAINLESS STEEL SPLICER



Part #	Hose I.D. x Hose I.D.	A	B	List Price
32-093SS	1/4"	2.03	0.97	5.13
32-095SS	3/8"	2.06	0.97	6.49
32-096SS	1/2"	2.06	0.97	10.23
32-098SS	3/4"	2.50	1.19	15.13

316 STAINLESS STEEL BARB ELBOW

Part #	Hose I.D. x NPT	List Price
32-038SS	1/4 x 1/8	14.92
32-039SS	1/4 x 1/4	17.07
32-041SS	3/8 x 1/4	16.77
32-042SS	3/8 x 3/8	16.77
32-043SS	1/2" x 3/8"	28.85
32-311SS	1/2 x 1/2	19.15
32-314SS	3/4" x 3/4"	80.72

304 STAINLESS STEEL HOSE NIPPLES

• Cast

Part #	Hose I.D. x Male Pipe	List Price
73-951	1/4"	7.08
73-952	3/8"	10.99
73-953	1/2"	12.22
73-954	3/4"	14.55
73-955	1"	17.70
73-956	1-1/4"	27.73
73-957	1-1/2"	34.75
73-958	2"	44.69
73-959	2-1/2"	104.00
73-960	3"	119.24

304 STAINLESS STEEL REDUCING HOSE NIPPLES

• Cast

Part #	Hose I.D. x Male Pipe	List Price
73-970	1/4" X 1/8"	7.64
73-971	3/8" X 1/4"	8.89
73-972	1/2" X 3/8"	12.23
73-973	1/2" X 1/4"	12.69
73-974	3/4" X 1/2"	15.69
73-975	1" X 3/4"	18.65
73-976	1" X 1/2"	29.90
73-977	1-1/4" X 1"	28.93
73-979	1-1/2" X 1-1/4"	46.69
73-980	1-1/2" X 1"	39.58
73-981	2" X 1-1/2"	56.00
73-982	2" X 1-1/4"	44.78

316 STAINLESS STEEL HOSE NIPPLES

• Cast

Part #	Hose I.D. x Male Pipe	List Price
973-951	1/4"	7.14
973-952	3/8"	10.36
973-953	1/2"	16.35
973-954	3/4"	20.96
973-955	1"	20.58
973-956	1-1/4"	31.09
973-957	1-1/2"	53.95
973-958	2"	57.54
973-959	2-1/2"	133.67
973-990	3"	164.70
973-991	4"	204.55

• See King nipples on page 307

BEVERAGE FITTINGS

NICKEL PLATED/ SS FITTINGS

SWIVEL NUT (NICKEL PLATED BRASS)

Part #	Size	List Price
34-500	1/4"	1.41
34-512	3/8"	2.31
34-513	1/2"	4.47

SWIVEL HOSE STEM

STAINLESS STEEL

Part #	Size	List Price
34-503	1/4"	2.47
34-515	3/8"	3.00
34-516	1/2"	5.33

1/4 stem for 1/4 nut
3/8 stem for 3/8 nut
1/2 stem for 1/2 nut

SWIVEL ELBOWS

90° SWIVEL ELBOW

STAINLESS STEEL

HOSE ID x FEMALE 45° FLARE

Part #	Size	List Price
34-525	1/4" x 1/4"	5.88
34-529	3/8" x 3/8"	11.64

BARB SPLICERS

HOSE SPLICER (STRAIGHT)

STAINLESS STEEL

ID HOSE

Part #	Size	List Price
32-091SS	1/8"	5.71
34-533	1/4"	3.84
32-095SS	5/16"	6.49
34-535	3/8"	4.67
34-543	3/8" x 1/4"	4.67

TEES

BARB HOSE TEES

ID HOSE

Part #	Size	List Price
34-562	1/4"	12.59
34-563	3/8"	14.38

LIGHT PATTERN TEES

NEW

Part #	Size	List Price
32-365SS	1/4"	4.16
32-126SS	3/8"	4.39

ADAPTERS

BARB TO MALE FLARE ADAPTER

HOSE ID x 45° FLARE

Part #	Size	List Price
34-579	1/4" x 1/4"	5.89
34-583	3/8" x 1/4"	8.17
34-584	1/4" x 3/8"	7.68
34-585	3/8" x 3/8"	8.37

BARB TO MALE PIPE ADAPTER

STAINLESS STEEL

HOSE ID x MALE NPT

Part #	Size	List Price
34-587	1/4" x 1/8"	7.28
34-588	1/4" x 1/4"	6.78
34-589	1/4" x 3/8"	9.34
34-590	3/8" x 1/8"	9.38
34-591	3/8" x 1/4"	7.42
34-592	3/8" x 3/8"	9.34
34-595	3/8" x 1/2"	14.76
34-597	1/2" x 3/4"	21.48

SWIVEL ELBOWS

BARB TO SWIVEL ELBOW

STAINLESS STEEL

HOSE ID x FEMALE 45° FLARE

Part #	Size	List Price
34-600	1/4" x 1/4"	12.47

ADAPTERS

NPT ELBOWS

STAINLESS STEEL

HOSE ID x MALE NPTF

Part #	Size	List Price
34-610	1/4" x 1/8"	14.41
34-611	3/8" x 1/4"	14.73
34-612	3/8" x 3/8"	16.05
34-613	1/2" x 1/2"	33.74

90° BARB SPLICER

STAINLESS STEEL

ID HOSE

Part #	Size	List Price
34-551	1/4"	4.60
34-552	3/8"	7.35

Today is Life- the only life you are sure of. Make the most of today. Get interested in something. Shake yourself awake. Develop a hobby. Let the winds of enthusiasm sweep through you. Live today with gusto.

- Dale Carnegie

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

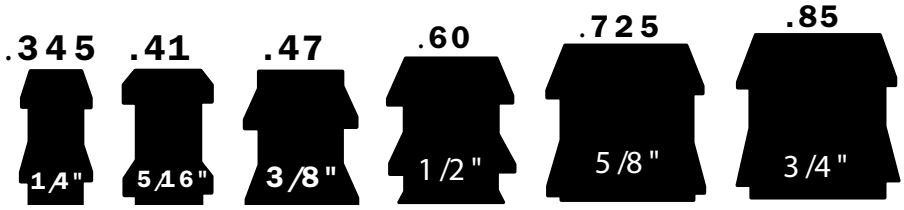
1- Split hose. Do not cut completely through hose. Sealing edge of barb could be damaged.

2- Bend hose and remove with a quick pull.

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

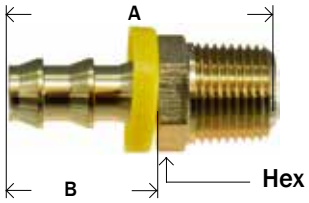
Stainless steel available at the end of this section.

Actual Profile of Push On Barbs



PUSH ON HOSE BARB — BRASS FITTINGS

MALE ADAPTER

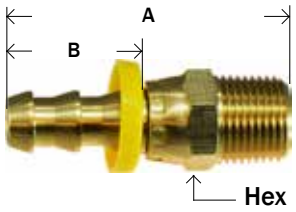


Part #	Hose I.D. x Male NPTF	A	B	Hex	Approx. Wt. Lbs.	List Price
30-200 *	1/4" x 1/8"	1.43	0.87	0.50	0.04	1.43
30-201 *	1/4" x 1/4"	1.66	0.87	0.56	0.06	2.03
30-211	1/4" x 3/8"	1.66	0.87	0.68	0.06	2.94
30-212	5/16" x 1/8"	1.42	0.77	0.43	0.04	3.14
30-213	5/16" x 1/4"	1.66	0.87	0.56	0.06	3.13
30-202	3/8" x 1/8"	1.53	0.97	0.50	0.04	2.18
30-203 *	3/8" x 1/4"	1.69	0.89	0.56	0.07	2.31
30-204 *	3/8" x 3/8"	1.76	0.97	0.68	0.08	2.81
30-205	3/8" x 1/2"	1.97	0.97	0.87	0.10	5.04
30-392	3/8" x 3/4"	1.97	0.92	1.06	0.16	13.28
30-216	1/2" x 1/4"	1.76	0.97	0.68	0.08	2.98
30-206 *	1/2" x 3/8"	1.76	0.97	0.68	0.09	2.93
30-207 *	1/2" x 1/2"	1.97	0.97	0.87	0.14	4.86
30-217	1/2" x 3/4"	1.97	0.97	1.06	0.16	7.10
30-219	5/8" x 3/8"	2.34	1.50	0.75	0.12	7.69
30-209	5/8" x 1/2"	2.45	1.45	0.87	0.16	6.71
30-214	5/8" x 3/4"	2.45	1.45	1.06	0.18	7.98
30-215 *	3/4" x 1/2"	2.45	1.45	0.87	0.21	8.24
30-210 *	3/4" x 3/4"	2.45	1.45	1.06	0.20	7.72
30-238	1" x 3/4"	2.93	1.50	1.25	0.43	28.65
30-239	1" x 1"	3.11	1.50	1.37	0.49	31.44

• See page 35 for Stainless

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

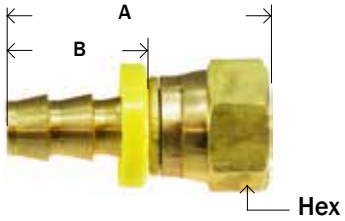
MALE SWIVEL



Part #	Hose I.D. x Male NPTF	A	B	Hex	Approx. Wt. Lbs.	List Price
30-422	1/4" x 1/8"	2.07	0.87	0.56	0.06	6.10
30-385	1/4" x 1/4"	2.02	0.87	0.56	0.06	5.54
30-423	3/8" x 1/8"	2.12	0.97	0.56	0.07	5.88
30-386	3/8" x 1/4"	2.12	0.97	0.56	0.08	6.39
30-387	3/8" x 3/8"	2.12	0.97	0.68	0.08	7.16
30-388	1/2" x 3/8"	2.12	0.97	0.68	0.10	6.70
30-389	1/2" x 1/2"	2.33	0.97	0.87	0.14	9.17
30-424	5/8" x 1/2	2.80	1.45	0.88	0.18	12.72
30-390	3/4" x 3/4"	2.80	1.45	1.06	0.24	11.13

921 HMS 285 31382

FEMALE GASKET SEAL SWIVEL - NPSM

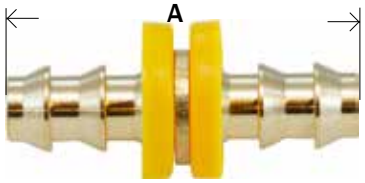


Part #	Hose I.D. x Gasket Swivel (NPSM)	A	B	Hex	Approx. Wt. Lbs.	List Price
30-359	1/4" x 1/8"	1.39	0.77	0.50	0.03	14.98
30-358	1/4" x 1/4"	1.47	0.82	0.68	0.06	6.69
30-360	3/8" x 1/4"	1.61	1.00	0.68	0.06	6.26
30-361	3/8" x 3/8"	1.77	0.97	0.81	0.08	9.99
30-362	3/8" x 1/2"	1.80	0.92	0.93	0.09	15.75
30-363	1/2" x 1/2"	1.90	1.02	0.93	0.11	12.64
30-366	3/4" x 3/4"	2.36	1.55	1.18	0.32	25.27

280

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

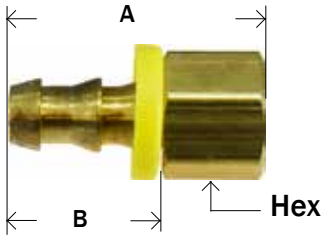
HOSE SPLICER



Part #	Hose I.D.	A	Approx. Wt. Lbs.	List Price
30-300	1/4"	1.87	0.04	1.78
30-305	5/16"	1.80	0.04	2.94
30-301	3/8"	2.00	0.06	2.21
30-302	1/2"	2.01	0.08	3.36
30-303	5/8"	3.03	0.14	7.71
30-304	3/4"	3.03	0.14	8.08
30-306	1"	3.21	0.28	22.28

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

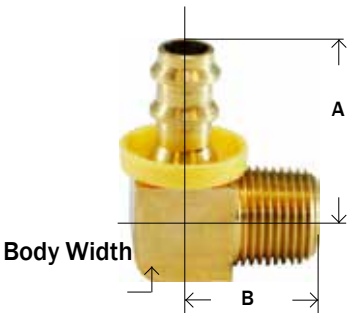
RIGID FEMALE ADAPTER



Part #	Hose I.D. x Female NPTF	A	B	Hex	Approx. Wt. Lbs.	List Price
30-220	1/4" x 1/8"	1.35	0.87	0.50	0.02	2.56
30-221	1/4" x 1/4"	1.51	0.87	0.62	0.06	2.20
30-384	1/4" x 3/8"	1.51	0.77	0.75	0.06	7.78
30-391	5/16" x 1/8"	1.32	0.77	0.50	0.03	6.70
30-222	5/16" x 1/4"	1.51	0.87	0.62	0.06	4.01
30-393	3/8" x 1/8"	1.47	0.92	0.56	0.06	7.93
30-224	3/8" x 1/4"	1.61	0.97	0.62	0.06	2.54
30-225	3/8" x 3/8"	1.63	0.97	0.75	0.06	3.62
30-394	3/8' x 1/2"	1.66	0.92	0.93	0.12	8.54
30-397	3/8" x 3/4"	1.97	0.97	1.18	0.20	20.90
30-223	1/2" x 1/4"	1.76	1.02	0.68	0.08	12.56
30-226	1/2" x 3/8"	1.63	0.97	0.75	0.08	4.12
30-227	1/2" x 1/2"	1.77	0.97	0.93	0.14	7.06
30-396	1/2" x 3/4"	2.07	1.02	1.18	0.20	17.62
30-398	5/8" x 3/8"	2.24	1.55	0.75	0.10	10.85
30-229	5/8" x 1/2"	2.24	1.48	0.93	0.11	9.09
30-399	3/4" x 1/2"	2.24	1.50	0.93	0.14	12.22
30-395	3/4" x 3/4"	2.55	1.50	1.18	0.24	16.68
30-400	1" x 3/4"	2.55	1.55	1.18	0.25	24.30
30-402	1" x 1"	2.68	1.55	1.43	0.37	30.49

30282 29FPO HLF 626 274 726 940

MALE ELBOW



Part #	Hose I.D. x Male NPTF	A	B	Body Width	Approx. Wt. Lbs.	List Price
30-372	1/4" x 1/8"	0.98	0.75	0.50	0.04	8.16
30-373	1/4" x 1/4"	1.04	0.95	0.56	0.06	7.86
30-374	5/16" x 1/8"	1.02	0.94	0.50	0.06	20.38
30-375	5/16" x 1/4"	1.09	0.94	0.56	0.08	10.53
30-370	3/8" x 1/8"	1.11	0.75	0.50	0.10	5.67
30-371	3/8" x 1/4"	1.13	0.90	0.56	0.10	5.28
30-376	3/8" x 3/8"	1.21	0.92	0.70	0.12	5.88
30-377	3/8" x 1/2"	1.30	1.19	0.87	0.22	20.69
30-382	1/2" x 3/8"	1.32	1.02	0.70	0.13	14.02
30-378	1/2" x 1/2"	1.50	1.19	0.87	0.22	12.77
30-379	5/8" x 1/2"	1.98	1.19	0.87	0.26	17.53
30-383	3/4" x 1/2"	2.15	1.24	0.87	0.25	35.35
30-381	3/4" x 3/4"	2.07	1.28	1.06	0.34	17.25

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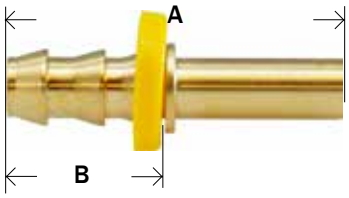
PUSH ON HOSE BARB — BRASS FITTINGS

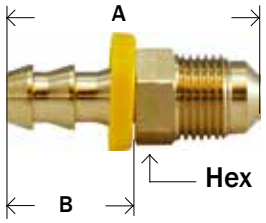
RIGID TUBE ADAPTER



Part #	Hose I.D. x O.D Tube	A	B	Approx. Wt. Lbs.	List Price
30-290	1/4" x 3/16"	1.68	0.77	0.04	7.46
30-291	1/4" x 1/4"	1.88	0.77	0.04	2.05
30-292	1/4" x 5/16"	1.88	0.77	0.04	7.61
30-293	5/16" x 5/16"	1.91	0.79	0.04	4.59
30-294	3/8" x 3/8"	2.03	0.92	0.06	3.55
30-426	3/8" x 1/2	1.81	0.97	0.04	5.15
30-297	1/2" x 1/2"	2.13	1.02	0.06	7.51
30-298	5/8" x 5/8"	2.61	1.50	0.10	11.75
30-299	3/4" x 3/4"	2.61	1.50	0.25	13.86

294 100B-X KA-RL 303 732 694

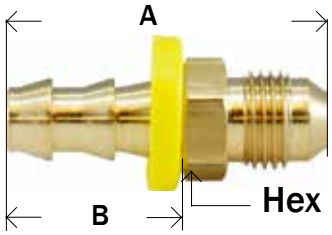
MALE SAE FLARE ADAPTER



Part #	Hose I.D. x 45° Male Flare	UNF Thread	A	B	Hex	Approx. Wt. Lbs.	List Price
30-240	1/4" x 1/4"	7/16-20	1.45	0.75	0.43	0.04	4.41
30-241	1/4" x 5/16"	1/2-20	1.59	0.84	0.50	0.04	5.20
30-249	5/16" x 5/16"	1/2-20	1.60	0.80	0.50	0.06	4.12
30-271	3/8" x 5/16"	1/2-20	1.64	0.86	0.50	0.08	3.96
30-243	3/8" x 3/8"	5/8-18	1.83	0.92	0.62	0.08	4.41
30-245	1/2" x 1/2"	3/4-16	1.98	1.02	0.875	0.10	10.86
30-246	5/8" x 5/8"	7/8-14	2.73	1.50	0.87	0.19	13.29
30-247	3/4" x 3/4"	1-1/16-14	2.98	1.50	1.06	0.32	20.87

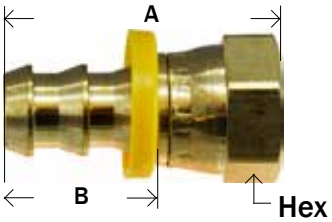
100B-3 KA-MS 727 945 682 302 282

37° MALE JIC FLARE ADAPTER



Part #	Hose I.D. x Male JIC	UNF Thread	A	B	Hex	Approx. Wt. Lbs.	List Price
32-900	1/4" x 1/4"	7/16-20	1.57	0.84	0.50	0.04	5.26
32-901	1/4" x 5/16"	1/2-20	1.60	0.83	0.56	0.04	6.18
32-906	1/4" x 3/8"	9/16-18	1.63	0.77	0.62	0.05	8.70
32-902	3/8" x 3/8"	9/16-18	1.78	0.97	0.62	0.06	8.27
32-903	1/2" x 1/2"	3/4-16	1.97	0.97	0.75	0.10	13.80
32-907	5/8" x 5/8"	7/8-14	2.62	1.50	0.93	0.19	15.00
32-905	3/4" x 3/4"	1-1/16-12	2.79	1.50	1.12	0.29	19.79

SAE/JIC DUAL 45°/37° FEMALE SWIVEL

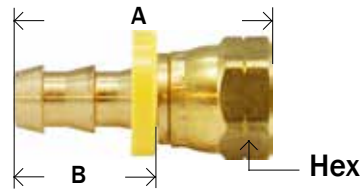


Part #	Hose I.D. x Dual Seat	UNF Thread	A	B	Hex	Approx. Wt. Lbs.	List Price
30-230 *	1/4" x 1/4"	7/16-20	1.53	0.87	0.56	0.06	2.44
30-231	1/4" x 5/16"	1/2-20	1.53	0.87	0.62	0.04	3.87
30-232	5/16" x 5/16"	1/2-20	1.56	0.87	0.62	0.04	4.02
30-427	3/8" x 5/16"	1/2-20	1.74	0.87	0.62	0.06	11.34
30-233	3/8" x 1/2"	3/4-16	1.79	0.97	0.87	0.10	4.99
30-234 *	1/2" x 1/2"	3/4-16	1.77	0.97	0.87	0.10	4.80
30-235	1/2" x 5/8"	7/8-14	1.84	0.97	1.00	0.12	7.55
30-236	5/8" x 1/2"	3/4-16	2.27	1.45	0.87	0.18	8.62
30-237	5/8" x 5/8"	7/8-14	2.33	1.45	1.00	0.14	8.55
30-428	3/4" x 5/8"	7/8-14	2.33	1.45	1.00	0.20	11.56

* See page 35 for stainless

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

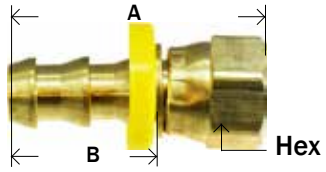
45° SAE FLARE FEMALE SWIVEL



Part #	Hose I.D. x 45° Female Flare	UNF Thread	A	B	Hex	Approx. Wt. Lbs.	List Price
30-250	1/4" x 1/4"	7/16-20	1.54	0.87	0.56	0.04	2.75
30-251	1/4" x 5/16"	1/2-20	1.57	0.87	0.62	0.04	4.35
30-253	1/4" x 3/8"	5/8-18	1.63	0.87	0.75	0.06	4.06
30-254	5/16" x 5/16"	1/2-20	1.58	0.87	0.68	0.06	17.80
30-260	5/16" x 3/8"	5/8-18	1.63	0.87	0.75	0.08	5.96
30-252	3/8" x 3/8"	5/8-18	1.73	0.97	0.75	0.10	3.96
30-257	3/8" x 1/2"	3/4-16	1.85	0.87	0.87	0.10	10.18
30-261	1/2" x 3/8"	5/8-18	1.92	1.05	0.75	0.10	8.08
30-255	1/2" x 1/2"	3/4-16	1.77	0.97	0.87	0.12	6.43
30-258	5/8" x 5/8"	7/8-14	2.35	1.45	1.00	0.14	11.92
30-259	3/4" x 3/4"	1-1/16-14	2.42	1.45	1.25	0.22	10.51

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

FEMALE 37° JIC FLARE SWIVEL

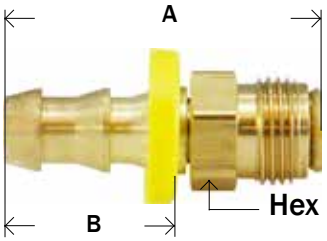


Part #	Hose I.D. x Female JIC	UNF Thread	A	B	Hex	Approx. Wt. Lbs.	List Price
30-265	1/4" x 1/4"	7/16-20	1.54	0.87	0.56	0.04	2.31
30-264	1/4" x 3/8"	9/16-18	1.57	0.87	0.68	0.06	4.48
30-270	5/16" x 3/8"	9/16-18	1.60	0.82	0.68	0.06	3.73
30-266 *	3/8" x 3/8"	9/16-18	1.70	0.97	0.68	0.08	3.64
30-267	1/2" x 1/2"	3/4-16	1.78	0.97	0.87	0.10	5.63
30-268	5/8" x 5/8"	7/8-14	2.33	1.45	1.00	0.14	7.32
30-269 *	3/4" x 3/4"	1-1/16-12	2.40	1.45	1.25	0.22	10.09
30-429	1" x 1"	1-5/16-12	2.60	1.45	1.50	0.39	27.59

* See page 35 for stainless

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

INVERTED FLARE MALE SWIVEL

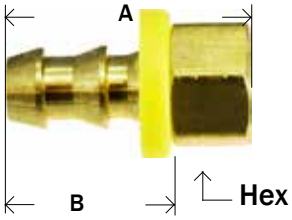


Part #	Hose I.D. x Male INV Flare	UNF Thread	A	B	Hex	Approx. Wt. Lbs.	List Price
30-275	1/4" x 3/16"	3/8-24	1.52	0.87	0.37	0.04	8.47
30-276	1/4" x 1/4"	7/16-24	1.56	0.87	0.43	0.04	4.11
30-277	1/4" x 5/16"	1/2-20	1.62	0.87	0.50	0.04	4.49
30-280	5/16" x 5/16"	1/2-20	1.62	0.87	0.50	0.06	7.44
30-283	5/16" x 3/8"	5/8-18	1.63	0.87	0.62	0.06	8.90
30-284	3/8" x 5/16"	1/2-20	1.72	0.97	0.50	0.06	6.63
30-279	3/8" x 3/8"	5/8-18	1.76	0.97	0.62	0.06	5.18
30-282	1/2" x 1/2"	3/4-18	1.84	0.97	0.75	0.10	10.20
30-286	5/8" x 5/8"	7/8-18	2.50	1.57	0.87	0.14	21.77

290 100B-B KA-MF 1MS 947

He who enjoys doing and enjoys what he has done is happy. – Johann Wolfgang Von Goethe

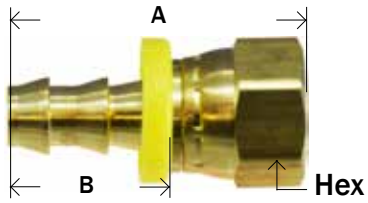
INVERTED FLARE FEMALE ADAPTER



Part #	Hose I.D. x Female INV Flare	A	B	Hex	Approx. Wt. Lbs.	List Price
30-310	1/4" x 3/16"	1.12	0.84	0.50	0.02	8.05
30-311	1/4" x 1/4"	1.14	0.84	0.56	0.02	5.45
30-312	1/4" x 5/16"	1.18	0.82	0.62	0.02	9.25
30-316	5/16" x 5/16"	1.25	0.81	0.62	0.04	7.26
30-313	3/8" x 5/16"	1.32	0.87	0.62	0.04	9.41
30-314	3/8" x 3/8"	1.35	0.95	0.75	0.06	5.70
30-315	1/2" x 1/2"	1.73	1.04	0.87	0.12	23.51

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

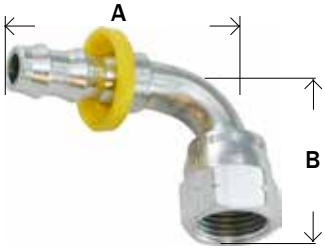
FEMALE BALLSEAT SWIVEL



Part #	Hose I.D. x Female NPSM	A	B	Hex	Approx. Wt. Lbs.	List Price
30-340	1/4" X 1/8"	1.39	0.85	0.50	0.06	11.29
30-341	1/4" X 1/4"	1.47	0.80	0.68	0.06	7.98
30-342	1/4" x 3/8"	1.40	0.77	0.68	0.09	8.44
30-343	3/8" X 1/4"	1.61	0.97	0.68	0.08	11.75
30-344	3/8" X 3/8"	1.75	0.95	0.81	0.10	10.86
30-430	3/8" x 1/2"	1.79	0.97	0.93	0.11	13.44
30-346	1/2" X 1/2"	1.88	1.09	0.93	0.12	16.13
30-345	1/2" x 3/4"	2.36	1.02	1.18	0.18	20.34
30-349	3/4" X 3/4"	2.36	1.55	1.18	0.22	22.83

628 278 29SPO 731 NPSM

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



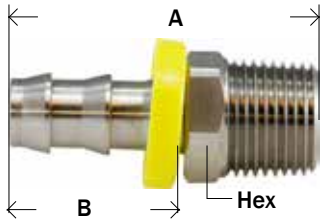
Part #	Hose I.D. x Female 37°/45°	UNF Thread	A	B	Approx. Wt. Lbs.	List Price
30-480	1/4"	7/16-20	1.55	0.83	.064	39.00
30-482	3/8"	9/16-18	1.85	0.91	.095	36.60
30-483*	3/8"	5/8-18	1.98	0.85	.095	52.68
30-484	1/2"	3/4-16	2.33	1.09	.171	43.22
30-486	3/4"	1-1/16-12	3.26	1.81	.281	115.97

* SAE

If you can hold up your head and admit that you were in the wrong, then a wrong deed can benefit you. For to admit a wrong will not only increase the respect of those about you, it will increase your own self-respect.

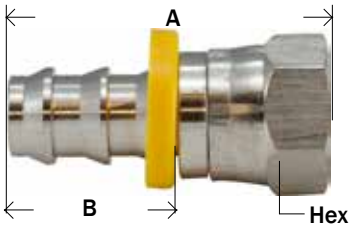
– Dale Carnegie

316 STAINLESS STEEL MALE ADAPTERS



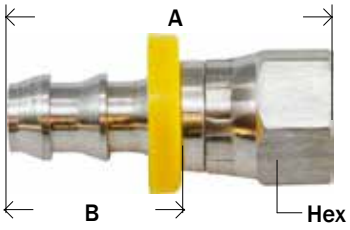
Part #	Hose I.D. x NPT	A	B	Hex	Approx. Wt. Lbs.	List Price
30-200SS	1/4" x 1/8"	1.42	0.77	0.44	0.027	9.99
30-201SS	1/4" x 1/4"	1.61	0.77	0.56	0.043	10.00
30-203SS	3/8" x 1/4"	1.76	0.92	0.56	0.053	11.20
30-204SS	3/8" x 3/8"	1.76	0.92	0.69	0.067	12.25
30-206SS	1/2" x 3/8"	1.86	1.02	0.69	0.071	12.41
30-207SS	1/2" x 1/2"	2.07	1.02	0.88	0.119	27.38
30-215SS	3/4" x 1/2"	2.55	1.50	0.88	0.20	31.30
30-210SS	3/4" x 3/4"	2.55	1.50	1.06	0.194	32.30

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



Part #	Hose I.D. x Female 45°/37°	A	B	Hex	Approx. Wt. Lbs.	List Price
30-230SS	1/4" x 1/4"	1.48	0.74	0.56	0.023	27.14
30-234SS	1/2" x 1/2"	1.93	1.03	0.88	0.04	50.50

316 STAINLESS STEEL FEMALE 37° JIC FLARE SWIVEL



Part #	Hose I.D. x Female 37°	A	B	Hex	Approx. Wt. Lbs.	List Price
30-266SS	3/8" x 3/8"	1.75	.92	0.68	0.065	35.90
30-269SS	3/4" x 3/4"	2.53	1.50	1.25	0.259	80.20

I've missed more than 9000 shots in my career. I've lost almost 300 games. 26 times, I've been trusted to take the game winning shot and missed. I've failed over and over and over again in my life. And that is why I succeed.

– Michael Jordan

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.

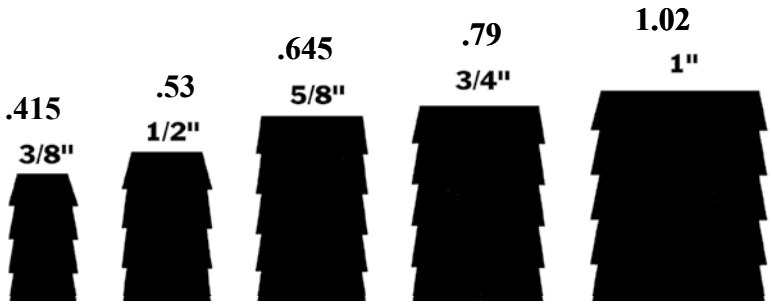
Male Garden Hose Profile

See Plastic section for Plastic Garden Hose Fittings

See page 158 for lead free Garden Hose

Washers included are #30150B black rubber washers.

Actual Profile of Garden Hose Barbs



SWIVEL - MGH X FGH

•WASHER INCLUDED

Internal Hex

Part #	MGH X FGH	A	Hex	Approx. Wt. Lbs.	List Price
30-000**	3/4" x 3/4"	1.03	0.50*	0.26	6.06

* 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.	List Price
30-011	3/4" x 3/4"	1.03	1.18 O.D.	0.24	5.24
30-012	No Swivel	1.08	1.19	0.24	9.52

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.	List Price
30-001	3/4" x 1/2"	1.20	1.00	0.11	5.79
30-006	3/4" x 3/4"	1.11	1.12	0.11	5.55

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

RIGID - FGH X FEMALE PIPE

•WASHER INCLUDED

30-017

Part #	FGH x Female NPTF	A	Hex	Approx. Wt. Lbs.	List Price
30-016	3/4" x 1/8"	1.02	1.18	0.08	13.60
30-017	3/4" x 1/4"	0.65	1.12	0.07	4.60
30-018	3/4" x 3/8"	1.19	1.18	0.11	4.93

95GH 501

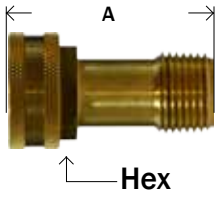
RIGID - FGH X FEMALE PIPE

Part #	FGH x Female NPTF	A	Hex	Approx. Wt. Lbs.	List Price
30-078	3/4” x 1/2”	1.06	1.18	0.10	4.43
30-083	3/4” x 3/4”	1.06	1.18	0.12	5.52

FS67 198 HU11 21507 501 99GH 5A H15PP

SWIVEL - FGH X MALE PIPE

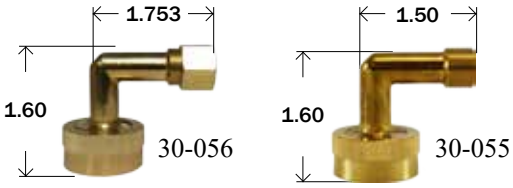
•WASHER INCLUDED



Part #	FGH x Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
30-047	3/4” x 1/4”	2.04	0.75	0.13	6.30
30-048	3/4” x 3/8”	2.06	0.75	0.14	5.36
30-049	3/4” x 1/2”	2.06	0.87	0.18	7.63

504 89GH W1 62H4 88GH W1

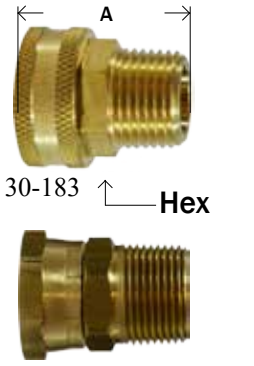
3/8" Comp 3/4" FGH DISHWASHER 90° ELBOW



Part #	3/4 Female Garden Hose Thread x 3/8 Compression	List Price
30-055	3/4" x 3/8" Body Only	9.68
30-056	3/4" x 3/8" w/ nut & sleeve	10.10

SWIVEL - FGH X MALE PIPE

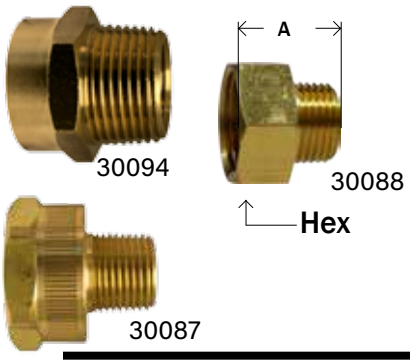
•WASHER INCLUDED



* Crimp style

Part #	FGH x Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
30-181*	3/4" x 1/4"	1.43	1.18	0.13	5.67
30-184*	3/4" x 3/8"	1.43	1.18	0.15	5.27
30-183	3/4” x 1/2”	1.32	0.81	0.11	7.63
30-182*	3/4" x 3/4"	1.43	1.18	0.14	15.35

RIGID - FGH X MALE PIPE



Part #	FGH x Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
30-087	3/4" x 3/8"	1.37	1.18	0.11	5.25
30-088	3/4” x 1/2”(1/2”SWT)**	1.06	1.18	0.09	6.77
30-093	3/4” x 3/4”	1.06	1.18	0.11	4.85
30-094	3/4” x 3/4”(1/2” FIP)	1.17	1.18	0.11	5.75
30-093L*	3/4” x 3/4”	1.22	1.18	0.14	14.59

* Long pattern

21505 503 83GH 20A HU21 199 H7

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

RIGID - MGH X FEMALE PIPE

30-068

Part #	MGH X Female NPTF	A	Hex	Approx. Wt. Lbs.	List Price
30-066	3/4" x 1/4"	1.10	1.06	0.09	5.69
30-067	3/4" x 3/8"	1.09	1.06	0.12	6.93
30-068	3/4" x 1/2"	0.81	1.06	0.10	3.57
30-073	3/4" x 3/4"	1.12	1.18	0.10	4.41

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.	List Price
30-053	3/4" x 3/8"	1.25	1.06	0.10	3.92
30-058*	3/4" x 1/2"	1.31	1.06	0.12	4.20
30-063**	3/4" x 3/4" x 1/2"	1.31	1.06	0.13	4.90
30-063BE***	3/4" x 3/4"	1.31	1.06	0.15	6.92
30-063S	3/4" x 3/4" Short	1.10	1.06	0.10	4.64
30-064	3/4" x 1"	1.88	1.37	0.35	12.52

No Tap

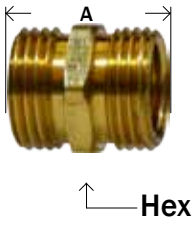
19R 196 H530 21501 508 HU22 514 71GH 19A

* (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.	List Price
30-098	3/4" x 3/4" (1/2" FIP)	1.22	1.06	0.13	4.88
30-099	3/4" x 3/4"	1.38	1.06		5.04
30-100*	1" x 3/4"	1.31	1.37	0.21	7.66

* 1-11-1/2

21500 509 75GH 23A H8 19R

GARDEN HOSE NUT

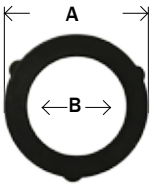
30-021

30-022

Part #	Size	A	Hex	Approx. Wt. Lbs.	List Price
30-021	Knurled	0.61	1.37 O.D.	0.08	3.24
30-022	Hex Nut	0.62	1.18	0.08	3.90

94GH GHN1 HNR 21514

GARDEN HOSE WASHERS



30-150

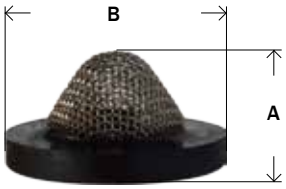
30-150R

Part #	Size	A	B	Thickness	Approx. Wt. Lbs.	List Price
30-150	black*	0.98	0.68	0.13	0.01	0.22
30-150R	red	1.00	0.68	0.13	0.01	0.19
30-150B	black rubber	1.00	0.68	0.13	0.01	0.28
30-151	1"	1.27	0.86	0.16	0.01	0.53

GHW 901GH

* plasticized rubber

GARDEN HOSE FILTER WASHER



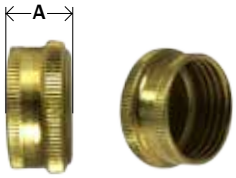
• 300 Series Stainless Steel Screen

Part #	Size	A	B	Approx. Wt. Lbs.	List Price
30-180	30 Mesh	0.52	1.00	0.02	1.03
30-180F	60 Mesh	0.52	1.00	0.02	1.12

LA662

GARDEN HOSE CAP

30-103



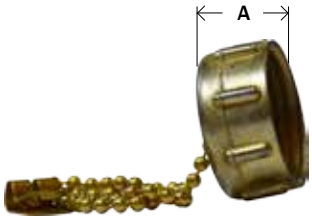
30-103B

Part #	Size	A	Approx. Wt. Lbs.	List Price
30-103	3/4" Die Cast	0.58	0.04	1.79
30-103B	3/4" Barstock	0.60	0.048	5.04

513 96GH GHN5 HC1 LA215 21518 200-W

• Garden hose washers sold seperately

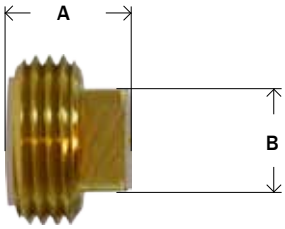
GARDEN HOSE CAP WITH CHAIN



Part #	Size	A	Approx. Wt. Lbs.	List Price
30-142	3/4" w/ 12" Chain	0.58	0.06	8.17

* Zinc die cast

GARDEN HOSE PLUG



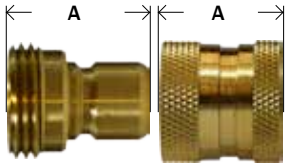
Part #	Size	A	B	Approx. Wt. Lbs.	List Price
30-026	3/4"	0.69	0.61	0.12	9.51

HOSE MENDERS - SOLID BARB X BARB

Part #	Hose I.D. x Hose I.D.	A	B	O.D.	Approx. Wt. Lbs.	List Price
32-096	1/2”	2.00	0.96	0.62	0.06	2.22
32-097	5/8”	2.05	0.96	0.75	0.08	3.00
32-098	3/4”	2.50	1.15	0.87	0.10	5.22
32-099	1"	3.00	1.44	1.02	0.23	9.94

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.	List Price
30-450	Complete	1.70	0.24	17.09
30-451	Female end	1.14	0.12	9.58
30-452	Male end	1.26	0.12	4.19
30-149	Recessed Washer	1.02	0.01	

LA73C

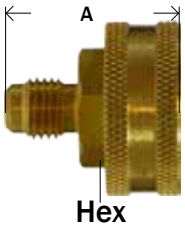
MALE FLARE X FGH RIGID

Part #	Male Flare x FGH	A	Hex	Approx. Wt. Lbs.	List Price
30-123	3/8” x 3/4”	1.31	1.18	0.10	8.65
30-128	1/2” x 3/4”	1.38	1.18	0.12	7.81
30-133	5/8” x 3/4”	1.53	1.18	0.14	12.91

190 46WH HFU21

MALE FLARE x FGH SWIVEL

•WASHER INCLUDED



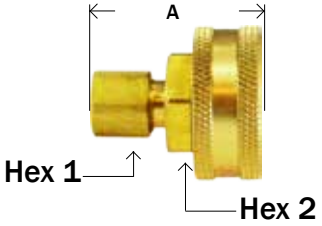
Part #	Male Flare x FGH	A	Hex	Approx. Wt. Lbs.	List Price
30-052	1/4” x 3/4”	1.24	0.75	0.10	5.48
30-138	3/8” x 3/4”	1.25	0.25*	0.12	23.43
30-139	1/2” x 3/4”	1.49	0.81	0.14	9.32

* Internal Hex

50GHSV 51GHSV W1 68H 191

COMPRESSION X FGH

•WASHER INCLUDED

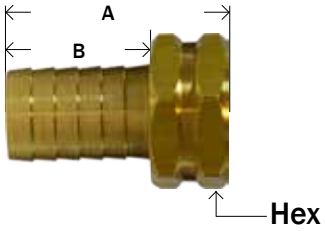


Part #	Compression x FGH	A	Hex 1	Hex 2	Approx. Wt. Lbs.	List Price
30-050	1/4” x 3/4”	1.02	0.50	0.75	0.09	8.63
30-051	3/8” x 3/4”	1.04	0.62	0.75	0.12	8.10

BARSTOCK BRASS GARDEN HOSE COUPLINGS

FEMALE SWIVEL ONLY

•WASHER INCLUDED



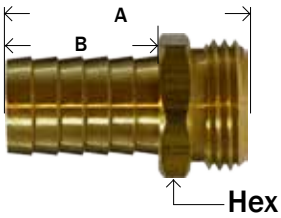
BRASS

Part #	Hose Barb x FGH	A	B	Hex	Approx. Wt. Lbs.	List Price
30-031	3/8” x 3/4"	1.82	1.19	1.18	0.11	4.87
30-032	1/2” x 3/4"	1.82	1.19	1.18	0.12	4.83
30-033	5/8” x 3/4"	1.82	1.19	1.18	0.13	5.16
30-034	3/4” x 3/4"	1.82	1.19	1.18	0.15	5.60
30-044	1" x 3/4"	2.10	1.19	1.18	0.18	8.01
30-035	1” x 1"	2.28	1.47	1.50	0.18	15.66

STAINLESS STEEL 316

30-032SS	1/2" x 3/4"	1.82	1.19	1.18	0.12	27.41
30-033SS	5/8" x 3/4"	1.82	1.19	1.18	0.13	27.41
30-034SS	3/4" x 3/4"	1.82	1.19	1.18	0.15	31.94

MALE END ONLY



BRASS

Part #	Hose Barb x MGH	A	B	Hex	Approx. Wt. Lbs.	List Price
30-039	3/8” x 3/4"	1.88	1.19	1.06	0.12	4.42
30-040	1/2” x 3/4"	1.88	1.19	1.06	0.12	3.97
30-041	5/8” x 3/4"	1.88	1.19	1.06	0.12	4.38
30-042	3/4” x 3/4"	1.88	1.19	1.06	0.13	4.29
30-045	1" x 3/4"	1.94	1.19	1.06	0.21	6.41
30-043	1” x 1"	2.34	1.47	1.37	0.26	15.00

STAINLESS STEEL 316

30-040SS	1/2" x 3/4"	1.88	1.19	1.06	0.12	22.91
30-041SS	5/8" x 3/4"	1.88	1.19	1.06	0.12	22.91
30-042SS	3/4" x 3/4"	1.88	1.19	1.06	0.13	26.36

GARDEN HOSE COUPLING

•WASHER INCLUDED

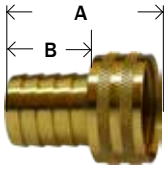
BRASS

Part #	Hose Barb	List Price
30-025	3/8”	9.19
30-027	1/2”	10.16
30-028	5/8”	10.76
30-029	3/4”	9.91
30-046	1"(3/4" threads)	30.06
30-030	1”	30.49

STAINLESS STEEL 316

30-027SS	1/2"	55.34
30-028SS	5/8"	55.34
30-029SS	3/4"	59.21

FEMALE SWIVEL ONLY - Short Shank Knurled Nut

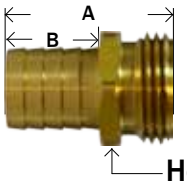


Part #	Hose Barb x FGH	A	B	Approx. Wt. Lbs.	List Price
30-466	1/2” x 3/4"	1.50	0.88	0.08	5.68
30-467	5/8” x 3/4"	1.50	0.88	0.09	4.69
30-468	3/4” x 3/4"	1.47	0.88	0.10	4.80

FEMALE END ONLY - Short Shank w/ hex

Part #	Hose x FGH	A	B	Hex	Approx. Wt. Lbs.	List Price
30-453	1/2” x 3/4"	1.63	1.00	1.18	0.11	4.40
30-454	5/8” x 3/4"	1.63	1.00	1.18	0.11	4.60
30-455	3/4” x 3/4"	1.63	1.00	1.18	0.13	5.07

MALE END ONLY - Short Shank



Part #	Hose Barb x MGH	A	B	Hex	Approx. Wt. Lbs.	List Price
30-471	1/2” x 3/4"	1.55	0.88	1.06	0.11	5.65
30-472	5/8” x 3/4"	1.56	0.88	1.06	0.12	5.08
30-473	3/4” x 3/4"	1.56	0.88	1.06	0.13	5.56

GARDEN HOSE COUPLING SETS - Short Shank with Knurled Nut

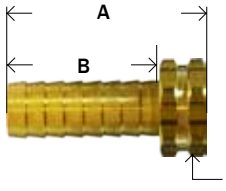
Part #	Hose Barb	List Price
30-461	1/2"	10.68
30-462	5/8"	10.68
30-463	3/4"	10.89

GARDEN HOSE COUPLING SETS - Short Shank w/ hex nut

Part #	Hose Barb	List Price
30-457	1/2"	9.26
30-458	5/8"	9.26
30-459	3/4"	9.90

FEMALE SWIVEL ONLY - 2" SHANK

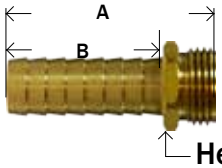
•WASHER INCLUDED



Part #	Hose Barb x FGH	A	B	Hex	Approx. Wt. Lbs.	List Price
30-505	1/2” x 3/4"	2.55	2.04	1.18	0.13	6.58
30-506	5/8” x 3/4"	2.56	2.04	1.18	0.16	7.62
30-507	3/4” x 3/4"	2.67	2.04	1.18	0.17	6.18
30-508	1" x 1"	2.84	2.03	1.43	0.29	10.39

GHFL 594

MALE END ONLY - 2" SHANK



Part #	Hose Barb x MGH	A	B	Hex	Approx. Wt. Lbs.	List Price
30-510	1/2” x 3/4"	2.72	2.04	1.06	0.16	7.44
30-511	5/8” x 3/4"	2.72	2.04	1.06	0.17	11.56
30-512	3/4” x 3/4"	2.72	2.04	1.06	0.20	6.82
30-513	1" x 1"	2.90	2.03	1.37	0.28	11.33

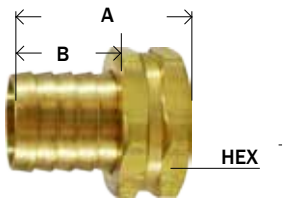
GHML 593

GARDEN HOSE COUPLING SETS - 2" SHANK

Part #	Hose x FGH	List Price
30-516	1/2"	13.64
30-517	5/8"	13.64
30-518	3/4"	17.01
30-519	1"	49.63

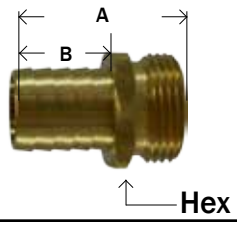
NPSM GARDEN HOSE | BRASS FITTINGS

NPSM FEMALE SHORT SHANK



Part #	Hose ID	NPSM Thread	A	B	Hex	List Price
30-545	1/2	3/4"	1.45	0.88	1.18	4.62
30-546	5/8	3/4"	1.47	0.88	1.18	5.73
30-547	3/4	3/4"	1.47	0.88	1.18	5.67
30-548	1	1"	1.50	1.00	1.50	11.24

NPSM MALE SHORT SHANK

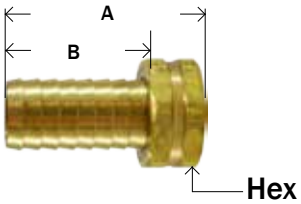


Part #	Hose ID	NPSM Thread	A	B	Hex	List Price
30-550	1/2	3/4"	1.56	0.88	1.06	4.88
30-551	5/8	3/4"	1.56	0.88	1.06	4.55
30-552	3/4	3/4"	1.56	0.88	1.06	5.22
30-553	1	1"	1.77	0.98	1.30	9.64

NPSM SHORT SHANK SETS

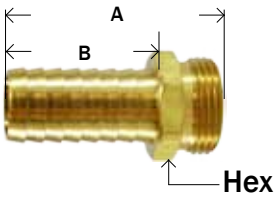
Part #	Size	List Price
30-540	1/2"	9.11
30-541	5/8"	9.31
30-542	3/4"	9.50
30-543	1"	19.60

NPSM FEMALE LONG SHANK



Part #	Hose ID	NPSM Thread	A	B	Hex	List Price
30-565	1/2	1/2"	2.09	1.50	0.94	3.97
30-566	5/8	3/4"	2.09	1.50	1.18	6.67
30-567	3/4	3/4"	2.09	1.50	1.18	6.11
30-568	1	1"	2.12	1.53	1.50	17.64

NPSM MALE LONG SHANK



Part #	Hose ID	NPSM Thread	A	B	Hex	List Price
30-570	1/2	1/2"	2.18	1.50	0.87	4.52
30-571	5/8	3/4"	2.18	1.50	1.06	6.13
30-572	3/4	3/4"	2.18	1.50	1.06	6.45
30-573	1	1"	2.32	1.53	1.30	13.66

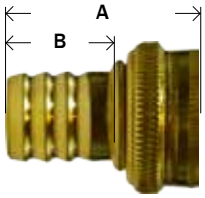
NPSM LONG SHANK SETS

Part #	Size	List Price
30-560	1/2"	8.58
30-561	5/8"	12.61
30-562	3/4"	12.74
30-563	1"	29.04

WROUGHT BRASS

WROUGHT BRASS - Female end only

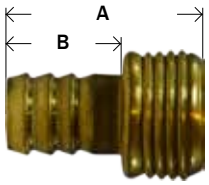
•WASHER INCLUDED



Part #	Hose Barb x FGH	A	B	Approx. Wt. Lbs.	List Price
30-526	5/8” x 3/4"	1.58	0.91	0.05	4.66
30-527	3/4” x 3/4"	1.50	0.84	0.06	4.68

85L

WROUGHT BRASS COUPLINGS - Male end only



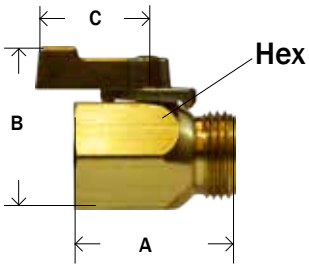
Part #	Hose Barb x MGH	A	B	Approx. Wt. Lbs.	List Price
30-530	1/2” x 3/4"	1.50	0.88	0.02	4.49

85M

GARDEN HOSE VALVES

ONE WAY BRASS BALL VALVE - FGH x MGH

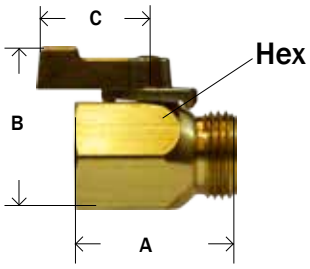
• 500 PSI • 180°F



Part #	FGH x MGH	A	B	C	Hex	Approx. Wt. Lbs.	List Price
30-161	3/4” x 3/4"	1.87	1.89	1.31	1.06	0.42	58.53

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.	List Price
30-162	3/4” x 3/4"	1.55	1.89	1.31	1.06	0.42	61.72

ZINC ALLOY HOSE SHUT-OFF W/ ONE LEVER

Part #	FGH x MGH	A	Approx. Wt. Lbs.	List Price
30-631	3/4" x 3/4"	1.67	0.08	4.60

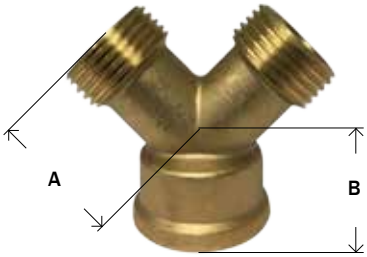
GARDEN HOSE VALVES | BRASS FITTINGS

PLASTIC GARDEN HOSE VALVE • CYCOLAC BODY & BALL

Part #	FGH x MGH	A	Hex	Approx. Wt. Lbs.	List Price
30-163	3/4" x 3/4"	1.75	1.25	0.04	6.58

LA45OC

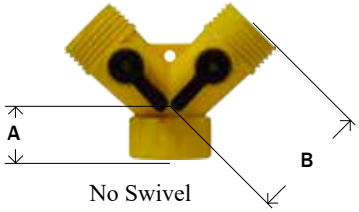
CAST BRASS HOSE - "Y" CONNECTOR •WASHER INCLUDED



Part #	Size	A	B	Approx. Wt. Lbs.	List Price
30-140	3/4”	1.40	0.67	0.22	11.39

86Y 21A

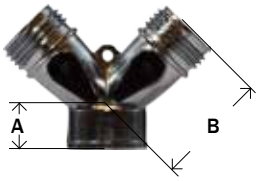
PLASTIC, NON-CORROSIVE, 2-WAY HOSE SHUT-OFF "Y"



No Swivel

Part #	Size	A	B	Approx. Wt. Lbs.	List Price
30-160	3/4"	0.74	1.87	0.08	3.48

"Y" SHAPE ZINC ALLOY CONNECTOR W/ TWO LEVERS



No Swivel

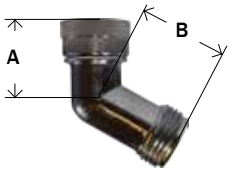
Part #	Size	A	B	Approx. Wt. Lbs.	List Price
30-626	3/4"	0.60	1.66	0.10	9.20

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

• Brass Levers

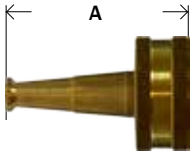
Part #	Size	Description	Approx. Wt. Lbs.	List Price
30-627	3/4"	3/4 Double Y valve, swivel inlet	0.56	54.69

ZINC ALLOY SWIVEL HOSE CONNECTOR



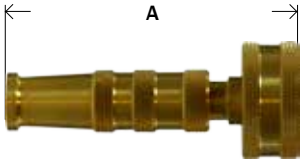
Part #	Size	A	B	Approx. Wt. Lbs.	List Price
30-629	3/4"	1.31	1.50	0.08	4.68

2-1/2" BRASS NOZZLE



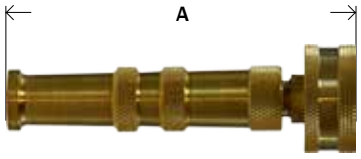
Part #	Size	A	Approx. Wt. Lbs.	List Price
30-637	3/4"	2.50	0.14	7.36

3" CROSSED PATTERN BRASS NOZZLE



Part #	Size	A	Approx. Wt. Lbs.	List Price
30-640	3/4"	2.89	0.25	10.46

4" CROSSED PATTERN BRASS NOZZLE



Part #	Size	A	Approx. Wt. Lbs.	List Price
30-638	3/4"	3.80	0.50	13.89

Adjustable Spray

Part #	Size		List Price
30-600	5-1/2"	Zinc Alloy spray nozzle with insulated handle soft grip and front thread protector	17.84

Lead Free

Part #	Size		List Price
30-620	4-1/4"	Zinc Alloy spray nozzle	6.90

Lead Free
Adjustable Spray

Part #	Size		List Price
30-609	5-1/4"	Zinc Alloy spray nozzle with easily adjustable brass head and plastic grip	18.76

Part #	Size		List Price
30-630	4-1/2"	Plastic spray nozzle	3.51

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).

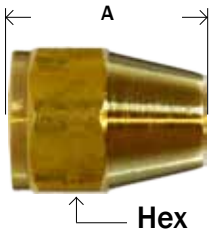
Assembly Instructions
1- Cut tubing to desired length. Make sure all burrs are removed and ends are cut square.
2- Slide nut on tube. Threaded end "A" of nut must face out.
3- Flare end of tube with a 45^0 flaring tool.
a-Measure flare diameter.
b- Examine flare for excessive thin out.
4- Lubricate threads 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 159

Actual O.D. of Flare Fittings

SHORT ROD NUT

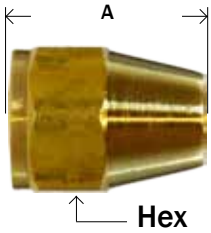
SAE# 010110



Part #	Thread Size UNF	Thread	A	Hex	Approx. Wt. Lbs.	List Price
10-013	1/8”	5/16-24	0.50	0.37	0.01	2.09
10-014	3/16”	3/8-24	0.62	0.43	0.02	1.05
10-015	1/4”	7/16-20	0.75	0.56	0.03	1.47
10-015L	1/4"	7/16-20	0.75	0.50	0.03	0.95
10-016	5/16”	1/2-20	0.88	0.62	0.04	2.41
10-017L	3/8”	5/8-18	0.77	0.75	0.05	1.60
10-017	3/8”	5/8-18	1.00	0.75	0.04	2.42
10-018	7/16”	11/16-16	1.06	0.81	0.06	9.27
10-019L	1/2”	3/4-16	0.93	0.87	0.06	1.95
10-019	1/2”	3/4-16	1.12	0.87	0.09	3.18
10-020L	5/8”	7/8-14	1.08	1.00	0.10	3.43
10-020	5/8”	7/8-14	1.31	1.06	0.15	8.85
10-021	3/4”	1-1/16-14	1.50	1.25	0.24	7.79
10-022	7/8”	1-1/4-12	1.62	1.50	0.36	16.45
10-026	1”	1-3/8-12	1.81	1.62	0.44	23.07

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

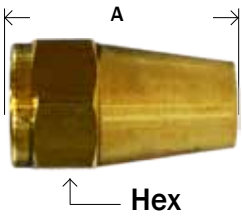
REDUCING SHORT ROD NUT



Part #	Thread Size UNF	A	Hex	Approx. Wt. Lbs.	List Price
10-023	3/8” x 1/4”	0.74	0.81	0.06	11.78
10-024	1/2” x 3/8”	0.86	0.94	0.10	12.80
10-025	5/8” x 1/2”	0.99	1.06	0.12	16.49

LONG ROD NUT

SAE# 010111



NEW

Part #	Thread Size UNF	A	Hex	Approx. Wt. Lbs.	List Price
10-001	1/8”	0.75	0.37	0.01	6.75
10-002	3/16”	0.81	0.43	0.02	2.60
10-003L	1/4"	0.98	0.55	0.03	1.56
10-003	1/4”	0.94	0.56	0.03	2.36
10-004	5/16”	1.12	0.62	0.04	4.50
10-005	3/8”	1.31	0.75	0.06	4.09
10-006	1/2”	1.62	0.87	0.12	6.85
10-007	5/8”	1.88	1.06	0.20	10.70
10-008	3/4”	2.19	1.25	0.34	51.60

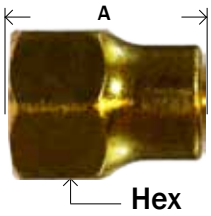
41FL N2 241 441 41

"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.

LONG FORGED NUT

SAE# 010167



Part #	Thread Size UNF	A	Hex	Approx. Wt. Lbs.	List Price
10-028	1/4”	0.94	0.62	0.05	4.43
10-030	3/8”	1.06	0.81	0.08	6.72
10-031	1/2”	1.19	0.94	0.12	7.14
10-032	5/8”	1.44	1.06	0.26	12.59
10-033	3/4”	1.75	1.31	0.35	16.70

41FF 39 N4 14FL 641

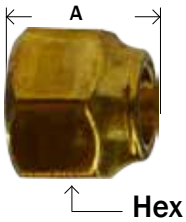
SHORT FORGED NUT

SAE# 010166

Part #	Thread Size UNF	A	Hex	Approx. Wt. Lbs.	List Price
10-038	3/16”	0.56	0.50	0.02	5.59
10-039	1/4”	0.60	0.62	0.04	1.70
10-040	5/16”	0.66	0.69	0.04	3.42
10-041	3/8”	0.70	0.81	0.06	2.39
10-042	1/2”	0.82	0.94	0.08	3.36
10-043	5/8”	0.95	1.06	0.12	5.41
10-044	3/4”	1.16	1.31	0.22	11.35
10-045	7/8”	1.18	1.38	0.30	14.67

14FS 41FFS 40 641-S 1116 NS4

EXTRA HEAVY SHORT FORGED NUT



Part #	Thread Size UNF	A	Hex	Approx. Wt. Lbs.	List Price
10-046	1/4”	0.63	0.75	0.04	3.48
10-047	3/8”	0.72	0.88	0.06	3.85
10-048	1/2”	0.88	1.00	0.08	4.70
10-049	5/8”	0.98	1.12	0.12	7.17

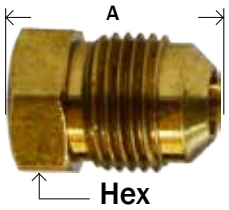
NSA

FORGED REDUCING NUT

Part #	Female Flare x OD	A	Hex	Approx. Wt. Lbs.	List Price
10-051	5/16” x 1/4”	0.66	0.75	0.06	13.07
10-052	3/8” x 1/4”	0.72	0.81	0.06	5.28
10-053	3/8” x 5/16”	0.72	0.81	0.08	4.98
10-054	1/2” x 3/8”	0.81	0.94	0.08	4.44
10-055	5/8” x 3/8”	0.96	1.12	0.15	12.88
10-056	5/8” x 1/2”	0.97	1.06	0.12	7.63
10-058	3/4” x 5/8”	1.17	1.31	0.30	17.65

NSR4 14FS 41FRS 40R 662-S

FLARED PLUG



Part #	Thread Size UNF	A	Hex	Approx. Wt. Lbs.	List Price
10-063	3/16”	0.59	0.50	0.02	5.15
10-064 *	1/4”	0.69	0.43	0.02	1.38
10-065 *	5/16”	0.78	0.50	0.04	2.99
10-066 *	3/8”	0.88	0.62	0.06	2.40
10-067	1/2”	1.06	0.75	0.10	4.00
10-068	5/8”	1.19	0.87	0.14	3.89
10-069	3/4"	1.32	1.06		17.19

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

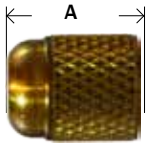
FLARED CAP

Part #	Thread Size UNF	A	Hex	Approx. Wt. Lbs.	List Price
10-074	3/16”	0.47	0.50	0.02	3.52
10-075 *	1/4”	0.48	0.50	0.02	0.85
10-076	5/16”	0.62	0.62	0.04	2.68
10-077 *	3/8”	0.58	0.75	0.03	2.02
10-078	1/2”	0.69	0.81	0.14	1.97
10-079	5/8”	0.81	0.94	0.20	3.22
10-080	3/4”	1.17	1.37	0.30	11.42

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

FINGER TIGHTENING CAP

- Neoprene
- **O-Ring Included**

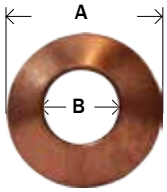


Part #	Thread Size UNF	A	Approx. Wt. Lbs.	List Price
10-081	1/4"	0.62	0.02	1.52

NFT5

COPPER GASKET

SAE# 010113

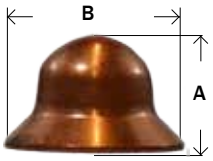


Part #	Size	A	B	Approx. Wt. Lbs.	List Price
10-084	3/16”	0.31	0.12	0.01	0.77
10-085	1/4”	0.36	0.19	0.01	0.40
10-086	5/16”	0.42	0.22	0.01	1.15
10-087	3/8”	0.55	0.28	0.01	0.83
10-088	1/2”	0.66	0.41	0.01	1.14
10-089	5/8”	0.77	0.50	0.01	1.47
10-090	3/4”	0.95	0.62	0.01	1.70

B2 2GF 6251 FG 157 59 46

COPPER BONNET

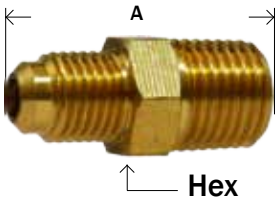
SAE# 010114

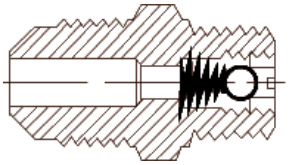


Part #	Size	A	B	Approx. Wt. Lbs.	List Price
10-094	3/16”	0.16	0.31	0.01	2.64
10-095	1/4”	0.22	0.36	0.01	2.26
10-097	3/8”	0.34	0.55	0.01	2.22
10-098	1/2”	0.41	0.66	0.01	3.03
10-099	5/8”	0.44	0.77	0.01	2.84
10-100	3/4”	0.56	0.95	0.01	6.71

B1 3GF 64C 57 156 FB 695 464

MALE BALL CHECK CONNECTOR





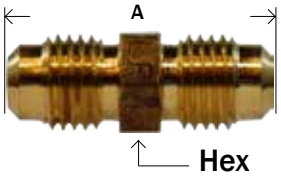
Part #	Male Flare x Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
10-131*	1/4" x 1/8"	1.06	0.43		32.58
10256WC	1/4” x 1/4”	1.24	0.6	0.04	2.94
10-133*	3/8” x 1/4”	1.31	0.62	0.08	28.79

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.	List Price
10-104	1/8”	0.91	0.31	0.02	7.58
10-105	3/16”	1.06	0.37	0.02	4.62
10-106L	1/4”	1.19	0.43	0.03	1.50
10-106 *	1/4”	1.19	0.43	0.03	2.69
10-107	5/16”	1.34	0.50	0.05	2.79
10-108L	3/8”	1.50	0.62	0.09	4.43
10-108 *	3/8’	1.50	0.62	0.09	3.11
10-109L	1/2”	1.67	0.75	0.12	6.04
10-109	1/2”	1.81	0.75	0.14	6.68
10-110L	5/8”	2.00	0.87	0.20	7.16
10-110	5/8”	2.12	0.87	0.20	6.69
10-111	3/4”	2.44	1.06	0.35	12.27
10-112	7/8”	2.72	1.25	0.52	48.18

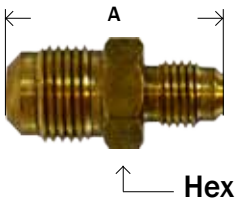
* Available in Stainless Steel. Add SS to the part#

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.

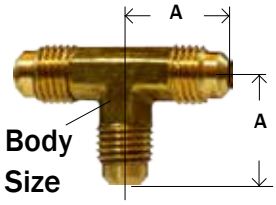
REDUCING UNION



Part #	Thread Size UNF	A	Hex	Approx. Wt. Lbs.	List Price
10-117	5/16" x 1/4"	1.28	0.50	0.04	6.04
10-118	3/8" x 1/4"	1.38	0.62	0.06	4.75
10-119	3/8" x 5/16"	1.44	0.62	0.08	8.44
10-120	1/2" x 1/4"	1.53	0.75	0.10	7.26
10-121	1/2" x 3/8"	1.69	0.75	0.10	7.16
10-122	5/8" x 3/8"	1.88	0.87	0.17	12.00
10-123	5/8" x 1/2"	1.87	0.87	0.14	6.22

656F UR2 42-R

UNION TEE



Forged Tee

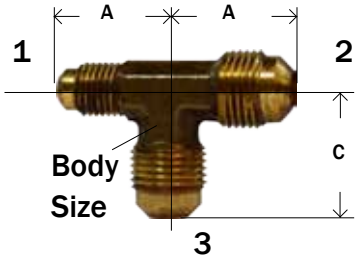
SAE# 010401

Part #	Thread Size UNF	A	Body Size	Approx. Wt. Lbs.	List Price
10-157	1/8"	0.67	0.36	0.04	8.11
10-158	3/16"	0.75	0.36	0.06	4.67
10-159 **	1/4"	0.78	0.36	0.06	4.88
10-160 **	5/16"	0.91	0.44	0.10	6.94
10-161 **	3/8"	1.00	0.44	0.12	7.04
10-162	1/2"	1.16	0.59	0.19	7.25
10-163	5/8"	1.41	0.69	0.30	13.30
10-164	3/4"	1.64	0.88	0.53	28.28
10-165	7/8"	1.75	1.25	0.93	57.47

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

244F T2 144F

REDUCING TEE 1 x 2 x 3

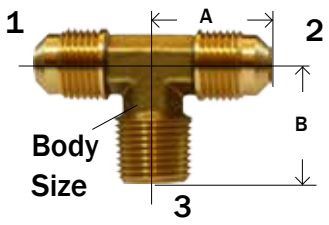


Part #	Thread Size UNF 1x2x3	A	C	Body Size	Approx. Wt. Lbs.	List Price
10-170	1/4" x 1/4" x 3/8"	0.91	1.00	0.44	0.10	7.65
10-171	5/16" x 5/16" x 1/4"	0.94	0.94	0.44	0.12	11.45
10-172	3/8" x 1/4" x 1/4"	0.91	1.00	0.44	0.10	9.15
10-173	3/8" x 1/4" x 3/8"	1.00	0.91	0.44	0.12	11.41
10-174	3/8" x 3/8" x 1/4"	1.00	0.88	0.44	0.11	8.22
10-175	3/8" x 3/8" x 1/2"	1.00	1.19	0.59	0.14	11.45
10-176	3/8" x 3/8" x 5/8"	1.16	1.44	0.69	0.16	22.10
10-178	1/2" x 3/8" x 3/8"	1.16	1.12	0.59	0.18	8.69
10-179	1/2" x 3/8" x 1/2"	1.16	1.09	0.59	0.18	10.61
10-180	1/2" x 1/2" x 1/4"	1.16	0.97	0.59	0.18	14.68
10-181	1/2" x 1/2" x 3/8"	1.16	1.12	0.59	0.19	9.61
10-182	1/2" x 1/2" x 5/8"	1.28	1.41	0.69	0.28	13.99
10-187	5/8" x 1/2" x 5/8"	1.44	1.33	0.69	0.27	21.69
10-188	5/8" x 5/8" x 3/8"	1.38	1.16	0.69	0.30	18.89
10-189	5/8" x 5/8" x 1/2"	1.38	1.28	0.69	0.28	27.08
10-197	3/4" x 3/4" x 5/8"	1.66	1.50	0.88	0.36	47.10

144F TR2 659F 684F 44R

SAE 45° FLARE

MALE BRANCH TEE
SAE# 010425



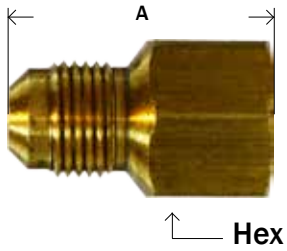
Forged Tee

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	5.52
10-204	1/4" x 1/8"	0.78	0.75	0.36	0.05	5.65
10-205	1/4" x 1/4"	0.88	0.88	0.44	0.08	5.85
10-206	1/4" x 3/8"	0.92	1.00	0.47	0.10	9.48
10-207	5/16" x 1/8"	0.89	0.78	0.44	0.08	6.74
10-208	5/16" x 1/4"	0.94	0.94	0.44	0.08	7.75
10-209	3/8" x 1/8"	1.00	0.91	0.44	0.14	11.27
10-210	3/8" x 1/4"	1.00	0.94	0.44	0.12	7.44
10-211 **	3/8" x 3/8"	1.00	1.00	0.47	0.13	9.17
10-212 **	3/8" x 1/2"	1.12	1.22	0.69	0.22	13.46
10-213	1/2" x 1/4"	1.16	1.00	0.59	0.20	19.83
10-214	1/2" x 3/8"	1.16	1.14	0.59	0.19	14.02
10-215	1/2" x 1/2"	1.22	1.22	0.69	0.24	13.32
10-216	1/2" x 3/4"	1.38	1.41	0.88	0.22	26.45
10-217	5/8" x 3/8"	1.38	1.25	0.69	0.24	22.52
10-218	5/8" x 1/2"	1.41	1.31	0.69	0.29	17.65
10-219	5/8" x 3/4"	1.41	1.41	0.88	0.36	26.61
10-220	3/4" x 1/2"	1.63	1.59	0.88	0.49	33.35
10-221	3/4" x 3/4"	1.63	1.44	0.88	0.48	34.29

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

T1 145F 45

FEMALE ADAPTER
SAE# 010103



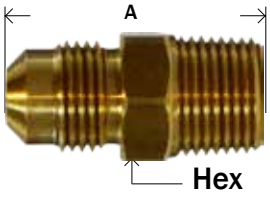
Part #	Male Flare x Female NPTF	A	Hex	Approx. Wt. Lbs.	List Price
10-227	3/16" x 1/8"	0.97	0.56	0.03	4.60
10-228L	1/4" x 1/8"	1.03	0.56	0.03	1.55
10-228	1/4" x 1/8"	1.03	0.56	0.04	3.23
10-229L	1/4" x 1/4"	1.06	0.68	0.06	3.85
10-229	1/4" x 1/4"	1.23	0.68	0.07	1.81
10-230	1/4" x 3/8"	1.18	0.81	0.08	4.49
10-231	1/4" x 1/2"	1.31	0.94	0.06	7.24
10-232	5/16" x 1/8"	1.06	0.56	0.05	17.30
10-233	5/16" x 1/4"	1.28	0.68	0.08	4.27
10-234	3/8" x 1/8"	1.09	0.62	0.08	4.18
10-235L	3/8" x 1/4"	1.25	0.68	0.08	3.29
10-235	3/8" x 1/4"	1.31	0.81	0.08	5.01
10-236L	3/8" x 3/8"	1.25	0.81	0.08	4.15
10-236	3/8" x 3/8"	1.25	0.81	0.10	7.19
10-237L	3/8" x 1/2"	1.31	0.94	0.08	3.51
10-237	3/8" x 1/2"	1.60	1.00	0.16	10.49
10-238	3/8" x 3/4"	1.41	1.18	0.11	9.49
10-239	1/2" x 1/4"	1.37	0.75	0.10	4.75
10-240L	1/2" x 3/8"	1.38	0.81	0.12	4.36
10-240	1/2" x 3/8"	1.50	0.81	0.14	8.85
10-241L	1/2" x 1/2"	1.42	0.94	0.10	6.44
10-241	1/2" x 1/2"	1.75	1.00	0.12	11.46
10-242L	1/2" x 3/4"	1.40	1.10		3.74
10-242	1/2" x 3/4"	1.60	1.12	0.16	5.83
10-243	5/8" x 3/8"	1.24	0.87	0.12	9.58
10-244L	5/8" x 1/2"	1.51	0.86		3.06
10-244	5/8" x 1/2"	1.62	0.94	0.12	6.10
10-245	5/8" x 3/4"	1.65	1.12	0.17	7.69
10-246	3/4" x 1/2"	1.74	1.18	0.32	21.05
10-247	3/4" x 3/4"	1.75	1.18	0.22	20.42
10-248	7/8" x 3/4"	1.94	1.31	0.26	21.28

"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.

46 U3

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	3.89
10-254	3/16” x 1/8”	1.00	0.43	0.03	2.13
10-255L	1/4” x 1/8”	1.06	0.43	0.03	1.46
10-255 *	1/4” x 1/8”	1.06	0.43	0.04	1.29
10-256L	1/4” x 1/4”	1.15	0.56	0.03	1.71
10-256 *	1/4” x 1/4”	1.25	0.56	0.04	1.70
10-257 *	1/4” x 3/8”	1.31	0.68	0.06	2.62
10-258	1/4” x 1/2”	1.44	0.87	0.11	6.14
10-259L	5/16” x 1/8”	1.15	0.50	0.04	2.96
10-259	5/16” x 1/8”	1.16	0.50	0.04	2.79
10-260L	5/16” x 1/4”	1.31	0.56	0.06	3.40
10-260	5/16” x 1/4”	1.34	0.56	0.06	3.27
10-261 *	5/16” x 3/8”	1.38	0.68	0.08	5.93
10-262	3/8” x 1/8”	1.25	0.62	0.07	2.29
10-263L	3/8” x 1/4”	1.31	0.62	0.06	2.42
10-263 *	3/8” x 1/4”	1.44	0.62	0.08	2.43
10-264L	3/8” x 3/8”	1.37	0.68	0.09	2.89
10-264 *	3/8” x 3/8”	1.42	0.68	0.09	2.83
10-265L	3/8” x 1/2”	1.44	0.89	0.12	3.39
10-265 *	3/8” x 1/2”	1.69	0.87	0.14	6.24
10-266	3/8” x 3/4”	1.81	1.06	0.18	7.62
10-267	1/2” x 1/4”	1.60	0.75	0.11	3.81
10-268L	1/2” x 3/8”	1.46	0.75	0.10	3.26
10-268	1/2” x 3/8”	1.62	0.75	0.12	3.88
10-269L	1/2” x 1/2”	1.62	0.87	0.13	3.71
10-269	1/2” x 1/2”	1.79	0.87	0.15	5.55
10-270	1/2” x 3/4”	1.75	1.06	0.22	7.48
10-271	5/8” x 1/4”	1.81	0.87	0.14	10.66
10-272L	5/8” x 3/8”	1.67	0.87	0.14	4.80
10-272	5/8” x 3/8”	1.81	0.87	0.18	8.12
10-273L	5/8” x 1/2”	1.80	0.87	0.11	4.92
10-273	5/8” x 1/2”	2.00	0.87	0.20	8.54
10-274	5/8” x 3/4”	1.85	1.06	0.21	6.27
10-275	3/4” x 1/2”	2.19	1.06	0.28	13.69
10-276	3/4” x 3/4”	2.08	1.06	0.28	8.46
10-277	7/8” x 1/2”	2.22	1.25	0.52	35.71
10-278	7/8” x 3/4”	2.35	1.25	0.41	22.63
10-279	1” x 3/4”	2.44	1.43	0.53	26.95
10-280	1” x 1”	2.44	1.43	0.53	33.08

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

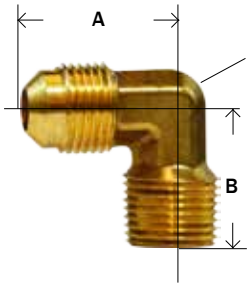
U1 48

"L" means light pattern.

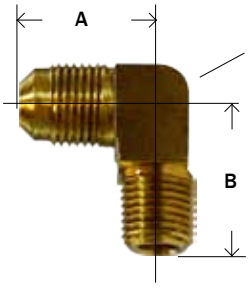
-These fittings are completely interchangeable with full pattern fittings, but have been modified in some way. This modification is usually in the length of the pipe threads. Used in plumbing and light industrial applications.

90° MALE ELBOW

SAE# 010202



Forged Elbow



Barstock Elbow

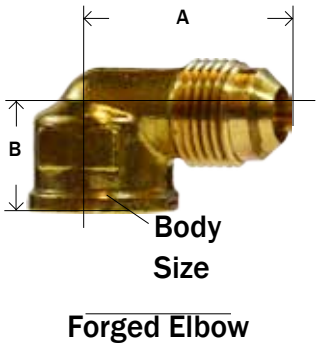
	Part #	Male Flare x Male NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
	10-283	1/8" x 1/8"	0.63	0.73	0.37	0.04	10.57
	10-283B*	1/8" x 1/8"	0.62	0.69	0.43	0.04	36.84
	10-284	3/16" x 1/8"	0.75	0.75	0.38	0.04	7.98
	10-284B*	3/16" x 1/8"	0.75	0.75	0.43	0.06	5.28
	10-285	3/16" x 1/4"	0.81	0.88	0.44	0.08	6.40
	10-286	1/4" x 1/8"	0.84	0.78	0.38	0.04	3.54
NEW	10-286L	1/4" x 1/8"	0.96	0.80	0.37	0.04	2.40
	10-286B*	1/4" x 1/8"	0.81	0.78	0.47	0.05	2.54
	10-287 **	1/4" x 1/4"	0.81	0.88	0.44	0.05	3.21
	10-287B*	1/4" x 1/4"	0.91	0.93	0.59	0.08	4.09
	10-288 **	1/4" x 3/8"	0.91	0.91	0.47	0.08	5.56
	10-289	1/4" x 1/2"	1.03	1.09	0.59	0.10	6.99
	10-290	5/16" x 1/8"	0.91	0.88	0.44	0.06	2.88
	10-290B*	5/16" x 1/8"	0.91	0.78	0.52	0.06	7.56
	10-291	5/16" x 1/4"	0.98	0.96	0.44	0.08	2.97
	10-291B*	5/16" x 1/4"	0.95	0.92	0.62	0.08	8.58
	10-292	5/16" x 3/8"	1.06	1.09	0.59	0.08	6.37
	10-293	3/8" x 1/8"	1.00	0.91	0.53	0.08	6.43
	10-293B*	3/8" x 1/8"	1.03	0.91	0.65	0.08	8.30
	10-294	3/8" x 1/4"	1.01	0.89	0.48	0.08	3.76
	10-294B*	3/8" x 1/4"	0.97	1.04	0.68	0.11	6.19
	10-295 **	3/8" x 3/8"	1.00	0.88	0.47	0.10	3.90
NEW	10-295L	3/8" x 3/8"	0.95	0.89	0.46		3.04
	10-295B*	3/8" x 3/8"	1.06	1.09	0.69	0.12	7.40
	10-296 **	3/8" x 1/2"	1.10	1.09	0.59	0.12	5.53
	10-297	3/8" x 3/4"	1.25	1.31	0.81	0.12	14.46
	10-298	1/2" x 1/4"	1.19	1.00	0.59	0.12	5.50
	10-298B*	1/2" x 1/4"	1.22	1.19	0.81	0.12	15.15
	10-299	1/2" x 3/8"	1.10	1.00	0.59	0.13	5.35
	10-299B*	1/2" x 3/8"	1.22	1.12	0.77	0.18	9.97
	10-300	1/2" x 1/2"	1.16	1.13	0.59	0.14	6.18
	10-300B*	1/2" x 1/2"	1.26	1.26	0.94	0.26	13.05
	10-301	1/2" x 3/4"	1.42	1.25	0.81	0.24	11.15
	10-311	5/8" x 1/4"	1.34	1.13	0.72	0.28	11.64
	10-302	5/8" x 3/8"	1.35	1.22	0.72	0.20	10.09
	10-302B*	5/8" x 3/8"	1.41	1.25	0.94	0.20	24.76
	10-303	5/8" x 1/2"	1.35	1.22	0.72	0.20	8.28
NEW	10-303L	5/8" x 1/2"	1.29	1.11	0.70	0.20	5.64
	10-303B*	5/8" x 1/2"	1.41	1.38	0.94	0.20	17.91
	10-304	5/8" x 3/4"	1.44	1.31	0.81	0.25	13.95
	10-305	3/4" x 1/2"	1.67	1.50	0.88	0.34	17.25
	10-306	3/4" x 3/4"	1.67	1.63	0.88	0.30	14.99
	10-306B*	3/4" x 3/4"	1.60	1.62	0.91	0.32	27.88
	10-307	7/8" x 3/4"	1.75	1.68	1.00	0.44	45.81
	10-308	1" x 3/4"	1.94	1.69	1.31	0.75	53.02
	10-309	1" x 1"	1.94	1.75	1.25	0.78	47.15

* Barstock

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

90° FEMALE ELBOW

SAE# 010203

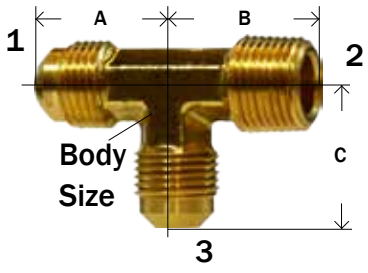


Forged Elbow

	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	7.21
	10-313	1/4" x 1/8"	0.90	0.46	0.56	0.06	4.38
	10-314	1/4" x 1/4"	0.97	0.59	0.75	0.08	5.81
	10-315	1/4" x 3/8"	1.03	0.57	0.81	0.09	8.60
	10-333	1/4" x 1/2"	1.08	0.66	1.00	0.12	11.01
	10-316	5/16" x 1/8"	0.94	0.88	0.45	0.08	7.59
	10-317	5/16" x 1/4"	1.03	0.58	0.75	0.06	12.34
	10-318	3/8" x 1/8"	1.00	0.88	0.47	0.10	8.02
	10-319	3/8" x 1/4"	1.06	0.59	0.75	0.09	3.76
	10-320	3/8" x 3/8"	1.06	0.57	0.81	0.10	5.33
	10-321	3/8" x 1/2"	1.16	0.66	1.00	0.14	7.08
NEW	10-321L	3/8" x 1/2"	1.21	0.42	0.96	0.13	6.00
	10-322	3/8" x 3/4"	1.28	0.72	1.25	0.12	12.27
	10-323	1/2" x 1/4"	1.25	0.70	0.88	0.13	10.71
	10-324	1/2" x 3/8"	1.25	0.70	0.88	0.12	7.96
	10-325	1/2" x 1/2"	1.29	0.72	1.00	0.18	8.38
NEW	10-325L	1/2" x 1/2"	1.24	0.71	0.98	0.17	5.45
	10-326	1/2" x 3/4"	1.41	0.72	1.25	0.20	11.43
	10-327	5/8" x 3/8"	1.35	1.22	0.72	0.22	14.27
	10-328	5/8" x 1/2"	1.38	0.75	1.00	0.20	12.50
	10-329	5/8" x 3/4"	1.50	0.76	1.25	0.28	12.64
	10-330	3/4" x 1/2"	1.63	1.06	1.06	0.42	23.87
	10-331	3/4" x 3/4"	1.88	1.06	1.31	0.40	35.30

E3 50 150F

FORGED MALE RUN TEE

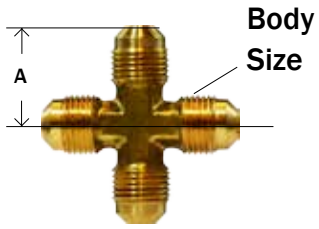


Part #	Male Flare x Male NPTF (1&3) x 2	A	B	C	Body Size	Approx. Wt. Lbs.	List Price
10-361	3/16" x 5/16" x 1/8"	0.87	0.78	0.97	0.44	0.08	5.57
10-343	3/16" x 1/8"	0.75	0.75	0.75	0.37	0.05	7.11
10-344	1/4" x 1/8"	0.78	0.75	0.78	0.37	0.06	6.13
10-345	1/4" x 1/4"	0.88	0.88	0.88	0.44	0.08	7.52
10-347	5/16" x 1/8"	0.88	0.80	0.88	0.44	0.08	6.55
10-348	5/16" x 1/4"	0.94	0.94	0.94	0.44	0.08	9.61
10-350	3/8" x 1/4"	1.00	0.94	1.00	0.44	0.12	9.61
10-351	3/8" x 3/8"	1.00	1.00	1.00	0.47	0.10	13.32
10-340	3/8" x 1/2" x 3/8"	1.09	1.09	1.16	0.59	0.18	12.35
10-352	3/8" x 1/2"	1.12	1.22	1.12	0.69	0.12	18.71
10-353	1/2" x 3/8" x 1/2"	1.22	1.22	1.15	0.69	0.22	14.65
10-354	1/2" x 3/8"	1.16	1.09	1.16	0.59	0.18	16.19
10-355	1/2" x 1/2"	1.22	1.22	1.22	0.69	0.22	14.27
10-357	5/8" x 1/2"	1.41	1.31	1.41	0.69	0.28	20.07
10-359	3/4" x 1/2"	1.63	1.59	1.63	0.88	0.48	39.51
10-360	3/4" x 3/4"	1.62	1.44	1.62	0.88	0.48	34.90

T3 151F 51

FORGED FLARE CROSS

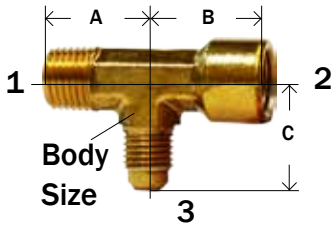
SAE# 010501



Part #	Thread Size UNF	A	Body Size	Approx. Wt. Lbs.	List Price
10-373	1/4”	0.88	0.44	0.10	14.46
10-374	5/16”	0.92	0.44	0.10	14.16
10-375	3/8”	1.00	0.44	0.16	13.51
10-376	1/2”	1.16	0.59	0.24	15.92

455 C1 147F 52

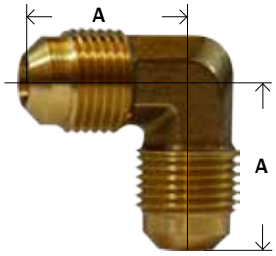
FORGED ADAPTER TEE / SERVICE TEE



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	7.44
10-383	1/4” x 1/4” x 1/4”	0.88	1.00	0.91	0.47	0.11	9.41

T17 53

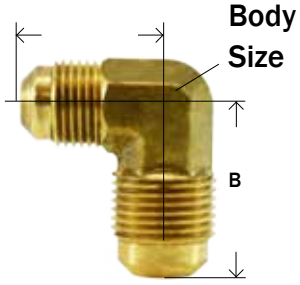
FORGED 90° FLARE ELBOW



Part #	Thread Size UNF	A	Approx. Wt. Lbs.	List Price
10-404	1/8”	0.64	0.04	23.86
10-405	3/16”	0.75	0.06	10.91
10-406	1/4”	0.81	0.08	2.04
10-407	5/16”	0.91	0.10	6.32
10-408	3/8”	1.00	0.10	5.34
10-409	1/2”	1.16	0.14	8.02
10-410	5/8”	1.41	0.22	13.03
10-411	3/4”	1.66	0.68	26.14
10-412	7/8”	1.81	0.82	47.87

E2 155F

FORGED REDUCING ELBOW

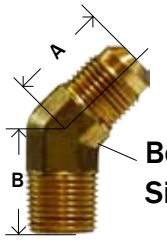


Part #	Male Flare x Male Flare	A	B	Body Size	Approx. Wt. Lbs.	List Price
10-416	3/8” x 1/4”	1.00	0.88	0.47	0.08	6.43
10-419	1/2” x 3/8”	1.19	1.02	0.59	0.14	8.17
10-421	5/8” x 1/2”	1.34	1.23	0.72	0.21	12.33

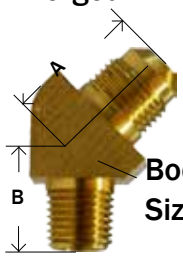
ER2 657F 55R

45° ELBOW

SAE# 010302



Forged



Barstock

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	3.39
10-448B*	1/4" x 1/8"	0.67	0.64	0.44	0.04	11.73
10-449	1/4" x 1/4"	0.75	0.86	0.53	0.07	3.95
10-450	5/16" x 1/8"	0.78	0.64	0.53	0.06	3.96
10-451	5/16" x 1/4"	0.81	0.86	0.53	0.07	7.17
10-452	3/8" x 1/4"	0.91	0.86	0.53	0.09	6.36
10-452B*	3/8" x 1/4"	0.89	0.86	0.64	0.12	11.26
10-453	3/8" x 3/8"	0.93	0.94	0.59	0.11	6.57
10-454	3/8" x 1/2"	0.99	1.17	0.75	0.19	9.48
10-455	1/2" x 3/8"	1.07	0.88	0.59	0.12	7.48
10-455B*	1/2" x 3/8"	1.06	0.94	0.76	0.18	24.90
10-456	1/2" x 1/2"	1.12	1.18	0.75	0.20	10.80
10-460	5/8" x 3/8"	1.13	0.95	0.81	0.22	15.64
10-457	5/8" x 1/2"	1.12	1.17	0.78	0.18	11.77
10-458	3/4" x 1/2"	1.28	1.16	0.88	0.26	18.78
10-459	3/4" x 3/4"	1.41	1.20	0.88	0.31	19.28

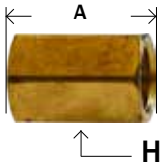
* Barstock

E145 54 159F 654F 59FF 254 47 4945

FEMALE 45° FLARE FITTINGS

UNION

- Use with Copper Gasket



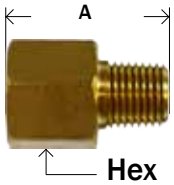
SAE# 010107

Part #	Female Flare x Female Flare	A	Hex	Approx. Wt. Lbs.	List Price
10-135	1/4"	1.00	0.62	0.06	11.52
10-136	3/8"	1.25	0.81	0.14	20.43
10-137	1/2"	1.43	0.94	0.18	26.08

2310 U4 660HD 32

FEMALE FLARE ADAPTER

SAE# 010106

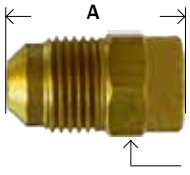


Part #	Female Flare x Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
10-440	1/4" x 1/8"	0.91	0.62	0.05	4.19
10-441	1/4" x 1/4"	1.01	0.62	0.06	6.14
10-442	3/8" x 1/4"	1.28	0.81	0.10	6.36
10-443	1/2" x 3/8"	1.36	0.94	0.14	25.92
10-444	1/2" x 1/2"	1.46	0.94	0.14	4.38

U5 664FHD 33 48-FF

FLARE REDUCER

SAE# 010105



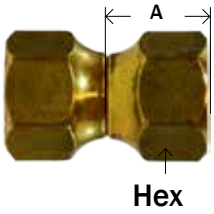
Part #	Male Flare x Female Flare	A	Hex	Approx. Wt. Lbs.	List Price
10-462	1/4" x 3/8"	1.22	0.81	0.10	2.70
10-461	1/4" x 1/2"	1.36	0.94	0.14	21.12
10-463 *	3/8" x 1/4"	1.12	0.62	0.06	5.02
10-464	3/8" x 1/2"	1.44	0.94	0.14	8.01
10-473	3/8" x 5/8"	1.63	1.12	0.16	17.97
10-467	1/2" x 3/8"	1.41	0.81	0.13	7.88
10-468	1/2" x 5/8"	1.68	1.06	0.20	35.09
10-469	5/8" x 1/2"	1.63	1.00	0.17	21.11
10-470	5/8" x 3/4"	1.97	1.31	0.31	20.34
10-471	3/4" x 5/8"	1.75	1.18	0.32	23.53

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

UR3 661FHD 227 46-FF

BRASS FLARE SWIVEL FITTINGS

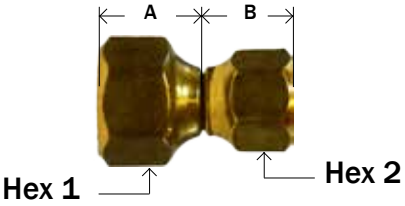
FORGED SWIVEL
SAE# 010108



	Part #	Female Flare UNF	A	Hex	Approx. Wt. Lbs.	List Price
	10-481	1/4”	0.59	0.62	0.04	6.51
	10-482	5/16”	0.62	0.68	0.06	9.32
	10-483	3/8”	0.69	0.81	0.10	6.54
NEW	10-483L	3/8"	0.63	0.80		4.35
	10-484	1/2”	0.81	0.94	0.16	9.52
NEW	10-484L	1/2"	0.82	0.92		5.70
	10-485	5/8”	0.94	1.06	0.24	11.05
	10-486	3/4”	1.12	1.31	0.34	37.65

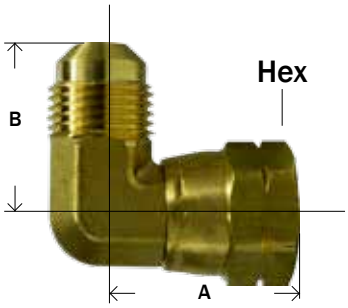
1350 US4 14FSV 34

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	14.17
10-488	1/2” x 3/8”	0.84	0.70	0.94	0.81	0.12	17.31
10-489	5/8” x 1/2”	0.98	0.82	1.03	0.94	0.22	21.16

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	14.86
10-494	3/8”	1.13	1.1	.75	0.20	23.44
10-495	1/2"	1.29	1.20	.88	0.25	33.33
10-496	5/8"	1.50	1.30	1.00	0.37	43.04
10-497	3/4"	1.83	1.60	1.25	0.54	77.15

ES4

It is not the strongest of the species that survive, nor the most intelligent, but the one most responsive to change.

- Charles Darwin

SPACE HEATER FITTINGS

NUT

9/16-24 FINE THREAD FLARE

#M-82SH

Part #	Size	List Price
14-001	3/8	3.50

MALE ADAPTER

#M-83SH

Part #	Size	List Price
14-016	3/8 x 3/8	6.43
14-017	3/8 x 1/2	6.95

FEMALE ADAPTER

#M-80SH

Part #	Size	List Price
14-018	3/8 x 3/8	6.56
14-025	3/8 x 1/2	3.32

UNION

Part #	Size	List Price
14-011	3/8	5.64

BRASS GAS RANGE FITTINGS

BRASS MALE ADAPTERS

15/16-16 FLARE THREAD

Part #	Male Flare x Male NPTF	List Price
35-132	1/2” x 1/2” (3/8” FIP TAP)	6.60
35-134	15/16” x 1/2”	6.33
35-135	15/16" x 3/4" (1/2" FIP TAP)	10.26

BRASS FEMALE ADAPTERS

Part #	Flare x FIP	List Price
35-136	15/16" x 1/2"	9.31
35-142	15/16" x 3/4"	11.25

DRUM ADAPTERS

- Straight Thread

SAE# 010165

Part #	Male Flare x FIP	List Price
50-011	1/4” x 1/2”	30.37
50-001	1/4” x 3/4”	14.55

CAP

Part #	Size	List Price
35-186	15/16"	26.56

RD IF K1

TEE CONNECTION

Part #	Pipe Size	List Price
34-001	1/4" Inverted flare x 1/4" MPT	34.25

41-1-390-0014 2000

TAILPIECE WITH FLATS

1/4 NPT

Part #	Length	List Price
34-011	2.34 w/ wrench Flats	20.07
34-012	2.13 w/ Hex	9.23

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

STANDARD NUT

7/8" Hex

Part #	Pipe Size	List Price
34-016	.880-14 LH	4.54

2001B

TAILPIECE & NUT ASSEMBLY

Part #	Pipe Size	List Price
34-022	1/4	21.53

2002AB

POL CAP

Part #	Pipe Size	List Price
34-031	.880-14LH	12.86

ME1699 POL2004 1004A M-2004

POL PLUG WITH CHAIN

Part #	Length	List Price
34-141	POL PLUG WITH CHAIN	41.10

ME1691-1

SINGLE PIECE POL ADPATER

Part #	Length	List Price
34-130	MALE POL X 1/4 FPT	7.08
34-131	MALE POL X 1/2 FPT	33.93

ME351 ME357

ADAPTERS

Part #	Pipe Size	List Price
34-041	3/8 Flare x .880-14LH	17.59
34-046	1/2 Flare x .880-14LH	17.49
34-051	5/8 Flare x .880-14LH	23.61

ME3510 2906E 2007

STRAIGHT TUBE UNION

Part #	Tube OD	Tube Thread	L	Hex	Working Pressure	List Price
28-966	1/4	7/16-20	1.35	0.49	3250 psi	8.37
28-969	3/8	9/16-18	1.41	0.63	3250 psi	10.59
28-970	1/2	3/4-16	1.62	0.81	3250 psi	12.85
28-971	3/4	1-1/16-12	2.14	1.13	3250 psi	63.05
28-972	1"	1-5/16-12	2.25	1.38	2600 psi	38.42

SBC 132403 HTXB

FEMALE STRAIGHT ADAPTER

Part #	Tube OD	Pipe	Tube Thread	L	Hex	Working Pressure	List Price
28-957	1/4	1/8-27	7/16-20	1.19	0.56	3250 psi	8.04
28-958	1/4	1/4-18	7/16-20	1.40	0.75	3250 psi	10.19
28-959	3/8	1/4-18	9/16-18	1.40	0.75	3250 psi	22.98
28-960	3/8	3/8-18	9/16-18	1.40	0.88	3250 psi	16.75
28-961	1/2	3/8-18	3/4-16	1.56	0.88	3250 psi	8.94
28-962	1/2	1/2-14	3/4-16	1.79	1.13	3250 psi	25.27
28-963	5/8	1/2-14	7/8-14	1.87	1.13	3250 psi	18.61
28-964	3/4	3/4-1/4	1-1/16-12	2.06	1.38	2600 psi	44.20

STRAIGHT

	Part #	Tube OD	A NPTF	Tube Thread	L	Hex	Working Pressure	List Price
	28-701	1/4	1/8-27	7/16-20	1.22	0.45	3250 psi	3.12
	28-702	1/4	1/4-18	7/16-20	1.37	0.56	3250 psi	6.33
	28-703	1/4	3/8-18	7/16-20	1.42	0.75	3250 psi	15.90
	28-705	5/16	1/4-18	1/2-20	1.42	0.56	3250 psi	20.91
	28-706	3/8	1/8-27	9/16-18	1.24	0.63	3250 psi	6.98
	28-707	3/8	1/4-18	9/16-18	1.43	0.63	3250 psi	6.53
	28-708	3/8	3/8-18	9/16-18	1.38	0.75	3250 psi	5.23
	28-709	3/8	1/2-14	9/16-18	1.69	0.88	3250 psi	9.90
	28-710	1/2	1/4-18	3/4-16	1.53	0.81	3250 psi	12.35
	28-711	1/2	3/8-18	3/4-16	1.53	0.81	3250 psi	10.22
	28-712	1/2	1/2-14	3/4-16	1.79	0.88	3250 psi	13.98
	28-713	1/2	3/4-14	3/4-16	1.85	1.13	2600 psi	28.86
	28-715	5/8	1/2-14	7/8-14	1.89	0.94	3250 psi	20.19
	28-716	5/8	3/4-14	7/8-14	1.95	1.13	2600 psi	22.28
	28-748	3/4	1/2-14	1 1/16-12	2.06	1.13	2925 psi	28.64
	28-717	3/4	3/4-14	1 1/16-12	2.06	1.13	2600 psi	22.66
	28-749	3/4	1-11 1/2	1 1/16-12	2.25	1.38	1950 psi	45.84
NEW	28-719	1	3/4-14	1 5/16-12	2.06	1.13	2275 psi	40.56
	28-718	1	1-11 1/2	1 5/16-12	2.3	1.38	1950 psi	40.56

B2404 SB FTXB

STRAIGHT SWIVEL ADAPTER

	Part #	Tube OD	A NPTF	Tube Thread	L	Hex	Working Pressure	List Price
NEW	28-752	1/4	1/4-18	7/16-20	1.389	.563	3250 psi	6.29
	28-753	3/8	1/4-18	9/16-18	1.6	.563	3250 psi	14.09
	28-754	3/8	3/8-18	9/16-18	1.574	.690	2925 psi	19.44
	28-756	1/2	1/2-14	3/4-16	1.706	.875	2600 psi	20.33

B6505 SJS

JIC 37° FLARE SHAPES

90° FORGED ELBOW

Part #	Tube OD	Tube Thread	A NPTF	M	N	Y	Working Pressure	List Price
28-760F	1/4	7/16-20	1/8-27	0.89	0.78	0.5	2160 psi	8.20
28-762F	1/4	7/16-20	1/4-18	1.05	1.03	0.53	1846 psi	7.36
28-766F	1/4	1/2-20	3/8-18	1.10	1.10	0.55	3905 psi	12.65
28-768F	3/8	9/16-18	1/8-27	1.06	1.00	0.56	3128 psi	20.00
28-770F	3/8	9/16-18	1/4-18	1.06	1.09	0.54	1564 psi	7.45
28-772F	3/8	9/16-18	3/8-18	1.15	1.22	0.74	1464 psi	13.66
28-773F	3/8	9/16-18	1/2-14	1.22	1.47	0.90	1265 psi	23.10
28-774F	1/2	3/4-16	3/8-18	1.25	1.22	0.81	1467 psi	19.92
28-777F	1/2	3/4-16	1/2-14	1.31	1.47	0.90	1265 psi	17.02
28-778F	1/2	3/4-16	3/4-14	1.4	1.59	0.89	2061 psi	42.72
28-780F	5/8	7/8-14	1/2-14	1.45	1.47	0.88	1265 psi	28.15
28-781F	3/4	1 1/16-12	1/2-14	1.66	1.56	1.08	1265 psi	57.38
28-783F	3/4	1 1/16-12	3/4-14	1.66	1.59	1.06	1084 psi	32.69
28-784F	1	1 5/16-12	1-11 1/2	1.88	1.77	1.32	1802 psi	53.12
28-786F	1	1 5/16-12	1-11 1/2	1.81	1.97	1.3	2361 psi	60.96

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	List Price
28-973	1/4	7/16-20	1/8-27	1.08	0.66	2797 psi	14.33
28-974	1/4	7/16-20	1/4-18	1.25	0.55	3066 psi	21.86
28-975	3/8	9/16-18	1/4-18	1.23	0.88	2842 psi	20.83

B2502 EBF DTXB

45° FORGED ELBOW

Part #	Tube OD	Tube Thread	A NPTF	M	N	Y	Working Pressure	List Price
28-722F	1/4	7/16-20	1/8-27	0.72	0.64	0.5	4367 psi	9.03
28-724F	1/4	7/16-20	1/4-18	0.81	0.84	0.53	3750 psi	12.09
28-729F	3/8	9/16-18	1/8-27	0.83	0.65	0.63	3128 psi	28.62
28-731F	3/8	9/16-18	1/4-18	0.83	0.86	0.63	3128 psi	9.37
28-733F	3/8	9/16-18	3/8-18	0.91	0.95	0.81	3100 psi	8.01
28-734F	3/8	9/16-18	1/2-14	1.03	1.17	0.94	2826 psi	18.26
28-736F	1/2	3/4-16	3/8-18	0.98	0.95	0.75	2938 psi	12.68
28-738F	1/2	3/4-16	1/2-14	1.13	1.17	0.86	2826 psi	37.05
28-742F	3/4	1 1/16-12	3/4-14	1.28	1.2	1.13	2442 psi	64.52

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

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

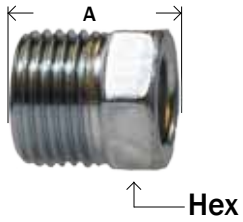
Measuring Metric Threads: Measure the O.D. of the threads and the crest to crest distance (pitch) in millimeters between threads.

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"

INVERTED FLARE

ZINC CHROMATE STEEL NUT

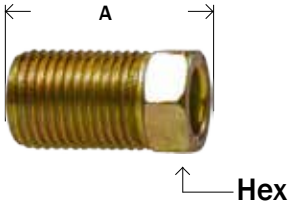


SAE# 040110

Part #	Size	Thread	A	Hex	Approx. Wt. Lbs.	List Price
12-001	1/8”	5/16-28	0.52	0.31	0.01	2.82
12-002	3/16”	3/8-24	0.56	0.37	0.02	0.41
12-018	3/16"	7/16-24	0.56	0.43	0.02	1.98
12-003	1/4”	7/16-24	0.56	0.43	0.02	0.46
12-004	5/16”	1/2-20	0.62	0.50	0.02	0.53
12-005	3/8”	5/8-18	0.66	0.62	0.03	0.89
12-000	7/16”	11/16-18	0.68	0.68	0.04	5.40
12-011	3/8"	11/16-18	0.66	0.68	0.05	6.42
12-006	1/2”	3/4-18	0.74	0.75	0.08	3.03
12-007	5/8”	7/8-18	0.80	0.87	0.10	3.37
12-008	3/4”	1-1/16-16	0.88	1.06	0.10	5.98

121XXX 2105 411FS 105 41W

LONG STEEL NUT

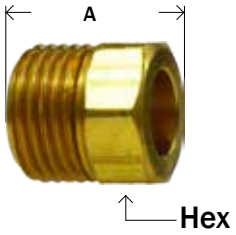


for Domestic lines

Part #	Size	A	Hex	Approx. Wt. Lbs.	List Price
12-009	3/16”	0.84	0.37	0.02	1.57
12-010	1/4”	0.81	0.43	0.02	1.78

7896

INVERTED FLARE BRASS NUT



SAE# 040110

Part #	Size	A	Hex	Approx. Wt. Lbs.	List Price
12-012	1/8”	0.52	0.31	0.01	2.90
12-013	3/16”	0.56	0.37	0.01	1.87
12-014	1/4”	0.56	0.43	0.02	0.65
12-015	5/16”	0.62	0.50	0.03	1.31
12-016	3/8”	0.66	0.62	0.04	1.72
12-017	1/2”	0.74	0.75	0.05	4.41

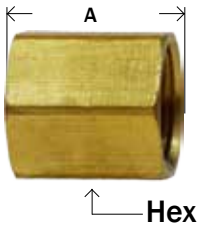
2100 41IF 100 41IB

ZINC STEEL METRIC TUBE NUTS

Part #	Tubesize	Thread	Ref#	List Price
12-260	3/16 British	3/8-24 Bubble	---	2.04
12-261	3/16 European	M10 x 1.0 Bubble	276110	1.98
12-262	3/16 Japanese	M10 x 1.0 Inv.	121050	1.98
12-263	3/16 Domestic	1/2 x 20 Inv.	---	2.52
12-264	3/16 Domestic	9/16 - 18 Inv.	121039	2.52
12-265	3/16 Imported	M11 x 1.5 Bubble	276011	2.52
12-266	3/16 Imported	M12 x 1.0 Bubble	276012	2.46
12-267	3/16 Imported	M13 x 1.5 Bubble	276013	2.58
12-268	1/4 Domestic	9/16 x 18 Inv.	121049	2.46
12-269	1/4 Domestic	1/2 x 20 Inv.	121045	2.58
12-270	6mm Imported	M12 x 1.0 Bubble		2.58
12-271	6mm GM	M12 x 1.0 Bubble		2.58
12-272	6mm GM	M12 x 1.5 Bubble		2.64
12-273	6mm GM	M14 x 1.5 Bubble		2.64
12-274	5/16 Domestic	M14 x 1.5 Surface Seal	121069	7.80
12-275	3/8 Domestic	M16 x 1.5 Surface Seal	121070	8.16

UNION INTERNAL

SAE# 040101



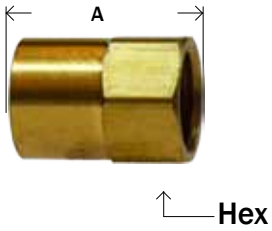
Part #	Inv. Flare X Inv. Flare	A	Hex	Approx. Wt. Lbs.	List Price
12-022	1/8”	0.59	0.40	0.02	2.40
12-023	3/16”	0.62	0.43	0.02	0.84
12-024	1/4”	0.62	0.50	0.03	1.79
12-025	5/16”	0.70	0.56	0.04	2.63
12-026	3/8”	0.80	0.75	0.08	3.17
12-027	1/2”	0.91	0.90	0.10	8.18

see page 72 for metric unions

302 2300 42IFHD

FEMALE ADAPTER

SAE# 040103



Part #	Inv. Flare X Female NPTF	A	Hex	Approx. Wt. Lbs.	List Price
12-032	3/16” x 1/8”	0.75	0.50	0.02	3.14
12-033	1/4” x 1/8”	0.75	0.53	0.02	1.98
12-034	5/16” x 1/8”	0.78	0.59	0.04	6.12
12-035	3/8” x 1/4”	1.03	0.75	0.08	6.62
12-036	1/2” x 3/8”	1.10	0.90	0.12	13.04

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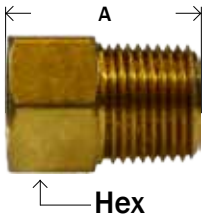
MALE ADAPTER

SAE# 040102

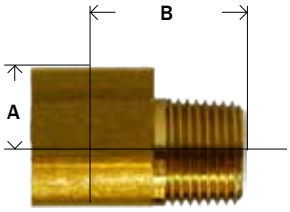


Part #	Inv. Flare X Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
12-041	1/8” x 1/8”	0.63	0.40	0.02	2.83
12-042	3/16” x 1/8”	0.70	0.43	0.02	1.09
12-043	1/4” x 1/8”	0.74	0.50	0.03	1.05
12-044	1/4” x 1/4”	0.89	0.56	0.04	1.58
12-045	5/16” x 1/8”	0.79	0.56	0.03	2.10
12-046	5/16” x 1/4”	0.98	0.56	0.05	2.15
12-047	3/8” x 1/8”	0.88	0.72	0.05	2.89
12-048	3/8” x 1/4”	1.02	0.75	0.06	2.38
12-049	3/8” x 3/8”	1.02	0.75	0.08	4.81
12-038	1/2” x 1/4”	0.97	0.87	0.10	5.46
12-050	1/2” x 3/8”	1.06	0.87	0.08	6.56
12-051	1/2” x 1/2”	1.06	0.87	0.11	6.33
12-052	5/8” x 1/2”	1.32	1.06	0.15	5.25
12-040	3/4” x 3/4”	1.39	1.25	0.24	27.18

2200 48IFHD 202 48W 200

ELBOW

SAE# 040202



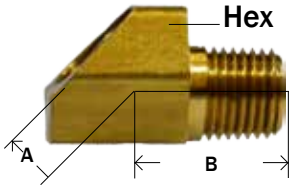
Part #	Inv. Flare X Male NPTF	A	B	Approx. Wt. Lbs.	List Price
12-057	1/8" x 1/8"	0.26	0.59	0.03	9.27
12-058	3/16" x 1/8"	0.26	0.61	0.03	2.95
12-059	1/4" x 1/8"	0.33	0.65	0.04	1.68
12-054*	1/4" x 1/8"	0.33	0.65	0.04	29.95
12-060	1/4" x 1/4"	0.28	0.82	0.06	3.36
12-061	5/16" x 1/8"	0.47	0.68	0.05	2.31
12-062	5/16" x 1/4"	0.45	0.85	0.08	3.36
12-063	3/8" x 1/8"	0.54	0.76	0.14	5.52
12-064	3/8" x 1/4"	0.53	0.92	0.14	4.97
12-065	3/8" x 3/8"	0.50	0.94	0.12	10.12
12-066	1/2" x 3/8"	0.59	1.03	0.16	6.93
12-067	1/2" x 1/2"	0.66	1.22	0.25	9.03
12-056	5/8" x 3/8"	0.67	1.09	0.20	17.78
12-068	5/8" x 1/2"	0.67	1.29	0.18	9.90
12-069	3/4" x 1/2"	0.80	1.39	0.42	57.45
12-080	7/8" x 3/4"	0.94	1.43	0.48	90.72
12-081	1" x 1"	1.02	1.69	0.60	106.44

*** Restricted pipe end .062**

400 2400 249IFHD 402 249IF 49W

45° ELBOW

SAE# 040302

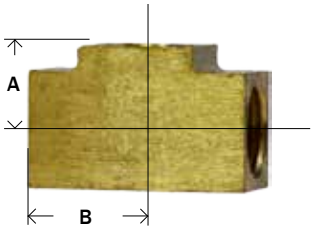


Part #	Inv. Flare X Male NPTF	A	B	Hex	Approx. Wt. Lbs.	List Price
12-072	3/16" x 1/8"	0.25	0.55	0.53	0.02	8.59
12-073	1/4" x 1/8"	0.27	0.58	0.56	0.04	4.10
12-074	5/16" x 1/8"	0.36	0.56	0.62	0.06	6.34
12-075	5/16" x 1/4"	0.23	0.83	0.62	0.06	18.19
12-076	3/8" x 1/4"	0.51	0.84	0.78	0.09	13.30
12-077	1/2" x 3/8"	0.38	0.91	0.84	0.11	13.14
12-079	5/8" x 1/2"	0.44	1.00	1.06	0.21	57.13

154 2352 259IFHD 352 94W

UNION TEE

SAE# 040401

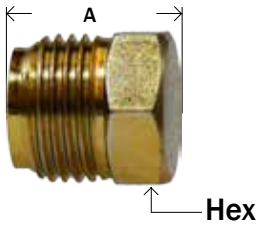


Part #	Size	A	B	Approx. Wt. Lbs.	List Price
12-085	1/8"	0.33	0.47	0.04	13.13
12-086	3/16"	0.39	0.55	0.04	4.33
12-087	1/4"	0.42	0.56	0.08	6.96
12-088	5/16"	0.45	0.63	0.09	7.77
12-089	3/8"	0.56	0.74	0.17	13.32
12-090	1/2"	0.67	0.88	0.24	31.37

244IFHD 702 44I

STEEL PLUG

• cored



SAE# 040109

Part #	Size	A	Hex	Approx. Wt. Lbs.	List Price
12-091	3/16”	0.53	0.37	0.01	0.83
12-092	1/4”	0.54	0.43	0.02	1.04
12-093	5/16”	0.59	0.50	0.03	1.15
12-094	3/8”	0.66	0.62	0.04	2.69

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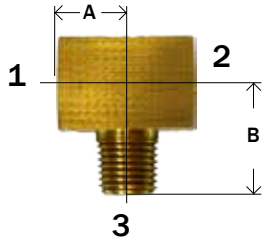
MALE BRANCH TEE

SAE# 040425

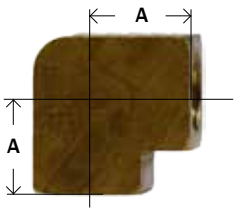


Part #	Inv. Flare x Male NPTF (1&2)x3	A	B	Approx. Wt. Lbs.	List Price
12-100	3/16” x 1/8”	0.41	0.60	0.04	4.92
12-101	1/4” x 1/8”	0.42	0.64	0.06	6.89
12-102	5/16” x 1/8”	0.47	0.68	0.07	11.34
12-103	3/8” x 1/4”	0.58	0.93	0.15	34.17

145 245IFHD 602 2600 600

FEMALE ELBOW

SAE# 040203

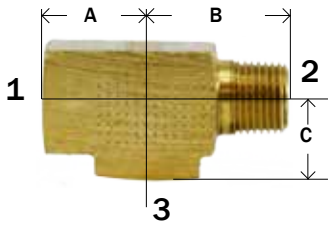


Part #	Inv. Flare x Female NPTF	A	Approx. Wt. Lbs.	List Price
12-110	1/4” x 1/8”	0.55	0.07	11.67
12-111	5/16” x 1/8”	0.51	0.08	23.53
12-112	3/8” x 1/4”	0.68	0.10	12.12

450

MALE RUN TEE

SAE# 040424

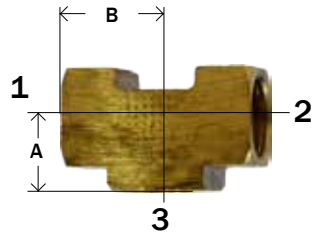


Part #	Inv. Flare x Male NPTF (1&3)x2	A	B	C	Approx. Wt. Lbs.	List Price
12-118	3/16” x 1/8”	0.53	0.72	0.39	0.06	39.61
12-119	1/4” x 1/8”	0.56	0.75	0.42	0.08	39.38
12-120	5/16” x 1/8”	0.62	0.85	0.45	0.10	12.50
12-121	3/8” x 1/4”	0.75	1.08	0.56	0.14	36.09

251IFHD 752 550 151

FEMALE BRANCH TEE

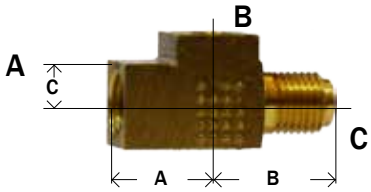
SAE# 040427



Part #	Inv. Flare x Female NPTF (1&2)x3	A	B	Approx. Wt. Lbs.	List Price
12-127	3/16" x 1/8"	0.39	0.55	0.06	16.33
12-129	5/16" x 1/8"	0.45	0.63	0.12	34.65
12-130	3/8" x 1/4"	0.56	0.74	0.17	30.25

252IFHD 652 136

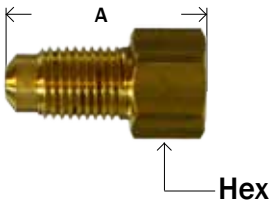
TOWED TRAILER BRAKE TEE



Part #	A	B	C	Reference #	Approx. Wt. Lbs.	List Price
12-147	3/16" 0.57	3/16" 0.76	3/16" 0.42	7900	0.08	7.35
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	38.46
12-148	3/16" (9/16-18)	3/16" (3/8-24)	3/16" (9/16/18)	7933	0.10	14.76
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	55.92
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	32.82
12-150	1/4" 0.56	3/16" 0.77	1/4" 0.43	7901	0.10	31.14
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	49.51
12-151	1/4" 0.56	1/4" 0.77	1/4" 0.43	7898	0.12	18.06

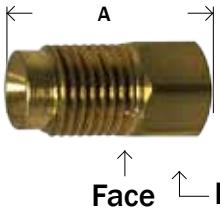
INVERTED FLARE AUTO FITTINGS

DUAL MASTER CYLINDER ADAPTER



Part #	Male Flare x Female Inv.	A	Hex	Reference #	Approx. Wt. Lbs.	List Price
12-200	3/16" x 3/16"	1.00	0.50	1441	0.03	4.08
12-202	5/16" x 3/16"	0.96	0.68	7897	0.07	9.72

DUAL MASTER CYLINDER ADAPTER

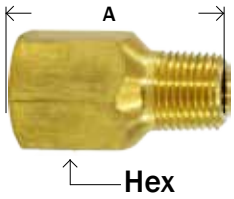


*** Seals on hex face**

Part #	Male Inverted Thread	Female Inverted Thread	Ref#	List Price
12-206	3/16(9/16-18)	3/16	7911	7.56
12-209	3/16(9/16-18)	3/16(1/2-20)	7913	7.00
12-207	3/16(9/16-20)	3/16	7910	5.40
12-210	3/16	1/4	7828	3.10
12-212	1/4	3/16	7818	2.82
12-214*	7/16-20	1/4	7732	8.45
12-211	1/4(9/16-18)	1/4	7908	7.19
12-215	1/4	5/16	7917	12.30
12-213*	5/16	3/16	7817	19.54
12-216	5/16	3/16	7909	5.27
12-208	5/16	3/16(9/16-18)	7912	6.92
12-218*	5/16	1/4	7727	7.91
12-220	5/16	1/4	7829	5.45
12-222*	5/16	5/16	1074	74.04
12-221	5/16	3/8	7915	6.69
12-224	3/8" NPTF	5/16	7771	18.11
12-217	3/8	5/16	7916	12.30

47W

CARBURETOR TO FUEL LINE ADAPTER - FORD

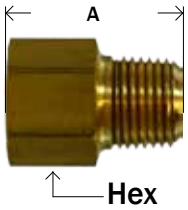


Part #	Female Tube OD x Male NPTF	A	Hex	Ref #	Approx. Wt. Lbs.	List Price
12-230	1/4”(1/2-20) x 1/8"	1.06	0.56	1513	0.04	19.33

1513

RESTRICTION PIPE ADAPTER

(.0625 ORIFICE)

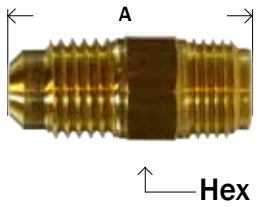


Part #	Size FIP x MIP	A	Hex	Ref #	Approx. Wt. Lbs.	List Price
12-310	1/8”	0.75	0.50	1512	0.02	7.99

1510

INVERTED FLARE

SAE FLARE X INVERTED FLARE

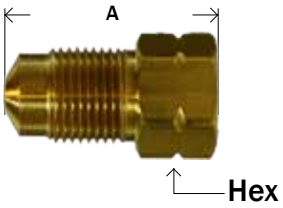


Part #	SAE Flare x Inv. Flare	A	Hex	Ref #	Approx. Wt. Lbs.	List Price
12-250	1/4" x 3/16"	1.03	0.43	1518	0.02	13.84
12-252	1/4" x 1/4"	1.03	0.43	1522	0.03	2.69
12-254	3/8" x 5/16"	1.34	0.63	1553	0.08	25.52
12-256	3/8" x 3/8"	1.37	0.63	1563	0.09	12.14
12-257	3/8" x 7/16"	1.40	0.68	1554	0.10	22.49

4205

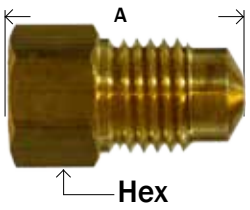
METRIC HYDRAULIC BRAKE FITTINGS

METRIC ADAPTER



Part #	Bubble Male Thread	Tube O.D./ Female Thread	A	Hex	Ref #	Approx. Wt. Lbs.	List Price
12-335	M10x1.0	3/16"(3/8-24)	1.02	0.50	1442	0.02	3.90
12-326	M11x1.5	3/16"(M10x1.0)	1.06	0.50	7935	0.02	18.76
12-327	M12x1.0	3/16"(M10x1.0)	1.02	0.53	7936	0.04	18.10
12-328	M16x1.5	3/16"(M10x1.0)	1.02	0.56	7937	0.06	19.19

ADAPTER STANDARD TO METRIC BUBBLE



Part #	Female Inv. Flare Seat	Male Metric Bubble Flare	A	Hex	Ref #	Approx. Wt. Lbs.	List Price
12-336	3/16" (3/8-24)	11x1.5			7973		11.22
12-337	3/16" (3/8-24)	(3/16") (10x1.25)	1.00	0.50	7970	0.02	21.06
12-339	3/16" (3/8-24)	13x1.5	1.03	0.56	7972	0.04	23.09
12-341	3/16" (3/8-24)	12x1.0	1.02	0.53	7974	0.04	18.97

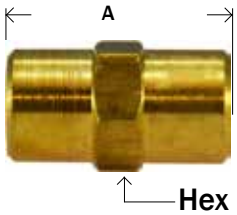
FEMALE X MALE ADAPTERS

Part #	Female Standard Flare Seat	Male Bubble Flare	Material	List Price
12-330	3/8-24 (3/16)	7/16-20	Steel	6.18

Part #	Tube OD/ Female Thread	Inverted Male Thread	Ref #	List Price
12-205	3/16 (3/8-24)	M10 x 1.0	1443	4.68

Part #	Female Standard Flare	Inverted Male Thread	Material	List Price
12-329	3/8-24 (3/16)	M9 x 1.0	Steel	9.18

METRIC UNION



Part #	Size	A	Hex	Ref #	Approx. Wt. Lbs.	List Price
12-342	British Brake Lines 3/16 (3/8-24 Bubble)	0.87	0.50	1594	0.03	7.32
12-343	European Brake Lines 3/16"(10.0MM)	1.04	0.56	7975	0.04	17.81
12-344	Japanese Brake Lines 3/16 (M10 x 1.0) Inverted	1.00	0.50	7934A	0.04	7.32
12-345	GM Brake Lines 6mm M12 x 1.0 Bubble	1.11	0.63		0.06	7.20

COMPRESSION FITTINGS

These are NOT Lead Free

See pages 160-164 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"

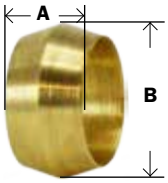
• "L" at the end of a Part# means Light Pattern -These fittings are completely interchangeable with full pattern fittings, but have been modified in some way. This modification is usually in the length of the pipe threads. Used in plumbing and light industrial applications.

Actual Profile of Compression Threads

BRASS SLEEVE

• FERRULES

SAE# 060115

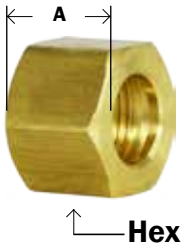


Part #	Size	A	B	Approx. Wt. Lbs.	List Price
18-001	1/8”	0.19	0.19	0.01	0.30
18-002	3/16”	0.22	0.27	0.01	0.21
18-003	1/4”	0.25	0.34	0.01	0.25
18-004	5/16”	0.25	0.41	0.01	0.20
18-005	3/8”	0.25	0.47	0.02	0.24
18-006	7/16”	0.31	0.53	0.02	0.57
18-007	1/2”	0.38	0.59	0.02	0.58
18-008	5/8”	0.38	0.71	0.03	0.62
18-009	3/4”	0.44	0.87	0.03	1.64
18-010	7/8”	0.41	0.99	0.03	1.05

60 260

BRASS NUT

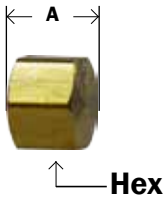
SAE# 060110



Part #	Size	Thread	A	Hex	Approx. Wt. Lbs.	List Price
18-033	1/8”	5/16-24	0.38	0.37	0.01	0.90
18-034	3/16”	3/8-24	0.41	0.43	0.01	0.53
18-035L	1/4”	7/16-24	0.44	0.50	0.02	0.57
18-035	1/4”	7/16-24	0.44	0.50	0.02	0.79
18-036	5/16”	1/2-24	0.44	0.56	0.02	0.85
18-037L	3/8”	9/16-24	0.47	0.62	0.04	0.90
18-037	3/8”	9/16-24	0.47	0.62	0.04	1.37
18-038	7/16”	5/8-24	0.50	0.68	0.04	3.87
18-039L	1/2”	11/16-20	0.56	0.75	0.04	1.83
18-039	1/2”	11/16-20	0.62	0.81	0.04	2.83
18-040L	5/8”	13/16-18	0.56	0.87	0.06	1.80
18-040	5/8”	13/16-18	0.62	0.94	0.06	3.15
18-041	3/4”	1-18	0.68	1.12	0.08	3.86
18-042	7/8”	1-1/8 - 18	0.62	1.25	0.10	4.88

61 261

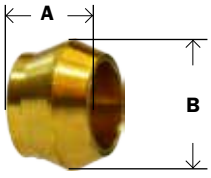
CAP



Part #	Size	A	Hex	Approx. Wt. Lbs.	List Price
18-047	1/4”	0.44	0.50	0.02	1.39
18-048	3/8”	0.40	0.62	0.04	1.64
18-049	1/2”	0.48	0.75	0.06	3.64
18-050	5/8”	0.56	0.94	0.10	6.17

61-CC N5CT

COMPRESSION PLUG

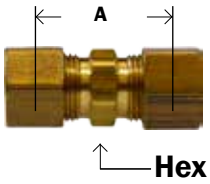


Part #	Size	A	B	Approx. Wt. Lbs.	List Price
18-029	3/8”	0.31	0.47	0.04	2.04
18-030	1/2”	0.34	0.59	0.06	2.83

CSP

UNION

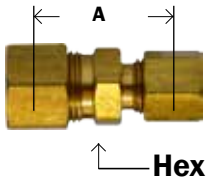
SAE# 060101BA



Part #	Size	A	Hex	Approx. Wt. Lbs.	List Price
18-062	1/8”	0.64	0.31	0.03	4.83
18-063	3/16”	0.75	0.37	0.04	2.39
18-064L	1/4”	0.79	0.43	0.06	2.55
18-064	1/4”	0.81	0.43	0.06	2.90
18-065	5/16”	0.88	0.50	0.06	3.72
18-066L	3/8”	0.96	0.56	0.09	3.55
18-066	3/8”	0.98	0.56	0.10	3.64
18-067	7/16”	1.02	0.62	0.12	19.44
18-068L	1/2”	1.06	0.68	0.16	7.66
18-068	1/2”	1.25	0.68	0.16	9.17
18-069L	5/8”	1.43	0.81	0.24	8.16
18-069	5/8”	1.25	0.81	0.26	11.91
18-070	3/4”	1.41	1.00	0.35	21.35
18-071L	7/8”	1.03	1.12	0.34	17.33
18-071	7/8”	1.00	1.12	0.36	17.12

M-62

REDUCING UNION

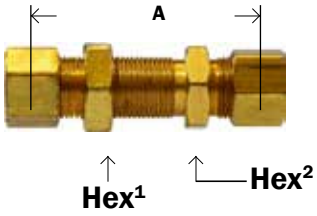


Part #	Size	A	Hex	Approx. Wt. Lbs.	List Price
18-076	1/4” x 1/8”	0.73	0.44	0.04	4.41
18-077	1/4” x 3/16”	0.78	0.44	0.06	7.99
18-078	5/16” x 1/4”	0.81	0.50	0.06	4.75
18-079	3/8” x 1/4”	0.90	0.56	0.10	7.20
18-080	3/8” x 5/16”	0.94	0.56	0.10	7.13
18-081	1/2” x 3/8”	1.03	0.68	0.12	8.12
18-082	5/8” x 3/8”	1.03	0.81	0.15	8.00
18-084	7/8” x 5/8”	1.23	1.18	0.20	29.44

62-R

BULKHEAD UNIONS

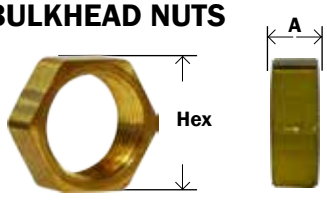
SAE# 060101



Part #	Size	A	Hex 1	Hex 2	Approx. Wt. Lbs.	List Price
18-088	1/4”	1.58	0.56	0.56	0.10	8.62
18-090	3/8”	1.76	0.68	0.68	0.14	23.77

62BH 75 274

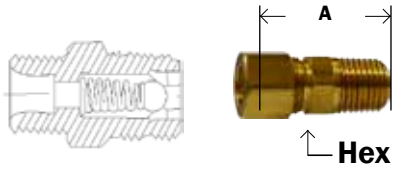
BULKHEAD NUTS



Part #	Size	A	Hex	Approx. Wt. Lbs.	List Price
18-097	1/4”	0.25	0.56	0.02	5.68
18-099	3/8”	0.25	0.68	0.04	6.28
18-100	1/2”	0.38	0.94	0.06	28.13

20102

BALL CHECK VALVE - Min. Working pressure 3 psi.

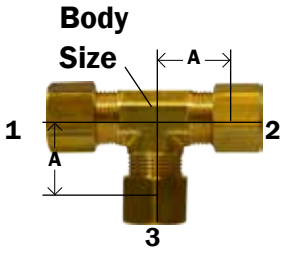


Part #	Tube OD x Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
18-092	1/8" x 1/8"	0.78	0.44	0.04	11.63
18-094	1/4" x 1/8"	0.88	0.44	0.04	12.20
18-096	3/8" x 1/4"	1.16	0.56	0.08	16.11

63 263 63A

TEE

SAE# 060401



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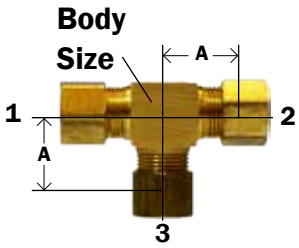


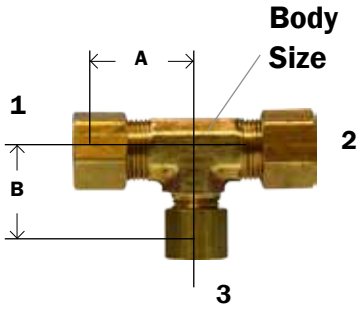
Barstock

Part #	Size	A	Body Size	Approx. Wt. Lbs.	List Price
18-101	1/8"	0.61	0.37	0.04	12.96
18-101B*	1/8"	0.62	0.33	0.04	11.29
18-102	3/16"	0.59	0.36	0.08	5.80
18-102B*	3/16"	0.60	0.38	0.08	8.20
18-103	1/4"	0.63	0.36	0.10	5.35
18-103B*	1/4"	0.62	0.49	0.10	10.20
18-104	5/16"	0.72	0.50	0.13	8.49
18-104B*	5/16"	0.60	0.50	0.14	13.33
18-105	3/8"	0.75	0.50	0.16	7.34
18-105B*	3/8"	0.73	0.59	0.16	13.55
18-106	1/2"	0.94	0.59	0.22	14.36
18-106B*	1/2"	0.94	0.69	0.24	30.90
18-107	5/8"	1.06	0.69	0.28	15.31
18-108	3/4"	1.22	0.88	0.32	49.88
18-109	7/8"	1.25	0.94	0.34	40.07

* Barstock

64 264C

FORGED REDUCING TEE



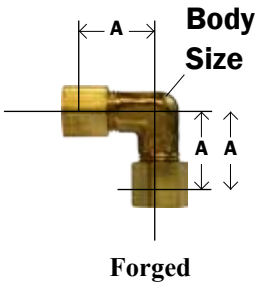
Part #	Size 1 x 2 x 3	A	B	Body Size	Approx. Wt. Lbs.	List Price
18-114	1/4" x 1/4" x 1/8"	0.62	0.59	0.38	0.09	7.68
18-110	1/4" x 1/4" x 3/8"	0.69	0.75	0.50	0.14	16.99
18-111	3/8" x 1/4" x 1/4"	0.75	0.69	0.50	0.12	10.44
18-115	3/8" x 3/8" x 1/4"	0.75	0.69	0.50	0.14	7.67
18-116	1/2" x 1/2" x 1/4"	0.94	0.81	0.59	0.16	14.50
18-117	1/2" x 1/2" x 3/8"	0.94	0.81	0.59	0.24	15.60
18-118	5/8" x 5/8" x 3/8"	1.06	0.94	0.69	0.28	18.66
18-119	5/8" x 5/8" x 1/2"	1.06	1.06	0.69	0.30	20.66

64-R

our life is what our thoughts make it. – Marcus Aurelius

UNION ELBOW

SAE# 060201

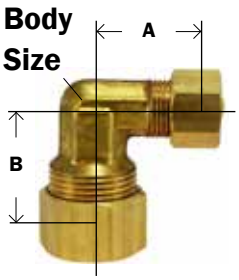


Part #	Size	A	Body Size	Approx. Wt. Lbs.	List Price
18-122B*	1/8”	0.62	0.35	0.04	8.32
18-123	3/16”	0.61	0.37	0.06	7.44
18-124	1/4”	0.66	0.38	0.08	4.80
18-125	5/16”	0.69	0.47	0.09	7.91
18-126	3/8”	0.72	0.43	0.12	6.33
18-127	1/2”	0.94	0.59	0.19	10.20
18-128	5/8”	1.06	0.72	0.26	10.71
18-129	3/4”	1.19	0.94	0.48	27.08
18-130	7/8”	1.25	0.94	0.44	30.00

Forged
Barstock

65 BSE2 165C 265C

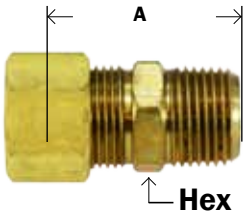
REDUCING ELBOW - Forged



Part #	Size	A	B	Body Size	Approx. Wt. Lbs.	List Price
18-135	3/8” x 1/4”	0.69	0.75	0.47	0.12	10.57
18-136	1/2” x 3/8”	0.88	0.94	0.59	0.15	11.63
18-137	5/8” x 3/8”	0.88	0.97	0.56	0.18	16.10
31-137	3/8" OD x 5/8" OD	Chrome Plated				9.56

65-R

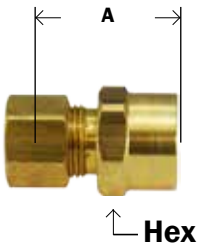
TANK ADAPTER DRILLED THRU (NO STOP)



Part #	Comp. X Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
18-208	1/4” x 1/8”	0.88	0.43	0.04	3.34
18-209	1/4” x 1/4”	0.99	0.56	0.05	2.51
18-210	3/8” x 1/4”	1.16	0.56	0.05	4.68
18-211	3/8” x 3/8”	1.09	0.68	0.08	3.88
18-212	3/8” x 1/2”	1.19	0.87	0.10	6.22
18-213	1/2” x 3/8”	1.22	0.68	0.12	8.40
18-214	1/2” x 1/2”	1.09	0.81	0.14	6.79
18-215	5/8” x 1/2”	1.12	0.81	0.18	8.01

68-T 682C 80F

COMP X SWEAT ADAPTER

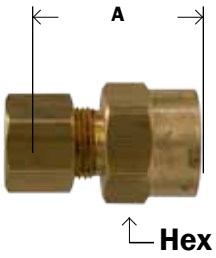


Part #	Comp. X Sweat Adapter	A	Hex	Approx. Wt. Lbs.	List Price
18-171	3/8” x 1/2” nom.swt.	0.98	0.75	0.08	6.58
31-171	3/8" OD x 1/2" SWT	Chrome Plated			6.11

66-S

FEMALE ADAPTER

SAE# 060103



Part #	Comp. X Female NPTF	A	Hex	Approx. Wt. Lbs.	List Price
18-142	1/8” x 1/8”	0.75	0.56	0.02	3.43
18-143	3/16” x 1/8”	0.78	0.56	0.04	4.45
18-144	3/16” x 1/4”	0.96	0.68	0.04	10.42
18-145L	1/4” x 1/8”	0.84	0.50	0.05	1.96
18-145	1/4” x 1/8”	0.78	0.56	0.05	2.82
18-146L	1/4” x 1/4”	0.88	0.62	0.09	3.89
18-146	1/4” x 1/4”	1.03	0.68	0.09	6.40
18-148	1/4” x 1/2”	1.02	0.87	0.12	16.56
18-149	5/16” x 1/8”	0.81	0.56	0.05	3.95
18-150	5/16” x 1/4”	0.91	0.62	0.06	5.83
18-152	3/8” x 1/8”	0.88	0.56	0.06	3.89
18-153L	3/8” x 1/4”	0.97	0.62	0.08	4.96
18-153	3/8” x 1/4”	1.06	0.68	0.08	5.25
18-154L	3/8” x 3/8”	1.03	0.75	0.08	3.31
18-154	3/8” x 3/8”	1.06	0.81	0.10	7.47
18-155	3/8” x 1/2”	1.12	1.00	0.08	5.59
18-156	3/8” x 3/4”	1.19	1.16	0.14	16.89
18-157	1/2” x 1/4”	1.09	0.68	0.10	10.36
18-158L	1/2” x 3/8”	0.94	0.81	0.12	8.45
18-158	1/2” x 3/8”	1.12	0.81	0.12	8.45
18-159L	1/2” x 1/2”	1.19	1.00	0.12	6.71
18-159	1/2” x 1/2”	1.31	1.00	0.12	13.81
18-160	1/2” x 3/4”	1.25	1.16	0.18	16.15
18-162L	5/8” x 1/2”	1.20	0.94	0.18	7.37
18-162	5/8” x 1/2”	1.38	1.00	0.18	12.06
18-163	5/8” x 3/4”	1.20	1.12	0.22	10.58
18-164	3/4” x 1/2”	1.25	1.06	0.26	19.10
18-165	3/4” x 3/4”	1.28	1.19	0.28	27.63
18-167	7/8” x 1/2”	1.28	1.19	0.32	18.39
18-166	7/8” x 3/4”	1.31	1.12	0.34	22.09

DRILLED THRU UNION - NO STOP

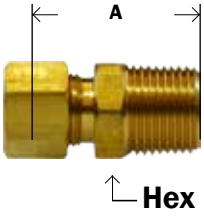
Part #	Size	List Price
18-066D	3/8"	5.72
18-069D	5/8"	13.38
18-071D	7/8"	30.66

A long life may not be good enough, but a good life is long enough.

-Benjamin Franklin

MALE ADAPTER

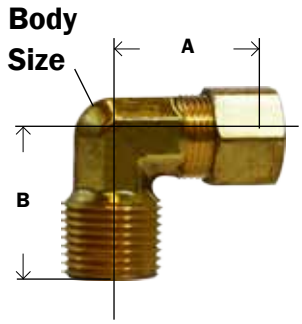
SAE# 060102



Part #	Comp. X Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
18-175	1/8" x 1/16"	0.78	0.37	0.02	8.49
18-176	1/8" x 1/8"	0.78	0.43	0.04	2.25
18-177	3/16" x 1/8"	0.84	0.43	0.04	1.95
18-178	3/16" x 1/4"	0.94	0.56	0.06	5.00
18-179L	1/4" x 1/8"	0.88	0.56	0.04	2.07
18-179	1/4" x 1/8"	0.88	0.43	0.04	2.02
18-180L	1/4" x 1/4"	0.94	0.56	0.05	1.77
18-180	1/4" x 1/4"	1.06	0.56	0.06	3.28
18-181	1/4" x 3/8"	1.03	0.68	0.08	3.23
18-182	1/4" x 1/2"	1.09	0.81	0.10	4.46
18-183	5/16" x 1/8"	0.91	0.50	0.05	2.74
18-184L	5/16" x 1/4"	1.01	0.56	0.06	3.54
18-184	5/16" x 1/4"	1.09	0.56	0.06	3.28
18-185	5/16" x 3/8"	1.06	0.68	0.07	5.96
18-186	5/16" x 1/2"	1.14	0.87	0.10	9.31
18-187L	3/8" x 1/8"	0.94	0.56	0.06	3.07
18-187	3/8" x 1/8"	0.97	0.56	0.06	4.23
18-188L	3/8" x 1/4"	1.03	0.56	0.06	3.33
18-188	3/8" x 1/4"	1.16	0.56	0.07	3.57
18-189L	3/8" x 3/8"	1.09	0.68	0.08	3.44
18-189	3/8" x 3/8"	1.14	0.69	0.08	4.59
18-190L	3/8" x 1/2"	1.19	0.88	0.12	5.28
18-190	3/8" x 1/2"	1.34	0.87	0.13	5.86
18-191	3/8" x 3/4"	1.29	1.06	0.16	11.56
18-192	7/16" x 1/4"	1.06	0.62	0.10	10.87
18-204	7/16" x 3/8"	1.10	0.68	0.12	8.88
18-193L	1/2" x 1/4"	1.09	0.69	0.11	6.33
18-193	1/2" x 1/4"	1.22	0.68	0.11	6.33
18-194L	1/2" x 3/8"	1.16	0.68	0.12	4.65
18-194	1/2" x 3/8"	1.16	0.69	0.12	5.01
18-195L	1/2" x 1/2"	1.09	0.81	0.12	5.71
18-195	1/2" x 1/2"	1.41	0.87	0.19	8.09
18-196	1/2" x 3/4"	1.38	1.06	0.22	8.09
18-197	5/8" x 3/8"	1.22	0.87	0.24	6.36
18-198	5/8" x 1/2"	1.12	0.81	0.24	7.28
18-199	5/8" x 3/4"	1.31	1.06	0.26	7.50
18-200	3/4" x 1/2"	1.44	1.00	0.26	11.98
18-201	3/4" x 3/4"	1.50	1.06	0.26	12.02
18-202	7/8" x 1/2"	1.18	1.12	0.26	18.85
18-203	7/8" x 3/4"	1.22	1.12	0.28	10.67
18-205	7/8" x 1"	1.67	1.37	0.32	56.21

MALE ELBOW

SAE# 060202



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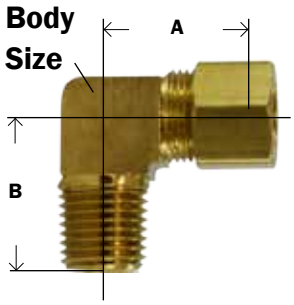
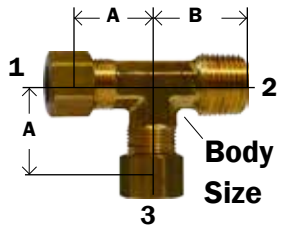


Barstock

Part #	Comp. X Male NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
18-220	1/8" x 1/8"	0.59	0.75	0.34	0.02	3.59
18-220B*	1/8" x 1/8"	0.60	0.67	0.43	0.04	3.61
18-221	3/16" x 1/8"	0.63	0.72	0.34	0.04	4.43
18-221B*	3/16" x 1/8"	0.62	0.69	0.43	0.06	3.42
18-223	3/16" x 1/4"	0.60	0.81	0.39	0.05	5.19
18-224	1/4" x 1/8"	0.60	0.75	0.37	0.06	3.69
18-224B*	1/4" x 1/8"	0.62	0.75	0.43	0.06	3.02
18-225	1/4" x 1/4"	0.65	0.94	0.36	0.08	3.51
18-225B*	1/4" x 1/4"	0.61	0.81	0.56	0.08	3.61
18-226	1/4" x 3/8"	0.75	0.91	0.47	0.08	4.82
18-227	1/4" x 1/2"	0.81	1.13	0.56	0.12	7.80
18-228	5/16" x 1/8"	0.66	0.75	0.47	0.06	5.12
18-228B*	5/16" x 1/8"	0.62	0.75	0.42	0.06	4.22
18-229	5/16" x 1/4"	0.66	0.81	0.47	0.07	5.07
18-229B*	5/16" x 1/4"	0.69	0.84	0.57	0.08	6.66
18-230	5/16" x 3/8"	0.75	0.91	0.47	0.10	5.97
18-231	5/16" x 1/2"	0.84	1.12	0.56	0.12	9.58
18-232	3/8" x 1/8"	0.72	0.66	0.39	0.06	4.09
18-232B*	3/8" x 1/8"	0.69	0.69	0.57	0.06	7.02
18-233	3/8" x 1/4"	0.75	0.82	0.46	0.08	5.39
18-233B*	3/8" x 1/4"	0.75	0.94	0.57	0.08	5.41
18-234	3/8" x 3/8"	0.81	0.94	0.46	0.10	5.65
18-234B*	3/8" x 3/8"	0.71	0.83	0.69	0.10	9.54
18-235	3/8" x 1/2"	0.87	1.12	0.56	0.14	11.62
18-235B*	3/8" x 1/2"	0.88	1.16	0.94	0.14	18.81
18-248	3/8" x 3/4"	1.03	1.19	0.81	0.18	12.11
18-247	7/16" x 1/4"	0.84	1.00	0.56	0.14	10.29
18-236	1/2" x 1/4"	0.88	0.97	0.56	0.14	8.30
18-237	1/2" x 3/8"	0.88	1.03	0.56	0.19	7.39
18-237B*	1/2" x 3/8"	0.94	1.12	0.70	0.19	10.64
18-238	1/2" x 1/2"	0.94	1.13	0.59	0.17	8.33
18-238B*	1/2" x 1/2"	0.94	1.31	0.86	0.17	16.89
18-239	1/2" x 3/4"	1.16	1.25	0.81	0.18	14.72
18-240	5/8" x 3/8"	1.06	1.12	0.68	0.18	9.05
18-241	5/8" x 1/2"	1.06	1.16	0.68	0.20	9.80
18-241B*	5/8" x 1/2"	1.06	1.31	0.86	0.20	16.94
18-242	5/8" x 3/4"	1.16	1.31	0.81	0.24	15.57
18-243	3/4" x 1/2"	1.19	1.31	0.94	0.26	16.79
18-245	3/4" x 3/4"	1.19	1.38	0.94	0.30	18.99
18-246	7/8" x 3/4"	1.25	1.38	0.94	0.35	29.10

* Barstock

FORGED MALE RUN TEE

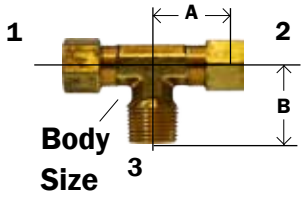


Part #	Comp. X Male NPTF (1&3) X 2	A	B	Body Size	Approx. Wt. Lbs.	List Price
18-272	1/8" x 1/8"	0.63	0.69	0.36	0.06	6.65
18-273	3/16" x 1/8"	0.63	0.69	0.36	0.07	6.65
18-274	1/4" x 1/8"	0.63	0.75	0.36	0.08	5.73
18-275	1/4" x 1/4"	0.69	0.88	0.44	0.10	6.78
18-276	5/16" x 1/8"	0.72	0.75	0.50	0.10	8.93
18-277	5/16" x 1/4"	0.75	0.88	0.44	0.10	8.67
18-278	3/8" x 1/8"	0.75	0.75	0.50	0.14	9.60
18-279	3/8" x 1/4"	0.79	0.87	0.44	0.18	7.43
18-280	3/8" x 3/8"	0.88	1.00	0.47	0.20	11.45
18-281	1/2" x 3/8"	0.94	1.09	0.59	0.24	13.94
18-282	1/2" x 1/2"	0.97	1.19	0.69	0.26	18.19
18-283	5/8" x 1/2"	1.06	1.31	0.69	0.28	16.97
18-284	3/4" x 1/2"	1.22	1.34	0.88	0.30	40.26

71 171C BST3

MALE BRANCH TEE

SAE# 060425



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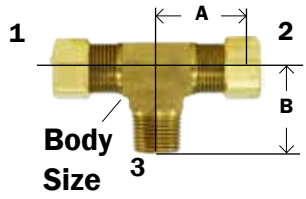


Barstock

Part #	Comp. X Male NPTF (1&2) X 3	A	B	Body Size	Approx. Wt. Lbs.	List Price
18-290	3/16" x 1/8"	0.63	0.69	0.36	0.08	8.66
18-291	1/4" x 1/8"	0.62	0.75	0.36	0.10	6.20
18-291B*	1/4" x 1/8"	0.64	0.73	0.45	0.10	10.61
18-292	1/4" x 1/4"	0.69	0.86	0.44	0.10	7.18
18-293	5/16" x 1/8"	0.72	0.75	0.50	0.11	7.18
18-294	5/16" x 1/4"	0.75	0.88	0.44	0.12	8.03
18-295	3/8" x 1/8"	0.75	0.75	0.50	0.14	9.59
18-296	3/8" x 1/4"	0.78	0.88	0.44	0.16	7.35
18-297	3/8" x 3/8"	0.78	0.97	0.47	0.18	10.77
18-298	3/8" x 1/2"	0.88	1.22	0.69	0.20	16.49
18-304	1/2" x 1/4"	0.94	0.97	0.59	0.22	14.26
18-299B*	1/2" x 3/8"	0.96	1.09	0.70	0.24	26.78
18-299	1/2" x 3/8"	0.94	1.12	0.59	0.24	13.65
18-300	1/2" x 1/2"	0.97	1.19	0.69	0.30	17.25
18-301	5/8" x 1/2"	1.06	1.31	0.69	0.32	19.43
18-302	3/4" x 1/2"	1.22	1.34	0.88	0.50	43.18
18-303	3/4" x 3/4"	1.25	1.50	0.88	0.54	40.66

* Barstock

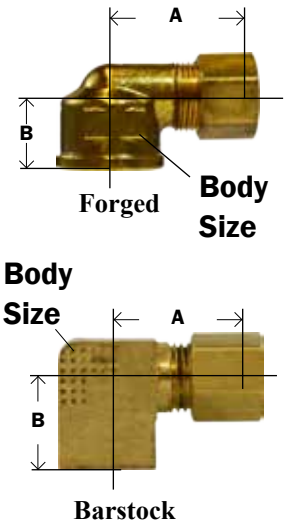
72 BST1 172C

Be glad of life because it gives you the chance to love and to work and to play and to look up at the stars.

– Henry Van Dyke

FEMALE ELBOW

SAE# 060203

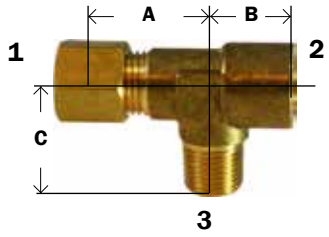


Part #	Comp. X Female NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
18-251	1/8" x 1/8"	0.69	0.56	0.56	0.04	8.46
18-252	3/16" x 1/8"	0.69	0.47	0.56	0.04	5.01
18-253	1/4" x 1/8"	0.69	0.47	0.56	0.06	4.98
18-253B*	1/4" x 1/8"	0.69	0.56	0.56	0.06	6.00
18-254	1/4" x 1/4"	0.75	0.50	0.72	0.08	5.64
18-267	1/4" x 3/8"	0.81	0.58	0.81	0.08	7.99
18-268	1/4" x 1/2"	0.89	0.66	1.00	0.10	10.57
18-255	5/16" x 1/8"	0.72	0.84	0.47	0.08	9.21
18-256	5/16" x 1/4"	0.78	0.50	0.72	0.09	7.18
18-257	3/8" x 1/8"	0.75	0.84	0.47	0.10	5.94
18-258	3/8" x 1/4"	0.84	0.59	0.75	0.10	6.33
18-259	3/8" x 3/8"	0.88	0.58	0.81	0.12	7.31
18-260	3/8" x 1/2"	0.97	0.66	1.00	0.14	8.39
18-250	3/8" x 3/4"	1.09	0.72	1.25	0.18	13.38
18-261	1/2" x 1/4"	1.06	0.70	0.88	0.18	11.66
18-262	1/2" x 3/8"	1.00	0.70	0.88	0.16	9.73
18-263	1/2" x 1/2"	1.03	0.72	1.00	0.20	10.04
18-270	1/2" x 3/4"	1.16	0.72	1.25	0.23	14.42
18-269	5/8" x 3/8"	1.09	0.77	1.00	0.20	14.76
18-264	5/8" x 1/2"	1.09	0.77	1.00	0.22	11.48
18-265	5/8" x 3/4"	1.22	0.77	1.25	0.24	15.75
18-266	3/4" x 1/2"	1.25	1.25	0.94	0.28	25.79

* Barstock

70 270C BSE3 170C

FORGED TEE



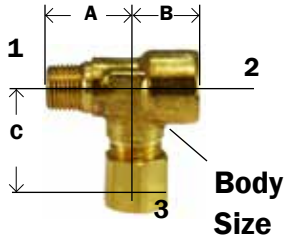
Part #	Comp. X Female NPTF x Male NPTF 1x(2&3)	A	B	C	Approx. Wt. Lbs.	List Price
18-307	1/4" x 1/8"	0.72	0.53	0.72	0.20	7.73

71 171C BST3

Don't be afraid to give your best to what seemingly are small jobs. Every time you conquer one it makes you that much stronger. If you do the little jobs well, the big ones will tend to take care of themselves.

- Dale Carnegie

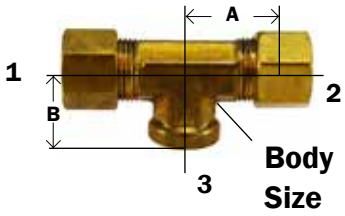
ADAPTER TEE



Part #	Male NPTF x Female NPTF x Comp. 3x (1&2)	A	B	C	Body Size	Approx. Wt. Lbs.	List Price
18-314	1/8" x 1/4"	0.72	0.53	0.72	0.47	0.08	8.56
18-316	3/8" x 1/4"	0.84	0.97	0.81	0.47	0.10	9.97

76 **176C**

FEMALE BRANCH FORGED TEE

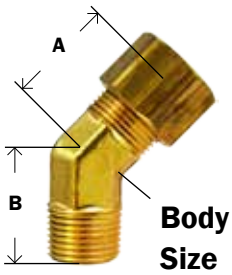


Part #	Comp. X Female NPTF (1&2)x3	A	B	Body Size	Approx. Wt. Lbs.	List Price
18-321	1/4" x 1/8"	0.78	0.75	0.45	0.10	7.37
18-328	1/4" x 1/4"	0.78	0.75	0.44	0.12	11.51
18-325	3/8" x 1/8"	0.75	0.63	0.50	0.12	9.57
18-322	3/8" x 1/4"	0.81	0.97	0.47	0.14	11.59
18-323	3/8" x 3/8"	0.97	0.69	1.05	0.16	17.32
18-326	1/2" x 1/8"	0.94	0.75	0.59	0.20	15.17
18-324	1/2" x 3/8"	1.00	0.72	0.88	0.22	22.81
18-327	5/8" x 1/8"	1.06	0.81	0.69	0.26	20.57

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

45° ELBOW

SAE# 060302

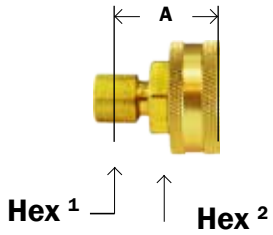


Part #	Comp. X Male NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
18-329	3/16" x 1/8"	0.40	0.63	0.41	0.04	5.72
18-330	1/4" x 1/8"	0.40	0.61	0.41	0.04	5.26
18-336	1/4" x 1/4"	0.59	0.84	0.53	0.06	7.71
18-331	5/16" x 1/8"	0.59	0.65	0.53	0.06	8.47
18-332	5/16" x 1/4"	0.59	0.83	0.53	0.08	8.96
18-333	3/8" x 1/4"	0.62	0.83	0.53	0.08	6.89
18-338	3/8" x 3/8"	0.75	0.95	0.59	0.10	18.75
18-334	1/2" x 3/8"	0.75	0.88	0.59	0.14	8.52
18-339	1/2" x 1/2"	0.94	1.14	0.75	0.14	16.54
18-335	5/8" x 1/2"	0.78	1.14	0.78	0.14	17.60

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

GARDEN HOSE SWIVEL

•WASHER INCLUDED



Part #	Compression x FGH	A	Hex 1	Hex 2	Approx. Wt. Lbs.	List Price
30-050	1/4" x 3/4"	1.02	0.50	0.75	0.09	8.63
30-051	3/8" x 3/4"	1.04	0.62	0.75	0.12	8.10

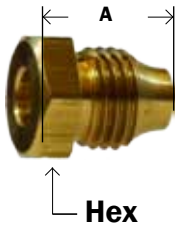
COMPRESSION — BRASS FITTINGS

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.	List Price
16-001	1/8”	0.50	0.37	0.02	1.18
16-002	3/16”	0.53	0.43	0.02	2.20
16-003	1/4”	0.56	0.50	0.04	2.92
16-004	5/16”	0.61	0.56	0.04	3.39
16-005	3/8”	0.61	0.62	0.04	3.84

181 **6100** 11

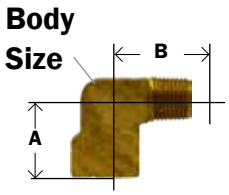
MALE ADAPTER

Part #	THRD Sleeve x Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
16-117	1/8” x *	0.62	0.43	0.02	13.26
16-118	1/8” x 1/8”	0.62	0.43	0.02	2.62
16-119	3/16” x 1/8”	0.69	0.43	0.02	3.30
16-121	1/4” x 1/8”	0.75	0.50	0.04	2.93
16-122	5/16” x 1/8”	0.89	0.56	0.04	5.72
16-123	3/8” x 1/4”	0.84	0.62	0.06	8.28

* 1/4 - 28 Male Thread Tapered.

188 **6200** 12

90° ELBOW

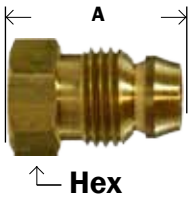


Part #	THRD Sleeve x Male NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
16-127	1/8” x *	0.50	0.52	0.41	0.02	10.12
16-128	1/8” x 1/8”	0.50	0.66	0.43	0.02	14.94
16-129	3/16” x 1/8”	0.56	0.62	0.44	0.02	33.70
16-130	1/4” x 1/8”	0.52	0.62	0.50	0.04	23.56

* 1/4 - 28 Male Thread Tapered

189 **6400** 15

BREAK-AWAY NUT



- 1-Piece Fiting

Part #	Size	A	Hex	Approx. Wt. Lbs.	List Price
16-090	3/16”	0.57	0.37	0.02	8.42
16-010	1/4”	0.62	0.43	0.02	2.09

* Threaded sleeve fittings on page 85.

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

I never did a day's work in my life. It was all fun.

-Thomas A. Edison

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.	List Price
38-711	5/32"	1.65
25-001	1/8"	1.66

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

NUT

Part #	Tube O.D.	List Price
38-732	5/32"	1.98
25-033	1/8"	1.87

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

DOUBLE END UNION

Part #	Tube O.D.	List Price
38-761	5/32"	15.15
25-062	1/8"	8.84

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

CONNECTOR WITH NUT AND SLEEVE

Part #	Tube O.D.	Pipe Thread	List Price
38-769	5/32"	1/16"	10.01
38-770	5/32"	1/8"	9.48
25-175	1/8"	1/16"	10.00
25-176	1/8"	1/8"	9.06

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

ELBOW

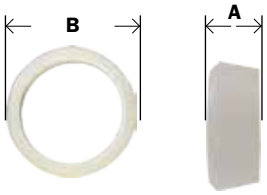
Part #	Tube O.D.	Pipe Thread	List Price
38-718	5/32"	1/8"	10.59
25-220	1/8"	1/8"	8.88

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

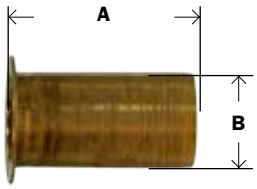


Part #	Size	A	B	Approx. Wt. Lbs.	List Price
18-015	1/4”	0.19	0.37	0.01	0.07
18-016	5/16”	0.19	0.43	0.01	1.09
18-017	3/8”	0.19	0.50	0.02	0.23
18-018	1/2”	0.25	0.63	0.02	0.15
18-019	5/8”	0.22	0.74	0.02	0.21

60-P

BRASS INSERT

• SLEEVE

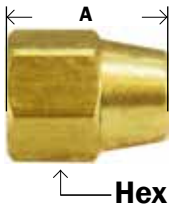


Part #	Size	A	B	Approx. Wt. Lbs.	Wall	List Price
22-008	1/8”	0.46	0.080	0.01	.016	0.73
22-009	3/16”	0.45	0.135	0.01	.025	0.80
22-009A	3/16”	0.52	0.095	0.01	.040	0.82
22-010	1/4”	0.50	0.163	0.02	.04	0.41
22-010A	1/4”	0.59	0.125	0.02	.04	1.16
22-010B	1/4”	0.53	0.172	0.02	.03	1.90
22-011A	5/16”	0.50	0.232	0.02	.04	1.76
22-011	5/16”	0.53	0.187	0.02	.062	0.73
22-012	3/8”	0.56	0.250	0.03	.062	0.64
22-013	1/2”	0.72	0.370	0.03	.062	0.83
22-014	5/8”	0.72	0.483	0.03	.062	1.69
22-015	3/4”	1.03	0.563	0.03	.03	5.04

See lead free insert on page 167

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

LONG NUT COMPRESSION - Can be assembled on any compression fitting



Part #	Size	A	Hex	Approx. Wt. Lbs.	List Price
10-013	1/8"	0.50	0.37	0.01	2.09
24-002	3/16"	0.62	0.43	0.01	1.71
24-003	1/4”	0.75	0.50	0.02	1.95
24-004	5/16”	0.84	0.56	0.02	1.51
24-005	3/8”	0.97	0.62	0.04	2.96
24-006	1/2”	1.06	0.81	0.06	7.63
24-007	5/8"	1.19	0.94	0.11	7.58
24-008	3/4"	1.50	1.25	0.14	15.47

161

SELF-ALIGN SLEEVES

Part #	Size	List Price
27-001	1/8"	0.32
27-002	3/16"	0.99
27-003	1/4"	0.38

860 **601**

Part #	Size	List Price
27-005	3/8"	0.95
27-006	1/2"	2.26

860

CAPTIVE SLEEVE NUT

Part #	Size	List Price
26-001	1/8”	1.59
26-002	3/16”	1.66
26-003	1/4”	1.35
26-004	5/16”	1.86
26-005	3/8”	1.74
26-007	1/2”	3.48
26-008	5/8”	6.22
26-015	3/4"	14.25
26-016	7/8"	36.44
26-009	1"	36.86

CS61 **61CA**

UNION

Part #	Size	List Price
26-062	1/8”	4.87
26-063	3/16”	3.55
26-064	1/4”	3.23
26-065	5/16”	3.75
26-066	3/8”	3.75
26-079	3/8” x 1/4”	7.74

CS62 **62CA**

TEE

Part #	Size	List Price
26-102	3/16”	7.17
26-103	1/4”	7.17
26-105	3/8”	7.74

CS64 **164CA**

FEMALE ADADPTER

Part #	Comp. X Female NPTF	List Price
26-145	1/4” x 1/8”	3.37
26-153	3/8” x 1/4”	5.83

CS66 **66CA**

MALE ADAPTER

Part #	Comp. X Male NPTF	List Price
26-176	1/8” x 1/8”	2.54
26-177	3/16” x 1/8”	2.80
26-179	1/4” x 1/8”	2.66
26-180	1/4” x 1/4”	3.63
26-181	1/4” x 3/8”	3.50
26-183	5/16” x 1/8”	3.37
26-184	5/16” x 1/4”	3.43
26-188	3/8” x 1/4”	3.88
26-189	3/8” x 3/8”	4.58
26-190	3/8” x 1/2”	6.04
26-195	1/2” x 1/2”	8.13

CS68 **68CA**

MALE ELBOW

Part #	Comp. X Male NPTF	List Price
26-220	1/8” x 1/8”	5.79
26-220B	1/8” x 1/8”	4.39
26-221	3/16” x 1/8”	4.83
26-224B	1/4" x 1/8"	2.87
26-224	1/4” x 1/8”	3.63
26-225	1/4” x 1/4”	4.51
26-225B	1/4” x 1/4”	3.45
26-228	5/16” x 1/8”	5.25
26-229	5/16” x 1/4”	5.10
26-233	3/8” x 1/4”	5.42
26-237	1/2” x 3/8”	8.14
26-238	1/2” x 1/2”	7.96

CS69 **169CA**

Interchangeable with compress-align fittings.

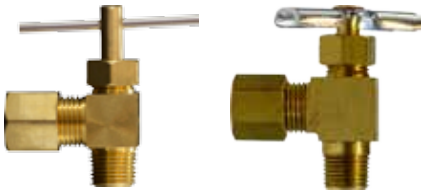
These are NOT Lead Free
Lead Free products
available upon request

MALE BRANCH TEE

Part #	Comp. X Male NPTF (1&2) X 3	List Price
26-291	1/4” x 1/8”	6.84
26-292	1/4” x 1/4”	8.01
26-293	5/16” x 1/8”	8.01
26-296	3/8” x 1/4”	9.03

CS72 **172CA**

CAPTIVE SLEEVE x MALE PIPE ANGLE NEEDLE VALVE



Part #	Comp X Male Pipe	List Price
26-011	1/4” x 1/8”	7.17
26-014	5/16” x 1/4”	49.16

CAPTIVE SLEEVE x CAPTIVE SLEEVE NEEDLE VALVE

Part #	Comp X Comp	List Price
26-021	1/4”	7.21
26-023	3/8”	11.77

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

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.

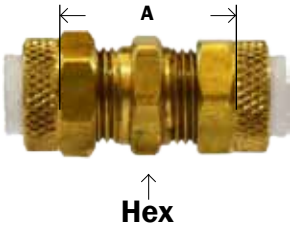
* Note: 1/8 and 3/16 sizes have brass sleeves

NUT AND PLASTIC SLEEVE ASSEMBLY

Part #	Tube O.D.	Thread	A	Hex (Dia.)	Approx. Wt. Lbs.	List Price
20-211	1/4”	3/8-24	0.34	0.43	0.02	1.50
20-212	5/16”	7/16-24	0.45	0.50	0.02	2.68
20-213	3/8”	1/2-24	0.38	0.56	0.04	1.99
20-214	1/2”	11/16-20	0.42	0.81	0.04	3.50

261PF **1261** 61PN

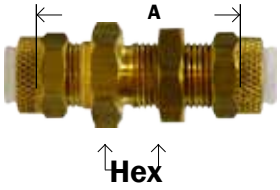
UNION



Part #	Tube O.D.	A	Hex	Approx. Wt. Lbs.	List Price
20-240	1/8”	0.66	0.31	0.02	8.13
20-241	3/16”	0.75	0.37	0.04	8.86
20-242	1/4”	0.69	0.37	0.04	3.56
20-243	5/16”	0.69	0.44	0.04	10.38
20-244	3/8”	0.72	0.50	0.10	10.45
20-200	3/8” x 1/4”	0.72	0.50	0.08	15.16
20-245	1/2”	0.84	0.69	0.14	15.20

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

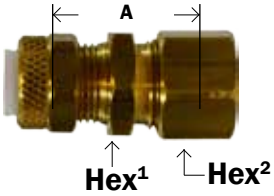
BULKHEAD UNION



Part #	Tube O.D.	A	Hex	Approx. Wt. Lbs.	List Price
20-337	1/4”	1.25	0.56	0.06	11.82
20-338	5/16”	1.25	0.62	0.08	14.62
20-339	3/8”	1.31	0.69	0.10	16.57

62PBH **329P** 282P

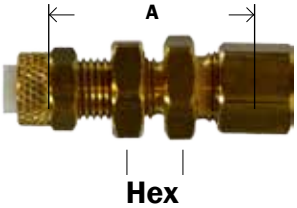
UNION TUBE #M62C - FLARELESS X STANDARD COMPRESSION



Part #	Tube O.D.	A	Hex 1	Hex 2	Approx. Wt. Lbs.	List Price
20-235	1/4”	0.75	0.44	0.50	0.04	9.46
20-237	3/8”	0.84	0.62	0.62	0.08	13.90

262S **62PCA** 262PC

BULKHEAD UNION - FLARELESS X COMPRESSION

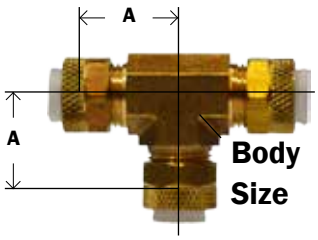


Part #	Tube O.D.	A	Hex	Approx. Wt. Lbs.	List Price
20-333	1/4”	1.31	0.56	0.07	12.61
20-334	3/8”	1.44	0.69	0.12	16.08

1274

FLARELESS BRASS FITTINGS

UNION TEE

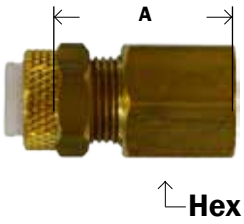


Part #	Tube O.D.	A	Body Size	Approx. Wt. Lbs.	List Price
20-248	1/8”	0.62	0.31	0.02	15.05
20-249	3/16”	0.62	0.31	0.04	13.13
20-250	1/4”	0.73	0.44	0.06	10.36
20-251	5/16”	0.62	0.37	0.08	15.00
20-252	3/8”	0.86	0.56	0.08	11.64
20-330*	3/8” x 1/4”	0.72	0.44	0.08	22.19
20-253	1/2”	0.81	0.62	0.24	32.11

* Reducing Branch

1264 **164P** 264P

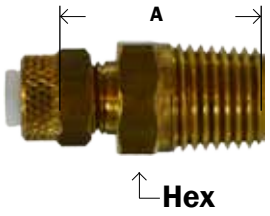
FEMALE CONNECTOR



Part #	Tube O.D. x Female NPTF	A	Hex	Approx. Wt. Lbs.	List Price
20-256	1/8” x 1/8”	0.75	0.56	0.03	7.24
20-257	3/16” x 1/8”	0.78	0.56	0.05	7.08
20-259	1/4” x 1/8”	0.76	0.50	0.04	8.46
20-260	1/4” x 1/4”	1.08	0.62	0.05	7.21
20-261	5/16” x 1/8”	0.75	0.50	0.03	7.92
20-265	3/8” x 1/8”	0.77	0.56	0.05	14.67
20-262	3/8” x 1/4”	0.94	0.62	0.05	8.52
20-263	1/2” x 3/8”	1.00	0.81	0.12	12.89

1266 **66P** 266P

MALE CONNECTOR

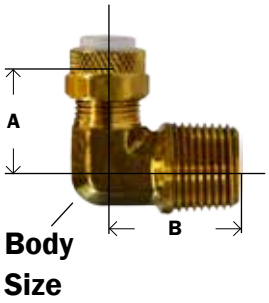


Part #	Tube O.D. x Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
20-268	1/8” x 1/8”	0.80	0.34	0.04	5.30
20-269	3/16” x 1/8”	0.86	0.44	0.04	4.65
20-271	1/4” x 1/8”	0.82	0.44	0.03	3.67
20-272	1/4” x 1/4”	1.00	0.56	0.05	4.45
20-273	1/4” x 3/8”	1.03	0.69	0.08	8.15
20-274	5/16” x 1/8”	0.81	0.44	0.04	5.03
20-275	5/16” x 1/4"	1.00	0.56	0.05	5.63
20-276	3/8” x 1/8”	1.00	0.56	0.06	5.26
20-277	3/8” x 1/4”	1.03	0.56	0.08	6.74
20-278	3/8” x 3/8”	1.03	0.69	0.10	8.02
20-279	1/2” x 3/8”	1.09	0.69	0.16	9.48
20-282	1/2” x 1/2”	1.33	0.88	0.18	14.99

* Furnished with gasket.

1268 **68P** 268P

MALE ELBOW

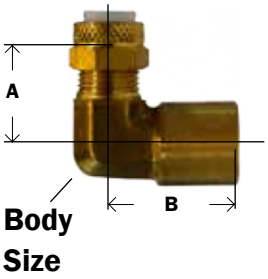


Part #	Tube O.D. x Male NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
20-287	1/8” x 1/8”	0.62	0.69	0.31	0.02	5.46
20-288	3/16” x 1/8”	0.62	0.69	0.37	0.04	5.58
20-289*	1/4” x 1/8”	0.53	0.73	0.50	0.04	4.66
20-290	1/4” x 1/4”	0.66	0.94	0.37	0.06	7.20
20-291	1/4” x 3/8”	0.75	1.03	0.50	0.10	11.69
20-292	5/16” x 1/8”	0.62	0.75	0.41	0.04	5.79
20-293	3/8” x 1/8”	0.79	0.73	0.37	0.08	7.18
20-294	3/8” x 1/4”	0.72	0.94	0.44	0.10	8.57
20-295	3/8” x 3/8”	0.78	1.03	0.50	0.14	10.90
20-296	1/2” x 3/8”	1.09	1.10	0.73	0.16	11.00

* Barstock

1269 **169P** 269P

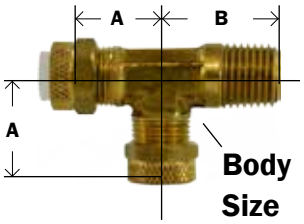
FEMALE ELBOW



Part #	Tube O.D. x Female NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
20-300	1/8" x 1/8"	0.69	0.55	0.56	0.02	8.28
20-301	3/16" x 1/8"	0.72	0.55	0.56	0.02	9.37
20-302	1/4" x 1/8"	0.62	0.75	0.37	0.08	8.89
20-303	1/4" x 1/4"	0.72	0.88	0.50	0.10	9.85
20-304	3/8" x 1/4"	0.72	0.88	0.50	0.12	9.45
20-305	1/2" x 3/8"	0.91	0.94	0.63	0.16	19.10

1270 **170P**

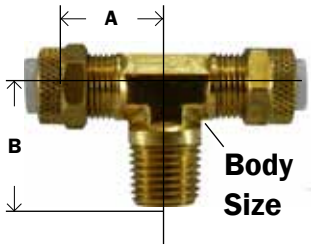
MALE RUN TEE



Part #	Tube O.D. x Male NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
20-308	1/8" x 1/8"	0.62	0.69	0.31	0.04	11.99
20-309	3/16" x 1/8"	0.62	0.69	0.31	0.04	11.22
20-310	1/4" x 1/8"	0.62	0.75	0.37	0.08	10.81
20-311	1/4" x 1/4"	0.66	0.94	0.37	0.10	14.42
20-312	5/16" x 1/8"	0.62	0.75	0.37	0.08	11.87
20-313	3/8" x 1/4"	0.66	0.94	0.44	0.10	15.17
20-314	1/2" x 3/8"	0.81	1.06	0.63	0.16	19.86

1271 **171P**

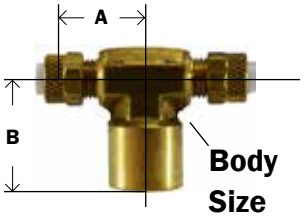
MALE BRANCH TEE



Part #	Tube O.D. x Male NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
20-317	1/8" x 1/8"	0.63	0.69	0.31	0.04	16.57
20-318	3/16" x 1/8"	0.63	0.69	0.31	0.04	11.69
20-319	1/4" x 1/8"	0.63	0.75	0.37	0.07	10.56
20-320	1/4" x 1/4"	0.66	0.94	0.37	0.09	13.52
20-321	5/16" x 1/8"	0.63	0.75	0.37	0.10	12.13
20-322	3/8" x 1/8"	0.63	0.75	0.44	0.08	18.70
20-323	3/8" x 1/4"	0.66	0.94	0.44	0.11	15.07
20-324	1/2" x 3/8"	0.81	1.06	0.63	0.21	30.76

1272 **172P** 272P

FEMALE BRANCH TEE



Part #	Tube O.D. x Female NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
20-327	1/4" x 1/8"	0.66	0.94	0.37	0.12	21.24
20-328	1/4" x 1/4"	0.84	1.16	0.56	0.16	18.44

1277 **177P** 277P

UNIVERSAL NUT AND BRASS SLEEVE ASSEMBLY

Part #	Tube O.D.	Thread	A	Hex	Approx. Wt. Lbs.	List Price
20-227	1/8”	5/16-24	0.37	0.37	0.02	1.91
20-228	3/16”	3/8-24	0.41	0.44	0.02	2.31
20-229	1/4”	3/8-24	0.34	0.43	0.02	2.50
20-230	5/16”	7/16-24	0.34	0.50	0.02	2.23
20-231	3/8”	1/2-24	0.37	0.56	0.04	3.21
20-232	1/2”	11/16-20	0.42	0.81	0.04	4.32

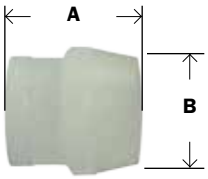
261PFB **1261B** 61PB **261UB**

NUT

Part #	Tube O.D.	Thread	A	Hex (Dia.)	Approx. Wt. Lbs.	List Price
20-218	1/8”	5/16-24	0.37	0.37	0.01	1.40
20-219	3/16”	3/8-24	0.41	0.44	0.01	1.20
20-220	1/4”	3/8-24	0.34	0.44	0.02	1.46
20-221	5/16”	7/16-24	0.34	0.50	0.02	0.98
20-222	3/8”	1/2-24	0.38	0.56	0.04	2.08
20-223	1/2”	11/16-20	0.42	0.81	0.06	2.62

61PN **1261** 261FPN

PLASTIC SLEEVE



Part #	Tube O.D.	A	B	Approx. Wt. Lbs.	List Price
20-205	1/4”	0.34	0.26	0.01	0.31
20-206	5/16”	0.39	0.32	0.01	0.35
20-207	3/8”	0.41	0.38	0.01	0.74
20-208	1/2”	0.44	0.51	0.01	1.14

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

PLASTIC CAP

Part #	Tube O.D.	A	Approx. Wt. Lbs.	List Price
20-201	1/4”	0.50	0.01	2.19
20-203	3/8”	0.56	0.01	1.75
20-204	1/2”	0.59	0.01	2.65

1229 **59P** 259P

PUSH-IN/ PUSH-TO-CONNECT FITTINGS

BRASS PUSH-IN
PAGE 95-99

NICKEL PLATED BRASS PUSH-IN
PAGE 100-104

BALL VALVES FOR N/P PUSH-IN
PAGE 105

METRIC N/P BRASS PUSH-IN
PAGE 106-108

COMPOSITE BODY PUSH-IN
PAGE 109-113

COMPOSITE BODY METRIC PUSH-IN
PAGE 114-116

PLASTIC PUSH-IN
PAGE 298-299

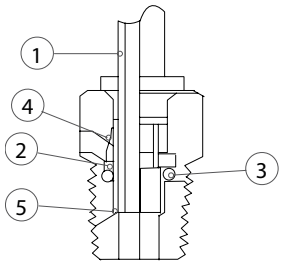
DOT BRASS PUSH-IN
PAGE 117-123

DOT COMPOSITE PUSH-IN
PAGE 124-128

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.

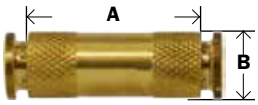


When tubing (1) is inserted into the fitting, it first passes through the gripping teeth (2). Just beyond the gripping teeth is the o-ring (3) which provides the leak proof seal against the OD of the tube. The gripping teeth grab the tube, which expands the insert. Pulling back on the tube only tightens 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 PRESSURE**:
The fitting is suitable for use up to the maximum working pressure of the plastic tubing used.
• **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

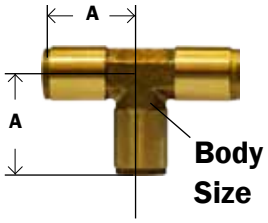
UNION CONNECTOR



Part #	Tube O.D.	A	B	Approx. Wt. Lbs.	List Price
20-017	1/8”	1.07	0.38	0.03	5.83
20-018	5/32”	1.07	0.38	0.03	7.62
20-019	1/4”	1.50	0.44	0.05	7.26
20-022	3/8” x 1/4”	1.46	0.56	0.05	9.80
20-020	3/8”	1.44	0.56	0.06	10.08
20-021	1/2”	1.63	0.81	0.18	14.75

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

UNION TEE

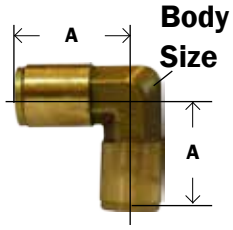


Part #	Tube O.D.	A	Body Size	Approx. Wt. Lbs.	List Price
20-025	1/8”	0.65	0.31	0.04	6.66
20-026	5/32”	0.67	0.31	0.04	8.28
20-027	3/16”	0.75	0.37	0.06	14.68
20-028	1/4”	0.92	0.37	0.09	10.04
20-031*	5/16”	0.89	0.49	0.10	28.36
20-029	3/8”	0.98	0.50	0.13	13.80
20-030	1/2”	1.16	0.62	0.24	21.20

* Nickel Plated

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

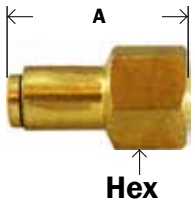
UNION ELBOW



Part #	Tube O.D.	A	Body Size	Approx. Wt. Lbs.	List Price
20-150	1/8”	0.65	0.31	0.02	12.05
20-151	5/32”	0.67	0.31	0.04	10.94
20-152	1/4”	0.87	0.37	0.06	10.94
20-155	5/16”	0.91	0.47	0.08	34.03
20-153	3/8”	0.97	0.50	0.09	13.75
20-154	1/2”	1.15	0.62	0.18	19.44

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

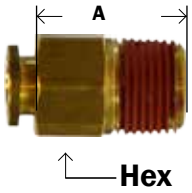
FEMALE CONNECTOR



Part #	Tube O.D. x Female NPTF	A	Hex	Approx. Wt. Lbs.	List Price
20-032	1/8” x 1/8”	0.96	0.56	0.04	10.45
20-038	1/8” x 1/4”	1.04	0.67	0.04	29.02
20-012	5/32" x 1/8"	1.09	0.56	0.05	14.95
20-034	1/4” x 1/8”	1.23	0.56	0.06	7.03
20-035	1/4” x 1/4”	1.42	0.75	0.09	12.58
20-036	3/8” x 1/4”	1.32	0.75	0.09	17.81
20-037	3/8” x 3/8”	1.31	0.87	0.12	10.87

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

MALE CONNECTOR

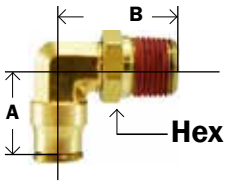


Part #	Tube O.D. x Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
20-047*	1/8” x 10-32”*	0.69	0.37	0.02	5.71
20-045	1/8" x 1/16"	0.68	0.37	0.02	11.43
20-048	1/8” x 1/8”	0.61	0.43	0.02	3.99
20-023	1/8” x 1/4”	0.98	0.56	0.04	5.85
20-049*	5/32” x 10-32”*	0.67	0.37	0.02	6.30
20-050	5/32” x 1/8”	0.67	0.43	0.03	4.85
20-046	5/32” x 1/4”	0.85	0.56	0.05	10.09
20-051*	3/16” x 10-32”*	0.80	0.37	0.02	2.69
20-052	3/16” x 1/8”	0.93	0.43	0.03	6.02
20-053*	1/4” x 10-32”*	0.70	0.43	0.03	4.31
20-039	1/4" x 1/16"	0.92	0.43	0.06	10.84
20-054	1/4” x 1/8”	0.93	0.43	0.06	4.67
20-055	1/4” x 1/4”	0.93	0.56	0.10	5.51
20-056	1/4” x 3/8”	0.94	0.68	0.08	7.84
20-530	5/16” x 1/8”	1.07	0.56	0.05	17.71
20-531	5/16” x 1/4”	0.98	0.56	0.10	18.64
20-532	5/16” x 3/8”	1.06	0.75	0.08	21.92
20-057	3/8” x 1/8”	1.10	0.56	0.06	7.68
20-058	3/8” x 1/4”	1.11	0.56	0.05	7.13
20-059	3/8” x 3/8”	1.02	0.68	0.08	7.61
20-062	3/8”x 1/2”	1.02	0.87	0.08	13.13
20-060	1/2” x 1/4”	1.36	0.81	0.11	9.88
20-061	1/2” x 3/8”	1.30	0.81	0.12	11.36
20-063	1/2” x 1/2”	1.23	0.87	0.14	14.34

* Furnished with gaskets

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

SWIVEL MALE ELBOW



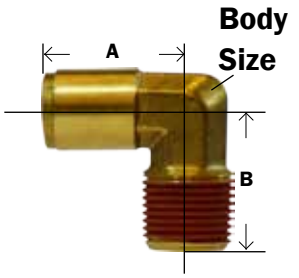
Part #	Tube O.D. x Male NPTF	A	B	Hex	Approx. Wt. Lbs.	List Price
20-079	1/8” x 1/8”	0.69	0.98	0.43	0.07	7.51
20-535*	1/8” x 1/4”	0.76	0.87	0.56	0.06	22.41
20-076**	5/32” x 10-32”	0.67	0.71	0.37	0.04	15.56
20-080	5/32” x 1/8”	0.68	0.89	0.43	0.05	8.24
20-077	5/32” x 1/4”	0.68	1.08	0.56	0.07	12.18
20-078**	1/4” x 10-32”	0.86	0.79	0.31	0.05	11.28
20-081	1/4” x 1/8”	0.90	0.93	0.37	0.08	7.32
20-082	1/4” x 1/4”	0.90	0.99	0.56	0.10	8.29
20-086	1/4” x 3/8”	0.98	1.14	0.68	0.09	16.03
20-538*	5/16” x 1/4”	0.91	0.85	0.56	0.07	23.79
20-539*	5/16” x 3/8”	0.91	0.87	0.75	0.08	37.88
20-087	3/8” x 1/8”	1.00	1.06	0.43	0.09	12.74
20-083	3/8” x 1/4”	0.99	1.15	0.56	0.10	10.20
20-084	3/8” x 3/8”	1.00	1.24	0.68	0.20	11.67
20-088	3/8” x 1/2”	1.00	1.54	0.87	0.19	19.03
20-085	1/2” x 3/8”	1.16	1.34	0.68	0.18	14.70
20-092	1/2” x 1/2”	1.16	1.51	0.87	0.24	20.91

* Nickel Plated

** Furnished with gaskets

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

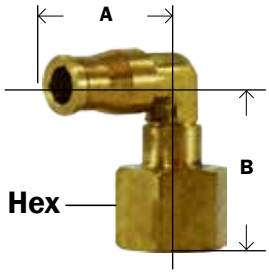
FIXED MALE ELBOW



Part #	Tube O.D. x Male NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
20-065	1/8” x 1/8”	0.69	0.69	0.31	0.03	7.57
20-066	5/32” x 1/8”	0.68	0.68	0.31	0.03	11.86
20-067	3/16” x 1/8”	0.75	0.71	0.37	0.04	8.56
20-068	1/4” x 1/8”	0.89	0.75	0.37	0.06	6.29
20-069	1/4” x 1/4”	0.95	0.96	0.37	0.08	6.13
20-070	1/4” x 3/8”	1.00	0.98	0.50	0.10	12.06
20-071	3/8” x 1/8”	0.99	0.80	0.50	0.06	10.39
20-072	3/8” x 1/4”	0.98	0.98	0.50	0.09	8.24
20-073	3/8” x 3/8”	0.97	0.98	0.50	0.12	15.31
20-074	1/2” x 1/4”	1.15	1.05	0.62	0.15	13.20
20-075	1/2” x 3/8”	1.18	1.05	0.62	0.22	12.85
20-064	1/2” x 1/2”	1.16	1.66	0.62	0.20	15.11

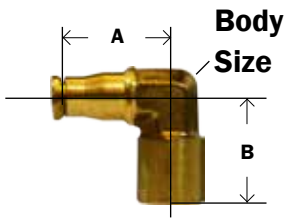
269PP AQ69-P 6500 169PLNS 12-445 1169

FEMALE SWIVEL ELBOW



Part #	Tube O.D. x Female NPTF	A	B	Hex	List Price
20-094S	5/32" x 1/8"	0.76	1.06	0.56	16.12
20-089S	1/4" x 1/8"	0.98	1.08	0.56	15.83
20-090S	1/4" x 1/4"	0.98	1.26	0.75	14.33
20-091S	3/8" x 1/4"	1.07	1.48	0.75	20.92

FEMALE ELBOW



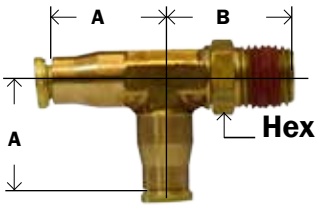
Part #	Tube O.D. x Female NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
20-192	1/8" x 1/8"	0.78	0.82	0.31	0.02	8.65
20-094	5/32” x 1/8”	0.68	0.82	0.37	0.02	10.27
20-089	1/4” x 1/8”	0.91	0.75	0.37	0.06	11.82
20-090	1/4” x 1/4”	1.03	1.03	0.50	0.11	13.82
20-091	3/8” x 1/4”	0.98	0.95	0.50	0.16	21.10

AQ70-P 3009

May your choices reflect your hopes, not your fears.

- Nelson Mandela

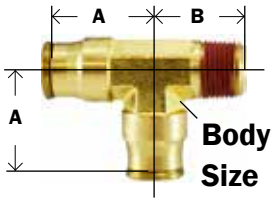
SWIVEL MALE RUN TEE



Part #	Tube O.D. x Male NPTF	A	B	Hex	Approx. Wt. Lbs.	List Price
20-160	1/8" x 1/8"	0.65	0.86	0.43	0.08	11.67
20-161	5/32" x 1/8"	0.67	1.04	0.43	0.09	13.95
20-162	1/4" x 1/8"	0.92	1.04	0.44	0.09	12.98
20-163	1/4" x 1/4"	0.92	1.13	0.56	0.11	14.58
20-164	3/8" x 1/4"	0.94	1.19	0.56	0.11	15.05
20-165	3/8" x 3/8"	0.96	1.24	0.50	0.12	24.21
20-174	1/2" x 1/4"	1.12	1.18	0.51	0.16	66.30
20-166	1/2" x 3/8"	1.14	1.31	0.68	0.14	27.69
20-167	1/2" x 1/2"	1.14	1.61	0.87	0.16	34.91

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

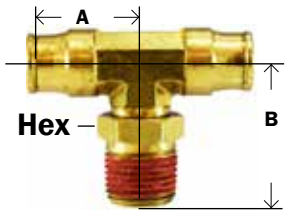
FIXED MALE RUN TEE



Part #	Tube O.D. x Male NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
20-095	1/8" x 1/8"	0.65	0.72	0.31	0.04	13.49
20-097	3/16" x 1/8"	0.75	0.73	0.37	0.06	16.74
20-098	1/4" x 1/8"	0.92	0.74	0.37	0.08	12.90
20-093	1/4" x 1/4"	0.92	0.92	0.43	0.10	14.50
20-099	3/8" x 1/8"	0.94	0.82	0.50	0.14	15.56
20-100	3/8" x 1/4"	0.98	0.98	0.50	0.12	18.59
20-101	3/8" x 3/8"	1.05	1.05	0.62	0.10	18.77
20-102	1/2" x 3/8"	1.14	1.05	0.62	0.18	27.82

AQ71-P

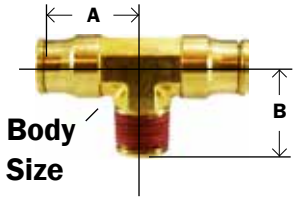
SWIVEL MALE BRANCH TEE



Part #	Tube O.D. x Male NPTF	A	B	Hex	Approx. Wt. Lbs.	List Price
20-103	1/8" x 1/8"	0.65	0.81	0.31	0.04	19.56
20-104*	5/32" x 10-32"*	0.65	0.71	0.31	0.04	24.76
20-109	5/32" x 1/8"	0.67	0.94	0.37	0.06	16.11
20-105	1/4" x 1/8"	0.92	0.97	0.37	0.08	15.84
20-106	1/4" x 1/4"	0.92	1.09	0.55	0.10	12.09
20-107	3/8" x 1/4"	0.96	1.14	0.56	0.18	16.36
20-108	3/8" x 3/8"	0.96	1.23	0.69	0.16	22.24
20-110	1/2" x 3/8"	1.16	1.34	0.69	0.24	26.94
20-111	1/2" x 1/2"	1.16	1.64	0.87	0.28	32.30

* Furnished with gaskets

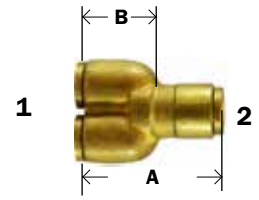
FIXED MALE BRANCH TEE



Part #	Tube O.D. x Male NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
20-112	1/8" x 1/8"	0.69	0.72	0.31	0.04	13.08
20-113	5/32" x 1/8"	0.69	0.65	0.31	0.04	14.92
20-115	1/4" x 1/8"	0.92	0.74	0.37	0.12	13.73
20-116	1/4" x 1/4"	0.91	0.91	0.43	0.10	14.06
20-117	3/8" x 1/8"	0.98	0.80	0.50	0.08	17.30
20-118	3/8" x 1/4"	0.98	0.97	0.50	0.12	18.33
20-119	3/8" x 3/8"	0.98	0.97	0.50	0.14	19.04
20-120	1/2" x 3/8"	1.16	1.05	0.62	0.18	26.40

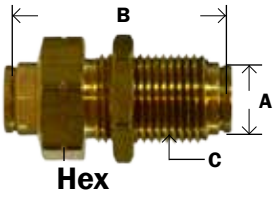
AQ72-P

UNION "Y"



Part #	Tube O.D. 1 X 2	A	B	Approx. Wt. Lbs.	List Price
20-551	5/32" x 5/32"	1.36	0.81	0.11	59.99
20-552	1/4" x 1/8"	1.61	1.06	0.12	40.05
20-553	1/4" x 1/4"	1.81	1.16	0.14	37.39

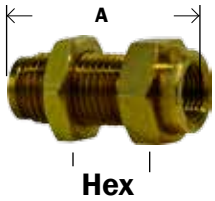
BULKHEAD UNION



Part #	Tube O.D. A	B	C	Hex	Approx. Wt. Lbs.	List Price
20-124	1/8"	1.12	7/16-20	0.62	0.03	28.39
20-125	5/32"	1.12	7/16-20	0.62	0.03	31.09
20-126	3/16"	1.27	1/2-20	0.68	0.04	27.24
20-127	1/4"	1.69	1/2-20	0.68	0.06	18.10
20-128	3/8"	1.69	3/4-16	0.81	0.13	23.60
20-129	1/2"	1.85	15/16-20	1.12	0.16	38.12

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

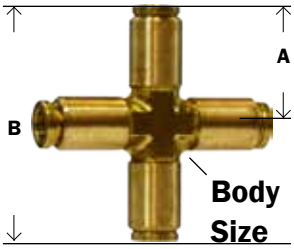
FEMALE BULKHEAD UNION



Part #	Tube O.D. x Female NPTF	A	Hex	Approx. Wt. Lbs.	List Price
20-170	1/4" x 1/8"	1.19	0.68	0.08	16.34
20-171	1/4" x 1/4"	1.36	0.75	0.10	23.23
20-172	3/8" x 1/4"	1.71	0.75	0.14	25.36

AQ86-P **1166BH**

CROSS



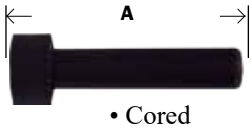
Size	Size	A	B	Body Size	List Price
20-142	1/4"	1.03	2.06	0.37	26.87
20-143	3/8"	1.06	2.12	0.50	26.33

REDUCER - NICKEL PLATED - TUBE OD X STUD

Part #	Tube O.D. 1 X 2	A	B	Approx. Wt. Lbs.	List Price
20-510	1/8" x 1/4"	1.38	0.39	0.02	16.78
20-511	5/32" x 1/4"	1.33	0.35	0.02	16.94
20-512	1/4" x 3/8"	1.50	0.51	0.04	20.07

67PPL **286PP**

PLASTIC PLUG



• Cored

Part #	Tube O.D.	A	Approx. Wt. Lbs.	List Price
20-009	5/32"	1.16	0.01	1.56
20-010	1/4"	1.40	0.01	1.90
20-011	3/8"	1.40	0.02	3.60
20-013	1/2"	1.50	0.02	4.73

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

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: 0-250 psi (17 bar) Vacuum service.
Min Temperature: 0°F (-18°C)
Max Temperature: 160°F (+70°C)
Tubing: Nylon, Polyethylene, Polyurethane.
- For best results use 95 Durometer
Media: Compressed air, water.

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

GLOBAL THREAD

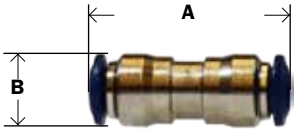
Works With Inch or Metric Threads

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)

NICKEL PLATED PUSH-IN FITTINGS

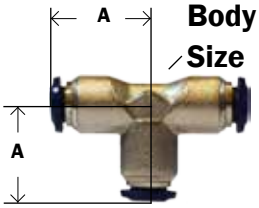
UNION CONNECTOR



Part #	Tube O.D.	A	B	Approx. Wt. Lbs.	List Price
20-017N	1/8”	1.06	0.34	0.03	7.54
20-018N	5/32”	1.20	0.41	0.03	7.62
20-016N	5/32" x 1/4"	1.20	0.40	0.04	8.15
20-019N	1/4”	1.38	0.49	0.05	7.32
20-015N	5/16"	1.46	0.57	0.06	8.22
20-020N	3/8”	1.69	0.69	0.06	10.90
20-022N	3/8" x 1/4"	1.69	0.68	0.06	10.98
20-021N	1/2”	1.93	0.81	0.18	15.09
20-024N	1/2" x 3/8"	1.84	0.80	0.17	13.01

62PL **88040**

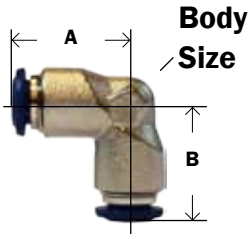
UNION TEE



Part #	Tube O.D.	A	Body Size	Approx. Wt. Lbs.	List Price
20-025N	1/8”	0.67	0.35	0.04	11.10
20-026N	5/32”	0.67	0.35	0.04	21.26
20-028N	1/4”	0.83	0.43	0.09	11.77
20-031N	5/16”	0.87	0.51	0.10	16.22
20-029N	3/8”	1.04	0.63	0.13	16.21
20-030N	1/2”	1.20	0.74	0.24	22.46

164PL **88230**

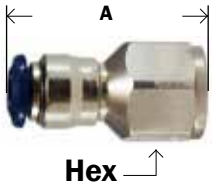
UNION ELBOW



Part #	Tube O.D.	A	Body Size	Approx. Wt. Lbs.	List Price
20-150N	1/8”	0.67	0.35	0.02	10.26
20-151N	5/32”	0.67	0.35	0.04	8.51
20-152N	1/4”	0.83	0.43	0.06	8.79
20-155N	5/16”	0.87	0.51	0.08	10.81
20-153N	3/8”	1.04	0.63	0.09	13.12
20-154N	1/2”	1.20	0.75	0.18	18.93

165PL **88130**

FEMALE CONNECTOR

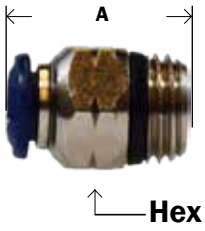


Part #	Tube O.D. x Female NPTF	A	Hex	Approx. Wt. Lbs.	List Price
20-032N	1/8” x 1/8”	0.93	0.51	0.04	12.43
20-038N	1/8” x 1/4”	1.14	0.63	0.04	11.28
20-034N	1/4” x 1/8”	1.06	0.51	0.06	9.94
20-035N	1/4” x 1/4”	1.26	0.63	0.09	10.90
20-036N	3/8” x 1/4”	1.38	0.71	0.09	18.60
20-037N	3/8” x 3/8”	1.38	0.79	0.12	18.24

66PL **88030**

Today is a GOOD day.

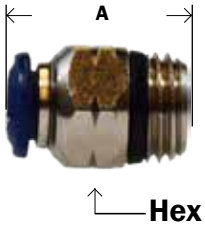
MALE CONNECTOR



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

Part #	Tube O.D. x Male Global Thread	A	Hex	Approx. Wt. Lbs.	List Price
20-047N	1/8” x 10-32”	0.75	0.31	0.02	6.02
20-048N	1/8” x 1/8”	0.77	0.43	0.02	5.48
20-023N	1/8” x 1/4”	0.97	0.55	0.04	5.36
20-049N	5/32” x 10-32”	0.83	0.39	0.02	5.91
20-050N	5/32” x 1/8”	0.83	0.43	0.03	4.58
20-046N	5/32” x 1/4”	0.98	0.55	0.05	7.14
20-053N	1/4” x 10-32”	0.97	0.51	0.03	6.76
20-054N	1/4” x 1/8”	0.98	0.51	0.06	4.71
20-055N	1/4” x 1/4”	0.98	0.55	0.10	5.39
20-056N	1/4” x 3/8”	0.98	0.71	0.08	6.89
20-530N	5/16” x 1/8”	0.98	0.55	0.05	7.87
20-531N	5/16” x 1/4”	1.08	0.55	0.10	7.82
20-532N	5/16” x 3/8”	1.08	0.71	0.08	9.60
20-057N	3/8” x 1/8”	1.38	0.67	0.06	7.82
20-058N	3/8” x 1/4”	1.32	0.67	0.05	7.28
20-059N	3/8” x 3/8”	1.32	0.71	0.08	8.11
20-062N	3/8” x 1/2”	1.32	0.87	0.08	14.58
NEW 20-841N	1/2" x1/8"	1.03	0.79	0.12	10.22
20-060N	1/2” x 1/4”	1.54	0.79	0.11	10.52
20-061N	1/2” x 3/8”	1.42	0.79	0.12	12.80
20-063N	1/2” x 1/2”	1.58	0.87	0.14	15.69

MALE CONNECTOR WITH INTERNAL HEX

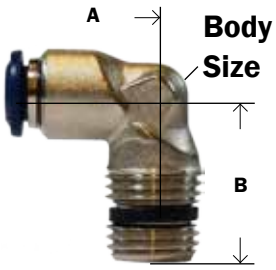


NEW

Part #	Tube O.D. x Male Global Thread	A	Hex	Approx. Wt. Lbs.	List Price
20-842N	1/8” x 10-32” UNF	0.71	0.10	0.02	5.79
20-847N	5/32" x 10-32 UNF	0.79	0.10	0.02	5.79
20-846N	5/32" x 1/8"	0.71	0.12	0.03	5.01
20-845N	1/4” x 10-32” UNF	0.93	0.10	0.03	5.79
20-843N	1/4" x 1/8"	0.93	0.16	0.06	5.79
20-844N	1/4" x 1/4"	0.85	0.16	0.10	6.28

68PL **87000**

FIXED MALE ELBOW



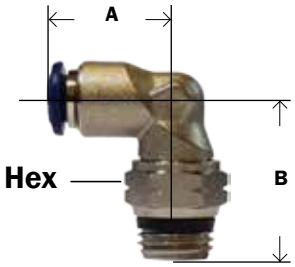
Part #	Tube O.D. x Male NPTF	A	B	Body Size	Approx. Wt. Lbs.	List Price
20-068N	1/4” x 1/8”	0.83	0.73	0.43	0.06	6.30
20-069N	1/4” x 1/4”	0.83	0.91	0.43	0.08	6.89
20-072N	3/8” x 1/4”	1.04	1.04	0.63	0.09	10.88
20-073N	3/8” x 3/8”	1.04	1.00	0.63	0.12	11.77

W169PLNS **8100**

The more I want to get something done, the less I call it work.

- Richard Bach

SWIVEL MALE ELBOW

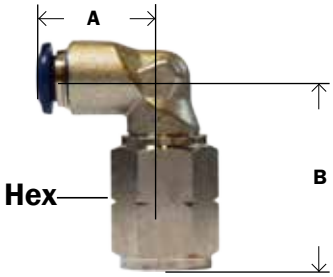


GLOBAL THREAD
NPT • BSPT • RC • NPTF • BSPP • G

	Part #	Tube O.D. x Male Global Thread	A	B	Hex	Approx. Wt. Lbs.	List Price
	20-079N	1/8” x 1/8”	0.67	0.78	0.51	0.07	7.96
	20-535N	1/8” x 1/4”	0.67	0.95	0.59	0.06	10.04
	20-076N	5/32” x 10-32”	0.67	0.95	0.59	0.04	9.70
	20-080N	5/32” x 1/8”	0.67	0.79	0.51	0.05	8.49
NEW	20-848N	5/32" x 1/4"	0.67	1.00	0.59	0.05	9.70
	20-081N	1/4” x 1/8”	0.83	0.87	0.51	0.08	7.81
	20-082N	1/4” x 1/4”	0.83	0.98	0.59	0.10	8.71
	20-086N	1/4” x 3/8”	0.83	1.10	0.67	0.09	14.49
NEW	20-537N	5/16" x 1/8"	0.91	0.98	0.51	0.06	8.21
	20-538N	5/16” x 1/4”	0.89	1.02	0.59	0.07	11.28
	20-539N	5/16” x 3/8”	0.87	1.10	0.67	0.08	13.65
	20-087N	3/8” x 1/8”	1.04	1.02	0.51	0.09	13.38
	20-083N	3/8” x 1/4”	1.04	1.10	0.59	0.10	11.31
	20-084N	3/8” x 3/8”	1.04	1.18	0.67	0.20	14.06
	20-088N	3/8” x 1/2”	1.04	1.30	0.83	0.19	19.11
NEW	20-184N	1/2" x 1/4"	1.24	1.30	0.59	0.17	17.59
	20-085N	1/2” x 3/8”	1.20	1.24	0.59	0.18	17.77
	20-092N	1/2” x 1/2”	1.20	1.42	0.83	0.24	19.97

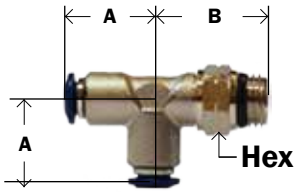
W169PL **87110**

FEMALE SWIVEL ELBOW



Part #	Tube O.D. x Female NPTF	A	B	Hex	List Price
20-094N	5/32" x 1/8"	0.669	0.994	0.354	9.99
20-089N	1/4" x 1/8"	0.826	1.023	0.433	11.80
20-090N	1/4" x 1/4"	0.826	1.200	0.433	11.62
20-762N	3/8" x 1/8"	0.885	1.082	0.511	12.72
20-091N	3/8" x 1/4"	0.885	1.240	0.511	13.45

SWIVEL MALE RUN TEE



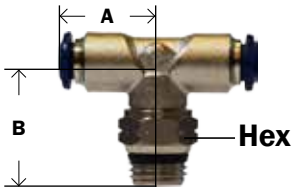
GLOBAL THREAD
NPT • BSPT • RC • NPTF • BSPP • G

	Part #	Tube O.D. x Male Global Thread	A	B	Hex	Approx. Wt. Lbs.	List Price
NEW	20-095N	1/8" x 1/8"	0.67	0.81	0.51	0.05	12.14
NEW	20-851N	1/8" x 1/4"	0.67	0.95	0.59	0.06	14.14
NEW	20-852N	5/32" x 1/8"	0.67	0.79	0.51	0.07	20.72
NEW	20-853N	5/32" x 1/4"	0.67	0.95	0.59	0.07	13.86
	20-162N	1/4” x 1/8”	0.83	0.87	0.51	0.09	13.01
	20-163N	1/4” x 1/4”	0.83	0.98	0.59	0.11	13.85
	20-164N	1/4" x 3/8"	0.83	1.10	0.59	0.11	15.05
NEW	20-159N	3/8" x 1/8"	1.04	1.07	0.59	0.12	20.72
	20-168N	3/8" x 1/4"	1.04	1.10	0.59	0.12	20.18
	20-165N	3/8” x 3/8”	1.04	1.18	0.67	0.12	24.24
NEW	20-181N	3/8" x 1/2"	1.20	1.24	0.59	0.15	26.13
	20-174N	1/2” x 1/4”	1.20	1.24	0.59	0.16	28.51
	20-166N	1/2” x 3/8”	1.20	1.30	0.67	0.14	32.15
NEW	20-167N	1/2" x 1/2"	1.20	1.42	0.83	0.17	30.05

W171PL **87222**

NICKEL PLATED PUSH-IN FITTINGS | BRASS FITTINGS

SWIVEL MALE BRANCH TEE

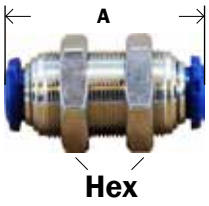


GLOBAL THREAD
NPT • BSPT • RC • NPTF • BSPP • G

	Part #	Tube O.D. x Male Global Thread	A	B	Hex	Approx. Wt. Lbs.	List Price
	20-103N	1/8” x 1/8”	0.67	0.78	0.51	0.04	11.89
	20-104N	5/32” x 10-32”	0.67	0.79	0.31	0.04	12.64
NEW	20-109N	5/32" x 1/8"	0.70	0.79	0.51	0.06	16.11
NEW	20-850N	5/32" x 1/4"	0.67	1.00	0.59	0.06	14.14
	20-105N	1/4” x 1/8”	0.83	0.87	0.51	0.08	12.99
	20-106N	1/4” x 1/4”	0.83	0.98	0.59	0.10	12.99
	20-156N	1/4" x 3/8"	1.043	1.10	0.59	0.18	15.05
NEW	20-157N	3/8" x 1/8"	1.04	1.08	0.59	0.18	19.61
	20-107N	3/8” x 1/4”	1.04	1.10	0.59	0.18	17.88
	20-108N	3/8” x 3/8”	1.04	1.18	0.67	0.16	21.25
	20-158N	3/8" x 1/2"	1.04	1.30	0.82	0.18	24.68
NEW	20-112N	1/2" x 1/4"	1.20	1.24	0.59	0.23	25.61
	20-110N	1/2” x 3/8”	1.20	1.30	0.67	0.24	27.09
	20-111N	1/2” x 1/2”	1.20	1.42	0.82	0.28	28.44

W172PL **87210**

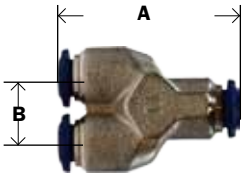
BULKHEAD UNION



	Part #	Tube O.D.	A	Hex	Approx. Wt. Lbs.	List Price
NEW	20-124N	1/8"	1.03	0.55	0.04	10.49
NEW	20-125N	5/32"	1.22	0.67	0.05	10.49
	20-127N	1/4”	1.38	0.67	0.06	13.48
	20-123N	5/16”	1.45	0.74	0.08	18.06
	20-128N	3/8”	1.69	0.94	0.13	19.28
NEW	20-129N	1/2"	1.93	1.02	0.15	20.19

62PLBH **88050**

UNION "Y"



Part #	Tube O.D.	A	B	Approx. Wt. Lbs.	List Price
20-553N	1/4” x 1/4”	1.44	0.53	0.14	24.98

662PL **88310**

REDUCER

Part #	Tube O.D. 2	Tube O.D. 1	A	List Price
20-510N	1/4"	1/8"	1.142	5.39
20-511N	1/4"	5/32"	1.181	5.64
20-512N	3/8"	1/4"	1.496	7.30
20-513N	1/2"	1/4"	1.693	7.30
20-514N	1/2"	3/8"	1.693	9.26

67PPL **88700**

Don’t look back. You’re not going that way

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.	List Price
28400	1/8	30/300	.07	13.72
28401	1/4	30/300	.10	13.72
28402	3/8	20/200	.21	13.72

PUSH-IN X MALE PIPE

Part #	Size	Box/ Case	Wgt.	List Price
28403	5/32 x 1/8	30/300	.08	13.58
28407	1/4 x 1/8	30/300	.08	13.58
28404	1/4 x 1/4	30/300	.10	13.58
28405	3/8 x 3/8	20/200	.17	13.58

NEW

FIP X FIP

Part #	Size	Box/Case	Wgt.	List Price
46650	1/8	30/300	.11	9.59
46651	1/4	30/300	.10	9.59
46652	3/8	20/200	.14	11.83
46653	1/2	15/150	.25	12.18

NEW

MIP X FIP

Part #	Size	Box/Case	Wgt.	List Price
46660	1/8	30/300	.11	9.59
46661	1/4	30/300	.10	9.59
46662	3/8	20/200	.14	11.83
46663	1/2	15/150	.25	12.18

PANEL MOUNT DESIGN

NEW

FIP X FIP ANGLE

Part #	Size	Box/Case	Wgt.	List Price
46670	1/8	20/200	.19	23.00
46671	1/4	20/200	.20	16.10
46672	3/8	25/250	.11	18.90

NEW

3-WAY FIP - OPEN CENTER

Part #	Size	Box/Case	Wgt.	List Price
466900	1/8	25/250	.13	30.80
466901	1/4	20/200	.21	30.80
466902	3/8	20/200	.21	33.60

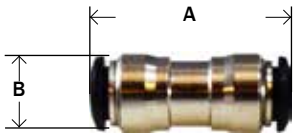
NEW

3-WAY FIP - CLOSED CENTER

Part #	Size	Box/Case	Wgt.	List Price
46680	1/8	25/250	.13	30.80
46681	1/4	20/200	.21	30.80
46682	3/8	20/200	.21	33.60

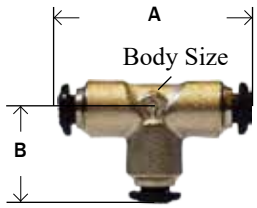
NICKEL PLATED METRIC PUSH-IN FITTINGS

BULKHEAD UNION



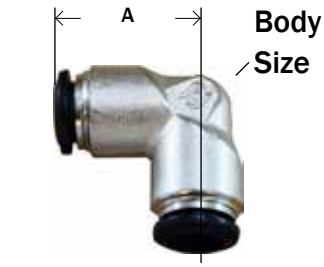
Part #	Tube O.D. (mm)	Tube O.D. (mm)	A	B	List Price
20-723N	3		1.014	0.332	11.87
20-600N	4		1.190	0.410	8.32
20-724N	5		1.287	0.449	8.64
20-725N	6	4	1.248	0.488	8.64
20-601N	6		1.326	0.488	8.64
20-726N	8	6	1.365	0.566	9.46
20-727N	8		1.404	0.566	9.65
20-728N	10	8	1.638	0.683	11.87
20-603N	10		1.638	0.683	11.87
20-729N	12	10	1.833	0.800	14.75
20-604N	12		1.833	0.800	14.03
20-730N	14		1.911	0.839	21.01

UNION TEE



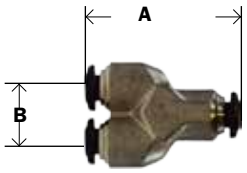
Part #	Tube O.D. (mm)	A	B	Body Size	List Price
20-741N	3	1.326	0.663	0.351	16.50
20-610N	4	1.326	0.663	0.351	12.69
20-742N	5	1.560	0.780	0.429	13.39
20-611N	6	1.638	0.819	0.429	13.39
20-612N	8	1.755	0.878	0.507	15.49
20-613N	10	2.067	1.034	0.624	20.12
20-614N	12	2.379	1.190	0.741	24.95
20-743N	14	2.379	2.535	0.741	32.06

UNION ELBOW



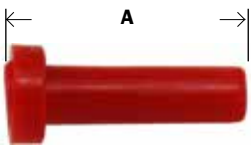
Part #	Tube O.D. (mm)	A	Body Size	List Price
20-738N	3	0.663	0.51	11.87
20-206N	4	0.663	0.351	9.21
20-739N	5	0.780	0.429	9.33
20-660N	6	0.780	0.429	9.33
20-661N	8	0.878	0.507	10.98
20-807N	10	1.034	0.624	13.52
20-808N	12	1.190	0.741	17.78
20-740N	14	1.268	0.741	21.90

UNION Y



Part #	Tube O.D. (mm)	B	A	List Price
20-744N	3	0.390	1.131	23.35
20-813N	4	0.429	1.248	17.52
20-745N	5	0.527	1.365	18.55
20-814N	6	0.527	1.424	18.54
20-815N	8	0.605	1.599	21.01
20-746N	10	0.728	1.890	29.65

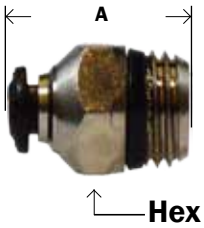
PLUG



Part #	Tube O.D. (mm)	A	List Price
20-748N	4	0.917	1.14
20-749N	5	0.956	1.14
20-750N	6	0.956	1.14
20-751N	8	1.014	1.40
20-752N	10	1.112	1.42
20-753N	12	1.190	1.43

NICKEL PLATED METRIC PUSH-IN FITTINGS

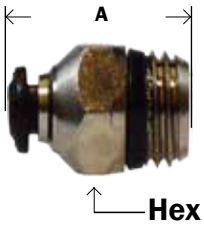
METRIC TUBE STRAIGHT MALE



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

	Part #	Tube O.D. (mm)	Global Thread	A	Hex	List Price
	20-630N	4	1/8"	0.702	0.429	4.51
	20-631N	4	1/4"	0.760	0.546	5.87
	20-700N	5	1/8"	0.78	0.429	5.27
	20-701N	5	1/4"	0.78	0.546	5.65
	20-632N	6	1/8"	0.78	0.546	5.27
	20-633N	6	1/4"	0.819	0.546	5.65
NEW	20-628N	6	3/8"	0.90	0.546	7.46
NEW	20-629N	6	1/2"	0.92	0.546	9.03
	20-702N	8	1/8"	0.955	0.546	5.84
	20-634N	8	1/4"	0.858	0.546	5.91
	20-635N	8	3/8"	0.897	0.663	6.53
	20-703N	8	1/2"	0.897	0.663	7.87
	20-636N	10	1/4"	1.092	0.663	7.68
	20-637N	10	3/8"	1.092	0.663	8.27
	20-704N	10	1/2"	1.014	0.663	8.95
	20-801N	12	1/4"	1.267	0.78	9.21
	20-638N	12	3/8"	1.267	0.78	9.97
	20-705N	12	1/2"	1.209	0.78	10.09
	20-706N	14	3/8"	1.287	0.858	11.74
	20-707N	14	1/2"	1.248	0.858	12.69

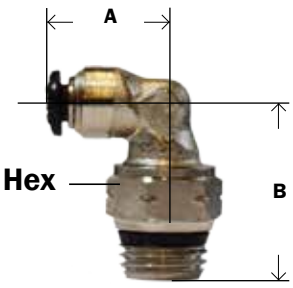
METRIC TUBE INTERNAL HEX



NEW

	Part #	Tube O.D. (mm)	Global Thread	A	Hex	List Price
	20-619N	3	M5	0.31	0.31	7.56
	20-620N	4	1/8"	0.71	0.43	4.68
	20-621N	4	M5	0.39	0.38	5.01
	20-622N	4	M7 x 1"	0.83	0.38	5.40
	20-623N	6	1/4"	0.83	0.55	5.81
	20-624N	6	1/8"	0.85	0.47	4.94
	20-625N	6	M5	0.47	0.47	5.40
	20-626N	8	1/4"	0.88	0.55	6.24
	20-627N	8	1/8"	0.98	0.55	6.58

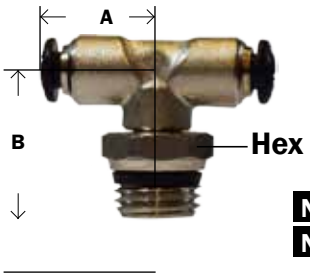
METRIC TUBE SWIVEL MALE ELBOW



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

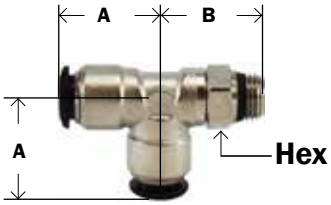
Part #	Tube O.D. (mm)	Global Thread	A	B	Hex	List Price
20-708N	4	1/8"	0.663	0.780	0.507	9.14
20-709N	4	1/4"	0.663	0.936	0.585	9.97
20-710N	5	1/8"	0.780	0.858	0.507	9.21
20-642N	6	1/8"	0.819	0.858	0.507	8.73
20-803N	6	1/4"	0.819	0.975	0.585	9.97
20-711N	8	1/8"	0.878	0.917	0.507	10.17
20-805N	8	1/4"	0.878	1.014	0.585	11.13
20-655N	8	3/8"	0.878	1.092	0.663	14.48
20-712N	8	1/2"	0.878	1.404	0.819	15.68
20-656N	10	1/4"	1.034	1.092	0.585	14.03
20-657N	10	3/8"	1.034	1.170	0.663	15.68
20-713N	10	1/2"	1.034	1.287	0.819	18.22
20-658N	12	3/8"	1.190	1.287	0.663	18.08
20-659N	12	1/2"	1.190	1.404	0.819	20.63
20-714N	14	3/8"	1.268	1.404	0.663	21.79
20-715N	14	1/2"	1.268	1.443	0.819	23.10

METRIC TUBE SWIVEL MALE BRANCH TEE



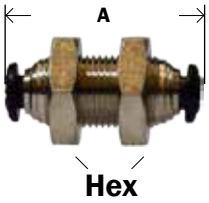
Part #	Tube O.D. (mm)	Global Thread	A	B	Hex	List Price
20-680N	4	1/8"	0.663	0.780	0.507	12.76
20-716N	4	1/4"	0.663	0.936	0.585	13.90
20-717N	5	1/8"	0.78	0.858	0.507	12.76
20-682N	6	1/8"	0.819	0.858	0.507	12.76
20-683N	6	1/4"	0.819	0.975	0.585	13.90
20-809N	8	1/8"	0.877	0.917	0.507	15.49
20-684N	8	1/4"	0.877	1.014	0.585	15.81
NEW 20-690N	8	3/8"	0.886	1.024	0.585	18.32
NEW 20-691N	8	1/2"	0.886	1.122	0.585	21.02
20-686N	10	1/4"	1.033	1.092	0.585	20.56
20-687N	10	3/8"	1.033	1.170	0.663	21.77
20-810N	10	1/2"	1.033	1.287	0.819	23.10
20-688N	12	3/8"	1.189	1.287	0.663	24.12
20-689N	12	1/2"	1.189	1.404	0.819	26.08
20-718N	14	3/8"	1.267	1.404	0.663	30.15
20-719N	14	1/2"	1.267	1.443	0.819	32.52

METRIC TUBE SWIVEL MALE RUN TEE



Part #	Tube O.D. (mm)	Global Thread	A	B	Hex	List Price
20-670N	4	1/8"	0.663	0.780	0.507	12.76
20-720N	4	1/4"	0.663	0.936	0.585	13.90
20-721N	5	1/8"	0.780	0.858	0.507	12.76
20-672N	6	1/8"	0.819	0.858	0.507	12.76
20-673N	6	1/4"	0.819	0.975	0.585	13.90
20-811N	8	1/8"	0.819	0.917	0.507	15.49
20-674N	8	1/4"	0.878	1.014	0.585	15.81
NEW 20-668N	8	3/8"	0.885	1.063	0.585	19.94
NEW 20-669N	8	1/2"	0.885	1.063	0.585	19.35
20-676N	10	1/4"	0.878	1.092	0.585	20.56
20-677N	10	3/8"	1.034	1.170	0.663	21.77
20-722N	10	1/2"	1.034	1.287	0.819	23.10
20-678N	12	3/8"	1.190	1.287	0.663	24.14
20-679N	12	1/2"	1.190	1.404	0.819	26.08

BULKHEAD



Part #	Tube O.D. (mm)	M	A	Hex	List Price
20-731N	3	M10x1	1.014	0.546	19.29
20-732N	4	MI2x1	1.229	0.663	16.56
20-733N	5	M14x1	1.287	0.663	14.16
20-734N	6	M14x1	1.365	0.663	14.16
20-735N	8	M16x1	1.443	0.741	15.49
20-736N	10	M20x1	1.677	0.936	20.52
20-737N	12	M22x1	1.872	1.014	24.56

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	-104°F ~180°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.

UNION

	Part #	Tube O.D.	Approx. Wt. Lbs.	List Price
	20-017C	1/8"	0.01	6.73
	20-018C	5/32"	0.01	6.75
	20-001C	3/16"	0.01	9.89
	20-019C	1/4”	0.01	3.44
	20-015C	5/16"	0.01	7.41
	20-020C	3/8”	0.02	4.40
	20-021C	1/2"	0.03	7.71
NEW	20-016C	1/4" x 5/32"	0.01	5.14
NEW	20-515C	5/16" x 1/4"	0.01	6.39
	20-022C	3/8" x 1/4"	0.01	8.16
NEW	20-516C	3/8" x 5/16"	0.02	6.27
	20-024C	1/2" x 3/8"	0.03	19.77

PQ62P

UNION TEE

	Part #	Tube O.D.	Approx. Wt. Lbs.	List Price
	20-025C	1/8"	0.01	9.69
	20-026C	5/32"	0.01	9.00
NEW	20-027C	3/16"	0.02	7.91
	20-028C	1/4”	0.02	2.75
	20-031C	5/16"	0.02	10.88
	20-029C	3/8”	0.02	5.46
	20-030C	1/2"	0.08	10.60

PQ64P

90° UNION ELBOW

	Part #	Tube O.D.	Approx. Wt. Lbs.	List Price
	20-150C	1/8"	0.01	6.72
	20-151C	5/32"	0.01	6.44
NEW	20-149C	3/16"	0.01	5.76
	20-152C	1/4”	0.02	5.25
	20-155C	5/16"	0.02	8.89
	20-153C	3/8”	0.02	6.16
	20-154C	1/2"	0.02	7.20

PQ65P

UNION "Y" CONNECTOR

Part #	Tube O.D.	Approx. Wt. Lbs.	List Price
20-551C	5/32"	0.01	11.10
20-553C	1/4”	0.02	3.69
20-182C	5/16"	0.02	11.97
20-555C	3/8”	0.02	9.70
20-185C	1/2	0.07	16.92

PQ89P

FEMALE CONNECTOR

- Brass

Part #	Tube O.D. x Female NPT	Approx. Wt. Lbs.	List Price
20-034C	1/4” x 1/8”	0.02	7.02
20-035C	1/4” x 1/4”	0.04	6.35
20-036C	3/8” x 1/4”	0.04	5.11
20-037C	3/8” x 3/8”	0.06	4.69

PQ66P

MALE CONNECTOR

• Nickel Plated

• See broader range of sizes on page 102
N/P push-in fittings

Part #	Tube O.D. x Male NPT	Approx. Wt. Lbs.	List Price
20-050C	5/32" x 1/8"	0.02	5.05
20-053C	1/4" x 10-32"	0.02	6.31
20-054C	1/4” x 1/8”	0.02	3.59
20-055C	1/4” x 1/4”	0.02	2.21
20-056C	1/4” x 3/8”	0.04	4.53
20-530C	5/16" x 1/8"	0.05	6.59
20-531C	5/16" x 1/4"	0.05	5.73
20-057C	3/8" x 1/8"	0.05	6.88
20-058C	3/8” x 1/4”	0.06	3.51
20-059C	3/8” x 3/8”	0.06	3.63
20-062C	3/8” x 1/2”	0.08	6.84
20-060C	1/2” x 1/4”	0.06	6.79
20-061C	1/2” x 3/8”	0.08	6.13
20-063C	1/2” x 1/2”	0.10	6.60

PQ68P

SWIVEL MALE ELBOW

• Swivels for installation only.
• Not a live swivel

* Global Thread

	Part #	Tube O.D. x Male NPT	Approx. Wt. Lbs.	List Price
	20-079C	1/8" x 1/8"	0.01	7.38
NEW	20-535C*	1/8" x 1/4"	0.01	5.02
NEW	20-517C*	3/16" x 1/4"	0.01	6.69
NEW	20-080C*	5/32" x 1/8"	0.01	6.69
NEW	20-077C*	5/32" x 1/4"	0.01	5.10
NEW	20-049C*	5/32" x 10/32"	0.01	5.18
	20-078C	1/4" x 10-32	0.01	6.72
	20-081C	1/4” x 1/8”	0.02	3.94
	20-082C	1/4” x 1/4”	0.04	3.75
	20-086C	1/4” x 3/8”	0.06	4.90
NEW	20-518C*	1/4" x 1/2"	0.07	9.16
	20-537C	5/16" x 1/8"	0.04	8.72
	20-538C	5/16" x 1/4"	0.04	7.02
NEW	20-539C*	5/16" x 3/8"	0.06	5.70
	20-087C	3/8” x 1/8’	0.04	4.98
	20-083C	3/8” x 1/4”	0.08	5.20
	20-084C	3/8” x 3/8”	0.10	4.96
	20-088C	3/8” x 1/2”	0.12	8.82
	20-184C	1/2" x 1/4"	0.14	10.77
	20-085C	1/2" x 3/8"	0.16	10.63
	20-092C	1/2" x 1/2"	0.18	13.20

PQ69PS

LONG PATTERN MALE ELBOWS

Part #	Tube O.D. x Thread	Approx. Wt. Lbs.	List Price
20-572C	1/4 X 1/8	0.03	15.34
20-573C	1/4 X 1/4	0.05	15.06
20-574C	1/4 X 3/8	0.06	24.09
20-579C	3/8 X 1/4	0.09	25.10
20-580C	3/8 X 3/8	0.12	25.10
20-581C	3/8 X 1/2	0.14	40.73
20-582C	1/2 X 1/4	0.16	37.59
20-583C	1/2 X 3/8	0.18	40.45
20-584C	1/2 X 1/2	0.20	40.45

COMPOSITE BODY PUSH-IN FITTINGS

FEMALE SWIVEL ELBOWS

Part #	Tube O.D. x Female NPT	Approx. Wt. Lbs.	List Price
20-089C	1/4 X 1/8	0.05	17.35
20-090C	1/4 X 1/4	0.06	18.93
20-591C	1/4 X 3/8	0.07	21.91
20-091C	3/8 X 1/4	0.10	27.97
20-595C	3/8 X 3/8	0.14	27.97
20-596C	3/8 X 1/2	0.15	34.16
20-597C	1/2 X 3/8	0.20	32.96
20-598C	1/2 X 1/2	0.23	13.20

45° SWIVELS

Part #	Tube O.D. x Male NPT	Approx. Wt. Lbs.	List Price
20-139C	1/4 X 1/8	0.04	8.60
20-140C	1/4 X 1/4	0.05	7.37

SWIVEL MALE RUN TEE

- Swivels for installation only.
- Not a live swivel

	Part #	Tube O.D. x Male NPT	Approx. Wt. Lbs.	List Price
NEW	20-160C*	1/8" x 1/8"	0.03	8.44
NEW	20-833C*	1/8" x 1/4"	0.03	8.95
NEW	20-835C*	5/32" x 10-32	0.03	7.92
	20-162C	1/4” x 1/8”	0.04	9.06
	20-163C	1/4” x 1/4”	0.04	5.54
NEW	20-834C*	1/4" x 10-32	0.04	7.61
	20-099C	3/8” x 1/8”	0.06	6.22
	20-100C	3/8” x 1/4”	0.08	5.77
	20-165C	3/8” x 3/8”	0.10	6.86
	20-181C	3/8 x 1/2	0.12	16.92
	20-174C	1/2 x 1/4	0.12	16.53
	20-166C	1/2 x 3/8	0.14	16.92
	20-167C	1/2 x 1/2	0.16	19.89

PQ71PS

SWIVEL MALE BRANCH TEE

- Swivels for installation only.
- Not a live swivel

	Part #	Tube O.D. x Male NPT	Approx. Wt. Lbs.	List Price
NEW	20-103C*	1/8" x 1/8"	0.02	10.94
NEW	20-519C*	1/8" x 1/4"	0.03	11.22
NEW	20-109C*	5/32" x 1/8"	0.02	10.37
NEW	20-135C*	5/32" x 1/4"	0.03	10.26
NEW	20-104C*	5/32" x 10/32"	0.03	7.10
NEW	20-830C*	3/16" x 1/8"	0.03	9.98
	20-105C	1/4” x 1/8”	0.04	9.29
	20-106C	1/4” x 1/4”	0.06	5.69
NEW	20-831C*	1/4" x 10/32"	0.06	7.61
	20-121C	1/4” x 3/8”	0.08	6.11
NEW	20-136C*	5/16" x 1/8"	0.04	11.28
NEW	20-137C*	5/16" x 1/4"	0.05	11.00
NEW	20-832C*	5/16" x 3/8"	0.06	9.98
	20-107C	3/8” x 1/4”	0.10	10.45
	20-108C	3/8” x 3/8”	0.12	12.49
	20-158C	3/8 X 1/2	0.14	16.92
	20-138C	1/2 X 1/4	0.14	16.53
	20-110C	1/2 X 3/8	0.16	16.92
	20-111C	1/2 X 1/2	0.21	19.83

PQ72PS

* Global Thread

BULKHEAD UNION

Part #	Tube O.D.	Approx. Wt. Lbs.	List Price
20-127C	1/4”	0.04	8.44
20-128C	3/8”	0.06	6.67
20-129C	1/2"	0.10	10.74

PQ82P

BULKHEAD FEMALES

Part #	Tube O.D. x Thread	Approx. Wt. Lbs.	List Price
20-170C	1/4 X 1/8	0.04	21.51
20-171C	1/4 X 1/4	0.04	16.58
20-172C	3/8 X 1/4	0.06	39.30
20-173C	3/8 X 3/8	0.07	35.57
20-175C	1/2 X 1/4	0.07	51.49
20-176C	1/2 X 3/8	0.09	41.74
20-179C	1/2 X 1/2	0.10	44.89

SWIVEL "Y" CONNECTOR

• Swivels for installation only. • Not a live swivel

Part #	Tube O.D. x Male NPT	Approx. Wt. Lbs.	List Price
20-187C	1/4 X 1/8	0.02	12.36
20-557C	1/4” x 1/4”	0.02	11.13
20-188C	3/8 X 1/4	0.04	14.59
20-189C	3/8 X 3/8	0.04	16.13
20-193C	3/8 X 1/2	0.07	19.26
20-194C	1/2 X 3/8	0.06	19.09
20-195C	1/2 X 1/2	0.09	22.34

PQ88PS

IN-LINE NEEDLE VALVE

Part #	Tube O.D.	Approx. Wt. Lbs.	List Price
20-487C	1/4”	0.04	27.32
20-488C	5/16”	0.05	26.39
20-489C	3/8”	0.06	33.00

PQ310C

RIGHT ANGLE FLOW CONTROL METER IN

• Free flow out

Part #	Tube O.D. x Male NPT	Approx. Wt. Lbs.	List Price
20-727C	1/4 X 1/8	0.04	33.36
20-728C	1/4” x 1/4”	0.04	23.79
20-780C	3/8 X 1/4	0.06	31.80
20-781C	3/8 X 3/8	0.06	49.36
20-782C	1/2 X 1/2	0.10	63.78

JPQ

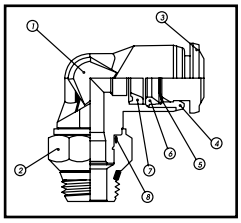
RIGHT ANGLE FLOW CONTROL METER OUT

• Free flow in

Part #	Tube O.D. x Male NPT	Approx. Wt. Lbs.	List Price
20-785C	1/4 x 1/8	0.04	31.69
20-786C	1/4 x 1/4	0.04	35.28
20-787C	3/8 x 1/4	0.06	31.80
20-788C	3/8 x 3/8	0.06	41.89
20-789C	1/2 x 1/2	0.10	74.44

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)	List Price
20-600	4	6.69
20-601	6	2.50
20-602	8	6.00
20-603	10	8.43
20-604	12	4.16

UNION TEE

	Part #	Tube O.D. (mm)	List Price
	20-610	4	16.64
NEW	20-862	5	7.92
	20-611	6	5.55
	20-612	8	5.69
	20-613	10	25.61
	20-614	12	26.12
NEW	20-861	14	13.48

3104

UNION ELBOW

	Part #	Tube O.D. (mm)	List Price
	20-806	4	6.69
	20-660	6	4.80
	20-661	8	7.12
	20-807	10	17.04
	20-808	12	22.55
NEW	20-740	14	9.26

3102

MALE ADAPTER

Part #	Tube OD (mm)	BSPT Thread	List Price
20-630	4	1/8”	6.01
20-631	4	1/4”	6.94
20-632	6	1/8”	6.69
20-633	6	1/4”	6.21
20-634	8	1/4”	3.69
20-635	8	3/8”	8.62
20-636	10	1/4”	9.10
20-637	10	3/8”	9.94
20-801	12	1/4”	11.61
20-638	12	3/8”	12.56

3175

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

SWIVEL ELBOW

	Part #	Tube OD (mm)	BSPT Thread	List Price
NEW	20-690*	4	M5	5.14
NEW	20-856*	4	1/8"	5.55
NEW	20-855*	4	1/4"	5.97
NEW	20-692*	5	M5	5.76
NEW	20-857*	5	1/8"	6.69
NEW	20-859*	5	M5	4.94
	20-642	6	1/8”	6.45
	20-803	6	1/4”	9.69
NEW	20-698*	6	3/8"	7.00
NEW	20-699*	6	1/2"	9.16
NEW	20-711*	8	1/8"	5.76
	20-805	8	1/4”	14.35
	20-655	8	3/8"	18.78
NEW	20-712*	8	1/2"	9.47
	20-656	10	1/4"	13.27
	20-657	10	3/8"	19.30
NEW	20-713*	10	1/2"	9.47
	20-658	12	3/8"	22.23
	20-659	12	1/2"	24.64
NEW	20-714*	14	3/8"	10.19
NEW	20-854*	14	1/2"	11.22

* Global Thread

SWIVEL BRANCH TEE

	Part #	Tube OD (mm)	BSPT Thread	List Price
	20-680*	4	1/8”	12.41
NEW	20-860*	4	1/4"	8.44
NEW	20-717*	5	1/8"	9.98
	20-682	6	1/8”	12.22
	20-683	6	1/4”	14.23
	20-809	8	1/8"	14.86
	20-684	8	1/4"	20.78
	20-685	8	3/8"	24.75
	20-686	10	1/4"	19.66
	20-687	10	3/8"	29.34
	20-810	10	1/2"	29.45
	20-688	12	3/8"	21.58
	20-689	12	1/2"	26.46
NEW	20-718*	14	3/8"	14.10
NEW	20-719*	14	1/2"	15.13

SWIVEL RUN TEE

	Part #	Tube OD (mm)	BSPT Thread	List Price
	20-670	4	1/8”	12.29
NEW	20-720*	4	1/4"	8.44
NEW	20-721*	5	1/8"	9.98
	20-672	6	1/8”	13.31
	20-673	6	1/4”	12.35
	20-811	8	1/8"	15.17
	20-674	8	1/4"	14.61
	20-675	8	3/8"	16.04
	20-676	10	1/4"	27.67
	20-677	10	3/8"	29.45
	20-678	12	3/8"	23.03
	20-679	12	1/2"	30.10

* Global Thread

METRIC COMPOSITE BODY PUSH-IN FITTINGS | BRASS FITTINGS

UNION WYE

	Part #	Tube OD (mm)	List Price
	20-813	4	21.83
	20-814	6	14.81
	20-815	8	26.08
NEW	20-746	10	9.98
NEW	20-827	12	12.97

SWIVEL MALE WYE

NEW

* Global Thread

Part #	Tube OD (mm)	Global Thread	List Price
20-816	4	1/8"	14.82
20-821	4	1/4"	10.29
20-817	6	1/8"	16.40
20-818	6	1/4"	15.23
20-819	8	1/8"	19.04
20-820	8	1/4"	19.40
20-822	8	3/8"	12.14
20-823	10	1/4"	11.22
20-824	10	3/8"	12.35
20-825	10	1/2"	14.82
20-826	12	3/8"	14.61
20-827	12	1/2"	12.97

The greatest discovery of my generation is that people can alter their lives by altering their attitudes.

- William James

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)

PLUG

Part #	Tube O.D.	Approx. Wt. Lbs.	List Price
595320	5/32”	0.01	1.17
590400	1/4”	0.02	2.54
590600	3/8”	0.02	2.32
590800	1/2”	0.04	4.34

1829 **DQ59DOT** 639PMT

UNION

Part #	Tube O.D.	Approx. Wt. Lbs.	List Price
620532	5/32”	0.06	10.08
620400	1/4”	0.06	11.27
620600	3/8”	0.13	10.98
620604	3/8" x 1/4"	0.15	28.80
620800	1/2”	0.19	10.92
621000	5/8”	0.30	26.19
621200	3/4”	0.44	49.89

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

UNION TEE

Part #	Tube O.D.	Approx. Wt. Lbs.	List Price
640400	1/4”	0.09	16.51
640600	3/8”	0.16	20.26
640800	1/2”	0.25	27.81
641000	5/8"	0.32	44.61
641200	3/4"	0.36	100.61

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

UNION ELBOW

Part #	Tube O.D.	Approx. Wt. Lbs.	List Price
655320	5/32”	0.03	22.85
650400	1/4”	0.06	11.60
650600	3/8”	0.12	15.93
650800	1/2”	0.18	21.41

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

FEMALE CONNECTOR

Part #	Tube O.D. x Female NPTF	Approx. Wt. Lbs.	List Price
660402	1/4” x 1/8”	0.06	10.80
660404	1/4” x 1/4”	0.10	13.89
660602	3/8” x 1/8”	0.11	34.53
660604	3/8” x 1/4”	0.11	12.87
660606	3/8” x 3/8”	0.17	22.56
660804	1/2” x 1/4”	0.14	51.66
660806	1/2” x 3/8”	0.16	28.43
660808	1/2” x 1/2”	0.25	31.16

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

MALE CONNECTOR

Part #	Tube O.D. x Male NPTF	Approx. Wt. Lbs.	List Price
685320	5/32” x 10/32”	0.02	11.75
685321	5/32” x 1/16”	0.02	8.41
685322	5/32” x 1/8”	0.02	9.39
680302	3/16” x 1/8”	0.02	10.73
680421	1/4" x 1/16"	0.02	12.90
680402	1/4” x 1/8”	0.03	5.16
680404	1/4” x 1/4”	0.04	5.55
680406	1/4” x 3/8”	0.07	9.75
680602	3/8” x 1/8”	0.06	7.83
680604	3/8” x 1/4”	0.07	7.06
680606	3/8” x 3/8”	0.06	7.68
680608	3/8” x 1/2”	0.13	13.57
680804	1/2” x 1/4”	0.11	16.55
680806	1/2” x 3/8”	0.12	9.81
680808	1/2” x 1/2”	0.14	10.16
681006	5/8” x 3/8”	0.18	19.12
681008	5/8” x 1/2”	0.18	20.81
681208	3/4” x 1/2”	0.20	26.60
681212	3/4” x 3/4”	0.20	33.47

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

MALE ELBOW

Forged

Part #	Tube O.D. x Male NPTF	Approx. Wt. Lbs.	List Price
695302	5/32" x 1/16"	0.03	15.21
695322	5/32" x 1/8"	0.03	10.16
690302	3/16" x 1/8"	0.03	19.40
690402	1/4" x 1/8"	0.08	8.65
690404	1/4" x 1/4"	0.06	9.09
690406	1/4" x 3/8"	0.11	11.49
690602	3/8" x 1/8"	0.08	12.47
690604	3/8" x 1/4"	0.09	10.86
690606	3/8" x 3/8"	0.11	11.95
690608	3/8" x 1/2"	0.20	20.01
690804	1/2" x 1/4"	0.22	17.13
690806	1/2" x 3/8"	0.22	17.02
690808	1/2" x 1/2"	0.24	22.21
691006	5/8" x 3/8"	0.30	25.18
691008	5/8" x 1/2"	0.32	26.11
691208	3/4" x 1/2"	0.32	35.13
691212	3/4" x 3/4"	0.34	42.35

AQ69DOT **169 PMTNS** 1869 **DQ69DOT**

MALE SWIVEL ELBOW

Forged

Part #	Tube O.D. x Male NPTF	Approx. Wt. Lbs.	List Price
695322S	5/32" x 1/8"	0.07	12.44
690402S	1/4" x 1/8"	0.06	11.07
690404S	1/4" x 1/4"	0.10	15.69
690406S	1/4" x 3/8"	0.10	20.01
690602S	3/8" x 1/8"	0.10	12.47
690604S	3/8" x 1/4"	0.11	14.27
690606S	3/8" x 3/8"	0.12	14.77
690608S	3/8" x 1/2"	0.20	21.75
690804S	1/2" x 1/4"	0.16	39.00
690806S	1/2" x 3/8"	0.18	18.41
690808S	1/2" x 1/2"	0.26	24.09
691006S	5/8" x 3/8"	0.28	24.95
691008S	5/8" x 1/2"	0.30	29.70
691208S	3/4" x 1/2"	0.50	96.10
691212S	3/4" x 3/4"	0.56	53.24

AQ69DOTS **169PMT** 1869 **DQ69DOTS**

Ask for what you want and be prepared to get it! – Maya Angelou

FEMALE ELBOW

Forged

Part #	Tube O.D. x Female NPTF	Approx. Wt. Lbs.	List Price
700402	1/4” x 1/8”	0.06	9.95
700404	1/4” x 1/4”	0.10	12.80
700406	1/4” x 3/8”	0.16	16.23
700602	3/8” x 1/8”	0.15	54.66
700604	3/8” x 1/4”	0.12	12.85
700606	3/8” x 3/8”	0.17	17.89
700806	1/2” x 3/8”	0.26	44.62
700808	1/2” x 1/2”	0.30	50.78

AQ70DOTS **1870** DQ70DOTS **170PMTNS**

FEMALE SWIVEL ELBOW

Part #	Tube O.D. x Female NPTF	List Price
700404S	1/4” x 1/4"	11.85

MALE RUN TEE

Forged

Part #	Tube O.D. x Male NPTF (1 x 3) x 2	Approx. Wt. Lbs.	List Price
710402	1/4” x 1/8”	0.06	13.99
71040604	(1/4" x 3/8") x 1/4"	0.20	84.59
710404	1/4” x 1/4”	0.08	14.94
710604	3/8” x 1/4”	0.20	18.41
71060404	(3/8" x 1/4") x 1/4"	0.20	50.95
710606	3/8” x 3/8”	0.17	17.60
71060406	(3/8" x 1/4") x 3/8"	0.20	68.75
710608	3/8” x 1/2”	0.14	92.35
710806	1/2” x 3/8”	0.28	29.14

AQ71DOT **171PMTNS** 1871 **DQ71DOT**

Leadership is not a position or a title, it is action and example.

MALE SWIVEL RUN TEE

Forged

Part #	Tube O.D. x Male NPTF	Approx. Wt. Lbs.	List Price
710402S	1/4" x 1/8"	0.09	15.69
710404S	1/4" x 1/4"	0.11	17.61
710604S	3/8" x 1/4"	0.15	21.07
710606S	3/8" x 3/8"	0.14	22.82
710804S	1/2" x 1/4"	0.24	93.23
710806S	1/2" x 3/8"	0.24	36.98
710808S	1/2" x 1/2"	0.30	38.76

AQ71DOTS **171PMT** 1871 **DQ71DOTS**

MALE 45° ELBOW

Forged

Part #	Tube O.D. x Male NPTF	Approx. Wt. Lbs.	List Price
540402	1/4" x 1/8"	0.06	11.85
540404	1/4" x 1/4"	0.06	12.88
540602	3/8" x 1/8"	0.08	12.75
540604	3/8" x 1/4"	0.09	14.66
540606	3/8" x 3/8"	0.11	16.70
540608	3/8" x 1/2"	0.15	18.10
540804	1/2" x 1/4"	0.13	25.42
540806	1/2" x 3/8"	0.16	18.24
540808	1/2" x 1/2"	0.18	26.15
541006	5/8" x 3/8"	0.22	49.61
541008	5/8" x 1/2"	0.21	27.44
541208	3/4" x 1/2"	0.28	35.28
541212	3/4" x 3/4"	0.32	42.41

AQ54DOT **179MTNS** 1880 **DQ54DOT**

MALE 45° SWIVEL ELBOW

Part #	Tube O.D. x Male NPTF	Approx. Wt. Lbs.	List Price
540402S	1/4" x 1/8"	0.06	17.75
540404S	1/4" x 1/4"	0.09	19.09
540602S	3/8" x 1/8"	0.10	16.47
540604S	3/8" x 1/4"	0.11	16.55
540606S	3/8" x 3/8"	0.13	17.37
540804S	1/2" x 1/4"	0.14	31.38
540806S	1/2" x 3/8"	0.16	28.72
540808S	1/2" x 1/2"	0.18	25.25
541008S	5/8" x 1/2"	0.24	41.17

AQ54DOTS **179PMT** 1880 **DQ54DOTS**

MALE BRANCH TEE

Forged

Part #	Tube O.D. x Male NPTF (1 x 2) x 3	Approx. Wt. Lbs.	List Price
720302	3/16" x 1/8"	0.07	31.65
720402	1/4" x 1/8"	0.10	14.20
720404	1/4" x 1/4"	0.10	14.73
720604	3/8" x 1/4"	0.14	20.14
72060404	(3/8" x 1/4") x 1/4"	0.20	58.93
720606	3/8" x 3/8"	0.15	28.00
720804	1/2" x 1/4"	0.20	31.53
720806	1/2" x 3/8"	0.24	28.05
720808	1/2" x 1/2"	0.32	40.38
72100808	(5/8" x 1/2") x 1/2"	0.20	72.89

AQ72DOT **172PMTNS** 1872 **DQ72DOT**

MALE SWIVEL BRANCH TEE

Part #	Tube O.D. x Male NPTF	Approx. Wt. Lbs.	List Price
720402S	1/4” x 1/8”	0.12	17.30
720404S	1/4” x 1/4”	0.14	16.93
720602S	3/8" x 1/8"	0.19	18.67
720604S	3/8” x 1/4”	0.15	22.39
720606S	3/8” x 3/8”	0.17	22.12
720804S	1/2” x 1/4”	0.30	34.02
720806S	1/2” x 3/8”	0.34	32.46
720808S	1/2” x 1/2”	0.22	36.06

AQ72DOTS **172PMT** 1872 **DQ72DOTS**

FEMALE BRANCH TEE

(RUN) BRANCH

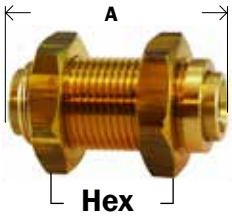
Part #	(1 & 2) x 3	List Price
770402	1/4” x 1/8"	18.50
770404	1/4" x 1/4"	23.38
770604	3/8" x 1/4"	17.68

GLADHAND BULKHEAD CONNECTOR

TUBE OD x MALE NPTF

Part #	Size	List Price
830808	1/2" x 1/2"	57.88

BULKHEAD UNION



Part #	Tube O.D.	Approx. Wt. Lbs.	List Price
820400	1/4”	0.16	21.63
820600	3/8”	0.21	35.89
820800	1/2”	0.14	40.08
821000	5/8”	0.30	47.15

AQ82DOT **62PMTBH** 1874 **DQ82DOT**

FEMALE BULKHEAD UNION

Part #	Tube O.D. x Female NPTF	Approx. Wt. Lbs.	List Price
860402	1/4" x 1/8"	0.08	13.90
860404	1/4" x 1/4”	0.10	15.10
860604	3/8” x 1/4”	0.14	15.65
860606	3/8” x 3/8”	0.31	21.01
860808	1/2” x 1/2”	0.32	41.50

• Jam nuts not available seperately

AQ86DOT **1873** DQ86DOT **66PMTBH**

COMPOSITE BODY DOT AIRBRAKE FITTINGS

NEW

WARNING

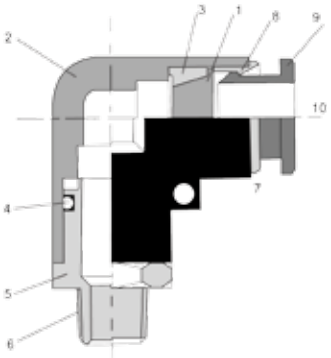
- Composite DOT push-to-connect fittings are designed only for use in applications where air is utilized as an operating fluid.
- Fittings must be used in accordance with manufacturer and industry specifications.
- They are not intended for use in environments exceeding 145psi or 140 degrees F.
- The 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

STRAIGHT UNION

Part #	Tube OD (inch)	Approx. Wt. Lbs.	List Price
620532C	5/32	0.01	22.23
620400C	1/4	0.01	6.42
620600C	3/8	0.03	9.50
620800C	1/2	0.05	12.85
621000C	5/8	0.08	37.92

UNION TEE

Part #	Tube OD (inch)	Approx. Wt. Lbs.	List Price
640400C	1/4	0.02	9.27
640600C	3/8	0.05	14.95
640800C	1/2	0.07	18.17
641000C	5/8	0.13	29.69

UNION 90° ELBOW

Part #	Tube OD (inch)	Approx. Wt. Lbs.	List Price
655320C	5/32	0.01	35.12
650400C	1/4	0.02	9.91
650600C	3/8	0.04	12.42
650800C	1/2	0.05	19.92

FEMALE CONNECTOR

Part #	Tube OD (inch)	Thread NPT	Approx. Wt. Lbs.	List Price
660402C	1/4	1/8-27	0.04	9.91
660404C	1/4	1/4-18	0.06	10.71
660406C	1/4	3/8-18	0.10	11.48
660602C	3/8	1/8-27	0.07	16.85
660604C	3/8	1/4-18	0.07	16.85
660606C	3/8	3/8-18	0.11	16.98
660608C	3/8	1/2-14	0.12	15.63
660802C	1/2	1/8-27	0.11	13.92
660804C	1/2	1/4-18	0.13	14.13
660806C	1/2	3/8-18	0.12	23.90
660808C	1/2	1/2-14	0.13	23.49

STRAIGHT MALE CONNECTOR

Part #	App. Tube OD (inch)	Thread NPT	Approx. Wt. Lbs.	List Price
680402C	1/4	1/8-27	0.02	4.53
680404C	1/4	1/4-18	0.03	4.86
680406C	1/4	3/8-18	0.05	6.21
680602C	3/8	1/8-27	0.05	9.42
680604C	3/8	1/4-18	0.06	7.31
680606C	3/8	3/8-18	0.06	7.65
680608C	3/8	1/2-14	0.09	12.20
680804C	1/2	1/4-18	0.09	12.78
680806C	1/2	3/8-18	0.09	13.49
680808C	1/2	1/2-14	0.09	16.34
681006C	5/8	3/8-18	0.15	24.18
681008C	5/8	1/2-14	0.13	23.32
681208C	3/4	1/2-14	0.38	27.97

90° MALE ELBOW

- Fixed

Part #	Tube OD (inch)	Thread NPT	Approx. Wt. Lbs.	List Price
695322SC	5/32	1/8-27	0.03	15.82
690402SC	1/4	1/8-27	0.03	6.27
690404SC	1/4	1/4-18	0.04	6.42
690406SC	1/4	3/8-18	0.07	11.17
690602SC	3/8	1/8-27	0.07	12.60
690604SC	3/8	1/4-18	0.06	10.43
690606SC	3/8	3/8-18	0.08	12.85
690608SC	3/8	1/2-14	0.14	16.06
690804SC	1/2	1/4-18	0.07	17.55
690806SC	1/2	3/8-18	0.09	16.49
690808SC	1/2	1/2-14	0.14	16.77
691006SC	5/8	3/8-18	0.14	24.27
691008SC	5/8	1/2-14	0.18	24.14
691208SC	3/4	1/2-14	0.26	27.73

90° FEMALE ELBOW

Part #	Tube OD (inch)	Thread NPT	Approx. Wt. Lbs.	List Price
700402SC	1/4	1/8-27	0.03	8.35
700404SC	1/4	1/4-18	0.05	13.43
700406SC	1/4	3/8-18	0.08	14.92
700604SC	3/8	1/4-18	0.07	15.42
700606SC	3/8	3/8-18	0.09	18.42
700608SC	3/8	1/2-14	0.10	16.45
700806SC	1/2	3/8-18	0.10	24.20
700808SC	1/2	1/2-14	0.11	26.41

MALE RUN TEE

• Fixed

Part #	Tube OD (inch)	Thread NPT	Approx. Wt. Lbs.	List Price
710402SC	1/4	1/8-27	0.04	12.77
710404SC	1/4	1/4-18	0.05	12.77
710604SC	3/8	1/4-18	0.08	16.98
710606SC	3/8	3/8-18	0.10	18.57
710608SC	3/8	1/2-14	0.15	23.22
710806SC	1/2	3/8-18	0.11	28.12

MALE BRANCH TEE

• Fixed

Part #	Tube OD (inch)	Thread NPT	Approx. Wt. Lbs.	List Price
720402SC	1/4	1/8-27	0.04	11.17
720404SC	1/4	1/4-18	0.05	12.06
720406SC	1/4	3/8-18	0.08	22.05
720604SC	3/8	1/4-18	0.08	15.76
720606SC	3/8	3/8-18	0.10	17.84
720806SC	1/2	3/8-18	0.11	22.12
720808SC	1/2	1/2-14	0.17	30.90

FEMALE BRANCH TEE

Part #	Tube OD (inch)	Thread NPT	Approx. Wt. Lbs.	List Price
770402C	1/4	1/8-27	0.06	15.05
770404C	1/4	1/4-18	0.08	17.56
770604C	3/8	1/4-18	0.08	24.14

45° MALE ELBOW

• Fixed

Part #	Tube OD (inch)	Thread NPT	Approx. Wt. Lbs.	List Price
540402SC	1/4	1/8-27	0.03	10.71
540404SC	1/4	1/4-18	0.04	12.63
540602SC	3/8	1/8-27	0.06	14.28
540604SC	3/8	1/4-18	0.06	14.28
540606SC	3/8	3/8-18	0.08	23.56
540608SC	3/8	1/2-14	0.13	19.98
540804SC	1/2	1/4-18	0.08	23.99
540806SC	1/2	3/8-18	0.10	23.56
540808SC	1/2	1/2-14	0.15	23.19
541006SC	5/8	3/8-18	0.14	41.55
541008SC	5/8	1/2-14	0.17	31.61
541208SC	3/4	1/2-14	0.26	29.77

UNION "Y"

Part #	A&B Tube OD (inch)	C Tube OD (inch)	Approx. Wt. Lbs.	List Price
620553C	1/4	1/4	0.03	17.02
620409C	1/4	3/8	0.03	18.84
620555C	3/8	3/8	0.05	20.99
620559C	3/8	1/4	0.07	23.99
620557C	1/2	1/2	0.08	26.66

MALE BRANCH "Y"

Part #	Tube OD (inch)	Thread NPT	Approx. Wt. Lbs.	List Price
620604C	3/8	1/4-18	0.09	24.63
620606C	3/8	3/8-18	0.12	25.59
620806C	1/2	3/8-18	0.13	39.73
620808C	1/2	1/2-14	0.15	40.80

BULKHEAD UNION

Part #	Tube OD (inch)	Thread (UNF)	Approx. Wt. Lbs.	List Price
820400C	1/4	9/16-18	0.07	11.88
820600C	3/8	7/8-14	0.19	17.62
820800C	1/2	1-12	0.26	26.62
821000C	5/8	1 1/8-12	0.42	66.33

FEMALE BULKHEAD CONNECTOR

Part #	App. Tube OD (inch)	Thread NPT	T (UNF)	Approx. Wt. Lbs.	List Price
860402C	1/4	1/8-27	9/16-18	0.01	16.70
860404C	1/4	1/4-18	9/16-18	0.08	24.31
860604C	3/8	1/4-18	7/8-14	0.20	24.95
860606C	3/8	3/8-18	7/8-14	0.20	25.48
860806C	1/2	3/8-18	1-12	0.26	28.91
860808C	1/2	1/2-14	1-12	0.27	30.09

Your attitude determines your direction.

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

D.O.T. AIR BRAKE - NYLON TUBING

BRASS FITTINGS

SLEEVE
SAE# 100115

Part #	Tube O.D.	Approx. Wt. Lbs.	List Price
38-001	1/4”	0.01	0.41
38-002	3/8”	0.01	0.54
38-003	1/2”	0.01	0.75
38-004	5/8”	0.01	1.20
38-005	3/4”	0.01	2.15

60NAB **60NTA** 1460

NUT
SAE# 100110

Part #	Tube O.D.	Approx. Wt. Lbs.	List Price
38-010	1/4”	0.02	0.84
38-011	3/8”	0.03	1.07
38-012	1/2”	0.05	2.64
38-013	5/8”	0.06	2.78
38-014	3/4”	0.09	4.68

61NAB **61NTA** 1461

UNION
SAE# 100101BA

Part #	Tube O.D.	Approx. Wt. Lbs.	List Price
38-019	1/4”	0.07	5.65
38-020	3/8”	0.11	6.83
38-021	1/2”	0.20	11.00
38-022	5/8”	0.25	23.01
38-023	3/4”	0.40	34.89

62NAB **62NTA** 1462

BULKHEAD UNION

Part #	Tube O.D.	Approx. Wt. Lbs.	List Price
38-028	1/4”	0.11	15.05
38-029	3/8”	0.16	18.50
38-030	1/2”	0.26	30.00

62NBH **1474** 475

STAINLESS STEEL INSERT
- 300 series stainless

- **For SAE# J844 TUBING**

Part #	Tube O.D.	Approx. Wt. Lbs.	List Price
38-035	1/4”	0.01	1.04
38-036	3/8”	0.01	0.79
38-037	1/2”	0.01	1.38
38-038	5/8”	0.01	3.46
38-039	3/4”	0.01	4.02

59A **63NTA**

BRASS INSERT

Part #	Tube O.D.	Approx. Wt. Lbs.	List Price
38-040	1/4”	0.01	0.83
38-041	3/8”	0.01	0.83
38-042	1/2”	0.01	1.64
38-043	5/8”	0.01	1.77
38-048	3/4”	0.02	2.82

1484 **463**

TEE

SAE# 100401BA

Part #	Tube O.D.	Approx. Wt. Lbs.	List Price
38-044	1/4”	0.12	12.27
38-045	3/8”	0.19	11.76
38-046	1/2”	0.36	18.65
38-047	5/8”	0.48	40.20

64NAB **264NTA** 1464

REDUCING BRANCH TEE

Part #	Tube O.D. (1&2) x 3	Approx. Wt. Lbs.	List Price
38-049	3/8” x 1/4”	0.24	46.94
38-057	1/2” x 3/8”	0.30	23.73

ELBOW

SAE# 100201BA

Part #	Tube O.D.	Approx. Wt. Lbs.	List Price
38-052	1/4”	0.09	12.58
38-053	3/8”	0.13	9.99
38-054	1/2”	0.15	24.42
38-055	5/8”	0.36	29.00

65NAB **265NTA** 1465

FEMALE ADAPTER

SAE# 100103BA

Part #	Tube O.D. x Female NPT	Approx. Wt. Lbs.	List Price
38-060	1/4” x 1/8”	0.06	4.76
38-061	1/4” x 1/4”	0.08	6.58
38-062	3/8” x 1/8”	0.07	6.36
38-063	3/8” x 1/4”	0.10	7.98
38-064	3/8” x 3/8”	0.14	9.00
38-065	1/2” x 3/8”	0.16	12.35
38-066	1/2” x 1/2”	0.20	18.46
38-067	5/8” x 3/8”	0.28	19.76
38-068	5/8” x 1/2”	0.28	23.32

66NAB **66NTA** 1466 **66NBH**

Nothing can bring you peace but yourself.

– Ralph Waldo Emerson

MALE ADAPTER
SAE# 100102BA

Part #	Tube O.D. x Male NPTF	Approx. Wt. Lbs.	List Price
38-072	1/4" x 1/16"	0.05	19.72
38-073	1/4" x 1/8"	0.05	3.84
38-074	1/4" x 1/4"	0.06	6.50
38-075	1/4" x 3/8"	0.08	8.03
38-076	3/8" x 1/8"	0.07	4.33
38-077	3/8" x 1/4"	0.08	4.58
38-078	3/8" x 3/8"	0.10	5.12
38-079	3/8" x 1/2"	0.14	7.48
38-080	1/2" x 1/4"	0.13	7.58
38-081	1/2" x 3/8"	0.14	6.54
38-082	1/2" x 1/2"	0.18	8.45
38-087	1/2" x 3/4"	0.23	31.54
38-083	5/8" x 3/8"	0.17	16.02
38-084	5/8" x 1/2"	0.21	13.72
38-088	5/8" x 3/4"	0.25	19.49
38-085	3/4" x 1/2"	0.28	19.02

68NAB **68NTA** 1468

SWIVEL MALE ADAPTER

Part #	Tube O.D. x Male NPTF	Approx. Wt. Lbs.	List Price
38-078S	3/8" x 3/8"	0.18	28.56
38-081S	1/2" x 3/8"	0.22	30.96

MALE ELBOW
SAE# 100202BA

Part #	Tube O.D. x Male NPTF	Approx. Wt. Lbs.	List Price
38-091	1/4" x 1/8"	0.06	4.82
38-092	1/4" x 1/4"	0.08	6.07
38-093	1/4" x 3/8"	0.13	6.55
38-094	3/8" x 1/8"	0.09	6.78
38-095	3/8" x 1/4"	0.11	6.44
38-090	3/8" x 1/4" LONG	0.14	21.32
38-101	3/8" x 3/8"	0.14	7.46
38-102	3/8" x 1/2"	0.20	9.69
38-103	1/2" x 1/4"	0.16	9.42
38-104	1/2" x 3/8"	0.20	10.26
38-109	1/2" x 3/8" LONG	0.26	46.92
38-105	1/2" x 1/2"	0.29	11.02
38-106	5/8" x 3/8"	0.26	18.66
38-107	5/8" x 1/2"	0.32	17.60
38-110	5/8" x 3/4"	0.40	27.52
38-108	3/4" x 1/2"	0.43	27.99

SWIVEL MALE ELBOW

269NTA **1469**

Part #	Tube O.D. x Male NPTF	Approx. Wt. Lbs.	List Price
38-101S	3/8" x 3/8"	0.28	39.66
38-104S	1/2" x 3/8"	0.32	42.36

FEMALE ELBOW
SAE# 100203BA

Part #	Tube O.D. x Female NPTF	Approx. Wt. Lbs.	List Price
38-113	1/4" x 1/8"	0.08	7.31
38-114	1/4" x 1/4"	0.12	14.61
38-115	3/8" x 1/8"	0.14	19.88
38-116	3/8" x 1/4"	0.10	12.98
38-117	3/8" x 3/8"	0.12	16.93
38-118	1/2" x 3/8"	0.23	18.50
38-119	1/2" x 1/2"	0.36	28.04
38-120	5/8" x 1/2"	0.38	39.14

MALE RUN TEE

SAE# 100424BA

Part #	Tube O.D. x Male NPTF x Tube O.D. 1x2x3	Approx. Wt. Lbs.	List Price
38-125	1/4" x 1/8" x 1/4"	0.10	13.80
38-126	1/4" x 1/4" x 1/4"	0.13	11.44
38-124	3/8" x 1/4" x 1/4"	0.14	31.54
38-127	3/8" x 1/4" x 3/8"	0.17	11.56
38-128	3/8" x 3/8" x 3/8"	0.20	10.01
38-129	1/2" x 3/8" x 1/2"	0.30	13.05

71NAB **271NTA** 1471

MALE BRANCH TEE

SAE# 100425BA

Part #	Tube O.D. x Tube O.D. x Male NPTF 1x2x3	Approx. Wt. Lbs.	List Price
38-136	1/4" x 1/4" x 1/8"	0.10	9.60
38-137	1/4" x 1/4" x 1/4"	0.13	18.41
38-138	3/8" x 3/8" x 1/8"	0.14	16.12
38-132	3/8" x 1/4" x 1/4"	0.15	52.23
38-139	3/8" x 3/8" x 1/4"	0.17	11.24
38-133	1/2" x 1/2" x 1/4"	0.26	28.69
38-140	3/8" x 3/8" x 3/8"	0.21	11.65
38-134	1/2" x 3/8" x 3/8"	0.26	39.42
38-141	1/2" x 1/2" x 3/8"	0.30	14.76
38-142	1/2" x 1/2" x 1/2"	0.37	23.35
38-143	5/8" x 5/8" x 1/2"	0.44	52.50

72NAB **272NTA** 1472

FEMALE BRANCH TEE

Part #	Tube O.D. x Tube O.D. x Female NPTF 1x2x3	Approx. Wt. Lbs.	List Price
38-144	3/8" x 3/8" x 1/4"	0.21	53.70
38-146	5/8" x 5/8" x 1/4"	0.48	82.94

45° ELBOW

SAE# 100302BA

Part #	Tube O.D. x Male NPTF	Approx. Wt. Lbs.	List Price
38-148	1/4" x 1/8"	0.06	10.10
38-149	1/4" x 1/4"	0.08	11.27
38-150	3/8" x 1/8"	0.09	22.46
38-151	3/8" x 1/4"	0.11	8.19
38-152	3/8" x 3/8"	0.14	11.59
38-153	3/8" x 1/2"	0.24	19.03
38-157	1/2" x 1/4"	0.18	28.44
38-154	1/2" x 3/8"	0.19	13.35
38-155	1/2" x 1/2"	0.25	18.27
38-156	5/8" x 1/2"	0.30	21.33
38-158	3/4" x 1/2"	0.38	44.04

6945NAB **279NTA** 1480

SWIVEL 45° ELBOW

Part #	Tube O.D. x Male NPTF	Approx. Wt. Lbs.	List Price
38-152S	3/8" x 3/8"	0.20	50.58
38-154S	1/2" x 3/8"	0.24	53.22

SLEEVE

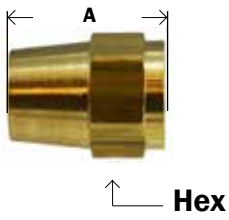
SAE# 120115BA

Part #	Tube O.D.	A	Approx. Wt. Lbs.	List Price
38-161	1/4”	0.25	0.01	0.55
38-162	3/8”	0.31	0.02	0.87
38-163	1/2”	0.38	0.02	0.88
38-164	5/8”	0.44	0.02	1.43
38-165	3/4”	0.50	0.04	3.72

60AB **1360**

NUT

SAE# 120111BA

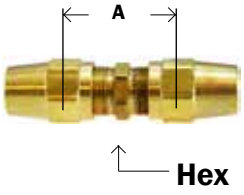


Part #	Tube O.D.	A	Hex	Approx. Wt. Lbs.	List Price
38-170	1/4”	0.75	0.56	0.02	1.79
38-171	3/8”	1.13	0.62	0.04	2.10
38-172	1/2”	1.25	0.81	0.08	4.51
38-173	5/8”	1.38	0.94	0.12	4.70
38-174	3/4”	1.56	1.12	0.18	10.06

20961 **61AB** 1361

UNION

SAE# 120101BA

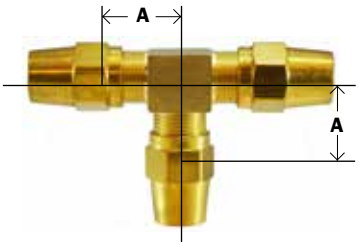


Part #	Tube O.D.	A	Hex	Approx. Wt. Lbs.	List Price
38-179	1/4”	0.81	0.44	0.08	6.18
38-180	3/8”	1.10	0.56	0.14	7.79
38-181	1/2”	1.07	0.69	0.24	15.73
38-182	5/8”	1.41	0.81	0.34	21.81
38-183	3/4"				42.57

62AB **1362**

TEE

SAE# 120401BA

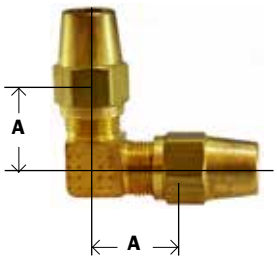


Part #	Tube O.D.	A	Approx. Wt. Lbs.	List Price
38-188	1/4”	0.62	0.16	14.40
38-189	3/8”	0.82	0.24	15.19
38-190	1/2”	0.94	0.48	28.41

264AB **1364**

ELBOW

SAE# 120201BA



Part #	Tube O.D.	A	Approx. Wt. Lbs.	List Price
38-196	1/4”	0.62	0.10	16.03

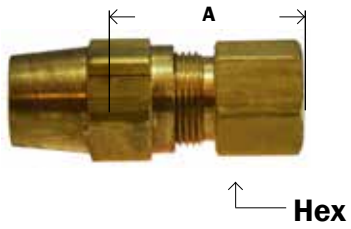
* Forged

265AB **1365**

Don’t complain about things you’re not willing to change.

FEMALE ADAPTER

SAE# 120103BA

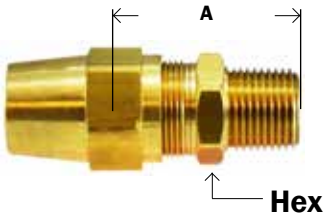


Part #	Tube O.D. x Female NPTF	A	Hex	Approx. Wt. Lbs.	List Price
38-207	3/8" x 1/4"	1.19	0.68	0.12	7.31
38-208	3/8" x 3/8"	1.18	0.87	0.16	8.28
38-209	1/2" x 3/8"	1.27	0.87	0.18	42.42

66AB 1366

MALE ADAPTER

SAE# 120102BA

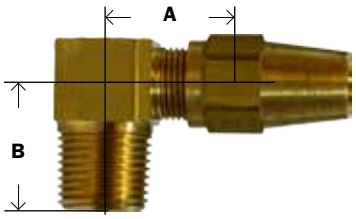


Part #	Tube O.D. x Male NPTF	A	Hex	Approx. Wt. Lbs.	List Price
38-217	1/4" x 1/8"	0.88	0.43	0.06	3.68
38-218	1/4" x 1/4"	0.97	0.56	0.08	5.19
38-221	3/8" x 1/4"	1.09	0.56	0.10	5.84
38-222	3/8" x 3/8"	1.19	0.69	0.12	6.25
38-223	3/8" x 1/2"	1.45	0.87	0.18	6.67
38-224	1/2" x 1/4"	1.32	0.69	0.16	13.48
38-225	1/2" x 3/8"	1.35	0.69	0.18	9.47
38-226	1/2" x 1/2"	1.51	0.87	0.24	16.37
38-227	5/8" x 3/8"	1.39	0.81	0.22	16.08
38-228	5/8" x 1/2"	1.57	0.87	0.24	19.34
38-229	3/4" x 1/2"	1.67	1.00	0.34	19.85

68AB 368

90° MALE ELBOW

SAE# 120202BA

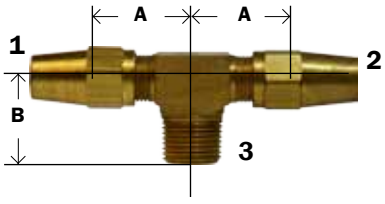


Part #	Tube O.D. x Male NPTF	A	B	Approx. Wt. Lbs.	List Price
38-235	1/4" x 1/8"	0.64	0.76	0.08	5.96
38-236	1/4" x 1/4"	0.69	0.88	0.10	10.20
38-237	1/4" x 3/8"	0.73	0.86	0.14	12.35
38-239	3/8" x 1/4"	0.80	0.93	0.12	8.92
38-240	3/8" x 3/8"	0.83	0.90	0.16	9.55
38-243	1/2" x 3/8"	0.92	0.98	0.22	12.47
38-244	1/2" x 1/2"	1.04	1.19	0.30	23.28
38-246	5/8" x 1/2"	1.10	1.25	0.36	27.30

269AB 1369

MALE BRANCH TEE

SAE# 120425BA



Part #	Tube O.D. x Male NPTF (1&2)x3	A	B	Approx. Wt. Lbs.	List Price
38-278	3/8" x 1/4"	0.78	0.91	0.18	19.63
38-279	3/8" x 3/8"	0.85	0.92	0.24	12.09

272AB 1372

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.	List Price
38-300	3/8”	0.02	2.27
38-301	1/2”	0.02	3.74

#60HC 3380-A 0903610 367 60RB

NUT

Part #	Hose I.D. Size	Approx. Wt. Lbs.	List Price
38-306	3/8”	0.04	7.30
38-307	1/2”	0.06	5.88

61RB **#61HC** 369 **3380-B** 0903624

NUT FOR USE WITH SPRING

Part #	Hose I.D. Size	Thread	Approx. Wt. Lbs.	List Price
38-312	3/8”	31/32-20	0.04	4.60
38-313	1/2”	1-3/32-20	0.06	6.02

#61HCS **0903613** 3380-D **61RBSG**

SPRING

Part #	Hose I.D.	Approx. Wt. Lbs.	List Price
38-351	3/8”	0.20	1.93
38-352	1/2”	0.22	3.55

#60SG **0901045** 3380-C **377**

NUT AND SPRING ASSEMBLY

Part #	Hose I.D. Size	Approx. Wt. Lbs.	List Price
38-015	3/8”	0.18	4.90
38-016	1/2”	0.24	8.54

379 **67RBSG** 0999999

UNION

Part #	Hose I.D.	Thread	Approx. Wt. Lbs.	List Price
38-318	3/8”	31/32-30	0.32	29.11
38-319	1/2”	1-1/8-20	0.48	46.82

#62HC **3380B-Y0** 362

BODY ONLY

Part #	Hose I.D.	Thread	Approx. Wt. Lbs.	List Price
39-318	3/8”	31/32-30	0.32	11.11
39-319	1/2”	1-1/8-20	0.48	16.82

FEMALE CONNECTOR HOSE

Part #	Hose I.D. x Female ABS	Approx. Wt. Lbs.	List Price
38-357	3/8” x 3/4-20	0.24	32.85
38-358	1/2” x 7/8-20	0.39	44.32

#66ABS **66RBSV** 3380B-Y7 **386**

BODY ONLY

Part #	Hose I.D. x Female ABS	Approx. Wt. Lbs.	List Price
39-357	3/8” x 3/4-20	0.24	12.85
39-358	1/2” x 7/8-20	0.38	14.32

MALE CONNECTOR

Part #	Hose I.D. x Male Pipe	Approx. Wt. Lbs.	List Price
38-363	3/8” x 1/4”	0.38	39.84
38-364	1/2” x 3/8”	0.46	93.42

#68ABS **09155** 3380B-Y8 **387**

ADAPTER FOR SWIVEL TYPE REUSABLE AND CRIMPED ON

Part #	Male ABS x Male Pipe	ABS Thread	Approx. Wt. Lbs.	List Price
38-369	3/8" x 1/4"	3/4-20	0.05	3.63
38-368	3/8" x 3/8"	3/4-20	0.08	3.40
38-372	3/8" x 1/2"	3/4-20	0.12	5.47
38-370	1/2" x 3/8"	7/8-20	0.10	6.81
38-371	1/2" x 1/2"	7/8-20	0.12	11.42

#68ABS **1390** 76RB **388**

MALE ADAPTER

Part #	Hose I.D. x Male Pipe	Approx. Wt. Lbs.	List Price
38-333	3/8" x 1/4"	0.22	11.35
38-334	3/8" x 3/8"	0.24	12.81
38-335	3/8" x 1/2"	0.26	14.51
38-336	1/2" x 3/8"	0.33	17.26
38-337	1/2" x 1/2"	0.36	18.77

#68HC **368** 3380B-Y2 **68RB**

ADAPTER BODY

Part #	Hose I.D. x Male Pipe	Approx. Wt. Lbs.	List Price
38-324	3/8" x 1/4"	0.12	5.86
38-325	3/8" x 3/8"	0.14	5.69
38-326	3/8" x 1/2"	0.20	6.20
38-327	1/2" x 3/8"	0.18	16.31
38-328	1/2" x 1/2"	0.20	9.36

#68B **W1391Z**

MALE ADAPTER

Part #	Hose I.D. x Male Pipe	Approx. Wt. Lbs.	List Price
38-342	3/8" x 1/4"	0.32	13.31
38-343	3/8" x 3/8"	0.34	13.56
38-344	3/8" x 1/2"	0.38	15.02
38-345	1/2" x 3/8"	0.48	18.99
38-346	1/2" x 1/2"	0.52	22.00

#68HCS **3380B-Y3** 68RBSG **378**

Happiness is an attitude. We either make ourselves miserable, or happy and strong. The amount of work is the same.

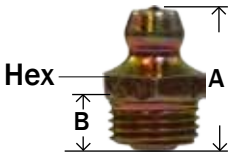
- Carlos Castaneda

- 8000 PSI max. pressure
- Exceeds 12hr salt spray

Meets SAE #J-534C
Many types available on special order.

- Assortments also available

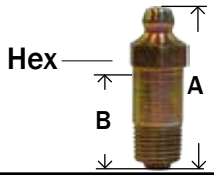
PIPE THREAD — BALL CHECK



Part #	Size	A	B	Hex	Approx. Wt. Lbs.	List Price
36-110	1/8" -27 NPTF	0.66	0.28	0.437	0.01	0.95
36-110SS	303 SS	0.68	0.29	0.437	0.01	4.26
36-111	Thread Forming	0.62	0.23	0.437	0.01	1.18

#610 **1610** 2800 **1720** 5000

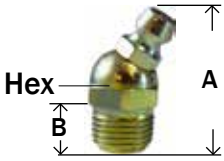
PIPE THREAD — BALL CHECK



Part #	Size	A	B	Hex	Approx. Wt. Lbs.	List Price
36-112	1/8" -27 NPTF	1.25	0.22	0.437	0.02	3.71
36-113	1/8" -27 NPTF	1.75	1.26	0.437	0.02	2.70

#607 **1607** 2800 **1669** 5003

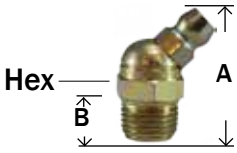
PIPE THREAD — 30° ANGLE BALL CHECK



Part #	Size	A	B	Hex	Approx. Wt. Lbs.	List Price
36-114	1/8" -27 NPTF	0.90	0.30	0.437	0.01	1.49

#611 **1611** 2830 **5100**

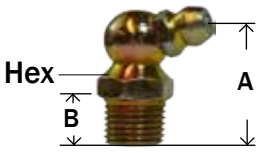
PIPE THREAD — 45° ANGLE BALL CHECK



Part #	Size	A	B	Hex	Approx. Wt. Lbs.	List Price
36-116	1/8" -27 NPTF	0.88	0.22	0.437	0.01	1.59
36-116SS	303 SS	0.95	0.29	0.437	0.01	7.36

#688 **1688** 2845 **5200**

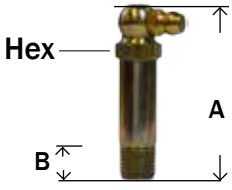
PIPE THREAD — 65° ANGLE BALL CHECK



Part #	Size	A	B	Hex	Approx. Wt. Lbs.	List Price
36-118	1/8" -27 NPTF	0.86	0.30	0.437	0.01	1.42

#612 **1612** 2865 **5300**

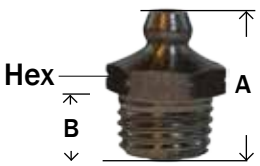
PIPE THREAD — 90° ANGLE BALL CHECK



Part #	Size	A	B	Hex	Approx. Wt. Lbs.	List Price
36-120	1/8" -27 NPTF	0.84	0.30	0.437	0.01	1.41
36-120SS	303 SS	0.84	0.29	0.437	0.01	7.36
36-121	1/8" -27 NPTF	1.81	1.25	0.437	0.01	4.84

#613 **1613** 2890 **5400** 5407

PIPE THREAD — BALL CHECK

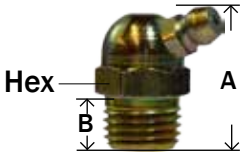


Part #	Size	A	B	Hex	Approx. Wt. Lbs.	List Price
36-130	1/4" -18 NPTF	0.84	0.30	0.437	0.02	1.58
36-130SS	303 SS	0.87	0.42	0.437	0.02	11.31

#627 **1627** 2900K **5050**

PIPE THREAD

65° ANGLE BALL CHECK

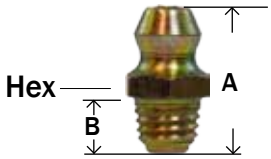


Part #	Size	A	B	Hex	Approx. Wt. Lbs.	List Price
36-132	1/4"-18 NPTF	0.97	0.34	0.56	0.02	2.43

#629 **1629** 2965 **5350**

1/4-28 TAPER THREAD

SHORT BALL CHECK

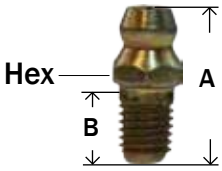


Part #	Size	A	B	Hex	Approx. Wt. Lbs.	List Price
36-140	1/4"-28 NPTF	0.54	0.18	0.31	0.01	0.54
36-140SS	303 SS	0.54	0.18	0.31	0.01	1.95
36-141	Thread Forming	0.55	0.10	0.31	0.01	0.53

#641 **1641** 2400 **3038** 5010

1/4-28 TAPER THREAD

LONG BALL CHECK

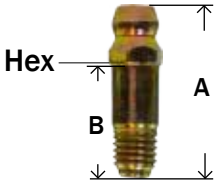


Part #	Size	A	B	Hex	Approx. Wt. Lbs.	List Price
36-142	1/4"-28 Taper Thread	0.69	0.34	0.312	0.01	0.73

#652 **1652** 2400 **5013**

1/4-28 TAPER THREAD

EXTRA LONG BALL CHECK

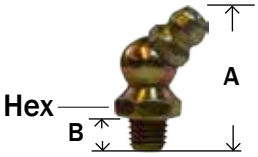


Part #	Size	A	B	Hex	Approx. Wt. Lbs.	List Price
36-144	1/4"-28 Taper Thread	0.92	0.60	0.312	0.02	1.15

#680 **1680** 2400 **5014**

1/4-28 TAPER THREAD

SHORT 45° BALL CHECK

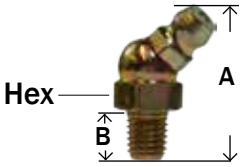


Part #	Size	Angle	A	B	Hex	Approx. Wt. Lbs.	List Price
36-146	1/4"-28 Taper Thread	45°	0.82	0.20	0.375	0.02	1.25
36-146SS	303 SS	45°	0.81	0.20	0.375	0.02	5.17
36-147	1/4"-28 Taper Thread	65°	0.78	0.20	0.375	0.02	1.32

#637 **1637** 2445 **1665** 2465 **3010** 5210

1/4-28 TAPER THREAD

LONG 45° BALL CHECK



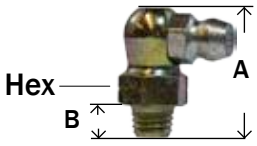
Part #	Size	A	B	Hex	Approx. Wt. Lbs.	List Price
36-148	1/4"-28 Taper Thread	0.94	0.30	0.375	0.02	2.07

#636 **1630** 2445

1/4-28 TAPER THREAD

90° ANGLE BALL CHECK

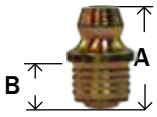
SAE# A515002



Part #	Size	A	B	Hex	Approx. Wt. Lbs.	List Price
36-150	1/4"-28 Taper Thread	0.75	0.10	0.375	0.02	1.06
36-150SS	303 SS	0.75	0.20	0.375	0.02	5.17
36-152	Thread Forming	0.75	0.16	0.375	0.02	2.35

#911 **1911** 2490 **3054** 5410

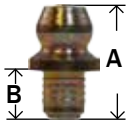
DRIVE TYPE — BALL CHECK



Part #	Size	A	B	Approx. Wt. Lbs.	List Price
36-160	5/16"	0.55	0.25	0.01	0.80

#608 **1608** 5021

DRIVE TYPE — BALL CHECK



Part #	Size	A	B	Approx. Wt. Lbs.	List Price
36-164	3/16"	0.52	0.25	0.01	0.71
36-164SS	303 SS	0.51	0.25	0.01	2.58

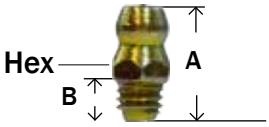
#728 **1728** 2316 **5033**

DRIVE TYPE — BALL CHECK

Part #	Size	A	B	Approx. Wt. Lbs.	List Price
36-166	1/4"	0.55	0.23	0.01	0.65
36-166SS	303 SS	0.55	0.23	0.01	2.58

#743 **1743** 214 **5029**

METRIC

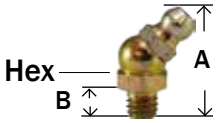


Part #	Size	A (mm)	B (mm)	Hex (mm)	Approx. Wt. Lbs.	List Price
36-168	6MM x 1	16	3.7	7	0.01	0.92

(Diameter x Pitch)

#711 **6000** 2106 **2M6** 5175

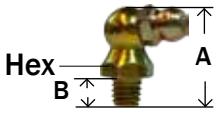
METRIC — 45° ANGLE



Part #	Size	A (mm)	B (mm)	Hex (mm)	Approx. Wt. Lbs.	List Price
36-170	6MM x 1	21	3.7	9	0.02	1.24

#712 **6045** 2107 **5176**

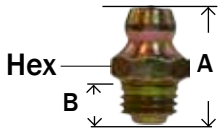
METRIC — 90° ANGLE



Part #	Size	A (mm)	B (mm)	Hex (mm)	Approx. Wt. Lbs.	List Price
36-172	6MM x 1	18	3.7	9	0.02	1.30

#713 **6090** 2108 **ZM906** 5177

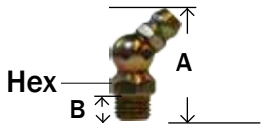
METRIC



Part #	Size	A (mm)	B (mm)	Hex (mm)	Approx. Wt. Lbs.	List Price
36-174	8MM x 1	16	3.7	9	0.02	0.78

#811 **8000** 2103 **ZM58** 5178

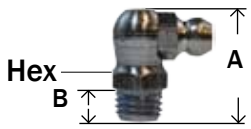
METRIC — 45° ANGLE



Part #	Size	A (mm)	B (mm)	Hex (mm)	Approx. Wt. Lbs.	List Price
36-176	8MM x 1	21	3.7	9	0.02	1.35

#812 **8045** 2104 **ZM458** 5179

METRIC — 90° ANGLE

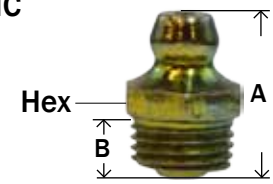


Part #	Size	A (mm)	B (mm)	Hex (mm)	Approx. Wt. Lbs.	List Price
36-178	8MM x 1	18	3.7	9	0.02	1.52

#813 **8090** 2105 **ZM908** 5180

STEEL GREASE FITTINGS | BRASS FITTINGS

METRIC

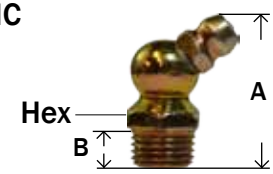


Part #	Size	A (mm)	B (mm)	Hex (mm)	Approx. Wt. Lbs.	List Price
36-180	10MM x 1	16	3.7	11	0.02	1.17

• Diameter x pitch (extra fine)

#911 **9000** 2109 **ZM510** 5181

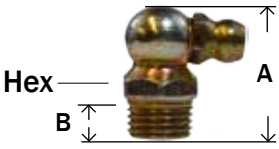
METRIC — 45° ANGLE



Part #	Size	A (mm)	B (mm)	Hex (mm)	Approx. Wt. Lbs.	List Price
36-182	10MM x 1	21	3.7	11	0.02	1.71

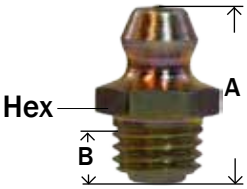
#912 **9045** 2110 **ZM4510**

METRIC — 90° ANGLE



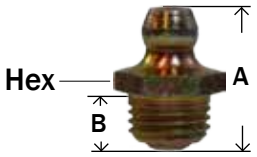
Part #	Size	A (mm)	B (mm)	Hex (mm)	Approx. Wt. Lbs.	List Price
36-184	10MM x 1	18	3.7	11	0.02	1.52

#913 **9090** 2111 **ZM9010** 5183



Part #	Size	A	B	Hex	Approx. Wt. Lbs.	List Price
36-186	5/16"-24	0.65	0.12	0.375	0.02	0.94

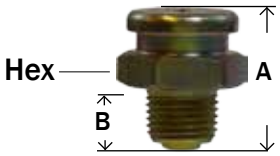
#711-B **1711** 2500



Part #	Size	A	B	Hex	Approx. Wt. Lbs.	List Price
36-188	3/8"-24	0.65	0.14	0.437	0.01	1.55

#710-B **1710** 2600

BUTTON HEAD



Part #	Size	A	B	Hex	Approx. Wt. Lbs.	List Price
36-200	1/8"-27 PTF	0.75	0.34	0.625	0.03	3.74
36-205	1/4"-18 NPT	0.83	0.44	0.625	0.03	3.98

1184 **1186**

WHIP HOSE - EXCEEDS SAE 100R1-AT - use with hand grease guns only

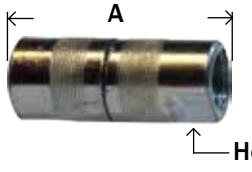
10,000 PSI Burst Pressure Rubber Hose

1/8" NPT Solid Base
3/16" ID
3,000 PSI Working pressure

Part #	Length	List Price
36-210	12" RUBBER	36.93
36-212	18" RUBBER	24.68
36-214	24" RUBBER	30.79
36-216	36" RUBBER	46.72

4 JAW GREASE GUN COUPLER

Provides quick, positive, leakproof connection w/ grease fittings.



1/8" NPTF

Part #	A	Hex	Approx. Wt. Lbs.	List Price
36-220	1.50	0.56	0.05	16.43

SPECIALTY VALVES AND COCKS

DRAIN COCKS
PAGE 144-145

AIR COCKS

3, 4 AND 6 WAY
PAGE 150

NEEDLE
PAGE 147-148

MARINE & ANTI-SIPHON
PAGE 151

PANEL MOUNT BALL VALVES
PAGE 152

TRUCK
PAGE 149

USA MINI
PAGE 152

SOLID BOTTOM SHUT-OFF
PAGE 149

CHECK
PAGE 153

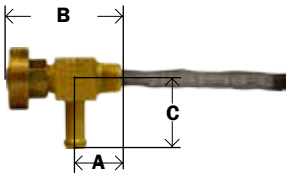
SPRING BOTTOM SHUT-OFF
PAGE 146

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

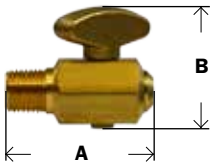
GASOLINE SHUT OFF w/ SCREEN FILTER



Part #	Barb X Male Pipe	A	B	C	Approx. Wt. Lbs.	List Price
46-064	1/4" x 1/8"	0.55	1.34	0.66	0.06	81.74

827

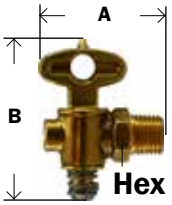
DRAIN COCK 150 PSI - Trunk Air Tank



Part #	Male Pipe	A	B	Approx. Wt. Lbs.	List Price
46-066	1/4"	1.73	1.41	0.22	26.18

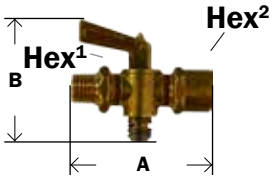
DCR601-4

TRUCK DRAIN - 125 P.S.I.G



Part #	Male Pipe	Industry Number	A	B	Hex	Approx. Wt. Lbs.	List Price
46-067	1/8"		1.53	1.95	0.62	0.14	18.94
46-068	1/4"	W15310	1.53	1.95	0.62	0.18	18.95

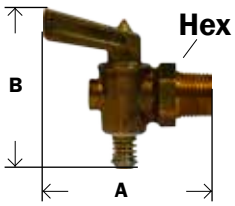
SHUT OFF - 150 P.S.I max.



Part #	Male Pipe x Female Pipe	Industry Number	A	B	Hex 1	Hex 2	Approx. Wt. Lbs.	List Price	
46-069	1/4"	W20332	1.96	1.96	0.75	0.62	0.20	14.58	LOWER

#60HC **3380-A** 0903610 **367**

LEVER HANDLE



Part #	Male Pipe	Industry Number	A	B	Hex	Approx. Wt. Lbs.	List Price	
46-070	1/8"	M-41-P	1.99	1.80	0.62	0.04	15.12	
46-071	1/4"	M-42-P	2.06	1.81	0.62	0.06	12.69	LOWER
46-072	3/8"	M-43-P	2.30	2.29	0.81	0.08	18.48	
46-073	1/2"	M-44-P	3.00	2.50	0.87	0.16	51.46	

840 **41D** DC601

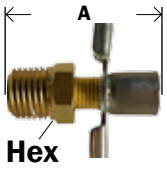
- 30 psi

*Valve is closed when handle is in the position of the picture

AIR TANK DRAIN PULL VALVE

Part #	Size	Description	List Price
39595	1/4" male	5ft nylon coated pull cable	12.77
39596	1/4" male	4ft nylon coated pull cable	11.94
39597	1/4" male	3ft nylon coated pull cable	11.77
39600	1/4" male	Air valve only	11.54

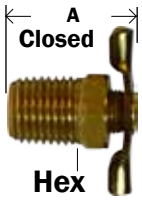
INTERNAL SEAT



	Part #	Male Pipe	Industry Number	A	Hex	Approx. Wt. Lbs.	List Price
LOWER	46-079	1/8”	6783	1.45	0.55	0.02	14.89

DC602 **808** 400A **1800A**

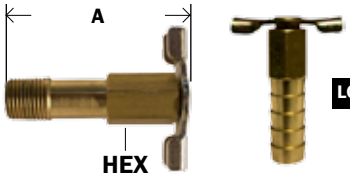
INTERNAL SEAT



	Part #	Male Pipe	Industry Number	A	Hex	Approx. Wt. Lbs.	List Price
	46-074	1/8”	130	0.92	0.40	0.04	11.02
	46-075	1/4”	140	0.94	0.56	0.06	6.31
LOWER	46-077	3/8”	230	1.27	0.68	0.08	9.40

HB - 5/16 **803** 305A

LONG INTERNAL SEAT

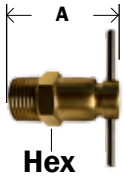


46-078 46-076

	Part #	Size	Ind #	A	Hex	Approx. Wt. Lbs.	List Price
LOWER	46-078	1/8 MIP	1.85				12.39
	46-076	3/8” Hose I.D.		1.65	0.43	0.02	14.12

809

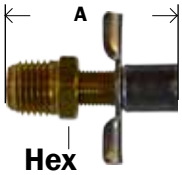
TEE HANDLE - Internal Seat



	Part #	Male Pipe	Industry Number	A	Hex	Approx. Wt. Lbs.	List Price
	46-080	1/8”	M-200-P	1.22	0.50	0.04	17.94
LOWER	46-081	1/4”	M-201-P	1.31	0.56	0.06	12.07
LOWER	46-082	3/8”	M-202-P	1.53	0.68	0.12	14.89

DC603 **802**

EXTERNAL SEAT w/ SPOUT

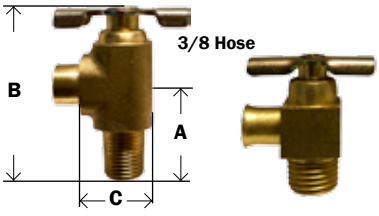


Part #	Male Pipe	Industry Number	A	Hex	Approx. Wt. Lbs.	List Price
46-084*	1/4”	6788	1.56	0.56	0.02	10.49

* Replaces GM # 511771 & Chrysler #836015

200A **239** DC606 **807**

BIBB VALVE



46-088 46-089A

	Part #	Male Pipe	Industry Number	A	B	C	Approx. Wt. Lbs.	List Price
L	46-088	1/8”	150	0.82	1.60	0.55	0.04	7.56
L	46-089	1/4”	120	0.89	1.59	0.54	0.06	8.53
	46-089A	1/4”	6660	0.55	1.34	0.66	0.06	8.87

804 **DC607** 2019 **201DH**

RADIATOR TYPE - External Seat

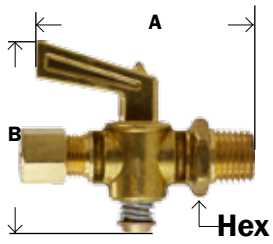
	Part #	Male Pipe	Industry Number	Ind #	A	Hex	Approx. Wt. Lbs.	List Price
	46-085	1/8”	M-320-P	135	0.90	0.43	0.02	3.66
	46-086	1/4”	M-321-P	145	1.00	0.56	0.04	3.84
L	46-087	3/8”	M-322-P	270	1.25	0.68	0.08	8.56
L	46-083	1/2”	108	108	1.48	0.87	0.12	16.10

320D **240** DC604 **801**

SHUT-OFF COCKS

- Designed for working pressure of 30 PSI.
- Forged brass bodies and brass handles.
- Instantaneous off-on operation with 360^0 rotation.
- Not good for gasoline.

COMPRESSION X MALE PIPE

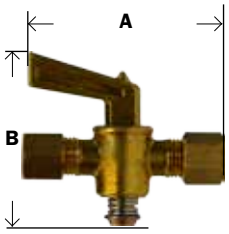


Part #	Comp X Male Pipe	Ind. #	A	B	Hex	Approx. Wt. Lbs.	List Price
46-130	1/4" x 1/8"	27-C	1.87	1.81	0.51	0.14	17.08
46-131	1/4" x 1/4"	227-C	2.05	1.86	0.62	0.15	21.52
46-132	5/16" x 1/8"	29-C	2.05	1.90	0.50	0.16	17.08
46-134	3/8" x 1/4"	57-C	2.05	1.83	0.62	0.15	18.06

868 **V304C** 2068 **133C** VC206

COMPRESSION X COMPRESSION

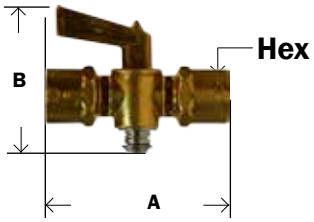
* See pg. 73-74 to order nut and sleeve separately.



Part #	Comp X Comp	Ind. #	A	B	Approx. Wt. Lbs.	List Price
46-140	1/4"	28-C	1.82	1.84	0.12	19.29
46-141	5/16"	30-C	1.84	1.88	0.14	20.19
46-142	3/8"	58-C	1.87	1.80	0.14	21.12
46-143	1/2"	68-C	2.21	2.32	0.22	30.08

V3030F **2062** 134C

FEMALE X FEMALE PIPE

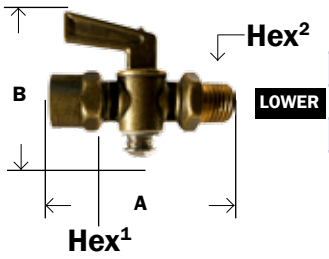


Part #	Female Pipe X Female Pipe	A	B	Hex	Approx. Wt. Lbs.	List Price
46-151	1/8"	1.77	1.79	0.56	0.12	15.18
46-152	1/4"	2.28	1.82	0.69	0.20	16.04
46-152T*	1/4"	2.28	2.00	0.68	0.20	23.92
46-153	3/8"	2.44	2.28	0.81	0.30	25.89

* 150 PSI

V403P **132C** 875

MALE PIPE X FEMALE

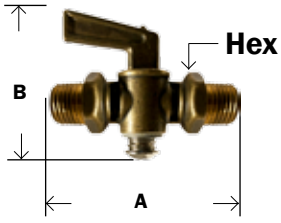


Part #	Male Pipe X Female Pipe	Ind. #	A	B	Hex 1	Hex 2	Approx. Wt. Lbs.	List Price
46-160	1/8"	48-P	2.03	1.84	0.50	0.56	0.14	15.34
46-161	1/4"	49-P	2.26	1.79	0.69	0.69	0.18	12.14
46-161T*	1/4"		2.26	1.98	0.69	0.69	0.20	21.75
46-162	3/8"	50-P	2.33	2.28	0.82	0.82	0.28	25.89

* 150 PSI

880 **V402P** 130C

MALE PIPE X MALE PIPE



	Part #	Male Pipe X Male Pipe	Ind. #	A	B	Hex	Approx. Wt. Lbs.	List Price
L	46-165	1/8"	76-P	2.15	1.80	0.69	0.12	12.14
L	46-166	1/4"	77-P	2.22	1.84	0.70	0.17	12.14
	46-166T*	1/4"		2.23	2.00	0.68	0.18	22.44
	46-167	3/8"	78-P	2.43	2.24	0.82	0.22	30.15

* 150 PSI

1V401P **890**

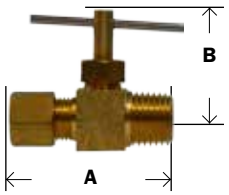
NEEDLE VALVES

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.

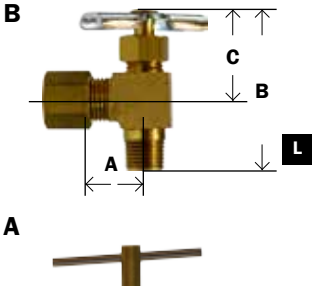
COMP X MALE PIPE



Part #	Comp X Male Pipe	Ind. #	A	B	Approx. Wt. Lbs.	List Price
46-002	1/4" x 1/8"	**M-101-C**	1.29	1.12	0.07	21.13
46-003	1/4" x 1/4"	**M-101-C**	1.27	1.14	0.10	9.83

NV106C **2205** 820 **3068**

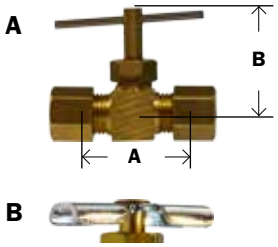
COMP X MALE PIPE-ANGLE



Part #	Comp X Male Pipe	Handle	Ind. #	A	B	C	Approx. Wt. Lbs.	List Price
46-011	1/4" x 1/8"	A	**M-103-C**	0.56	1.48	0.93	0.08	6.68
46-011X	Heavy Pattern	B	**M-103-C**	0.53	1.53	0.83	0.08	20.50
46-012	1/4" x 1/4"	B	**M-104-C**	0.62	1.67	0.90	0.13	12.83
46-013	5/16" x 1/8"	B	**M-104-C**	0.63	1.63	0.95	0.10	24.10
46-016	3/8" x 1/4"	A	**M-303-C**	0.65	1.71	0.92	0.16	15.48

NV104C **2203** 821 **3069**

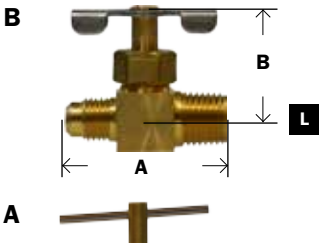
COMP X COMP



Part #	Comp X Comp	Handle	Ind. #	A	B	Approx. Wt. Lbs.	List Price
46-020	3/16"	B	**M-105-C**	1.06	0.88	0.08	88.77
46-021	1/4"	A	**M-106-C**	1.17	1.12	0.10	7.63
46-022	5/16"	A	**M-107-C**	1.22	1.08	0.12	25.90
46-023	3/8"	B	**M-113-C**	1.31	1.15	0.13	11.88

NV105C **3062** 2201 **822**

FLARE X MALE PIPE

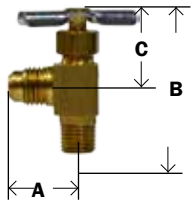


Part #	Male Flare X Male Pipe	Handle	Ind. #	A	B	Approx. Wt. Lbs.	List Price
46-028	1/4" x 1/8"	A	**M-104-SAE**	1.35	1.12	0.07	19.96
46-029	1/4" x 1/4"	B	**M-1040-SAE**	1.38	0.88	0.09	15.45
46-031	3/8" x 1/4"	B	**M-108-SAE**	1.73	1.22	0.18	90.79

NV103F **2405** 823 **3048**

Those who say it can not be done, should not interrupt those doing it. - Chinese Proverb

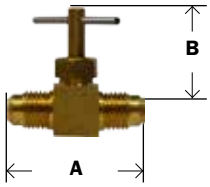
FLARE X MALE PIPE



Part #	Male Flare X Male Pipe	Ind. #	A	B	C	Approx. Wt. Lbs.	List Price
46-036	1/4" x 1/8"	M-103-SAE	0.68	1.54	0.86	0.08	15.22
46-038	5/16" x 1/8"	M-203-SAE	0.88	1.59	0.94	0.11	52.16
46-039	5/16" x 1/4"	M-204-SAE	0.90	1.94	1.00	0.14	22.66
46-040	3/8" x 1/4"	M-303-SAE	0.97	1.84	0.90	0.17	76.55

NV101F **2403** 824 **3049**

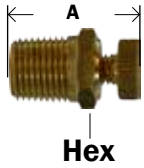
FLARE X FLARE



Part #	Male Flare X Male Flare	Ind. #	A	B	Approx. Wt. Lbs.	List Price
46-045	1/4"	M-110-SAE	1.48	1.20	0.18	5.66
46-046	3/8"	M-115-SAE	1.79	1.19	0.20	23.63

NV102F **3042** 825 **2401**

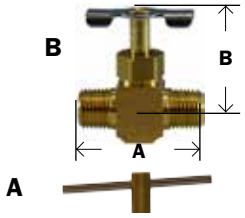
MULTI-PURPOSE AIR VENT



Part #	Male Pipe	A	Hex	Approx. Wt. Lbs.	List Price
46-048	1/8"	0.78	0.43	0.02	3.74

705

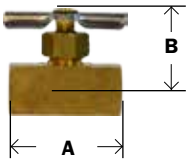
MALE PIPE TO MALE PIPE



Part #	Male Pipe X Male Pipe	Handle	Ind. #	A	B	Approx. Wt. Lbs.	List Price
46-050	1/8"	A	M-108-P	1.25	1.09	0.08	24.12
46-051	1/4"	B	M-110-P	1.69	1.00	0.16	18.11

NV107P **2301** 826 **3122**

FEMALE PIPE X FEMALE PIPE

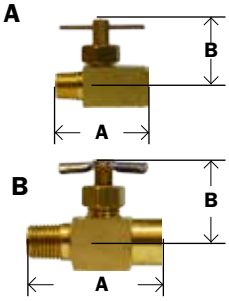


	Part #	Female Pipe X Female Pipe	Ind. #	A	B	Approx. Wt. Lbs.	List Price
L	46-055*	1/8"	M-304-P	1.18	0.84	0.18	10.13
	46-056	1/4"	M-3044-P	1.60	1.24	0.21	10.36
	46-056P*	1/4" Heavy	M-3044-P	1.62	2.53	0.20	15.51

* 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.	List Price
46-060	1/8"	A	M-305-P	1.18	1.09	0.10	7.01
46-061	1/4'	A	M-3055-P	1.60	1.14	0.18	11.11
46-061L	1/4" Light Pattern	B	M-3055-P	1.88	1.09	0.21	38.52

NV108P **2305** 818 **3120**

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

HOSE TO MALE PIPE

	Part #	Size	List Price
L	46-450	3/8 x 3/8	14.20
L	46-451	5/8 x 3/8	14.20

404V

HOSE TO MALE PIPE

Part #	Size	List Price
46-455	5/8 x 1/2	35.78
46-457	3/4 x 3/8	47.27
46-456	3/4 x 1/2	37.69

404V

FEMALE TO MALE PIPE

	Part #	Size	List Price
	46-465	3/8 x 3/8	22.46
L	46-466	3/8 x 1/2	25.60
	46-467	1/2 x 1/2	30.00

405V

FLARE TO MALE PIPE

Part #	Size	List Price
46-475	1/2 x 1/2	66.65
46-476	5/8 x 1/2	30.07

409V

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	List Price
46-400	1/8	29.19
46-401	1/4	26.78
46-402	3/8	29.60

1035D **M-70-SBV**

- Good for Propane

#M-72-SBV
FIP x FIP

Part #	Size	List Price
46-411	1/4	31.71

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	List Price
46-400M	1/8 x 1/8	49.23
46-401M	1/4 x 1/4	36.40
46-402M	3/8 x 3/8	43.20

8980

PIPE
MALE x MALE

Part #	Size	List Price
46-406M	1/4 x 1/4	44.95

8990

- Good for Propane

FEMALE X FEMALE

Part #	Size	List Price
46-411M	1/4 x 1/4	43.79

8975

MALE PIPE X FLARE

Part #	Size	List Price
46-429M	1/4 x 3/8	41.00
46-430M	3/8 x 3/8	66.28

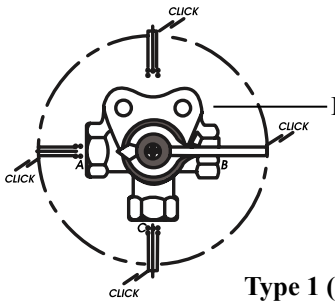
8948

SPECIALTY VALVES — BRASS FITTINGS

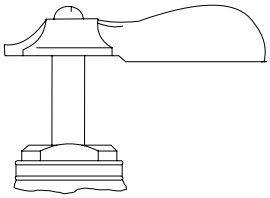
GROUND PLUG SHUT-OFF COCKS

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 40⁰ to 180⁰F, 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).**



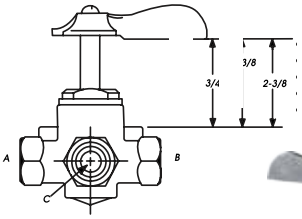
Bracket Mount



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	List Price
46-247	1/4	1-3/8"	35.71
46-248	3/8	1-3/8"	42.08

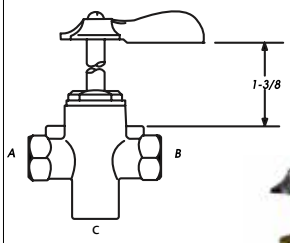
M-108-MID WITH CLICK 360⁰

Part #	A-B-C Female Pipe Thread	Length of Stem	List Price
46-250	1/8	1-3/8"	37.19
46-251	1/4	1-3/8"	36.35
46-252	3/8	1-3/8"	42.78

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

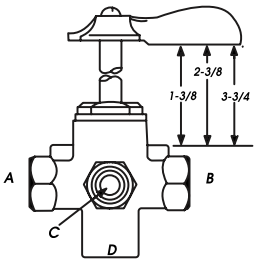
Part #	A-B-C Female Pipe Thread	Length of Stem	List Price
46-241	1/4	1-3/8"	37.25

WITH CLICK 360⁰

Part #	A-B-C Female Pipe Thread	Length of Stem	List Price
46-243	1/8	1-3/8"	43.35
46-244	1/4	1-3/8"	38.96

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	List Price
46-257	1/4	1-3/8"	34.96

M-114-MID WITH CLICK (360⁰)

Part #	A-B-C-D Female Pipe Thread	Length of Stem	List Price
46-255	1/4	1-3/8"	39.50
46-256	3/8	1-3/8"	47.15

WITH 2-3/8" LONG STEM M-115-MID

Part #	A-B-C-D Female Pipe Thread	Length of Stem	List Price
46-260	1/4	2-3/8"	39.93

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"

MARINE FITTINGS

• Calibrated to support 30" column of gasoline.

BRASS ANTI-SIPHON VALVES
MALE X MALE

	Part #	Size	List Price
	46-520	1/4 x 1/4	18.56
	46-521	3/8 x 3/8	30.97
NEW	46-522	1/2 x 1/2	30.21

• Flo direction <-

BRASS ANTI-SIPHON VALVES
BARB X NPT

Part #	Size	List Price
46-529	1/4 x 1/4	12.80
46-530	5/16 x 1/4	19.08
46-531	3/8 x 1/4	16.37
46-532	3/8 x 3/8	30.05
46-533	1/2 x 3/8	30.05

NEW

MINI BALL VALVE - BRASS W/ SS HANDLE AND NUT

Part #	Barb x MIP	List Price
46-986	5/6 x 1/4	28.60
46-987	3/8 x 1/4	28.60
46-988	3/8 x 3/8	28.60
46-989	1/2 x 1/2	35.10

NEW

ALUMINUM

Part #	Size	List Price
46-520A	1/4 x 1/4	18.56
46-521A	3/8 x 3/8	30.97

NEW

ALUMINUM

Part #	Size	List Price
46-530A	5/16 x 1/4	11.50
46-531A	3/8 x 1/4	11.50
46-532A	3/8 x 3/8	19.19
46-533A	1/2 x 3/8	21.11

• NBR O-Ring
• Working temp 180°F
• 3,000 PSI
• Brass or Aluminum
• #316 Ball & Spring

NEW

MALE MIP X FEMALE FIP BRASS

Part #	Size	List Price
46-523	1/4	21.17
46-524	3/8	29.33

NEW

ALUMINUM

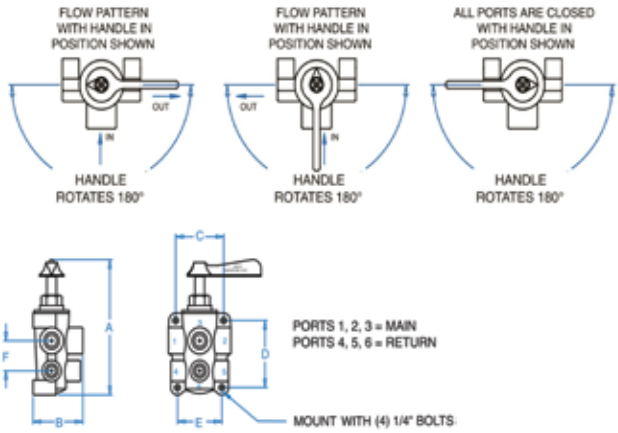
Part #	Size	List Price
46-523A	1/4	18.90
46-524A	3/8	26.10

NEW

FLARE X MIP - BRASS

Part #	Size	List Price
46-526	3/8 x 1/4	15.11

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	List Price
46-237	SK-1036	1/2 x 3/8	13/16	1	456.11

MINIATURE BALL VALVES

BRASS DOMESTIC 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	List Price
46-900	1/8 x 1/8	25.15
46-903	1/4 x 1/4	25.13

MALE X MALE

Part #	Size	List Price
46-910	1/8 x 1/8	27.86
46-912	1/4 x 1/4	27.19

MALE PIPE X HOSE BARB

Part #	Size	List Price
47-042	1/8 x 1/4	33.91
46-980	1/4 x 1/4	25.36
46-981	1/4 x 3/8	23.77

FEMALE X FEMALE

Part #	Size	List Price
46-920	1/8 x 1/8	25.78
46-921	1/8 x 1/4	29.04
46-922	1/4 x 1/4	25.01

Part #	Size	List Price
46-922A	1/4 x 1/4	20.64
46-923	3/8 x 3/8	34.00

Part #	Size	List Price
46-924	1/2 x 1/2	55.56
46-925	3/4 x 3/4	51.50

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	List Price
46-440	1/4 x 1/4	28.34

U.L. TWO WAY VALVES MNPT X FNPT

Part #	Size	List Price
46-443	1/4 x 1/4	28.34

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	List Price
46-830	1/8 x 1/8	58.70
46-832	1/4 x 1/4	58.75
46-833	3/8 x 3/8	115.00
46-834	1/2 x 1/2	130.75

FEMALE X FEMALE

Part #	Size	List Price
46-875	1/8 x 1/8	57.75
46-878	1/4 x 1/4	58.00

Part #	Size	List Price
46-951	1/8 FPT	61.45
46-956	1/4 FPT	61.55

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

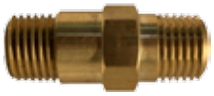
Part #	Size	List
46-560	1/8"	29.08
46-561	1/4"	32.41
46-562	3/8"	47.05
46-563	1/2"	57.41
46-564	3/4"	99.93

FIP X FIP VITON

Part #	Size	List
46-560V	1/8"	29.08
46-561V	1/4"	32.41
46-562V	3/8"	47.05
46-563V	1/2"	57.41
46-564V	3/4"	99.93

FEMALE X MALE BUNA-N

Part #	Size	List Price
46-565	1/8"	29.08
46-566	1/4"	27.84
46-567	3/8"	34.83
46-568	1/2"	42.47
46-569	3/4"	99.93



MALE X MALE

Part #	Size	Buna-N List
46-570	1/8"	29.08
46-571	1/4"	27.84
46-572	3/8"	34.82
46-573	1/2"	42.47

MALE X FEMALE

Part #	Size	Buna-N Price
46-575	1/8"	29.08
46-576	1/4"	27.84
46-577	3/8"	34.83
46-578	1/2"	42.47

HIGH PRESSURE CHECK VALVES

LOWER PRICE

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.	List Price
46-500	1/4 x 1/4	0.187	16.88

LOWER PRICE

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.	List Price
46-505	1/4 x 1/4	0.187	16.88

LOWER PRICE

MAX. 1200 PSI

- O-Ring poppet seal Bubble tight operation
- 180°F max operating temp.

FNPT X FNPT

Part #	Size	Opening Dia.	List Price
46-510	1/4 x 1/4	0.25	18.00
46-511	3/8 x 3/8	0.375	24.13
46-512	1/2 x 1/2	0.437	45.81

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.)		List Price
		A	B	
46-200	1/4	1.97	0.67	18.98
46-201	3/8	1.97	0.83	19.32
46-202	1/2	2.48	0.98	38.69

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	List Price
46-513	1/4	55.02
46-517	3/8	57.16

NEW

FEMALE X MALE

Part #	Size	List Price
46-514	1/4	55.02
46-518	3/8	57.16

NEW

MALE X FEMALE

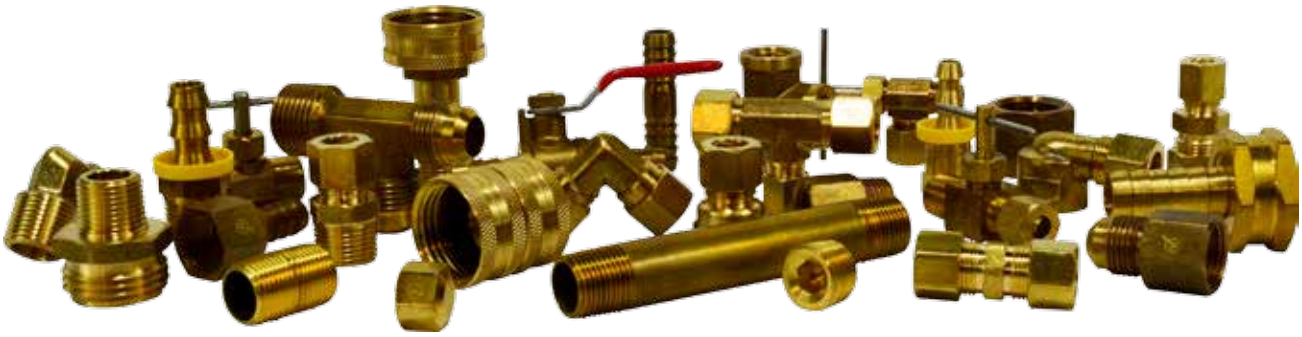
Part #	Size	List Price
46-516	1/4	50.41
46-539	3/8	56.03

NEW

MALE X MALE

Part #	Size	List Price
46-515	1/4	48.47
46-519	3/8	56.04

LEAD FREE



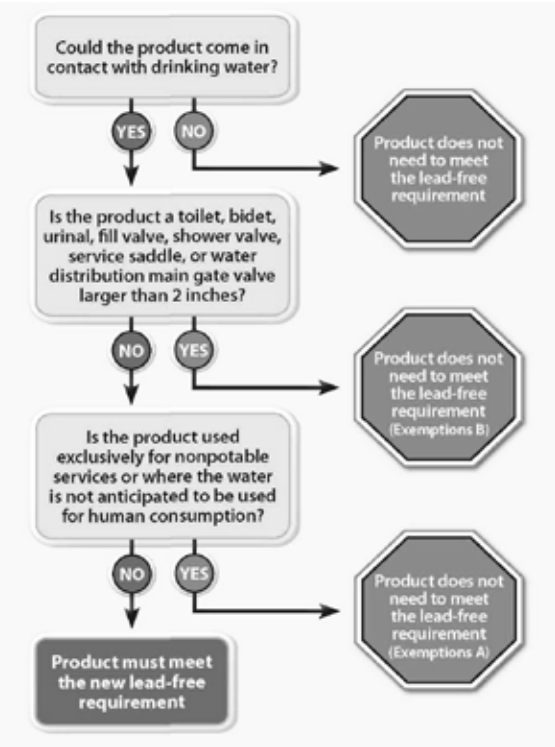
What is the new lead-free requirement?

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.

90⁰ FORGED FEMALE ELBOW

Part #	Thread size NPTF	List Price
28-009LF	1/8"	6.18
28-010LF	1/4"	10.55
28-011LF	3/8”	7.99
28-012LF	1/2”	9.67
28-013LF	3/4”	16.13

UNION FORGED TEE

Part #	Thread size NPTF	List Price
28-032LF	1/8"	4.17
28-033LF	1/4"	7.64
28-034LF	3/8”	10.84
28-035LF	1/2”	16.50
28-036LF	3/4”	25.35

90⁰ STREET ELBOW

Part #	Thread size NPTF	List Price
28-165LF	1/8”	2.70
28-166LF	1/4”	4.07
28-167LF	3/8"	5.98
28-168LF	1/2”	12.18
28-169LF	3/4"	10.80

COUPLING

Part #	Thread size NPTF	List Price
28-058LF	1/8"	2.18
28-059LF	1/4”	2.38
28-060LF	3/8"	3.92
28-061LF	1/2”	5.94

REDUCING COUPLING

Part #	Thread size NPTF	List Price
28-183LF	3/8" x 1/4"	6.54
28-185LF	1/2” x 3/8”	5.21
28-189LF	3/4” x 1/2”	6.99

HEX BUSHING

Part #	Thread size NPTF MxF	List Price
28-102LF	1/4” x 1/8”	1.68
28-103LF	3/8" x 1/8"	3.72
28-104LF	3/8” x 1/4”	2.60
28-105LF	1/2" x 1/8"	6.27
28-106LF	1/2” x 1/4”	3.83
28-107LF	1/2” x 3/8”	4.70
28-108LF	3/4" x 1/8"	11.93
28-109LF	3/4" x 1/4"	8.55
28-110LF	3/4" x 3/8"	8.58
28-111LF	3/4” x 1/2”	6.97
28-119LF	1 x 1/8	27.36
28-112LF	1 x 1/4	27.42
28-114LF	1 x 1/2	17.19
28-115LF	1" x 3/4"	15.58

FACE BUSHING

Part #	Thread size NPTF MxF	List Price
28-121LF	1/4” x 1/8”	2.08
28-122LF	3/8" x 1/8"	6.92
28-116LF	3/8” x 1/4”	3.92
28-128LF	1/2” x 1/4”	4.50
28-117LF	1/2” x 3/8”	6.30
28-129LF	3/4" x 1/4"	7.43
28-130LF	3/4" x 3/8"	7.05
28-118LF	3/4" x 1/2"	10.14

HEX CAP

Part #	Thread size NPTF	List Price
28-075LF	1/8"	3.11
28-076LF	1/4"	3.36
28-077LF	3/8”	1.99
28-078LF	1/2"	4.36
28-079LF	3/4”	12.00

SOLID SQUARE HEAD PLUG

Part #	Thread size NPTF	List Price
28-084LF	1/8"	1.82
28-085LF	1/4"	1.18
28-086LF	3/8"	4.41
28-087LF	1/2"	3.73
28-088LF	3/4”	15.00

COUNTERSUNK HEX PLUG

Part #	Thread size NPTF	List Price
28-093LF	1/8"	0.81
28-094LF	1/4"	3.49
28-095LF	3/8”	3.58
28-096LF	1/2”	5.25
28-097LF	3/4"	8.31
28-098LF	1"	16.14

CORED HEX PLUGS

Part #	Thread size NPTF	List Price
28-201LF	1/8”	1.15
28-202LF	1/4”	2.87
28-204LF	1/2"	8.71

CLOSE NIPPLE

Part #	Thread size NPTF	List Price
28-131LF	1/8"	2.70
28-132LF	1/4”	2.22
28-133LF	3/8”	2.69
28-134LF	1/2”	3.09
28-135LF	3/4”	4.45

LONG NIPPLE

Part #	Thread size NPTF	List Price
28-144LF	1/4" x 1-1/2"	2.25
28-145LF	1/4" x 2"	2.80
28-147LF	1/4" x 3"	3.86
28-148LF	3/8” x 1-1/2"	3.02
28-149LF	3/8" x 2"	4.58

HEX NIPPLE

Part #	Thread size NPTF	List Price
28-211LF	1/8"	2.09
28-212LF	1/4”	2.98
28-213LF	3/8"	3.33
28-222LF	3/8" x 1/4"	8.06
28-214LF	1/2”	7.25
28-224LF	1/2" x 3/8"	10.56
28-215LF	3/4"	29.27
28-225LF	3/4" x 1/2"	16.19

MALE BRANCH TEE

Part #	Thread size NPTF	List Price
28-283LF	3/8”	12.55

EXTENDER ADAPTER

Part #	Thread size NPTF FxM	List Price
28-191LF	1/4” X 1/8”	2.80
28-192LF	1/4" x 1/4"	4.43
28-193LF	3/8" x 1/4"	10.53
28-195LF	1/2" x 3/8"	10.16
28-196LF	1/2” X 1/2”	12.01
28-208LF	3/4" x 1/2"	8.00

STREET TEE/ SERVICE TEE

Part #	Thread size NPTF	List Price
28-246LF	1/4”	9.44

HOSE BARBS

RIGID MALE ADAPTER

Part #	Hose I.D. x Male NPTF	List Price
32-001LF	1/8" x 1/8"	3.68
32-027LF	1/8" x 1/4"	4.87
32-002LF	3/16” x 1/8”	2.50
32-003LF	3/16" x 1/4"	3.90
32-004LF	1/4” x 1/8”	2.86
32-005LF	1/4” x 1/4”	1.95
32-006LF	1/4" x 3/8"	2.64
32-007LF	1/4" x 1/2"	4.21
32-008LF	5/16” x 1/8”	1.51
32-009LF	5/16” x 1/4”	2.96
32-010LF	5/16" x 3/8"	5.72
32-011LF	3/8” x 1/8”	3.56
32-012LF	3/8” x 1/4”	2.68
32-013LF	3/8” x 3/8”	3.07
32-014LF	3/8” x 1/2”	4.15
32-026LF	3/8" x 3/4"	6.10
32-015LF	1/2” x 1/4”	3.41
32-016LF	1/2” x 3/8”	3.57
32-017LF	1/2” x 1/2”	5.15
32-018LF	1/2" x 3/4"	7.07
32-019LF	5/8" x 3/8"	5.40
32-020LF	5/8” x 1/2”	5.64
32-021LF	5/8" x 3/4"	9.68
32-306LF	3/4" x 3/8"	10.26
32-022LF	3/4” x 1/2”	8.02
32-023LF	3/4” x 3/4”	15.18
32-024LF	1" x 3/4"	19.15
32-025LF	1" x 1"	25.99

MENDER/ SPLICER

Part #	Hose I.D. x Hose I.D.	List Price
32-091LF	1/8"	2.32
32-092LF	3/16"	4.45
32-093LF	1/4”	4.33
32-094LF	5/16"	4.36
32-095LF	3/8"	5.43
32-096LF	1/2”	7.68
32-097LF	5/8"	8.74
32-098LF	3/4"	11.05

RIGID FEMALE ADAPTER

Part #	Hose I.D. x Female NPTF	List Price
32-050LF	1/8" x 1/8"	3.25
32-317LF	1/8" x 1/4"	5.14
32-052LF	1/4" x 1/8"	3.99
32-053LF	1/4” x 1/4”	5.47
32-054LF	1/4" x 3/8"	5.82
32-055LF	5/16" x 1/8"	2.20
32-056LF	5/16" x 1/4"	3.30
32-058LF	3/8” x 1/4”	5.23
32-059LF	3/8” x 3/8”	8.78
32-063LF	3/8” x 1/2”	8.38
32-064LF	1/2" x 1/4"	6.65
32-060LF	1/2" x 3/8"	7.70
32-061LF	1/2” x 1/2”	4.25
32-065LF	3/4" x 3/4"	15.42

FORGED HOSE BARB 90° ELBOW

Part #	Hose I.D. x Male NPTF	List Price
32-038LF	1/4" x 1/8"	5.18
32-039LF	1/4” x 1/4”	2.69
32-309LF	1/4" x 3/8"	7.76
32-036LF	5/16” x 1/8”	3.92
32-040LF	5/16” x 1/4”	4.80
32-046LF	3/8" x 1/8"	5.22
32-041LF	3/8” x 1/4”	2.89
32-042LF	3/8” x 3/8”	3.36
32-047LF	3/8" x 1/2"	5.45
32-048LF	1/2" x 1/4"	7.12
32-043LF	1/2" x 3/8"	6.01
32-311LF	1/2" x 1/2"	5.29
32-313LF	3/4" x 1/2"	11.02

HOSE BARB/ PUSH-ON/ GARDEN HOSE

LEAD FREE

HOSE BARB TEES

Part #	Hose Barb Size	List Price
32-365LF	1/4”	5.30
32-126LF	3/8”	4.15

FEMALE 45° FLARE SWIVEL

Part #		List Price
32-105LF	3/8" x 3/8"	5.20

LEAD FREE MINI BALL VALVES BARB x BARB

Part #	H.B. x H.B.	List Price
944-142LF	1/4”	12.73
944-134LF	3/8”	12.88

PUSH-ON

MALE ADAPTER

Part #	Hose I.D. x Male NPTF	List Price
30-200LF	1/4” x 1/8”	2.45
30-201LF	1/4” x 1/4”	3.29
30-203LF	3/8” x 1/4”	3.40
30-204LF	3/8” x 3/8”	4.64
30-206LF	1/2” x 3/8”	5.35
30-207LF	1/2” x 1/2”	8.83

SAE/JIC DUAL 45°/37° FEMALE SWIVEL

Part #	Hose I.D. x Female 45°/37°	List Price
30-230LF	1/4" x 1/4"	3.37

GARDEN HOSE

SWIVEL - FGH X FGH

•WASHER INCLUDED

Part #	FGH X FGH	List Price
30-011LF	3/4” x 3/4”	14.89

RIGID - MGH X FEMALE PIPE

Part #	MGH x Female NPTF	List Price
30-073LF	3/4” x 3/4”	11.75

RIGID - MGH X MALE PIPE

Part #	MGH x Male NPTF	List Price
30-052LF	3/4" x 1/4"	12.58
30-063LF	3/4” x 3/4” x 1/2”	14.28

FEMALE SWIVEL ONLY

Part #	Hose Barb x FGH	List Price
30-031LF	3/8” x 3/4”	6.06
30-032LF	1/2” x 3/4"	5.00
30-033LF	5/8" x 3/4"	13.97

SWIVEL FGH X MIP

Part #	MIP x FGH	List Price
30-047LF	3/4" x 1/4"	10.56
30-049LF	3/4" x 1/2"	13.12

SAE 45° FLARE

SHORT ROD NUT

Part #	Thread Size UNF	List Price
10-015LF	1/4"	2.28
10-017LF	3/8”	2.31
10-019LF	1/2”	2.33
10-021LF	3/4"	15.96

SHORT FORGED NUT

Part #	Thread Size UNF	List Price
10-041LF	3/8”	3.71
10-042LF	1/2”	5.33

FLARED CAP

Part #	Thread Size UNF	List Price
10-075LF	1/4”	0.94
10-077LF	3/8”	2.49
10-078LF	1/2”	4.29
10-079LF	5/8”	6.06

UNION

Part #	Thread Size UNF	List Price
10-106LF	1/4”	2.14
10-108LF	3/8”	3.85
10-118LF	3/8" x 1/4"	6.35
10-109LF	1/2”	7.99
10-110LF	5/8”	15.86

TEE

Part #	Size	List Price
10-159LF	1/4"	6.46
10-161LF	3/8"	12.66

MALE BRANCH TEE

Part #	Size	List Price
10-204LF	1/4" x 1/8"	7.62

FEMALE ADAPTER

Part #	Male Flare x Female NPTF	List Price
10-229LF	1/4" x 1/4"	4.20
10-236LF	3/8” x 3/8”	5.23
10-237LF	3/8” x 1/2”	5.63
10-240LF	1/2” x 3/8”	8.01
10-241LF	1/2” x 1/2”	7.99
10-242LF	1/2” x 3/4”	9.43

MALE ADAPTER

Part #	Male Flare x Male NPTF	List Price
10-255LF	1/4” x 1/8”	1.59
10-256LF	1/4” x 1/4”	2.21
10-257LF	1/4" x 3/8"	2.73
10-258LF	1/4” x 1/2”	3.35
10-262LF	3/8” x 1/8”	6.04
10-263LF	3/8” x 1/4”	4.46
10-264LF	3/8” x 3/8”	5.44
10-265LF	3/8” x 1/2”	4.83
10-267LF	1/2" x 1/4"	8.86
10-268LF	1/2” x 3/8”	4.67
10-269LF	1/2” x 1/2”	5.19
10-270LF	1/2” x 3/4”	14.34
10-272LF	5/8" x 5/8	14.94
10-273LF	5/8" x 1/2"	11.12
10-275LF	3/4" x 1/2"	17.65
10-276LF	3/4” x 3/4”	22.33

90° MALE ELBOW

Forged Elbow

Part #	Male Flare x Male NPTF	List Price
10-286LF	1/4” x 1/8”	2.31
10-287LF	1/4” x 1/4”	3.47
10-288LF	1/4” x 3/8”	4.35
10-293LF	3/8" x 1/8"	8.98
10-294LF	3/8” x 1/4”	7.78
10-295LF	3/8” x 3/8”	4.41
10-296LF	3/8” x 1/2”	5.57
10-299LF	1/2” x 3/8”	11.72
10-300LF	1/2” x 1/2”	12.95
10-301LF	1/2” x 3/4”	18.56
10-305LF	3/4" x 1/2"	42.88
10-306LF	3/4" x 3/4"	49.59

FORGED MALE RUN TEE

Part #	Male Flare x Male NPTF (1&3) x 2	List Price
10-351LF	3/8" x 3/8"	26.88
10-355LF	1/2” x 1/2”	9.95
10-359LF	3/4" x 1/2"	81.65

FORGED SWIVEL

Part #	Female Flare UNF	List Price
10-483LF	3/8”	12.86
10-484LF	1/2”	16.44
10-485LF	5/8”	39.50
10-487LF	3/8" x 1/4"	4.62

BRASS SLEEVE

• FERRULES

Part #	Size	List Price
18-002LF	3/16”	1.44
18-003LF	1/4”	0.17
18-004LF	5/16”	0.22
18-005LF	3/8”	0.29
18-007LF	1/2”	0.32
18-008LF	5/8”	0.40
18-009LF	3/4"	7.26
18-010LF	7/8”	0.93

60 260

NUT

Part #	Size	List Price
18-037LF	3/8"	3.42

DELRIN SLEEVE

Part #	Size	List Price
18-015	1/4”	0.07
18-016	5/16”	1.09
18-017	3/8”	0.23
18-018	1/2”	0.15
18-019	5/8”	0.21

60-P

BRASS INSERT

• SLEEVE

Part #	Size	List Price
22-010LF	1/4”	0.15
22-011LF	5/16”	0.24
22-012LF	3/8”	0.21
22-013LF	1/2”	0.31
22-014LF	5/8”	0.54

63-BI 60AE 2030 63PT

CAP

Part #	Size	List Price
18-047LF	1/4”	0.73
18-048LF	3/8”	0.92
18-049LF	1/2”	2.29
18-050LF	5/8”	2.88

61-CC N5CT

UNION

Part #	Size	List Price
18-062LF	1/8”	3.76
18-063LF	3/16”	4.69
18-064LF	1/4”	3.04
18-065LF	5/16”	3.04
18-066LF	3/8”	4.39
18-067LF	7/16"	10.01
18-068LF	1/2”	6.29
18-069LF	5/8”	7.60
18-070LF	3/4”	28.03
18-071LF	7/8”	16.06

M-62

REDUCING UNION

Part #	Size	List Price
18-076LF	1/4” x 1/8”	6.20
18-077LF	1/4” x 3/16”	5.89
18-078LF	5/16” x 1/4”	8.00
18-079LF	3/8” x 1/4”	3.95
18-081LF	3/8" x 1/2"	5.71
18-082LF	3/8" x 5/8"	6.50
18-083LF	1/2" x 5/8"	7.44

62-R

TEE

Part #	Size	List Price
18-101LF	1/8”	5.67
18-102LF	3/16"	7.32
18-103LF	1/4”	4.89
18-104LF	5/16"	12.51
18-105LF	3/8”	7.04
18-106LF	1/2”	11.47
18-107LF	5/8”	16.36
18-109LF	7/8”	68.43

FORGED REDUCING TEE

Part #	Size	List Price
18-115LF	3/8” x 3/8” x 1/4”	7.27
18-117LF	1/2” x 1/2” x 3/8”	26.07

64-R

UNION ELBOW

Part #	Size	List Price
18-124LF	1/4”	3.59
18-125LF	5/16”	9.76
18-126LF	3/8”	4.75
18-127LF	1/2”	8.09
18-128LF	5/8”	11.10
18-129LF	3/4”	31.41
18-130LF	7/8”	65.35

65 BSE2 165C 265C

REDUCING ELBOW - Forged

Part #	Size	List Price
18-135LF	3/8” x 1/4”	8.85
18-137LF	3/8” x 5/8”	8.95

65-R

COMP X SWEAT ADADPTER

Part #	Comp. X Sweat Adapter	List Price
18-171LF	3/8” x 1/2” nom.swt.	5.16

66-S

64 264C

FEMALE ADAPTER

Part #	Comp. X Female NPTF	List Price
18-142LF	1/8” x 1/8”	7.41
18-143LF	3/16” x 1/8”	4.31
18-145LF	1/4” x 1/8”	4.56
18-146LF	1/4” x 1/4”	3.91
18-147LF	1/4” x 3/8”	5.59
18-148LF	1/4” x 1/2”	6.22
18-150LF	5/16” x 1/4”	5.02
18-151LF	5/16” x 3/8”	9.52
18-152LF	3/8” x 1/8”	6.22
18-153LF	3/8” x 1/4”	3.12
18-154LF	3/8” x 3/8”	3.56
18-155LF	3/8” x 1/2”	3.92
18-156LF	3/8” x 3/4”	17.34
18-158LF	1/2” x 3/8”	4.17
18-159LF	1/2” x 1/2”	5.01
18-160LF	1/2” x 3/4”	17.98
18-162LF	5/8” x 1/2”	6.64
18-163LF	5/8” x 3/4”	10.42
18-166LF	7/8” x 3/4”	11.55

66

MALE ADAPTER

Part #	Comp. X Male NPTF	List Price
18-176LF	1/8” x 1/8”	3.17
18-177LF	3/16” x 1/8”	3.53
18-178LF	3/16” x 1/4”	13.15
18-179LF	1/4” x 1/8”	2.21
18-180LF	1/4” x 1/4”	2.69
18-181LF	1/4” x 3/8”	3.46
18-182LF	1/4” x 1/2”	5.18
18-183LF	5/16” x 1/8”	4.59
18-184LF	5/16” x 1/4”	5.43
18-187LF	3/8” x 1/8”	5.12
18-188LF	3/8” x 1/4”	3.07
18-189LF	3/8” x 3/8”	3.68
18-190LF	3/8” x 1/2”	5.23
18-191LF	3/8” x 3/4”	9.94
18-192LF	7/16” x 1/4”	11.14
18-193LF	1/2” x 1/4”	4.95
18-194LF	1/2” x 3/8”	4.76
18-195LF	1/2” x 1/2”	6.12
18-196LF	1/2” x 3/4”	11.09
18-197LF	5/8” x 3/8”	5.60
18-198LF	5/8” x 1/2”	6.38
18-199LF	5/8” x 3/4”	7.51
18-201LF	3/4” x 3/4”	23.36
18-202LF	7/8” x 1/2”	21.55
18-203LF	7/8” x 3/4”	11.61

MALE ELBOW

Forged

Part #	Comp. X Male NPTF	List Price
18-221LF	3/16” x 1/8”	4.58
18-224LF	1/4" x 1/8"	2.89
18-225LF	1/4” x 1/4”	3.38
18-226LF	1/4" X 3/8"	3.93
18-227LF	1/4” x 1/2”	11.10
18-228LF	5/16” x 1/8”	6.78
18-229LF	5/16” x 1/4”	7.07
18-232LF	3/8” x 1/8”	7.92
18-233LF	3/8” x 1/4”	3.85
18-234LF	3/8” x 3/8”	4.74
18-235LF	3/8” x 1/2”	6.48
18-236LF	1/2” x 1/4”	13.38
18-237LF	1/2” x 3/8”	6.09
18-238LF	1/2” x 1/2”	7.37
18-239LF	1/2” x 3/4”	17.32
18-240LF	5/8” x 3/8”	15.85
18-241LF	5/8” x 1/2”	8.80
18-242LF	5/8” x 3/4”	12.65
18-246LF	7/8” x 3/4”	31.08

69 269C BSE1 169C

FEMALE ELBOW

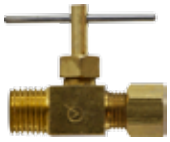
Forged

Part #	Comp. X Female NPTF	List Price
18-253LF	1/4” x 1/8”	8.19
18-254LF	1/4” x 1/4”	12.02
18-267LF	1/4” x 3/8”	9.33
18-259LF	3/8” x 3/8”	5.94
18-260LF	3/8” x 1/2”	6.55
18-262LF	1/2” x 3/8”	11.80
18-263LF	1/2” x 1/2”	14.49
18-264LF	5/8” x 1/2”	9.57

70 270C BSE3 170C

NEEDLE VALVES

COMP X MALE PIPE



Part #	Comp x Male Pipe	List Price
46-002LF	1/4" x 1/8"	7.39
46-003LF	1/4" x 1/4"	15.96
46-005LF	3/8" x 1/4"	10.05

FEMALE PIPE X FEMALE PIPE

Part #	Female x Female	List Price
46-055LF	1/8" x 1/8"	14.41
46-056LF	1/4" x 1/4"	12.28

MALE X FEMALE PIPE

Part #	Male x Female	List Price
46-061LF	1/4" x 1/4" MIP	12.59

COMP X MALE PIPE-ANGLE

Part #	Comp x Male Pipe	List Price
46-011LF	1/4" x 1/8"	15.36
46-012LF	1/4" x 1/4"	26.29

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 #	Comp x Male Pipe	List Price
935044LF	1/4 x 3/8	6.29
935045LF	3/8 x 3/8	6.38

COMP X COMP

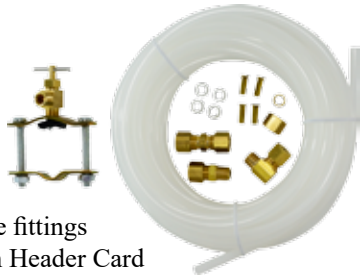
Part #	Comp x Comp	List Price
46-021LF	1/4"	8.64
46-023LF	3/8"	32.54

COMP X COMP

Part #	Comp x Comp	List Price
46-021LF	1/4"	8.64
46-023LF	3/8"	32.54

Ice Maker Kits

ICE MAKER WATER SUPPLY KIT with Poly Tubing

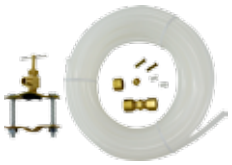


- Lead free fittings
- Bag with Header Card
- 25' 1/4" O.D. Polyethylene Tubing - 979215
- Self Piercing Saddle Valve
- 1/4" O.D. Compression x 1/8" MIP Elbow & Adapter
- 1/4" O.D. Compression Union
- 1/4" Inserts & Sleeves

Part #	Description	List Price
43-265LF	Kit	18.23
979-215	1/4" OD, 25' Tube	7.53

ICE-MAKER WATER SUPPLY KIT

- Economy
- 25' Polyethylene Tubing
- Self Piercing Saddle Valve
- 1/4" Compression Union
- 1/4" Inserts & Sleeves



Part #	List Price
43-266LF	13.53

SELF PIERCING SADDLE VALVES

FITS 3/8" OD
THRU 3/4" OD

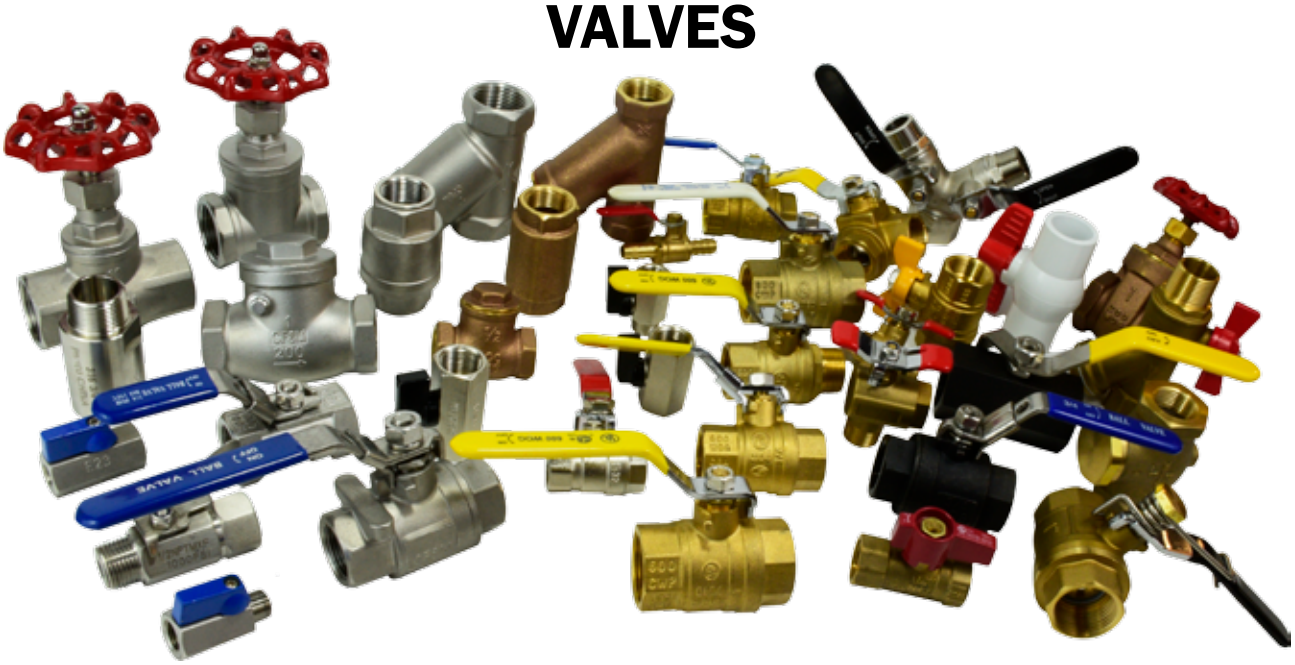
SELF PIERCING NEEDLE VALVE KIT #M-104-VSP

- **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	List Price
46-090ALF	1/4	1	11.10

VALVES



VALVES 164-209

LEAD FREE BALL VALVES 165-167
LEAD FREE VALVES 168
BRASS VALVES 169-193
Full Port Ball 169
Locking Handle 170
Butterfly Handle 171
N/P Ball Valve 172
N/P Ball w/SS Trim 173
Italian Ball Valve 174
M X F Ball Valve 175-176
Tee Handle M X F Ball 177
M X F Ball Locking handle 178
Spring Handle Ball Valve 179
Right Angle Ball valve 179
Wye, 3-Way Ball Valve 180
Safety Exhaust Ball Valve 180
Gas Valves 181
Mini Ball Valves 182-185
3-Way Valves 186
Strainer Ball Valve 187
Vacuum Breaker/Hose Bibb 187
Bent Nose Garden Valve - **NEW** 187
Gate Valves 188
Quick Opening Gate - **NEW** 189
Y Strainer 190
Check Valves 191-193

STAINLESS STEEL VALVES

2000# Full Port 194
Standard Port 195
1,000 PSI Full Port 196
SS Mini Ball Valve 197-198
Check Valves 199-202
Y-strainer, Globe,Gate 203

Carbon Steel valves 204-206

2,000# Standard Port 204
2,000 # FP 2-Piece 205
Hi Pressure 2-Way Valves 206
Hi Pressure 3-Way Balves 206
Check valves-5,000# 207

PVC Valves 208-209

LEAD FREE BALL VALVE

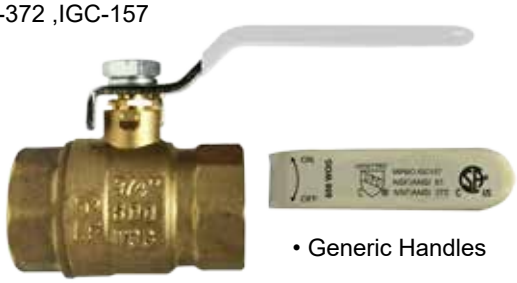
5 PSIG C US

• BRASS • 600PSI • STAINLESS STEEL BALL • FULL PORT

LEAD FREE

IAMPO IGC 157 - 2004b

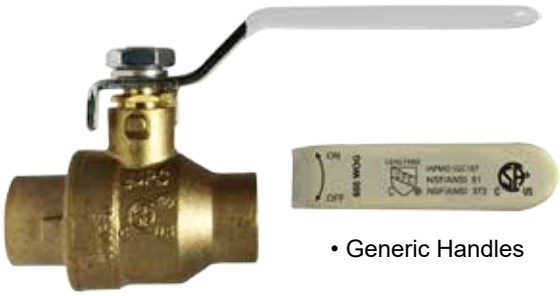
Lead Free Brass Ball Valve NPT,Female*Female
Lead Free and dezincification resistant (DZR) material
IAPMO listed to NSF/ANSI-61, NSF/ANSI-372 ,IGC-157
CSA listed to NSF/ANSI-61, NSF/ANSI-372 ,IGC-157
Vacuum Services 29.92 inches Hg
600 psi (WOG) 150 psi (WSP) Service
Thread conform ANSI B1.20.1
Temperature 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

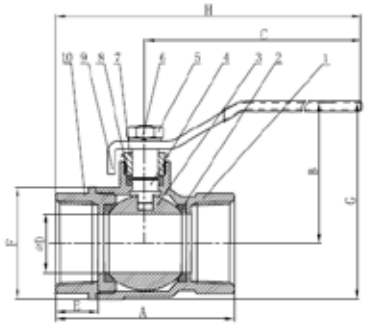
Part #	Size	OD	A	B	C	E	F	G	H	Weight	Box/Case	List Price
941151LF	1/4"	0.394	1.73	1.69	3.35	0.453	0.945	2.154	4.331	0.32	10/120	9.75
941152LF	3/8"	0.394	1.73	1.69	3.35	0.473	0.945	2.154	4.331	0.32	10/120	9.75
941153LF	1/2"	0.524	1.89	1.73	3.35	0.472	1.083	2.276	4.291	0.36	10/100	10.99
941154LF	3/4"	0.748	2.28	1.89	3.35	0.563	1.378	2.579	4.488	0.57	10/80	16.05
941155LF	1"	0.984	2.80	2.14	4.29	0.650	1.772	3.031	5.689	0.94	8/48	24.84
941156LF	1-1/4"	1.240	3.15	2.32	4.29	0.669	2.165	3.398	5.866	1.30	4/36	37.88
941157LF	1-1/2"	1.476	3.44	2.66	5.63	0.701	2.50	3.909	7.343	1.92	2/24	57.10
941158LF	2"	1.949	4.06	3.01	5.63	0.708	3.244	4.638	7.638	3.12	2/12	87.81



• Generic Handles

SWT X SWT LEAD FREE BALL VALVE

Part #	Size	OD	A	B	C	E	G	H	Weight	WTG	Box/Case	List Price
941163LF	1/2"	0.524	1.945	1.73	3.35	0.504	1.083	2.276	4.319	0.38	10/100	10.49
941164LF	3/4"	0.748	2.654	1.89	3.35	0.748	1.378	2.579	4.665	0.65	10/80	14.20
941165LF	1"	0.984	3.315	2.14	4.29	0.909	1.772	3.031	5.949	0.93	8/48	25.02
941166LF	1-1/4"	1.240	3.741	2.32	4.29	0.968	2.165	3.398	6.165	1.35	4/36	38.46
941167LF	1-1/2"	1.476	4.252	2.66	5.63	1.091	2.50	3.909	7.756	1.88	2/24	57.88
941168LF	2"	1.949	5.276	3.01	5.63	1.343	3.244	4.638	8.268	3.62	2/12	68.36



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

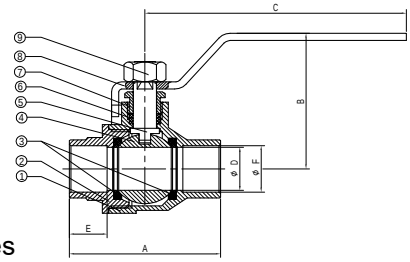
CSA, UL, FM(1/4"-2"), cUPC, NSF/ ANSI 61 & 372

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								Weight	Box/Case	List Price
		A	B	C	D	E	F	G	H			
940-171LF	1/4"	1.756	1.732	3.543	0.394	0.457	1.012	2.238	4.421	0.34	70/140	13.55
940-172LF	3/8"	1.756	1.732	3.543	0.394	0.457	1.012	2.238	4.421	0.34	70/140	12.54
940-173LF	1/2"	2.047	2.040	3.543	0.583	0.520	1.240	2.559	4.567	0.45	50/100	17.58
940-174LF	3/4"	2.362	2.260	3.780	0.748	0.563	1.492	2.854	4.961	0.69	30/60	26.69
940-175LF	1"	2.756	2.579	4.528	0.945	0.630	1.791	3.476	5.906	1.11	20/40	42.81
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	72.14
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	106.95
940-178LF	2"	4.181	3.701	6.160	1.969	0.748	3.425	5.413	7.602	3.62	6/12	149.14
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	342.06
940-180LF	3"	6.039	4.970	8.870	2.913	1.102	4.921	7.579	11.681	10.40	1/4	418.27
940-181LF	4"	7.386	6.130	10.85	3.898	1.220	6.430	9.055	13.299	20.99	1/2	907.10

SWT X SWT LEAD FREE BALL VALVE

FM, cUPC, NSF/ ANSI 61 & 372

Part #	SWT	A	B	C	D	E	F	Weight	Box/Case	List Price
943-612LF	1/2"	2.047	1.839	3.543	0.583	0.512	0.630	0.45	50/100	13.73
943-613LF	3/4"	2.748	2.14	3.780	0.748	0.748	0.878	0.68	30/60	23.63
943-614LF	1"	3.228	2.449	4.528	0.945	0.906	1.130	1.08	20/40	37.77
943-615LF	1-1/4"	3.819	3.04	4.36	1.260	0.972	1.378	1.80	12/24	59.09
943-616LF	1-1/2"	4.425	3.169	5.39	1.575	1.088	1.630	2.51	9/18	86.07
943-617LF	2"	5.377	3.488	6.307	1.989	1.346	2.130	3.57	6/12	120.84

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

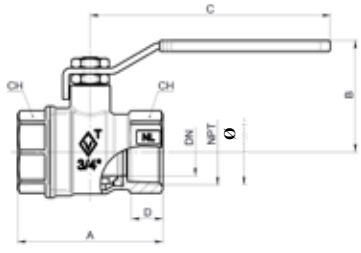
SWT X SWT

FIP X FIP LEAD FREE FORGED BRASS BALL VALVE

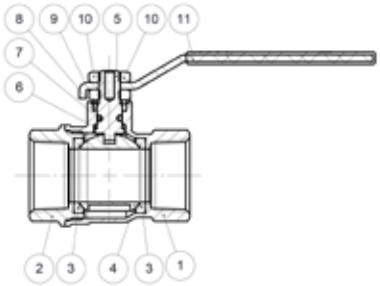
Part #	NPT	DN	A	B	C	D	CH	Weight (lbs)	Box/Case	List Price
943-233LF	1/2"	0.57	2.09	1.57	3.35	0.46	0.98	0.39	20/80	18.74
943-234LF	3/4"	0.75	2.28	1.77	3.80	0.49	1.22	0.56	14/56	28.09
943-235LF	1"	0.94	3.04	2.03	3.80	0.59	1.50	0.89	6/24	46.68
943-236LF	1-1/4"	1.24	3.23	2.32	4.72	0.62	1.85	1.44	4/16	74.64
943-237LF	1-1/2"	1.49	3.70	2.60	4.72	0.64	2.13	2.19	2/8	115.67
943-238LF	2"	1.96	4.13	3.27	6.38	0.65	2.64	3.62	1/4	155.28

SWT X SWT LEAD FREE FORGED BRASS BALL VALVE

Part #	SWT	Ø	DN	A	B	C	D	CH	Weight (lbs)	Box/Case	List Price
940-212LF	1/2"	0.63	0.57	2.25	1.57	3.35	0.42	0.79	0.35	20/80	18.08
940-213LF	3/4"	0.866	0.75	3.26	1.77	3.80	0.61	1.06	0.55	10/40	26.99
940-214LF	1"	1.102	0.94	3.68	2.03	3.80	0.73	1.34	0.87	6/24	41.18
940-215LF	1-1/4"	1.377	1.24	4.23	2.32	4.72	0.91	1.61	1.41	6/24	67.88
940-216LF	1-1/2"	1.61	1.49	4.96	2.60	4.72	1.06	1.89	2.08	2/8	98.42
940-217LF	2"	2.125	1.96	5.47	3.27	6.38	1.26	2.40	3.62	1/4	155.28



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	List Price
940-130LF	1/4	16.73
940-131LF	3/8	16.74
940-132LF	1/2	22.54
940-133LF	3/4	26.86
940-134LF	1	34.64
940-135LF	1-1/4	65.46
940-136LF	1-1/2	95.23
940-137LF	2	101.49

BRASS GATE VALVE C X C

Part#	Size	List Price
940-142LF	1/2"	17.85
940-143LF	3/4"	24.29
940-144LF	1"	34.64
940-145LF	1-1/4"	56.89
940-146LF	1-1/2"	71.95
940-147LF	2"	102.08

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	List Price
944-430LF	1/2	25.41
944-431LF	3/4	34.27
944-432LF	1	47.69
944-433LF	1-1/4	64.57
944-434LF	1-1/2	88.00
944-435LF	2	147.90

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	List Price
940-352LF	1/2"	21.59
940-353LF	3/4"	22.83
940-354LF	1"	36.28
940-355LF	1-1/4"	61.14
940-356LF	1-1/2"	77.97
940-357LF	2"	116.22

C X C SWING CHECK VALVE

Part #	Size	List Price
940-362LF	1/2	16.06
940-363LF	3/4	22.68
940-364LF	1	32.10
940-365LF	1-1/4	57.45
940-366LF	1-1/2	68.10
940-367LF	2	130.25

CLASS 150 BRASS Y-PATTERN STRAINER

LEAD-FREE

Part#	Size	List Price
940-523LF	1/2"	38.36

LEAD FREE

FORGED BRASS BALL VALVE

• BRASS • 600WOG • FULL PORT

1/2" - 2" Sizes Gas Approved

C US

UL842, UL258, UL125,FM

ISO 9002 Manufacturer

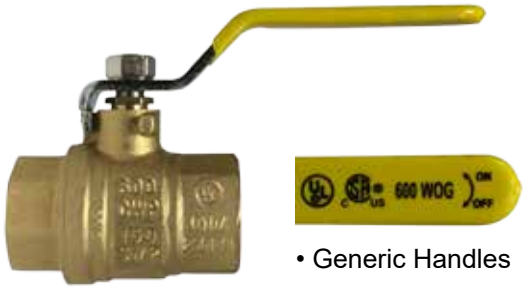
FEATURES

1/4-2" 600 PSI non-shock cold water, gas, oil - 150 PSI saturated steam

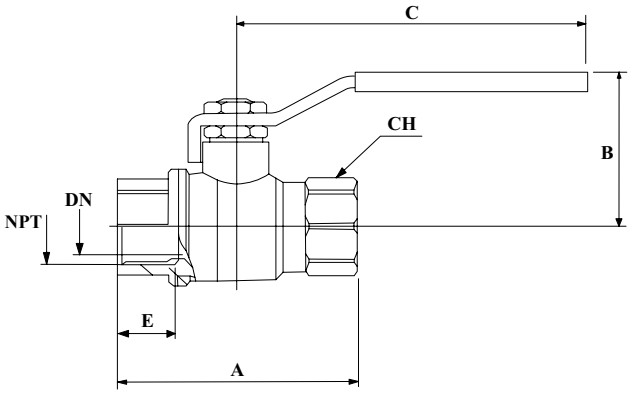
2-1/2"- 4" 400 PSI non-shock cold water, gas, oil

Made in China

- 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

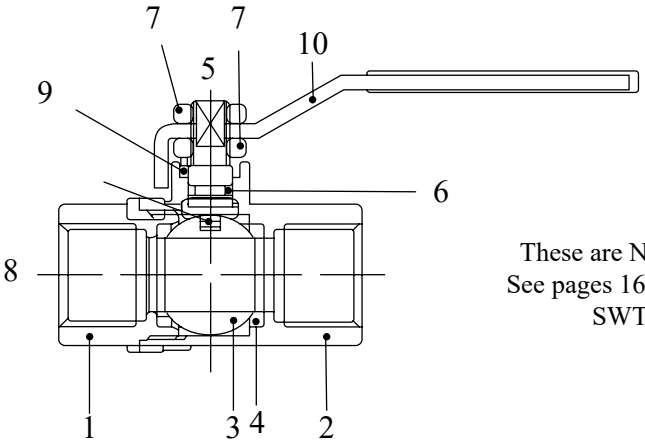


• Generic Handles



Part#	Size	Dimension Inches								
	NPT	DN	A	B	C	E	CH	Weight	Box/Case	List Price
940-171	1/4"	0.39	1.75	1.92	3.54	0.46	0.78	0.34	70/140	9.46
940-172	3/8"	0.41	1.75	1.92	3.54	0.46	0.78	0.30	70/140	9.39
940-173	1/2"	0.58	2.05	2.08	3.54	0.52	0.98	0.44	50/100	11.35
940-174	3/4"	0.75	2.36	2.30	3.78	0.56	1.20	0.67	30/60	16.66
940-175	1"	0.94	2.75	2.68	4.52	0.66	1.50	1.05	20/40	25.89
940-176	1-1/4"	1.26	3.30	3.14	4.52	0.70	1.82	1.50	12/24	38.00
940-177	1-1/2"	1.57	3.66	3.61	5.51	0.72	2.09	2.30	9/18	56.36
940-178	2"	1.97	4.18	3.68	5.51	0.74	2.62	3.38	6/12	87.91
940-179*	2-1/2"	2.52	5.38	4.76	8.66	1.01	3.36	7.61	4/8	221.00
940-180*	3"	2.95	6.04	5.08	8.66	1.11	3.86	11.10	2/4	258.49
940-181*	4"	3.89	7.38	5.86	9.00	1.22	4.89	12.12	1/2	487.76

* 400 PSI



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

LOCKING HANDLE BALL VALVE

• BRASS • 600WOG • FULL PORT

1/2" - 2" Sizes Gas Approved

5 PSIG

C US

UL842, UL258, UL125,FM

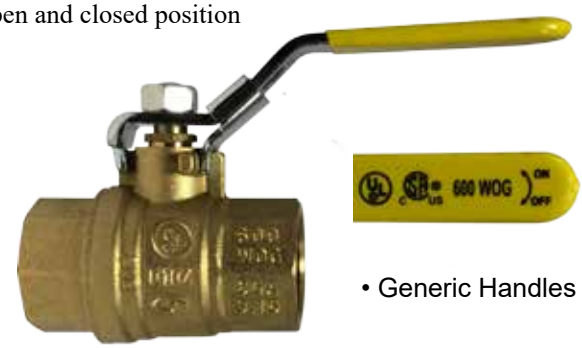
ISO 9002 Manufacturer

FEATURES

1/4-2" 600 PSI non-shock cold water, gas, oil - 150 PSI saturated steam

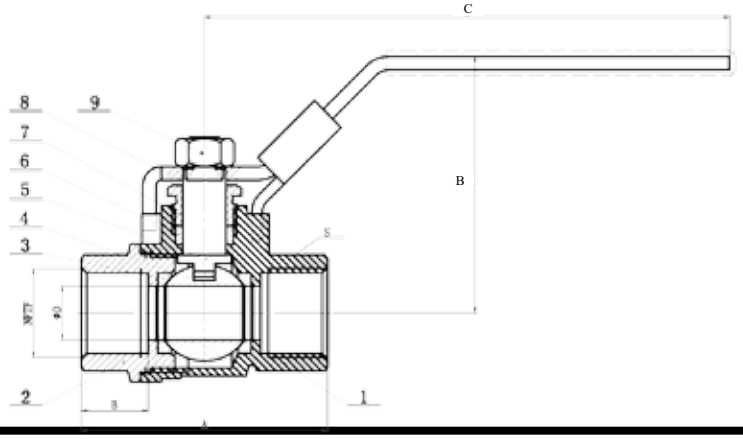
Made in China

- 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	List Price
940-171L	1/4"	0.31	1.73	1.84	3.15	0.49	0.71	0.39	70/140	11.50
940-172L	3/8"	0.39	1.81	1.88	3.86	0.49	0.79	0.35	70/140	11.36
940-173L	1/2"	0.58	2.23	2.09	3.43	0.61	0.98	0.49	50/100	13.30
940-174L	3/4"	0.75	2.48	2.24	3.62	0.62	1.20	0.78	30/60	20.33
940-175L	1"	0.94	2.95	2.67	4.42	0.73	1.50	1.18	20/40	30.13
940-176L	1-1/4"	1.26	3.42	3.05	4.73	0.77	1.81	1.76	12/24	46.12
940-177L	1-1/2"	1.57	3.78	3.51	5.18	0.78	2.09	2.53	9/18	70.52
940-178L	2"	1.97	4.18	3.84	5.24	0.75	2.60	3.53	6/12	100.96



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

BUTTERFLY HANDLE BALL VALVE

• BRASS • 600WOG • FULL PORT

1/2" - 3/4" Sizes Gas Approved

5 PSIG

UL842, UL258, UL125,FM

ISO 9002 Manufacturer

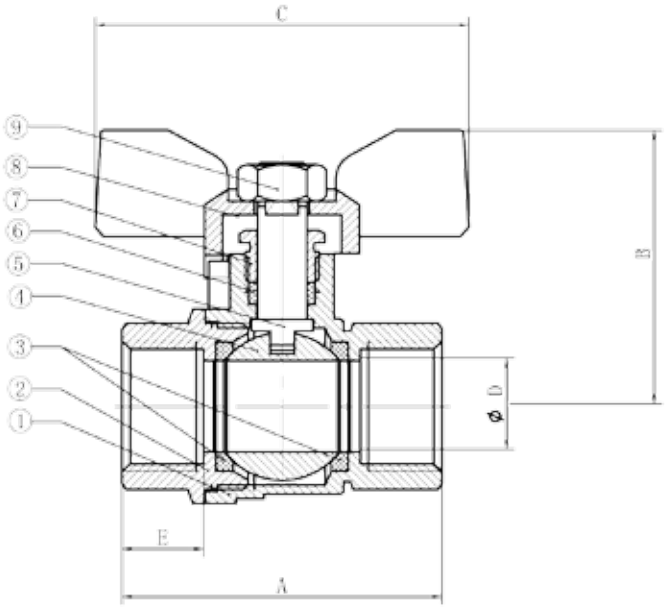
1/4-3/4" 600 PSI non-shock cold water, gas, oil - 150 PSI saturated steam

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"-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	List Price
940-171T	1/4"	1.75	1.488	1.831	0.315	0.457	0.342	70/140	11.54
940-172T	3/8"	1.756	1.488	1.831	0.394	0.457	0.31	70/140	11.38
940-173T	1/2"	2.047	1.756	2.394	0.583	0.520	0.44	50/100	13.34
940-174T	3/4"	2.362	1.921	2.394	0.748	0.563	0.68	30/60	20.30



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")

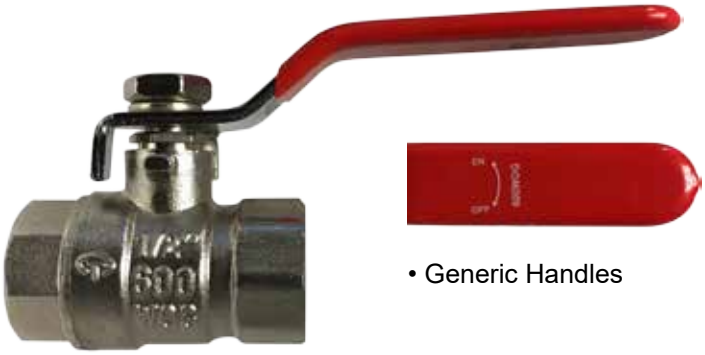
• Not Lead Free AB1953 Compliant

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

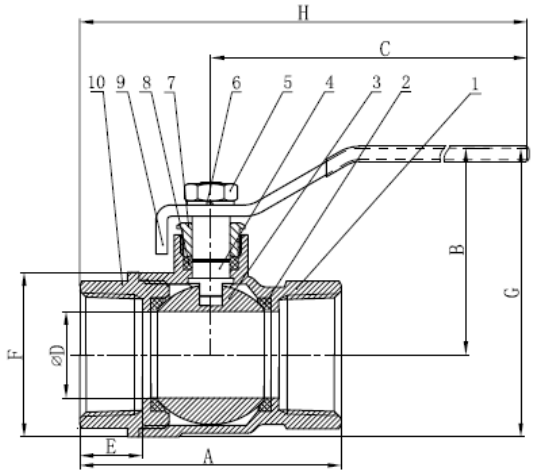
• Not Lead Free



• Generic Handles

FIP X FIP NICKEL PLATED BALL VALVE

Part #	Size	OD	A	B	C	E	F	G	H	Weight	Box/Case	List Price
941151NP	1/4"	0.394	1.73	1.69	3.35	0.453	0.945	2.154	4.331	0.32	10/120	8.96
941152NP	3/8"	0.394	1.73	1.69	3.35	0.473	0.945	2.154	4.331	0.32	10/120	8.96
941153NP	1/2"	0.524	1.89	1.73	3.35	0.472	1.083	2.276	4.291	0.36	10/100	10.88
941154NP	3/4"	0.748	2.28	1.89	3.35	0.563	1.378	2.579	4.488	0.57	10/80	17.36
941155NP	1"	0.984	2.80	2.14	4.29	0.650	1.772	3.031	5.689	0.65	8/48	28.56
941156NP	1-1/4"	1.240	3.15	2.32	4.29	0.669	2.165	3.398	5.866	1.75	4/36	43.68
941157NP	1-1/2"	1.476	3.44	2.66	5.63	0.701	2.50	3.909	7.343	2.10	2/24	64.96
941158NP	2"	1.949	4.06	3.01	5.63	0.708	3.244	4.638	7.638	3.35	2/12	90.48



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

When writing the story of your life, don't let anyone else hold the pen.

- Harley Davidson

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

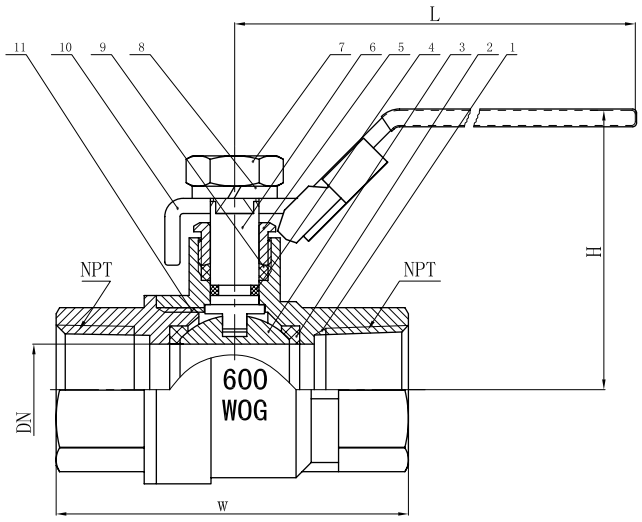
- **Vacuum service to 29 inches Hg**
- Thread Conform ANSI B1.20.1
- Forged Brass Body
- Blow Out Proof Stem Design
- Packing Nut, O-RING & Packing On The Stem Seal
- Stainless Steel Ball, Handle, Nut&Stem
- Handle With Vinyl Grip

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	List Price
941-121NP	1/4	0.394	3.22	1.84	1.73	8.23	0.326	10/120	13.12
941-122NP	3/8	0.394	3.22	1.84	1.73	8.23	0.320	10/120	13.12
941-123NP	1/2	0.591	3.22	2.02	2.24	18.55	0.474	10/100	17.20
941-124NP	3/4	0.748	4.04	2.40	2.52	29.76	0.785	10/80	26.56
941-125NP	1	0.984	4.08	2.20	2.97	51.55	1.155	8/48	39.28
941-126NP	1-1/4	1.259	5.20	3.05	3.44	84.42	1.797	4/36	64.08
941-127NP	1 1/2	1.574	5.20	3.18	3.88	131.93	2.447	2/24	83.92
941-128NP	2	1.941	5.20	3.48	4.33	200.35	3.477	2/12	116.80



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 BELL VALVES AVAILABLE WITH UL-MARINE LISTING AND SS TRIM

ITALIAN BALL VALVE

• BRASS • 600WOG • FULL PORT

5 PSIG C US

UL842, UL258, UL125,FM

CSA AGA 3.88 5 PSIG

IAMPO IGC 157 - 2004b

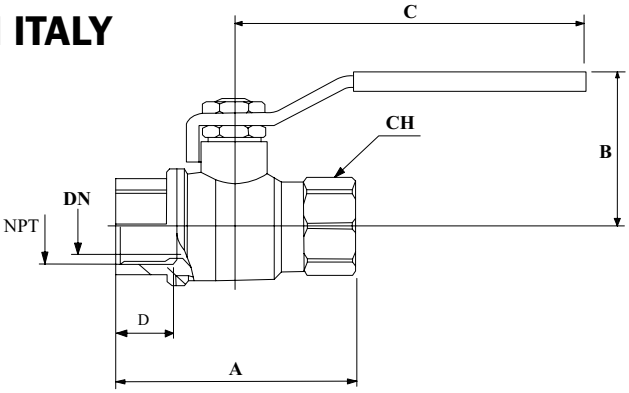
ISO 9002 Manufacturer

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 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	List Price
943-200	1/4"	.39	1.96	1.53	3.31	.43	.75	0.36	24/96	17.16
943-201	3/8"	.39	1.96	1.53	3.31	.43	.86	0.40	24/96	17.49
943-202	1/2"	.57	2.09	1.57	3.25	.46	.98	0.44	20/80	14.69
943-203	3/4"	.75	2.28	1.77	3.80	.49	1.22	0.57	14/56	23.39
943-204	1"	.94	2.80	2.03	3.80	.59	1.50	0.89	6/24	36.94
943-205	1-1/4"	1.24	3.50	2.32	4.72	0.72	1.85	1.64	4/16	57.90
943-206	1-1/2"	1.49	3.90	3.02	6.38	0.85	2.13	2.78	2/8	86.32
943-207	2"	1.96	4.07	3.27	6.38	.65	2.64	3.21	2/8	126.29
942-208	2-1/2"	2.48	5.80	4.98	7.54	1.06	3.31	6.97	5	375.22
942-209	3"	2.99	6.85	5.63	8.86	1.14	3.89	10.34	3	706.76
942-210	4"	3.54	7.67	6.04	8.86	1.22	4.80	18.77	1	1235.42

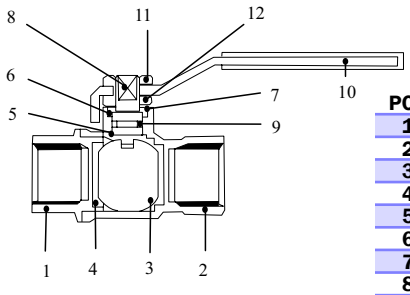
HANDLE OPTIONS

TEE HANDLES

Part #	Valve Size	List Price
43-200T	1/4" - 3/4"	3.41
43-204T	1"	4.07

LOCKING HANDLES

Part #	Valve Size	List Price
43-200L	1/4" - 3/4"	16.05
43-204L	1"	28.75
43-206L	1-1/4" - 1-1/2"	38.55
43-207L	2"	53.13



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

MALE X FEMALE BRASS BALL VALVE

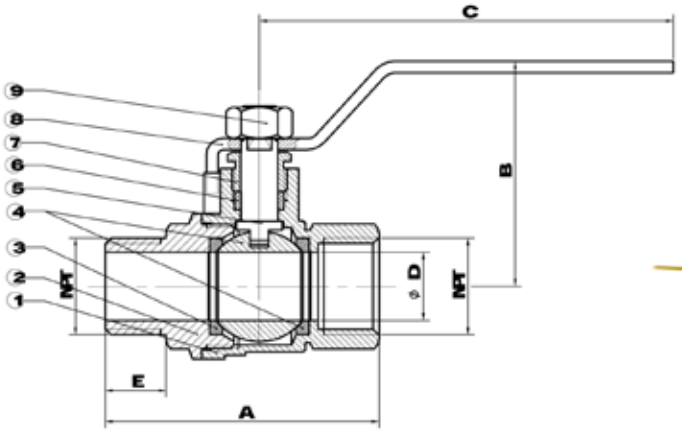
• 600WOG • FULL PORT

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	List Price
948-170	1/4	1/4 - 18	2.016	1.689	2.756	0.315	0.457	0.29	70/140	10.62
948-171	3/8	3/8 - 18	2.094	1.89	3.543	0.394	0.457	0.33	70/140	10.90
948-172	1/2	1/2 - 14	2.343	2.05	3.543	0.583	0.520	0.47	50/100	13.26
948-173	3/4	3/4 - 14	2.618	2.20	3.780	0.748	0.563	0.68	30/60	19.71
948-174	1	1 - 11.5	3.000	2.579	4.528	0.945	0.630	1.11	20/40	29.19
948-175	1-1/4	1-1/4 - 11.5	3.563	2.953	4.528	1.260	0.709	1.70	12/24	42.55
948-176	1-1/2	1-1/2 - 11.5	3.965	3.346	5.512	1.575	0.717	2.50	9/18	63.32
948-177	2	2 - 11.5	4.496	3.681	5.512	1.969	0.748	3.57	6/12	91.74



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. 178

Tee handle option
see pg. 177

ITALIAN MALE X FEMALE BALL VALVE

• BRASS • 600WOG • FULL PORT

Gas Approved

5 PSIG C US

UL842, UL258, UL125,FM

CSA AGA 3.88 5 PSIG

Made in Italy

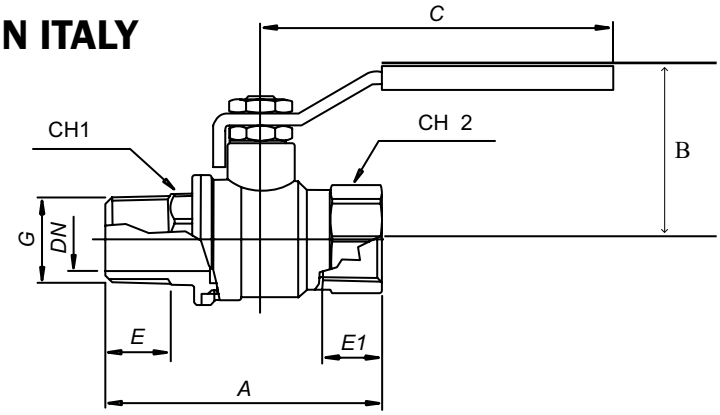
ISO 9002 Manufacturer

FEATURES

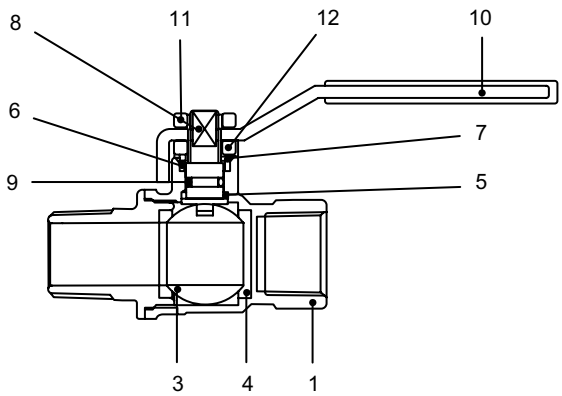
- Solid chrome plated brass ball
- Suitable for full range of liquids and gases.
- Minimal pressure drop due to large full size ports.
- Bottom loaded, pressure retaining stem.
- Pressure rated at 600psi (42 bars) WOG (non-shock) and 150psi (10.34 bars) saturated steam. Virgin TFE stem packing seal, 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	List Price
948-101	1/4	.39	2.18	1.53	3.28	.39	.43	.55	.75	0.35	24/96	17.51
948-102	3/8	.39	2.20	1.53	3.28	.43	.43	.71	.86	0.35	24/96	19.07
948-103	1/2	.57	2.54	1.57	3.28	.62	.46	.87	.98	0.42	14/56	18.73
948-104	3/4	.75	2.75	1.77	3.80	.55	.49	1.12	1.22	0.68	12/48	28.77
948-105	1	.94	3.23	2.03	3.80	.69	.59	1.34	1.50	0.95	6 /24	46.20
948-106	1-1/4	1.24	3.86	2.32	4.63	.81	.79	1.69	1.90	1.66	4/16	76.71
948-107	1-1/2	1.49	4.20	2.98	6.28	.85	.64	2.15	2.13	2.83	2/8	105.11
948-108	2	1.96	4.90	3.27	6.38	.90	.75	2.40	2.64	4.22	1/4	169.16



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

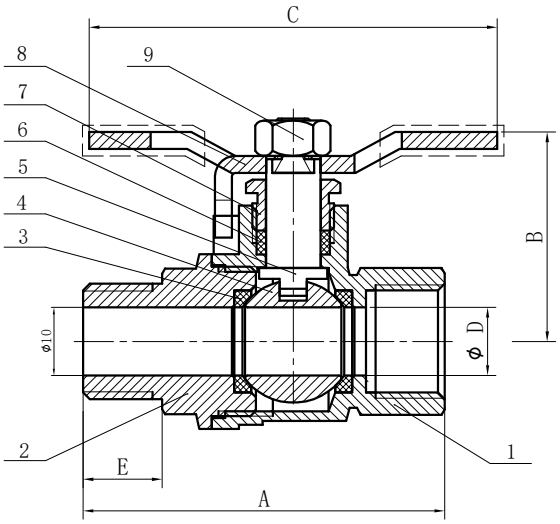
TEE HANDLE BALL VALVE - MALE X FEMALE

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	List Price
948-170T	1/4"	2.016	1.27	2.67	0.315	0.457	0.26	70/140	9.78
948-171T	3/8"	2.094	1.213	2.67	0.394	0.457	0.33	70/140	9.96
948-172T	1/2"	2.343	1.61	3.12	0.583	0.520	0.49	50/100	12.54
948-173T	3/4"	2.618	1.26	3.12	0.748	0.563	0.66	30/60	19.70
948-174T	1"	3.000	1.921	3.701	0.945	0.630	1.06	20/40	29.39
948-175T	1-1/4"	3.563	2.303	3.701	1.260	0.709	1.70	12/24	47.61
948-176T	1-1/2"	3.965	2.717	4.331	1.575	0.717	2.46	9/18	65.73
948-177T	2"	4.496	3.051	4.331	1.969	0.748	3.61	6/12	93.19



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

A day without sunshine is like, you know, night. - Steve Martin

LOCKING HANDLE BALL VALVES - FEMALE X MALE

UL842, UL258

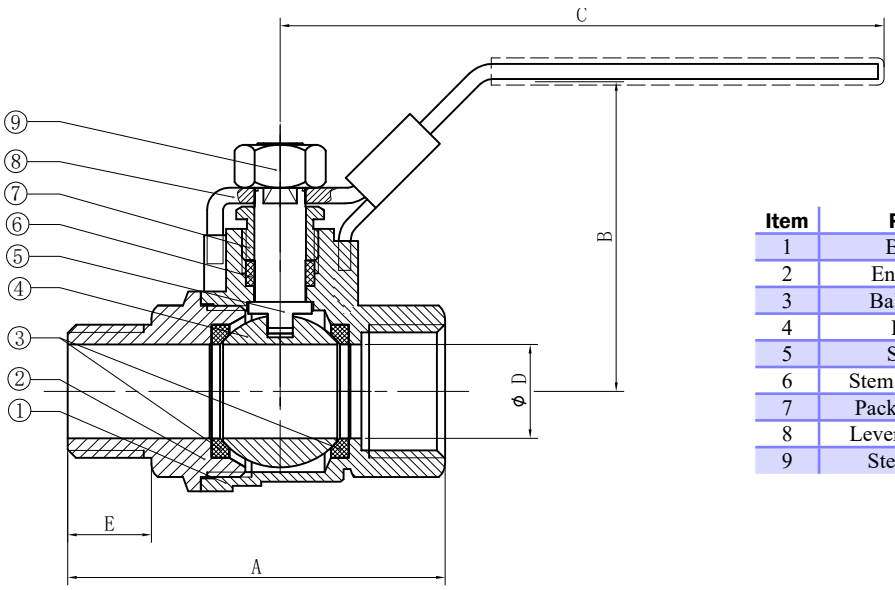
Features

- 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

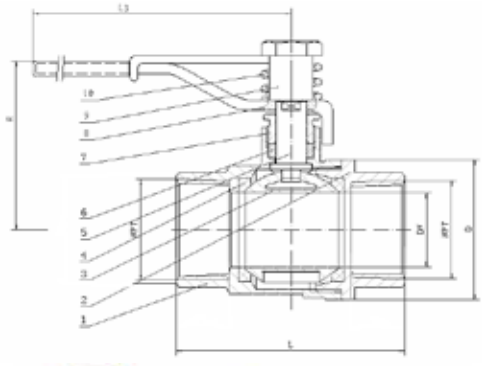
Part#	Size	Dimension Inches							
	NPT	A	B	C	D	E	Weight	Box/Case	List Price
948-170L	1/4"	2.016	1.732	3.543	0.315	0.457	0.32	70/140	10.29
948-171L	3/8"	2.094	1.732	3.543	0.394	0.457	0.37	70/140	10.49
948-172L	1/2"	2.343	1.941	3.543	0.583	0.520	0.50	50/100	13.20
948-173L	3/4"	2.618	2.106	3.78	0.748	0.563	0.77	30/60	20.73
948-174L	1"	3.000	2.579	4.528	0.945	0.630	1.21	20/40	30.94
948-175L	1-1/4"	3.563	2.961	4.528	1.260	0.709	1.74	12/24	49.04
948-176L	1-1/2"	3.965	3.366	5.36	1.575	0.717	2.58	9/18	67.71
948-177L	2"	4.496	3.701	5.36	1.969	0.748	3.73	6/12	95.98



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

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

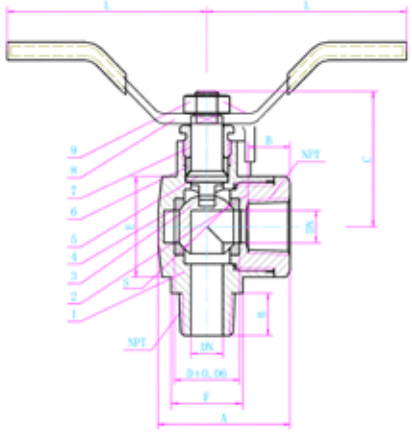


Part #	Part Name	Material
1	Body	Brass
2	Bonnet	Brass
3	Ball	Brass
4	Sealing Seat	PTFE
5	Stem	Stainless Steel
6	Packing Ring	PTFE
7	Gland	Brass
8	Handle	Stainless Steel
9	Bolt	Brass
10	Spring	Stainless Steel

Item#	Size	L	D	DN	H	L3	WTG	Box/Case	List Price
947-103	1/2"	2.19	1.24	0.59	1.83	4.24	0.54	10/80	36.79
947-104	3/4"	2.38	1.5	0.75	2.19	4.24	0.72	5/40	42.90
947-105	1"	3.23	1.91	0.98	2.49	4.71	1.32	5/30	52.71

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

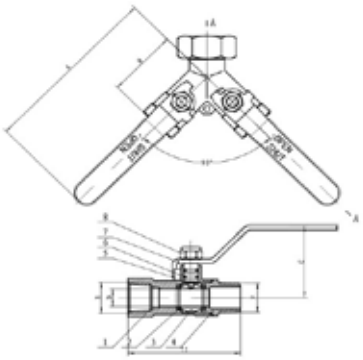
Part #	Size	A	B	C	D	S	DN	L	E	F	WTG	Box/Case	List Price
947-111	1/4	1.59	0.41	1.40	0.64	0.63	0.32	2.60	0.98	0.65	0.34	12/120	15.14
947-112	3/8	1.59	0.41	1.40	0.73	0.71	0.39	2.60	0.98	0.65	0.36	12/120	15.14
947-113	1/2	1.73	0.55	1.40	0.79	0.87	0.55	2.60	1.08	0.83	0.47	10/80	24.11

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

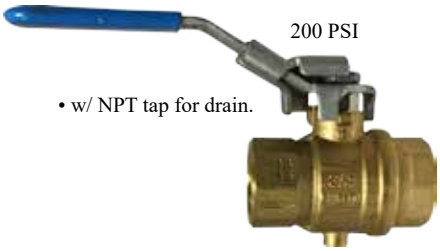
Part #	Ball	E	F	A	B	C	D	G	WTG	Box/Case	List Price
947-125	Non-vented	1" Female	3/4" Male	5.18"	**2.5"**	2.05"	0.59"	90°	1.43	2/24	55.63
947-126	Vented								1.48	2/24	57.32

EXHAUST VALVES

AUTOMATIC DRAIN & LATCH LOCK HANDLE

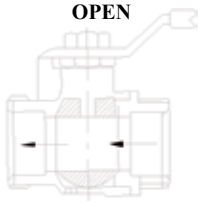
Full port hot forged brass ball valve, blow-out proof stem, downstream automatic vent with lockable handle in compliance with OSHA requirements.

- Maximum working pressure: 200 PSI (CWP).
- Temperature rating: -4°F through +350°F.
- Made in Italy
- Not lead free



200 PSI

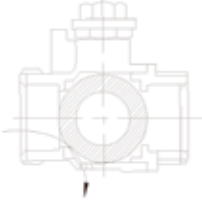
• w/ NPT tap for drain.



OPEN

Valve - open position.
Drain vent shut off.

CLOSED



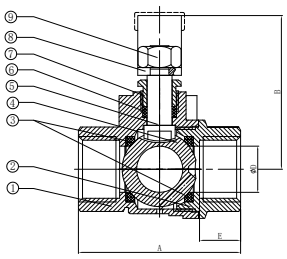
Part#	Size	List Price
948-131	1/4"	54.96
948-132	3/8"	58.30
948-133	1/2"	60.87
948-134	3/4"	83.43
948-135	1"	100.20

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	List Price
948-141	1/4"	1.756	1.88	0.394	0.457	11.34
948-142	3/8"	1.756	1.88	0.394	0.457	10.91
948-143	1/2"	2.047	2.13	0.583	0.520	14.88
948-144	3/4"	2.362	2.28	0.748	0.563	22.98



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

GAS BALL VALVES

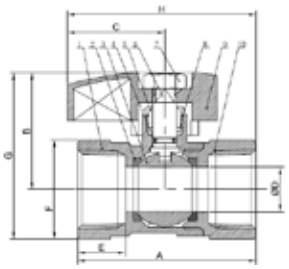
5 PSIG
C US
CSA AGA 3.88 5 PSIG

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;
- ASEM 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	List Price
943-311	3/8"	0.35	10/100	7.35
943-312	1/2"	0.44	10/100	7.35
943-313	3/4"	0.62	10/100	10.80

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

NEW

FLARE X FLARE

Part#	Size	List Price
943342	3/8	6.79
943343	1/2	8.54
943345	5/8	14.07
943344	15/16	14.07

NEW

FLARE X MIP

Part#	Size	List Price
943347	3/8 x 1/2	7.63
943348	1/2 x 1/2	8.82

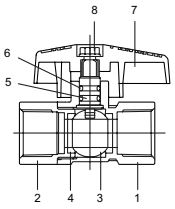
NEW

FLARE X FIP

Part#	Size	List Price
943331	3/8 x 1/2	7.28
943332	1/2 x 1/2	7.56
943351	5/8 x 3/4	13.23
943350	15/16 x 3/4	13.23

- 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.
- Larger ports for increased flow capacity.
- Red Reversible handle.
- May be used with water 400 WOG.

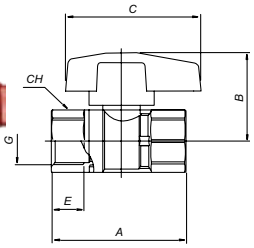
MADE IN ITALY



	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									List Price
	G	DN	A	B	C	E	CH	PN in psi	WTG	Box/ Case	
943-212	1/2"	.47	2.26	1.45	2.28	.55	.98	600	0.33	20/80	14.88
943-213	3/4"	.59	2.48	1.57	2.28	.57	1.22	600	0.45	14/56	21.58

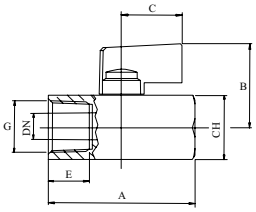
CHROME PLATED BRASS MINI BALL VALVE

ITALIAN CHROME PLATED BRASS MINI BALL VALVE

ISO 9002 Manufacturer

FEATURES

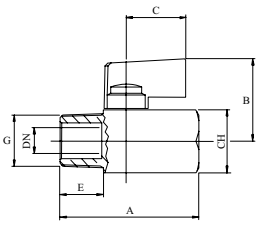
- Solid chrome plated brass ball
- Max working pressure 235 psi will handle 300psi@75° F
- Longer body style for longer, deeper thread connections
- One piece drawn sand blasted chrome plated body.
- Each valve is seal tested for maximum safety.
- Double seal system allows valve to be operated in both 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

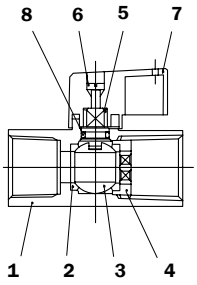
Female x Female

Part#	Size		Dimension Inches							
	G	DN	A	B	C	E	CH	WTG	Box/ Case	List Price
46-922I	1/4"	0.31	1.81	1.17	0.9	0.51	0.83	0.24	50/200	15.98
46-923I	3/8"	0.31	1.85	1.17	0.9	0.51	0.83	0.22	50/200	15.98
46-924I	1/2"	0.39	2.18	1.26	0.9	0.61	0.98	0.32	30/120	18.43

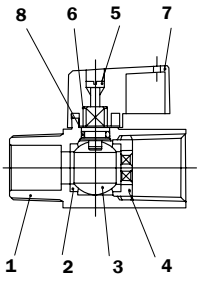


Male x Female

Part#	Size		Dimension Inches							
	G	DN	A	B	C	E	CH	WTG	Box/ Case	List Price
46-903I	1/4"	0.31	1.75	1.17	0.9	.40	0.83	0.20	50/200	15.54
46-904I	3/8"	0.31	1.81	1.17	0.9	.41	0.83	0.20	50/200	15.54
46-905I	1/2"	0.39	2.14	1.26	0.9	.52	0.98	0.30	40/160	17.28



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

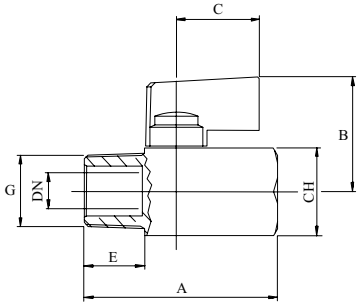


YELLOW BRASS 1/4" MINI MALE X FEMALE VALVE

- **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	List Price
46-903ISB	1/4"	0.315	1.75	1.18	0.91	0.48	0.83	200	**5.90**

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	List Price
		A	D(FLOW)	F	G			
46-934	1/8	1.57	0.24	0.93	1.46	0.21	20/300	7.56
46-935	1/4	1.57	0.31	0.93	1.46	0.20	20/300	7.56
46-936	3/8	1.57	0.28	0.93	1.46	0.22	20/300	8.27
46-937	1/2	1.77	0.35	0.93	1.56	0.24	20/200	8.57

MINI BALL VALVES W/VITON SEALS

FEMALE X FEMALE - LEVER HANDLE

Part #	Size	Dimensions (In)				Wt lbs	Box/ Case	List Price
		A	D(FLOW)	F	G			
46-934L	1/8	1.57	0.24	1.99	1.50	0.21	20/300	8.23
46-935L	1/4	1.57	0.31	1.99	1.50	0.20	20/300	7.33
46-936L	3/8	1.60	0.28	1.99	1.50	0.22	20/300	6.79
46-937L	1/2	1.77	0.35	1.99	1.59	0.24	20/200	8.61

FEMALE X FEMALE - TEE HANDLE

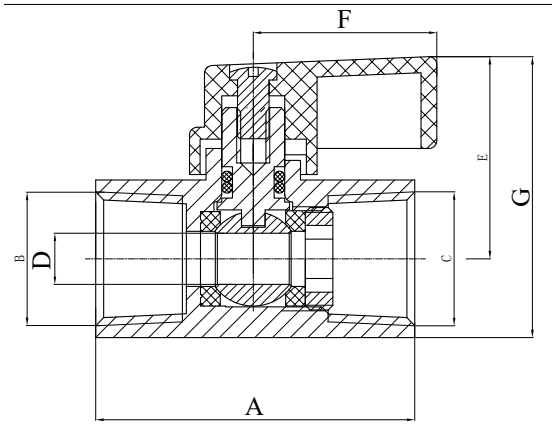
Part #	Size	Dimensions (In)				Wt lbs	Box/ Case	List Price
		A	D(FLOW)	Handle	G			
46-934LT	1/8	1.60	0.24	1.34	1.43	0.21	20/300	8.13
46-935LT	1/4	1.57	0.31	1.34	1.43	0.20	20/300	7.23
46-936LT	3/8	1.60	0.28	1.34	1.43	0.22	20/300	6.70
46-937LT	1/2	1.77	0.35	1.34	1.52	0.24	20/200	8.51

FEMALE X FEMALE - SCREWDRIVER

Part #	Size	Dimensions (In)		Wt lbs	Box/Case	List Price
		A	D(FLOW)			
46-934LS	1/8	1.57	0.24	0.21	20/300	7.48
46-935LS	1/4	1.57	0.31	0.20	20/300	6.57
46-936LS	3/8	1.57	0.28	0.22	20/300	6.04
46-937LS	1/2	1.77	0.35	0.24	20/200	7.85

* BSPP Threads available with extended delivery, same cost.

- 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

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	List Price
		A	D(FLOW)	F	G			
46-930	1/8	1.57	0.24	0.93	1.46	0.17	20/300	7.56
46-931	1/4	1.57	0.31	0.93	1.46	0.15	20/300	7.56
46-932	3/8	1.57	0.28	0.93	1.46	0.21	20/300	8.27
46-933	1/2	1.77	0.35	0.93	1.56	0.24	20/200	8.57

MINI BALL VALVES W/VITON SEALS

MALE X FEMALE - LEVER HANDLE

Part #	Size	Dimensions (In)				Wt lbs	Box/ Case	List Price
		A	D(FLOW)	F	G			
46-930L	1/8	1.57	0.24	1.99	1.50	0.17	20/300	6.50
46-931L	1/4	1.57	0.31	1.99	1.50	0.15	20/300	6.20
46-932L	3/8	1.57	0.28	1.99	1.50	0.21	20/300	6.20
46-933L	1/2	1.77	0.35	1.99	1.59	0.24	20/200	8.17

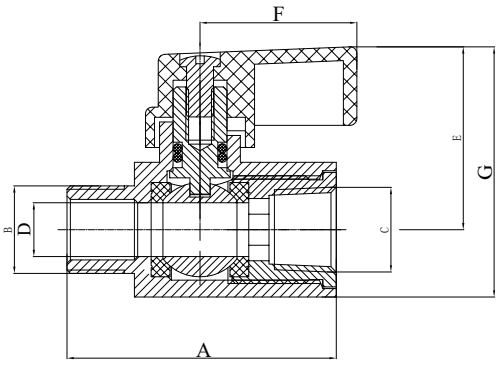
MALE X FEMALE - TEE HANDLE

Part #	Size	Dimensions (In)				Wt lbs	Box/ Case	List Price
		A	D(FLOW)	Handle	G			
46-930T	1/8	1.57	0.24	1.34	1.46	0.17	20/300	6.42
46-931T	1/4	1.57	0.31	1.34	1.46	0.15	20/300	6.11
46-932T	3/8	1.57	0.28	1.34	1.40	0.21	20/300	6.11
46-933T	1/2	1.77	0.35	1.34	1.56	0.24	20/200	8.07

MALE X FEMALE - SCREWDRIVER

Part #	Size	Dimensions (In)		Wt lbs	Box/ Case	List Price
		A	D(FLOW)			
46-930S	1/8	1.57	0.24	0.17	20/300	5.76
46-931S	1/4	1.57	0.31	0.15	20/300	5.45
46-932S	3/8	1.57	0.28	0.21	20/300	5.45
46-933S	1/2	1.77	0.35	0.24	20/200	7.42

* BSPP Threads available with extended delivery, same cost.
- Not lead free

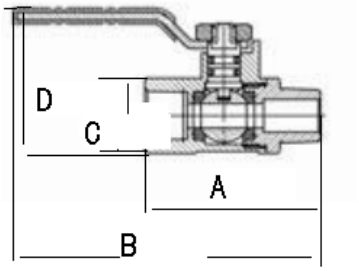


Pos	Components	Materials	N
1	Body	CP Forged Brass	1
2	Ball Seats	P.T.F.E.	2
3	Ball	CP Brass	1
4	Ring Unit	Brass	1
5	Stern	Brass	1
6	O-Ring - flag handle	NBR 80	1
6	O-Ring - all others	Viton	1
7	Handle	Alumzinc	1
8	Screw	Steel	1

FORGED BRASS MINI-BALL VALVES

- 180^0 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	List Price
944-113	1/8	1.53	2.80	0.73	1.42	7.12
944-116	1/4	1.53	2.80	0.73	1.42	8.25
944-117	3/8	1.73	2.90	0.87	1.50	8.77
944-140	1/2	2.07	3.08	0.98	1.45	9.90

FEMALE x MALE

Part #	Size	A	B	C	D	List Price
944-106	1/8	1.69	3.02	0.73	1.46	10.30
944-100	1/4X1/8	1.28	2.90	0.66	1.32	13.70
944-101	1/4	1.70	3.00	0.73	1.46	11.99
944-103	3/8	1.78	3.02	0.87	1.50	9.00
944-102	3/8X1/4	1.78	2.50	0.89	1.50	10.12
944-104	1/2	2.34	3.35	0.98	1.45	10.65

MALE x MALE

Part #	Size	A	B	C	D	List Price
944-107	1/8	1.82	2.94	0.65	1.42	7.50
944-109	1/4	1.25	2.66	0.65	1.42	7.88
944-110	3/8	1.90	2.98	0.73	1.42	8.25
944-112	1/2	2.56	4.93	1.02	2.21	12.87

HOSE BARB x MALE

Part #	Size	A	B	C	D	List Price
944-132	1/4X1/8	2.05	2.91	0.73	1.51	5.70
944-138	1/4X1/4	2.08	2.98	0.73	1.51	8.00
944-128	3/8X1/4	2.08	3.04	0.73	1.51	7.51
944-130	3/8X3/8	2.12	3.06	0.73	1.51	6.15
944-139	1/2X1/2	2.15	3.19	0.73	1.51	9.90

HOSE BARB x FEMALE

Part #	Size	A	B	C	D	List Price
944-135	1/8X1/8	1.78	2.44	0.62	1.38	10.30
944-136	1/4X1/4	1.97	2.87	0.73	1.55	9.53

HOSE BARB x HOSE BARB

Part #	Size	A	B	C	D	List Price
944-142	1/4X1/4	2.47	3.19	0.73	1.55	10.73
944-134	3/8X3/8	2.47	3.18	0.73	1.55	10.88

LEAD FREE

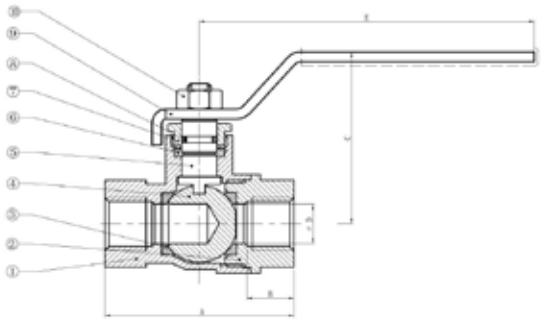
Part #	Size	A	B	C	D	List Price
944-142LF	1/4	2.49	3.19	0.73	1.55	10.73
944-134LF	3/8	2.47	3.18	0.73	1.55	10.88

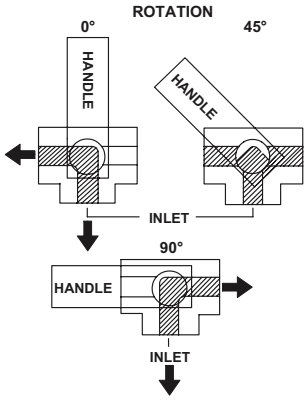
SIDE OUTLET 3-WAY BALL VALVE

• 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

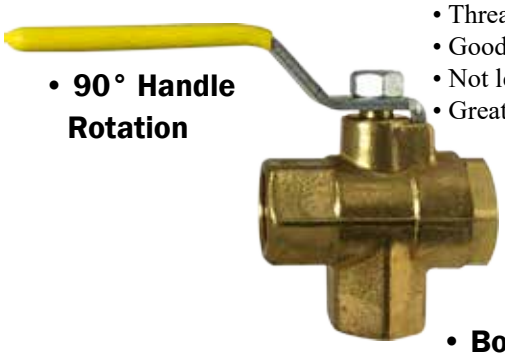
NO	Part Name	Material	Qty
1	Body	Brass	1
2	End Cap	Brass	1
3	Ball Seat	PTFE	1
4	Ball	Brass	1
5	Stem	Brass	2
6	Seal	PTFE	1
7	Impacted Nut	Brass	1
8	O-Ring	NBR	2
9	Lever Handle	Steel	1
10	Stem Nut	Steel	1

Part#	Size	I	H	D	L	A	WTG	Box/Case	List Price
940-464	1/4"	1.89	1.73	0.39	3.58	0.47	0.51	50/100	45.28
940-465	3/8"	1.89	1.73	0.39	3.35	0.47	0.57	50/100	47.11
940-461	1/2"	2.11	1.80	0.50	3.58	0.51	0.65	30/60	36.99
940-462	3/4"	2.56	2.16	0.74	4.31	0.55	0.99	20/40	61.10

BOTTOM OUTLET 3 WAY BALL VALVE

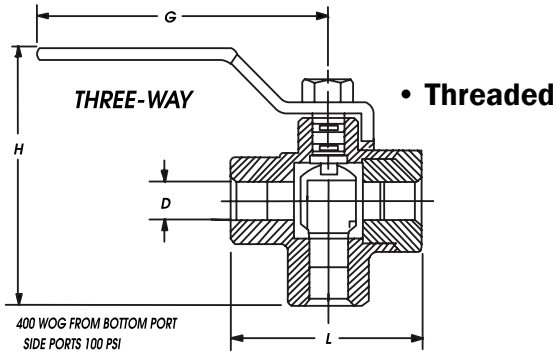
- Forged Brass
  Bottom Port is inlet 400 psi
  Side Ports are inlet 100 psi

- 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



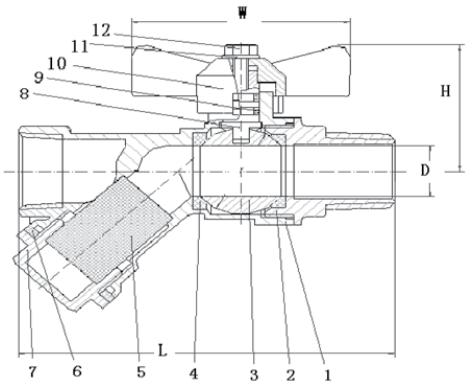
• Threaded

Part#	Size	D	G	H	L	Cv	WTG	List Price
940-121	1/4"	.44	3.50	3.12	2.25	5.2	0.76	58.45
940-122	3/8"	.50	3.50	3.12	2.25	5.5	0.69	54.10
940-123	1/2"	.50	3.50	3.12	2.25	5.5	1.00	61.36

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	List Price
947-133	**1/2"x1/2"(MxF)**	3.77"	0.59"	2.00"	1.50"	0.60	8/64	24.70
947-134	**3/4"x3/4"(MxF)**	4.32"	0.75"	2.40"	1.85"	1.00	8/64	32.69

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*
- *IAMPO*

Part #	Size	List Price
947-055	3/4" x 3/4"	11.04

HOSE BIBBS
3/4" Hose Thread Outlet

IPS

Part #	Size	WTG	Box/ Case	List Price
942-170	1/2 (1/2"C)	0.33	10/100	22.17
942-171	3/4	0.35	10/100	17.71

RADIATOR AIR VALVE
COIN SLOT OR LOSSE KEY

Part #	Size	List Price
943-284	1/8" MIP	3.25
943-287	Key only	0.54

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	List Price
942-142	1/2	12	21.20

BENT NOSE GARDEN VALVES

- Heavy brass construction
- Cast iron handle
- Stuffing box
- Neoprene seal disc

NEW

Part #	Size	Box	Case	List Price
942-100	1/2"	12	72	14.86
942-101	3/4"	12	72	14.86
942-102	1"	12	72	15.87

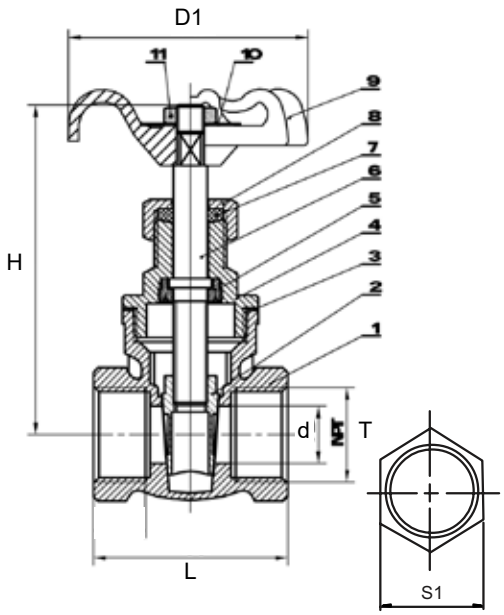
BRASS GATE VALVE

• 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	List Price
940-130	1/4	1.64	2.91	2.09	0.44	1/4-18 NPT	.85	0.60	10/120	19.81
940-131	3/8	1.71	2.91	2.09	0.48	3/8-18 NPT	.85	0.59	10/120	19.81
940-132	1/2	1.71	2.91	2.09	0.50	1/2-14 NPT	1.03	0.75	10/120	16.79
940-133	3/4	1.71	3.06	2.13	0.74	3/4-14 NPT	1.26	0.83	10/80	22.57
940-134	1	2.13	3.60	2.48	0.97	1-11.5 NPT	1.51	1.24	5/60	30.92
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	56.06
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	71.75
940-137	2	2.70	5.94	3.52	1.85	2-11.5 NPT	2.60	3.33	2/24	94.41
940-138	2-1/2	3.70	7.87	3.98	2.48	2-1/2-8 NPT	3.27	6.26	1/10	163.97
940-139	3	4.02	8.82	4.37	2.80	3-8 NPT	3.86	8.34	1/6	244.97
940-140	4	4.53	9.88	4.74	3.60	4-8 NPT	4.88	13.09	1/4	394.42



See Lead Free section page 168 for lead free Gate Valves.

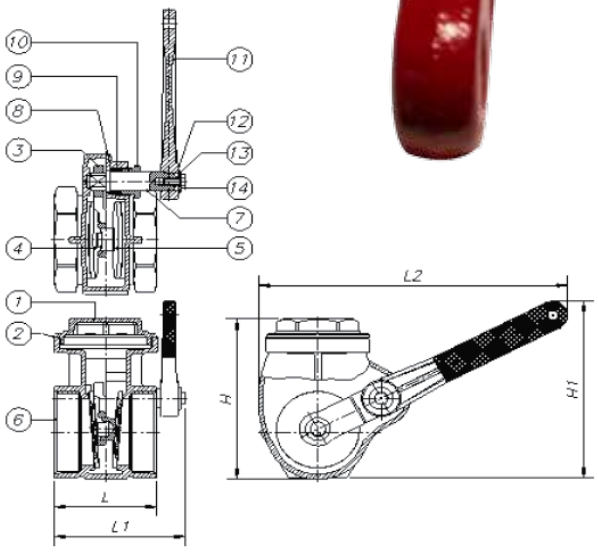
See page 203 for SS Gate Valve

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

GATE VALVE QUICK OPENING

Features: Bronze Material, Threaded Ends

NEW



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	List Price
941-133	1/2"	45.6	60.6	119	56.8	52.8	10	50	36.05
941-134	3/4"	51	62	126.3	68	87.5	10	50	53.41
941-135	1"	58.3	72.3	155	78.7	90.2	10	30	71.68
941-136	1-1/4"	30.1	78	180.2	89.5	104	5	25	92.86
941-137	1-1/2"	66.7	85.3	196.6	99.2	131	6	18	120.33
941-138	2"	76.4	90.3	250.6	119.3	143.7	2	10	174.72
941-140	3"	101	129.2	305.6	172.2	191.3	2	6	396.34
941-141	4"	114.5	150.7	378.2	213.5	248.6	1	2	683.62

Life always offers you a second chance. It's called tomorrow.

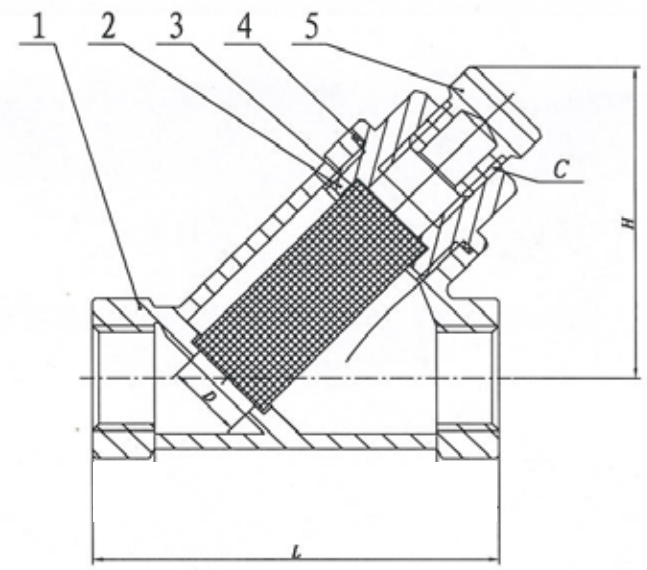
CLASS 150 BRASS Y-PATTERN STRAINER

- 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	List Price
940-521	1/4"	2.57	1.95	NPT 3/8	.53	10/100	40.32
940-522	3/8"	3.23	2.44	NPT 3/8	.71	12/48	42.51
940-523	1/2"	3.23	2.44	NPT 3/8	.66	12/48	31.75
940-524	3/4"	3.94	2.78	NPT 3/8	1.10	8/48	46.02
940-525	1"	4.53	3.19	NPT 1/2	1.71	8/32	79.88
940-526	1-1/4"	5.33	3.66	NPT 1/2	2.49	6/24	109.52
940-527	1-1/2"	6.20	3.82	NPT 1/2	3.24	2/16	144.90
940-528	2"	7.44	4.65	NPT 1/2	5.39	2/8	238.83
940-529	2-1/2"	9.50	5.39	NPT 3/4	9.56	1/6	555.00
940-530	3"	9.4	5.67	NPT 3/4	13.49	1/4	794.88

See page 168 for 1/2" Lead Free

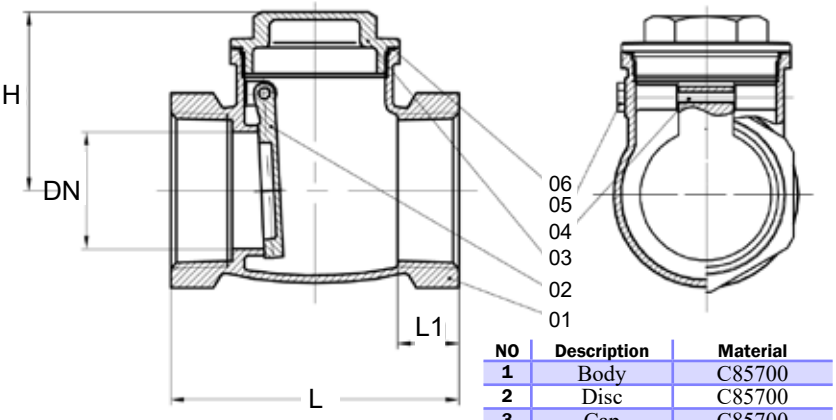
See page 203 for SS Y Strainer



NO	Name	Material
1	BODY	C85700
2	BONNET	C85700
3	STRAINER	304 S.S.
4	SPRING SEAL	PTFE
5	END CAP	C85700

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	List Price
940-352	1/2	2.09	1.42	0.531	0.512	.41	10/100	19.15
940-353	3/4	2.36	1.56	0.579	0.728	.56	10/80	21.55
940-354	1	2.62	1.77	0.748	0.925	.73	5/60	30.87
940-355	1-1/4	3.19	2.07	0.748	1.201	1.36	5/40	48.71
940-356	1-1/2	3.54	2.16	0.846	1.417	1.56	5/30	67.20
940-357	2	4.21	2.74	0.886	1.772	2.58	2/20	100.90
940-358	2-1/2	5.14	3.09	1.063	2.224	4.55	1/15	190.84
940-359	3	5.77	3.80	1.102	2.579	6.53	1/6	268.43
940-360	4	6.84	4.25	1.102	3.602	10.18	1/4	436.02

• See page 168 for Lead Free Brass Swing Check Valves

• See page 203 for SS Swing Check Valves

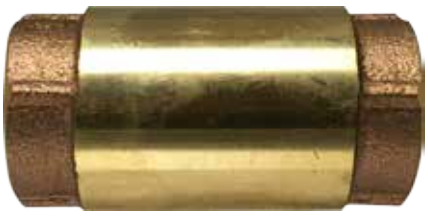
Y PATTERN BRASS SWING CHECK VALVE SCREWED ENDS

Part #	Size	List Price
940-352B	1/2"	65.19
940-353B	3/4"	86.87
940-354B	1"	111.31
940-355B	1-1/4"	166.80
940-356B	1-1/2"	200.24
940-357B	2"	277.28

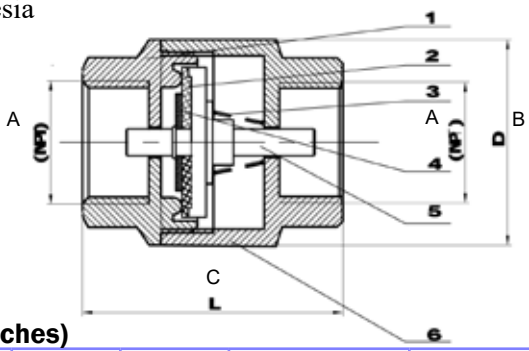
BRASS CHECK VALVES

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	List Price
944-428	1/4"	-	1/4"	1.00	2.29	.24	24/192	19.77
944-429	3/8"	-	3/8"	1.00	2.07	.23	10/100	23.14
944-430	1/2"	1-1/4"	1/2"	1.26	2.40	.42	10/100	18.14
944-431	3/4"	1-1/4"	3/4"	1.45	2.74	.53	10/80	26.96
944-432	1"	2"	1"	1.77	3.23	.80	6/60	36.14
944-433	1-1/4"	2-1/2"	1-1/4"	2.13	3.62	1.18	4/40	52.70
944-434	1-1/2"	3"	1-1/2"	2.29	4.04	1.40	5/30	65.07
944-435	2"	3-1/2"	2"	2.48	5.04	2.70	5/20	101.79

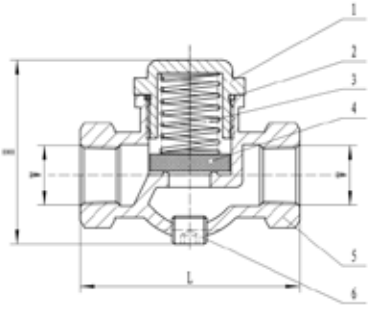
• See page 168 for Lead Free Brass Check Valves

• See page 200 for SS Check Valves

IN LINE CHECK VALVES VERTICAL OR HORIZONTAL

NEW

- 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	List Price
947-140	1/8"	1/8	1.75	1.34	0.28	20/100	23.40
947-141	1/4"	1/4	1.75	1.37	0.29	20/100	23.40
947-142	3/8"	3/8	2.50	2.18	0.62	10/50	35.10
947-143	1/2"	1/2	2.50	2.13	0.54	10/50	49.40
947-144	3/4"	3/4	2.88	2.64	1.17	8/40	73.84
947-145	1"	1	3.61	3.30	1.98	2/20	103.41

BRASS IN-LINE CHECK VALVES

High Capacity, Size 1/4"-2" 400 WOG, 2 1/2"-4" 175 WOG

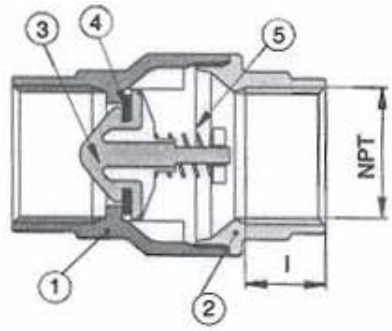
- Soft Seat for Bubble Tight Shutoff, Spring Loaded for Fast Seating Action.
- Compact design.
- Low Cracking Pressure 1/2 psi.
- Flow Profile Designed to Minimize Head Loss.
- Perfect Seating both at High and Low Pressure, Wide Temperature Range: +10° to 210°F.
- Polyethermide Disc to ensure the Best 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

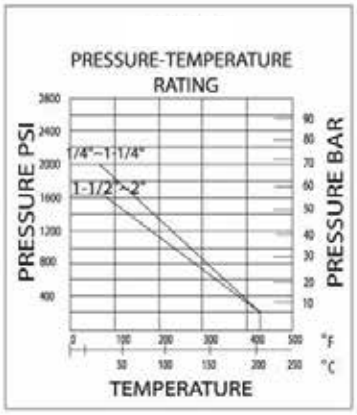
Part#	NBR List	Size	l	psi	Lbs	Case	Viton Part#	Viton List
944-401	20.27	1/4"	0.39	400	0.22	144		
944-402	20.27	3/8"	0.40	400	0.18	144	944-402V	20.88
944-403	22.42	1/2"	0.60	400	0.32	144	944-403V	24.92
944-404	32.52	3/4"	0.65	400	0.49	90	944-404V	32.70
944-405	40.12	1"	0.66	400	0.71	90	944-405V	42.17
944-406	63.05	1-1/4"	0.68	400	1.13	30	944-406V	67.25
944-407	94.90	1-1/2"	0.68	400	1.53	30	944-407V	99.81
944-408	136.78	2"	0.69	400	2.28	12	944-408V	133.88
944-409	293.75	2-1/2"	0.93	175	4.83	4		
944-410	397.82	3"	1.01	175	6.70	4		
944-411	640.09	4"	1.09	175	12.43	2		



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

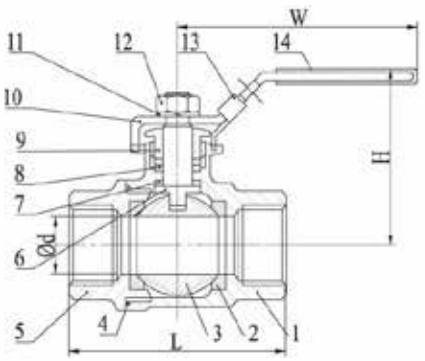
316 SS 2-PC BALL VALVE, FULL PORT, THREADED END, 2000 PSI

- 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	List Price
949-171	1/4"	0.36	2.13	2.13	4.33	.157	0.64	80	34.14
949-172	3/8"	0.50	2.13	2.16	4.33	.157	0.58	80	34.14
949-173	1/2"	0.59	2.24	2.28	4.53	.197	0.71	70	43.92
949-174	3/4"	0.79	2.76	2.40	4.53	.315	1.18	50	60.48
949-175	1"	0.98	3.50	3.03	6.04	.394	2.33	30	90.72
949-176	1-1/4"	1.25	4.12	3.19	6.04	.551	3.48	20	134.64
949-177	1-1/2"	1.50	4.05	3.54	6.10	.709	4.03	14	187.32
949-178	2"	1.96	4.90	4.25	6.10	.984	7.50	7	260.46



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

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

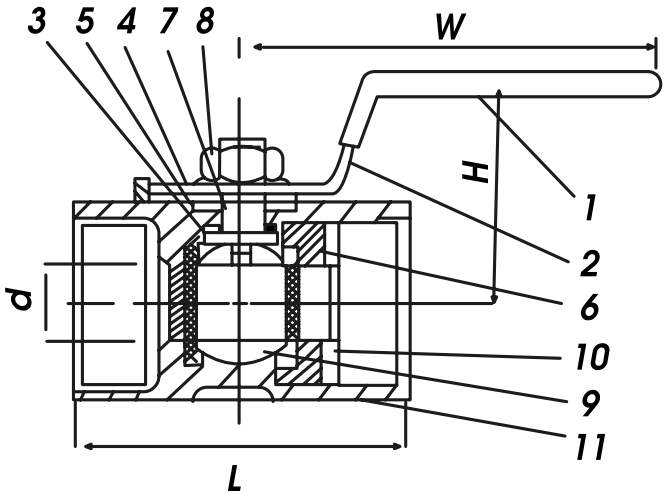
LOCKING HANDLE

Valves will accept a pad-lock on the handle.

dimensions (inches)

Part#	Size	D	L	H	W	Weight	Case	List Price
949-101	1/4"	0.20	1.53	1.53	3.03	0.19	150	32.68
949-102	3/8"	0.27	1.74	1.53	3.03	0.23	150	33.15
949-103	1/2"	0.36	2.24	1.73	3.46	0.41	100	36.82
949-104	3/4"	0.50	2.32	1.89	3.46	0.63	70	43.10
949-105	1"	0.59	2.80	2.24	4.29	0.86	50	55.21
949-106	1-1/4"	0.79	3.07	2.32	4.29	1.34	30	96.48
949-107	1-1/2"	0.98	3.26	2.76	5.14	2.00	25	98.29
949-108	2"	1.25	3.94	2.24	6.50	2.88	15	139.91

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

316 SS TWO PIECE FULL PORT VALVES

TWO PIECE FULL PORT BALL VALVE

316 Stainless Steel

1000 PSI

Materials: CFM8M (SS316)

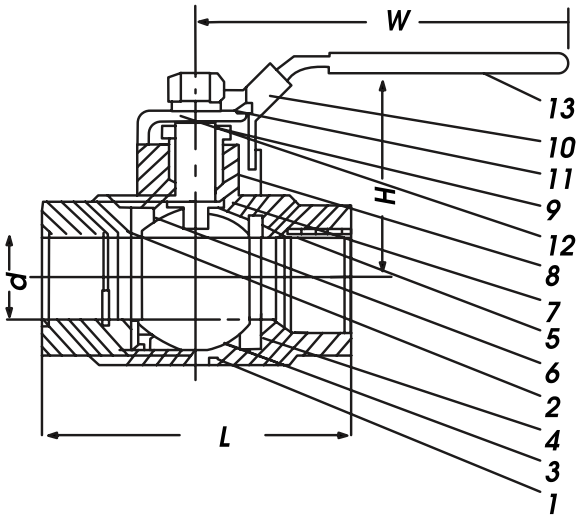
Features:

- 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	List Price
949-161	1/4"	0.36	2.13	2.13	4.33	0.51	80	33.86
949-162	3/8"	0.50	2.13	2.16	4.33	0.49	80	33.86
949-163	1/2"	0.59	2.24	2.28	4.17	0.69	70	41.74
949-164	3/4"	0.79	2.68	2.40	4.17	1.03	50	49.75
949-165	1"	0.98	3.15	2.50	4.88	1.40	30	74.23
949-166	1-1/4"	1.26	3.58	3.19	5.04	2.17	20	133.89
949-167	1-1/2"	1.49	4.05	3.54	6.10	3.33	12	176.42
949-168	2"	1.97	4.88	4.25	6.13	6.02	7	211.07
949-170	3"	3.15	7.28	5.71	9.06	21.01	2	466.51
949-180	4"	3.94	8.84	7.28	11.10	36.18	1	1220.30



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

STAINLESS STEEL MIN BALL VALVES

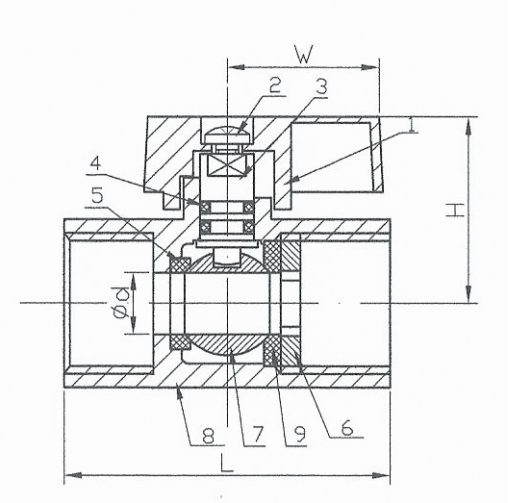
- 316 Stainless Steel
- Working pressure 400PSI
- Working Temperature -10°C to 150°C

FEMALE PIPE x FEMALE PIPE

Part#	Size	W	D	H	L	Weight	Case	List Price
46934SS	1/8"	.898	.197	.985	1.693	.18	150	19.50
46935SS	1/4"	.898	.276	.984	1.693	.21	150	19.50
46936SS	3/8"	.898	.276	.984	1.693	.19	150	20.46
46937SS	1/2"	.898	.362	1.114	1.811	.26	100	25.19

MALE PIPE x FEMALE PIPE

Part#	Size	W	D	H	L	Weight	Case	List Price
46930SS	1/8"	.898	.197	.985	1.693	.18	150	18.53
46931SS	1/4"	.898	.276	.984	1.693	.18	150	18.53
46932SS	3/8"	.898	.276	.984	1.693	.19	150	19.44
46933SS	1/2"	.898	.362	1.114	1.811	.26	100	24.56



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

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

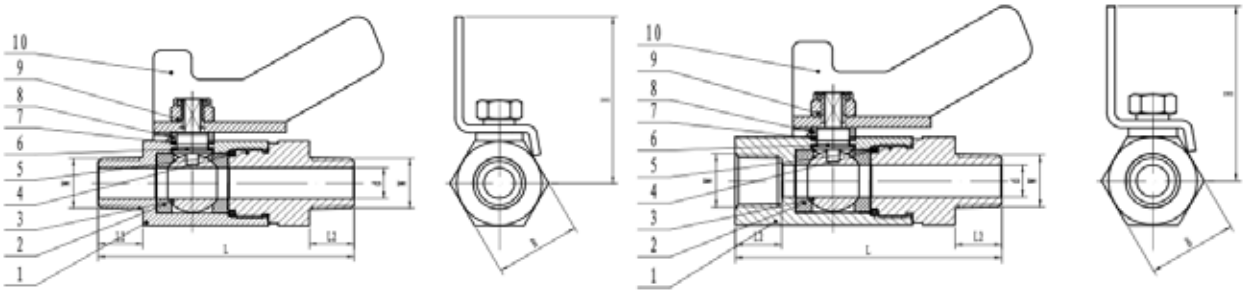
Part #	Size	Dimensions in						List
	FIP x FIP	d	L	B (Hex)	H	WTG	Box	Price
46-922SS	1/4"×1/4"	0.314"	2.34"	22.1/0.87"	1.5"	0.33	36	44.20
46-923SS	3/8"×3/8"	0.314"	2.39"	22.1/0.87"	1.5"	0.39	36	44.20
46-924SS	1/2"×1/2"	0.314"	2.81"	24.9/0.98"	1.5"	0.43	36	57.85

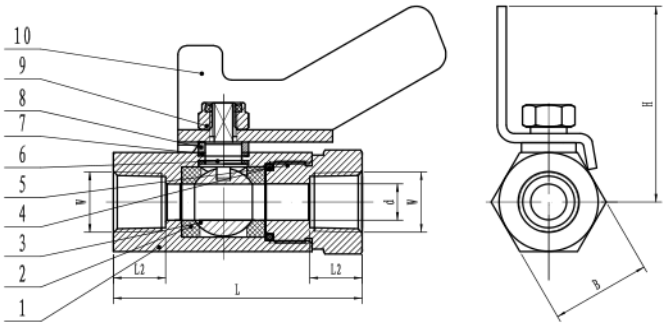
MALE PIPE X FEMALE PIPE

Part #	Size	Dimensions in						List
	MIP x FIP	d	L	B (Hex)	H	WTG	Box	Price
46-903SS	1/4"×1/4"	0.314"	2.45"	0.87"	1.5"	0.39	36	45.11
46-904SS	3/8"×3/8"	0.314"	2.45"	0.87"	1.5"	0.36	36	45.11
46-905SS	1/2"×1/2"	0.314"	2.81"	0.98"	1.5"	0.41	36	59.02

MALE PIPE X MALE PIPE

Part #	Size	Dimensions in						List
	MIP x MIP	d	L	B (Hex)	H	WTG	Box	Price
46-912SS	1/4"×1/4"	0.314"	2.59"	0.87"	1.5"	0.33	36	46.41
46-913SS	3/8"×3/8"	0.314"	2.65"	0.87"	1.5"	0.34	36	46.41
46-914SS	1/2"×1/2"	0.314"	2.47"	0.98"	1.5"	0.63	36	60.78





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

#304 STAINLESS STEEL

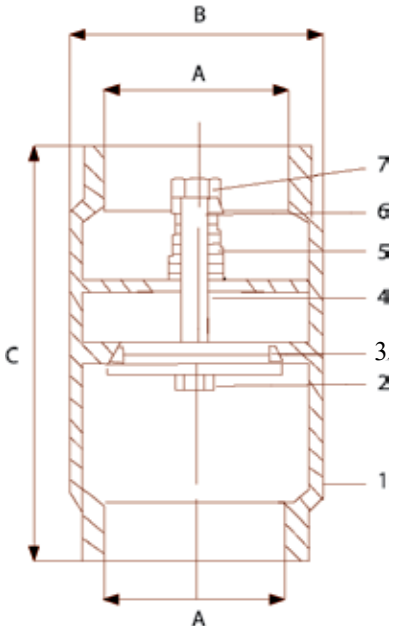
CHECK VALVE

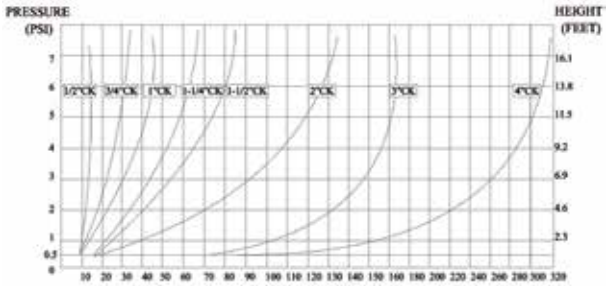
- No Lead.
- Water wells need a check valve installed above the pumps between lengths of drop pipes.
- Opens & Closes with flow of media.
- No cracking pressure.
- Working pressure unavailable.
- Made in Taiwan

Dimensions (Inches)

Part#	Size	A NPT	B	C	Box/Case	List Price
949-430	1/2"	1/2"	1.26	2.43	10/100	37.68
949-431	3/4"	3/4"	1.50	2.72	10/80	52.04
949-432	1"	1"	1.77	3.23	10/60	67.18

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

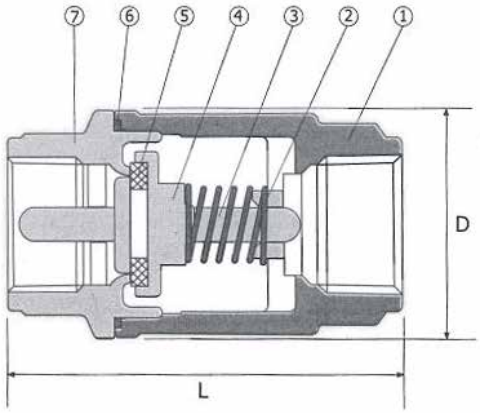
STAINLESS STEEL IN-LINE CHECK VALVE

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	List
949-401	1/4"	1.15	2.25	800	0.36	145.00
949-402	3/8"	1.16	2.25	800	0.34	145.00
949-403	1/2"	1.35	2.31	800	0.40	157.53
949-404	3/4"	1.81	2.87	800	0.85	215.00
949-405	1"	2.13	3.50	800	1.30	248.76
949-406	1-1/4"	2.46	4.18	800	2.50	496.88
949-407	1-1/2"	2.88	4.93	800	3.40	690.63
949-408	2"	3.56	6.00	800	6.0	1012.75



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

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

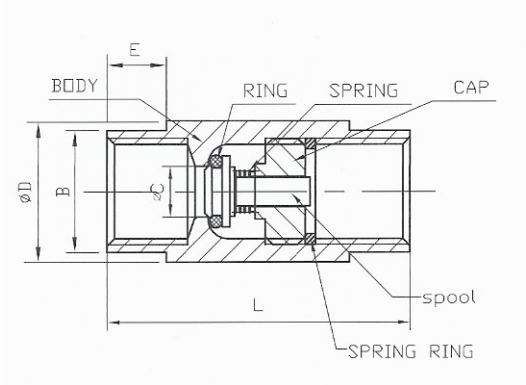
FEMALE PIPE x FEMALE PIPE

Part#	Size	L	C	D	B	E	lbs/ pc	Case	List Price
949-451	1/4"	2.165	.217	.748	.699	.394	.19	200	30.24
949-452	3/8"	2.165	.295	.866	.787	.394	.21	160	30.24
949-453	1/2"	2.165	.413	1.063	.945	.472	.31	100	34.92
949-454	3/4"	2.677	.591	1.417	1.26	.472	.71	60	50.70
949-455	1"	3.268	.787	1.693	1.496	.591	1.14	36	68.28

MALE PIPE x FEMALE PIPE

Part#	Size	L	C	D	B	E	lbs/ pc	Case	List Price
949-471	1/4"	2.165	.217	.748	.699	.394	.176	200	30.24
949-472	3/8"	2.165	.295	.866	.787	.394	.22	160	30.24
949-473	1/2"	2.165	.413	1.063	.945	.472	.27	100	34.92
949-474	3/4"	2.677	.591	1.417	1.26	.472	.62	65	50.70
949-475	1"	3.268	.787	1.693	1.496	.591	1.05	40	68.28

FLOWS MALE -> FEMALE

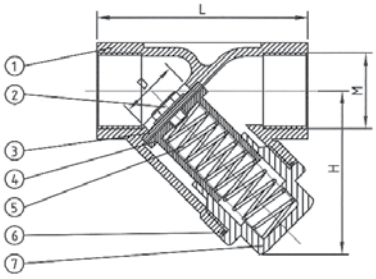


NO	Part	Material	QTY
1	BODY	316	1
2	RING	Rubber	1
3	SPRING	304	1
4	CAP	CF8M	1
5	SPOOL	304/316	1
6	SPRING RING	304	1

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	List Price
949-481	1/4"	2.559	1.661	.472	.44	70	35.10
949-482	3/8"	2.559	1.661	.472	.51	70	35.10
949-483	1/2"	2.559	1.634	.591	.51	100	39.00
949-484	3/4"	3.15	2.067	.787	.93	80	63.42
949-485	1"	3.543	2.657	.984	1.25	40	102.42
949-486	1-1/4"	4.134	2.795	1.26	2.20	30	117.06
949-487	1-1/2"	4.724	3.169	1.575	3.24	24	156.06
949-488	2"	5.512	3.74	1.969	5.21	10	224.34

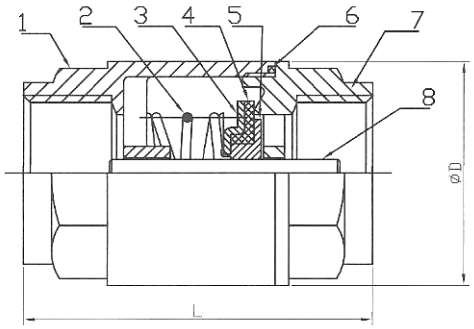


NO	Part	Material	QTY
1	BODY	CF8M/ CF8	1
2	BOLT	304	1
3	SEAT	Teflon	1
4	DISC	304	1
5	SPRING	304	1
6	GASKET	Teflon	1
7	CAP	CF8M/ CF8	1

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

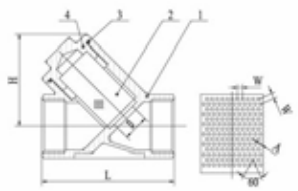
Part#	Size	L	D	lbs/pc	Case	List Price
949-441	1/4"	2.00	1.142	.27	100	30.24
949-442	3/8"	2.00	1.142	.24	100	30.24
949-443	1/2"	2.24	1.28	.36	100	34.92
949-444	3/4"	2.44	1.594	.54	60	45.84
949-445	1"	2.95	1.89	.88	30	66.30
949-446	1-1/4"	3.23	2.362	1.39	18	81.90
949-447	1-1/2"	3.46	2.756	1.81	25	113.16
949-448	2"	3.94	3.425	2.86	14	175.56



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

#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

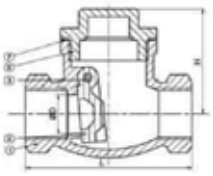
	Part	Material	QTY
1	BODY	CF8M	1
2	SCREEN	SS316	1
3	JOINT GASKET	PTFE	1
4	BONNET	CF8M	1

Part #	Size	d	L	H	W	ØA	Lbs	List Price
949-521	1/4"	.38"	2.53	51	1.69	1	0.44	27.41
949-522	3/8"	.48"	2.53	51	1.69	1	0.38	27.41
949-523	1/2"	.59"	2.53	51	1.76	1	0.46	28.50
949-524	3/4"	.79"	3.12	60	2.07	1	0.69	37.85
949-525	1"	.98"	3.57	72	2.67	1	1.27	57.06
949-526	1-1/4"	1.26"	4.17	77	2.9	1	1.74	68.09
949-527	1-1/2"	1.57"	4.71	87	3.23	1	2.38	93.42
949-528	2"	1.96"	5.49	102	3.88	1	3.57	128.88

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



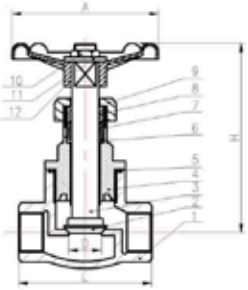
Part #	Size	D	L	W	Lbs	List Price
949-353	1/2"	.59"	2.45	1.66	0.53	39.86
949-354	3/4"	.79"	2.92	1.82	0.73	49.42
949-355	1"	.98"	3.41	2.06	1.2	64.02
949-356	1-1/4"	1.26"	3.93	2.32	1.79	75.93
949-357	1-1/2"	1.57"	4.54	2.54	2.18	126.15
949-358	2"	1.96"	5.3	2.78	3.03	146.04

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

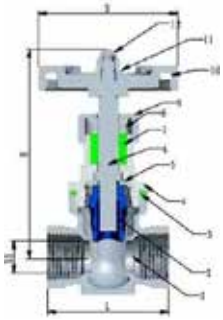


Part #	Size	L	Lbs	List Price
949-303	1/2	2.64	0.89	34.33
949-304	3/4	3.19	1.3	44.72
949-305	1	3.46	1.72	62.43
949-306	1-1/4	3.81	2.33	88.45
949-307	1-1/2	4.25	3.11	98.76
949-308	2	5.1	4.38	156.08

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



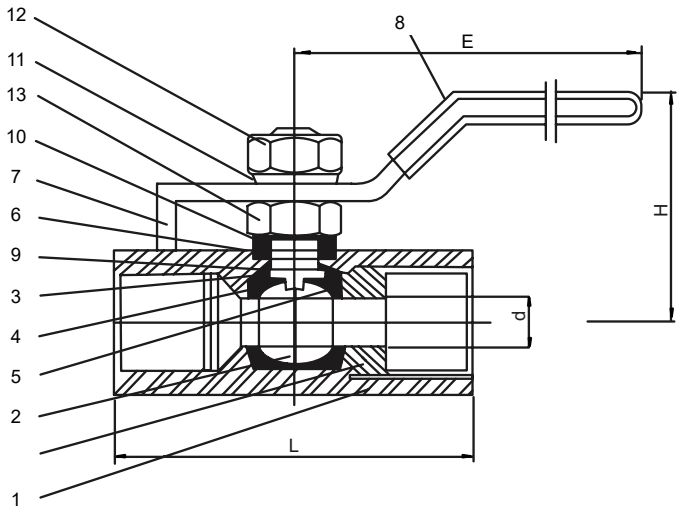
Part #	Size	L	D	D1	H	Lbs	List Price
949-253	1/2	2.07	2.54	0.55	3.37	0.78	37.45
949-254	3/4	2.28	2.89	0.74	4.03	0.99	46.79
949-255	1	2.42	2.89	0.95	4.46	1.25	63.70
949-256	1-1/4	2.79	3.06	1.18	4.86	1.76	95.49
949-257	1-1/2	2.92	3.79	1.49	5.53	2.59	121.75
949-258	2	3.3	4.17	1.85	6.12	3.54	177.95

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

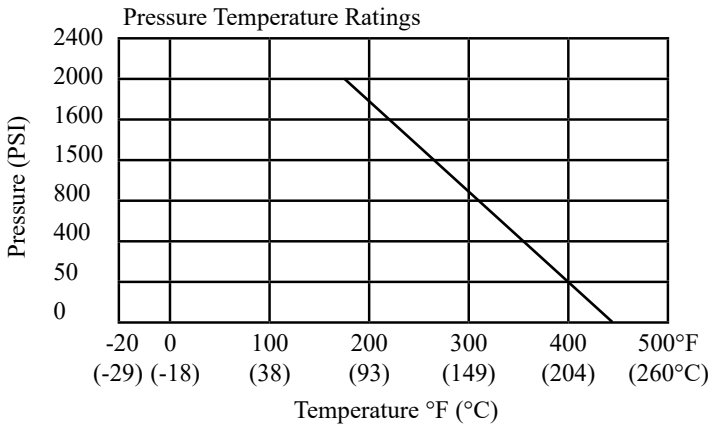
SPECIFICATIONS

- 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	List Price
949-121	1/4	.20	1.38	2.95	1.71	0.25	24/96	44.28
949-122	3/8	.28	1.30	3.27	1.87	0.32	100/200	45.58
949-123	1/2	.36	2.36	4.53	2.20	0.67	50/100	47.94
949-124	3/4	.49	2.72	4.53	2.58	1.06	50/100	49.96
949-125	1	.59	2.95	5.00	3.19	1.17	25/50	63.30
949-126	1-1/4	.78	3.07	5.29	3.94	3.15	15/30	109.08
949-127	1-1/2	0.98	3.39	5.29	3.94	2.15	15/30	120.33
949-128	2	1.26	3.86	5.29	4.49	6.21	10/20	204.69



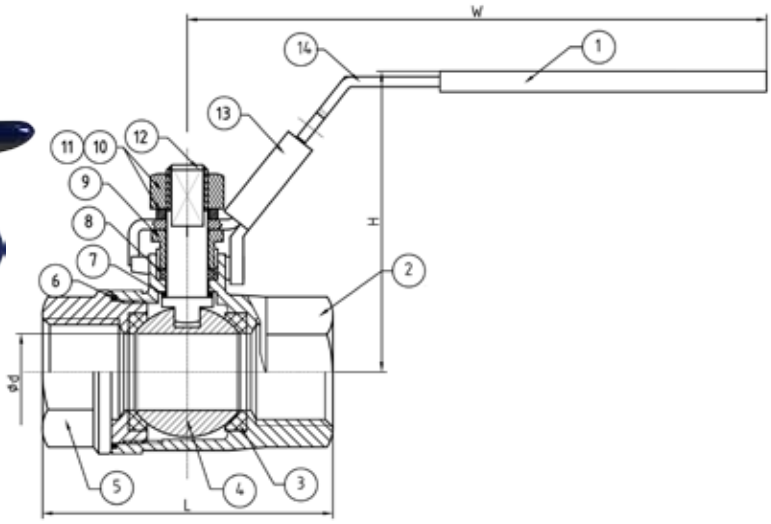
Item	Parts	Material
1	Body	ASTM A216 WCB
2	Ball	ASTM A351 CF8
3	Stem	304
4	Ball Seat	PTFE
5	Cap Seal	PTFE
6	Packing	PTFE
7	Handle	SS304
8	Handle Sleeve	Vinyl Grip
9	Thrust Washer	PTFE
10	Gland	SS304
11	Washer	SS304
12	Handle Nut	SS304
13	Stem Nut	SS304

2000 PSI CARBON STEEL 2PC FULL PORT BALL VALVE

• 2 PIECE

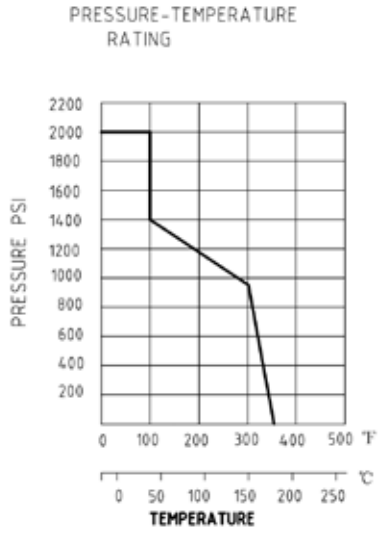
SPECIFICATIONS

- 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	List Price
949-111	1/4	0.36	2.13	2.13	4.33	0.59	70	48.15
949-112	3/8	0.50	2.13	2.17	4.33	0.59	70	48.15
949-113	1/2	0.59	2.24	2.28	4.33	0.75	60	53.12
949-114	3/4	0.79	2.76	2.40	4.33	1.17	50	58.63
949-115	1	0.98	3.25	3.03	5.04	1.88	30	67.60
949-116	1-1/4	1.26	3.58	3.19	5.04	2.45	20	119.58
949-117	1-1/2	1.50	4.06	3.54	6.10	4.06	20	131.32
949-118	2	1.97	4.90	4.25	6.10	2.43	7	225.86



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

HIGH PRESSURE FULL PORT 2-WAY VALVES

FULL PORT Two-Way

BKH

Part Number	Thread	Working Pressure	List Price
GE2-14-NPT	1/4" NPT	7250 PSI	53.81
GE2-38-NPT	3/8" NPT	7250 PSI	52.65
GE2-12-NPT	1/2" NPT	7250 PSI	66.95
GE2-34-NPT	3/4" NPT	5800 PSI	128.15
GE2-1-NPT	1" NPT	5075 PSI	160.20
GE2-114T-NPT*	1-1/4" NPT	5000 PSI	188.10
GE2-112T-NPT*	1-1/2" NPT	5000 PSI	250.00
GE2-2T-NPT	2" NPT	5000 PSI	428.57

Part Number	Thread	Working Pressure	List Price
GE2-04-SAE	7/16-20 UNF	7250 PSI	53.80
GE2-06-SAE	9/16-18 UNF	7250 PSI	54.82
GE2-08-SAE	3/4-16 UNF	7250 PSI	75.53
GE2-12-SAE	1-1/16-12 UNF	5800 PSI	115.52
GE2-16-SAE	1-5/16-12 UNF	5000 PSI	145.31
GB2-20T-SAE+	1-5/8-12 UNF	5000 PSI	SAE+
GB2-24T-SAE+	1-7/8-12 UNF	5000 PSI	SAE+
GB2-32T-SAE+	2-1/2-12 UNF	5000 PSI	SAE+

*** 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	List Price
GE3L-14-NPT	1/4" NPT	5880 PSI	142.86
GE3L-38-NPT	3/8" NPT	5880 PSI	108.84
GE3L-12-NPT	1/2" NPT	5145 PSI	116.10
GE3L-34-NPT	3/4" NPT	5145 PSI	167.62
GE3L-1-NPT	1" NPT	5145 PSI	203.17
GE3L-114T-NPT	1 1/4" NPT	4500 PSI	1073.92
GE3L-112T-NPT	1 1/2" NPT	4500 PSI	1668.80
GE3L-2T-NPT	2" NPT	4500 PSI	1456.69

Part Number	Thread	Working Pressure	List Price
GE3L-04-SAE	7/16-20 UNF	5880 PSI	177.72
GE3L-06-SAE	9/16-18 UNF	5880 PSI	185.79
GE3L-08-SAE	3/4-16 UNF	5145 PSI	222.15
GE3L-12-SAE	1-1/16-12 UNF	5145 PSI	179.95
GE3L-16-SAE	1-5/16-12 UNF	5145 PSI	214.06
GB3L-20T-SAE+	1-5/8-12 UNF	4500 PSI	SAE+
GB3L-24T-SAE+	1-7/8-12 UNF	4500 PSI	SAE+
GB3L-32T-SAE+	2-1/2-12 UNF	4500 PSI	SAE+

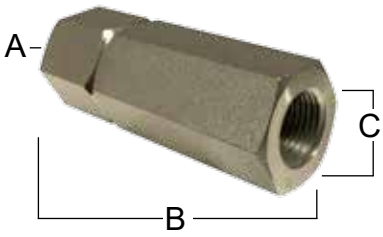
+ 'L' flow pattern

Temp Rating = -22° - 212°F

Construction: Steel Body, Ball, Stem
Zinc Chromate Plate
Buna "O" Rings (Viton on request)
Delrin Ball Seats

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	List Price
100025	1/4 NPT	2.44	.87	6	5,000	38.52
100035	3/8 NPT	2.87	.95	10	5,000	44.85
100045	1/2 NPT	3.76	1.26	18	5,000	60.35
100065	3/4 NPT	4.30	1.50	30	5,000	81.00
100085	1 NPT	4.74	1.83	36	5,000	118.92
1000105	1-1/4 NPT	5.56	2.40	50	3,000	281.14
1000125	1-1/2 NPT	5.56	2.56	60	3,000	138.86

CHECK VALVES - HARD SEAT CARBON STEEL CONSTRUCTION - 65lb Cracking Pressure

Part #	A Size	B Inches	C Inches	Rated Flow gpm	PSI	List Price
1000265	1/4NPT	2.45	.87	6	5,000	35.00
1000365	3/8NPT	2.91	.94	10	5,000	43.00
1000465	1/2NPT	3.74	1.18	18	5,000	55.00
1000665	3/4NPT	4.29	1.26	30	5,000	80.95
1000865	1NPT	5.00	1.81	36	5,000	112.00
10001065	1-1/4NPT	5.20	2.41	50	3,000	158.00
10001265	1-1/2NPT	5.20	2.56	60	3,000	162.00

CHECK VALVES - 5lb Cracking Pressure

• w/ SAE threads

Part #	A Size	B Inches	C Inches	Rated Flow gpm	PSI	List Price
100145	7/16-20 SAE	2.56	.87	6	5,000	32.00
100165	9/16-18 SAE	2.91	.94	10	5,000	45.45
100185	3/4-16 SAE	3.74	1.18	18	5,000	57.06
1001125	1-1/6-12 SAE	4.29	1.50	30	3,000	103.84
1001165	1-5/16-12 SAE	5.00	1.81	36	3,000	113.09
1001205	1-5/8-12 SAE	5.20	2.41	50	3,000	235.83
1001245	1-7/8-12 SAE	5.20	2.56	60	3,000	161.96

CHECK VALVES - 65lb Cracking Pressure

• w/ SAE threads

Part #	A Size	B Inches	C Inches	Rated Flow gpm	PSI	List Price
1001465	7/16-20 SAE	2.56	.87	6	5,000	37.00
1001665	9/16-18 SAE	2.91	.94	10	5,000	45.00
1001865	3/4-16 SAE	3.74	1.18	18	5,000	58.00
10011265	1-1/6-12 SAE	4.29	1.50	30	3,000	87.00
10011665	1-5/16-12 SAE	5.00	1.81	36	3,000	123.00
10012065	1-5/8-12 SAE	5.20	2.41	50	3,000	175.00
10012465	1-7/8-12 SAE	5.20	2.56	60	3,000	179.00

Rated Pressure: Sizes 2 thru 8 - 5000 psi / Sizes 10 thru 24 - 3000 psi

• Soft Seat available by special quote

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 •NSF approved
•Rated for 150 PSI at 73°F • Threaded ends comply with ANSI B1.20.1

MOLDED IN PLACE - WHITE PIPE THREADS

Part#	Size	Case	List Price
940-284	1/2"	100	5.14
940-285	3/4"	100	7.99
940-286	1"	100	11.99
940-287	1-1/4"	100	21.99
940-288	1-1/2"	48	22.03
940-289	2"	24	38.07
940-291	3"	12	139.43
940-292	4"	6	193.12

WHITE SOCKET - SLIP X SLIP

Part #	Size	Case	List Price
940-294	1/2"	100	6.07
940-295	3/4"	100	8.56
940-296	1"	100	12.44
940-297	1-1/4"	100	21.62
940-298	1-1/2"	48	26.75
940-299	2"	24	29.03
940-300	2-1/2"	12	102.83
940-301	3"	12	136.84
940-302	4"	6	259.71

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	List Price
899000	1/2"	100	16.75
899001	3/4"	100	16.08
899002	1"	100	22.83
899003	1-1/4"	100	28.57
899004	1-1/2"	48	47.71
899005	2"	24	60.02

SLIP X SLIP BALL VALVE

Part #	Size	Case	List Price
899050	1/2"	100	15.80
899051	3/4"	100	17.28
899052	1"	100	20.60
899053	1-1/4"	100	25.04
899054	1-1/2"	48	53.69
899055	2"	24	67.22

INLINE PLASTIC SPRING CHECK VALVE

Socket x Socket

• 200 PSI working pressure @ 77°F .5 PSI to open.

Part#	Size	List Price
940-325	1/2"	15.37
940-326	3/4"	15.23
940-327	1"	21.73
940-328	1-1/4"	29.13
940-329	1-1/2"	30.65
940-330	2"	36.01

INLINE PLASTIC SPRING CHECK VALVE FEMALE THREADED ENDS

• 200 PSI working pressure @ 77°F .5 PSI to open.

Part#	Size	List Price
940-331	1/2"	14.42
940-332	3/4"	17.06
940-333	1"	20.93
940-334	1-1/4"	29.04
940-335	1-1/2"	52.10
940-336	2"	50.58

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	List Price
46-277	3/4"	17.11

DRUM & BARREL FAUCET VALVE

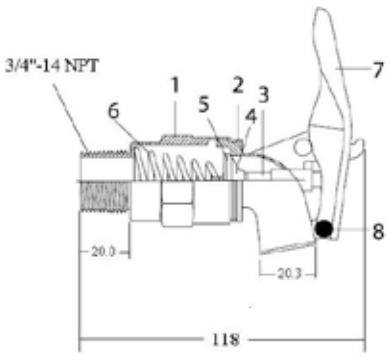
- Die cast body w/ nylon seat and steel spring.
- For use with all petroleum products except trichlorethylene.

G261N

Not suitable for potable water

SELF-CLOSING DRUM & BARREL FAUCET

Part #	Size	List Price
46-270	3/4"	13.87



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

NIPPLES & FITTINGS

BRASS & BRONZE 210-288

Brass Nipples - Sch 40 211-217
C/P Brass Nipples 218
Bronze Fittings 219-227
Lead Free Bronze Fittings 219-227
C/P Fittings 227
Bronze Cleanout Plugs 228
Bronze Drop Ear Elbows 228
Bronze Barbs for PL. Pipe 229
Steel Barbs for PL. Pipe 229
Lead Free Bronze Barbs for PL. Pipe 230
Stainless Steel Barbs for PL. Pipe 230
Stainless Steel Well Couplings 230
Stainless Steel Merchant Couplings 230

STAINLESS STEEL 231-244

Stainless Nipples 231-236
150# Cast SS Fittings 237-244

BLACK & GALVANIZED 245-281

Sch. 40 Welded Steel Nipples 245-253
Sch. 80 Seamless Steel nipple 254-259
Sch. XXS Seamless Steel Nipple 260
Groove Nipples 261-262
Merchant Couplings 263
API Line Couplings 264
Malleable Fittings 265-273
Steel Fittings 274-275
300# Malleable 276-277

Bull Plugs and Swages 278-279
Forged Steel Fanges 280-281

Copper Fittings 282-288

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.	List Price
40-001	Close (3/4")	25/400	0.02	4.37
40-002	x 1-1/2"	25/400	0.03	4.94
40-003	x 2"	25/400	0.04	5.29
40-004	x 2-1/2"	25/400	0.05	6.01
40-005	x 3"	25/400	0.06	6.48
40-006	x 3-1/2"	25/400	0.07	7.00
40-007	x 4"	25/400	0.08	7.85
40-008	x 4-1/2"	25/400	0.10	8.87
40-009	x 5"	25/400	0.11	9.60
40-010	x 5-1/2"	25/400	0.12	10.38
40-011	x 6"	25/400	0.13	11.13
40-012	x 7"	25/400	0.15	13.22
40-013	x 8"	25/400	0.17	14.59
40-014	x 9"	25/400	0.19	17.93
40-015	x 10"	25/400	0.21	19.61
40-017	x 12"	25/400	0.25	22.65
40-018	x 14"	1/1	0.29	24.37
40-019	x 16"	1/1	0.34	22.76

LEAD FREE

1/4"-18

1/4" DIAMETER SCH 40 SEAMLESS

Part #	Size	Box/Case	Approx. Wt. Lbs.	List Price
40-020	Close (7/8")	25/400	0.03	5.09
40-021	x 1-1/2"	25/400	0.05	5.90
40-022	x 2"	25/400	0.07	6.68
40-023	x 2-1/2"	25/400	0.09	7.24
40-024	x 3"	25/400	0.11	8.49
40-025	x 3-1/2"	25/400	0.13	9.24
40-026	x 4"	25/400	0.14	10.87
40-027	x 4-1/2"	25/400	0.16	11.81
40-028	x 5"	25/400	0.18	12.86
40-029	x 5-1/2"	25/400	0.20	13.95
40-030	x 6"	25/400	0.22	15.69
40-031	x 7"	25/200	0.25	17.88
40-032	x 8"	25/200	0.29	19.59
40-033	x 9"	25/200	0.33	21.77
40-034	x 10"	25/200	0.36	23.90
40-035	x 11"	25/200	0.40	31.71
40-036	x 12"	25/200	0.43	28.23

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.	List Price
40-040	Close (1")	25/400	0.05	5.29
40-041	x 1-1/2"	25/400	0.08	6.26
40-042	x 2"	25/400	0.10	7.60
40-043	x 2-1/2"	25/400	0.13	8.23
40-044	x 3"	25/400	0.16	10.08
40-045	x 3-1/2"	25/400	0.18	10.87
40-046	x 4"	25/400	0.21	12.94
40-047	x 4-1/2"	25/300	0.23	16.76
40-048	x 5"	25/300	0.26	15.10
40-049	x 5-1/2"	25/300	0.29	16.42
40-050	x 6"	25/300	0.31	17.78
40-051	x 7"	25/200	0.36	21.57
40-052	x 8"	25/150	0.42	24.18
40-053	x 9"	25/150	0.47	34.78
40-054	x 10"	25/100	0.52	28.81
40-055	x 11"	25/100	0.57	31.45
40-056	x 12"	25/100	0.62	34.11

LEAD FREE

1/2" - 14

1/2" DIAMETER SCH 40 SEAMLESS

Part #	Size	Box/Case	Approx. Wt. Lbs.	List Price
40-060	Close (1-1/8")	25/400	0.09	7.04
40-061	x 1-1/2"	25/400	0.12	8.15
40-062	x 2"	25/400	0.16	9.58
40-063	x 2-1/2"	25/300	0.20	11.40
40-064	x 3"	25/300	0.23	13.39
40-065	x 3-1/2"	25/300	0.27	15.27
40-066	x 4"	25/200	0.31	17.50
40-067	x 4-1/2"	25/200	0.35	19.01
40-068	x 5"	25/200	0.39	20.93
40-069	x 5-1/2"	25/200	0.43	23.00
40-070	x 6"	25/200	0.47	25.49
40-071	x 7"	25/100	0.55	29.52
40-072	x 8"	25/100	0.62	33.08
40-073	x 9"	25/100	0.70	36.71
40-074	x 10"	25/75	0.78	40.61
40-075	x 11"	25/75	0.86	54.03
40-076	x 12"	25/75	0.94	48.30

Behind every great man is a woman rolling her eyes. - Jim Carrey

SCH 40 SEAMLESS | BRASS NIPPPLES

LEAD FREE

3/4" - 14

3/4" DIAMETER SCH 40 SEAMLESS

Part #	Length	Box/Case	Approx. Wt. Lbs.	List Price
40-080	Close (1- 3/8")	25/400	0.15	10.16
40-081	x 1-1/2"	25/400	0.16	10.84
40-082	x 2"	25/300	0.21	12.79
40-083	x 2-1/2"	25/300	0.27	14.84
40-084	x 3"	25/200	0.32	17.11
40-085	x 3-1/2"	25/200	0.37	19.22
40-086	x 4"	25/150	0.43	22.34
40-087	x 4-1/2"	25/150	0.48	24.28
40-088	x 5"	25/100	0.53	26.81
40-089	x 5-1/2"	25/100	0.59	29.28
40-090	x 6"	25/100	0.64	32.62
40-091	x 7"	25/75	0.75	38.21
40-092	x 8"	25/75	0.85	43.04
40-093	x 9"	25/75	0.96	47.65
40-094	x 10"	25/50	1.06	52.51
40-095	x 11"	25/50	1.17	57.31
40-096	x 12"	25/50	1.28	62.50
40-097	x 18"	1/1	1.92	106.10
40-098	x 24"	1/1	2.56	79.59
40-099	x 36"	1/1	3.84	163.15

LEAD FREE

1" - 11 1/2

1" DIAMETER SCH 40 SEAMLESS

Part #	Length	Box/Case	Approx. Wt. Lbs.	List Price
40-100	Close (1-1/2")	25/200	0.23	14.98
40-101	x 2"	25/200	0.30	18.49
40-102	x 2-1/2"	25/150	0.38	21.57
40-103	x 3"	25/150	0.45	24.83
40-104	x 3-1/2"	25/100	0.53	28.75
40-105	x 4"	25/100	0.60	32.35
40-106	x 4-1/2"	25/100	0.68	36.07
40-107	x 5"	25/75	0.75	39.88
40-108	x 5-1/2"	25/75	0.83	43.68
40-109	x 6"	25/50	0.94	47.63
40-110	x 7"	25/50	1.05	55.63
40-111	x 8"	25/50	1.20	63.50
40-112	x 9"	25/50	1.35	70.86
40-113	x 10"	25/50	1.50	78.61
40-114	x 11"	25/50	1.65	84.80
40-115	x 12"	20/40	1.80	93.72

Laugh and the world laughs with you, snore and you sleep alone. - Anthony Burgess

LEAD FREE

1 1/4" - 11 1/2

1-1/4" DIAMETER SCH 40 SEAMLESS

Part #	Length	Box/Case	Approx. Wt. Lbs.	List Price
40-120	Close (1-5/8")	25/100	0.36	22.61
40-121	x 2"	25/100	0.44	25.82
40-122	x 2-1/2"	25/100	0.56	29.19
40-123	x 3"	25/100	0.67	34.56
40-124	x 3-1/2"	25/100	0.78	40.44
40-125	x 4"	25/50	0.89	45.51
40-126	x 4-1/2"	25/50	1.00	50.40
40-127	x 5"	25/50	1.11	55.58
40-128	x 5-1/2"	25/50	1.22	73.92
40-129	x 6"	25/50	1.33	66.41
40-130	x 7"	25/50	1.56	78.32
40-131	x 8"	25/50	1.78	88.72
40-132	x 9"	25/50	2.00	105.23
40-133	x 10"	25/50	2.22	109.71
40-134	x 11"	25/50	2.45	125.60
40-135	x 12"	25/50	2.67	159.62
40-136	x 18"	1/1	4.00	178.85

LEAD FREE

1-1/2" - 11 1/2

1-1/2" DIAMETER SCH 40 SEAMLESS

Part #	Length	Box/Case	Approx. Wt. Lbs.	List Price
40-140	Close (1-3/4")	25/100	0.46	29.40
40-141	x 2"	25/100	0.53	31.63
40-142	x 2-1/2"	25/50	0.66	37.88
40-143	x 3"	25/50	0.79	43.54
40-144	x 3-1/2"	25/50	0.93	50.01
40-145	x 4"	25/50	1.06	56.72
40-146	x 4-1/2"	25/50	1.19	63.73
40-147	x 5"	20/40	1.32	70.51
40-148	x 5-1/2"	20/40	1.46	93.83
40-149	x 6"	20/40	1.59	83.81
40-150	x 7"	20/40	1.85	97.93
40-151	x 8"	20/40	2.12	111.28
40-152	x 9"	20/40	2.38	124.55
40-153	x 10"	20/40	2.65	137.85
40-154	x 11"	1/40	2.91	151.15
40-155	x 12"	1/15	3.18	164.43
40-156	x 18"	1/1	4.77	207.44

SCH 40 SEAMLESS | BRASS NIPPPLES

LEAD FREE

2" - 11 1/2

2" DIAMETER SCH 40 SEAMLESS

Part #	Length	Box/Case	Approx. Wt. Lbs.	List Price
40-160	Close (2")	25/50	0.69	44.77
40-161	x 2-1/2"	25/50	0.86	48.32
40-162	x 3"	25/50	1.03	55.78
40-163	x 3-1/2"	25/50	1.20	64.21
40-164	x 4"	1/25	1.37	72.96
40-165	x 4-1/2"	1/25	1.54	81.36
40-166	x 5"	1/25	1.72	90.22
40-167	x 5-1/2"	1/25	1.89	98.96
40-168	x 6"	1/25	2.06	107.72
40-169	x 7"	1/20	2.40	126.01
40-170	x 8"	1/18	2.74	143.70
40-171	x 9"	1/18	3.09	160.24
40-172	x 10"	1/18	3.43	216.46
40-173	x 11"	1/18	3.77	192.34
40-174	x 12"	1/14	4.12	212.28
40-175	x 18"	1/1	6.18	227.72
40-176	x 24"	1/1	8.24	303.63
40-178	x 36"	1/1	12.36	467.57
40-179	x 48"	1/1	16.48	712.58

LEAD FREE

2 1/2" - 8

2-1/2" DIAMETER SCH 40 SEAMLESS

Part #	Length	Box/Case	Approx. Wt. Lbs.	List Price
40-180	Close (2-1/2")	1/36	1.26	118.14
40-181	x 3"	1/36	1.51	123.52
40-182	x 3-1/2"	1/30	1.76	139.95
40-183	x 4"	1/30	2.02	155.57
40-184	x 4-1/2"	1/30	2.27	157.38
40-185	x 5"	1/20	2.52	161.89
40-186	x 5-1/2"	1/20	2.77	197.75
40-187	x 6"	1/20	3.03	216.49

The road to success is always under construction. - Lily Tomlin

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.	List Price
40-200	Close (2-5/8")	1/24	1.89	160.66
40-201	x 3"	1/20	2.16	166.96
40-202	x 3-1/2"	1/18	2.52	229.68
40-203	x 4"	1/18	2.88	212.73
40-204	x 4-1/2"	1/18	3.24	233.85
40-205	x 5"	1/18	3.60	257.28
40-206	x 5-1/2"	1/18	3.96	279.55
40-207	x 6"	1/12	4.32	303.90
40-209	x 8"	1/1	5.76	403.98

LEAD FREE

4" DIAMETER SCH 40 SEAMLESS

Part #	Size	Box/Case	Approx. WT. Lbs.	List Price
40-220	Close (2-7/8)	1/20	2.40	170.23
40-221	x 3"	1/10	2.72	186.31
40-222	x 3-1/2"	1/10	3.18	209.19
40-223	x 4"	1/10	3.71	286.51
40-224	x 4-1/2"	1/5	4.24	257.69
40-225	x 5"	1/5	4.77	346.13
40-226	x 5-1/2"	1/5	5.30	303.50
40-234	x 6"	1/5	6.36	335.12

LEAD FREE

6" DIAMETER SCH 40 SEAMLESS

Part #	Size	Box/Case	Approx. WT. Lbs.	List Price
40-254	Close	1/1	4.94	590.69
40-256	x 4"	1/1	6.54	761.05
40-259	x 4-1/2"	1/1	7.12	824.74
40-260	x 5"	1/1	7.91	965.90
40-261	x 6"	1/1	9.49	1125.70

CHROME PLATED BRASS NIPPPLES

LEAD FREE

3/8" DIAMETER CHROME PLATED

Part #	Size	Box/Case	Approx. Wt. Lbs.	List Price
41-040	X Close	5/25	0.05	9.38
41-041	x 1-1/2"	5/25	0.08	11.11
41-042	x 2"	5/25	0.10	13.49
41-043	x 2-1/2"	5/25	0.13	13.26
41-044	x 3"	5/25	0.16	17.89
41-045	x 3-1/2"	5/25	0.18	19.30
41-046	x 4"	5/25	0.21	22.96
41-047	x 4-1/2"	5/25	0.23	22.14
41-048	x 5"	5/25	0.26	26.82
41-049	x 5-1/2"	5/25	0.29	29.16
41-050	x 6"	5/25	0.31	31.54

LEAD FREE

1/2" DIAMETER CHROME PLATED

Part #	Size	Box/Case	Approx. Wt. Lbs.	List Price
41-060	X Close	5/25	0.09	12.51
41-061	x 1-1/2"	5/25	0.12	14.48
41-062	x 2"	5/25	0.16	17.01
41-063	x 2-1/2"	5/25	0.20	20.24
41-064	x 3"	5/25	0.23	23.76
41-065	x 3-1/2"	5/25	0.27	27.12
41-066	x 4"	5/25	0.31	31.08
41-067	x 4-1/2"	5/25	0.35	33.73
41-068	x 5"	5/25	0.39	37.16
41-069	x 5-1/2"	5/25	0.43	41.48
41-070	x 6"	5/25	0.47	45.25
41-074	x 10"	1/1	0.78	82.94

New Nickel Plated Brass Ball Valve with SS trim see page 173

See page 305 for Brass Cam & Groove Fittings

BRONZE FITTINGS

UL842, UL258, UL125,FM

Class 125 (150) For steam, water, gas, oil and air service

Standard specifications

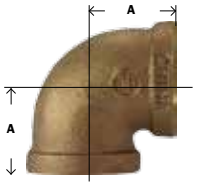
- UL/ FM Approved
- 1S0 9001:2000
- Not Lead Free
- RoHS Compliant

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

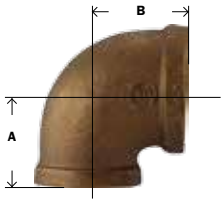
- Approved to ANSI/NSF 61-4 California AB 1953
- Meets Federal State Drinking Water Act, Lead Free Requirement
- Brass fittings conform to AWWA C800
- Brass castings conform to ASTM B584, UNS Alloy C8933
- Brass fittings dimensions conform to ASME B16.15
- NPT threads on all fittings conform to ASME B1.20.1
- Brass unions conform to specification A-A-59617
- Manufacturing facilities are ISO 9001:2008



90° ELBOWS

LEAD FREE

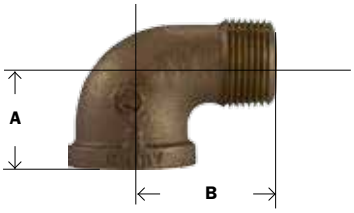
Part #	List Price	Approx. Wt. Lbs.	Box/Case	Size	A	Approx. Wt. Lbs.	Part #	List Price
44-100	7.27	0.08	50/600	1/8”	0.55	0.06	44-100LF	9.02
44-101	7.27	0.12	35/420	1/4”	0.72	0.10	44-101LF	5.88
44-102	7.27	0.17	90/360	3/8”	0.83	0.15	44-102LF	5.88
44-103	11.06	0.24	50/200	1/2”	1.03	0.25	44-103LF	8.94
44-104	14.87	0.34	35/105	3/4”	1.19	0.41	44-104LF	12.04
44-105	22.97	0.61	20/60	1”	1.43	0.69	44-105LF	18.58
44-106	36.53	0.95	20/40	1-1/4”	1.71	1.02	44-106LF	29.54
44-107	45.61	1.30	15/30	1-1/2”	1.87	1.36	44-107LF	36.87
44-108	74.27	2.07	8/16	2”	2.14	2.14	44-108LF	59.99
44-109	145.66	3.80	1/12	2-1/2”	2.74	3.79		
44-110	223.45	4.76	1/4	3”	3.10	5.21	44-110LF	248.68
44-112	538.88	9.71	1/2	4”	3.80	8.59		



90° REDUCING ELBOWS

LEAD FREE

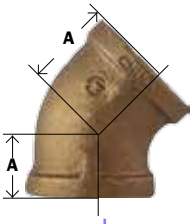
Part #	List Price	Approx. Wt. Lbs.	Box/Case	Size	A	B	Approx. Wt. Lbs.	Part #	List Price
44-123	11.94	0.44	60/240	1/2" x 1/4"	0.93	0.90	0.19		
44-124	11.94	0.58	60/240	1/2” x 3/8”	0.93	0.90	0.22	44-124LF	14.86
44-127	16.29	0.80	40/160	3/4” x 1/2”	1.08	1.11	0.31	44-127LF	20.21
44-131	28.60	1.07	50/100	1” x 3/4”	1.30	1.31	0.56	44-131LF	35.49
44-134	44.66	0.80	25/50	1-1/4” x 1”	1.52	1.60	0.81		
44-137	56.43	1.07	10/40	1-1/2” x 1”	1.56	1.72	1.02	44-137LF	62.80
				2" x 1"				44-140LF	115.86



90° STREET ELLS

LEAD FREE

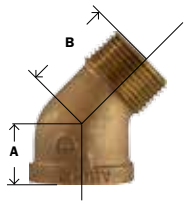
Part #	List Price	Approx. Wt. Lbs.	Box/Case	Size	A	B	Approx. Wt. Lbs.	Part #	List Price
44-160	11.06	0.07	60/720	1/8”	0.55	0.92	0.06	44-160LF	13.29
44-161	11.06	0.11	35/420	1/4”	0.72	1.11	0.11	44-161LF	8.94
44-162	11.06	0.18	60/240	3/8”	0.83	1.24	0.16	44-162LF	8.94
44-163	13.74	0.24	60/180	1/2”	1.03	1.51	0.24	44-163LF	11.12
44-164	19.40	0.37	35/105	3/4”	1.19	1.66	0.38	44-164LF	15.68
44-165	29.40	0.67	45/90	1”	1.43	1.98	0.66	44-165LF	25.95
44-166	49.10	1.00	25/50	1-1/4”	1.71	2.26	0.99	44-166LF	39.71
44-167	63.98	1.37	9/27	1-1/2”	1.87	2.46	1.15	44-167LF	51.72
44-168	108.47	1.93	8/16	2”	2.14	2.98	2.07	44-168LF	87.69
44-169	171.49	4.05	5/10	2-1/2”	2.74	3.92	3.79		
44-170	257.23	6.16	1/8	3”	3.10	4.45	6.38		



45° ELBOWS

LEAD FREE

Part #	List Price	Approx. Wt. Lbs.	Box/Case	Size	A	Approx. Wt. Lbs.	Part #	List Price
44-180	7.97	0.08	50/600	1/8”	0.43	0.05	44-180LF	8.86
44-181	7.97	0.13	30/360	1/4”	0.55	0.09	44-181LF	6.43
44-182	7.97	0.17	75/300	3/8”	0.63	0.14	44-182LF	21.23
44-183	10.10	0.21	50/200	1/2”	0.79	0.19	44-183LF	8.18
44-184	14.87	0.32	40/120	3/4”	0.91	0.36	44-184LF	12.04
44-185	25.15	0.52	20/60	1”	1.07	0.59	44-185LF	23.70
44-186	40.21	0.86	20/40	1-1/4”	1.23	0.87	44-186LF	32.50
44-187	50.39	1.10	10/30	1-1/2”	1.31	1.13	44-187LF	40.73
44-188	81.67	1.71	12/24	2”	1.47	1.65	44-188LF	66.01
44-189	160.59	3.24	1/12	2-1/2"	1.95	2.69		
44-190	258.16	4.12	1/10	3"	2.17	3.68		



45° STREET ELBOWS

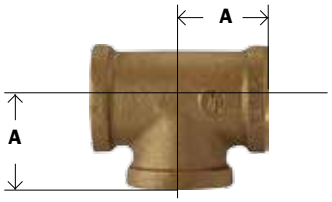
LEAD FREE

Part #	List Price	Approx. Wt. Lbs.	Box/Case	Size	A	B	Approx. Wt. Lbs.	Part #	List Price
44-200	11.26	0.06	70/840	1/8”	0.26	0.43	0.06		
44-201	13.45	0.11	100/400	1/4”	0.35	0.56	0.09	44-201LF	33.87
44-202	11.26	0.13	100/400	3/8”	0.37	0.63	0.12	44-202LF	33.87
44-203	13.74	0.18	75/225	1/2”	0.45	0.79	0.22	44-203LF	11.12
44-204	27.03	0.28	40/120	3/4”	0.52	0.91	0.31	44-204LF	15.68
44-205	32.08	0.52	25/75	1”	0.60	1.07	0.52	44-205LF	39.82
44-206	49.10	0.77	10/40	1-1/4”	0.67	1.23	0.72	44-206LF	39.71
44-207	65.96	0.97	10/30	1-1/2”	0.70	1.31	1.05	44-207LF	53.31
44-208	111.80	2.04	12/24	2”	0.76	1.47	2.04	44-208LF	124.41

CROSSES

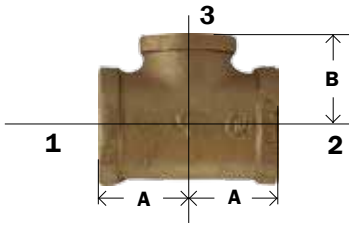
LEAD FREE

Part #	List Price	Approx. Wt. Lbs.	Box/Case	Size	A	Approx. Wt. Lbs.	Part #	List Price
44-391	16.90	0.20	60/240	1/4”	0.72	0.15	44-391LF	13.66
44-392	16.90	0.15	50/150	3/8”	0.83	0.25	44-392LF	21.91
44-393	20.53	0.45	30/90	1/2”	1.03	0.38	44-393LF	16.60
44-394	29.66	0.76	20/60	3/4”	1.19	0.59	44-394LF	23.98
44-395	47.04	1.04	15/30	1”	1.19	0.94	44-395LF	38.03
44-396	73.63	1.63	10/20	1-1/4”	1.71	1.43	44-396LF	95.55
44-397	94.06	2.10	8/16	1-1/2”	1.87	1.89	44-397LF	122.15
44-398	196.02	3.28	5/10	2”	2.14	2.95	44-398LF	158.44



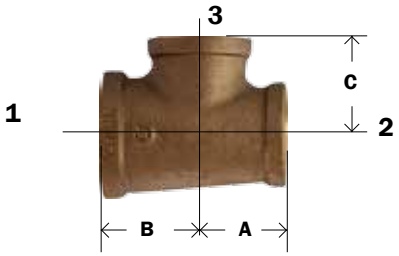
TEES

Part #	List Price	Approx. Wt. Lbs.	Box/Case	Size	A	Approx. Wt. Lbs.	Part #	List Price
44-250	10.10	0.11	120/480	1/8”	0.55	0.09	44-250LF	11.26
44-251	10.10	0.17	75/300	1/4”	0.72	0.13	44-251LF	8.18
44-252	10.10	0.25	45/180	3/8”	0.83	0.21	44-252LF	8.18
44-253	12.72	0.31	40/120	1/2”	1.03	0.35	44-253LF	10.29
44-254	18.30	0.50	35/70	3/4”	1.19	0.55	44-254LF	14.81
44-255	32.52	0.85	20/40	1”	1.43	0.92	44-255LF	26.29
44-256	45.61	1.29	14/28	1-1/4”	1.71	1.34	44-256LF	36.87
44-257	62.76	1.68	12/24	1-1/2”	1.87	1.82	44-257LF	50.73
44-258	102.80	2.70	8/16	2”	2.14	2.80	44-258LF	83.12
44-259	199.92	5.14	1/6	2-1/2”	2.74	4.70		
44-260	305.74	7.59	1/6	3”	3.10	6.69		



REDUCING TEES
REDUCING ON THE BRANCH

Part #	List Price	Approx. Wt. Lbs.	Box/Case	Size (1 & 2) x 3	A	B	Approx. Wt. Lbs.	Part #	List Price
44-276	15.44	0.24	40/160	1/2” x 1/4”	0.87	0.87	0.28	44-276LF	19.14
44-280	29.90	0.46	40/160	1/2" x 3/4"	2.42	1.155	0.48	44-280LF	21.92
44-282	21.92	0.43	25/100	3/4” x 1/4”	1.05	1.08	0.38	44-282LF	27.22
44-283	21.92	0.45	25/100	3/4” x 3/8”	1.00	1.00	0.46		
44-286	21.92	0.53	20/80	3/4” x 1/2”	1.08	1.11	0.40	44-286LF	17.73
44-291	40.08	0.60	15/60	1” x 1/2”	1.20	1.24	0.73	44-291LF	32.39
44-298	40.08	0.80	12/48	1” x 3/4”	1.30	1.31	0.71	44-298LF	32.39
44-301	70.02	0.85	20/40	1-1/4” x 1/2”	1.34	1.53	1.18	44-301LF	70.02
44-303	56.43	0.90	20/40	1-1/4” x 3/4”	1.30	1.31	1.08	44-303LF	62.80
44-306	56.43	1.21	20/40	1-1/4” x 1”	1.58	1.67	1.23	44-306LF	62.80
				2" x 1"			1.88	44-330LF	92.06
				2" x 1-1/4"			2.03	44-334LF	240.01



REDUCING TEES
REDUCING ON THE RUN

Part #	List Price	Size 1x2x3	A	B	C	Box/Case	Approx. Wt. Lbs.	Part #	List Price
44-287	24.12	3/4” x 1/2” x 1/2”	25/100	1.20	1.22	25/100	0.37	44-287LF	31.83
		3/4" x 1/2" x 3/4"					0.49	44-288LF	31.83
44-296	43.65	1” x 3/4” x 3/4”	15/60	1.37	1.45	10/40	0.71		

COUPLINGS

Part #	List Price	Approx. Wt. Lbs.	Box/Case	Size	A	Approx. Wt. Lbs.	Part #	List Price
44-410	7.27	0.12	70/840	1/8”	0.80	0.06	44-410LF	8.09
44-411	7.27	0.11	40/480	1/4”	0.80	0.09	44-411LF	5.88
44-412	7.27	0.15	40/480	3/8”	1.05	0.13	44-412LF	5.88
44-413	9.14	0.18	60/240	1/2”	1.29	0.21	44-413LF	7.37
44-414	12.05	0.28	50/150	3/4”	1.43	0.32	44-414LF	9.75
44-415	18.30	0.45	25/100	1”	1.68	0.53	44-415LF	14.81
44-416	28.60	0.63	16/64	1-1/4”	1.86	0.73	44-416LF	23.13
44-417	38.88	0.82	18/36	1-1/2”	1.92	0.97	44-417LF	31.42
44-418	63.98	1.38	12/24	2”	2.20	1.51	44-418LF	51.72
44-419	106.32	2.63	1	2-1/2"	2.88	2.20		
44-420	146.97	3.80	1	3”	3.18	3.63	44-420LF	163.56

REDUCING COUPLINGS

Part #	List Price	Approx. Wt. Lbs.	Box/Case	Size	A	Approx. Wt. Lbs.	Part #	List Price
44-430	7.81	0.08	70/840	1/4” x 1/8”	0.88	0.08	44-430LF	8.67
44-431	7.81	0.11	35/420	3/8” x 1/8”	0.92	0.10		
44-432	7.81	0.13	30/360	3/8” x 1/4”	0.92	0.11	44-432LF	6.30
44-433	11.26	0.16	75/300	1/2” x 1/8”	1.17	0.14		
44-434	9.72	0.16	75/300	1/2” x 1/4”	1.17	0.16	44-434LF	7.87
44-435	9.72	0.18	60/240	1/2” x 3/8”	1.17	0.17	44-435LF	7.87
44-436	16.09	0.23	45/180	3/4” x 1/4”	1.35	0.20	44-436LF	13.01
44-437	14.48	0.24	45/180	3/4” x 3/8”	1.35	0.23	44-437LF	17.97
44-438	14.48	0.23	60/180	3/4” x 1/2”	1.35	0.26	44-438LF	11.71
44-440	27.15	0.40	30/120	1” x 3/8”	1.56	0.40		
44-441	24.08	0.33	30/120	1” x 1/2”	1.56	0.38	44-441LF	19.47
44-442	24.08	0.44	25/100	1” x 3/4”	1.56	0.43	44-442LF	19.47
44-444	46.14	0.62	25/75	1-1/4” x 1/2”	1.77	0.60	44-444LF	51.36
44-445	38.88	0.64	25/75	1-1/4” x 3/4”	1.77	0.57	44-445LF	31.42
44-446	38.88	0.54	15/60	1-1/4” x 1”	1.77	0.65	44-446LF	31.42
44-447	55.29	0.80	20/60	1-1/2” x 1/2”	1.80	0.77		
44-448	55.29	0.83	15/60	1-1/2” x 3/4”	1.80	0.74	44-448LF	44.71
44-449	49.10	0.68	25/50	1-1/2” x 1”	1.80	0.83	44-449LF	39.71
44-450	49.10	0.99	12/48	1-1/2” x 1-1/4”	1.80	0.87	44-450LF	39.71
44-458	82.25	1.28	12/36	2” x 1/2”	2.03	1.07		
44-451	82.25	0.97	12/36	2” x 3/4”	2.03	1.25	44-451LF	91.54
44-452	82.25	1.40	12/36	2” x 1”	2.03	1.19	44-452LF	66.50
44-453	72.99	1.09	9/27	2” x 1-1/4”	2.03	1.22	44-453LF	60.27
44-454	72.99	3.60	9/27	2” x 1-1/2”	2.03	1.28	44-454LF	58.96
44-461	129.30	1.26	1	2-1/2” x 1-1/2”	3.15	1.94		
44-462	129.34	2.29	1	2-1/2” x 2”	3.15	2.37	44-462LF	143.89
44-456	171.36	2.49	1	3” x 2”	3.69	2.46		
44-463	171.36	3.92	1	3” x 2-1/2”	3.69	3.82		

LEAD FREE

CAPS

Part #	List Price	Approx. Wt. Lbs.	Box/Case	Size	A	Approx. Wt. Lbs.	Part #	List Price
44-470	5.44	0.04	80/160	1/8”	0.53	0.03	44-470LF	6.07
44-471	5.44	0.06	80/960	1/4”	0.58	0.06	44-471LF	11.13
44-472	5.44	0.10	60/720	3/8”	0.66	0.09	44-472LF	6.07
44-473	7.27	0.13	75/300	1/2”	0.75	0.13	44-473LF	5.88
44-474	9.61	0.19	40/160	3/4”	0.87	0.21	44-474LF	7.77
44-475	15.06	0.30	25/100	1”	1.03	0.35	44-475LF	12.18
44-476	22.90	0.51	20/80	1-1/4”	1.10	0.52	44-476LF	18.52
44-477	30.92	0.66	18/54	1-1/2”	1.12	0.65	44-477LF	25.00
44-478	52.47	1.00	12/36	2”	1.35	1.14	44-478LF	42.44
44-480	159.33	2.74	1	3”	1.83	2.64		

LEAD FREE

UNIONS

Part #	List Price	Approx. Wt. Lbs.	Box/Case	Size	A	Approx. Wt. Lbs.	Part #	List Price
44-600	25.78	0.17	40/160	1/8”	1.18	0.13	44-600LF	28.71
44-601	25.78	0.25	40/160	1/4”	1.26	0.27	44-601LF	20.85
44-602	25.78	0.37	40/160	3/8”	1.50	0.39	44-602LF	46.66
44-603	28.04	0.52	50/100	1/2”	1.57	0.44	44-603LF	22.67
44-604	38.88	0.78	35/70	3/4”	1.89	0.59	44-604LF	31.42
44-605	51.49	1.18	20/40	1”	2.13	0.90	44-605LF	41.62
44-606	75.42	1.64	15/30	1-1/4”	2.36	1.33	44-606LF	60.96
44-607	89.00	2.08	10/20	1-1/2”	2.68	1.80	44-607LF	71.95
44-608	136.98	3.24	6/12	2”	2.99	2.66	44-608LF	110.75
44-609	269.56	5.31	4/8	2-1/2”	3.35	4.80		
44-610	416.45	6.94	4/8	3”	3.74	6.49		

• Straight Thread

HEX LOCKNUTS

Part #	Box/Case	Size	A	Thickness	Approx. Wt. Lbs.	List Price
44-700	180/720	1/8”	0.50	0.19	0.01	3.60
44-701	90/540	1/4”	0.66	0.25	0.03	3.60
44-702	90/540	3/8”	0.77	0.28	0.04	3.60
44-703	90/360	1/2”	0.97	0.31	0.09	5.79
44-704	90/360	3/4”	1.23	0.34	0.10	6.89
44-705	50/150	1”	1.50	0.38	0.17	10.28
44-706	45/180	1-1/4”	1.86	0.42	0.22	16.70
44-707	45/135	1-1/2”	2.12	0.47	0.29	21.66
44-708	25/75	2”	2.63	0.53	0.45	34.42

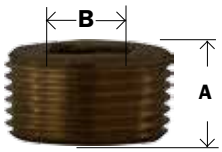
Hex

LEAD FREE

HEX BUSHINGS

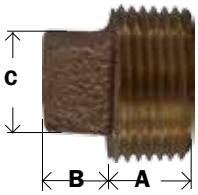
Part #	List Price	Approx. Wt. Lbs.	Box/Case	Size	A	Hex	Approx. Wt. Lbs.	Part #	List Price
44-500	4.92	0.02	120/1440	1/4" x 1/8"	0.58	0.66	0.03	44-500LF	7.15
44-501	4.92	0.06	75/900	3/8" x 1/8"	0.64	0.72	0.06	44-501LF	7.82
44-502	4.92	0.04	75/900	3/8" x 1/4"	0.64	0.75	0.04	44-502LF	6.15
44-503	6.89	0.10	150/600	1/2" x 1/8"	0.75	0.92	0.09	44-503LF	6.52
44-504	5.79	0.09	150/600	1/2" x 1/4"	0.75	0.93	0.10	44-504LF	4.68
44-505	5.79	0.08	150/600	1/2" x 3/8"	0.75	0.92	0.08	44-505LF	4.68
44-506	9.61	0.17	75/300	3/4" x 1/8"	0.87	1.15	0.17	44-506LF	10.70
44-507	9.61	0.15	75/300	3/4" x 1/4"	0.85	1.14	0.18	44-507LF	7.77
44-508	7.97	0.14	75/300	3/4" x 3/8"	0.85	1.14	0.17	44-508LF	6.43
44-509	7.97	0.14	75/300	3/4" x 1/2"	0.85	1.15	0.14	44-509LF	6.43
44-510*	14.63	0.23	50/200	1" x 1/4"	1.05	1.43	0.28	44-510LF*	11.82
44-511*	14.63	0.22	50/200	1" x 3/8"	1.05	1.50	0.26	44-511LF	16.28
44-512	12.05	0.25	50/200	1" x 1/2"	1.00	1.40	0.30	44-512LF	9.75
44-513	12.05	0.21	50/200	1" x 3/4"	1.00	1.43	0.21	44-513LF	9.75
44-514	24.79	0.34	30/120	1-1/4" x 1/4"	1.22	1.10	0.34		
44-515	58.02	0.35	30/120	1-1/4" x 3/8"	1.19	1.84	0.29		
44-516*	24.79	0.34	30/120	1-1/4" x 1/2"	1.14	1.33	0.39	44-516LF*	44.53
44-517	20.53	0.40	30/120	1-1/4" x 3/4"	1.08	1.75	0.43	44-517LF	16.60
44-518	20.53	0.33	30/120	1-1/4" x 1"	1.08	1.76	0.42	44-518LF	16.60
44-519*	32.08	0.47	25/75	1-1/2" x 1/4"	1.09	2.12	0.29	44-519LF	35.71
44-520*	32.08	0.45	25/75	1-1/2" x 3/8"	1.35	2.16	0.44	44-520LF	51.27
44-521*	32.08	0.44	25/75	1-1/2" x 1/2"	1.20	2.10	0.51	44-521LF*	25.95
44-522*	32.08	0.48	25/75	1-1/2" x 3/4"	1.20	2.12	0.54	44-522LF*	25.95
44-523	26.22	0.53	25/75	1-1/2" x 1"	1.14	2.08	0.57	44-523LF	21.21
44-524	26.22	0.45	25/75	1-1/2" x 1-1/4"	1.14	2.12	0.46	44-524LF	21.21
44-527*	46.83	0.67	20/60	2" x 1/2"	1.27	1.32	1.10	44-527LF	52.11
44-528*	46.83	0.74	20/60	2" x 3/4"	1.27	1.62	0.77	44-528LF	32.31
44-529*	46.83	0.76	20/60	2" x 1"	1.29	1.95	0.77	44-529LF*	37.85
44-530	38.88	0.86	20/60	2" x 1-1/4"	1.22	2.47	0.88	44-530LF	31.42
44-531	38.88	0.83	20/60	2" x 1-1/2"	1.22	2.50	0.71	44-531LF	31.42
44-532	96.41	1.16	15/30	2-1/2" x 1"	1.53	1.94	1.19		
44-534	92.71	1.36	15/30	2-1/2" x 1-1/2"	1.50	2.38	1.15	44-534LF	86.51
44-535	77.73	1.13	15/30	2-1/2" x 2"	1.43	2.97	1.12	44-535LF	86.51
44-537	152.80	1.82	12/24	3" x 1-1/2"	1.61	2.68	2.44		
44-538	117.53	2.33	12/24	3" x 2"	1.61	3.70	1.82	44-538LF	130.84
44-539	117.53	2.19	12/24	3" x 2-1/2"	1.53	3.70	2.11		
44-541	270.61	3.51	12/24	4" x 2"			3.86		
44-543	270.61	4.22	12/24	4" x 3"	2.01	4.62	3.56	44-543LF	300.01

* INSIDE HEX



BRONZE COUNTERSUNK PLUGS

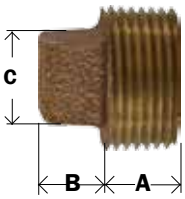
Part #	Size	A	Socket Size	Box/Case	Approx. Wt. Lbs.	List Price
44-633	1/2”	0.57	0.43	120/1440	0.06	5.95
44-634	3/4”	0.58	0.47	70/840	0.11	7.09
44-635	1”	0.75	0.59	20/240	0.22	12.74
44-636	1-1/4”	0.74	0.72	40/120	0.33	21.22
44-637	1-1/2”	0.79	0.72	30/90	0.50	31.87
44-638	2”	0.80	0.85	20/60	0.88	51.87
44-639	2-1/2"	1.08	1.25	1/1	1.56	95.15
44-640	3"	1.13	1.38	1/1	2.47	155.34
44-641	4"	1.22	2.12	1/1	3.21	323.05



LEAD FREE

CORED SQUARE HEAD PLUGS

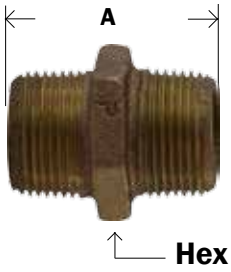
Part #	List Price	Approx. Wt. Lbs.	Box/Case	Size	A	B	C	Approx. Wt. Lbs.	Part #	List Price
44-650	5.44	0.02	300/3600	1/8”	0.27	0.24	0.28	0.02	44-670LF	5.56
44-651	5.44	0.04	150/1800	1/4”	0.41	0.28	0.37	0.04	44-671LF	5.98
44-652	5.44	0.06	100/1200	3/8”	0.41	0.31	0.43	0.06	44-672LF	6.12
44-653	7.60	0.10	50/600	1/2”	0.54	0.38	0.56	0.10	44-653LF	6.15
44-654	8.71	0.13	30/360	3/4”	0.55	0.44	0.62	0.13	44-654LF	7.87
44-655	11.48	0.25	20/240	1”	0.69	0.50	0.81	0.22	44-655LF	9.29
44-656	17.08	0.39	40/120	1-1/4”	0.71	0.56	0.93	0.32	44-656LF	13.83
44-657	21.79	0.57	30/90	1-1/2”	0.73	0.62	1.12	0.47	44-657LF	18.09
44-658	34.39	0.77	20/60	2”	0.76	0.68	1.31	0.68	44-658LF	27.79
44-659	58.85	1.25	16/32	2-1/2”	1.07	0.74	1.50	1.26		
44-660	94.06	2.02	16/32	3”	1.13	0.80	1.68	1.49		
44-662	183.75	3.20	6/12	4”	1.22	0.92	2.25	3.20		



SOLID SQUARE HEAD PLUGS

Part #	List Price	Size	A	B	C	Box/Case	Approx. Wt. Lbs.	Part #	List Price
44-670	5.79	1/8”	0.27	0.24	0.28	400/4800	0.02		
44-671	5.79	1/4”	0.41	0.28	0.37	150/1800	0.04		
44-672	4.83	3/8”	0.41	0.31	0.43	120/1440	0.06		
44-673	9.14	1/2”	0.54	0.38	0.56	50/600	0.12	44-673LF	10.16
44-674	11.92	3/4”	0.55	0.44	0.62	35/420	0.18	44-674LF	13.26
44-675	20.32	1”	0.69	0.50	0.81	20/240	0.36	44-675LF	22.59
44-676	36.59	1-1/4”	0.71	0.56	0.93	30/120	0.63	44-676LF	40.74
44-677	47.57	1-1/2”	0.73	0.62	1.12	30/90	0.84		
44-678	75.42	2”	0.76	0.68	1.31	10/60	1.27	44-678LF	83.91

HEX NIPPLES



Part #	Size	A	Hex	Box/ Case	Approx. Wt. Lbs.	List Price
44-720	1/8”	1.25	0.50	400/4800	0.05	8.47
44-721	1/4”	1.25	0.61	150/1800	0.06	14.05
44-722	3/8"	1.55	0.68	120/1440	0.11	14.44
44-723	1/2”	1.65	1.03	240/480	0.18	14.44
44-724	3/4”	1.77	1.21	80/320	0.24	15.16
44-725	1”	2.06	1.46	50/150	0.36	16.35
44-726	1-1/4”	2.12	1.81	50/100	0.47	33.95
44-727	1-1/2”	2.25	2.07	35/70	0.76	51.87
44-728	2”	2.50	2.41	20/40	1.50	62.76
44-729	2-1/2”	2.80	3.10	1	2.10	64.66

REDUCING HEX NIPPLES

Part #	Size	Box/Case	Approx. Wt. Lbs.	List Price
44-740	1/4" x 1/8"	1/1	0.06	14.51
44-742	1/2" x 3/8"	1/1	0.16	18.12
44-744	1" x 1/2"	1/1	0.31	30.92
44-750	1-1/2" x 1"	1/1	0.64	59.36
44-753	1-1/2" x 1-1/4"	1/1	0.68	63.44

See page 239 for Stainless Steel Reducing Hex Nipples

CHROME PLATED 90° ELBOW

LEAD FREE

Part #	Size	List Price
45-102LF	3/8"	49.09
45-103LF	1/2"	47.56

CHROME PLATED 90° ELBOW

LEAD FREE

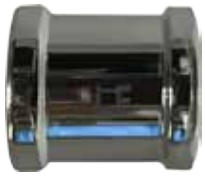
Part #	Size	List Price
45-163LF	1/2"	29.20

CHROME PLATED TEE

LEAD FREE

Part #	Size	List Price
45-252LF	3/8"	57.63
45-253LF	1/2"	55.86

CHROME PLATED COUPLING



LEAD FREE

Part #	Size	List Price
45-412LF	3/8"	41.06
45-413LF	1/2"	52.01

CLEANOUT PLUGS/ DROP EAR ELBOWS

NEW

• Southern Code

CAST BRASS SQUARE HEAD CLEANOUT PLUG

Part #	Size	Box/Case	List Price
970-300	1-1/2"	100/200	5.07
970-301	2"	100/200	6.27
970-302	2-1/2"	50/200	8.37
970-303	3"	20/160	13.90
970-304	3-1/2"	20/120	14.59
970-305	4"	10/80	17.21
970-330	5"	10/60	30.95
970-331	6"	10/40	43.66
970-332	8"	5/20	112.52
970-333	10"	1/1	157.95

• Southern Code

CAST BRASS COUNTERSUNK HEAD CLEANOUT PLUG

Part #	Size	Box/Case	List Price
970-306	1-1/2"	100/200	4.73
970-307	2"	100/200	8.94
970-308	2-1/2"	100/200	9.06
970-309	3"	50/200	11.62
970-310	3-1/2"	20/160	14.19
970-311	4"	20/120	21.03
970-312	5"	10/60	32.49
970-313	6"	10/40	44.46
970-314	8"	5/20	118.21

CAST BRASS COUNTERSUNK CLEANOUT W 1/4-20 TAP

Part #	Size	Box/Case	List Price
970-700	1-1/2"	1/1	7.41
970-701	2"	1/1	10.31
970-702	2-1/2"	1/1	13.90
970-703	3"	1/1	16.70
970-704	3-1/2"	1/1	24.85
970-705	4"	1/1	25.87
970-706	5"	1/1	47.53
970-707	6"	1/1	59.90

DROP EAR ELBOWS

• Lead Free Brass

• Lead Free Bronze

Part #	Swt x FIP	List Price
44840LF	1/2 x 1/2 Bronze	5.67
44841LF	1/2 x 1/2 Brass	4.27
44842LF	3/4 x 1/2 Brass	6.23
44843LF	3/4 x 3/4 Brass	7.84

• Lead Free Brass

Part #	Swt x Swt	List Price
44844LF	1/2 x 1/2	3.57

• Lead Free Bronze

Part #	Pex x FIP	List Price
44845LF	1/2 x 1/2	5.88

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	List Price
973-925	3/4" x 3/4"	10.65
973-927	1" x 1"	29.89
973-930	1" x 1-1/4"	26.88
973-928	1-1/4" x 1-1/4"	26.22
973-929	1-1/4" x 1"	27.89
973-948	1-1/2" x 1-1/2"	35.07
973-949	2" x 2"	49.89

BRONZE TEES ALL BARB

Part #	Size	List Price
973-965	3/4"	21.37
973-966	1"	30.91
973-967	1-1/4"	62.92

ELBOWS

(Barb x Male Pipe)

Part #	Size	List Price
973-980	3/4" x 3/4"	18.09
973-981	1" x 3/4"	24.02
973-982	1" x 1"	32.57

ELBOWS

(Barb x Barb)

Part #	Hose Size	List Price
973-975	3/4"	21.78
973-976	1"	24.14
973-977	1-1/4" x 1"	42.31
973-978	1-1/4"	48.17
973-979	1-1/2"	113.93

STEEL INSERT FITTINGS FOR PLASTIC PIPE

MALE ADAPTER

• Galvanized

(Barb x Male Pipe)

Part #	Size	Box/Case	List Price
973-906	1/2"	25/100	3.66
973-907	3/4"	25/10	4.74
973-908	1"	16/48	5.05
973-909	1-1/4"	12/36	7.30
973-910	1-1/2"	6/36	10.62
973-911	2"	5/25	16.42
973-912	2-1/2"	1/3	52.03
973-913	3"	1/3	57.12
973-914	4"	1/3	65.05

REDUCING ADAPTER

(Insert x NPT)

Part #	Size	List Price
974-264	3/4 x 1/2	6.30
974-265	1 x 3/4	7.61
974-266	1-1/4 x 1	23.94
974-267	1-1/2 x 1-1/4	29.14

COUPLINGS

Part #	Size	Box/Case	List Price
973-900	1/2	30/120	3.00
973-901	3/4	20/100	4.35
973-902	1	20/100	5.07
973-903	1-1/4	16/64	7.38
973-904	1-1/2	12/48	10.43
973-905	2	5/25	14.57

SS & LEAD FREE BRONZE INSERT

STAINLESS STEEL #304

NEW

#304 INSERT X MALE PIPE

• For coiled plastic pipe to submersible pump

Part #	Size	List Price
973947SS	1/2 x 1/2	8.48
973925SS	3/4 x 3/4	8.66
973926SS	1 x 3/4	13.78
973927SS	1 x 1	14.23
973930SS	1 x 1-1/4	18.02
973928SS	1-1/4 x 1-1/4	16.79
973948SS	1-1/2 x 1-1/2	24.74
973949SS	2 x 2	33.57

#304 INSERT X MIP ELBOW

• Hydrant elbow

Part #	Size	List Price
973980SS	3/4 x 3/4	21.91
973982SS	1 x 1	34.11
973985SS	1-1/4 x 1-1/4	46.68

LEAD FREE BRONZE INSERT FITTINGS

INSERT X INSERT

Part #	Size	List Price
973960LF	1/2	7.01
973961LF	3/4	9.86
973962LF	1	12.37
973963LF	1-1/4	19.55

INSERT TEE

Part #	Size	List Price
973965LF	3/4	14.14
973966LF	1	19.21
973967LF	1-1/4	43.43

BRONZE FITTINGS

INSERT X MALE BRANCH TEE

Part #	Size	List Price
973969LF	3/4	15.62
973970LF	1 x 3/4	20.12
973971LF	1	23.94

INSERT X INSERT ELBOW

Part #	Size	List Price
973975LF	3/4	11.17
973976LF	1	15.90

WELL COUPLINGS

304 SS DROP WELL COUPLINGS STANDARD

Part #	Size	List Price
62415DC	1	16.79
62416DC	1-1/4	22.97
62417DC	1-1/2	26.51
62418DC	2	35.01

HEAVY WALLED SS 304 DROP WELL COUPLINGS

Part #	Size	List Price
62415HDDC	1	23.15
62416HDDC	1-1/4	27.39
62417HDDC	1-1/2	34.10
62418HDDC	2	38.34

#304 STAINLESS STEEL MERCHANT COUPLINGS

Part #	Size	List Price
61775	1	14.00
61776	1-1/4	19.21
61777	1-1/2	22.17
61778	2	31.28

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.	List Price	Length	Box	Approx. Wt. Lbs.	Part # 316 S.S.	List Price
48-001	2.41	X Close (3/4")	25	0.01	49-001	3.00
48-002	3.17	x 1-1/2"	25	0.03	49-002	4.20
48-003	3.77	x 2"	25	0.04	49-003	5.12
48-004	4.37	x 2-1/2"	25	0.05	49-004	6.02
48-005	4.97	x 3"	25	0.06	49-005	6.94
48-006	5.58	x 3-1/2"	25	0.07	49-006	7.85
48-007	6.20	x 4"	25	0.07	49-007	8.78
48-008	6.80	x 4-1/2"	25	0.09	49-008	9.69
48-009	7.40	x 5"	25	0.10	49-009	10.63
48-010	8.03	x 5-1/2"	25	0.11	49-010	11.54
48-011	8.62	x 6"	25	0.12	49-011	12.46
48-015	12.14	x 10"	1	0.19		
		x 12"	1	0.24	49-017	23.43

1/4"-18

1/4" DIAMETER
SCH 40 WELDED

Part # 304 S.S.	List Price	Length	Box	Approx. Wt. Lbs.	Part # 316 S.S.	List Price
48-020	2.74	X Close (7/8")	25	0.02	49-020	3.38
48-021	3.39	x 1-1/2"	25	0.04	49-021	4.32
48-022	4.07	x 2"	25	0.06	49-022	5.26
48-023	4.82	x 2-1/2"	25	0.07	49-023	6.27
48-024	5.57	x 3"	25	0.09	49-024	7.39
48-025	6.31	x 3-1/2"	25	0.11	49-025	8.31
48-026	7.12	x 4"	25	0.13	49-026	9.41
48-027	7.88	x 4-1/2"	25	0.14	49-027	10.41
48-028	8.62	x 5"	25	0.16	49-028	11.44
48-029	9.38	x 5-1/2"	25	0.18	49-029	12.45
48-030	10.13	x 6"	25	0.19	49-030	13.46
48-031	11.70	x 7"	1	0.22	49-031	20.76
48-032	13.32	x 8"	1	0.25	49-032	15.96
		x 9"	1	0.31	49-033	21.36
48-034	16.31	x 10"	1	0.35	49-034	25.85
		x 11"	1	0.40	49-035	25.32
48-036	19.32	x 12"	1	0.44	49-036	23.35
		x 14"	1	0.46	49-037	41.94
		x 16"	1	0.47	49-038	34.62

#304

3/8"-18

3/8" DIAMETER
SCH 40 WELDED

#316

Part # 304 S.S.	List Price	Length	Box	Approx. Wt. Lbs.	Part # 316 S.S.	List Price
48-040	3.28	X Close (1")	25	0.03	49-040	4.16
48-041	3.97	x 1-1/2"	25	0.06	49-041	5.20
48-042	4.82	x 2"	25	0.07	49-042	6.38
48-043	5.73	x 2-1/2"	25	0.10	49-043	7.65
48-044	6.64	x 3"	25	0.12	49-044	8.93
48-045	7.58	x 3-1/2"	25	0.15	49-045	10.20
48-046	8.49	x 4"	25	0.17	49-046	11.47
48-047	9.41	x 4-1/2"	25	0.19	49-047	12.74
48-048	10.32	x 5"	25	0.22	49-048	14.03
48-049	11.23	x 5-1/2"	25	0.23	49-049	15.28
48-050	12.17	x 6"	25	0.26	49-050	16.57
48-052	16.12	x 8"	1	0.34	49-052	21.75
48-054	19.79	x 10"	1	0.43	49-054	26.80

1/2" - 14

1/2" DIAMETER
SCH 40 WELDED

Part # 304 S.S.	List Price	Length	Box	Approx. Wt. Lbs.	Part # 316 S.S.	List Price
48-060	4.22	X Close 1-1/8"	25	0.05	49-060	5.54
48-061	5.09	x 1-1/2"	25	0.07	49-061	6.82
48-062	6.11	x 2"	25	0.10	49-062	8.34
48-063	7.33	x 2-1/2"	25	0.14	49-063	10.09
48-064	8.53	x 3"	25	0.18	49-064	11.83
48-065	9.75	x 3-1/2"	25	0.20	49-065	13.57
48-066	11.00	x 4"	25	0.25	49-066	14.41
48-067	12.20	x 4-1/2"	25	0.28	49-067	17.11
48-068	13.41	x 5"	25	0.31	49-068	18.66
48-069	14.61	x 5-1/2"	25	0.34	49-069	20.59
48-070	15.84	x 6"	25	0.39	49-070	22.34
48-071	18.46	x 7"	1	0.41		
48-072	20.88	x 8"	1	0.52	49-072	29.24
48-073	23.30	x 9"	1	0.54		
48-074	25.73	10"	1	0.58	49-074	36.14
48-075	28.15	x 11"	1	0.64		
48-076	30.56	x 12"	1	0.69		

SCH 40 STAINLESS STEEL NIPPLES

STAINLESS STEEL

#304

3/4" - 14

3/4" DIAMETER
SCH 40 WELDED

#316

Part # 304 S.S.	List Price	Length	Box	Approx. Wt. Lbs.	Part # 316 S.S.	List Price
48-080	5.71	X Close (1-3/8")	25	0.08	49-080	7.23
48-081	6.07	x 1-1/2"	25	0.13	49-081	7.71
48-082	7.28	x 2"	25	0.14	49-082	9.43
48-083	8.75	x 2-1/2"	25	0.17	49-083	11.40
48-084	10.20	x 3"	25	0.22	49-084	13.37
48-085	11.67	x 3-1/2"	25	0.27	49-085	15.35
48-086	13.12	x 4"	25	0.32	49-086	17.31
48-087	14.59	x 4-1/2"	25	0.38	49-087	19.31
48-088	16.06	x 5"	25	0.40	49-088	21.26
48-089	17.52	x 5-1/2"	25	0.42	49-089	23.25
48-090	18.98	x 6"	25	0.48	49-090	25.23
48-091	22.07	x 7"	1	0.45		
48-092	24.99	x 8"	1	0.67	49-092	32.94
48-094	30.86	x 10"	1	0.94	49-094	41.18
48-096	36.71	x 12"	1	1.03		

1" - 11 1/2

1" DIAMETER
SCH 40 WELDED

Part # 304 S.S.	List Price	Length	Box	Approx. Wt. Lbs.	Part # 316 S.S.	List Price
48-100	7.49	X Close (1-1/2")	25	0.13	49-100	10.02
48-101	9.39	x 2"	25	0.20	49-101	12.72
48-102	11.14	x 2-1/2"	25	0.25	49-102	15.26
48-103	13.04	x 3"	25	0.33	49-103	17.95
48-104	14.92	x 3-1/2"	25	0.40	49-104	20.63
48-105	16.80	x 4"	25	0.47	49-105	23.33
48-106	18.69	x 4-1/2"	25	0.53	49-106	26.02
48-107	20.57	x 5"	25	0.55	49-107	28.69
48-108	22.46	x 5-1/2"	25	0.60	49-108	31.38
48-109	24.34	x 6"	25	0.71	49-109	34.06
48-110	28.50	x 7"	1	0.57		
48-111	32.29	x 8"	1	1.02	49-111	44.75
48-113	39.83	x 10"	1	1.16	49-113	55.38
48-115	49.24	x 12"	1	1.31		

1,000# 2 Piece FP #316 Stainless Steel Ball Valve on page 196

1 1/4" - 11 1/2

1-1/4" DIAMETER
SCH 40 WELDED

Part # 304 S.S.	List Price	Length	Box	Approx. Wt. Lbs.	Part # 316 S.S.	List Price
48-120	10.08	X Close (1-5/8")	10	0.17	49-120	13.72
48-121	11.86	x 2"	10	0.23	49-121	16.34
48-122	14.06	x 2-1/2"	10	0.35	49-122	19.57
48-123	16.46	x 3"	10	0.46	49-123	23.03
48-124	18.84	x 3-1/2"	10	0.52	49-124	26.50
48-125	21.23	x 4"	10	0.65	49-125	29.96
48-126	23.62	x 4-1/2"	10	0.53	49-126	33.42
48-127	26.02	x 5"	10	0.60	49-127	36.88
48-128	28.40	x 5-1/2"	10	0.61	49-128	40.35
48-129	30.78	x 6"	10	0.71	49-129	43.81
48-131	40.48	x 8"	1	1.34		
48-135	59.59	x 12"	1	1.54		

1-1/2" - 11 1/2

1-1/2" DIAMETER
SCH 40 WELDED

Part # 304 S.S.	List Price	Length	Box	Approx. Wt. Lbs.	Part # 316 S.S.	List Price
48-140	12.33	X Close x 1-3/4"	10	0.25	49-140	16.94
48-141	13.52	x 2"	10	0.32	49-141	18.76
48-142	16.35	x 2-1/2"	10	0.41	49-142	22.85
48-143	19.16	x 3"	10	0.52	49-143	26.94
48-144	21.99	x 3-1/2"	10	0.62	49-144	31.02
48-145	24.81	x 4"	10	0.73	49-145	35.11
48-146	27.64	x 4-1/2"	10	0.86	49-146	39.22
48-147	30.46	x 5"	10	0.95	49-147	43.29
48-148	33.28	x 5-1/2"	10	1.01	49-148	47.38
48-149	36.09	x 6"	10	1.19	49-149	51.47
48-151	47.69	x 8"	1	1.63	49-151	67.44
48-152	53.34	x 9"	1	1.88		
48-153	48.14	x 10"	1	2.28		
48-155	69.53	x 12"	1	2.43		

New SS Mini Ball Valves w/Viton O-Ring on page 198

SCH 40 STAINLESS STEEL NIPPLES

STAINLESS STEEL

2" DIAMETER
SCH 40 WELDED

Part # 304 S.S.	List Price	Length	Box	Approx. Wt. Lbs.	Part # 316 S.S.	List Price
48-160	19.15	X Close (2")	10	0.37	49-160	26.32
48-161	21.33	x 2-1/2"	10	0.54	49-161	30.11
48-162	24.68	x 3"	10	0.65	49-162	35.17
48-163	28.37	x 3-1/2"	10	0.88	49-163	40.56
48-164	32.04	x 4"	10	1.02	49-164	45.96
48-165	35.72	x 4-1/2"	10	1.16	49-165	51.34
48-166	39.40	x 5"	10	1.29	49-166	56.75
48-167	43.07	x 5-1/2"	10	1.46	49-167	62.13
48-168	46.75	x 6"	10	1.57	49-168	67.51
48-169	54.80	x 7"	1	1.92	49-169	79.06
48-170	62.16	x 8"	1	2.01	49-170	88.91
48-171	69.52	x 9"	1	2.55		
48-172	76.87	x 10"	1	2.69		
48-174	88.31	x 12"	1	2.89		

2-1/2" DIAMETER
SCH 40 WELDED

Part # 304 S.S.	Length	Box	Approx. Wt. Lbs.	List Price
48-180	X Close (2-1/2")	10	0.64	38.83
48-187	x 6"	1	2.37	77.67
48-193	x 12"	1	4.85	135.52

3" DIAMETER
SCH 40 WELDED

Part # 304 S.S.	List Price	Length	Box	Approx. Wt. Lbs.	Part # 316 S.S.	List Price
48-200	54.64	X Close (2-5/8")	10	0.95	49-200	70.15
48-201	60.32	x 3"	10	1.32	49-201	77.95
48-203	75.52	x 4"	10	1.66	49-203	90.69
48-205	86.49	x 5"	5	1.72	49-205	115.01
48-207	101.68	x 6"	5	1.88	49-207	135.78
48-209	136.92	x 8"	1	1.91	49-209	182.44
48-213	202.70	x 12"	1	2.12		

4" DIAMETER
SCH 40 WELDED

Part # 304 S.S.	List Price	Length	Box	Approx. Wt. Lbs.	Part # 316 S.S.	List Price
48-220	69.82	X Close (2-7/8")	8	1.15	49-220	94.75
		x 4"	1	2.98	49-223	126.35
48-227	130.52	x 6"	1	4.10	49-234	181.62
		x 8"	1	5.95	49-236	244.33
		x 12"	1	9.25	49-240	356.73

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

90° ELBOW
304 & 316 150#

Part # 304 S.S	List Price	Size	Box	Approx. Wt. Lbs.	Part # 316 S.S.	List Price
62-100	6.53	1/8”	25	0.06	63-100	8.37
62-101	6.53	1/4”	25	0.06	63-101	8.37
62-102	8.10	3/8”	25	0.11	63-102	10.16
62-103	8.62	1/2”	25	0.13	63-103	11.22
62-104	12.39	3/4”	25	0.20	63-104	16.27
62-105	17.55	1”	10	0.33	63-105	20.42
62-106	30.79	1-1/4”	10	0.55	63-106	35.01
62-107	40.99	1-1/2”	5	0.77	63-107	46.70
62-108	51.97	2”	5	1.10	63-108	59.04
62-109	118.40	2-1/2”	1	2.09	63-109	96.36
62-110	150.86	3”	1	2.84	63-110	134.33
62-112	294.41	4”	1	5.00	63-112	327.89

90° STREET ELBOW
304 & 316 150#

Part # 304 S.S	List Price	Size	Box	Approx. Wt. Lbs.	Part # 316 S.S.	List Price
62-160	9.32	1/8”	25	0.04	63-160	11.20
62-161	9.32	1/4”	25	0.07	63-161	11.42
62-162	11.22	3/8”	25	0.09	63-162	14.04
62-163	13.21	1/2”	25	0.15	63-163	16.52
62-164	18.33	3/4”	25	0.24	63-164	21.77
62-165	31.70	1”	10	0.31	63-165	34.75
62-166	46.04	1-1/4”	10	0.51	63-166	51.94
62-167	54.47	1-1/2”	5	0.84	63-167	57.85
62-168	73.76	2”	5	1.26	63-168	82.64
62-169	121.00	3"	1	4.16	63-170	275.75
		4"	1	7.61	63-171	544.58

45° ELBOW
304 & 316 150#

Part # 304 S.S	List Price	Size	Box	Approx. Wt. Lbs.	Part # 316 S.S.	List Price
62-180	8.25	1/8”	25	0.04	63-180	9.97
62-181	8.25	1/4”	25	0.07	63-181	9.97
62-182	9.70	3/8”	25	0.09	63-182	12.17
62-183	10.66	1/2”	25	0.13	63-183	13.35
62-184	15.55	3/4”	25	0.20	63-184	17.54
62-185	18.98	1”	10	0.33	63-185	21.97
62-186	30.40	1-1/4”	10	0.49	63-186	34.57
62-187	36.17	1-1/2”	5	0.66	63-187	41.10
62-188	50.89	2”	5	1.14	63-188	57.48
62-189	154.58	2-1/2"	1	2.82		
62-190	213.04	3"	1	2.91	63-190	239.98
62-191	379.13	4"	1	5.05	63-192	451.78

TEE
304 & 316 150#

Part # 304 S.S	List Price	Size	Box	Approx. Wt. Lbs.	Part # 316 S.S.	List Price
62-250	8.76	1/8”	25	0.07	63-250	10.40
62-251	8.76	1/4”	25	0.07	63-251	10.40
62-252	11.16	3/8”	25	0.11	63-252	13.79
62-253	11.70	1/2”	25	0.20	63-253	14.53
62-254	18.63	3/4”	25	0.29	63-254	21.43
62-255	23.72	1”	10	0.42	63-255	26.93
62-256	47.18	1-1/4”	5	0.66	63-256	53.58
62-257	58.64	1-1/2”	5	0.99	63-257	65.00
62-258	75.32	2”	3	1.43	63-258	83.74
62-259	146.86	2-1/2"	1	1.43		
62-260	232.83	3”	1	3.66	63-260	308.49
		4"	1	7.19	63-261	502.59

CROSS
304 & 316 150#

Part # 304 S.S	List Price	Size	Box	Approx. Wt. Lbs.	Part # 316 S.S.	List Price
		1/8”	25	0.06	63-390	18.81
62-391	15.23	1/4”	25	0.09	63-391	18.81
62-392	18.16	3/8”	25	0.13	63-392	22.13
62-393	22.36	1/2”	25	0.29	63-393	27.46
62-394	38.25	3/4”	10	0.44	63-394	47.99
62-395	56.62	1”	10	0.74	63-395	57.93
62-396	67.22	1-1/4”	5	1.25	63-396	83.74
62-397	83.29	1-1/2”	5	1.53	63-397	104.51
62-398	119.24	2”	1	2.28	63-398	143.97
		3"	1	5.46	63-400	488.69
		4"	1	9.41	63-401	791.84

HEX NIPPLE
304 & 316 150#

Part # 304 S.S	List Price	Size	Box	Approx. Wt. Lbs.	Part # 316 S.S.	List Price
62-720	6.36	1/8”	1	0.02	63-720	7.14
62-721	5.98	1/4”	1	0.04	63-721	7.14
62-722	7.06	3/8”	1	0.07	63-722	7.91
62-723	8.38	1/2”	1	0.11	63-723	9.37
62-724	10.30	3/4”	1	0.18	63-724	12.25
62-725	15.08	1”	1	0.22	63-725	16.86
62-726	23.10	1-1/4”	1	0.37	63-726	27.54
62-727	29.19	1-1/2”	1	0.46	63-727	32.68
62-728	46.89	2”	1	0.61	63-728	66.62

REDUCING HEX NIPPLE
304 & 316 150#

Part # 304 S.S	List Price	Size	Box	Approx. Wt. Lbs.	Part # 316 S.S.	List Price
62-740	6.58	1/4" x 1/8"	1	0.04	63-740	7.85
62-741	7.77	3/8" x 1/8"	1	0.07	63-741	8.71
62-742	7.77	3/8" x 1/4"	1	0.07	63-742	8.71
62-744	9.22	1/2" x 1/4"	1	0.09	63-744	10.31
62-745	9.22	1/2" x 3/8"	1	0.11	63-745	10.31
62-747	12.80	3/4" x 1/4"	1	0.15	63-747	14.83
62-748	11.33	3/4" x 3/8"	1	0.15	63-748	13.49
62-749	11.33	3/4" x 1/2"	1	0.15	63-749	13.49

304 & 316 150# SS FITTINGS — STAINLESS STEEL

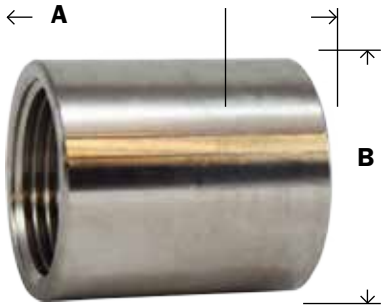
COUPLING
304 & 316 150#

Part # 304 S.S	List Price	Size*	Box	Approx. Wt. Lbs.	Part # 316 S.S.	List Price
62-410	5.47	1/8"	25	0.03	63-410	6.96
62-411	6.50	1/4"	25	0.06	63-411	6.96
62-412	7.57	3/8"	25	0.07	63-412	8.16
62-413	6.97	1/2"	25	0.13	63-413	8.07
62-414	10.07	3/4"	25	0.18	63-414	11.66
62-415	15.30	1"	25	0.24	63-415	17.38
62-416	24.31	1-1/4"	10	0.44	63-416	27.61
62-417	28.86	1-1/2"	10	0.51	63-417	32.82
62-418	40.68	2"	5	0.79	63-418	46.20
62-419	89.28	2-1/2"	1	1.28	63-419	108.55
62-420	115.42	3"	1	1.87	63-420	140.22
62-421	179.43	4"	1	2.80	63-421	216.56

REDUCING COUPLING
304 & 316 150#

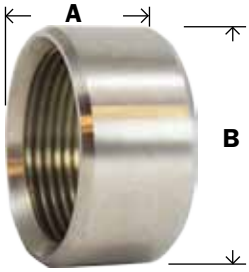
Part # 304 S.S	List Price	Size	Box	Approx. Wt. Lbs.	Part # 316 S.S.	List Price
62-430	6.82	1/4" x 1/8"	25	0.04	63-430	7.77
62-431	8.62	3/8" x 1/8"	25	0.04	63-431	8.62
62-432	7.58	3/8" x 1/4"	25	0.04	63-432	8.62
62-433	10.35	1/2" x 1/8"	25	0.09	63-433	10.35
62-434	7.23	1/2" x 1/4"	25	0.09	63-434	10.35
62-435	7.23	1/2" x 3/8"	25	0.09	63-435	10.35
62-455	12.83	3/4" x 1/8"	25	0.13	63-455	12.83
62-436	10.89	3/4" x 1/4"	25	0.11	63-436	13.28
62-437	10.89	3/4" x 3/8"	25	0.13	63-437	13.28
62-438	10.89	3/4" x 1/2"	25	0.15	63-438	13.28
		1" x 1/4"	25	0.25	63-459	24.17
62-440	21.90	1" x 3/8"	25	0.22	63-440	21.90
62-441	14.89	1" x 1/2"	25	0.24	63-441	21.90
62-442	14.89	1" x 3/4"	25	0.24	63-442	21.90
62-445	21.70	1-1/4" x 3/4"	10	0.33	63-445	28.59
62-446	21.70	1-1/4" x 1"	10	0.35	63-446	28.59
62-447	31.29	1-1/2" x 1/2"	10	0.40	63-447	38.18
62-448	31.29	1-1/2" x 3/4"	10	0.42	63-448	38.18
62-449	31.29	1-1/2" x 1"	10	0.44	63-449	38.18
62-450	31.29	1-1/2" x 1-1/4"	10	0.46	63-450	38.18
62-452	52.27	2" x 1"	5	0.57	63-452	64.39
62-453	52.27	2" x 1-1/4"	5	0.62	63-453	64.39
62-454	52.27	2" x 1-1/2"	5	0.62	63-454	64.39
62-428	176.16	3" x 1"	1	1.82		
62-456	176.16	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.	List Price
62-410B	5.46	1/8"	0.67	0.56	25	0.04	63-410B	6.35
62-411B	5.31	1/4"	0.94	0.71	25	0.04	63-411B	6.35
62-412B	6.80	3/8"	1.01	0.84	25	0.07	63-412B	6.93
62-413B	7.33	1/2"	1.33	1.01	25	0.09	63-413B	9.71
62-414B	10.15	3/4"	1.41	1.27	25	0.16	63-414B	13.64
62-415B	19.95	1"	1.69	1.54	10	0.21	63-415B	22.16
62-416B	26.05	1-1/4"	1.93	1.90	10	0.31	63-416B	31.07
62-417B	34.74	1-1/2"	1.93	2.16	5	0.41	63-417B	38.85
62-418B	50.39	2"	2.06	2.66	5	0.68	63-418B	58.24
62-420B	173.80	3"	3.23	3.76	1			

HALF COUPLING
304 & 316 150#



Part # 304 S.S	List Price	Size	A	B	Box	Approx. Wt. Lbs.	Part # 316 S.S.	List Price
62-771	2.83	1/4”	0.43	0.69	25	0.02	63-771	2.99
62-772	3.06	3/8”	0.41	0.81	25	0.02	63-772	5.83
62-773	4.25	1/2”	0.59	0.98	25	0.09	63-773	5.08
62-774	5.68	3/4”	0.67	1.22	25	0.11	63-774	6.46
62-775	7.29	1”	0.79	1.47	25	0.13	63-775	16.39
62-776	11.91	1-1/4”	0.95	1.83	10	0.24	63-776	19.71
62-777	15.27	1-1/2”	0.94	2.10	10	0.26	63-777	24.65
62-778	23.87	2”	1.06	2.60	5	0.44	63-778	29.38

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	22.04	1/8”	25	0.09	63-600	25.00
62-601	22.04	1/4”	25	0.13	63-601	25.00
62-602	22.46	3/8”	25	0.22	63-602	25.43
62-603	24.31	1/2”	25	0.26	63-603	27.61
62-604	30.79	3/4”	25	0.46	63-604	35.02
62-605	46.45	1”	10	0.60	63-605	52.87
62-606	80.59	1-1/4”	5	0.90	63-606	91.41
62-607	91.14	1-1/2”	5	1.10	63-607	103.75
62-608	109.11	2”	1	1.81	63-608	123.73
62-610	372.17	3”	1	3.40	63-610	442.14

CAP - CAST
304 & 316 150#

Part # 304 S.S	List Price	Size	Box	Approx. Wt. Lbs.	Part # 316 S.S.	List Price
62-470	3.29	1/8”	25	0.02	63-470	3.98
62-471	4.71	1/4”	25	0.02	63-471	5.36
62-472	5.54	3/8”	25	0.04	63-472	6.32
62-473	5.75	1/2”	25	0.07	63-473	7.31
62-474	7.19	3/4”	25	0.11	63-474	8.40
62-475	10.80	1”	10	0.18	63-475	12.86
62-476	19.57	1-1/4”	10	0.29	63-476	25.27
62-477	25.66	1-1/2”	10	0.40	63-477	32.42
62-478	32.72	2”	10	0.60	63-478	41.50
62-480	81.61	3”	1	1.28	63-480	85.54
62-481	135.73	4"	1	1.54		

HEX BUSHING
304 & 316 150#

Part # 304 S.S	List Price	Size M x F	Box	Approx. Wt. Lbs.	Part # 316 S.S.	List Price
62-500	4.25	1/4” x 1/8”	25	0.04	63-500	4.80
62-501	4.25	3/8” x 1/8”	25	0.04	63-501	5.48
62-502	4.65	3/8” x 1/4”	25	0.04	63-502	5.48
62-503	5.88	1/2” x 1/8”	25	0.09		
62-504	5.88	1/2” x 1/4”	25	0.09	63-504	6.44
62-505	5.88	1/2” x 3/8”	25	0.11	63-505	6.44
62-506	9.40	3/4" x 1/8"	25	0.13	63-506	9.57
62-507	4.84	3/4” x 1/4”	25	0.15	63-507	9.57
62-508	8.60	3/4” x 3/8”	25	0.15	63-508	10.81
62-509	8.60	3/4” x 1/2”	25	0.15	63-509	9.57
62-557	13.20	1" x 1/8"	25	0.27		
62-510	11.95	1" x 1/4"	25	0.22	63-510	13.66
62-511	11.95	1" x 3/8"	25	0.24	63-511	13.66
62-512	11.95	1” x 1/2”	25	0.24	63-512	13.66
62-513	11.95	1” x 3/4”	25	0.24	63-513	13.66
62-515	23.97	1-1/4” x 3/8”	25	0.37		
62-516	13.50	1-1/4” x 1/2”	25	0.37	63-516	26.70
62-517	21.40	1-1/4” x 3/4”	25	0.37	63-517	26.70
62-518	21.40	1-1/4” x 1”	25	0.37	63-518	26.70
62-521	25.61	1-1/2” x 1/2”	25	0.44	63-521	31.56
62-522	25.61	1-1/2” x 3/4”	25	0.46	63-522	31.56
62-532	31.30	1-1/2” x 1”	25	0.49	63-523	31.56
62-524	25.61	1-1/2” x 1-1/4”	25	0.46	63-524	31.56
62-559	43.11	2" x 1/4"	10	0.95		
62-527	39.06	2” x 1/2”	10	0.66	63-527	49.49
62-528	39.06	2” x 3/4”	10	0.66	63-528	44.82
62-529	39.06	2” x 1”	10	0.66	63-529	44.82
62-530	39.06	2” x 1-1/4”	10	0.68	63-530	44.82
62-531	39.06	2” x 1-1/2”	10	0.68	63-531	44.82
62-536	73.90	2-1/2" x 1"	5	1.70		
62-534	66.93	2-1/2” x 1-1/2”	5	1.23	63-534	76.16
62-535	66.93	2-1/2” x 2”	5	1.21	63-535	76.16
		3" x 1"	5	2.20	63-550	129.28
		3" x 1-1/2"	5	1.97	63-537	129.28
62-538	102.56	3” x 2”	5	1.72	63-538	117.11
62-539	102.56	3” x 2-1/2”	5	1.81		
		4" x 1-1/2"	5	3.92	63-540	232.54
		4" x 2"	1	3.72	63-541	232.54
62-543	186.64	4” x 3”	1	2.43	63-543	232.54

- SEE PAGE 13 FOR STAINLESS STEEL BULKHEAD FITTINGS
- SEE PAGE 230 FOR STAINLESS STEEL:
  - BARBED FOR PLASTIC PIPE
  - WELL COUPLINGS
  - MERCHANT COUPLINGS

HEX LOCKNUT
304 & 316 150#

• Straight Thread

Part # 304 S.S	List Price	Size	Box	Approx. Wt. Lbs.	Part # 316 S.S.	List Price
62-700	13.42	1/8"	25	0.02		
62-701	13.42	1/4”	25	0.05	63-701	14.63
62-702	13.42	3/8”	25	0.06	63-702	14.63
62-703	13.42	1/2”	25	0.07	63-703	14.63
62-704	16.36	3/4”	25	0.11	63-704	18.36
62-705	18.56	1”	25	0.15	63-705	20.63
62-706	38.38	1-1/4”	25	0.22	63-706	41.78
62-707	38.43	1-1/2”	25	0.29	63-707	52.00
62-708	42.26	2”	10	0.35	63-708	45.85

HEX SOCKET PLUG - BARSTOCK
304 & 316 150#

Part # 316 S.S	Size	Box	Approx. Wt. Lbs.	List Price
63-759	1/16"	1	0.03	3.92
63-760	1/8 "	1	0.05	3.51
63-761	1/4 "	1	0.07	5.00
63-762	3/8 "	1	0.10	8.52
63-763	1/2 "	1	0.14	11.73
63-764	3/4 "	1	0.21	28.12
63-765	1"	1	0.24	40.50

CORED SQUARE HEAD PLUG
304 & 316 150#

Part # 304 S.S	List Price	Size	Box	Approx. Wt. Lbs.	Part # 316 S.S.	List Price
62-670	2.82	1/8”	25	0.02	63-670	3.04
62-671	3.33	1/4”	25	0.03	63-671	3.86
62-672	4.46	3/8”	25	0.04	63-672	5.09
62-653	6.37	1/2”	25	0.06	63-653	7.19
62-654	7.77	3/4”	25	0.13	63-654	8.80
62-655	9.82	1”	25	0.20	63-655	10.99
62-656	19.57	1-1/4”	25	0.32	63-656	26.00
62-657	23.32	1-1/2”	10	0.41	63-657	28.72
62-658	27.59	2”	10	0.65	63-658	39.63
62-659	45.63	2-1/2"	1	1.04		
62-660	66.11	3”	1	0.88		

SOLID SQUARE HEAD PLUG
316 150#

Part # 316 S.S	Size	Box	Approx. Wt. Lbs.	List Price
63-680	1/8"	25	0.04	6.57
63-681	1/4"	25	0.04	8.84
63-682	3/8"	25	0.05	10.36
63-683	1/2"	25	0.06	15.54
63-684	3/4"	25	0.12	29.58

304 & 316 150# SS FITTINGS — STAINLESS STEEL

SOLID HEX HEAD PLUG
316 150#

Part # 316 S.S	Size	Box	Approx. Wt. Lbs.	List Price
63-660	1/8"	25	0.04	7.23
63-661	1/4"	25	0.06	9.10
63-662	3/8"	25	0.08	13.32
63-663	1/2"	25	0.12	23.68
63-664	3/4"	25	0.15	31.86
63-665	1"	25	0.24	46.23

CORED HEX HEAD PLUG
304 & 316 150#

Part # 304 S.S	List Price	Size	Box	Approx. Wt. Lbs.	Part # 316 S.S.	List Price
62-630	3.12	1/8”	25	0.02	63-630	3.87
62-631	3.12	1/4”	25	0.02	63-631	3.87
62-632	3.86	3/8”	25	0.04	63-632	4.37
62-633	6.09	1/2”	25	0.07	63-633	7.31
62-634	7.66	3/4”	25	0.11	63-634	9.24
62-635	13.21	1”	25	0.20	63-635	14.71
62-636	21.19	1-1/4”	25	0.31	63-636	25.40
62-637	23.20	1-1/2”	10	0.44	63-637	32.73
62-638	32.01	2”	10	0.65	63-638	43.38
		4"	1	2.77	63-641	221.00

HOSE NIPPLE
304 & 316 150#

HOSE BARB X MALE PIPE

Part # 304 S.S	List Price	Hose I.D. x Male Pipe	Box	Approx. Wt. Lbs.	Part # 316 S.S.	List Price
73-951	7.08	1/4”	1	0.04	973-951	7.14
73-952	10.99	3/8”	1	0.07	973-952	10.36
73-953	12.22	1/2”	1	0.13	973-953	16.35
73-954	14.55	3/4”	1	0.20	973-954	20.96
73-955	17.70	1”	1	0.33	973-955	20.58
73-956	27.73	1-1/4”	1	0.47	973-956	31.09
73-957	34.75	1-1/2”	1	0.67	973-957	53.95
73-958	44.69	2”	1	0.88	973-958	57.54
73-959	104.00	2-1/2”	1	1.45	973-959	133.67
73-960	119.24	3”	1	1.94	973-990	164.70
73-961	377.81	4”	1	3.57	973-991	204.55

REDUCING HOSE NIPPLE
304 & 316 150#

HOSE BARB X MALE PIPE

Part # 304 S.S	Hose I.D. x Male Pipe	Box	Approx. Wt. Lbs.	List Price
73-970	1/4” x 1/8”	1	0.04	7.64
73-971	3/8” x 1/4”	1	0.07	8.89
73-972	1/2” x 3/8”	1	0.13	12.23
73-973	1/2” x 1/4”	1	0.13	12.69
73-974	3/4” x 1/2”	1	0.20	15.69
73-975	1” x 3/4”	1	0.33	18.65
73-976	1” x 1/2”	1	0.33	29.90
73-977	1-1/4” x 1”	1	0.46	28.93
73-979	1-1/2” x 1-1/4”	1	0.66	46.69
73-980	1-1/2” x 1”	1	0.66	39.58
73-981	2” x 1-1/2”	1	0.88	56.00
73-982	2” x 1-1/4”	1	0.88	44.78

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 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

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	List Price	Length	Box/Case	Approx. Wt. Lbs.	Part # Black	List Price
56-001	2.29	X Close (3/4")	50/600	0.02	57-001	1.62
56-002	2.37	x 1-1/2"	50/600	0.03	57-002	1.83
56-003	2.65	x 2"	50/500	0.04	57-003	1.97
56-004	2.88	x 2-1/2"	100/400	0.06	57-004	2.19
56-005	3.27	x 3	50/300	0.07	57-005	2.43
56-006	3.50	x 3-1/2"	50/300	0.08	57-006	2.65
56-007	3.86	x 4"	50/300	0.09	57-007	3.07
56-008	4.96	x 4-1/2"	50/300	0.10	57-008	3.99
56-009	6.51	x 5"	50/300	0.11	57-009	4.60
56-010	7.02	x 5-1/2"	50/300	0.12	57-010	5.05
56-011	7.33	x 6"	50/300	0.13	57-011	5.59
56-012	9.14	x 7"	50/300	0.15	57-012	6.64
56-013	9.64	x 8"	50/300	0.18	57-013	7.02
56-014	10.13	x 9"	50/300	0.21	57-014	7.29
56-015	10.98	x 10"	50/300	0.25	57-015	7.76
56-017	12.30	x 12"	50/300	0.29	57-017	8.18

1/4"-18

Wall Thickness 0.068 - GradeB - Test Pressure 700 PSI - Thread Length 0.39

1/4" DIAMETER
SCH 40 WELDED

Part # Galv	List Price	Length	Box/Case	Approx. Wt. Lbs.	Part # Black	List Price
56-020	2.39	X Close (7/8")	50/600	0.04	57-020	1.96
56-021	2.56	x 1-1/2"	125/500	0.06	57-021	2.08
56-022	2.98	x 2"	125/500	0.06	57-022	2.31
56-023	3.43	x 2-1/2"	100/400	0.08	57-023	2.62
56-024	3.88	x 3	50/300	0.10	57-024	2.88
56-025	4.18	x 3-1/2"	50/300	0.12	57-025	3.19
56-026	4.36	x 4"	50/300	0.14	57-026	3.52
56-027	5.24	x 4-1/2"	50/300	0.17	57-027	4.27
56-028	6.17	x 5"	50/300	0.19	57-028	5.05
56-029	7.16	x 5-1/2"	50/300	0.21	57-029	5.57
56-030	7.48	x 6"	50/300	0.23	57-030	6.19
56-031	9.00	x 7"	50/100	0.27	57-031	7.27
56-032	9.17	x 8"	50/100	0.31	57-032	7.40
56-033	9.64	x 9"	50/100	0.35	57-033	8.06
56-034	11.57	x 10"	50/100	0.40	57-034	8.73
56-035	13.86	x 11"	50/100	0.44	57-035	9.14
56-036	14.11	x 12"	50/100	0.48	57-036	9.68
56-038	37.99	x 18"	50/100	0.54		

See page 204 for Standard port 2,000 Carbon Steel Ball Valve

STEEL NIPPLES — BLACK & GALVANIZED SCH 40

3/8" DIAMETER
SCH 40 WELDED

Wall Thickness 0.091 - Grade B - Test Pressure 700 PSI - Thread Length 0.6

Part # Galv	List Price	Length	Box/Case	Approx. Wt. Lbs.	Part # Black	List Price
56-040	2.79	X Close (1")	50/600	0.05	57-040	2.15
56-041	3.23	x 1-1/2"	125/500	0.07	57-041	2.29
56-042	3.34	x 2"	125/500	0.08	57-042	2.83
56-043	3.74	x 2-1/2"	100/400	0.11	57-043	2.79
56-044	4.20	x 3"	50/300	0.13	57-044	3.33
56-045	5.41	x 3-1/2"	50/300	0.16	57-045	3.52
56-046	5.41	x 4"	50/300	0.19	57-046	3.89
56-047	5.70	x 4-1/2"	50/200	0.21	57-047	4.27
56-048	7.39	x 5"	50/150	0.24	57-048	5.70
56-049	7.99	x 5-1/2"	50/150	0.27	57-049	6.04
56-050	8.39	x 6"	50/100	0.29	57-050	6.40
56-051	8.91	x 7"	50/100	0.35	57-051	7.67
56-052	9.30	x 8"	50/100	0.40	57-052	8.39
56-053	11.23	x 9"	50/100	0.45	57-053	8.94
56-054	11.57	x 10"	50/100	0.51	57-054	9.50
56-055	16.58	x 11"	50/100	0.56	57-055	10.04
56-056	12.34	x 12"	50/100	0.62	57-056	10.32
56-430	27.38	x 18"	5/10	0.71	57-430	34.80
		x 24"	1/1	1.02	57-431	25.56
		x 36"	1/1	1.54	57-433	33.03

1/2" DIAMETER
SCH 40 WELDED

Wall Thickness 0.109 - Grade B - Test Pressure 700 PSI - Thread Length 0.78

Part # Galv	List Price	Length	Box/Case	Approx. Wt. Lbs.	Part # Black	List Price
56-060	1.69	X Close (1-1/8")	50/600	0.08	57-060	1.52
56-061	1.91	x 1-1/2"	125/500	0.08	57-061	1.62
56-062	2.10	x 2"	125/500	0.12	57-062	1.73
56-063	2.21	x 2-1/2"	100/400	0.15	57-063	1.83
56-064	2.39	x 3"	50/300	0.19	57-064	2.06
56-065	2.65	x 3-1/2"	50/300	0.23	57-065	2.27
56-066	2.93	x 4"	50/300	0.27	57-066	2.56
56-067	3.27	x 4-1/2"	50/200	0.30	57-067	2.76
56-068	3.53	x 5"	50/150	0.34	57-068	3.04
56-069	3.75	x 5-1/2"	50/150	0.38	57-069	3.40
56-070	3.99	x 6"	50/100	0.42	57-070	3.63
56-071	6.40	x 7"	50/100	0.49	57-071	5.51
56-072	7.00	x 8"	50/100	0.57	57-072	5.93
56-073	8.14	x 9"	50/100	0.65	57-073	6.68
56-074	8.33	x 10"	50/100	0.72	57-074	7.11
56-075	8.98	x 11"	50/100	0.80	57-075	7.94
56-076	9.47	x 12"	40/80	0.87	57-076	11.58
56-240	14.78	x 18"	1/3	1.29	57-240	17.22
56-241	23.19	x 24"	1/3	1.74	57-241	21.07
56-242	24.99	x 30"	1/3	2.16	57-242	25.92
56-243	34.36	x 36"	1/3	2.61	57-243	28.00
56-244	71.46	x 42"	1/3	3.03	57-244	59.51
56-245	43.59	x 48"	1/3	3.48	57-245	33.75
56-246	48.92	x 60"	1/3	4.35	57-246	39.20
56-247	72.22	x 72"	1/3	5.22	57-247	49.94

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	List Price	Length	Box/Case	Approx. Wt. Lbs.	Part # Black	List Price
56-080	2.27	X Close (1-3/8")	50/300	0.13	57-080	2.06
56-081	2.39	x 1-1/2"	125/250	0.10	57-081	2.17
56-082	2.56	x 2"	125/250	0.15	57-082	2.28
56-083	2.77	x 2-1/2"	50/250	0.20	57-083	2.52
56-084	3.05	x 3"	50/200	0.24	57-084	2.76
56-085	3.37	x 3-1/2"	50/150	0.29	57-085	3.06
56-086	3.70	x 4"	50/150	0.34	57-086	3.36
56-087	4.03	x 4-1/2"	50/150	0.39	57-087	3.66
56-088	4.66	x 5"	50/150	0.43	57-088	4.06
56-089	5.32	x 5-1/2"	60/120	0.48	57-089	4.37
56-090	5.18	x 6"	50/100	0.53	57-090	4.72
56-091	8.78	x 7"	50/100	0.63	57-091	6.72
56-092	9.09	x 8"	50/100	0.72	57-092	7.47
56-093	9.91	x 9"	40/80	0.82	57-093	8.97
56-094	9.96	x 10"	40/80	0.91	57-094	9.39
56-095	12.42	x 11"	30/60	1.01	57-095	9.60
56-096	11.14	x 12"	30/60	1.10	57-096	9.96
56-250	18.25	x 18"	1/3	1.63	57-250	14.62
56-251	23.41	x 24"	1/3	2.20	57-251	17.94
56-252	26.10	x 30"	1/3	2.73	57-252	23.10
56-253	29.82	x 36"	1/3	3.30	57-253	27.34
56-254	76.69	x 42"	1/3	3.83	57-254	66.31
56-255	47.78	x 48"	1/3	4.40	57-255	36.34
56-256	56.89	x 60"	1/3	5.50	57-256	44.58
56-257	62.81	x 72"	1/3	6.60	57-257	49.09

See page 205 for Full port 2,000# Carbon Steel Ball Valve

Darkness cannot drive out darkness: only light can do that. Hate cannot drive out hate: only love can do that.

- Martin Luther King Jr.

STEEL NIPPLES — BLACK & GALVANIZED SCH 40

1" DIAMETER
SCH 40 WELDED

Wall Thickness 0.133 - Grade B - Test Pressure 700 PSI - Thread Length 0.98

Part # Galv	List Price	Length	Box/Case	Approx. Wt. Lbs.	Part # Black	List Price
56-100	3.33	X Close (1-1/2")	50/200	0.16	57-100	3.03
56-101	3.50	x 2"	50/150	0.23	57-101	3.36
56-102	3.82	x 2-1/2"	50/150	0.29	57-102	3.36
56-103	4.20	x 3"	50/100	0.36	57-103	3.74
56-104	5.05	x 3-1/2"	50/100	0.43	57-104	4.13
56-105	5.75	x 4"	50/100	0.50	57-105	4.58
56-106	5.73	x 4-1/2"	50/100	0.56	57-106	4.91
56-107	6.02	x 5"	50/100	0.63	57-107	5.29
56-108	6.70	x 5-1/2"	50/100	0.70	57-108	5.70
56-109	6.89	x 6"	40/80	0.77	57-109	6.19
56-110	10.32	x 7"	25/50	0.90	57-110	8.44
56-111	11.26	x 8"	25/50	1.03	57-111	9.23
56-112	22.43	x 9"	15/30	1.17	57-112	10.21
56-113	21.75	x 10"	15/30	1.30	57-113	10.97
56-114	26.59	x 11"	15/30	1.44	57-114	14.89
56-115	26.59	x 12"	15/30	1.57	57-115	12.79
56-260	30.06	x 18"	1/3	2.34	57-260	25.58
56-261	36.37	x 24"	1/3	3.14	57-261	29.59
56-262	60.84	x 30"	1/3	3.91	57-262	44.88
56-263	53.11	x 36"	1/3	4.71	57-263	42.06
56-264	97.76	x 42"	1/3	5.48	57-264	87.96
56-265	77.30	x 48"	1/3	6.28	57-265	60.13
56-266	92.73	x 60"	1/3	7.85	57-266	82.10
56-267	105.92	x 72"	1/3	9.42	57-267	139.56

High Pressure 7,250 psi Full Port Ball Valves - see page 206

If you tell the truth, you don't have to remember anything.

- Mark Twain

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	List Price	Length	Box/Case	Approx. Wt. Lbs.	Part # Black	List Price
56-120	4.48	X Close (1-5/8")	50/100	0.25	57-120	3.98
56-121	4.64	x 2"	50/100	0.32	57-121	4.27
56-122	5.06	x 2-1/2"	50/100	0.41	57-122	4.59
56-123	5.54	x 3"	50/100	0.50	57-123	5.04
56-124	6.36	x 3-1/2"	30/60	0.60	57-124	5.51
56-125	7.33	x 4"	30/60	0.69	57-125	6.09
56-126	8.13	x 4-1/2"	30/60	0.78	57-126	6.57
56-127	7.83	x 5"	25/50	0.87	57-127	7.23
56-128	8.62	x 5-1/2"	25/50	0.96	57-128	7.47
56-129	8.86	x 6"	25/50	1.06	57-129	7.99
56-130	17.17	x 7"	15/30	1.24	57-130	11.09
56-131	14.88	x 8"	15/30	1.42	57-131	12.29
56-132	24.67	x 9"	15/30	1.61	57-132	13.23
56-133	23.91	x 10"	15/30	1.79	57-133	14.17
56-134	24.18	x 11"	10/20	1.97	57-134	16.91
56-135	30.12	x 12"	10/20	2.16	57-135	25.80
56-270	36.06	x 18"	1/3	3.22	57-270	27.80
56-271	46.94	x 24"	1/3	4.32	57-271	36.06
56-272	54.75	x 30"	1/3	3.22	57-272	56.07
56-273	70.54	x 36"	1/3	6.48	57-273	70.52
56-275	94.06	x 48"			57-275	89.76

1-1/2" DIAMETER
SCH 40 WELDED

Wall Thickness 0.145 - Grade B - Test Pressure 1300 PSI - Thread Length 1.03

Part # Galv	List Price	Length	Box/Case	Approx. Wt. Lbs.	Part # Black	List Price
56-140	5.59	X Close (1-3/4")	50/100	0.31	57-140	4.80
56-141	5.89	x 2"	40/80	0.37	57-141	4.94
56-142	6.17	x 2-1/2"	40/80	0.47	57-142	5.48
56-143	6.77	x 3"	40/80	0.58	57-143	6.17
56-144	7.38	x 3-1/2"	25/50	0.68	57-144	7.00
56-145	8.06	x 4"	25/50	0.78	57-145	7.41
56-146	9.06	x 4-1/2"	25/50	0.89	57-146	8.18
56-147	9.35	x 5"	25/50	1.10	57-147	8.33
56-148	10.44	x 5-1/2"	20/40	1.10	57-148	8.82
56-149	10.62	x 6"	15/30	1.20	57-149	9.23
56-150	15.96	x 7"	15/30	1.41	57-150	12.84
56-151	17.49	x 8"	15/30	1.62	57-151	14.05
56-152	22.87	x 9"	15/30	1.83	57-152	15.72
56-153	21.80	x 10"	1/20	2.04	57-153	16.61
56-154	28.35	x 11"	1/20	2.25	57-154	27.65
56-155	28.14	x 12"	1/20	2.46	57-155	19.38
56-280	42.56	x 18"	1/3	3.66	57-280	36.53
56-281	68.82	x 24"	1/3	4.92	57-281	51.08
56-282	86.08	x 30"	1/3	6.12	57-282	65.56
56-283	81.96	x 36"	1/3	7.38	57-283	79.50
56-285	103.73	x 48"	1/3	9.84	57-285	122.61
		x 60"			57-286	136.96

2" DIAMETER
SCH 40 WELDED

Wall Thickness 0.154 - Grade B - Test Pressure 2500 PSI - Thread Length 1.06

Part # Galv	List Price	Length	Box/Case	Approx. Wt. Lbs.	Part # Black	List Price
56-160	7.62	X Close (2")	40/80	0.55	57-160	6.34
56-161	8.80	x 2-1/2"	25/50	0.70	57-161	7.62
56-162	9.12	x 3"	25/50	0.86	57-162	7.99
56-163	10.30	x 3-1/2"	1/30	1.01	57-163	9.39
56-164	11.90	x 4"	1/30	1.16	57-164	9.30
56-165	13.13	x 4-1/2"	1/25	1.31	57-165	10.47
56-166	14.17	x 5"	1/30	1.47	57-166	11.11
56-167	13.56	x 5-1/2"	1/30	1.62	57-167	12.06
56-168	14.93	x 6"	1/20	1.77	57-168	12.51
56-169	25.92	x 7"	1/20	2.08	57-169	17.18
56-170	23.23	x 8"	1/20	2.39	57-170	19.87
56-171	42.45	x 9"	1/10	2.70	57-171	21.95
56-172	27.23	x 10"	1/10	3.00	57-172	24.71
56-173	31.17	x 11"	1/10	3.31	57-173	27.17
56-174	34.88	x 12"	1/10	3.62	57-174	32.46
56-290	48.22	x 18"	1/3	5.39	57-290	48.55
56-291	63.45	x 24"	1/3	5.26	57-291	67.57
56-292	92.22	x 30"	1/3	7.03	57-292	75.67
56-293	102.20	x 36"	1/3	10.86	57-293	86.30
56-294	168.55	x 42"	1/3	12.63	57-294	140.61
56-295	128.25	x 48"	1/3	14.48	57-295	146.34
56-296	173.03	x 60"	1/3	18.10	57-296	169.87
56-297	211.31	x 72"	1/3	18.10	57-297	208.37

2-1/2" DIAMETER
SCH 40 WELDED

Wall Thickness 0.203 - Grade B - Test Pressure 2500 PSI - Thread Length 1.57

Part # Galv	List Price	Length	Box/Case	Approx. Wt. Lbs.	Part # Black	List Price
56-180	22.29	X Close (2-1/2")	1/20	1.09	57-180	16.45
56-181	22.95	x 3"	1/20	1.33	57-181	16.76
56-182	32.18	x 3-1/2"	1/20	1.57	57-182	19.72
56-183	25.26	x 4"	1/20	1.82	57-183	19.72
56-184	28.48	x 4-1/2"	1/20	2.06	57-184	24.84
56-185	28.14	x 5"	1/20	2.30	57-185	26.15
56-186	31.46	x 5-1/2"	1/10	2.54	57-186	30.88
56-187	30.90	x 6"	1/10	2.78	57-187	28.64
56-188	39.20	x 7"	1/10	3.27	57-188	47.20
56-189	49.34	x 8"	1/10	3.75	57-189	39.55
56-190	47.10	x 9"	1/10	4.24	57-190	51.07
56-191	48.48	x 10"	1/8	4.72	57-191	41.00
56-192	51.17	x 11"	1/8	5.21	57-192	50.46
56-193	51.37	x 12"	1/8	5.69	57-193	47.86

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	List Price	Length	Box/Case	Approx. Wt. Lbs.	Part # Black	List Price
56-200	27.21	X Close (2-5/8")	1/20	1.52	57-200	19.18
56-201	28.75	x 3"	1/20	1.76	57-201	19.43
56-202	46.97	x 3-1/2"	1/10	2.08	57-202	21.78
56-203	32.26	x 4"	1/10	2.39	57-203	21.78
56-204	38.87	x 4-1/2"	1/10	2.71	57-204	42.57
56-205	39.88	x 5"	1/10	3.03	57-205	26.99
56-206	43.38	x 5-1/2"	1/10	3.35	57-206	30.32
56-207	41.99	x 6"	1/10	3.66	57-207	30.32
56-208	51.55	x 7"	1/8	4.30	57-208	51.33
56-209	52.06	x 8"	1/8	4.93	57-209	40.36
56-210	58.48	x 9"	1/8	5.57	57-210	56.41
56-211	62.67	x 10"	1/5	6.20	57-211	45.32
56-212	99.97	x 11"	1/5	7.20	57-212	69.17
56-213	83.37	x 12"	1/5	7.47	57-213	50.34
		x 24"	1	14.94	57-311	189.27

4" DIAMETER
SCH 40 WELDED

Wall Thickness 0.237 - Grade B - Test Pressure 2210 PSI - Thread Length 1.74

Part # Galv	List Price	Length	Box/Case	Approx. Wt. Lbs.	Part # Black	List Price
56-220	38.91	X Close (2-7/8")	1/10	2.00	57-220	25.23
56-221	39.93	3-1/2"	1/8	2.21		
56-223	42.79	x 4"	1/8	3.41	57-223	29.16
56-224	54.23	x 4-1/2"	1/6	3.86	57-224	33.34
56-225	53.82	x 5"	1/6	4.31	57-225	34.55
56-226	71.72	x 5-1/2"	1/6	4.76	57-226	52.51
56-227	58.04	x 6"	1/6	5.21	57-227	35.64
56-330	105.50	x 7"	1/5	6.48	57-330	41.14
56-229	102.44	x 8"	1/5	7.01	57-229	41.14
56-331	99.63	x 9"	1/5	7.54	57-331	46.83
56-332	116.88	x 10"	1/5	8.14	57-332	46.83
56-228	116.24	x 12"	1/4	8.54	57-228	46.83

Exercise? I thought you said extra fries!

NEW

6" DIAMETER
SCH 40 WELDED

Wall Thickness 0.154 - Grade B - Test Pressure 2500 PSI - Thread Length 1.06

Part # Galv	List Price	Length	Box/Case	Approx. Wt. Lbs.	Part # Black	List Price
56-300	240.61	X Close (3-1/8")	1/1	3.80	57-300	89.01
		x 4"	1/1	5.30	57-304	82.68
		x 6"	1/1	8.30	57-301	124.39
		x 8"	1/1	11.30	57-305	125.59
		x 12"	1/1	17.20	57-308	163.16

NEW

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.	List Price
57-320	X Close (3-1/8")	1/1	5.80	152.78
57-322	x 4"	1/1	6.50	195.55
57-324	x 6"	1/1	11.30	275.00
57-326	x 8"	1/1	19.00	314.72
57-328	x 12"	1/1	28.55	370.03

STEEL NIPPLE ASSORTMENTS

B "6" ASSORTMENTS

Black		LENGTH											Wt.	Total	List
		Close	1-1/2"	2"	2-1/2"	3"	3-1/2"	4"	4-1/2"	5"	5-1/2"	6"	Lbs.	Pieces	Prices
973-567	1/2"	6	6	6	6	6	6	6	6	6	6	6	20	66	**201.27**
973-568	3/4"	6	6	6	6	6	6	6	6	6	6	6	27	66	**244.82**
973-569	1"	6		6	6	6	6	6	6	6	6	6	34	60	**341.19**

Galv.		LENGTH											Wt.	Total	List
		Close	1-1/2"	2"	2-1/2"	3"	3-1/2"	4"	4-1/2"	5"	5-1/2"	6"	Lbs.	Pieces	Prices
973-667	1/2"	6	6	6	6	6	6	6	6	6	6	6	20	66	**250.05**
973-668	3/4"	6	6	6	6	6	6	6	6	6	6	6	27	66	**306.24**
973-669	1"	6		6	6	6	6	6	6	6	6	6	34	60	**421.30**

STEEL TOTE TRAYS

Part #	Size	Capacity	List Price
990-781	1/2"	77pcs	80.44
990-782	3/4"	66pcs	87.41
990-783	1"	50pcs	96.07
990-786	1-1/4"	40pcs	107.79
990-784	1-1/2"	30pcs	104.27
990-785	2"	27pcs	130.33

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.	List Price
59-001SMLS	x Close	40/480	0.02	1.73
59-002SMLS	x 1-1/2"	40/480	0.03	2.75
59-003SMLS	x 2"	100/400	0.05	1.90
59-004SMLS	2-1/2"	100/400	0.06	23.32
59-005SMLS	x 3"	40/240	0.08	3.39
59-006SMLS	x 3-1/2"	40/240	0.09	28.27
59-007SMLS	x 4"	40/240	0.11	3.51
59-009SMLS	x 5"	40/120	0.12	46.75
59-010SMLS	x 5-1/2"	40/120	0.13	50.16
59-011SMLS	x 6"	40/80	0.16	6.58

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.	List Price
59-020SMLS	x Close (7/8")	40 / 480	0.03	2.97
59-021SMLS	x 1-1/2"	100 / 400	0.06	3.51
59-022SMLS	x 2"	100 / 400	0.08	3.51
59-023SMLS	x 2-1/2"	80 / 320	0.10	4.54
59-024SMLS	x 3"	40 / 240	0.12	4.54
59-025SMLS	x 3-1/2"	40 / 240	0.15	4.96
59-026SMLS	x 4"	40 / 240	0.17	4.96
59-027SMLS	x 4-1/2"	40 / 120	0.19	7.81
59-028SMLS	x 5"	40 / 120	0.21	7.81
59-029SMLS	x 5-1/2"	40 / 80	0.24	8.90
59-030SMLS	x 6"	40 / 80	0.26	8.90
59-031SMLS	x 7"	40 / 80	0.30	14.95
59-032SMLS	x 8"	40 / 80	0.35	14.95
59-033SMLS	x 9"	40 / 80	0.39	15.92
59-034SMLS	x 10"	40 / 80	0.44	15.92
59-036SMLS	x 12"	40 / 80	0.53	17.55

5,000# Carbon Steel Check Valves on page 207

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.	List Price
59-040SMLS	X Close (3/8")	40 / 480	0.05	3.09
59-041SMLS	x 1-1/2"	100 / 400	0.08	3.87
59-042SMLS	x 2"	100 / 400	0.11	3.87
59-043SMLS	x 2-1/2"	80 / 320	0.14	4.60
59-044SMLS	x 3"	40 / 240	0.17	4.60
59-045SMLS	x 3-1/2"	40 / 240	0.20	5.45
59-046SMLS	x 4"	40 / 240	0.23	5.45
59-047SMLS	x 4-1/2"	40 / 160	0.26	7.81
59-048SMLS	x 5"	40 / 120	0.29	7.81
59-049SMLS	x 5-1/2"	40 / 120	0.32	8.90
59-050SMLS	x 6"	40 / 80	0.35	8.90
59-052SMLS	x 8"	40/80	0.47	78.98
59-054SMLS	x 10"	40/80	0.53	68.12
59-056SMLS	x 12"	40/80	0.65	75.96

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.	List Price
59-060SMLS	X Close (1-1/8")	40 / 480	0.07	2.85
59-061SMLS	x 1-1/2"	100 / 400	0.11	2.85
59-062SMLS	x 2"	100 / 400	0.15	2.85
59-063SMLS	x 2-1/2"	80 / 320	0.20	3.39
59-064SMLS	x 3"	40 / 240	0.24	3.39
59-065SMLS	x 3-1/2"	40 / 240	0.29	4.06
59-066SMLS	x 4"	40 / 240	0.33	4.06
59-067SMLS	x 4-1/2"	40 / 160	0.38	4.66
59-068SMLS	x 5"	40 / 120	0.42	4.60
59-069SMLS	x 5-1/2"	40 / 120	0.47	5.27
59-070SMLS	x 6"	40 / 80	0.51	5.27
59-071SMLS	x 7"	40 / 80	0.60	10.04
59-072SMLS	x 8"	40 / 80	0.69	10.04
59-073SMLS	x 9"	40/80	0.73	32.59
59-074SMLS	x 10"	40 / 80	0.88	11.37
59-075SMLS	x 11"	32/64	0.96	45.85
59-076SMLS	x 12"	32 / 64	1.06	13.07

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.	List Price
59-080SMLS	X Close (1-3/8")	40/240	0.13	3.21
59-081SMLS	x 1-1/2"	100/200	0.15	3.27
59-082SMLS	x 2"	100/200	0.21	3.27
59-083SMLS	x 2-1/2"	40/160	0.27	3.94
59-084SMLS	x 3"	40/160	0.33	3.94
59-085SMLS	x 3-1/2"	40/120	0.39	4.60
59-086SMLS	x 4"	40/120	0.45	4.60
59-087SMLS	x 4-1/2"	40/120	0.51	5.75
59-088SMLS	x 5"	40/120	0.57	5.75
59-089SMLS	x 5-1/2"	48/96	0.64	6.84
59-090SMLS	x 6"	40/80	0.69	6.84
59-091SMLS	x 7"	40/80	0.82	11.80
59-092SMLS	x 8"	40/80	0.94	11.80
59-094SMLS	x 10"	32/64	1.19	13.74
59-096SMLS	x 12"	24/48	1.44	15.55

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.	List Price
59-100SMLS	X Close (1-1/2")	40 / 160	0.21	4.79
59-101SMLS	x 2"	40 / 120	0.30	5.39
59-102SMLS	x 2-1/2"	40 / 120	0.37	5.57
59-103SMLS	x 3"	40 / 80	0.47	5.57
59-104SMLS	x 3-1/2"	40 / 80	0.56	6.66
59-105SMLS	x 4"	40 / 80	0.65	6.66
59-106SMLS	x 4-1/2"	40 / 80	0.74	7.93
59-107SMLS	x 5"	40 / 80	0.83	7.93
59-108SMLS	x 5-1/2"	40 / 80	0.92	9.38
59-109SMLS	x 6"	32 / 64	1.01	9.38
59-110SMLS	x 7"	20 / 40	1.19	15.85
59-111SMLS	x 8"	20 / 40	1.37	15.85
59-112SMLS	x 9"	20 / 40	1.55	19.00
59-113SMLS	x 10"	12 / 24	1.74	19.00
59-114SMLS	x 11"	12 / 24	1.92	20.52
59-115SMLS	x 12"	12 / 24	2.10	20.52

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.	List Price
59-120SMLS	X Close (1-5/8")	40 / 80	0.31	5.87
59-121SMLS	x 2"	40 / 80	0.42	6.36
59-122SMLS	x 2-1/2"	40 / 80	0.52	6.90
59-123SMLS	x 3"	40 / 80	0.64	6.90
59-124SMLS	x 3-1/2"	24 / 48	0.77	8.66
59-125SMLS	x 4"	24 / 48	0.90	8.66
59-126SMLS	x 4-1/2"	24 / 48	1.02	10.65
59-127SMLS	x 5"	20 / 40	1.15	10.65
59-128SMLS	x 5-1/2"	20 / 40	1.27	11.98
59-129SMLS	x 6"	20 / 40	1.40	11.98
59-130SMLS	x 7"	20 / 40	1.65	19.97
59-131SMLS	x 8"	12 / 24	1.90	19.97
59-132SMLS	x 9"	12 / 24	2.15	23.06
59-133SMLS	x 10"	12 / 24	2.40	23.06
59-134SMLS	x 11"	8 / 16	2.65	26.57
59-135SMLS	x 12"	8 / 16	2.90	26.57

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.	List Price
59-140SMLS	X Close (1-3/4")	40 / 80	0.41	7.38
59-141SMLS	x 2"	32 / 64	0.51	7.99
59-142SMLS	x 2-1/2"	32 / 64	0.64	8.59
59-143SMLS	x 3"	32 / 64	0.78	8.59
59-144SMLS	x 3-1/2"	20 / 40	0.94	10.35
59-145SMLS	x 4"	20 / 40	1.09	10.35
59-146SMLS	x 4-1/2"	20 / 40	1.23	12.05
59-147SMLS	x 5"	20 / 40	1.39	12.05
59-148SMLS	x 5-1/2"	16 / 32	1.54	13.79
59-149SMLS	x 6"	12 / 24	1.69	13.79
59-150SMLS	x 7"	12 / 24	2.00	23.06
59-151SMLS	x 8"	12 / 24	2.30	23.06
59-152SMLS	x 9"	12 / 24	2.61	26.57
59-153SMLS	x 10"	8 / 16	2.90	26.57
59-154SMLS	x 11"	8 / 16	3.20	32.07
59-155SMLS	x 12"	8 / 16	3.51	32.07

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.	List Price
59-160SMLS	X Close (2")	32/64	0.30	10.11
59-161SMLS	x 2-1/2"	20 / 40	0.80	11.37
59-162SMLS	x 3"	20 / 40	1.10	11.37
59-163SMLS	x 3-1/2"	12 / 24	1.31	13.07
59-164SMLS	x 4"	12 / 24	1.52	13.07
59-165SMLS	x 4-1/2"	12 / 24	1.72	16.16
59-166SMLS	x 5"	12 / 24	1.94	16.16
59-167SMLS	x 5-1/2"	12 / 24	2.15	18.63
59-168SMLS	x 6"	8 / 16	2.35	18.63
59-169SMLS	x 7"	8 / 16	2.78	32.07
59-170SMLS	x 8"	8 / 16	3.19	32.07
59-171SMLS	x 9"	1 / 8	3.62	37.33
59-172SMLS	x 10"	1 / 8	4.03	37.33
59-173SMLS	x 11"	1 / 8	4.44	43.02
59-174SMLS	x 12"	1 / 8	4.87	43.02
59-196SMLS	x 18"	1/1	7.22	158.40
59-197SMLS	x 24"	1/1	9.74	193.60
59-198SMLS	x 36"	1/1	14.61	246.40
59-199SMLS	x 48"	1/1	19.48	308.00

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.	List Price
59-180SMLS	x Close (2-1/2")	1 / 16	1.25	30.92
59-181SMLS	x 3"	1 / 16	1.57	32.25
59-182SMLS	x 3-1/2"	1 / 16	1.82	37.51
59-183SMLS	x 4"	1 / 16	2.15	37.51
59-184SMLS	x 4-1/2"	1 / 16	1.75	42.66
59-185SMLS	x 5"	1 / 16	2.78	42.66
59-186SMLS	x 5-1/2"	1 / 8	2.25	46.46
59-187SMLS	x 6"	1 / 8	3.41	46.46
59-188SMLS	x 7"	1 / 8	3.89	56.09
59-189SMLS	x 8"	1 / 8	4.69	56.09
59-190SMLS	x 9"	1 / 8	5.34	63.35
59-191SMLS	x 10"	1 / 6	5.97	63.35
59-192SMLS	x 11"	1 / 6	4.89	69.88
59-193SMLS	x 12"	1 / 5	7.26	69.88

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.	List Price
59-200SMLS	X Close (2-5/8")	1 / 16	1.79	37.75
59-201SMLS	x 3"	1 / 16	2.11	41.99
59-202SMLS	x 3-1/2"	1 / 16	2.55	48.64
59-203SMLS	x 4"	1 / 8	2.89	48.64
59-204SMLS	x 4-1/2"	1 / 8	3.30	53.79
59-205SMLS	x 5"	1 / 8	3.73	53.79
59-206SMLS	x 5-1/2"	1 / 8	4.17	58.69
59-207SMLS	x 6"	1 / 8	4.57	58.69
59-208SMLS	x 7"	1 / 6	5.45	80.29
59-209SMLS	x 8"	1 / 6	6.29	80.29
59-210SMLS	x 9"	1 / 6	7.17	89.49
59-211SMLS	x 10"	1 / 4	8.01	89.49
59-212SMLS	x 11"	1 / 4	8.85	96.80
59-213SMLS	x 12"	1 / 4	9.72	96.80

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.	List Price
59-220SMLS	X Close (2-7/8")	1 / 8	2.91	56.94
59-221SMLS	x 4"	1 / 6	4.26	64.68
59-223SMLS	x 5"	1 / 5	5.49	72.67
59-225SMLS	x 6"	1 / 5	6.72	78.96
59-226SMLS	x 7"	1/3	7.33	92.61
59-227SMLS	x 8"	1 / 3	9.23	92.93
59-229SMLS	x 10"	1 / 3	11.73	107.03
59-231SMLS	x 12"	1 / 3	14.24	118.77

SCHEDULE 80 SEAMLESS

NEW

6" DIAMETER

8" DIAMETER

Part #	List Price	Length	Box/Case	Approx. Wt. Lbs.		Part #	List Price
				6"	8"		
59-300SMLS	76.38	X Close	2	3.57	4.62	59-320SMLS	76.38
59-301SMLS	171.12	x 6"	2	14.29	16.91	59-322SMLS	171.12
59-305SMLS	187.85	x 8"	2	19.05	22.54	59-324SMLS	187.85
59-306SMLS	232.22	x 10"	2	23.81	27.47	59-326SMLS	232.22
59-308SMLS	275.00	x 12"	2	28.57	34.18	59-328SMLS	275.00

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.	List Price
59-060SMLSXX	x Close	100 / 200	0.31	10.84
59-062SMLSXX	x 2"	100 / 200	0.58	12.83
59-064SMLSXX	x 3"	50 / 100	0.62	15.55
59-066SMLSXX	x 4"	50 / 100	0.66	19.43
59-070SMLSXX	x 6"	25 / 50	0.75	28.92

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.	List Price
59-080SMLSXX	x Close	40/240	0.55	9.54
59-082SMLSXX	x 2"	50 / 100	0.62	17.67
59-086SMLSXX	x 4"	25 / 50	0.68	27.71
59-090SMLSXX	x 6"	25 / 50	0.71	39.88

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.	List Price
59-100SMLSXX	x close	50 / 100	0.88	22.26
59-101SMLSXX	x 2"	50 / 100	1.07	23.54
59-103SMLSXX	x 3"	20/40	1.10	28.07
59-105SMLSXX	x 4"	20 / 40	1.14	36.61
59-109SMLSXX	x 6"	20 / 40	1.75	52.64
59-111SMLSXX	x 8"	1 / 25	1.88	79.74
59-115SMLSXX	x 12"	1 / 15	2.15	104.91

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.	List Price
59-160SMLSXX	x close	1 / 25	1.36	33.88
59-161SMLSXX	x 2-1/2"	1 / 20	1.67	38.79
59-162SMLSXX	x 3"	1 / 20	2.09	49.97
59-163SMLSXX	x 3-1/2"	1 / 12	2.51	53.85
59-164SMLSXX	x 4"	1 / 12	2.86	60.08
59-166SMLSXX	x 5"	1/12	3.04	85.54
59-168SMLSXX	x 6"	1 / 11	3.20	86.76
59-169SMLSXX	x 7"	1 / 8	4.35	91.54
59-170SMLSXX	x 8"	1 / 8	5.86	97.41
59-171SMLSXX	x 9"	1 / 8	6.58	101.71
59-172SMLSXX	x 10"	1 / 8	7.31	106.48
59-174SMLSXX	x 12"	1 / 8	9.34	116.16
59-179SMLSXX	x 24"	1 / 1	14.77	405.79

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 #	List Price
57162TV	8.89	50	0.70	x 3	1.03	40	59162TV	13.67
57164TV	11.41	30	0.97	x 4	1.40	24	59164TV	15.69
57168TV	16.56	20	1.64	x 6	2.41	16	59168TV	25.02
57170TV	23.42	20	2.15	x 8	3.20	16	59170TV	35.66
57172TV	28.22	10	2.80	x 10	3.65	8	59172TV	42.61
57174TV	33.06	10	3.45	x 12	4.01	8	59174TV	49.71

3" DIAMETER

Part #	List Price	Box	Wtg	Length	Wtg	Box	Part #	List Price
57201TV	18.21	20	1.26	x 3	2.01	16	59201TV	31.48
57203TV	23.52	10	1.80	x 4	3.01	8	59203TV	36.45
57207TV	34.24	10	3.17	x 6	4.87	8	59207TV	52.29
57209TV	48.50	8	4.13	x 8	5.86	6	59209TV	74.47
57211TV	58.54	5	5.48	x 10	6.19	4	59211TV	89.01
57213TV	68.68	5	6.24	x 12	6.37	4	59213TV	94.36

4" DIAMETER

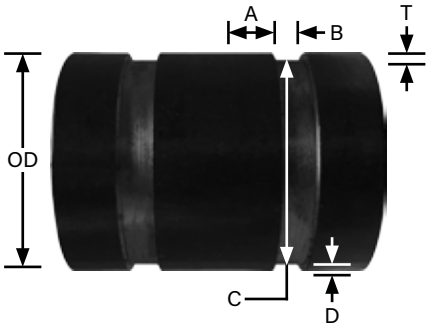
Part #	List Price	Box	Wtg	Length	Wtg	Box	Part #	List Price
57222TV	25.92	8	2.40	x 3	4.11	6	59222TV	50.98
57223TV	33.52	8	2.52	x 4	4.15	6	59221TV	33.52
57227TV	48.72	6	4.30	x 6	6.52	5	59225TV	74.55
57229TV	69.10	4	5.63	x 8	7.18	3	59229TV	127.24
57332TV	83.40	4	7.90	x 10	11.74	3	59231TV	134.70
57228TV	97.76	4	8.25	x 12	14.24	3	59227TV	96.39

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

BLACK SCH 40 AND SCH 80 SEAMLESS | GROOVE NIPPLES

GROOVE X GROOVE

SCH 40



SCH 80

2" DIAMETER

Part #	List Price	Box	Wtg	Length	Wtg	Box	Part #	List Price
57162V	9.66	50	0.70	x 3	1.03	40	59162V	14.93
57164V	12.44	30	0.97	x 4	1.40	24	59164V	17.13
57168V	14.45	20	1.64	x 6	2.41	16	59168V	27.31
57170V	25.52	20	2.15	x 8	3.20	16	59170V	35.40
57172V	30.71	10	2.80	x 10	3.65	8	59172V	46.50
57174V	36.00	10	3.45	x 12	4.01	8	59174V	59.67

3" DIAMETER

Part #	List Price	Box	Wtg	Length	Wtg	Box	Part #	List Price
57201V	19.75	20	1.26	x 3	2.01	16	59201V	31.27
57203V	25.55	10	1.80	x 4	3.01	8	59203V	39.79
57207V	37.28	10	3.17	x 6	4.87	8	59207V	57.06
57209V	52.85	8	4.13	x 8	5.86	6	59209V	81.32
57211V	63.75	5	5.48	x 10	6.19	4	59211V	97.17
57213V	74.78	5	6.24	x 12	6.37	4	59213V	113.28

4" DIAMETER

Part #	List Price	Box	Wtg	Length	Wtg	Box	Part #	List Price
57223V	36.38	8	2.52	x 4	4.15	6	59221V	51.67
57227V	42.62	6	4.35	x 6	6.52	5	59225V	81.36
57229V	75.27	4	5.63	x 8	7.18	3	59227V	115.76
57332V	90.82	4	7.90	x 10	11.74	3	59229V	138.87
57228V	106.45	4	8.25	x 12	14.24	3	59231V	161.68

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

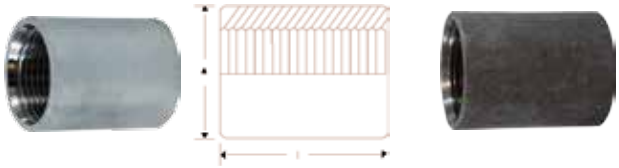
STEEL NIPPLES

MERCHANT COUPLINGS

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	List Price	Size	Part # Black	List Price
64-770	4.25	1/8"	65-770	2.65
64-771	5.48	1/4"	65-771	3.74
64-772	5.01	3/8"	65-772	3.15
64-773	4.38	1/2"	65-773	3.06
64-774	6.22	3/4"	65-774	4.50
64-775	9.99	1"	65-775	7.08
64-776	11.87	1-1/4"	65-776	9.78
64-777	15.15	1-1/2"	65-777	10.48
64-778	24.83	2"	65-778	14.89
64-779	52.90	2-1/2"	65-779	45.38
64-780	105.83	3"	65-780	87.59
64-781	141.15	4"	65-781	112.37
		5"	65-782	252.25
		6"	65-783	252.25

HALF MERCHANT COUPLINGS

• Straight threads thru 2"

Part # Galv	List Price	Size	Part # Black	List Price
		1/4"	65-771H	4.38
		3/8"	65-772H	5.07
64-773H	3.47	1/2"	65-773H	3.39
64-774H	4.70	3/4"	65-774H	4.49
64-775H	9.48	1"	65-775H	6.53
64-776H	8.39	1-1/4"	65-776H	8.47
64-777H	11.96	1-1/2"	65-777H	9.78
64-778H	21.00	2"	65-778H	13.28
		2-1/2"	65-779H	43.03
64-780H	22.99	3"	65-780H	61.97
64-781H	42.35	4"	65-781H	83.99

#304 STAINLESS STEEL MERCHANT COUPLINGS

Part #	Size	List Price
61775	1	14.00
61776	1-1/4	19.21
61777	1-1/2	22.17
61778	2	31.28

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

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	List Price
65770API	1/8"	27	0.563	1-1/16	0.04	3.86
65771API	1/4"	18	0.719	1-5/8	0.10	4.07
65772API	3/8"	18	0.875	1-5/8	0.13	5.05
65773API	1/2"	14	1.063	2-1/8	0.24	8.92
65774API	3/4"	14	1.313	2-1/8	0.35	9.20
65775API	1"	11.5	1.576	2-5/8	0.52	11.18
65776API	1-1/4"	11.5	2.054	2-3/4	1.00	15.13
65777API	1-1/2"	11.5	2.200	2-3/4	0.88	15.68
65778API	2"	11.5	2.875	2-7/8	1.83	29.68
65779API	2-1/2"	8	3.375	4-1/8	3.28	58.85
65780API	3"	8	4.000	4-1/4	4.09	76.85
65781API	4"	8	5.200	4-1/2	7.59	125.02
65783API	6"	8	7.390	4-5/8	12.92	237.84
65784API	8"	8	9.625	5-3/4	23.18	396.48

It is better to remain silent at the risk of being thought a fool, than to talk and remove all doubt of it.

- Maurice Switzer

MALLEABLE FITTINGS

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

MALLEABLE IRON - ANSI B 16.3

F°	Class 150 PSIG	Sizes 1/4-1	Sizes 1 1/4-2	Sizes 2 1/4-3
-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

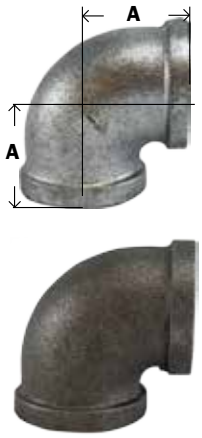
• Meet ANSI/ ASME B1.20.1 standards
• Black meet ASTM 197 standards

BULL PLUGS AND SWAGES

FLANGES

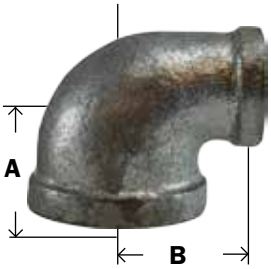
ELBOWS

ELBOWS 90°



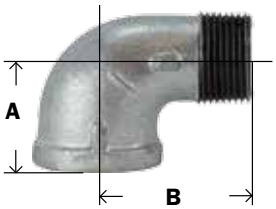
Part # Galvanized	List Price	Size	A	Box/ Case	Approx. Wt. Lbs.	Part # Black	List Price
64-100	4.83	1/8”	0.69	50/600	0.07	65-100	3.25
64-101	4.59	1/4”	0.81	35/420	0.10	65-101	2.95
64-102	4.35	3/8”	0.95	90/360	0.16	65-102	2.95
64-103	2.79	1/2”	1.12	50/200	0.23	65-103	2.34
64-104	3.73	3/4”	1.31	35/105	0.35	65-104	3.21
64-105	6.24	1”	1.50	20/60	0.57	65-105	5.13
64-106	10.51	1-1/4”	1.75	20/40	0.86	65-106	7.72
64-107	13.83	1-1/2”	1.94	15/30	1.31	65-107	10.26
64-108	21.01	2”	2.25	8/16	1.79	65-108	16.41
64-109	57.50	2-1/2”	2.70	6/12	3.35	65-109	37.59
64-110	96.53	3”	3.08	4/8	5	65-110	53.12
64-112	161.76	4”	3.79	1/2	9.02	65-112	119.15
64-114	571.49	6”	5.13	1/1	23.68	65-114	384.07
		8"			41.1	65-115	1447.37

REDUCING ELBOWS 90°



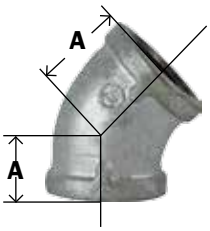
Part # Galvanized	List Price	Size	A	B	Box/ Case	Approx. Wt. Lbs.	Part # Black	List Price
64-122	6.84	3/8” x 1/4”	0.88	0.90	90/360	0.16	65-122	4.70
64-123	5.67	1/2” x 1/4”	0.97	0.98	60/240	0.21	65-123	4.86
64-124	5.32	1/2” x 3/8”	1.04	1.03	60/240	0.24	65-124	4.28
64-126	8.22	3/4” x 3/8”	1.12	1.13	40/160	0.31	65-126	6.12
64-127	6.66	3/4” x 1/2”	1.20	1.22	40/160	0.44	65-127	4.63
64-130	7.84	1” x 1/2”	1.26	1.40	25/100	0.52	65-130	6.27
64-131	7.95	1” x 3/4”	1.37	1.45	50/100	0.58	65-131	5.93
64-133	16.82	1-1/4” x 3/4”	1.45	1.62	15/120	0.79	65-133	10.96
64-134	13.17	1-1/4” x 1”	1.58	1.67	10/40	0.80	65-134	10.25
64-136	19.07	1-1/2” x 3/4”	1.52	1.75	10/40	0.88	65-136	15.82
64-137	20.23	1-1/2” x 1”	1.65	1.80	10/40	1.07	65-137	13.79
64-138	15.51	1-1/2” x 1-1/4”	1.82	1.88	15/30	1.12	65-138	13.82
64-140	30.01	2” x 1”	1.73	2.02	14/28	1.41	65-140	24.30
64-141	28.12	2” x 1-1/4”	1.90	2.10	10/20	1.53	65-141	24.30
64-142	24.57	2” x 1-1/2”	2.02	2.16	10/20	1.65	65-142	20.00
64-145	117.57	2-1/2” x 1-1/2”	2.16	2.51	6/12	2.97	65-145	55.97
64-146	85.45	2-1/2” x 2”	2.39	2.60	6/12	3.18	65-146	54.90
64-148	134.95	3” x 1-1/2”	2.28	2.83	6/18	4.54	65-148	116.50
		3” x 2-1/2”	2.83	2.99	4/8	4.39	65-151	94.63
		3" x 2"	2.52	3.60	4/8	4.22	65-150	94.63

90° STREET ELBOWS



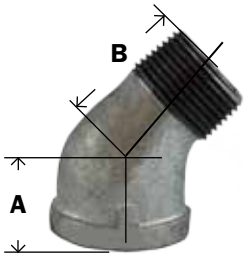
Part # Galvanized	List Price	Size	A	B	Box/ Case	Approx. Wt. Lbs.	Part # Black	List Price
64-160	5.92	1/8”	0.69	1.00	60/720	.06	65-160	4.70
64-161	6.02	1/4”	0.80	1.17	35/420	.10	65-161	4.48
64-162	6.24	3/8”	0.95	1.48	40/240	.15	65-162	4.48
64-163	6.12	1/2”	1.10	1.59	60/180	.22	65-163	4.60
64-164	5.90	3/4”	1.28	1.85	35/105	.39	65-164	4.42
64-165	8.03	1”	1.47	2.10	35/105	.60	65-165	6.50
64-166	14.39	1-1/4”	1.75	2.57	25/50	.95	65-166	9.90
64-167	17.70	1-1/2”	1.90	2.63	9/27	1.37	65-167	12.62
64-168	27.97	2”	2.21	3.19	8/16	2.25	65-168	21.41
64-169	83.26	2-1/2”	2.65	3.78	5/10	3.32	65-169	54.56
64-170	125.66	3”	3.02	4.42	4/8	5.27	65-170	80.55
64-171	207.42	4”	3.72	5.57	2/4	8.94	65-171	121.51

ELBOWS 45°



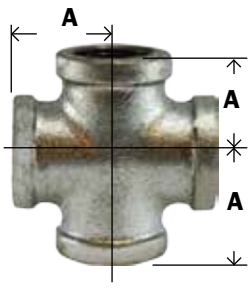
Part # Galvanized	List Price	Size	A	Box/ Case	Approx. Wt. Lbs.	Part # Black	List Price
64-180	6.89	1/8”	0.63	50/600	.07	65-180	4.96
64-181	6.14	1/4”	0.73	30/360	.10	65-181	5.03
64-182	6.14	3/8”	0.80	75/300	.14	65-182	4.58
64-183	4.70	1/2”	0.88	50/200	.21	65-183	3.95
64-184	6.55	3/4”	0.98	40/120	.33	65-184	4.86
64-185	7.55	1”	1.12	20/60	.50	65-185	6.20
64-186	13.75	1-1/4”	1.29	20/40	.74	65-186	10.81
64-187	16.43	1-1/2”	1.43	10/30	1.01	65-187	13.41
64-188	24.49	2”	1.68	12/24	1.53	65-188	19.50
64-189	82.96	2-1/2”	1.95	9/18	2.78	65-189	56.97
64-190	120.62	3”	2.17	1/10	4.49	65-190	71.54
64-191	202.17	4”	2.61	2/4	7.44	65-191	143.62
64-192	714.38	6”	3.46	1/1	18.63	65-192	568.25
		8"			26.40	65-194	1619.44

45° STREET ELBOWS



Part # Galvanized	List Price	Size	A	B	Box/ Case	Approx. Wt. Lbs.	Part # Black	List Price
64-200	8.99	1/8”	0.63	0.83	70/840	.05	65-200	7.65
64-201	7.65	1/4”	0.73	0.94	40/480	.09	65-201	5.41
64-202	8.81	3/8”	0.80	1.03	100/400	.14	65-202	6.48
64-203	6.81	1/2”	0.86	1.30	75/225	.19	65-203	5.19
64-204	10.96	3/4”	0.96	1.48	40/120	.28	65-204	7.54
64-205	13.55	1”	1.10	1.69	25/75	.48	65-205	9.31
64-206	20.33	1-1/4”	1.26	1.87	10/40	.71	65-206	15.57
64-207	22.03	1-1/2”	1.40	2.05	10/30	1.02	65-207	19.79
64-208	42.34	2”	1.65	2.38	12/24	1.68	65-208	35.07
64-209	99.61	2-1/2”	1.95	2.72	6/12	2.69	65-209	74.46
64-210	161.08	3”	2.17	3.16	3/6	4.61	65-210	109.75
64-211	334.72	4”	2.61	3.90	2/4	7.74	65-211	203.75

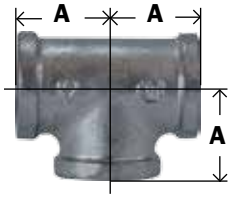
CROSSES



Part # Galvanized	List Price	Size	A	Box/ Case	Approx. Wt. Lbs.	Part # Black	List Price
64-390	26.36	1/8”	0.65	50/600	.14	65-390	19.36
64-391	20.39	1/4”	0.80	60/240	.17	65-391	13.74
64-392	20.39	3/8”	0.95	50/150	.26	65-392	13.74
64-393	20.39	1/2”	1.12	30/90	.42	65-393	13.74
64-394	22.69	3/4”	1.31	20/60	.64	65-394	15.69
64-395	25.63	1”	1.50	15/30	.98	65-395	17.42
64-396	37.10	1-1/4”	1.75	10/20	1.45	65-396	28.29
64-397	45.03	1-1/2”	1.94	8/16	1.90	65-397	35.04
64-398	85.92	2”	2.25	5/10	2.96	65-398	58.00
64-399	214.69	2-1/2”	2.71	4/8	5.49	65-399	130.44
64-400	289.20	3”	3.06	2/4	7.71	65-400	207.88
		4"		1/1	14.77	65-401	441.54

BLACK & GALVANIZED IRON #150 — MALLEABLE FITTINGS

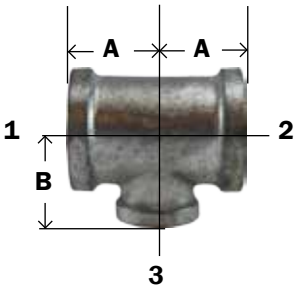
TEES



Part # Galvanized	List Price	Size	A	Box/Case	Approx. Wt. Lbs.	Part # Black	List Price
64-250	6.48	1/8”	0.69	120/480	.11	65-250	5.01
64-251	5.65	1/4”	0.81	75/300	.15	65-251	4.47
64-252	5.95	3/8”	0.95	45/180	.22	65-252	4.47
64-253	3.54	1/2”	1.12	40/120	.36	65-253	2.85
64-254	6.19	3/4”	1.31	35/70	.48	65-254	4.22
64-255	9.17	1”	1.50	20/40	.83	65-255	7.25
64-256	15.94	1-1/4”	1.75	14/28	1.29	65-256	11.76
64-257	19.88	1-1/2”	1.94	12/24	1.66	65-257	14.63
64-258	33.18	2”	2.26	8/16	2.50	65-258	24.88
64-259	89.09	2-1/2”	2.70	4/8	4.45	65-259	56.24
64-260	104.52	3”	3.08	1/6	6.72	65-260	76.88
64-261	247.12	4”	3.79	1/2	11.31	65-261	198.28
64-262	762.05	6”	5.13	1/1	30.75	65-262	568.25
		8"			37.85	65-264	1930.57

REDUCING TEES

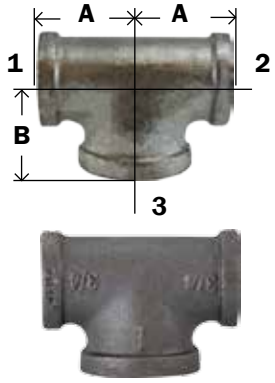
(SAME SIZE ON RUN, REDUCING ON BRANCH)



Part # Galvanized	List Price	Size (1&2) x 3	A	B	Box/ Case	Approx. Wt. Lbs.	Part # Black	List Price
64-273	9.36	3/8” x 1/4”	0.81	0.90	25/300	.18	65-273	8.97
64-276	7.13	1/2” x 1/4”	0.97	0.98	40/160	.24	65-276	5.40
64-279	8.31	1/2” x 3/8”	1.04	1.03	40/160	.35	65-279	6.75
64-282	8.82	3/4” x 1/4”	1.05	1.08	25/100	.43	65-282	9.72
64-283	9.39	3/4” x 3/8”	1.12	1.13	25/100	.39	65-283	8.64
64-286	9.99	3/4” x 1/2”	1.20	1.18	20/80	.49	65-286	6.51
64-268	16.80	1” x 1/4”	1.11	1.22	20/80	.51	65-268	9.68
64-269	14.66	1” x 3/8”	1.18	1.27	15/60	.55	65-269	12.53
64-291	11.96	1” x 1/2”	1.26	1.40	15/60	.63	65-291	8.87
64-298	11.96	1” x 3/4”	1.37	1.45	12/48	.71	65-298	8.87
64-301	27.97	1-1/4” x 1/2”	1.34	1.45	20/40	.91	65-301	16.08
64-303	18.47	1-1/4” x 3/4”	1.45	1.62	20/40	.99	65-303	14.12
64-306	18.47	1-1/4” x 1”	1.58	1.66	20/40	1.07	65-306	15.31
		1-1/2" x 1/2"				1.12	65-721	25.30
64-316	22.88	1-1/2” x 3/4”	1.41	1.75	15/30	1.23	65-316	17.81
64-318	24.39	1-1/2” x 1”	1.65	1.88	10/30	1.33	65-318	17.81
64-322	29.36	1-1/2” x 1-1/4”	1.65	1.88	12/24	1.52	65-322	23.03
64-327	33.29	2” x 1/2”	1.49	1.88	10/20	1.64	65-327	27.93
64-328	33.29	2” x 3/4”	1.60	1.97	10/20	1.71	65-328	27.93
64-330	33.29	2” x 1”	1.73	2.02	10/20	1.88	65-330	27.93
64-334	41.83	2” x 1-1/4”	1.86	2.06	8/16	2.03	65-334	29.50
64-336	41.83	2” x 1-1/2”	1.98	2.12	8/16	2.22	65-336	29.50
		2-1/2" x 1"				2.85	65-342	98.23
64-343	113.47	2-1/2” x 1-1/2”	2.16	2.51	5/10	2.97	65-343	73.16
64-729	170.01	3" x 1"	2.00	2.00	3/6	4.15		
		3" x 1-1/2"				5.19	65-359	131.23
64-351	143.83	3” x 2”	2.52	2.89	3/6	5.35	65-351	97.67

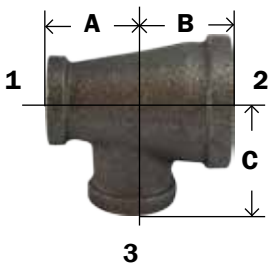
Quick Disconnects - see pages 344-350

BULLHEAD TEES



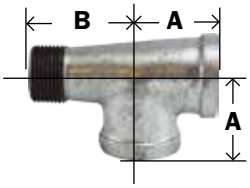
Part #	List Price	Size (1&2) x 3	A	B	Box/ Case	Approx. Wt. Lbs.	Part # Black	List Price
64-280	9.75	1/2" x 3/4"	1.22	1.20	30/120	.4	65-280	7.95
64-733	14.67	1/2" x 1"	1.36	1.26	25/100	.50	65-733	18.17
64-289	14.39	3/4" x 1"	1.45	1.37	20/120	.60	65-289	10.08
64-299	22.88	1" x 1-1/4"	1.67	1.58	15/30	.96	65-299	18.74
64-300	38.89	1" x 1-1/2"	1.80	1.65	9/36	1.11	65-300	29.84
64-317	32.98	1-1/4" x 1-1/2"	1.88	1.82	12/24	1.07	65-317	46.54
64-319	61.46	1-1/2" x 2"	2.12	1.98	8/32	2.10	65-319	64.69

REDUCING TEES
REDUCING ON RUN



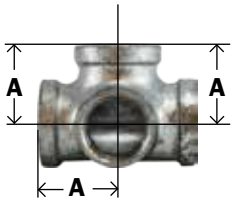
Part # Black	Size 1 x 2 x 3	A	B	C	Box/Case	Approx. Wt. Lbs.	List Price
65-287	3/4" x 1/2" x 1/2"	1.18	1.18	1.20	25/100	0.39	7.22
65-288	3/4" x 1/2" x 3/4"	1.28	1.20	1.28	20/80	0.49	7.95
65-292	1" x 1/2" x 1/2"	1.31	1.22	1.31	20/80	0.51	11.99
65-293	1" x 1/2" x 3/4"	1.22	1.37	1.45	20/80	0.53	10.41
65-294	1" x 1/2" x 1"	1.40	1.50	1.50	15/60	0.54	8.26
65-295	1" x 3/4" x 1/2"	1.20	1.26	1.40	20/80	0.58	10.41
65-296	1" x 3/4" x 3/4"	1.34	1.28	1.42	15/60	0.63	9.34
65-297	1" x 3/4" x 1"	1.45	1.50	1.50	15/60	0.62	12.44
65-347	1-1/4" x 3/4" x 3/4"	1.31	1.45	1.64	10/40	0.66	11.50
65-305	1-1/4" x 3/4" x 1-1/4"	1.62	1.75	1.75	10/40	1.14	11.50
65-309	1-1/4" x 1"x 1"	1.55	1.47	1.63	20/40	1.00	20.48
65-346	1-1/4" x 3/4" x 1/2"	1.31	1.45	1.64	20/40	1.05	21.20
65-349	1-1/4" x 1" x 1/2"	1.26	1.34	1.53	20/40	1.10	17.03
65-310	1-1/4" x 1" x 1-1/4"	1.30	1.36	1.44	15/30	1.21	11.50
65-372	1-1/2" x 1" x 1"	1.50	1.65	1.78	15/30	1.28	22.83
65-375	1-1/2" x 1-1/4" x 3/4"	1.43	1.52	1.25	15/30	1.30	22.83
65-377	1-1/2" x 1-1/4" x 1-1/4"	1.75	1.82	1.88	15/30	1.35	28.41
65-312	2" x 1-1/2" x 1-1/4"	1.82	1.90	2.10	10/30	1.21	35.57
65-313	2" x 1-1/2" x 1-1/2"	1.94	2.02	2.16	10/30	1.79	36.69

MALLEABLE SERVICE TEE (STREET TEE)



Part # Galvanized	List Price	Size	A	B	Box/ Case	Approx. Wt. Lbs.	Part # Black	List Price
64-363	11.70	1/2"	1.12	1.62	40/12	0.31	65-363	8.15
64-364	12.85	3/4"	1.31	1.89	25/75	0.49	65-364	10.81

SIDE OUTLET TEES



Part # Galvanized	List Price	Size	A	Box/ Case	Approx. Wt. Lbs.	Part # Black	List Price
64-383	18.24	1/2"	1.12	25/100	.39	65-383	14.08
64-384	23.03	3/4"	1.31	15/60	.58	65-384	17.97
64-385	37.35	1"	1.50	20/40	.88	65-385	28.81
64-386	62.14	1-1/4"	1.75	12/24	1.32	65-386	45.12
		1-1/2"	1.97	1/1	1.56	65-387	96.31
		2"	2.29	1/1	1.81	65-388	130.33

BLACK & GALVANIZED IRON #150 — MALLEABLE FITTINGS

COUPLINGS

Part # Galvanized	List Price	Size	A	Box/ Case	Approx. Wt. Lbs.	Part # Black	List Price
64-410	5.72	1/8”	0.96	70/840	.07	65-410	4.64
64-411	5.32	1/4”	1.06	40/480	.09	65-411	4.39
64-412	5.32	3/8”	1.16	40/480	.13	65-412	4.76
64-413	4.22	1/2”	1.34	60/240	.19	65-413	4.76
64-414	4.93	3/4”	1.52	50/150	.28	65-414	3.89
64-415	8.11	1”	1.67	25/100	.45	65-415	5.93
64-416	11.14	1-1/4”	1.93	16/64	.66	65-416	7.57
64-417	12.73	1-1/2”	2.15	18/36	.84	65-417	10.15
64-418	18.55	2”	2.54	12/24	1.39	65-418	13.83
64-419	56.71	2-1/2”	2.88	8/16	2.42	65-419	40.13
64-420	75.79	3”	3.18	1/12	3.49	65-420	54.21
64-421	160.96	4”	3.69	3/6	5.81	65-421	108.19
64-422	420.46	6”	4.23	1/2	28.62	65-422	290.31

REDUCING COUPLINGS

Part # Galvanized	List Price	Size	A	Box/ Case	Approx. Wt. Lbs.	Part # Black	List Price
64-430	4.93	1/4” x 1/8”	1.00	50/600	.07	65-430	3.63
64-431	4.99	3/8” x 1/8”	1.13	35/420	.09	65-431	3.95
64-432	4.99	3/8” x 1/4”	1.13	30/360	.11	65-432	3.63
64-433	5.59	1/2” x 1/8”	1.25	75/300	.13	65-433	3.92
64-434	4.55	1/2” x 1/4”	1.25	75/300	.11	65-434	3.63
64-435	4.22	1/2” x 3/8”	1.25	60/240	.15	65-435	3.30
64-439	6.14	3/4” x 1/8”	1.44	60/240	.18	65-439	4.58
64-436	5.67	3/4” x 1/4”	1.44	45/18	.19	65-436	4.48
64-437	5.67	3/4” x 3/8”	1.44	45/18	.21	65-437	4.48
64-438	4.99	3/4” x 1/2”	1.44	60/180	.25	65-438	3.58
64-459	10.00	1” x 1/4”	1.69	45/135	.34	65-459	6.93
64-440	10.23	1” x 3/8”	1.69	30/120	.35	65-440	7.04
64-441	7.82	1” x 1/2”	1.69	30/120	.36	65-441	6.03
64-442	7.65	1” x 3/4”	1.69	25/100	.39	65-442	5.90
64-460	20.85	1-1/4” x 3/8”	2.06	25/75	.55	65-460	15.99
64-444	13.05	1-1/4” x 1/2”	2.06	25/75	.53	65-444	8.71
64-445	10.56	1-1/4” x 3/4”	2.06	25/75	.57	65-445	7.57
64-446	10.56	1-1/4” x 1”	2.06	15/60	.61	65-446	8.31
64-443	24.49	1-1/2” x 3/8”	2.31	20/60	.71	65-443	14.15
64-447	15.38	1-1/2” x 1/2”	2.31	20/60	.69	65-447	11.10
64-448	15.38	1-1/2” x 3/4”	2.31	15/60	.71	65-448	12.51
64-449	13.60	1-1/2” x 1”	2.31	25/50	.78	65-449	11.10
64-450	12.87	1-1/2” x 1-1/4”	2.31	12/48	.87	65-450	9.58
64-458	35.46	2” x 1/2”	2.81	12/36	1.14	65-458	18.04
64-451	22.22	2” x 3/4”	2.81	12/36	1.14	65-451	15.90
64-452	18.55	2” x 1”	2.81	12/36	1.21	65-452	15.00
64-453	19.61	2” x 1-1/4”	2.81	9/27	1.19	65-453	15.90
64-454	18.55	2” x 1-1/2”	2.81	9/27	1.38	65-454	13.88
64-461	58.51	2-1/2” x 1-1/2”	3.25	20/40	2.07	65-461	41.35
64-462	57.40	2-1/2” x 2”	3.25	7/14	2.23	65-462	35.46
64-486	84.73	3” x 1-1/2”	3.69	6/12	3.23	65-486	55.32
64-456	74.15	3” x 2”	3.69	6/12	3.30	65-456	41.78
64-463	76.32	3” x 2-1/2”	3.69	5/10	3.55	65-463	55.32
64-464	165.11	4” x 2”	4.38	3/6	5.55	65-464	110.85
64-465	151.40	4” x 2-1/2”	4.38	3/6	5.90	65-465	110.85
64-457	165.11	4” x 3”	4.38	3/6	6.05	65-457	104.34
		6” x 4”	4.24	1/2	10.86	65-491	420.40

HEX BUSHING

* INSIDE HEX

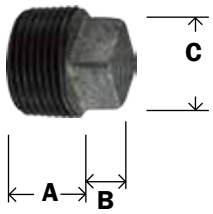
Part # Galvanized	List Price	Size M x F	A	Hex	Box/ Case	Approx. Wt. Lbs.	Part # Black	List Price
64-500	8.47	*1/4" x 1/8"	0.79	0.67	1/25	.03	65-500	5.83
64-501	8.47	*3/8" x 1/8"	0.79	0.75	1/25	.06	65-501	5.83
64-502	8.47	*3/8" x 1/4"	0.79	0.75	1/25	.05	65-502	5.83
64-503	6.84	1/2" x 1/8"	0.84	1.03	150/600	.09	65-503	4.51
64-504	8.47	1/2" x 1/4"				.08	65-504	5.83
64-505	6.84	1/2" x 3/8"	0.75	1.03	150/600	.07	65-505	4.22
64-506	7.28	3/4" x 1/8"	0.85	1.15	75/300	.14	65-506	4.42
64-507	7.04	3/4" x 1/4"	0.85	1.15	75/300	.13	65-507	4.36
64-508	7.45	3/4" x 3/8"	0.85	1.15	75/300	.12	65-508	4.42
64-509	6.37	3/4" x 1/2"	0.93	1.15	75/300	.10	65-509	3.74
64-510*	7.62	1" x 1/4"	1.13	1.12	50/200	.20	65-510*	5.19
64-511*	11.96	1" x 3/8"	1.13	1.12	50/200	.18	65-511*	5.34
64-512	6.89	1" x 1/2"	1.10	1.42	50/200	.21	65-512	3.65
64-513	6.14	1" x 3/4"	1.10	1.42	50/200	.17	65-513	3.65
64-514*	10.36	1-1/4" x 1/4"	1.24	1.12	30/120	.29	65-514*	6.69
64-515*	10.36	1-1/4" x 3/8"	1.24	1.12	30/120	.29	65-515*	5.95
64-516*	9.67	1-1/4" x 1/2"	1.24	1.24	30/120	.31	65-516*	5.75
64-517	8.82	1-1/4" x 3/4"	1.08	1.76	30/120	.35	65-517	5.13
64-518	8.82	1-1/4" x 1"	1.08	1.76	30/120	.29	65-518	5.13
64-519*	22.41	1-1/2" x 1/4"	1.30	1.12	25/75	.40	65-519*	7.94
64-520*	22.41	1-1/2" x 3/8"	1.30	1.12	25/75	.38	65-520*	7.94
64-521*	12.85	1-1/2" x 1/2"	1.30	1.34	25/75	.38	65-521*	6.30
64-522*	12.85	1-1/2" x 3/4"	1.30	1.44	25/75	.40	65-522*	6.30
64-523	11.53	1-1/2" x 1"	1.23	2.00	25/75	.45	65-523	6.03
64-524	10.65	1-1/2" x 1-1/4"	1.23	2.00	25/75	.34	65-524	6.03
64-526	10.11	2" x 1/4"	1.29	1.12	20/60	.57	65-526	18.99
64-525*	90.90	2" x 3/8"	1.28	1.12	20/60	.57	65-525*	9.88
64-527*	15.98	2" x 1/2"	1.39	1.34	20/60	.57	65-527*	9.88
64-528*	14.89	2" x 3/4"	1.39	1.63	20/60	.63	65-528*	8.35
64-529*	14.08	2" x 1"	1.39	1.77	20/60	.66	65-529*	8.35
64-530	14.08	2" x 1-1/4"	1.50	2.48	20/60	.74	65-530	8.35
64-531	11.97	2" x 1-1/2"	1.50	2.48	20/60	.61	65-531	8.35
64-546*	35.09	2-1/2" x 1/2"	1.51	1.34	15/30	.97	65-546*	14.15
64-547*	23.19	2-1/2" x 3/4"	1.51	1.63	15/30	.91	65-547*	15.09
64-532*	33.17	2-1/2" x 1"	1.51	1.95	15/30	.97	65-532*	14.15
64-533*	22.65	2-1/2" x 1-1/4"	1.51	2.39	15/30	1.03	65-533*	14.15
64-534	22.70	2-1/2" x 1-1/2"	1.51	2.98	15/30	1.16	65-534	14.15
64-535	20.22	2-1/2" x 2"	1.54	2.98	15/30	1.01	65-535	14.15
64-550	35.88	3" x 1"	1.61	1.95	12/24	1.41	65-550	18.84
64-549*	35.88	3" x 1-1/4"	1.61	2.39	12/24	1.42	65-549*	20.57
64-537*	27.21	3" x 1-1/2"	1.61	2.68	12/24	1.51	65-537*	20.57
64-538	28.77	3" x 2"	1.61	3.86	12/24	1.71	65-538	20.57
64-539	54.73	3" x 2-1/2"	1.61	3.86	12/24	1.68	65-539	19.33
		3-1/2" x 3"	1.86	4.20	5/10	2.17	65-555	52.17
64-551	117.72	4" x 3/4"	2.15	4.90	5/10	3.88	65-551	49.04
64-553*	68.40	4" x 1"	2.00	4.75	5/10	3.79	65-553*	42.34
64-552	44.57	4" x 1-1/4"	1.82	2.39	5/10	2.39	65-552	39.44
64-540	76.08	4" x 1-1/2"	1.82	2.68	5/10	2.39	65-540	41.17
64-541*	56.51	4" x 2"	1.82	3.31	5/10	2.52	65-541*	40.34
64-542*	56.51	4" x 2-1/2"	2.06	3.87	5/10	2.87	65-542*	35.29
64-543	56.51	4" x 3"	2.17	4.96	5/10	2.95	65-543	38.50
		5" x 4"	2.16	5.34	2/4	6.80	65-544	96.80
64-545*	123.07	6" x 4"	2.33	5.79	2/4	7.11	65-545*	

UNIONS

• Brass Seat

Part # Galvanized	List Price	Size	A	Box/ Case	Approx. Wt. Lbs.	Part # Black	List Price
64-600	21.24	1/8”	1.26	60/240	.17	65-600	17.67
64-601	20.57	1/4”	1.44	20/240	.25	65-601	16.26
64-602	13.71	3/8”	1.61	40/160	.37	65-602	13.13
64-603	13.05	1/2”	1.72	50/100	.52	65-603	9.88
64-604	14.31	3/4”	1.94	35/70	.78	65-604	12.85
64-605	17.88	1”	2.06	20/40	1.18	65-605	15.40
64-606	27.71	1-1/4”	2.26	15/30	1.64	65-606	20.57
64-607	34.21	1-1/2”	2.41	10/20	2.08	65-607	26.95
64-608	44.33	2”	2.75	6/12	3.24	65-608	38.12
64-609	134.06	2-1/2”	3.22	4/8	5.31	65-609	97.97
64-610	187.64	3”	3.50	4/8	6.94	65-610	113.54
64-611	406.44	4”	3.85	2/4	12.02	65-611	298.31

SQUARE HEAD PLUGS



• Cored

Part # Galvanized	List Price	Size	A	B	C	Box/ Case	Approx. Wt. Lbs.	Part # Black	List Price
		*1/8"	0.41	0.23	0.30	1/25	.02	65-650	2.86
64-651	4.62	*1/4”	0.48	0.28	0.38	1/25	.03	65-651	2.86
64-652	4.86	*3/8”	0.53	0.31	0.43	1/25	.04	65-652	2.86
64-653	3.06	1/2”	0.58	0.38	0.56	50/600	.08	65-653	1.83
64-654	4.75	3/4”	0.65	0.44	0.63	30/360	.13	65-654	2.04
64-655	4.36	1”	0.75	0.50	0.82	20/240	.22	65-655	2.85
64-656	7.29	1-1/4”	0.82	0.56	0.94	40/120	.33	65-656	4.36
64-657	9.90	1-1/2”	0.85	0.62	1.13	30/90	.41	65-657	5.27
64-658	12.24	2”	0.91	0.68	1.31	20/60	.68	65-658	6.74
64-659	24.17	2-1/2”	1.26	0.74	1.50	16/64	.89	65-659	15.90
64-660	33.25	3”	1.16	0.80	1.69	16/32	1.68	65-660	22.55
64-661	42.87	4”	1.22	1.00	2.28	6/12	3.02	65-661	46.99
		6"	1.85	1.13	5.97	5/10	11.41	65-662	87.14
		8"				1/1		65-664	458.34

CAPS

Part # Galvanized	List Price	Size	A	Box/ Case	Approx. Wt. Lbs.	Part # Black	List Price
64-470	5.50	1/8"	0.55	1/25	.03	65-470	4.29
64-471	5.50	1/4"	0.62	80/960	.07	65-471	1.89
64-472	4.30	3/8”	0.74	60/720	.08	65-472	2.33
64-473	3.29	1/2”	0.87	75/300	.13	65-473	2.42
64-474	4.72	3/4”	0.97	40/160	.18	65-474	3.19
64-475	5.23	1”	1.16	25/100	.30	65-475	3.53
64-476	7.59	1-1/4”	1.28	20/80	.47	65-476	4.81
64-477	9.67	1-1/2”	1.33	18/54	.66	65-477	6.82
64-478	12.22	2”	1.45	12/36	.99	65-478	8.10
64-479	38.87	2-1/2”	1.70	20/40	1.58	65-479	20.94
64-480	47.09	3”	1.80	12/24	2.51	65-480	33.10
64-481	93.51	4”	2.08	6/12	4.09	65-481	51.67
64-482	340.37	6”	2.55	2/4	5.18	65-482	207.89

* Use steel fittings for smaller sizes. See page 274-275 for Galvanized and Black Steel Fittings.

FLOOR FLANGES

Part # Galvanized	List Price	Size	A	Thickness	Hole Size	Box/ Case	Approx. Wt. Lbs.	Part # Black	List Price
64-692	20.05	1/2”	3.50	0.50	0.25	25/100	.63	65-692	9.24
64-693	22.37	3/4”	3.50	0.63	0.25	15/45	.73	65-693	9.58
64-694	24.63	1”	4.00	0.69	0.25	15/45	1.02	65-694	13.82
64-695	28.05	1-1/4”	4.00	0.75	0.25	15/30	1.00	65-695	15.40
64-696	34.99	1-1/2”	4.50	0.87	0.31	8/24	1.37	65-696	16.92
64-697	46.09	2”	5.50	1.00	0.31	8/16	2.11	65-697	21.85

EXTENSION FIP X MIP

Part #	Size	Approx. WT. Lbs.	Box/Case	List Price
65-621	1/2"	0.12	75 / 300	10.40
65-622	3/4"	0.23	40 / 160	15.17
65-623	1"	0.32	30 / 90	21.19

MUSHROOM VENT CAP

Cast Iron Galvanized Threaded Cap. 30 Mesh screen. Protects against driving rain, snow, sleet and insects.

Part #	Size	Approx. WT. Lbs.	Box/Case	List Price
21-178	2"	1.36	1/48	16.86

Other sizes available with extended delivery

BLACK & GALVANIZED STEEL FITTINGS

ROHS, WEE, REACH COMPLIANT - MADE IN THE USA • Merchant Steel

HEX BUSHINGS

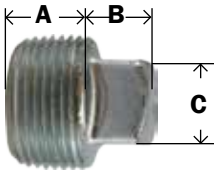
Part # Galvanized	List Price	Size M x F	A	Hex	Approx. Wt. Lbs.	Part # Black	List Price
66-500	1.53	1/4" x 1/8"	0.63	0.62	0.02	67-500	1.76
66-501	1.95	3/8" x 1/8"	0.66	0.68	0.04	67-501	2.28
66-502	1.81	3/8" x 1/4"	0.66	0.68	0.02	67-502	2.24
66-503	2.76	1/2" x 1/8"	0.80	0.87	0.10	67-503	2.48
66-504	2.75	1/2" x 1/4"	0.80	0.87	0.08	67-504	2.48
66-505	2.65	1/2" x 3/8"	0.80	0.87	0.06	67-505	2.50
66-506	4.05	3/4" x 1/8"	0.94	1.06	0.18	67-506	3.78
66-507	4.79	3/4" x 1/4"	0.94	1.06	0.14	67-507	3.98
66-508	4.81	3/4" x 3/8"	0.94	1.06	0.14	67-508	3.91
66-509	4.54	3/4" x 1/2"	0.94	1.06	0.10	67-509	4.02
66-510	7.61	1" x 1/4"	1.00	1.31	0.16	67-510	6.86
66-511	7.61	1" x 3/8"	1.00	1.31	0.26	67-511	6.66
66-512	9.78	1" x 1/2"	1.00	1.31	0.22	67-512	6.66
66-513	8.66	1" x 3/4"	1.00	1.31	0.14	67-513	7.29
		1-1/4" x 1/8"	1.08	1.31	0.16	67-514	10.24

CAPS

Part # Galvanized	List Price	Size NPTF	A	Hex	Approx. Wt. Lbs.	Part # Black	List Price
66-470	1.31	1/8"	0.53	0.56	0.02	67-470	1.27
66-471	1.64	1/4"	0.63	0.62	0.04	67-471	1.45
66-472	2.36	3/8"	0.69	0.81	0.06	67-472	2.23
66-473	5.06	1/2"	0.87	1.00	0.12	67-473	3.43
66-474	6.22	3/4"	0.97	1.18	0.16	67-474	5.07
66-475	8.44	1"	1.16	1.50	0.30	67-475	7.25
66-476	40.68	1-1/4"	1.28	2.00	0.68	67-476	33.79
66-477	51.17	1-1/2"	1.35	2.25	0.83	67-477	50.18
66-478	107.46	2"	1.45	2.625	1.36		

SQUARE HEAD PLUGS

• Solid



Part # Galvanized	List Price	Size NPTF	A	B	C	Approx. Wt. Lbs.	Part # Black	List Price
		1/16"	0.33	0.18	0.22	0.01	67-669	0.53
66-670	0.59	1/8"	0.33	0.24	0.28	0.01	67-670	0.58
66-671	0.66	1/4"	0.45	0.28	0.37	0.02	67-671	0.55
66-672	1.04	3/8"	0.50	0.31	0.43	0.04	67-672	0.88
66-653	1.87	1/2"	0.59	0.38	0.55	0.12	67-653	1.52
66-654	2.50	3/4"	0.63	0.44	0.62	0.18	67-654	2.09
66-655	8.71	1"	0.75	0.5	0.81	0.34	67-655	7.50
66-656	15.44	1-1/4"	0.80	0.56	0.93	0.62	67-656	13.73
66-657	24.58	1-1/2"	0.83	0.62	1.12	0.82	67-657	20.79
66-658	31.39	2"	0.88	0.68	1.31	1.36	67-658	27.26

HEX HEAD PLUGS

• Solid

Part # Galvanized	List Price	Size NPTF	A	Hex	Approx. Wt. Lbs.	Part # Black	List Price
66-770	0.55	1/8"	0.55	0.43	0.01	67-770	0.41
66-771	0.93	1/4"	0.74	0.56	0.04	67-771	0.76
66-772	1.57	3/8"	0.67	0.68	0.06	67-772	1.43
66-773	2.66	1/2"	0.80	0.70	0.12	67-773	2.36
66-774	4.95	3/4"	0.94	1.06	0.18	67-774	3.68
66-775	8.90	1"	1.00	1.31	0.22	67-775	6.66
66-776	12.74	1-1/4"	1.17	1.75	0.7	67-776	11.45
66-777	41.98	1-1/2"	1.51	2.00	1.2	67-777	23.14
66-778	64.64	2"	1.65	2.50	2.06	67-778	42.59

- Available in Stainless Steel Aluminum, Cast Iron
- BSPT & DIN threads available

COUNTERSUNK PLUG - Square Socket

Part # Galv	List Price	Size NPTF	A	Socket Size	Approx. Wt. Lbs.	Part # Black	List Price
66-630	0.41	1/8”	0.29	0.19	0.01	67-630	0.38
66-631	0.56	1/4”	0.45	0.25	0.02	67-631	0.56
66-632	0.83	3/8”	0.45	0.31	0.04	67-632	0.70
66-633	1.21	1/2”	0.59	0.38	0.08	67-633	1.05
66-634	2.05	3/4”	0.60	0.50	0.12	67-634	1.65
66-635	4.78	1”	0.75	0.50	0.16	67-635	4.11
66-636	8.08	1-1/4"	0.80	0.75	0.32	67-636	7.49
66-637	17.84	1-1/2"	0.83	0.75	0.45	67-637	14.71
66-638	38.84	2"	0.88	0.875	2.06	67-638	28.13

COUNTERSUNK PLUG - Hex Socket

Part # Galv	List Price	Size NPTF	A	Socket Size	Approx. Wt. Lbs.	Part # Black	List Price
66-760	0.64	1/16”	0.29	0.15	0.01	67-760	0.53
66-761	0.45	1/8”	0.29	0.18	0.01	67-761	0.56
66-762	0.60	1/4”	0.44	0.25	0.02	67-762	0.53
66-763	0.76	3/8”	0.44	0.31	0.04	67-763	0.70
66-764	1.13	1/2”	0.59	0.37	0.08	67-764	1.14
66-765	2.09	3/4”	0.60	0.56	0.14	67-765	1.63
66-766	5.57	1”	0.75	0.625	0.22	67-766	3.45
66-767	7.87	1-1/4"	0.80	0.75	0.37	67-767	6.16
66-768	16.33	1-1/2"	0.83	1.0	0.45	67-768	15.45
66-769	29.65	2"	0.88	1.0	0.86	67-769	25.18

- Slotted and Flush plugs available upon request

FACE BUSHING

Part # Galv	List Price	Size M x F	A	Approx. Wt. Lbs.	Part # Black	List Price
66-700	1.39	1/4” x 1/8”	0.44	0.01	67-700	1.43
66-701	1.71	3/8” x 1/8”	0.48	0.02	67-701	1.53
66-702	2.58	3/8” x 1/4”	0.48	0.02	67-702	1.53
		1/2” x 1/8”	0.56	0.04	67-703	2.30
66-704	2.48	1/2” x 1/4”	0.56	0.04	67-704	2.34
66-705	2.58	1/2” x 3/8”	0.56	0.04	67-705	2.45
		3/4” x 1/4”	0.62	0.12	67-707	3.03
66-708	3.72	3/4” x 3/8”	0.62	0.10	67-708	3.03
66-709	3.94	3/4” x 1/2”	0.62	0.10	67-709	3.12
		1” x 3/8”	0.75	0.18	67-711	5.59
66-712	6.35	1” x 1/2”	0.75	0.16	67-712	5.59
66-713	8.61	1” x 3/4”	0.75	0.16	67-713	5.76

See Hydraulic Pipe Fittings pg 410

BLACK EXTRA HEAVY 300# IRON — MALLEABLE FITTINGS

90° ELBOW

Part #	Size	List Price
69-101	1/4"	31.87
69-102	3/8"	20.31
69-103	1/2"	11.25
69-104	3/4"	12.91
69-105	1"	19.15
69-106	1-1/4"	29.62
69-107	1-1/2"	39.82
69-108	2"	96.10

45° ELBOW

Part #	Size	List Price
69-181	1/4"	72.30
69-182	3/8"	67.78
69-183	1/2"	37.87
69-184	3/4"	58.59
69-185	1"	49.78
69-186	1-1/4"	74.65
69-187	1-1/2"	96.43
69-188	2"	147.00

90° STREET ELBOW

Part #	Size	List Price
69-161	1/4"	37.68
69-162	3/8"	33.88
69-163	1/2"	18.56
69-164	3/4"	26.17
69-165	1"	28.46
69-166	1-1/4"	32.56
69-167	1-1/2"	45.51
69-168	2"	155.79

TEE

Part #	Size	List Price
69-252	3/8"	42.39
69-253	1/2"	19.57
69-254	3/4"	21.08
69-255	1"	27.25
69-256	1-1/4"	43.02
69-257	1-1/2"	52.14
69-258	2"	89.12

COUPLING

Part #	Size	List Price
69-411	1/4"	19.11
69-412	3/8"	23.93
69-413	1/2"	11.58
69-414	3/4"	14.39
69-415	1"	17.53
69-416	1-1/4"	35.00
69-417	1-1/2"	53.88
69-418	2"	81.32

MALLEABLE FITTINGS — BLACK EXTRA 300# IRON

REDUCING COUPLING

Part #	Size	List Price
69-432	3/8 x 1/4"	31.14
69-434	1/2 x 1/4"	37.22
69-435	1/2 x 3/8"	38.02
69-438	3/4 x 1/2"	31.05
69-441	1 x 1/2"	44.29
69-442	1 x 3/4"	48.73

CAP

Part #	Size	List Price
69-471	1/4"	21.12
69-472	3/8"	24.81
69-473	1/2"	23.97
69-474	3/4"	26.44
69-475	1"	34.72
69-476	1-1/4"	43.71
69-477	1-1/2"	63.90
69-478	2"	84.28

UNION

• Brass Seat

Part #	Size	List Price
69-600	1/8"	61.18
69-601	1/4"	68.94
69-602	3/8"	73.56
69-603	1/2"	61.18
69-604	3/4"	62.93
69-605	1"	65.69
69-606	1-1/4"	103.09
69-607	1-1/2"	140.32
69-608	2"	124.14

STEEL MAGNETIC PLUGS

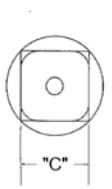
Steel Magnetic Drain Plugs - NPT Threaded

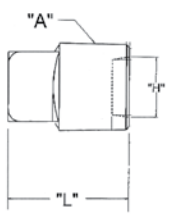
Magnetic Drain Plugs are similar to standard pipe or straight thread drain plugs with one important difference - a permanent magnet is fastened to the plug body. This magnet attracts and holds abrasive, ferrous metal particles preventing their circulation through the lubrication or hydraulic system.

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:
- Outbound 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"	List Price
28-996	3/8 - 18	.428 - .440	.435 - .445	.805 - .860	3.71
28-997	1/2 - 14	.553 - 565	.560 - .570	.970 -1.04	4.43
28-998	3/4 - 14	.615 - .627	.725 - .735	1.120 - 1.170	5.61
28-999	1-11 1/2	.803 - 815	.895 - .905	1.25 - 1.33	8.13

BULL PLUGS & SWAGES

BULL PLUGS

STANDARD BULL PLUG

- Sch 40 150#
- Zinc plated

Part #	Description	List Price
91-008	2"	39.00
91-007	2" w/ 1/2" TAP	54.15
91-009	2-1/2"	84.60
91-010	3"	104.40
91-011	4"	242.50

XH BULL PLUG

- Made from sch. 80 pipe.
- Zinc plated
- Hollow

Part #	Description	List Price
90-001	1/4"	7.05
90-002	3/8"	11.31
90-003	1/2"	11.60
90-004	3/4"	12.45
90-005	1"	27.71
90-006	1-1/4"	18.20
90-007	1-1/2"	22.05
90-008	2"	39.60
93-001*	2"	60.25
90-213	2" w/ 1/4" TAP	45.10
90-212	2" w/ 1/2" TAP	45.10
93-212*	2"XXH w/1/2" TAP	60.25
90-009	2-1/2"	75.50
90-010	3"	153.03
90-215	3" w/ 1/2" TAP	302.71
90-011	4"	252.03

* XXH

STANDARD SCH. 40 SWAGE

MIP X MIP

- Zinc plated

Part #	Description	List Price
93-113	1-1/4" x 1"	24.66
93-121	2" x 1"	52.47
93-122	2" x 1-1/4"	32.75
93-123	2" x 1-1/2"	43.74
93-124	2-1/2" x 2"	50.75
93-125	3" x 1"	129.29
93-127	3" x 1-1/2"	80.66
93-128	3" x 2"	105.69
93-129	3" x 2-1/2"	76.45
93-130	4" x 2"	157.15
93-131	4" x 3"	151.40
93-139	6" x 3"	442.20

SCH 80 XH SWAGES
MIP X MIP

* Hex Style

Part #	Description	List Price
90-100*	1/4" x 1/8"	14.91
90-102*	1/2" x 1/4"	13.40
90-103*	1/2" x 3/8"	12.55
90-104*	3/8" x 1/4"	11.80
90-105*	3/4" x 1/4"	21.16
90-106*	3/4" x 3/8"	13.86
90-107*	3/4" x 1/2"	17.25
90-108*	1" x 1/4"	20.20
90-109*	1" x 3/8"	19.60
90-110*	1" x 1/2"	22.20
90-111*	1" x 3/4"	29.55
90-140	1-1/4" x 3/4"	25.65
90-141	1-1/4" x 1"	47.15
90-114	1-1/2" x 1/2"	33.40
90-115	1-1/2" x 3/4"	31.90
90-116	1-1/2" x 1"	39.85
90-117	1-1/2" x 1-1/4"	35.15
90-118	2" x 1/4"	74.40
90-119	2" x 1/2"	60.70
90-120	2" x 3/4"	64.95
90-121	2" x 1"	58.00
90-122	2" x 1-1/4"	37.30
90-123	2" x 1-1/2"	53.13
90-124	2-1/2" x 2"	107.51
90-125	3" x 1"	114.35
90-126	3" x 1-1/4"	69.49
90-127	3" x 1-1/2"	114.40
90-128	3" x 2"	118.08
90-129	3" x 2-1/2"	80.05
90-133	4" x 1"	186.30
90-130	4" x 2"	179.69
90-131	4" x 3"	191.84
90-132	6" x 4"	519.00
90-150	6" x 2"	563.95
90-152	6" x 3"	554.80

XXH SWAGE

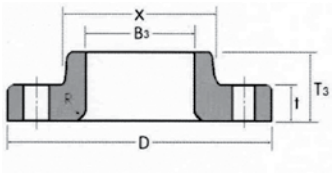
Part #	Description	List Price
92-102*	1/2" x 1/4"	15.83
92-107*	3/4" x 1/2"	24.11
92-108*	1" x 1/4"	25.88
92-109*	1" x 3/8"	25.88
92-110*	1" x 1/2"	24.80
92-111*	1" x 3/4"	20.95
92-114	1-1/2" x 1/2"	28.13
92-115	1-1/2" x 3/4"	28.13
92-116	1-1/2" x 1"	35.44
92-119	2" x 1/2"	42.09
92-120	2" x 3/4"	42.09
92-121	2" x 1"	69.40
92-122	2" x 1-1/4"	83.60
92-123	2" x 1-1/2"	51.28
92-128	3" x 2"	203.69

ASTMA105
ASME SA105
ANSI B16.5

Forged Steel Flanges

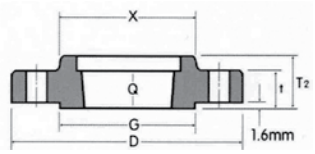
• A105 Forged Steel • CLASS 150

(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	List Price
107-020	1/2"	23.13
107-021	3/4"	23.09
107-022	1"	26.56
107-023	1-1/4"	14.37
107-024	1-1/2"	21.41
107-025	2"	29.68
107-026	2-1/2"	30.38
107-027	3"	44.55
107-029	4"	43.27
107-031	6"	94.03
107-032	8"	144.78
107-033	10"	205.88
107-034	12"	227.22



THREADED 1/16" RAISED FACE FORGED STEEL FLANGE

Part #	Size	List Price
107-060	1/2"	8.90
107-061	3/4"	13.79
107-062	1"	26.00
107-063	1-1/4"	27.00
107-064	1-1/2"	28.50
107-065	2"	29.00
107-066	2-1/2"	45.59
107-067	3"	52.29
107-069	4"	53.80
107-071	6"	79.00
107-072	8"	110.55
107-073	10"	165.00
107-074	12"	239.84

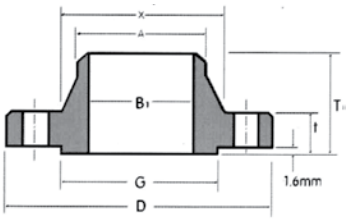
Nominal Pipe Size	Depth of Socket in.	DRILLING			BOLTING				APPROXIMATE WEIGHT		
		Bolt Circle Diameter	Number of Holes	Diameter of Holes	Diameter of Bolts (inch)	Machine Bolt Length	Stud Bolt Length		Welding Neck	Slip-on and Threaded	Blind
						Raised Face	Raised Face	Ring Joint			
	Y								LBS	LBS	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

ASTMA105
ASME SA105
ANSI B16.5

Forged Steel Flanges

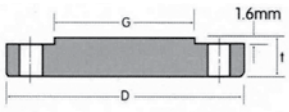
- **A105 Forged Steel**
- **CLASS 150**

(1-1/2 thru 6" available in #316 Stainless Steel add SS to part#)



WELD NECK FORGED STEEL FLANGE

Part #	Size	List Price
107-000	1/2"	32.50
107-001	3/4"	33.14
107-002	1"	34.19
107-003	1-1/4"	33.11
107-004	1-1/2"	33.11
107-005	2"	36.98
107-006	2-1/2"	39.49
107-007	3"	62.06
107-009	4"	59.25
107-011	6"	134.91
107-012	8"	145.71
107-013	10"	220.29
107-014	12"	346.65



BLIND 1/16" RAISED FACE FORGED STEEL FLANGE

Part #	Size	List Price
107-040	1/2"	8.40
107-041	3/4"	10.64
107-042	1"	30.53
107-043	1-1/4"	27.71
107-044	1-1/2"	26.71
107-045	2"	31.18
107-046	2-1/2"	44.96
107-047	3"	53.15
107-049	4"	79.73
107-051	6"	127.66
107-052	8"	158.81
107-053	10"	250.00
107-054	12"	377.10

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

COPPER FITTINGS

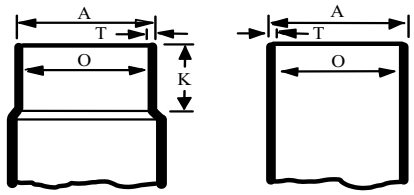
SYMBOL OF JOINT ENDS

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

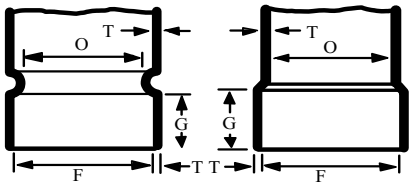
- Temp range 32° to 200°F
- Pressure @100° - 1/8-1 : 500 PSI
  - 1-1/4-2 : 400 PSI
  - 2-1/2 - 3: 300 PSI

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 #	List Price
77-100	1/8"	1/4"	0.01	W 02003	4.60
77-101	1/4"	3/8"	0.01	W 02009	5.24
77-102	3/8"	1/2"	0.03	W 02017	3.99
77-104	1/2"	5/8"	0.04	W 02022	1.45
77-107	5/8"	3/4"	0.07	W 02028	9.35
77-108	3/4"	7/8"	0.09	W 02034	3.22
77-110	1"	1-1/8"	0.17	W 02047	8.26
77-113	1-1/4"	1-3/8"	0.27	W 02077	10.72
77-114	1-1/2"	1-5/8"	0.41	W 02085	18.75
77-116	2"	2-1/8"	0.73	W 02086	33.30

WE-500-R 607-R 107-C

90° STREET ELL FTG. X C

77-124	1/4"	3/8"	0.01	W 02312	9.18
77-125	3/8"	1/2"	0.03	W 02321	6.04
77-126	1/2"	5/8"	0.05	W 01652	2.20
77-127	5/8"	3/4"	0.07	W 02330	9.94
77-128	3/4"	7/8"	0.12	W 01654	4.66
77-129	1"	1-1/8"	0.22	W 02344	11.92
77-130	1-1/4"	1-3/8"	0.33	W 02384	16.03
77-131	1-1/2"	1-5/8"	0.45	W 02385	23.42
77-132	2"	2-1/8"	0.87	W 02386	45.49

90° LONG TURN ELL C X C

77-139	1/8"	1/4"	0.01	W 02715	6.81
77-140	1/4"	3/8"	0.02	W 02716	5.71
77-141	5/16"		0.03		8.73
77-142	3/8"	1/2"	0.04	W 02717	6.70
77-143	1/2"	5/8"	0.06	W 02722	6.48
77-144	5/8"	3/4"	0.10	W 02728	6.79
77-145	3/4"	7/8"	0.15	W 02734	8.68

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	16.28
77-155	1/2"	5/8"	0.06	W 02822	8.60
77-156	5/8"	3/4"	0.11		10.53
77-157	3/4"	7/8"	0.15		12.05
77-158	1"	1-1/8"	0.33		18.75
77-159	1-1/4"	1-3/8"	0.46	W 02828	10.53
77-160	1-1/2"	1-5/8"	0.64	W 02834	12.05

WE-503-L 607-2LT

WROT SOLDER JOINT — COPPER FITTINGS

45° ELL C X C

Part#	Nominal	Approx Net Wt.	Ind #	List Price
77-161	1/8"	0.01	W 03005	12.51
77-162	1/4"	0.01	W 03012	7.45
77-163	3/8"	0.02	W 03021	6.38
77-164	1/2"	0.04	W 03026	2.57
77-165	5/8"	0.06	W 03030	13.38
77-166	3/4"	0.10	W 03034	4.38
77-167	1"	0.19	W 03044	11.42
77-168	1-1/4"	0.27	W 03050	13.78
77-169	1-1/2"	0.39	W 03055	18.51
77-170	2"	0.75	W 03059	31.69

WE-504 606 106

STREET 45° FTG. X C

77-177	1/4"	0.01	W 03312	13.91
77-178	3/8"	0.02	W 03321	10.09
77-179	1/2"	0.06	W 03326	2.75
77-180	5/8"	0.06	W 03330	23.01
77-181	3/4"	0.10	W 03334	5.38
77-182	1"	0.18	W 03344	13.86
77-183	1-1/4"	0.27	W 03350	21.16
77-184	1-1/2"	0.38	W 03355	25.26
77-185	2"	0.75	W 03359	40.16

WE-505 606-2

COUPLING (SOCKET) W/ ROLLED UP TUBE STOP C X C

77-201	1/8"	0.01	W 01003	1.22
77-202	1/4"	0.01	W 01009	1.01
77-203	3/8"	0.02	W 01017	1.31
77-204	1/2"	0.03	W 01022	1.12
77-205	5/8"	0.04	W 01028	2.71
77-206	3/4"	0.06	W 01034	2.25
77-207	1"	0.10	W 01047	4.49
77-208	1-1/4"	0.15	W 01055	7.59
77-209	1-1/2"	0.22	W 01063	10.03
77-210	2"	0.39	W 01072	16.74

WC-400 100

COUPLING (SOCKET) LESS TUBE STOP C X C

77-219	1/8"	0.01	W 01900	4.03
77-220	1/4"	0.01	W 01901	1.25
77-222	1/2"	0.03	W 01903	1.43
77-223	3/4"	0.06	W 01905	3.08
77-224	1"	0.10	W 01906	6.48
77-225	1-1/4"	0.15	W 01907	9.14
77-226	1-1/2"	0.22	W 01908	12.34
77-227	2"	0.39	W 01909	18.99

WC-400NS 601

See page 165-167 for SWT x SWT LF Ball Valves

COPPER FITTINGS — WROT SOLDER JOINT

COUPLING (SOCKET) W/ DIMPLED TUBE STOP C X C

Part#	Nominal	Approx Net Wt.	Ind #	List Price
77-238	1/2"	0.03		1.73
77-240	3/4"	0.06		2.76
77-241	1"	0.10		5.46
77-242	1-1/4"	0.15		13.52
77-244	2"	0.39		21.20

WC-400S

REDUCER COUPLING W/ STOP C X C

77-252	1/4" x 1/8"	0.01	W 01011	6.33
77-254	3/8" x 1/8"			3.58
77-253	3/8" x 1/4"	0.02	W 01019	2.70
77-256	1/2" x 1/4"	0.03	W 01023	2.51
77-255	1/2" x 3/8"	0.03	W 01021	2.17
77-258	5/8" x 1/2"	0.04	W 01025	5.40
77-263	3/4" x 3/8"	0.06	W 01036	5.67
77-262	3/4" x 1/2"	0.06	W 01029	3.51
77-267	1"x1/2"	0.10	W 01049	9.82
77-265	1"x3/4"	0.12	W 01038	6.98
77-270	1 -1/4" x 1/2"	0.14	W 01058	9.15
77-269	1 -1/4" x 3/4"	0.17	W 01056	9.68
77-268	1-1/4" x 1"	0.17	W 01051	9.73
77-273	1 -1/2" x 3/4"	0.25	W 01065	14.96
77-272	1-1/2" x1"	0.24	W 01064	16.36
77-271	1-1/2" x 1-1/4"	0.24	W 01060	16.04
77-277	2" x 1"	0.48	W 01074	29.70
77-276	2 x 1-1/4"	0.46	W 01073	29.87
77-275	2" x 1-1/2"	0.42	W 01069	22.68
77-280	2-1/2"x2"	0.79	W 01075	49.90

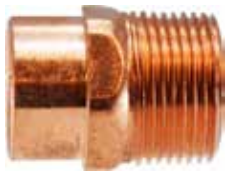
WC-400R 600-R

FITTING REDUCER FTG. C X C

77-292	3/8" x 1/8"	0.01	W 01314	3.29
77-291	3/8" x 1/4"	0.02	W 01312	2.84
77-294	1/2" x 1/4"	0.03	W 01317	2.76
77-293	1/2" x 3/8"	0.03	W01315	2.97
77-295	5/8" X 1/2"	0.03	W 01320	5.48
77-298	3/4" x 3/8"	0.05	W 01327	6.23
77-297	3/4" x 1/2"	0.06	W 01326	3.84
77-296	3/4" x 5/8"	0.08	W 01325	3.49
77-352	1" x 1/2"	0.10	W 01265	7.56
77-300	1"x3/4"	0.11	W 01337	5.92
77-355	1 -1/4" x 3/4"	0.15	W 01345	10.58
77-354	1-1/4" x1"	0.17	W 01343	11.07
77-360	1 -1/2" x 1/2"	0.21	W 01355	12.85
77-359	1 -1/2" x 3/4"	0.21	W 01353	14.05
77-358	1-1/2"x1"	0.22	W 01351	16.59
77-357	1 -1/2" X 1-1/4"	0.21	W 01350	13.77
77-365	2" x 1/2"	0.44	W 01364	34.95
77-363	2" x 1"	0.40	W 01360	32.92
77-361	2" x 1-1/2"	0.39	W 01358	25.94

WC-403 600-2

MALE ADAPTER C X M



Part#	Nominal	Approx Net Wt.	Ind #	List Price
77-393	1/8"	0.02		19.19
77-394	1/4"	0.04		26.13
77-398	3/8"	0.06	W 01125	6.49
77-401	1/2"	0.08	WB01131	3.02
77-306	3/4"	0.14	WB01146	5.06
77-309	1"	0.24	WB01163	13.36
77-314	1-1/4"	0.41	W 01171	18.54
77-318	1-1/2"	0.50	W 01179	21.72
77-322	2"	0.87	W 01187	36.76
77-395	1/4" x 1/2"	0.09	W 01113	9.66
77-311	1/2" x 3/8"	0.18		6.94
77-303	1/2" x 3/4"	0.16	W 01130	9.01
77-308	3/4" x 1/2"	0.31		8.84
77-307	3/4" x 1"	0.29	W 01145	19.10
77-312	1" x 3/4"	0.18	W 01164	19.10

• 14 more reducing sizes available

WC-401 604

FTG. MALE ADAPTER FTG. X M

77-331	1/2"	0.09	W 01431	13.15
77-333	3/4"	0.15	W 01446	14.94
77-334	1"	0.15	W 01463	19.88
77-335	1-1/4"	0.41	W 01471	77.69
77-336	1-1/2"	0.41	W 0147X9	77.59
77-337	2"	0.86	W 01487	152.15

WC-404 604-2

COPPER TUBING

SEE COPPER TUBING FOR REFRIGERATION AND DRINKING WATER ON PAGE 336

A mind is like a parachute. It doesn't work if it is not open. - Frank Zappa

FEMALE ADAPTERS
C X F

Part#	Nominal	Approx Net Wt.	Ind #	List Price
77-343	1/2"	0.10	WB01231	4.77
77-349	3/4"	0.14	WB01246	6.56
77-402	1"	0.24	WB01263	14.98
77-406	1-1/4"	0.43	W 01271	21.72
77-410	1-1/2"	0.58	W 01279	33.95
77-413	2"	0.74	W 01287	46.12
77-341	3/8" x 1/2"	0.10	W 01224	10.44
77-347	1/2" x 1/4"	0.05	W 01233	7.36
77-346	1/2"x3/8"	0,70	W 01232	7.36
77-345	1/2" x 3/4"	0.15	WB01230	10.24

FEMALE FTG.
ADAPT. FTG. X F

77-419	3/8"	0.05	W 01525	14.42
77-420	1/2"	0.11	W 01531	9.42
77-423	3/4"	0.19	W 01546	12.15
77-424	1			24.20

• More sizes available

WC402 603 WC402R 603R

CAP

77-429	1/4"	0.01	W 07004	1.53
77-430	3/8"	0.01	W 07006	1.88
77-431	1/2"	0.02	WB07007	0.92
77-432	5/8"	0.03	W 07008	2.68
77-433	3/4"	0.04	WB07009	1.95
77-434	1"	0.08	WB07011	4.57
77-435	1-1/4"	0.11	W 07012	5.69
77-436	1-1/2"	0.18	W 07013	8.86
77-437	2"	0.30	W 07014	14.94

WC405 603-2 WC405R 603R

UNIONS C X C

• LF = Lead Free

77-453	1/4"	0.11	W 08001	115.19
77-454	3/8"	0.11	W 08002	115.81
77-455LF	1/2"	0.17	W 08003	23.36
77-456LF	3/4"	0.37	W 08004	30.02
77-457LF	1"	0.51	W 08005	52.45
77-606LF	1-1/4"	0.98	W08006	80.58
77-607LF	1-1/2"	1.21	W08007	109.05
77-608LF	2"		W08008	189.45

WC-415 617

U-TYPE STRAP

77-461	1/2"	0.03	A 02529	0.83
77-462	3/4"	0.03	A 02574	1.48
77-463	1"	0.04	A 02614	1.45
77-464	1-1/4"	0.04	A 02650	2.04

WC-407

WS-1100

WROT SOLDER JOINT — COPPER FITTINGS

TEE
C X C X C

Part#	Nominal 1 x 2 x 3	Approx Net Wt.	Ind #	List Price
77-467	1/8"	0.02	W 40306	9.16
77-468	1/4"	0.03	W 04000	9.69
77-470	3/8"	0.05	W 04001	7.77
77-473	1/2"	0.08	WB04006	2.57
77-481	5/8"	0.12	W 04017	14.02
77-483	3/4"	0.18	WB04031	5.92
77-490	1"	0.35	WB04048	18.04
77-504	1-1/4"	0.58	W 04068	22.92
77-519	1-1/2"	0.72	W 04084	37.00
77-543	2"	1.35	W 40102	58.84
77-489	3/4"x1/2"x1/2"	0.15	WB04043	7.47
77-488	3/4" x 1/2" x 3/4"	0.19	WB04041	8.07
77-486	3/4" x 3/4" x 1/2"	0.15	WB04033	5.85
77-485	3/4"x3/4"x1"	0.25	W 04065	21.28
77-501	1"x1/2"x1"	0.34	W 04061	25.20
77-499	1"x3/4"x3/4"	0.31	W 04056	25.25
77-498	1"x3/4"x1"	0.38	W 04055	19.76
77-496	1"x1"x1/2"	0.24	WB04051	20.23
77-493	1"x1"x3/4"	0.29	WB04049	16.62
77-518	1 -1 /4"x 1/2" x 1-1/4"	0.58	W 04083	39.10
77-514	1 -1/4" x 3/4" x 1-1/4"	0.63	W 04078	33.96
77-508	1-1/4" x 1-1/4" x 3/4"	0.39	W 04070	24.20
77-507	1-1/4"x1-1/4"x1"	0.47	W 04069	24.20
77-506	1 -1/4" x1 -1/4" x 1-1/2"	0.79	W 40100	67.71
77-523	1 -1/2" x 1-1/2" x 3/4"	0.51	W 04087	30.69
77-522	1-1/2" x 1-1/2" x1"	0.60	W 04086	28.81
77-549	2"x2"x1/2"	0.77	W 40107	39.66
77-548	2" x 2" x 3/4"	0.90	W 40106	44.44
77-547	2"x2"x1"	0.99	W 40105	40.89

DROP EAR ELBOWS

• Lead Free Bronze • Lead Free Brass

Part #	SWT x FIP	List Price
44840LF	1/2 x 1/2 Bronze	5.67
44841LF	1/2 x 1/2 Brass	4.27
44842LF	3/4 x 1/2 Brass	6.23
44843LF	3/4 x 3/4 Brass	7.84

• Lead Free Brass

Part #	SWT x SWT	List Price
44844LF	1/2 x 1/2	3.57

• Lead Free Bronze

Part #	Pex x FIP	List Price
44845LF	1/2 x 1/2	5.88

Everything is funny, as long as it's happening to somebody else. - *Will Rogers*

PLASTIC FITTINGS

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.

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

PLASTIC PIPE | PLASTIC FITTINGS

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	List Price
28-702P	3/8"	10.06
28-704P	3/4"	7.83

W

NYLON ELBOWS

Part #	Size	List Price
28-701W	1/4"	8.49
28-703W	1/2"	7.32
28-704W	3/4"	7.91
28-705W	1"	14.03
28-706W	1-1/4"	16.08
28-707W	1-1/2"	18.29
28-708W	2"	24.97

TEE

P

POLYPROPYLENE TEES

Part #	Size	List Price
28-741P	1/4"	6.60
28-742P	3/8"	11.93
28-743P	1/2"	6.74
28-744P	3/4"	8.50

W

NYLON TEES

Part #	Size	List Price
28-741W	1/4"	6.80
28-743W	1/2"	8.32
28-744W	3/4"	10.30
28-745W	1"	19.08
28-746W	1-1/4"	21.79
28-747W	1-1/2"	29.21
28-748W	2"	29.64

STREET ELBOW

P

POLYPROPYLENE STREET ELBOW

Part #	Size	List Price
28-819P	1/8"	3.71
28-723P	1/2"	5.57
28-820P	2"	17.79
28-821P	3"	143.62

W

NYLON STREET ELBOW

Part #	Size	List Price
28-819W	1/8"	3.93
28-720W	1/4"	5.31
28-721W	3/8"	7.90
28-723W	1/2"	5.20
28-724W	3/4"	7.15
28-725W	1"	15.75
28-726W	1-1/4"	17.38
28-727W	1-1/2"	16.07
28-820W	2"	21.03

HEX HEAD PLUGS

- Cored

B

POLYETHYLENE PLUGS

Part #	Size	List Price
28-601B	1/8"	0.68
28-602B	1/4"	0.70
28-603B	3/8"	0.76
28-604B	1/2"	0.89
28-605B	3/4"	1.28

W

NYLON PLUGS

Part #	Size	List Price
28-601W	1/8"	0.98
28-602W	1/4"	0.98
28-603W	3/8"	0.92
28-604W	1/2"	2.07
28-605W	3/4"	1.18
28-606W	1"	1.86
28-607W	1-1/4"	2.97
28-608W	1-1/2"	3.63
28-609W	2 "	6.52

HEX BUSHING

P

POLYPROPYLENE BUSHINGS

Part #	Size	List Price
28-659P	1/4 x 1/8"	2.76
28-660P	3/8 x 1/8"	2.62
28-661P	3/8 x 1/4"	2.55
28-663P	1/2 x 1/4"	2.47
28-664P	1/2 x 3/8"	2.26
28-666P	3/4 x 1/4"	2.91
28-668P	3/4 x 1/2"	3.09
28-671P	1 x 1/2"	2.95
28-672P	1 x 3/4"	3.69
28-675P	1-1/4" x 1"	3.61
28-814P	1-1/2" x 1/2"	7.82
28-678P	1-1/2 x 3/4"	5.35
28-680P	1-1/2 x 1-1/4"	3.89

W

NYLON BUSHINGS

Part #	Size	List Price
28-659W	1/4 x 1/8"	2.46
28-661W	3/8 x 1/4"	2.45
28-663W	1/2 x 1/4"	2.02
28-664W	1/2 x 3/8"	2.53
28-666W	3/4 x 1/4"	1.98
28-667W	3/4 x 3/8"	2.69
28-668W	3/4 x 1/2"	2.13
28-671W	1 x 1/2"	3.22
28-672W	1 x 3/4"	2.42
28-674W	1-1/4 x 3/4"	6.05
28-675W	1-1/4 x 1"	6.57
28-678W	1-1/2 x 3/4"	6.41
28-679W	1-1/2 x 1"	6.22
28-680W	1-1/2 x 1-1/4"	5.35
28-815W	2" x 1/2"	12.11
28-682W	2 x 3/4"	13.80
28-683W	2 x 1"	11.90
28-685W	2 x 1-1/2"	6.34
28-818W	3" x 2"	16.30

HEX NIPPLES

B

POLYETHYLENE HEX NIPPLES

Part #	Size	List Price
28-611B	1/8"	0.85
28-612B	1/4"	0.80
28-613B	3/8"	0.80
28-614B	1/2"	1.11

P

POLYPROPYLENE HEX NIPPLES

Part #	Size	List Price
28-612P	1/4"	0.96
28-613P	3/8"	1.01
28-614P	1/2"	1.08
28-615P	3/4"	1.59

W

NYLON HEX NIPPLES

Part #	Size	List Price
28-611W	1/8"	0.83
28-612W	1/4"	1.45
28-613W	3/8"	0.78
28-614W	1/2"	1.12
28-615W	3/4"	1.36
28-616W	1"	2.43
28-617W	1 1/4 "	5.30
28-618W	1 1/2"	5.24
28-619W	2"	7.48

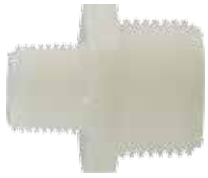
REDUCER NIPPLES

B

POLYETHYLENE HEX NIPPLES

Part #	Size	List Price
28-623B	1/2 x 1/4"	0.98
28-624B	1/2 x 3/8"	0.99
28-628B	3/4 x 3/8"	1.15
28-625B	3/4 x 1/2"	1.32

W



NYLON REDUCING HEX NIPPLES

Part #	Size	List Price
28-620W	1/4 x 1/8"	1.19
28-621W	3/8 x 1/8"	1.01
28-622W	3/8 x 1/4"	1.04
28-623W	1/2 x 1/4"	1.22
28-624W	1/2 x 3/8"	1.12
28-628W	3/4 x 3/8"	1.00
28-625W	3/4 x 1/2"	1.37

P = Polypropylene
W = White Nylon
B = Black Polyethylene

PLASTIC PIPE/ HOSE BARB | PLASTIC FITTINGS

COUPLING

P

POLYETHYLENE COUPLINGS

Part #	Size	List Price
28-761P	1/4"	5.16
28-762P	3/8"	5.83
28-763P	1/2"	6.76
28-764P	3/4"	6.93

W

NYLON COUPLINGS

Part #	Size	List Price
28-761W	1/4"	6.79
28-762W	3/8"	7.48
28-763W	1/2"	6.29
28-764W	3/4"	6.33
28-765W	1"	7.52
28-803W	1-1/4"	7.35
28-767W	1-1/2"	10.21
28-768W	2"	12.62

Forget yourself by becoming interested in others. Do every day a good deed that will put a smile of joy on someone's face.

-Dale Carnegie

PIPE CAP

W

NYLON CAPS

Part #	Size	List Price
28-640W	1/4"	0.90
28-641W	3/8"	1.17
28-642W	1/2"	1.19
28-643W	3/4"	1.14

PLASTIC BULKHEAD FITTINGS

P

20% Glass Filled Polypropylene w/ Santoprene Gasket

NEW LOW COST

Part #	Fpt	Hole	List Price
28-693P	1/2"	1-3/8"	16.32
28-694P	3/4"	1-3/8"	12.96
28-695P	1"	1-3/4"	16.56
28-696P	1-1/4"	2"	17.82
28-697P	1-1/2"	3"	25.14
28-698P	2"	3"	25.68
28-699P	3"	4-1/2"	127.96

P = Polypropylene
W = White Nylon
B = Black Polyethylene

MALE ADAPTERS

B

POLYETHYLENE BARB X MALE PIPE

Part #	Size	List Price
33-002B	3/16 x 1/8"	0.88
33-003B	3/16 x 1/4"	0.96
33-004B	1/4 x 1/8"	0.70
33-005B	1/4 x 1/4"	0.82
33-006B	1/4 x 3/8"	0.84
33-007B	1/4 x 1/2"	0.91
33-008B	5/16 x 1/8"	0.71
33-009B	5/16 x 1/4"	0.82
33-012B	3/8 x 1/4"	0.74
33-013B	3/8 x 3/8"	0.88
33-014B	3/8 x 1/2"	0.91
33-026B	3/8 x 3/4"	0.97
33-015B	1/2 x 1/4"	0.78
33-016B	1/2 x 3/8"	0.84
33-017B	1/2 x 1/2"	0.93
33-018B	1/2 x 3/4"	1.15
33-019B	5/8 x 3/8"	1.01
33-020B	5/8 x 1/2"	0.90
33-021B	5/8 x 3/4"	1.44
33-022B	3/4 x 1/2"	0.96
33-023B	3/4 x 3/4"	1.19
33-024B	1 x 3/4"	3.29
33-025B	1 x 1"	3.42

P

POLYPROPYLENE HOSE BARB
Hose ID x MIP

Part #	Size	List Price
33-012P	3/8 x 1/4"	0.99
33-014P	3/8 x 1/2"	1.22
33-015P	1/2 x 1/4"	0.97
33-016P	1/2 x 3/8"	1.02
33-017P	1/2 x 1/2"	0.99
33-018P	1/2 x 3/4"	1.56
33-303P	1/2" x 1"	2.59
33-020P	5/8 x 1/2"	0.98
33-022P	3/4 x 1/2"	1.17
33-023P	3/4 x 3/4"	1.36
33-024P	1 x 3/4"	1.88
33-025P	1 x 1"	2.30
33-323P	3" x 3"	34.04

W

NYLON BARB MALE ADAPTERS
Hose ID x MIP

Part #	Size	List Price
33-002W	3/16 x 1/8"	0.89
33-003W	3/16 x 1/4"	0.98
33-004W	1/4 x 1/8"	0.91
33-005W	1/4 x 1/4"	0.82
33-006W	1/4 x 3/8"	1.09
33-007W	1/4 x 1/2"	1.16
33-380W	1/4 x 3/4"	1.33
33-008W	5/16 x 1/8"	0.90
33-009W	5/16 x 1/4"	0.93
33-010W	5/16 x 3/8"	0.97
33-011W	3/8 X 1/8"	0.93
33-012W	3/8 x 1/4"	1.39
33-013W	3/8 x 3/8"	1.05
33-014W	3/8 x 1/2"	1.13
33-026W	3/8 x 3/4"	1.31
33-015W	1/2 x 1/4"	0.89
33-016W	1/2 x 3/8"	0.97
33-017W	1/2 x 1/2"	0.99
33-018W	1/2 x 3/4"	1.53
33-303W	1/2" x 1"	1.96
33-019W	5/8 x 3/8"	0.85
33-020W	5/8 x 1/2"	1.30
33-021W	5/8 x 3/4"	1.48
33-329W	5/8" x 1"	2.82
33-306W	3/4" x 3/8"	1.50
33-022W	3/4 x 1/2"	1.41
33-023W	3/4 x 3/4"	1.41
33-000W	3/4 x 1"	1.84
33-318W	3/4" x 1-1/4"	3.10
33-319W	3/4" x 1-1/2"	6.20
33-307W	1" x 1/2"	2.55
33-024W	1 x 3/4"	1.86
33-025W	1 x 1"	2.05
33-029W	1 x 1-1/4"	3.99
33-320W	1" x 1-1/2"	6.20
33-349W	1-1/4" x 3/4"	4.45
33-028W	1-1/4 x 1"	3.22
33-030W	1-1/4 x 1-1/4"	3.60
33-032W	1-1/4 x 1-1/2"	3.35
33-321W	1-1/2" x 1-1/4"	4.10
33-033W	1-1/2 x 1-1/2"	4.09
33-322W	2" x 1-1/2"	18.04
33-035W	2 x 2"	7.59

ELBOWS

B

POLYETHYLENE ELBOWS
Hose ID x MALE PIPE

Part #	Size	List Price
33-308B	3/16 x 1/8	1.32
33-038B	1/4 x 1/8	1.34
33-039B	1/4 x 1/4	1.28
33-309B	1/4 x 3/8	0.97
33-046B	3/8 x 1/8	1.28
33-041B	3/8 x 1/4	1.53
33-042B	3/8 x 3/8	2.52
33-047B	3/8 x 1/2	1.70
33-043B	1/2 x 3/8	1.61
33-311B	1/2 x 1/2	1.44
33-385B	1/2 x 3/4	3.28
33-044B	5/8 x 3/8	1.94
33-045B	5/8 x 1/2	2.28
33-312B	5/8 x 3/4	2.61
33-313B	3/4 x 1/2	2.38
33-314B	3/4 x 3/4	3.36
33-316B	1 x 1	3.38

P

POLYPROPYLENE BARB ELBOW

Part #	Size	List Price
33-048P	1/2 x 1/4	1.63
33-311P	1/2 x 1/2	1.72
33-385P	1/2 x 3/4	2.59
33-313P	3/4 x 1/2	2.01
33-314P	3/4 x 3/4	2.35
33-316P	1 x 1	2.84
33-334P	1-1/4 x 1	6.75
33-461P	1-1/4 x 1-1/4	4.96
33-463P	1-1/2 x 1-1/2	7.50

W

NYLON BARB X MIP ELBOWS

Part #	Size	List Price
33-381W	3/16 x 1/4	2.01
33-038W	1/4 x 1/8	1.70
33-039W	1/4 x 1/4	1.43
33-309W	1/4 x 3/8	1.87
33-351W	1/4 x 1/2	1.58
33-040W	5/16 x 1/4	1.85
33-310W	5/16 x 3/8	2.23
33-046W	3/8 x 1/8	1.72
33-041W	3/8 x 1/4	1.56
33-042W	3/8 x 3/8	1.34
33-047W	3/8 x 1/2	1.74
33-384W	3/8 x 3/4	2.40
33-048W	1/2 x 1/4	1.70
33-043W	1/2 x 3/8	1.66
33-311W	1/2 x 1/2	1.65
33-385W	1/2 x 3/4	2.21
33-044W	5/8 x 3/8	1.86
33-045W	5/8 x 1/2	2.17
33-312W	5/8 x 3/4	2.47
33-313W	3/4 x 1/2	2.26
33-314W	3/4 x 3/4	2.18
33-315W	3/4 x 1	2.40
33-386W	1x3/4	3.09
33-316W	1 x 1	3.04
33-460W	1 x 1-1/4	4.96
33-461W	1-1/4 x 1-1/4	6.22
33-462W	1-1/2 x 1-1/4	6.36
33-463W	1-1/2 x 1-1/2	7.46
33-464W	2 x 2	9.49

P = Polypropylene
W = White Nylon
B = Black Polyethylene

PLASTIC BARBS

PLASTIC FITTINGS

HOSE BARB X FE ADAPTERS

B

POLYETHYLENE ADAPTER
Hose ID x FIP

Part #	Size	List Price
33-053B	1/4 x 1/4"	5.57

W

NYLON ADAPTER
Barb x FIP

Part #	Size	List Price
33-052W	1/4 x 1/8"	3.73
33-053W	1/4 x 1/4"	5.71
33-058W	3/8 x 1/4"	1.92
33-059W	3/8 x 3/8"	4.41
33-060W	3/8 x 1/2"	6.22
33-442W	3/8 x 3/4"	4.67
33-066W	1/2 x 1/4"	3.63
33-061W	1/2 x 1/2"	3.79
33-067W	1/2 x 3/4"	4.26
33-068W	5/8 x 1/2"	3.51
33-063W	5/8 x 3/4"	6.04
33-064W	3/4 x 1/2"	5.04
33-065W	3/4 x 3/4"	6.10

HOSE BARB X FE ELBOW

W

NYLON ELBOW
Hose ID x Female Pipe

Part #	Size	List Price
33-343W	1/2 x 1/2	2.86
33-345W	3/4 x 1/2	4.41
33-471W	3/4 x 3/4	6.22

P = Polypropylene
W = White Nylon
B = Black Polyethylene

UNION ELBOWS

B

POLYETHYLENE ELBOW

Part #	Size	List Price
33-390B	1/4	1.42
33-391B	3/8	1.80
33-394B	1/2	1.39
33-395B	5/8	2.03
33-396B	3/4	2.20

W

NYLON ELBOW

Part #	Size	List Price
33-390W	1/4	1.61
33-391W	3/8	1.63
33-394W	1/2	1.67
33-395W	5/8	2.15
33-396W	3/4	2.11
33-397W	1	3.48
33-398W	1-1/4	9.86
33-399W	1-1/2	12.70
33-389W	2	19.80

SPLICERS

B

POLYETHYLENE SPLICER

Part #	Size	List Price
33-091B	1/8	0.70
33-092B	3/16	0.84
33-093B	1/4	0.72
33-095B	3/8	0.82
33-096B	1/2	0.78
33-097B	5/8	0.97
33-098B	3/4	2.46

POLYPROPYLENE SPLICER

Part #	Size	List Price
33-095P	3/8	0.91
33-096P	1/2	0.88
33-098P	3/4	1.55
33-099P	1	1.82

SPLICERS

W

NYLON SPLICES

Part #	Size	List Price
33-091W	1/8	0.85
33-092W	3/16	1.08
33-093W	1/4	1.64
33-094W	5/16	1.14
33-095W	3/8	0.80
33-096W	1/2	0.92
33-097W	5/8	1.09
33-098W	3/4	1.56
33-099W	1	2.34
33-480W	1-1/4	4.25
33-481W	1-1/2	4.05
33-482W	2	15.46

REDUCING SPLICERS

B

POLYETHYLENE SPLICES

Part #	Size	List Price
33-406B	3/8 x 1/4	0.78
33-407B	1/2 x 1/4	0.79
33-408B	1/2 x 3/8	0.83
33-410B	5/8 x 1/2	0.80

W

NYLON SPLICES

Part #	Size	List Price
33-079W	1/4 x 1/8	0.70
33-347W	1/4 x 3/16	0.72
33-406W	3/8 x 1/4	0.97
33-348W	3/8 x 5/16	0.82
33-407W	1/2 x 1/4	0.87
33-408W	1/2 x 3/8	0.96
33-409W	5/8 x 3/8	1.09
33-410W	5/8 x 1/2	1.04
33-089W	3/4 x 1/2	2.06

TEES BARBED ON ALL SIDES

B

POLYETHYLENE TEE

Part #	Size	List Price
33-415B	1/8	1.32
33-418B*	3/16	1.22
33-420B	3/16	1.68
33-422B	1/4	1.35
33-426B	5/16	2.83
33-429B	3/8	1.35
33-433B	1/2	1.40
33-436B	5/8	1.76
33-437B	3/4	1.95
33-438B	1	2.38

P

POLYPROPYLENE TEE

Part #	Size	List Price
33-429P	3/8	1.93
33-440P	1-1/2	6.14

ALL HOSE BARB "Y"

P

POLYPROPYLENE WYE

Part #	Size	List Price
33-300P*	1/4"	7.29
33-301P*	3/8"	4.51
33-302P*	1/2"	8.25

**Natural Polypro*

W

NYLON WYE

Part #	Size	List Price
33-301W	3/8"	3.52

W

NYLON TEE

Part #	Size	List Price
33-415W	1/8	1.81
33-417W	5/32	3.32
33-420W	3/16	1.59
33-422W	1/4	1.80
33-426W	5/16	1.82
33-429W	3/8	1.53
33-433W	1/2	1.77
33-436W	5/8	1.98
33-437W	3/4	2.42
33-438W	1	3.51
33-439W	1-1/4	5.83
33-440W	1-1/2	7.36
33-441W	2	21.10

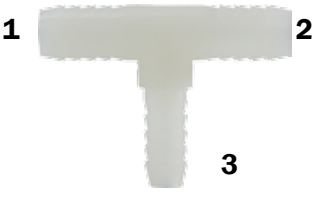
REDUCING TEES

B

POLYETHYLENE TEE

Part #	Size	List Price
33-423B	3/8 x 3/8 x 1/4	1.55
33-430B	1/2 x 1/2 x 3/8	1.73
33-432B	3/8 x 3/8 x 1/2	2.02
33-434B	1/2 x 5/8 x 1/2	1.96
33-435B	3/4 x 3/4 x 1/2	2.01

W



NYLON TEE

Part #	Size	List Price
33-430W	1/2 x 1/2 x 3/8	2.06
33-431W	5/8 x 5/8 x 3/8	1.84
33-432W	3/8 x 3/8 x 1/2	2.30
33-435W	3/4 x 3/4 x 1/2	2.69

MALE BRANCH TEE

W

NYLON BRANCH TEE

Part #	Size	List Price
33-448W	1/4 x 1/4	1.79
33-450W	3/8 x 1/4	2.04
33-451W	3/8 x 3/8	2.85
33-453W	1/2 x 1/4	2.71
33-454W	1/2 x 3/8	1.87
33-455W	1/2 x 1/2	1.71
33-458W	5/8" x 3/4"	2.38
33-456W	3/4 x 3/4	2.52

Every house where love abides and friendship is a guest, is surely home, and home, sweet home, for there the heart can rest.

-Henry Van Dyke

PLASTIC GARDEN HOSE

PLASTIC FITTINGS

PLASTIC GARDEN HOSE FITTINGS

FITTINGS WITH GARDEN HOSE THREAD

GARDEN HOSE CAP

- Washer not included

- White Nylon

P

Part #	Size	List Price
30-103P	3/4"	1.22

GARDEN HOSE THREAD ADAPTERS

BARB X MALE GARDEN HOSE

- White Nylon

Part #	Size	List Price
31-038	1/4"	1.45
31-039	3/8"	1.20
31-040	1/2"	1.93
31-041	5/8"	1.61
31-042	3/4"	1.15

Be ever soft and pliable like a reed. Not hard and unbending like a cedar.

-The Talmud

GARDEN HOSE ADAPTER INSERTS

- for assembly with 31-022

- White Nylon

Part #	Size	List Price
31-030	1/4"	0.63
31-031	3/8"	0.49
31-032	1/2"	0.98
31-033	5/8"	0.94
31-034	3/4"	0.87
31-035	1/2" MPT	2.53

GARDEN HOSE NUT

- White Nylon

Part #	Size	List Price
31-022	3/4"	1.04
31-023	3/4" FIP	1.15

MALE GARDEN HOSE X FEMALE PIPE

- White Nylon

Part #	Size	List Price
31-067	MGH X 1/4	3.68
31-068	MGH X 1/2 FIP	4.37
31-069	MGH X 3/4	2.95

FEMALE GARDEN HOSE X MALE PIPE

- White Nylon

Part #	Size	List Price
31-093	FGH X 3/4 MPT	4.28
31-095	FGH X 3/4 MGH	2.95

FEMALE GARDEN HOSE X FEMALE PIPE

- White Nylon

Part #	Size	List Price
31-096	FGH X 1/2 FIP	4.00
31-097	FGH X 3/4 FIP	6.63

MALE GARDEN HOSE X MALE PIPE

- White Nylon

Part #	Size	List Price
31-055	GHT X 3/8 MPT	1.21
31-058	GHT X 1/2 MPT	1.35
31-063	GHT X 3/4 MPT	1.58
31-064	GHT X 1 MPT	1.41

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	List Price
17-064P	1/4"	4.16
17-066P	3/8"	8.75
17-079P	3/8" x 1/4"	5.47
17-068P	1/2"	7.48
17-081P	1/2" x 3/8"	9.76

• Nylon

Part #	Size	List Price
17-064N	1/4"	3.91
17-065N	5/16"	4.20
17-078N	5/16" x 1/4"	4.41
17-066N	3/8"	6.40
17-079N	3/8" x 1/4"	7.77
17-068N	1/2"	9.62

BULKHEAD UNIONS

• Nylon

Part #	Size	List Price
17-088N	1/4"	6.51
17-090N	3/8"	9.04
17-091N	1/2"	9.19

UNION TEES

• Nylon

Part #	Size	List Price
17-103N	1/4"	6.97
17-105N	3/8"	13.65
17-106N	1/2"	12.50

UNION ELBOWS

P

Part #	Size	List Price
17-124P	1/4"	4.70
17-126P	3/8"	6.87
17-127P	1/2"	9.87

• Nylon

Part #	Size	List Price
17-124N	1/4"	7.38
17-126N	3/8"	6.82

FEMALE CONNECTORS

P

Part #	Size	List Price
17-145P	1/4 x 1/8	3.45
17-153P	3/8 x 1/4	6.00
17-154P	3/8 x 3/8	5.76
17-158P	1/2 x 3/8	6.31
17-159P	1/2 x 1/2	5.43

• Nylon

Part #	Size	List Price
17-146N	1/4 x 1/4	3.54
17-153N	3/8 x 1/4	3.84
17-154N	3/8 x 3/8	5.76

MALE CONNECTORS

P

Part #	Size	List Price
17-179P	1/4 x 1/8	3.60
17-180P	1/4 x 1/4	3.78
17-188P	3/8 x 1/4	4.04
17-189P	3/8 x 3/8	4.21
17-190P	3/8 x 1/2	5.55
17-193P	1/2 x 1/4	8.79
17-194P	1/2 x 3/8	6.06
17-195P	1/2 x 1/2	8.37

• Nylon

Part #	Size	List Price
17-179N	1/4 x 1/8	2.79
17-180N	1/4 x 1/4	2.91
17-188N	3/8 x 1/4	4.67
17-189N	3/8 x 3/8	4.13
17-190N	3/8 x 1/2	5.79
17-193N	1/2 x 1/4	5.57
17-194N	1/2 x 3/8	4.86
17-195N	1/2 x 1/2	5.91

MALE ELBOWS

P

Part #	Size	List Price
17-225P	1/4 x 1/4	4.80
17-233P	3/8 x 1/4	7.21
17-234P	3/8 x 3/8	5.77
17-237P	1/2 x 3/8	6.36
17-238P	1/2 x 1/2	8.88

• Nylon

Part #	Size	List Price
17-224N	1/4 x 1/8	4.77
17-225N	1/4 x 1/4	5.15
17-233N	3/8 x 1/4	6.44
17-234N	3/8 x 3/8	8.61
17-237N	1/2 x 3/8	5.49
17-238N	1/2 x 1/2	6.00

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 5/32" 4mm	3/16" 5mm	1/4" 6mm	5/16" 8mm	3/8" 10mm	1/2" 12mm	Large Size 5/8" 15mm	16mm	7/8" 18mm	22mm	28mm
1℃ (34℉)	16bar (230PSI)				11bar (170PSI)		11bar (170PSI)				
20℃ (68℉)	16bar (230PSI)				11bar (170PSI)		11bar (170PSI)				
65℃ (150℉)	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	List Price
20-018P	5/32"	4.31
20-702P	3/16"	4.20
20-019P	1/4"	4.16
20-703P	5/16"	5.40
20-020P	3/8"	5.76
20-021P	1/2"	6.96

UNION TEE

Part #	Tube OD	List Price
20-028P	1/4"	6.36
20-031P	5/16"	6.57
20-029P	3/8"	7.38
20-030P	1/2"	9.11

REDUCING ELBOW

Part #	Tube OD	Tube OD	List Price
20-732P	5/16"	1/4"	8.31
20-733P	3/8"	3/16"	5.69
20-734P	3/8"	1/4"	8.68
20-736P	1/2"	3/8"	12.42

REDUCING UNION

Part #	Tube OD	Tube OD	List Price
20-750P	1/4"	3/16"	7.86
20-753P	5/16"	1/4"	7.89
20-754P	3/8"	3/16"	11.55
20-755P	3/8"	1/4"	7.28
20-756P	3/8"	5/16"	9.83
20-758P	1/2"	3/8"	8.81

REDUCING BRANCH TEE

Part #	Tube OD	Tube OD	List Price
20-725P	3/8"	1/4"	12.98
20-724P	1/2"	3/8"	15.60

FEMALE CONNECTOR

Part #	Tube OD	Thread NPTF	List Price
20-993P	1/4"	1/8"	8.07
20-035P	1/4"	1/4"	6.99
20-944P	3/8"	1/8"	9.22
20-036P	3/8"	1/4"	9.01

BULKHEAD UNION

Part #	Tube OD	List Price
20-127P	1/4"	8.89
20-128P	3/8"	10.70
20-129P	1/2"	16.12

UNION ELBOW

Part #	Tube OD	List Price
20-152P	1/4"	5.32
20-155P	5/16"	6.84
20-153P	3/8"	8.75
20-154P	1/2"	9.67

MALE CONNECTOR

Part #	Tube OD	Thread NPTF	List Price
20-050P	5/32"	1/8"	3.53
20-054P	1/4"	1/8"	3.50
20-055P	1/4"	1/4"	3.64
20-056P	1/4"	3/8"	5.05
20-531P	5/16"	1/4"	4.58
20-532P	5/16"	3/8"	5.77
20-057P	3/8"	1/8"	6.90
20-058P	3/8"	1/4"	5.06
20-059P	3/8"	3/8"	5.15
20-062P	3/8"	1/2"	9.78
20-061P	1/2"	3/8"	7.49
20-063P	1/2"	1/2"	8.76

STEM ADAPTER

Part #	Tube OD	Thread NPTF	List Price
20-524P	1/4"	1/8"	1.87
20-525P	1/4"	1/4"	1.88
20-528P	3/8"	1/4"	2.26
20-529P	3/8"	3/8"	2.82

REDUCER

Part #	Tube OD	Tube OD	List Price
20-512P	3/8"	1/4"	8.01
20-763P	3/8"	5/16"	7.21
20-514P	1/2"	3/8"	11.86

FIXED ELBOW

Part #	Tube OD	Thread NPTF	List Price
20-068P	1/4"	1/8"	5.02
20-069P	1/4"	1/4"	5.33
20-070P	1/4"	3/8"	6.05
20-072P	3/8"	1/4"	6.92
20-073P	3/8"	3/8"	9.39

PLUG-IN ELBOW

Part #	Tube OD	Tube OD	List Price
20-740P	5/32"	5/32"	5.23
20-742P	1/4"	1/4"	7.13
20-743P	5/16"	5/16"	8.99
20-745P	3/8"	1/4"	8.33
20-747P	3/8"	3/8"	10.21
20-748P	1/2"	1/2"	11.98

2-WAY DIVIDER

Part #	Tube OD	List Price
20-776P	5/16"	11.28
20-777P	3/8"	9.88

PLUG

Part #	Tube OD	List Price
20-876P	5/32"	1.37
20-878P	1/4"	1.44
20-880P	3/8"	2.33
20-881P	1/2"	3.68

TUBE END STOP

Part #	Tube OD	List Price
20-925P	1/4"	3.88
20-927P	3/8"	5.00

PL X PL

Part #	Tube OD	List Price
20-900P	1/4"	15.47
20-901P	3/8"	16.69

PL X MALE NPTF

Part #	Tube OD	Thread NPTF	List Price
20-904P	1/4"	1/4"	13.77
20-905P	3/8"	3/8"	17.72

CHECK VALVE

Part #	Tube OD	List Price
20-779P	3/8"	55.78

See Polyethylene Tubing on pages 332

HOSE ACCESSORIES

CAM AND GROOVE

ALUMINIUM

POLYPROPLYENE

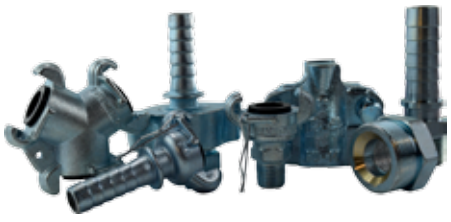
STAINLESS STEEL

BRASS

COMBINATION HOSE NIPPLES

FIRE HOSE FITTINGS

UNIVERSAL/ GROUND JOINT COUPLINGS



ALUMINUM

SEE PAGES 332 FOR JUMP SIZES IN ALUMINUM

MALE ADAPTER X FEMALE NPT

TYPE A

Part#	Size	List Price
61-911	3/4"	5.09
61-912	1"	5.81
61-913	1-1/4"	8.00
61-914	1-1/2"	6.62
61-915	2"	7.80
61-916	2-1/2"	14.91
61-917	3"	14.33
61-918	4"	23.62
61-919	5”	57.74
61-920	6”	62.18
61-910	8”	368.14

FEMALE COUPLER X MALE NPT

TYPE B

Part#	Size	List Price
61-921	3/4"	11.03
61-922	1"	13.15
61-923	1-1/4"	16.51
61-924	1-1/2"	15.52
61-925	2"	17.54
61-926	2-1/2"	44.23
61-927	3"	30.47
61-928	4"	38.34
61-929	5”	100.88

FEMALE COUPLER X HOSE SHANK

TYPE C

Part#	Size	List Price
61-931	3/4"	9.66
61-932	1"	11.49
61-933	1-1/4"	17.09
61-934	1-1/2"	15.39
61-935	2"	18.02
61-936	2-1/2"	27.81
61-937	3"	32.17
61-938	4"	47.21
61-939	5”	108.06
61-940	6"	194.88
61-907	8"	31.03

FEMALE COUPLER X FEMALE NPT

TYPE D

Part#	Size	List Price
61-941	3/4"	11.52
61-942	1"	13.15
61-943	1-1/4"	17.97
61-944	1-1/2"	16.33
61-945	2"	19.22
61-946	2-1/2"	32.95
61-947	3"	31.03
61-948	4"	44.66
61-950	5”	144.95
61-949	6”	187.61
61-904	8"	685.49

MALE ADAPTER X HOSE SHANK

TYPE E

Part#	Size	List Price
61-951	3/4"	5.64
61-952	1"	6.61
61-953	1-1/4"	9.35
61-954	1-1/2"	7.17
61-955	2"	9.37
61-956	2-1/2"	17.25
61-957	3"	19.15
61-958	4"	31.81
61-959	5”	144.95
61-905	6”	140.62
61-906	8"	411.83

MALE ADAPTER X MALE NPT

TYPE F

Part#	Size	List Price
61-961	3/4"	6.31
61-962	1"	6.72
61-963	1-1/4"	11.04
61-964	1-1/2"	8.34
61-965	2"	9.88
61-966	2-1/2"	18.87
61-967	3"	20.65
61-968	4"	29.64
61-970	5”	75.78
61-969	6”	135.56
61-999	8”	515.31

DUST CAP

TYPE DC

Part#	Size	List Price
61-971	3/4"	10.62
61-972	1"	11.20
61-973	1-1/4"	18.25
61-974	1-1/2"	13.95
61-975	2"	16.13
61-976	2-1/2"	23.96
61-977	3"	26.79
61-978	4"	33.82
61-980	5”	74.49
61-979	6”	110.92
61-998	8”	460.99

DUST PLUG

TYPE DP

Part#	Size	List Price
61-981	3/4"	5.26
61-982	1"	5.63
61-983	1-1/4"	6.57
61-984	1-1/2"	5.61
61-985	2"	6.58
61-986	2-1/2"	13.52
61-987	3"	12.79
61-988	4"	20.49
61-909	5”	73.19
61-908	6”	83.26

ALUMINUM JUMP SIZES

MALE ADAPTER X MALE ADAPTER

ALUMINUM SPOOL ADAPTER

Part#	Size	List Price
61-872	1”	8.97
61-873	1-1/2”	15.82
61-874	2”	20.63
61-875	2” x 3”	25.46
61-876	2-1/2”	60.47
61-877	3”	38.90
61-878	3” x 4”	47.17
61-879	4”	55.76

FEMALE COUPLER X FEMALE COUPLER

ALUMINUM TYPE DD

Part#	Size	List Price
619-440	1-1/2”	108.44
619-450	2”	40.86
619-470	3”	68.03
619-480	4”	91.67

FEMALE COUPLER X MALE ADAPTER

ALUMINUM TYPE DA

Part#	Size	List Price
619-001	1-1/2” x 1”	110.10
619-002	1-1/2” x 2”	112.85
619-003	2” x 1-1/2”	96.33
619-004	2” x 3”	41.47
619-005	2” x 4”	54.76
619-006	3” x 1-1/2”	134.38
619-007	3” x 2”	47.87
619-008	3” x 4”	68.00
619-009	4” x 2”	61.56
619-010	4” x 3”	64.09
619-011	4” x 6”	287.84
619-012	6” x 4”	129.04

MALE ADAPTER X FEMALE NPT

ALUMINUM JUMP SIZE A

Part#	Size	List Price
61-851	2” x 3”	29.79
61-853	3” x 4”	52.03
61-854	4” x 3”	49.70

FEMALE COUPLER X MALE NPT

ALUMINUM JUMP SIZE B

Part#	Size	List Price
61-859	3” x 2”	45.60
61-860	3” x 4”	77.63
61-861	4” x 3”	78.61

FEMALE COUPLER X FEMALE NPT

ALUMINUM JUMP SIZE D

Part#	Size	List Price
61-867	3” x 2”	47.26
61-868	4” x 3”	74.20

MALE ADAPTER X MALE NPT

ALUMINUM JUMP SIZE F

Part#	Size	List Price
61-870	3” x 2”	36.43
61-871	3” x 4”	58.42

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

POLYPROPLYENE

MALE ADAPTER X FEMALE NPT

TYPE A

Part#	Size	List Price
35-910	1/2"	7.57
35-911	3/4"	2.50
35-912	1"	2.67
35-913	1-1/4"	4.00
35-914	1-1/2"	4.33
35-915	2"	5.33

FEMALE COUPLER X MALE NPT

TYPE B

Part#	Size	List Price
35-920	1/2"	26.97
35-921	3/4"	7.98
35-922	1"	9.17
35-923	1-1/4"	13.40
35-924	1-1/2"	15.33
35-925	2"	17.17
35-927	3"	23.70

FEMALE COUPLER X HOSE SHANK

TYPE C

Part#	Size	List Price
35-930	1/2"	25.85
35-931	3/4"	7.67
35-932	1"	9.33
35-933	1-1/4"	13.40
35-934	1-1/2"	15.63
35-935	2"	17.80
35-937	3"	24.90

FEMALE COUPLER X FEMALE NPT

TYPE D

Part#	Size	List Price
35-940	1/2"	20.94
35-941	3/4"	9.10
35-942	1"	10.00
35-943	1-1/4"	14.93
35-944	1-1/2"	15.73
35-945	2"	18.33
35-947	3"	25.10

MALE ADAPTER X HOSE SHANK

TYPE E

Part#	Size	List Price
35-950	1/2"	11.29
35-951	3/4"	1.80
35-952	1"	2.23
35-953	1-1/4"	3.33
35-954	1-1/2"	4.33
35-955	2"	5.93
35-957	3"	9.70

MALE ADAPTER X MALE NPT

TYPE F

Part#	Size	List Price
35-960	1/2"	12.06
35-961	3/4"	1.93
35-962	1"	3.13
35-963	1-1/4"	3.33
35-964	1-1/2"	4.33
35-965	2"	5.93
35-967	3"	11.93

DUST CAP

TYPE DC

Part#	Size	List Price
35-970	1/2"	25.45
35-971	3/4"	7.00
35-972	1"	8.90
35-973	1-1/4"	13.27
35-974	1-1/2"	14.57
35-975	2"	15.83
35-977	3"	21.20

DUST PLUG

TYPE DP

Part#	Size	List Price
35-980	1/2"	11.78
35-981	3/4"	1.63
35-982	1"	1.53
35-983	1-1/4"	3.27
35-984	1-1/2"	3.50
35-985	2"	4.83
35-987	3"	6.50

316 STAINLESS STEEL

FEMALE ADAPTER X FEMALE NPT

TYPE A

Part#	Size	List Price
63-911	3/4"	16.83
63-912	1"	16.48
63-913	1-1/4"	25.79
63-914	1-1/2"	27.51
63-915	2"	33.18
63-916	2-1/2"	111.90
63-917	3"	69.43
63-918	4"	122.59
63-919	5”	344.92

FEMALE COUPLER X MALE NPT

TYPE B

Part#	Size	List Price
63-921	3/4"	27.86
63-922	1"	28.52
63-923	1-1/4"	75.25
63-924	1-1/2"	46.15
63-925	2"	58.07
63-926	2-1/2"	66.57
63-927	3"	96.89
63-928	4"	142.12
63-929	5”	417.93

FEMALE COUPLER X HOSE SHANK

TYPE C

Part#	Size	List Price
63-931	3/4"	26.93
63-932	1"	26.13
63-933	1-1/4"	44.61
63-934	1-1/2"	44.12
63-935	2"	56.39
63-936	2-1/2"	155.58
63-937	3"	106.41
63-938	4"	297.53
63-939	5”	545.51

FEMALE COUPLER X FEMALE NPT

TYPE D

Part#	Size	List Price
63-941	3/4"	27.77
63-942	1"	27.77
63-943	1-1/4"	46.87
63-944	1-1/2"	48.47
63-945	2"	58.12
63-946	2-1/2"	165.52
63-947	3"	111.15
63-948	4"	154.13
63-949	5”	599.39
63-950	6”	729.36

MALE ADPATER X HOSE SHANK

TYPE E

Part#	Size	List Price
63-951	3/4"	14.83
63-952	1"	19.89
63-953	1-1/4"	52.03
63-954	1-1/2"	32.12
63-955	2"	44.69
63-956	2-1/2"	135.55
63-957	3"	97.69
63-958	4"	142.65
63-959	5”	431.02

MALE ADAPTER X MALE NPT

TYPE F

Part#	Size	List Price
63-961	3/4"	20.64
63-962	1"	22.64
63-963	1-1/4"	36.50
63-964	1-1/2"	39.64
63-965	2"	47.66
63-966	2-1/2"	134.95
63-967	3"	99.28
63-968	4"	141.59
63-969	5”	439.90
63-999	6”	608.32

DUST CAP

TYPE DC

Part#	Size	List Price
63-971	3/4"	25.21
63-972	1"	25.51
63-973	1-1/4"	59.85
63-974	1-1/2"	42.84
63-975	2"	50.42
63-976	2-1/2"	118.85
63-977	3"	82.94
63-978	4"	111.69
63-979	5”	375.86
63-980	6”	472.96

DUST PLUG TYPE DP

Part#	Size	List Price
63-981	3/4"	14.05
63-982	1"	16.70
63-983	1-1/4"	34.80
63-984	1-1/2"	25.83
63-985	2"	29.73
63-986	2-1/2"	91.85
63-987	3"	64.54
63-988	4"	76.95
63-989	6”	474.55

BRASS

MALE ADAPTER X FEMALE NPT

TYPE A

Part#	Size	List Price
44-911	3/4"	12.38
44-912	1"	13.05
44-913	1-1/4"	18.90
44-914	1-1/2"	21.40
44-915	2"	26.06
44-916	2-1/2"	47.57
44-917	3"	63.13
44-918	4"	87.49
44-919	5”	156.14
44-920	6”	229.08

FEMALE COUPLER X MALE NPT

TYPE B

Part#	Size	List Price
44-921	3/4"	38.86
44-922	1"	24.96
44-923	1-1/4"	32.28
44-924	1-1/2"	60.71
44-925	2"	43.23
44-926	2-1/2"	82.11
44-927	3"	81.67
44-928	4"	117.34
44-929	5”	608.61
44-930	6”	283.76

FEMALE COUPLER X HOSE SHANK

TYPE C

Part#	Size	List Price
44-931	3/4"	19.98
44-932	1"	25.57
44-933	1-1/4"	29.53
44-934	1-1/2"	40.01
44-935	2"	50.32
44-936	2-1/2"	78.54
44-937	3"	99.76
44-938	4"	150.19
44-939	5”	248.21
44-940	6”	376.06

FEMALE COUPLER X FEMALE NPT

TYPE D

Part#	Size	List Price
44-941	3/4"	20.50
44-942	1"	27.46
44-943	1-1/4"	38.12
44-944	1-1/2"	41.73
44-945	2"	49.14
44-946	2-1/2"	64.84
44-947	3"	81.28
44-948	4"	128.39
44-949	5”	220.69
44-950	6”	290.86

MALE ADAPTER X HOSE SHANK

TYPE E

Part#	Size	List Price
44-951	3/4"	13.55
44-952	1"	15.16
44-953	1-1/4"	22.11
44-954	1-1/2"	25.36
44-955	2"	42.98
44-956	2-1/2"	67.30
44-957	3"	93.86
44-958	4"	137.63
44-959	5”	562.44
44-960	6”	427.18

MALE ADAPTER X MALE NPT

TYPE F

Part#	Size	List Price
44-961	3/4"	13.90
44-962	1"	15.83
44-963	1-1/4"	21.39
44-964	1-1/2"	25.68
44-965	2"	38.33
44-966	2-1/2"	74.93
44-967	3"	74.86
44-968	4"	115.43
44-969	5”	477.16
44-970	6”	282.54

DUST CAP

TYPE DC

Part#	Size	List Price
44-971	3/4"	11.04
44-972	1"	16.40
44-973	1-1/4"	25.39
44-974	1-1/2"	32.31
44-975	2"	38.19
44-976	2-1/2"	149.95
44-977	3"	70.59
44-978	4"	108.06
44-979	5”	160.19
44-980	6”	221.21

DUST PLUG

TYPE DP

Part#	Size	List Price
44-981	3/4"	17.12
44-982	1"	15.40
44-983	1-1/4"	14.48
44-984	1-1/2"	18.22
44-985	2"	23.43
44-986	2-1/2"	56.96
44-987	3"	48.59
44-988	4"	80.41
44-989	5”	322.52
44-990	6”	384.56

STAINLESS STEEL AND BRASS JUMP SIZES

MALE ADAPTER X MALE ADAPTER

316 SS SPOOL ADAPTER

Part#	Size	List Price
63-850	1”	161.81
63-851	1-1/2”	197.32
63-852	1-1/2” x 2”	235.22
63-853	2”	106.27
63-854	2” x 3”	337.35
63-855	3”	453.29
63-856	3” x 4”	553.72
63-857	4”	698.80

FEMALE COUPLER X FEMALE COUPLER

316 SS TYPE DD

Part#	Size	List Price
639-440	1-1/2”	256.38
639-450	2”	147.58
639-470	3”	249.66
639-480	4”	689.85

FEMALE COUPLER X MALE ADAPTER

316 SS TYPE DA

Part#	Size	List Price
639-001	2” x 1-1/2”	301.82
639-002	3” x 2”	211.99
639-003	4” x 3”	555.11
639-004	6” x 4”	995.76

MALE ADAPTER X MALE ADAPTER

BRASS SPOOL ADAPTER

Part#	Size	List Price
44-212	1-1/2”	67.21
44-213	2”	82.14
44-214	2-1/2”	257.08
44-215	3”	156.82
44-216	4”	224.02

FEMALE COUPLER X MALE ADAPTER

BRASS TYPE DA

Part#	Size	List Price
449-450	2” x 3”	354.35
449-470	3” x 2”	388.53
449-480	4” x 2”	542.36
449-481	4” x 3”	563.43
449-482	6” x 4”	864.09

INVESTMENT CAST STAINLESS STEEL HANDLE, RING & PIN

Part#	Size	List Price
61-447	3/4”	4.11
61-448	1”	4.18
61-449	1-1/4” - 2-1/2”	26.54
61-452	3” & 4”	33.87
61-454	6”	93.55

FORGED BRASS HANDLE - RING & PIN STEEL

Part#	Size	List Price
61-455	3/4”	2.08
61-450	1”	2.61
61-451	1-1/4” - 2-1/2”	13.74
61-453	3” & 4”	18.62
61-457	6”	78.92

SAFETY CLIP

Part #	Size	List Price
66-015	1-1/4" - 2-1/2"	0.75

BUNA-N GASKET

Part#	Size	List Price
BG-50	1/2”	0.28
BG-75	3/4”	0.35
BG-100	1”	0.34
BG-125	1-1/4”	0.49
BG-150	1-1/2”	0.63
BG-200	2”	1.75
BG-250	2-1/2”	2.07
BG-300	3”	2.23
BG-400	4”	3.13
BG-500	5”	7.85
BG-600	6”	8.45
BG-800	8”	39.34

SILICONE GASKET

Part#	Size	List Price
SG300	3"	14.70
SG400	4"	21.73

VITON GASKET

Part#	Size	List Price
VG100	1"	3.54
VG150	1-1/2"	5.70
VG200	2"	7.38
VG250	2-1/2"	10.98
VG300	3"	12.42

STEEL HOSE NIPPLES

(Barb x Male Pipe) • Black

Part #	Hose Size	List Price
973-850	1/2"	9.28
973-851	3/4"	4.49
973-852	1"	8.02
973-853	1-1/4"	10.38
973-854	1-1/2"	11.60
973-855	2"	10.56
973-856	2-1/2"	31.89
973-857	3"	38.85
973-858	4"	72.04

ZINC PLATED STEEL

Part #	Size	List Price
973-870	1/2"	5.24
973-871	3/4"	6.07
973-872	1"	7.12
973-873	1-1/4"	9.45
973-874	1-1/2"	11.37
973-875	2"	12.71
973-876	2-1/2"	31.37
973-877	3"	61.10
973-878	4"	51.35
973-879	5"	165.53
973-880	6"	140.26
973-881	8"	385.94

ZINC PLATED STEEL EXPANDER & REDUCER

NEW

Hose x MIP

Part #	Size	List Price
973-862	3/4 x 1	22.10
973-884	1 x 3/4	13.97
973-863	1 x 1-1/4	28.97
973-885	1-1/4 x 1	17.70
973-886	1-1/4 x 1-1/2	24.03
973-887	1-1/2 x 1-1/4	17.77
973-864	1-1/2 x 2	33.16
973-859	2 x 2-1/2	62.16
973-869	2-1/2 x 2	58.16
973-865	2-1/2 x 3	73.25
973-867	3 x 2-1/2	72.40
973-866	3 x 4	147.04
973-868	4 x 3	158.40

316 STAINLESS STEEL

Part #	Size	List Price
973-700	1/2"	24.53
973-701	3/4"	23.03
973-702	1"	23.17
973-703	1-1/4"	29.67
973-704	1-1/2"	36.63
973-705	2"	55.55
973-706	2-1/2"	90.13
973-707	3"	129.89
973-708	4"	201.69

BRASS

• Lead Free

Part #	Size	List Price
973-600	1/2"	28.01
973-601	3/4"	50.96
973-602	1"	47.14
973-603	1-1/4"	63.03
973-604	1-1/2"	73.00
973-605	2"	104.37
973-606	2-1/2"	174.46
973-607	3"	250.36

ALUMINUM

Part #	Size	List Price
973-620	1/2"	29.98
973-621	3/4"	29.88
973-622	1"	28.46
973-623	1-1/4"	33.19
973-624	1-1/2"	32.66
973-625	2"	38.11
973-626	2-1/2"	99.55
973-627	3"	94.80
973-628	4"	151.64

MENDERS

STEEL HOSE MENDERS

Part #	Hose Size	List Price
973-890	1/2"	12.99
973-891	3/4"	6.33
973-892	1"	6.47
973-893	1-1/4"	16.51
973-894	1-1/2"	16.19
973-895	2"	21.24

PLATED STEEL MENDER

• Zinc

Part #	Size	List Price
973-650	3/8"	13.98
973-651	1/2"	13.94
973-652	3/4"	10.37
973-653	1"	12.08
973-654	1-1/4"	15.15
973-655	1-1/2"	15.44
973-656	2"	19.00
973-657	2-1/2"	38.84
973-658	3"	46.09
973-659	4"	77.96

316 STAINLESS STEEL HOSE MENDER

Part #	Size	List Price
73-670	3/4"	59.33
73-671	1"	64.69
73-672	1-1/4"	75.00
73-673	1-1/2"	88.00
73-674	2"	89.33

BRASS HOSE MENDER

• Lead Free

Part #	Size	List Price
73-983	3/4"	26.93
73-984	1"	28.97
73-985	1-1/4"	46.92
73-986	1-1/2"	76.12
73-987	2"	82.59

MALE NPT ENDS

• Twist claw/ universal/ chicago

• Malleable iron
• ISO PSI

* Safety clip included

Part #	Size	List Price
66005	3/8"	4.95
66006	1/2"	5.50
66007	3/4"	6.27
66008	1"	6.93

WASHER

Part #	List Price
66000	0.37

FEMALE NPT ENDS

* Safety clip included

Part #	Size	List Price
66009	3/8"	8.13
66010	1/2"	6.77
66011	3/4"	7.18
66012	1"	9.03

HOSE END

* Safety clip included

Part #	Size	List Price
66001	3/8"	9.44
66002	1/2"	6.14
66003	3/4"	6.20
66004	1"	8.13

SAFETY CLIP

Part #	Size	List Price
66-015	1-1/4" - 2-1/2"	0.75

TRIPLE CONNECTIONS

Part #	List Price
66013	21.16

FOR SHOP USE ONLY,
NOT FOR STEAM OR
HYDRAULIC APPLICATIONS

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	List Price
73-003	1/2"	36.49
73-004	3/4"	39.96
73-005	1"	44.32
73-006	1-1/4"	81.60
73-007	1-1/2"	81.60
73-008	2"	99.48
73-009	2-1/2"	277.21
73-010	3"	284.88
73-011	4"	544.50

HOSE STEM ONLY

Part #	Size	List Price
73-023	1/2"	8.06
73-024	3/4"	15.31
73-025	1"	15.37
73-026	1-1/4"	25.70
73-027	1-1/2"	24.23
73-028	2"	27.23
73-029	2-1/2"	93.66
73-030	3"	98.01
73-031	4"	174.89

WING NUT ONLY

Part #	Size	List Price
73-033	1/2"	8.71
73-035	1"	11.22
73-036	1-1/4"	23.23
73-037	1-1/2"	25.71
73-038	2"	33.06
73-039	2-1/2"	107.04
73-040	3"	90.09
73-041	4"	182.95

FEMALE SPUD ONLY

Part #	Size	List Price
73-063	1/2"	19.90
73-064	3/4"	17.35
73-065	1"	17.99
73-066	1-1/4"	39.39
73-067	1-1/2"	37.29
73-068	2"	39.24
73-069	2-1/2"	145.65
73-070	3"	126.68
73-071	4"	196.57

MALE PIPE STEM ONLY (NPT)

Part #	Size	List Price
73-043	1/2"	10.00
73-044	3/4"	14.60
73-045	1"	17.24
73-046	1-1/4"	21.89
73-047	1-1/2"	26.13
73-048	2"	41.66
73-049	2-1/2"	65.32
73-050	3"	81.31
73-051	4"	141.85

2, 4, 6 BOLT CLAMPS

Part #	Size	# Bolts	List Price
73-056	3/4"	2	8.28
73-057	1"	4	18.15
73-058	1-1/2"	4	25.52
73-059	2"	4	29.18
73-060	3"	4	75.10

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.

HYDRANT ADAPTERS - BRASS

FEMALE X MALE

Part #	Description	List Price
444-011	1-1/2" NST x 3/4" GHT	49.31
444-000	2-1/2" NST x 3/4" GHT	49.31
444-001	2-1/2" NST x 3/4" NPT	49.31
444-002	2-1/2" NST x 1" NPT	43.56
444-005	2-1/2" NST x 1-1/2" NPT	50.08
444-007	2-1/2" NST x 2" NPSH	53.48
444-008	2-1/2" NST x 2" NPT	66.66
444-006	2-1/2" NST x 1-1/2" NST	50.08

FEMALE TO MALE HEX ADAPTER - BRASS

FEMALE X MALE

Part #	Description	List Price
444-021	1-1/2" NST x 1-1/2" NPSH	47.86
444-023	1-1/2" NPT x 1-1/2" NPSH	49.15
444-020	1-1/2" NST x 1-1/2" NPT	29.02
444-318	2 NPT x 2-1/2" NST	158.40

DOUBLE MALE HEX NIPPLE - BRASS

Part #	Description	List Price
444-042	1-1/2" NPT x 1-1/2" NPSH	44.43
444-040	1-1/2" NPT x 1-1/2" NST	35.83
444-095	2-1/2" NST x 1-1/2" NST	98.28
444-045	2-1/2" NST x 2" NPT	98.39
444-049	3" NPT x 2-1/2" NST	182.41

MALE SWIVEL ADAPTER - BRASS W/LUGS

Part #	Description Female x Male	List Price
444-111	2-1/2" NST x 2" NPT	272.63
444-112	2-1/2" NST x 2-1/2" NPT	210.34
444-113	2-1/2" NST x 3" NPT	348.77

CAP - BRASS

Part #	Description	List Price
444-062	2-1/2" NST	68.61
444-313	4-1/2" NST	366.36
444-320	2-1/2" NST PLUG	74.58

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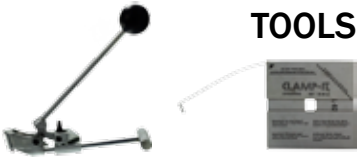

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300 & 600 WORM GEAR CLAMPS | HOSE CLAMPS

MINIATURE CLAMPS - 5/16" BAND

Stainless Steel band with Carbon Steel Housing and Screw

5/16" band, 1/4" screw

Part #	Dia. Range		Box/Case	List Price
	Min.	Max.		
300-0004	7/32"	5/8"	200/2400	1.36
300-005	7/16"	11/16"	200/2400	1.19
300-0006	5/16"	7/8"	200/2400	1.15
300-0008	7/16"	1"	200/1200	1.31
300-010	1/2"	1-1/16"	200/1200	1.47
300-012	9/16"	1-1/4"	200/1200	1.25
300-016	11/16"	1-1/2"	200/1200	1.53
300-0020	7/8"	1-3/4"	200/1200	1.63

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.

1/2" BAND CLAMPS

Stainless Steel band with Carbon Steel Housing and Screw

1/2" band, 5/16" screw

Part #	#	Dia. Range		Bag/Case	List Price
		Min.	Max.		
600-006	6	3/8"	7/8"	100/600	1.57
600-008	8	7/16"	1"	100/600	1.56
600-010	10	9/16"	1-1/16"	100/600	1.47
600-012	12	9/16"	1-1/4"	100/600	1.55
600-016	16	11/16"	1-1/2"	100/600	1.46
600-020	20	3/4"	1-3/4"	100/300	1.47
600-024	24	1-1/16"	2"	100/300	1.56
600-028	28	1-5/16"	2-1/4"	100/300	1.72
600-032	32	1-9/16"	2-1/2"	100/300	1.52
600-036	36	1-13/16"	2-3/4"	50/200	1.53
600-040	40	2-1/16"	3"	50/200	1.75
600-044	44	2-5/16"	3-1/4"	50/200	2.41
600-048	48	2-9/16"	3-1/2"	50/200	2.05
600-052	52	2-13/16"	3-3/4"	25/100	3.41
600-056	56	3-1/16"	4"	25/100	3.04
600-060	60	3-5/16"	4-1/4"	25/100	2.71
600-064	64	2-1/2"	4-1/2"	25/100	2.33
600-072	72	3"	5"	25/100	2.40
600-080	80	3-1/2"	5-1/2"	10/100	2.44
600-088	88	4"	6"	10/100	3.06
600-096	96	4-1/2"	6-1/2"	10/100	3.34
600-104	104	5"	7"	10/100	3.62

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

The more you use your brain, the more brain you will have to use. –George A. Dorsey

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	List Price
	Min.	Max.		
325-004	7/32"	5/8"	200/2400	1.07
325-005	7/16"	11/16"	200/2400	1.17
325-006	5/16"	7/8"	200/2400	0.94
325-008	7/16"	1"	200/1200	1.24
325-010	1/2"	1-1/16"	200/1200	1.46
325-012	9/16"	1-1/4"	200/1200	2.76
325-016	11/16"	1-1/2"	200/1200	2.61
325-020	7/8"	1-3/4"	200/1200	1.76

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	List Price
		Min.	Max.		
611-006	6	3/8"	7/8"	100/600	1.58
611-008	8	7/16"	1"	100/600	1.67
611-010	10	9/16"	1-1/16"	100/600	1.43
611-012	12	9/16"	1-1/4"	100/600	1.69
611-016	16	11/16"	1-1/2"	100/600	1.86
611-020	20	3/4"	1-3/4"	100/300	1.83
611-024	24	1-1/16"	2"	100/300	1.58
611-028	28	1-5/16"	2-1/4"	100/300	2.41
611-032	32	1-9/16"	2-1/2"	100/300	2.41
611-036	36	1-13/16"	2-3/4"	50/200	1.53
611-040	40	2-1/16"	3"	50/200	1.74
611-044	44	2-5/16"	3-1/4"	50/200	2.88
611-048	48	2-9/16"	3-1/2"	50/200	1.97
611-052	52	2-13/16"	3-3/4"	25/100	2.16
611-056	56	3-1/16"	4"	25/100	2.51
611-060	60	3-5/16"	4-1/4"	25/100	2.72
611-064	64	2-1/2"	4-1/2"	25/100	2.46
611-072	72	3"	5"	25/100	3.15
611-080	80	3-1/2"	5-1/2"	10/100	3.67
611-088	88	4"	6"	10/100	3.22
611-096	96	4-1/2"	6-1/2"	10/100	3.22
611-104	104	5"	7"	10/100	2.94
611-116	116	5-3/4"	7-3/4"	100/100	6.66
611-128	128	6-1/2"	8-1/2"	100/100	4.18
611-152	152	2"	10"	100/100	4.80
611-164	164	1-3/4"	10-3/4"	100/100	8.28
611-176	176	9-1/4"	11-1/4"	100/100	4.58
611-188	188	2-1/16"	12-1/4"	100/100	5.28
611-200	200	11"	13"	100/100	5.75
611-212	212	11-3/4"	13-3/4"	100/100	7.46
611-224	224	12-1/2"	14-1/2"	100/100	5.89
611-248	248	10-3/4"	16"	100/100	5.71
611-270	270	15-3/8"	17-3/8"	100/100	12.11
611-312	312	18"	20"	100/100	8.47
611-332	332	19-1/8"	21-1/4"	100/100	6.22
611-390	390	22-7/8"	24-7/8"	100/100	11.94

350 & 620 WORM GEAR CLAMPS — HOSE CLAMPS

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	List Price
	Min.	Max.		
350-004	7/32"	5/8"	200/2400	0.96
350-005	7/16"	11/16"	200/2400	1.72
350-006	5/16"	7/8"	200/2400	0.96
350-008	7/16"	1"	200/1200	1.08
350-010	1/2"	1-1/16"	200/1200	1.36
350-012	9/16"	1-1/4"	200/1200	1.36
350-016	11/16"	1-1/2"	200/1200	2.07
350-020	7/8"	1-3/4"	200/1200	1.85

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	List Price
		Min.	Max.		
620-006	6	3/8"	7/8"	100/600	1.71
620-008	8	7/16"	1"	100/600	1.93
620-010	10	9/16"	1-1/16"	100/600	1.93
620-012	12	9/16"	1-1/4"	100/600	2.34
620-016	16	11/16"	1-1/2"	100/600	1.95
620-020	20	3/4"	1-3/4"	100/300	1.97
620-024	24	1-1/16"	2"	100/300	1.76
620-028	28	1-5/16"	2-1/4"	100/300	1.77
620-032	32	1-9/16"	2-1/2"	100/300	1.90
620-036	36	1-13/16"	2-3/4"	50/200	1.96
620-040	40	2-1/16"	3"	50/200	2.56
620-044	44	2-5/16"	3-1/4"	50/200	3.16
620-048	48	2-9/16"	3-1/2"	50/200	2.44
620-052	52	2-13/16"	3-3/4"	25/100	2.54
620-056	56	3-1/16"	4"	25/100	2.54
620-060	60	3-5/16"	4-1/4"	25/100	4.38
620-064	64	2-1/2"	4-1/2"	25/100	2.68
620-072	72	3"	5"	25/100	2.82
620-080	80	3-1/2"	5-1/2"	10/100	4.62
620-088	88	4"	6"	10/100	3.21
620-096	96	4-1/2"	6-1/2"	10/100	4.48
620-104	104	5"	7"	10/100	3.50
620-116	116	5-3/4"	7-3/4"	100/100	7.50
620-128	128	6-1/2"	8-1/2"	100/100	4.85
620-152	152	2"	10"	100/100	6.73
620-164	164	1-3/4"	10-3/4"	100/100	12.06
620-176	176	9-1/4"	11-1/4"	100/100	9.58
620-188	188	9.9"	12-1/4"	100/100	7.39
620-200	200	11"	13"	100/100	6.03
620-212	212	11-3/4"	13-3/4"	100/100	12.47
620-224	224	12-1/2"	14-1/2"	100/100	12.30
620-248	248	10-3/4"	16"	100/100	7.81
620-270	270	15-3/8"	17-3/8"	100/100	7.35
620-312	312	18"	20"	100/100	13.92
620-332	332	19-1/8"	21-1/4"	100/100	7.50
620-390	390	22-7/8"	24-7/8"	100/100	13.26

MINIATURE CLAMPS - 5/16" BAND

All #316 SS for Marine Environments

5/16" band, 1/4" screw

Part #	Dia. Range		Box/Case	List Price
	Min.	Max.		
350-004SS	7/32"	5/8"	200/2400	0.72
350-005SS	7/16"	11/16"	200/2400	0.75
350-006SS	5/16"	7/8"	200/2400	0.87
350-008SS	7/16"	1"	200/1200	0.90
350-010SS	1/2"	1-1/16"	200/1200	0.87
350-012SS	9/16"	1-1/4"	200/1200	0.96
350-016SS	11/16"	1-1/2"	200/1200	1.14
350-020SS	7/8"	1-3/4"	200/1200	1.01

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	List Price
		Min.	Max.		
620-006SS	6	3/8"	7/8"	100/600	1.80
620-008SS	8	7/16"	1"	100/600	1.83
620-010SS	10	9/16"	1-1/16"	100/600	1.67
620-012SS	12	9/16"	1-1/4"	100/600	1.92
620-016SS	16	11/16"	1-1/2"	100/600	2.01
620-020SS	20	3/4"	1-3/4"	100/300	2.10
620-024SS	24	1-1/16"	2"	100/300	2.22
620-028SS	28	1-5/16"	2-1/4"	100/300	2.13
620-032SS	32	1-9/16"	2-1/2"	100/300	2.43
620-036SS	36	1-13/16"	2-3/4"	50/200	2.52
620-040SS	40	2-1/16"	3"	50/200	2.64
620-044SS	44	2-5/16"	3-1/4"	50/200	2.73
620-048SS	48	2-9/16"	3-1/2"	50/200	2.85
620-052SS	52	2-13/16"	3-3/4"	25/100	2.94
620-056SS	56	3-1/16"	4"	25/100	3.06
620-060SS	60	3-5/16"	4-1/4"	25/100	3.12
620-064SS	64	2-1/2"	4-1/2"	25/100	3.24
620-072SS	72	3"	5"	25/100	3.45

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.

Character building begins in our infancy and continues until our death. – *Eleanor Roosevelt*

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 #	List Price	#	Dia. Range		Part #	List Price
			Min.	Max.		
500-012	2.41	12	1/2"	1-1/4"	550-012	3.26
500-020	2.45	20	3/4"	1-3/4"	550-020	2.59
500-028	2.51	28	1"	2-1/4"	550-028	2.78
500-036	1.90	36	1"	2-3/4"	550-036	2.88
500-048	3.20	48	1-1/2"	3-1/2"	550-048	3.41
500-056	3.65	56	1"	4"	550-056	4.95
500-072	3.08	72	2"	5"	550-072	5.70
500-088	4.58	88	2-1/16"	6"	550-088	5.91
500-104	4.82	104	1-3/4"	7"	550-104	11.75
500-128	4.28	128	1-3/4"	8-9/16"	550-128	6.13
500-152	4.53	152	2"	10"	550-152	6.66
500-188	5.28	188	2-1/16"	12-5/16"	550-188	8.49
500-216	5.43	216	10-3/16"	14"	550-216	10.23
500-248	5.61	248	10-3/4"	16"	550-248	9.45
500-280	6.79	280	14-1/4"	18"	550-280	9.08
		312	14"	20"	550-312	10.78

Stop and look out the window and see how beautiful the world is. It is there-enjoy it. Go out tonight and look up at the stars. They are the wonders of nature.

-Dale Carnegie

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#	List Price
	From:	To:		
1-1/4	1-5/32"	1-15/32"	840-131	5.06
1-1/2	1-3/8"	1-9/16"	840-150	4.63
1-3/4	1-5/8"	1-13/16"	840-175	4.40
1-7/8	1-3/4"	1-15/16"	840-188	4.80
2	1-7/8"	2-1/16"	840-200	4.88
2-1/4	2-1/8"	2-5/16"	840-225	5.67
2-3/8	2-1/4"	2-7/16"	840-238	4.84
2-1/2	2-3/8"	2-9/16"	840-250	4.73
2-9/16	2-11/32"	2-5/8"	840-256	6.77
2-5/8	2-13/32"	2-11/16"	840-263	4.82
2-3/4	2-17/32"	2-13/16"	840-275	5.78
2-7/8	2-21/32"	2-15/16"	840-288	5.35
3	2-25/32"	3-1/16"	840-300	5.47
3-1/8	2-29/32"	3-3/16"	840-312	6.72
3-1/4	3-1/32"	3-5/16"	840-325	5.45
3-1/2	3-9/32"	3-9/16"	840-350	5.40
3-3/4	3-17/32"	3-13/16"	840-375	6.38
3-53/64	3-19/32"	3-7/8"	840-382	7.15
4	3-25/32"	4-1/16"	840-400	5.80
4-1/4	4-1/32"	4-5/16"	840-425	5.85
4-1/2	4-9/32"	4-9/16"	840-450	6.24
4-3/4	4-17/32"	4-13/16"	840-475	6.34
5	4-25/32"	5-1/16"	840-500	7.04
5-1/4	5-1/32"	5-5/16"	840-525	8.15
5-1/2	5-9/32"	5-9/16"	840-550	7.26
5-3/4	5-17/32"	5-13/16"	840-575	8.18
6	5-25/32"	6-1/16"	840-600	8.32
6-1/4	6-1/32"	6-5/16"	840-625	8.56
6-1/2	6-9/32"	6-9/16"	840-650	8.68
6-3/4	6-17/32"	6-13/16"	840-675	8.80
7	6-25/32"	7-1/16"	840-700	8.92
7-1/2	7-9/32"	7-9/16"	840-750	10.39
8	7-25/32"	8-1/16"	840-800	9.43
8-1/4	8-9/32"	8-9/16"	840-850	12.09
8-7/8	8-21/32"	8-15/16"	840-888	12.54
10-7/8	10-21/32"	10-15/16"	840-1088	9.78

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	List Price
844-213	40	2.13 - 2.44	0.170	100	7.95
844-225	44	2.25 - 2.56	0.174	100	8.02
844-238	48	2.38 - 2.69	0.179	100	8.02
844-250	52	2.50 - 2.81	0.181	100	8.17
844-263	56	2.63 - 2.94	0.183	100	8.25
844-275	60	2.75 - 3.06	0.185	100	8.40
844-300	68	3 - 3.31	0.187	100	9.34
844-306	70	3.06 - 3.38	0.190	100	8.55
844-313	72	3.13 - 3.44	0.192	100	8.62
844-325	76	3.25 - 3.56	0.194	100	8.62
844-338	80	3.38 - 3.69	0.196	100	8.77
844-350	84	3.50 - 3.81	0.196	100	8.85
844-356	86	3.56 - 3.88	0.196	100	8.85
844-363	88	3.63 - 3.94	0.198	100	8.85
844-375	92	3.75 - 4.06	0.198	100	8.92
844-406	102	4.06 - 4.38	0.203	100	9.15
844-413	104	4.13 - 4.44	0.209	100	9.22
844-425	108	4.25 - 4.56	0.214	100	9.22
844-456	118	4.56 - 4.88	0.216	100	9.45
844-500	132	5 - 5.31	0.218	100	9.67
844-525	140	5.25 - 5.56	0.220	100	9.82
844-600	164	6 - 6.31	0.223	100	10.20
844-625	172	6.25 - 6.56	0.225	100	10.35

Automatically adjust diameter for hose expansioin and contraction due to temperature changes.

A great attitude becomes a great day which becomes a great month which becomes a great LIFE.

– Mandy Hale

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

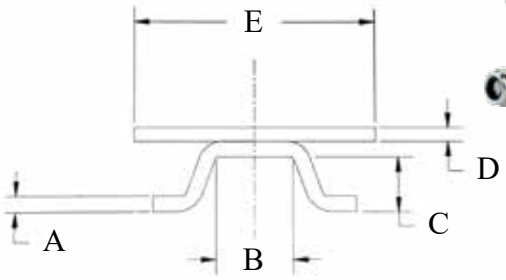
Purpose: To eliminate leaks by automatically incerasing or decreasing the clamps diameter, decreasing the need for retightening. Constant torque clamps have an extended tail on the band to protect soft hose or tube from being cut.

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	List Price
842-010	9/16" - 1 1/16"	9/16"	45 in-lb	5/16"	0.106	100	4.12
842-012	11/16" - 1 1/4"	9/16"	45 in-lb	5/16"	0.108	100	4.20
842-016	13/16" - 1 1/2"	9/16"	45 in-lb	5/16"	0.112	100	4.27
842-020	13/16" - 1 3/4"	9/16"	45 in-lb	5/16"	0.119	100	4.38
842-024	1 1/16" - 2"	9/16"	45 in-lb	5/16"	0.121	100	4.53
842-200	1 1/4" - 2 1/8"	5/8"	90 in-lb High	3/8"	0.207	100	7.65
842-250	1 3/4" - 2 5/8"	5/8"	90 in-lb High	3/8"	0.216	100	8.06
842-300	2 1/4" - 3 1/8"	5/8"	90 in-lb High	3/8"	0.220	100	8.43
842-350	2 3/4" - 3 5/8"	5/8"	90 in-lb High	3/8"	0.225	100	8.85
842-400	3 1/4" - 4 1/8"	5/8"	90 in-lb High	3/8"	0.231	100	9.18
842-450	3 3/4" - 4 5/8"	5/8"	90 in-lb High	3/8"	0.238	100	9.41
842-500	4 1/4" - 5 1/8"	5/8"	90 in-lb High	3/8"	0.256	100	9.67

V-Band Hose Clamps

- Band thickness: see chart
- Band width: see chart
- Band material: 300 stainless
- Trunnion: 300 stainless
- 1/4" T-bolt: 410 stainless
- 7/17" 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	List Price
		A	B	C	D	E			
843-321	3.21	0.050	0.262	0.141	0.035	0.750	0.525	100	12.30
843-382	3.82	0.077	0.207	0.281	0.040	0.875	0.531	100	20.75
843-388	3.88	0.050	0.400	0.281	0.040	0.875	0.536	100	17.67
843-450	4.50	0.077	0.207	0.281	0.040	0.875	0.547	100	17.21
843-461	4.61	0.050	0.156	0.281	0.035	0.750	0.549	100	17.67
843-475	4.75	0.050	0.400	0.281	0.040	0.875	0.553	100	19.76
843-525	5.25	0.050	0.262	0.141	0.035	0.750	0.567	100	18.60
843-588	5.88	0.050	0.400	0.281	0.040	0.875	0.575	100	22.29

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	List Price
841-175	1-3/4"	0.335	50	3.60
841-200	2"	0.410	50	4.20
841-250	2-1/2"	0.448	50	4.65
841-300	3"	0.582	50	5.70
841-350	3-1/2"	0.741	50	7.12
841-400	4"	0.847	25	8.70
841-450	4-1/2"	1.023	25	10.42
841-500	5"	1.067	25	16.80

FLAT BAND

Part #	Size	WGT	Box Qty	List Price
841-004	4"	0.847	25	9.90
841-005	5"	1.093	25	12.37

GUILLOTINE - provides a complete 360° heavy duty seal

Part #	Size	WGT	Box Qty	List Price
841-040	4"	0.820	25	9.60
841-045	4-1/2"	0.847	25	11.62
841-050	5"	0.988	25	13.12

What consumes your mind, controls your life.

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	List Price
845-200	2"	0.970	50	13.87
845-300	3"	1.058	50	15.15
845-350	3.50"	1.102	50	15.75
845-400	4"	1.146	50	16.42
845-500	5"	1.235	50	17.92
845-600	6"	1.323	50	19.65
845-500SS*	5"	1.190	50	20.40

*Light pattern .5mm band thickness

ALUMINIZED STEEL LAP CLAMPS

- .7mm band thickness
- 76mm band width

Part #	Size	WGT	Box Qty	List Price
846-200	2"	0.970	50	14.02
846-250	2.50"	1.014	50	14.70
846-275	2.75"	1.036	50	15.30
846-300	3"	1.058	50	15.22
846-350	3.50"	1.102	50	15.15
846-400	4"	1.146	50	16.50
846-500	5"	1.235	50	17.70

STAINLESS STEEL LAP CLAMPS

- .5mm band thickness
- 76mm band width

Part #	Size	WGT	Box Qty	List Price
847-200	2"	0.926	50	15.15
847-250	2.50"	0.970	50	16.20
847-275	2.75"	0.992	50	16.27
847-300	3"	1.014	50	16.72
847-350	3.50"	1.058	50	17.92
847-400	4"	1.102	50	18.90
847-500	5"	1.190	50	20.62
847-600	6"	1.279	50	22.27

STAINLESS STEEL EASY-FORM CLAMPS

- .5mm band thickness
- 76mm band width

Part #	Size	WGT	Box Qty	List Price
848-200	2"	0.926	50	15.45
848-225	2.25"	0.948	50	15.97
848-250	2.50"	0.970	50	16.80
848-275	2.75"	0.992	50	17.40
848-300	3"	1.014	50	17.85
848-350	3.50"	1.058	50	19.12
848-400	4"	1.102	50	20.10
848-500	5"	1.190	50	21.90
848-600	6"	1.279	50	23.25
848-700	7"	1.367	50	26.62

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		List Price
			Close	Open	
1050000	105	3/8"	0.350	0.414	0.48
1050001	113	7/16"	0.381	0.444	0.65
1050002	123	15/32"	0.394	0.486	0.65
1050003	133	1/2"	0.453	0.524	0.67
1050006	140	35/64"	0.472	0.551	0.90
1050007	145	9/16"	0.496	0.571	0.60
1050008	157	5/8"	0.543	0.618	0.71
1050009	170	11/16"	0.594	0.669	0.53
1050010	185	23/32"	0.618	0.728	0.58
1050011	198	3/4"	0.669	0.779	0.70
1050012	210	13/16"	0.716	0.827	0.58
1050013	226	7/8"	0.779	0.890	1.12
1050014	241	15/16"	0.839	0.949	0.70
1050015	256	1"	0.898	1.008	0.73
1050016	271	1-1/16"	0.945	1.067	0.81
1050017	286	1-1/8"	1.004	1.126	0.76
1050018	301	1-3/16"	1.063	1.185	0.69
1050020	331	1-5/16"	1.181	1.303	0.88
1050021	346	1-3/8"	1.240	1.362	0.75
1050023	376	1-15/32"	1.358	1.480	1.35
1050025	396	1-9/16"	1.437	1.559	0.78
1050026	410	1-5/8"	1.492	1.614	2.70
1050029	455	1-3/4"	1.669	1.791	1.37
1050030	470	1-16/16"	1.728	1.850	0.92
1050032	500	1-15/16"	1.846	1.968	0.98
1050033	515	2"	1.905	2.028	1.02

Successful people never worry about what others are doing.

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		List Price
		Close	Open	
1010002	3/16"	0.134	0.197	1.27
1010008	5/16"	0.276	0.354	1.48
1010011	3/8"	0.319	0.433	1.14
1010016	1/2"	0.425	0.512	1.15
1010019	9/16"	0.492	0.591	1.32
1010022	19/32"	0.551	0.669	1.49
1010024	5/8"	0.591	0.709	1.26
1010027	3/4"	0.638	0.787	1.15

STAINLESS STEEL

Part #	Nominal Size	Inches		List Price
		Close	Open	
1510003	1/4"	0.197	0.276	1.41
1510004	5/16"	0.276	0.354	1.75
1510023	3/8"	0.319	0.433	1.50
1510006	1/2"	0.425	0.512	1.81
1510007	9/16"	0.492	0.591	2.09
1510008	19/32"	0.551	0.669	2.19
1510009	5/8"	0.591	0.709	0.99
1510010	3/4"	0.638	0.787	2.34
1510011	13/16"	0.709	0.866	2.83
1510012	7/8"	0.748	0.906	1.54
1510013	15/16"	0.827	0.984	2.53
1510014	1"	0.886	1.063	2.93
1510016	1-1/8"	1.035	1.221	2.76
1510019	1-9/16"	1.260	1.457	4.15
1510020	1-1/2"	1.378	1.575	3.81

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		List Price
			Close	Open	
16700001	9/32"	5mm	0.228	0.276	1.25
16700004	3/8"	5mm	0.307	0.374	1.32
16700007	7/16"	5mm	0.378	0.445	1.72
16700010	1/2"	7mm	0.425	0.524	1.10
16700012	35/64"	7mm	0.453	0.551	1.45
16700013	9/16"	7mm	0.472	0.571	1.82
16700016	5/8"	7mm	0.520	0.618	1.66
16700017	11/16"	7mm	0.571	0.669	1.27
16700022	3/4"	7mm	0.654	0.780	1.58
16700024	13/16"	7mm	0.701	0.827	1.77

Attitude is a little thing that makes a big difference.

—Winston Churchill

PREFORMED HOSE CLAMPS

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	List Price	Clamp I.D. Inches	Catalog Number SS	Band Width & Thick-ness	List Price
F-3	3/8 x .025	1.39	13/16			1.39
F-311	3/8 x .025	1.72	1 3/8			1.72
F-4	5/8 x .025	1.27	1	FS-4	5/8 x .022	3.18
F-5	5/8 x .025	1.46	1 1/4	FS-5	5/8 x .022	3.55
F-6	5/8 x .031	1.79	1 1/2	FS-6	5/8 x .022	3.51
F-7	5/8 x .031	1.52	1 3/4	FS-7	5/8 x .022	4.44
F-8	5/8 x .031	1.52	2	FS-8	5/8 x .022	4.10
F-9	5/8 x .031	1.74	2 1/4	FS-9	5/8 x .022	3.83

WITH STAINLESS STEEL LOK - 50/BOX

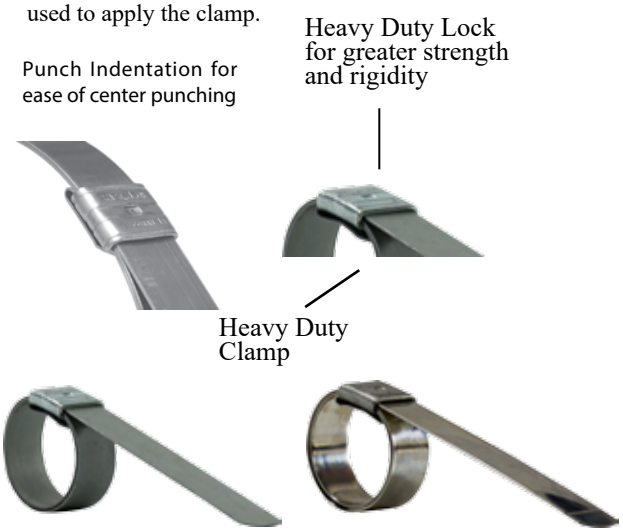
F-10	5/8 x .031	1.88	2 1/2	FS-10	5/8 x .022	4.59
F-11	5/8 x .031	2.18	2 3/4	FS-11	5/8 x .022	5.67
F-12	5/8 x .031	2.32	3	FS-12	5/8 x .022	4.79
F-14	5/8 x .031	2.15	3 1/2	FS-14	5/8 x .022	5.63
			25/ BOX			
F-16	5/8 x .031	2.62	4	FS-16	5/8 x .022	6.22
F-18	5/8 x .031	2.95	4 1/2	FS-18	5/8 x .022	6.87
F-20	5/8 x .031	2.92	5	FS-20	5/8 x .022	7.51
	5/8 x .031		6	FS-24	5/8 x .022	8.90
	5/8 x .031		7	FS-28	5/8 x .022	7.42

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.



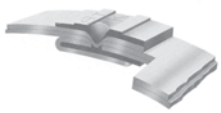
K-Clamps may be secured by either a punch or fold-up method. (See cross sectioned views)

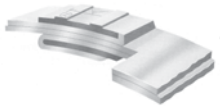
• Minimum Qty may apply

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	List Price	Clamp I.D. Inches	Band Width & Thickness	Catalog Number	List Price
K-3	1.38	13/16"	3/8" x .025	KS-3	2.39
K-311	1.37	1-3/8"	3/8" x .025	KS-311	2.39
K-4	1.76	1"	5/8" x .030	KS-4	4.03
K-5	2.05	1-1/4"	5/8" x .030	KS-5	3.97
K-6	1.97	1-1/2"	5/8" x .030	KS-6	4.25
K-7	2.23	1-3/4"	5/8" x .030	KS-7	4.19
K-8	2.16	2"	5/8" x .030	KS-8	4.96
K-9	2.43	2-1/4"	5/8" x .030	KS-9	4.98
			50/BOX		
K-10	2.35	2-1/2"	5/8" x .030	KS-10	5.77
K-11	2.45	2-3/4"	5/8" x .030	KS-11	5.77
K-12	2.89	3"	5/8" x .030	KS-12	6.71
K-14	3.05	3-1/2"	5/8" x .030	KS-14	8.15
			25/BOX		
K-16	2.93	4"	5/8" x .030	KS-16	7.53
K-18	3.15	4-1/2"	5/8" x .030	KS-18	8.90
K-20	3.33	5"	5/8" x .030	KS-20	9.43
K-24	3.76	6"	5/8" x .030		
K-28	5.09	7"	5/8" x .030		

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	List Price
FLJS-203	1"	5/8" x .030	4.08
FLJS-204	1-1/4"	5/8" x .030	4.77
FLJS-205	1-1/2"	5/8" x .030	4.80
FLJS-207	2"	5/8" x .030	5.54
FLJS-208	2-1/4"	5/8" x .030	5.89
FLJS-209	2-1/2"	5/8" x .030	6.25

100' CLAMP-IT STRAPPING

Catalog #	Width	Thickness	Material 100'/CTN.	List Price/ CNT
SS-3751	3/8"	.025	301 Stainless	150.24
SS-5001	1/2"	.030	301 Stainless	232.60
SS-6251	5/8"	.030	301 Stainless	272.89
SS-7501	3/4"	.030	301 Stainless	327.51
SG-5000	1/2"	.030	Galvanized	87.83

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	List Price Each pc.
CS-3751	3/8"	301 Stainless	100	1.13
CS-5001	1/2"	301 Stainless	100	1.22
CS-6251	5/8"	301 Stainless	100	1.60
CS-7501	3/4"	301 Stainless	50	2.04

Be the attitude you want to be around. -Tim DeTellis

CLAMPLING TOOLS

Model 1098 I
Standard Jaw Pincers

Part #	List Price
1410118	188.01

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 #		List Price
188.01 1410083	Model 1099 I	184.21

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 #		List Price
308-070	Hose Crimper	244.44

HOSE CLAMPS

FOLD UP ADAPTER

Part #	List Price
KA001	

LOKING TOOL

Part #		List Price
F-38	Portable hand tool used to apply punch Type 3/8 & 5/8 Clamps	127.84

LOKING TOOL

Part #		List Price
F-40	Used to apply Punch Type 3/8 & 5/8 clamps. Order mallet separately	216.02

LOKING TOOL

Part #		List Price
F-100	Used to apply Punch Type 3/8 & 5/8 clamps. Order mallet separately	505.98

HOSE CLAMPS

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	List Price	SAE Size	Clamping Range		Bag	Part# 304 SS	List Price
			Inches	mm			
88-024	3.25	8	5/8-1	15-24	1000	89-024	6.51
88-028	3.66	10	3/4-1-1/8	19-28	500	89-028	7.58
88-032	4.45	12	7/8-1-1/4	22-32	500	89-032	8.58
88-038	3.70	16	1-1/16-1-1/2	26-38	500	89-038	7.17
		20	1-1/4-1-3/4	32-44	500	89-044	7.82
88-050	4.32	24	1-1/2-2	38-50	500	89-050	8.29
88-056	4.00	28	1-3/4-2-1/4	44-56	500	89-056	8.51
88-065	5.99	32	2-2-9/16	50-65	200	89-065	9.53
88-075	5.98	40	2-5/16-3	58-75	200	89-075	11.00
88-085	5.84	44	2-11/16-3-3/8	68-85	200	89-085	11.81
88-095	4.99	52	3-3-3/4	77-95	200	89-095	14.13
88-112	7.49	64	3-7/16-4-7/16	87-112	200	89-112	13.44

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		Qty per Bag	List Price
	Inches	mm		
92-010	.36-.41	9-10.5	1000	1.41
92-011	.37-.45	9.5-11.5	900	1.26
92-012	.41-.49	10.5-12.5	800	1.65
92-013	.45-.53	11.5-13.5	800	1.58
92-014	.49-.57	12.5-14.5	700	1.30
92-015	.53-.61	13.5-15.5	600	1.82
92-016	.55-.65	14-16.5	500	1.57
92-017	.59-.69	15-17.5	500	1.40

NEW

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)	List Price
96022	12-22	.469-.859	2.42
96027	16-27	.625-1.06	2.65
96032	20-32	.787-1.26	2.83
96040	25-40	.984-1.575	3.04
96050	35-50	1.26-1.969	3.31
96060	40-60	1.575-2.362	3.49
96070	50-70	1.969-2.756	3.67
96080	60-80	2.362-3.15	3.89
96090	70-90	2.756-3.543	4.12
96100	80-100	3.15-3.937	4.39
96110	90-110	3.543-4.33	4.46
96120	100-120	3.937-4.724	4.80
96130	110-130	4.33-5.118	5.12
96140	120-140	4.72-5.512	5.23
96150	130-150	5.118-5.906	5.66
96160	140-160	5.512-6.299	5.80

MINI CLAMPS

304 SS MINI CLAMPS

Part # 304 SS	Clamping Range		Qty per Bag	List Price
	Inches	mm		
93-008	.30-.34	7.5-8.5	1000	3.49
93-009	.34-.37	8.5-9.5	1000	4.25
93-011	.41-.47	10.5-12	900	4.24
93-013	.49-.55	12.5-14	800	4.65
93-014	.53-.59	13.5-15	700	3.59
93-016	.59-.67	15-17	1000	4.52
93-017	.63-.71	16-18	500	3.81

LINED, MINI/ RUBBER LINED

HOSE CLAMPS

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	List Price	Clamping Range		Part# 304 SS	Qty per Bag	List Price
			Inches	mm			
95-300	100	1.38	1/8	3			
95-301	100	1.55	3/16	5	96-301	1000	2.49
95-302	100	1.36	1/4	6	96-302	200	2.42
95-303	100	1.44	5/16	8	96-303	1000	2.39
95-304	100	1.29	3/8	10	96-304	100	2.75
95-305	100	1.32	7/16	11	96-305	1000	2.60
95-306	100	1.57	1/2	13	96-306	100	2.71
95-307	100	1.67	9/16	14	96-307	100	3.28
95-308	100	1.52	5/8	16	96-308	100	3.27
95-309	50	1.76	11/16	18			
95-310	50	1.65	3/4	19	96-310	500	3.31
95-311	50	2.10	13/16	21			
95-312	50	2.15	7/8	22	96-312	500	3.38
95-313	50	2.31	15/16	24			
95-314	50	1.94	1	25	96-314	500	4.22
95-315	50	2.62	1-1/16	27			
95-316	50	2.39	1-1/8	29	96-316	500	5.66
95-317	50	3.42	1-3/16	30			
95-318	50	3.68	1-1/4	32	96-318	500	5.98
95-319	50	4.01	1-5/16	33			
95-320	50	4.01	1-3/8	35	96-320	500	7.72
95-321	50	3.93	1-7/16	36			
95-322	500	4.25	1-1/2	38	96-322	100	7.35
95-326	50	6.68	1-5/8	41			
95-323	25	5.13	1-3/4	45	96-323	500	7.98
95-328	25	6.80	1-7/8	47			
95-324	25	5.29	2	51			
95-325	25	5.76	2-1/8	54			
95-329	25	6.98	2-3/8	60			
95-327	25	6.59	2-1/2	65			
95-330	15	6.86	2-15/16	74			
95-331	10	11.03	4-5/16	110			

RUBBER CUSHIONED SS CLAMP

Part #	Mounting Dia	Clamp Dia	List Price
95402	3/8"	1/4"	0.60
95404	3/8"	3/8"	0.60
95406	3/8"	1/2"	0.70
95408	3/8"	5/8"	0.73
95410	3/8"	3/4"	0.83
95414	3/8"	1"	0.98
95418	3/8"	1 1/4"	1.40
95422	3/8"	1 1/2"	1.55
95424	3/8"	2"	2.18
95427	3/8"	2 1/2"	3.45
95432	3/8"	3"	4.53
95433	3/8"	4"	5.85
95434	3/8"	5"	9.53

GALVANIZED STEEL VINYL COATED CLAMP

Part #	Mounting Dia	Clamp Dia	List Price
95504	1/4"	3/8"	0.38
95506	1/4"	1/2"	0.52
95508	1/4"	5/8"	0.61
95510	1/4"	3/4"	0.61
95512	1/4"	7/8"	0.78
95514	1/4"	1"	0.81
95516	1/4"	1 1/8"	1.33
95518	1/4"	1 1/4"	0.99
95522	1/4"	1 1/2"	1.28
95523	1/4"	1 3/4"	1.45
95524	1/4"	2"	2.78

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	List Price
32-500	6231	0.330	0.49	0.250	0.020	0.38
32-501	833	0.358	0.500	0.265	0.020	0.39
32-503	833B	0.375	0.718	0.265	0.025	0.42
32-502	622	0.380	0.500	0.265	0.020	0.36
32-550	619	0.400	0.47	0.27	0.020	0.57
32-504	620	0.410	0.500	0.265	0.020	0.39
32-551	769R	0.450	0.562	0.343	0.020	0.50
32-552	4750	0.478	0.687	0.328	0.025	0.45
32-553	624R	0.500	0.500	0.343	0.020	0.58
32-506	7322A	0.500	1.000	0.343	0.025	0.61
32-554	7322	0.500	1.000	0.328	0.025	0.70
32-555	625	0.525	0.47	0.36	0.020	0.43
32-517	625A	0.525	0.56	0.360	0.020	0.42
32-556	7323	0.525	1.000	0.375	0.025	0.81
32-521	9974	0.525	1.000	0.437	0.025	0.79
32-557	7324	0.531	1.000	0.375	0.025	0.70
32-558	626	0.550	0.484	0.375	0.020	0.53
32-507	3588	0.56	0.75	0.375	0.020	0.51
32-559	7325	0.56	1.000	0.437	0.025	0.77
32-561	7326	0.593	1.000	0.437	0.025	0.73
32-563	JJ	0.600	0.500	0.500	0.020	0.52
32-526	II	0.625	0.500	0.500	0.020	0.71
32-564	7327	0.625	1.000	0.437	0.025	0.69
32-565	HH	0.650	0.500	0.500	0.020	0.63
32-566	7328	0.656	1.000	0.437	0.025	0.80
32-567	GG	0.675	0.515	0.500	0.020	0.75
32-568	7329	0.69	1.000	0.500	0.025	0.86

Part #	Ferrule #	I.D.	Length	Pierce	Gauge	List Price
32-570	7330	0.718	1.000	0.500	0.025	0.83
32-508	7330A	0.718	1.000	0.625	0.025	0.85
32-571	EE	0.725	0.530	0.500	0.020	0.65
32-572	DD	0.750	0.531	0.500	0.020	0.64
32-510	7331B	0.75	1.00	0.500	0.025	0.89
32-573	7331	0.750	1.000	0.625	0.025	1.25
32-574	CC	0.775	0.531	0.500	0.020	0.74
32-533	7332B	0.781	1.000	0.500	0.025	1.20
32-575	7332	0.781	1.000	0.625	0.025	0.88
32-576	BB	0.800	0.546	0.562	0.020	0.80
32-577	7333	0.812	1.000	0.625	0.025	1.20
32-578	AA	0.825	0.546	0.562	0.020	0.76
32-535		0.85	0.968	0.687	0.025	0.86
32-579	7244	0.875	0.843	0.687	0.025	1.07
32-539	5029A	0.900	0.875	0.687	0.025	1.07
32-580	7113	0.925	0.968	0.750	0.025	1.14
32-543	5028A	0.975	0.843	0.687	0.025	1.29
32-545	5235A	1.000	0.843	0.687	0.025	1.20
32-549	7145A	1.050	0.843	0.687	0.025	1.51
32-584	5027	1.100	0.843	0.812	0.025	1.33
32-586	7104A	1.15	0.843	0.875	0.025	1.05
32-588	7088A	1.175	0.875	0.875	0.025	1.56
32-590	875L	1.200	0.843	0.875	0.025	1.75
32-591	7291	1.225	0.968	0.875	0.025	2.09
32-592	7255	1.25	0.968	1.000	0.04	2.40
32-596	8000	1.425	0.875	1.062	0.025	1.98
32-597	1500	1.50	0.875	1.125	0.025	1.63

STAINLESS STEEL FERRULES

Part #	Cross #	I.D.	Length	Hole	Metal Thickness	List Price
32552SS	x4750	.478	.687	.328	.020	0.60
32557SS	7324	.531	1.00	.438	.020	0.71
32559SS	7325	.56	1.00	.437	.020	0.70
32561SS	7326	.593	1.00	.437	.020	0.75
32564SS	7327	.625	1.00	.437	.020	0.78
32566SS	7328	.656	1.00	.437	.020	1.51
32568SS	7329	.69	1.00	.50	.020	0.83
32570SS	7330	.718	1.00	.625	.020	0.88
32575SS	7332	.781	1.00	.625	.020	0.88
32577SS	7333	.812	1.00	.625	.020	1.87
32588SS	7088A	1.175	.844	.875	.020	1.05

MORE SIZES AVAILABLE

AVAILABLE IN ALUMINUM AND STEEL ALSO

TUBING

POLYURETHANE

POLYETHYLENE

Sold individually boxed

Natural, Black, Blue, Green, Red, Yellow, Orange

NYLON

Sold individually boxed

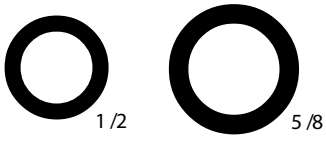
PVC

- Clear

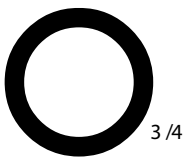
Sold individually boxed

COPPER AND ALUMINUM

TYPE L AND REFRIGERATION



ALUMINUM



POLYURETHANE 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)	List Price
973-341	4mm, 5/32	.093	.031	.250	200	85	600	.70	49.36
973-343	.250	.156	.047	.476	180	70	540	1.50	66.66
973-345	.375	.250	.063	1.000	150	70	450	3.40	136.02
973-346	.500	.328	.086	1.102	150	70	450	5.60	260.94

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)	List Price
73-341B	4mm, 5/32	.093	.031	.250	200	85	600	.70	37.50
73-343B	.250	.156	.047	.476	180	70	540	1.50	66.66
73-345B	.375	.250	.063	1.000	150	70	450	3.40	136.02
73-346B	.500	.328	.086	1.102	150	70	450	5.60	260.94

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)	List Price
73-341U	4mm, 5/32	.093	.031	.250	200	85	600	.70	37.50
73-343U	.250	.156	.047	.476	180	70	540	1.50	66.66
73-345U	.375	.250	.063	1.000	150	70	450	3.40	136.02
73-346U	.500	.328	.086	1.102	150	70	450	5.60	260.94

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)	List Price
73-341R	4mm, 5/32	.093	.031	.250	200	85	600	.70	37.50
73-343R	.250	.156	.047	.476	180	70	540	1.50	66.60
73-345R	.375	.250	.063	1.000	150	70	450	3.40	136.02
73-346R	.562	.375	.093	1.142	140	60	420	5.60	260.94

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	List Price
973-200	1/8"	0.08	0.022	250	23.54
973-201	4mm/5/32"	0.106	0.025	180	24.40
973-203	1/4"	0.17	0.040	150	22.81
973-204	1/4"	0.125	0.0625	350	30.50
973-205	8mm/5/16"	0.236	0.038	150	43.25
973-206	3/8"	0.25	0.0625	150	49.87
973-207	1/2"	0.375	0.0625	125	62.78
973-208	5/8"	0.50	0.0625	100	140.58
973-211	3/4"	0.625	0.0625	100	204.24
973-210	1"	0.75	0.125	150	388.60

500' LENGTH

Part #	Tube O.D.	Tube ID	Tube Wall	Working Pressure	List Price
73-200N5	1/8"	0.085	0.020	250	103.17
73-203N5	1/4"	0.17	0.040	150	137.47
73-204N5	1/4"	0.125	0.0625	350	148.45
73-206N5	3/8"	0.25	0.0625	150	244.62
73-207N5	1/2"	0.375	0.0625	125	308.89

1000' LENGTH

Part #	Tube O.D.	Tube ID	Tube Wall	Working Pressure	List Price
73-203N1	1/4"	0.17	0.040	150	218.11
73-206N1	3/8"	0.25	0.0625	150	428.64

LLDPE POLYETHYLENE TUBING - COLORS

BLACK

- 100'
- 500'
- 1000'

Part #	Color	Length	Nominal O.D.	List Price
73-200B	Black	100'	1/8"	23.54
73-201B	Black	100'	5/32"	26.87
73-203B	Black	100'	1/4"	27.81
73-204B	Black	100'	1/4"	28.50
73-205B	Black	100'	5/16"	43.25
73-206B	Black	100'	3/8"	47.54
73-207B	Black	100'	1/2"	64.45
73-208B	Black	100'	5/8"	117.19
73-203B5	Black	500'	1/4"	131.51
73-205B5	Black	500'	5/16"	187.98
73-206B5	Black	500'	3/8"	225.35
73-207B5	Black	500'	1/2"	308.89
73-203B1	Black	1000'	1/4"	428.64
73-206B1	Black	1000'	3/8"	428.64

GREEN

- 100'
- 500'
- 1000'

Part #	Color	Length	Nominal O.D.	List Price
73-201G	Green	100'	5/32"	26.87
73-203G	Green	100'	1/4"	28.35
73-204G	Green	100'	1/4"	28.50
73-205G	Green	100'	5/16"	43.25
73-206G	Green	100'	3/8"	47.54
73-207G	Green	100'	1/2"	64.45
73-203G5	Green	500'	1/4"	111.96
73-203G1	Green	1000'	1/4"	218.11

WHITE

- 100'
- 500'

Part #	Color	Length	Nominal O.D.	List Price
73-203W	White	100'	1/4"	27.81
73-206W	White	100'	3/8"	47.54
73-207W	White	100'	1/2"	68.16
73-207W5	White	500'	1/2"	308.89

BLUE

- 100'
- 500'
- 1000'

Part #	Color	Length	Nominal O.D.	List Price
73-200U	Blue	100'	1/8"	23.54
73-201U	Blue	100'	5/32"	26.87
73-203U	Blue	100'	1/4"	27.81
73-204U	Blue	100'	1/4"	28.50
73-205U	Blue	100'	5/16"	43.25
73-206U	Blue	100'	3/8"	49.95
73-207U	Blue	100'	1/2"	64.45
73-203U5	Blue	500'	1/4"	111.96
73-206U5	Blue	500'	3/8"	225.35
73-203U1	Blue	1000'	1/4"	218.11

RED

- 100'
- 500'
- 1000'

Part #	Color	Length	Nominal O.D.	List Price
73-203R	Red	100'	1/4"	27.81
73-205R	Red	100'	5/16"	43.25
73-206R	Red	100'	3/8"	47.54
73-207R	Red	100'	1/2"	62.07
73-203R5	Red	500'	1/4"	123.87
73-206R5	Red	500'	3/8"	225.35
73-203R1	Red	1000'	1/4"	218.11

YELLOW

- 100'

Part #	Color	Length	Nominal O.D.	List Price
73-203Y	Yellow	100'	1/4"	27.81
73-204Y	Yellow	100'	1/4"	28.50
73-205Y	Yellow	100'	5/16"	43.25
73-206Y	Yellow	100'	3/8"	47.54
73-207Y	Yellow	100'	1/2"	64.45

ORANGE

Part #	Color	Length	Nominal O.D.	List Price
73-203O	Orange	100'	1/4"	27.01

NYLON TUBING

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	List Price
973-230	1/8"	0.08	.022	420	50.70
973-231	5/32"	0.106	.025	350	66.87
973-232	1/4"	0.18	.035	290	112.50
973-238	1/4"	0.15	.05	800	134.34
973-233	3/8"	0.275	.050	250	242.40
973-234	1/2"	0.375	.062	240	400.33

BLACK TUBING & MISC.

Part #	O.D.	Tube ID	Wall	Working Pressure	List Price
73-230B	1/8	0.08	0.022	420	54.67
73-231B	5/32	0.106	0.025	350	66.84
73-232B	1/4	0.18	0.035	290	112.51
73-238B	1/4	0.15	0.05	800	131.25
73-233B	3/8	0.275	0.05	250	242.40
73-232N5*	1/4	0.18	0.035	290	479.30
73-238U**	1/4	0.15	0.075	800	112.51

• 500' Natural **Blue

*METRIC LENGTH - 100 ft. coils

• available in natural color only

Part #	MM O.D.	MM I.D.	MM Wall	Working Pressure	List Price
973-323	4	2.7	0.65	350	66.84
973-326	6	3.5	1.25	350	111.49
973-325	6	4	1	340	143.88
973-327	8	6	1	250	202.44
973-329	10	8	1	225	234.62
973-332	12	10	1	200	393.30
973-334	14	11	1.5	175	648.36

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	List Price
973-224	1/8 (.125)	1/4 (.25)	1/16 (.032)	50	53.76
973-223	3/16 (.187)	5/16 (.313)	1/16 (.062)	55	41.14
973-215	1/4 (.25)	3/8 (.375)	1/16 (.062)	55	56.56
973-252	5/16 (.312)	7/16 (.438)	1/16 (.062)	50	68.79
973-253	5/16 (.312)	1/2 (.500)	3/32 (.094)	55	93.23
973-216	3/8 (.375)	1/2 (.500)	1/16 (.062)	45	72.85
973-255	3/8 (.375)	5/8 (.625)	1/8 (.125)	55	169.53
973-262	3/8 (.375)	9/16 (.563)	3/32 (.094)	50	147.88
973-217	1/2 (.500)	5/8 (.625)	1/16 (.062)	30	139.64
973-219	3/4 (.750)	1 (1.00)	1/8 (.125)	35	248.89
973-221	1 (1.00)	1-1/4 (1.25)	1/8 (.125)	25	373.97

TUBING ACCESSORIES

MINI-TUBING CUTTER

• Great for tight places

Part #	Size	List Price
990-571	3mm-22mm (1/8"-7/8")	6.38

TUBING CUTTER

Part #	Size	List Price
990-570	1/8"-1-1/8"	12.04

PLASTIC TUBE CUTTER

Range: 1/8" - 3/8" I.D. (3mm-10mm)

Part #	Description	List Price
91-707	Cutter w/Blade	9.77

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.

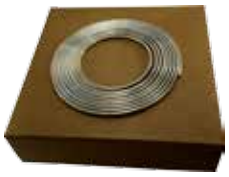
NOTE: MOUNTING SCREWS NOT PROVIDED

Part #	Tubing OD	Description	Channels	List Price
28-988	1/4	non-adhesive	10	3.91
28-989	1/4	adhesive	10	4.33
28-990	3/8	non-adhesive	7	13.99
28-991	1/2	non-adhesive	5	16.60

ALUMINUM & COPPER TUBING

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	45.11
972-191	3/16	.028	.132"	1,600	10 coils	57.93
972-192	1/4	.032	.186"	1,400	10 coils	53.39
972-193	5/16	.035	.243"	1,200	10 coils	75.14
972-194	3/8	.035	.305"	1,000	10 coils	81.54
972-195	1/2	.035	.43"	740	10 coils	121.70

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	POR
972-181	-	3/16	.030	.128"	1,900	2.88	POR
972-182	1/8	1/4	.030	.19"	1,400	4..02	POR
972-183	-	5/16	.032	.248"	1,100	5.45	POR
972-184	1/4	3/8	.032	.311"	980	6.70	POR
972-185	3/8	1/2	.032	.436"	720	9.10	POR
972-186	1/2	5/8	.035	.555"	610	12.55	POR
972-187	5/8	3/4	.035	.68'	510	15.25	POR

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	POR
972-172	3/8	1/2	.035"	.43"	770	11.88	POR
972-173	1/2	5/8"	.04"	.545"	720	17.10	POR

HIGH PRESSURE SPRAYERS

NEW

STRAIGHT THROUGH QDS

NEW

FITTINGS AND SWIVELS

NEW

NOZZLES

NEW

SPRAY GUNS AND WANDS

NEW

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. Nozzles attach with ¼" quick disconnect plug.

Part #	Degree of Spray	Size of Opening	List Price
DX250030	0	3.0	4.20
DX251530	15	3.0	4.20
DX252530	25	3.0	4.20
DX254030	40	3.0	4.20
DX250040	0	4.0	4.20
DX251540	15	4.0	4.20
DX252540	25	4.0	4.20
DX254040	40	4.0	4.20
DX250050	0	5.0	4.20
DX251550	15	5.0	4.20
DX252550	25	5.0	4.20
DX254050	40	5.0	4.20
DX250060	0	6.0	4.20
DX251560	15	6.0	4.20
DX252560	25	6.0	4.20
DX254060	40	6.0	4.20
DX256500	65		4.20

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, stainless steel and ¼" male pipe thread.

Part #	Degree of Spray	Size of Opening	List Price
DX140030MG	0	3.0	3.33
DX141530MG	15	3.0	3.33
DX142530MG	25	3.0	3.33
DX144030MG	40	3.0	3.33
DX140040MG	0	4.0	3.33
DX141540MG	15	4.0	3.33
DX142540MG	25	4.0	3.33
DX144040MG	40	4.0	3.33
DX140050MG	0	5.0	3.33
DX141550MG	15	5.0	3.33
DX142550MG	25	5.0	3.33
DX144050MG	40	5.0	3.33
DX140060MG	0	6.0	3.33
DX141560MG	15	6.0	3.33
DX142560MG	25	6.0	3.33
DX144060MG	40	6.0	3.33
DX140070MG	0	7.0	3.33
DX141570MG	15	7.0	3.33
DX142570MG	25	7.0	3.33
DX144070MG	40	7.0	3.33

5-PIECE KIT

Part #	Size	List Price
DX259520	2.0	19.08
DX259530	3.0	19.08
DX259540	4.0	19.08
DX259550	5.0	19.08
DX259560	6.0	19.08
DX259570	7.0	19.08

RUBBER-TIP TURBO NOZZLE

Rubber tip, rotating turbo nozzle, ¼" NPT with steel male quick disconnect plug adaptor

Part #	PSI	Size of Opening	List Price
DX722530	2500	3.0	86.25
DX722540	2500	4.0	86.25
DX722550	2500	5.0	86.25
DX722560	2500	6.0	86.25
DX723230	3200	3.0	86.55
DX723240	3200	4.0	86.55
DX723250	3200	5.0	86.55
DX723260	3200	6.0	86.55
DX724030	4000	3.0	94.45
DX724040	4000	4.0	94.45
DX724050	4000	5.0	94.45
DX724060	4000	6.0	94.45
DX725030	5000	3.0	95.55
DX725040	5000	4.0	95.55
DX725050	5000	5.0	95.55
DX725060	5000	6.0	95.55

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	List Price
DX60021	NBR	1/4"	39.27
DX60022	NBR	3/8"	40.78
DX60023	NBR	1/2"	51.33
DX60021V	Viton	1/4"	39.27
DX60022V	Viton	3/8"	40.78
DX60023V	Viton	1/2"	51.33

THERMAL RELIEF VALVE

140F Thermal Relief Valve, Brass, 300 PSI

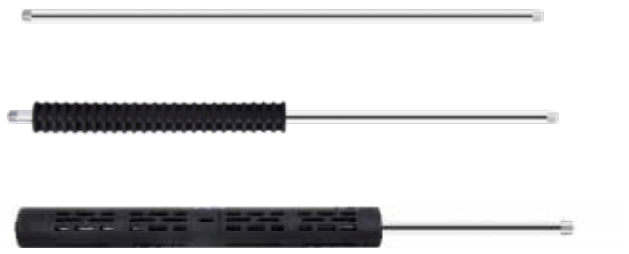
Part #	Size	List Price
DX35TR25	¼"	10.32
DX35TR38	3/8"	10.25

90° BOOM SWIVEL

Part #	Size	List Price
DX60092	3/8"	61.90

CHROMED STEEL WAND

1/4" MNPT x 1/4" Extension Wands, 10.5 GPM, 300F



Part #	Size	Grip	List Price
DX4324	24"	No Grip	8.40
DX4336	36"	No Grip	11.70
DX4424	24"	Molded Grip	14.20
DX4436	36"	Molded Grip	16.80
DX4524VG	24"	Vented Grip	20.40
DX4536VG	36"	Vented Grip	24.20

SPRAY GUN

Rear entry spray gun, 4000 PSI, 7 GPM, 212F max

Part #	Pressure	Flow	Temperature	List Price
DX5090	4000	7	212	46.65
DX5022	4000	6.6	300	46.50
DX5005	5075	10.5	300	52.05

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 #	List Price
DX5006	58.15

SPRAY GUN WITH EXTENSION

Rear entry spray gun with 12” extension, 4000psi, 7gpm, 300F max

Part #	List Price
DX5190	53.95

SPRAY GUN WITH EXTENSION

Rrear entry spray gun with 12” extension, 5075psi, 10.5gpm, 300F max

Part #	List Price
DX5197	64.65

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

NEW

MALE BRASS COUPLERS

Part #	Body Size	Thread Size	PSI	List Price
86-030	1/4	1/4	4000	6.78
86-031	3/8	3/8	4000	8.40
86-032	1/2	1/2	4000	12.75

MALE STEEL PLUGS

Part #	Body Size	Thread Size	PSI	List Price
86-040	1/4	1/4	4000	1.71
86-041	3/8	3/8	4000	1.94
86-042	1/2	1/2	4000	2.41

FEMALE BRASS COUPLERS

Part #	Body Size	Thread Size	PSI	List Price
86-035	1/4	1/4	4000	6.78
86-036	3/8	3/8	4000	8.40
86-037	1/2	1/2	4000	13.14

FEMALE STEEL PLUGS

Part #	Body Size	Thread Size	PSI	List Price
86-045	1/4	1/4	4000	1.94
86-046	3/8	3/8	4000	2.05
86-047	1/2	1/2	4000	2.86

MALE STAINLESS STEEL COUPLERS

NEW

Part #	Body Size	Thread Size	PSI	List Price
86-030SS	1/4	1/4	6000	13.49
86-031SS	3/8	3/8	6000	17.39

MALE STAINLESS STEEL PLUGS

NEW

Part #	Body Size	Thread Size	PSI	List Price
86-040SS	1/4	1/4	6000	4.52
86-041SS	3/8	3/8	6000	10.69

FEMALE STAINLESS STEEL COUPLERS

Part #	Body Size	Thread Size	PSI	List Price
86-035SS	1/4	1/4	6000	12.49
86-036SS	3/8	3/8	6000	16.09

FEMALE STAINLESS STEEL PLUGS

Part #	Body Size	Thread Size	PSI	List Price
86-045SS	1/4	1/4	6000	5.02
86-046SS	3/8	3/8	6000	6.56

COUPLERS/ KNOBS

NEW

MOLDED GRIP MALE BRASS COUPLER

Part #	Thread Size	Thread Size	PSI	List Price
86-030RG	1/4	1/4	4000	8.09
86-031RG	3/8	3/8	4000	11.51

MOLDED GRIP FEMALE BRASS COUPLER

Part #	Thread Size	Plug	PSI	List Price
86-035RG	1/4	1/4	4000	6.78
86-036RG	3/8	3/8	4000	9.63

M22 SCREW TYPE X MNPT

Part #	Thread Size	Male	PSI	List Price
86-001	M22	1/4	4000	7.50
86-002	M22	3/8	4000	4.66

M22 SCREW TYPE X FNPT

Part #	Thread Size	Female Size	PSI	List Price
86-005	M22	1/4	4000	4.85
86-006	M22	3/8	4000	4.85

INSULATED KNOB

M22 INSULATED KNOB X MNPT

Part #	Thread Size	Male Size	PSI	List Price
86-012	M22	1/4	4000	8.78
86-013	M22	3/8	4000	11.00

M22 INSULATED KNOB X FNPT

Part #	Thread Size	Female Size	PSI	List Price
86-017	M22	1/4	4000	6.35
86-018	M22	3/8	4000	8.82

M22 X M22 FNPT

Part #	Thread Size	Thread Size	PSI	List Price
86-022	M22	M22	4000	17.61

M22 INSULATED KNOB X QC PLUG

Part #	Thread Size	Plug	PSI	List Price
86-020	M22	3/8	4000	13.05

PNEUMATICS

1/4" 3/8" 1/2" INDUSTRIAL INTERCHANGE | 1/4" ARO | 1/4" AUTO | 3/8" AUTO | 1/4" LINCOLN | 1/4" STRAIGHT THRU | 3/8" 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

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	List Price
28-540	1/4"	1/4"	7.23
28-541	1/4"	3/8"	7.80

BRASS MALE COUPLER

Part#	Body Size	Thread Size	List Price
28-552	1/4"	1/4"	7.16
28-553	1/4"	3/8"	7.69

STEEL FEMALE COUPLER

Part#	Body Size	Thread Size	List Price
28-540S	1/4"	1/4"	5.34
28-541S	1/4"	3/8"	6.01
98-810	3/8"	1/4"	12.01
98-811	3/8"	3/8"	11.47
98-812	3/8"	1/2"	13.41
99-812	1/2"	1/2"	16.68
99-813	1/2"	3/4"	21.71

STEEL MALE COUPLER

Part#	Body Size	Thread Size	List Price
28-552S	1/4"	1/4"	5.46
28-553S	1/4"	3/8"	5.78
98-823	3/8"	1/4"	10.82
98-824	3/8"	3/8"	12.88
98-825	3/8"	1/2"	16.17
99-825	1/2"	1/2"	15.84
99-826	1/2"	3/4"	22.92

BRASS HOSE ID COUPLER

Part#	Body Size	Barb Size	List Price
28-562	1/4"	1/4"	9.36
28-564	1/4"	3/8"	9.42

STEEL HOSE ID COUPLER

Part#	Body Size	Barb Size	List Price
28-562S	1/4"	1/4"	5.51
28-564S	1/4"	3/8"	6.04
98-840	3/8"	1/4"	15.17
98-841	3/8"	3/8"	15.36
99-841	1/2"	3/8"	21.63
99-843	1/2"	1/2"	18.90

BRASS PUSH-ON HOSE COUPLER

Part#	Body Size	Barb Size	List Price
28-565	1/4"	1/4"	10.51
28-566	1/4"	3/8"	11.40

STEEL PUSH-ON HOSE COUPLER

Part#	Body Size	Barb Size	List Price
28-565S	1/4"	1/4"	6.01
28-566S	1/4"	3/8"	6.55
98-842	3/8"	3/8"	15.66

STEEL MALE PLUG

Part#	Body Size	Thread Size	List Price
28-545	1/4"	1/8"	1.79
28-546	1/4"	1/4"	1.49
28-547	1/4"	3/8"	2.51
98-814	3/8"	1/4"	2.79
98-815	3/8"	3/8"	3.11
99-816	1/2"	1/2"	4.26
99-817	1/2"	3/4"	7.83

STEEL FEMALE PLUG

Part#	Body Size	Thread Size	List Price
28-533	1/4"	1/8"	1.48
28-534	1/4"	1/4"	1.33
28-535	1/4"	3/8"	2.54
98-801	3/8"	1/4"	2.01
98-802	3/8"	3/8"	2.61
99-803	1/2"	1/2"	5.31
99-804	1/2"	3/4"	9.36

BRASS MALE PLUG

Part#	Body Size	Thread Size	List Price
28-546B	1/4"	1/4"	1.82

BRASS FEMALE PLUG

Part#	Body Size	Thread Size	List Price
28-534B	1/4"	1/4"	2.03

STEEL HOSE ID PLUG

Part#	Body Size	Barb Size	List Price
28-557	1/4"	1/4"	1.43
28-559	1/4"	3/8"	1.83
98-828	3/8"	3/8"	4.15
99-828	1/2"	3/8"	5.55
99-830	1/2"	1/2"	5.10

STEEL PUSH-ON HOSE PLUG

Part#	Body Size	Barb Size	List Price
28-558	1/4"	1/4"	1.87
28-561	1/4"	3/8"	2.06
98-830	3/8"	3/8"	4.37

STEEL SWIVEL MALE PLUG

Part#	Body Size	Thread Size	List Price
320-065	1/4"	1/4"	11.04

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 ARC 210, Parker Interchange and Industrial Interchange plugs
• Maximum working pressure is 250 PSI

BRASS MALE COUPLER

Part#	Body Size	Thread Size	List Price
28-579	1/4"	1/4"	10.61
28-589	1/4"	3/8"	10.16

BRASS FEMALE COUPLER

Part#	Body Size	Thread Size	List Price
28-560	1/4"	1/4"	13.54

BRASS HOSE ID COUPLER

Part#	Body Size	Barb Size	List Price
28-690	1/4"	1/4"	12.25
28-691	1/4"	3/8"	11.52

STAINLESS STEEL MALE COUPLER

Part#	Body Size	Thread Size	List Price
28-579SS	1/4"	1/4"	186.11

STAINLESS STEEL FEMALE COUPLER

Part#	Body Size	Thread Size	List Price
28-560SS	1/4"	1/4"	186.11

STAINLESS STEEL INDUSTRIAL MALE PLUG

Part#	Body Size	Thread Size	List Price
28-546SS	1/4"	1/4"	36.26

STAINLESS STEEL INDUSTRIAL FEMALE PLUG

Part#	Body Size	Thread Size	List Price
28-534SS	1/4"	1/4"	36.26

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	List Price
28-592	1/4"	1/8"	23.37
28-593	1/4"	1/4"	9.89
28-594	1/4"	3/8"	14.32

MALE PLUG

Part#	Body Size	Thread Size	List Price
28-586	1/4"	1/8"	4.07
28-587	1/4"	1/4"	1.83

FEMALE COUPLER

Part#	Body Size	Thread Size	List Price
28-583	1/4"	1/8"	19.46
28-584	1/4"	1/4"	9.00
28-585	1/4"	3/8"	28.00

FEMALE PLUG

Part#	Body Size	Thread Size	List Price
28-578	1/4"	1/4"	2.14

HOSE ID COUPLER

Part#	Body Size	Barb Size	List Price
28-601	1/4"	1/4"	10.01
28-603	1/4"	3/8"	14.13

HOSE ID PLUG

Part#	Body Size	Barb Size	List Price
28-595	1/4"	1/4"	4.39
28-597	1/4"	3/8"	7.83

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	List Price
28-515	1/4"	1/8"	20.71
28-516	1/4"	1/4"	7.83
28-517	1/4"	3/8"	19.11

BRASS FEMALE COUPLER

Part#	Body Size	Thread Size	List Price
28-507	1/4"	1/4"	7.88
28-508	1/4"	3/8"	17.54

STEEL MALE COUPLER

Part#	Body Size	Thread Size	List Price
28-516S	1/4"	1/4"	5.11
28-514S	3/8"	1/4"	7.70
28-519S	3/8"	3/8"	8.12

STEEL FEMALE COUPLER

Part#	Body Size	Thread Size	List Price
28-507S	1/4"	1/4"	5.11
28-525S	3/8"	1/4"	7.70
28-526S	3/8"	3/8"	8.12

BRASS MALE PLUG

Part#	Body Size	Thread Size	List Price
28-510B	1/4"	1/4"	1.82

BRASS FEMALE PLUG

Part#	Body Size	Thread Size	List Price
28-501B	1/4"	1/4"	2.03

STEEL MALE PLUG

Part#	Body Size	Thread Size	List Price
28-509	1/4"	1/8"	1.93
28-510	1/4"	1/4"	1.43
28-511	1/4"	3/8"	2.74
28-512	3/8"	1/4"	2.01
28-513	3/8"	3/8"	2.15

STEEL FEMALE PLUG

Part#	Body Size	Thread Size	List Price
28-500	1/4"	1/8"	5.70
28-501	1/4"	1/4"	1.61
28-502	1/4"	3/8"	2.65
28-503	3/8"	1/4"	1.76
28-504	3/8"	3/8"	2.17

HOSE ID COUPLER

Part#	Body Size	Barb Size	List Price
28-528	1/4"	1/4"	23.34
28-530	1/4"	3/8"	24.30
28-536	3/8"	1/4"	10.08
28-538	3/8"	3/8"	10.08

HOSE ID PLUG

Part#	Body Size	Barb Size	List Price
28-518	1/4"	1/4"	2.46
28-520	1/4"	3/8"	8.31
28-523	3/8"	1/4"	1.68
28-524	3/8"	3/8"	1.75

PUSH-ON HOSE COUPLER

Part#	Body Size	Barb Size	List Price
28-531	1/4"	1/4"	24.90
28-532	1/4"	3/8"	23.33

PUSH-ON HOSE PLUG

Part#	Body Size	Barb Size	List Price
28-521	1/4"	1/4"	14.24
28-522	1/4"	3/8"	14.35

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	List Price
28-683	1/4"	1/4"	36.90

STEEL MALE PLUG

Part#	Body Size	Thread Size	List Price
28-685	1/4"	1/8"	5.97
28-686	1/4"	1/4"	5.62

FEMALE COUPLER

Part#	Body Size	Thread Size	List Price
28-684	1/4"	1/4"	31.71

STEEL FEMALE PLUG

Part#	Body Size	Thread Size	List Price
28-687	1/4"	1/4"	5.27

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	List Price
28-667	1/8"	20.63
28-665	1/4"	16.12
28-666	3/8"	16.91
28-668	1/2"	24.80
28-669	3/4"	50.80
28-670	1"	79.14

FEMALE PIPE COUPLER

BRASS

Part #	Body & Thread Size	List Price
28-671	1/8"	13.33
28-651	1/4"	14.68
28-652	3/8"	15.87
28-672	1/2"	24.16
28-673	3/4"	44.90

MALE PLUG

STEEL

Part #	Size	List Price
28-675	1/8"	8.88
28-639	1/4"	6.88
28-640	3/8"	5.24
28-676	1/2"	5.97
28-677	3/4"	18.26

FEMALE PLUG

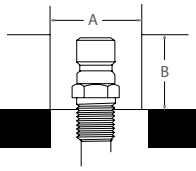
STEEL

Part #	Size	List Price
28-688	1/8"	5.71
28-619	1/4"	6.93
28-620	3/8"	5.84
28-679	1/2"	9.00
28-680	3/4"	17.32
28-681	1"	46.18

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	List Price
29-900	1/8"	0.69	0.69	3.16
29-901	1/4"	0.84	0.94	3.78
29-902	3/8"	1.00	0.97	3.35

3/8" BASIC SIZE

Part #	Size	A	B	List Price
29-906	1/4"	1.00	0.94	5.07
29-907	3/8"	1.00	1.13	4.92
29-908	1/2"	1.81	1.25	8.36

1/2" BASIC SIZE

Part #	Size	A	B	List Price
29-911	1/2"	1.25	1.50	9.89
29-912	3/4"	1.50	1.56	15.21

FEMALE PLUG (STEEL)

1/4" BASIC SIZE

Part #	Size	List Price
29-903	1/8"	3.26
29-904	1/4"	3.41
29-905	3/8"	5.12

3/8" BASIC SIZE

Part #	Size	List Price
29-909	1/4"	4.25
29-910	3/8"	5.74

1/2" BASIC SIZE

Part #	Size	List Price
29-913	1/2"	13.72
29-914	3/4"	25.40

MINI TYPE QUICK DISCONNECTS

MALE COUPLER

Part #	Size	List Price
28-605	1/8"	7.55

FEMALE PLUG

Part #	Size	List Price
28-608	1/8"	2.02

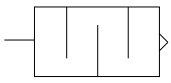
BRASS MUFFLERS

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	List Price
300-020	10/32"	2.57
300-021	1/8"	2.54
300-022	1/4"	4.02
300-023	3/8"	5.39
300-024	1/2"	7.83
300-026	3/4"	15.95
300-028	1"	43.95

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	List Price
300-031	10/32"	18.15
300-032	1/8"	21.23
300-033	1/4"	19.44
300-034	3/8"	22.04
300-035	1/2"	32.80
300-036	3/4"	91.67
300-037	1"	121.02

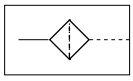
BRASS BREATHER VENT

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	List Price
300-000	10-32"	3.72
300-001	1/8"	2.41
300-002	1/4"	3.55
300-003	3/8"	4.38
300-004	1/2"	5.87
300-006	3/4"	16.36
300-008	1"	31.63

40 Micron element

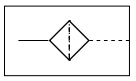
STAINLESS BREATHER VENT



Materials:
Body: 303 Grade Stainless Steel
Element:316 Grade Stainless Steel
Max Operating Pressure: 150PSI
Temperature: 35° to 390°F

Part #	Size	List Price
300-014	1/8"	11.73
300-015	1/4"	16.46
300-017	3/8"	24.82
300-018	1/2"	29.72
300-019	3/4"	77.01
300-007	1"	108.98

PRESSURE SNUBBER

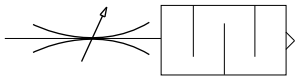


Materials:
Body: Brass
Element: Sintered Bronze
Max Operating Pressure: 9000PSI
Temperature: 35° to 300°F
• Applications: Protect pressure instruments from sudden pressure surges and fluctuations providing more accurate gauge readings
• Construction: Solid brass housing with porous bronze element
• Can 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	List Price
28-354	1/4"	40 um	19.17
28-353	1/4"	30 um	16.24
28-352	1/4"	25 um	14.95
28-351	1/4"	20 um	16.24
28-350	1/4"	10 um	16.24

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

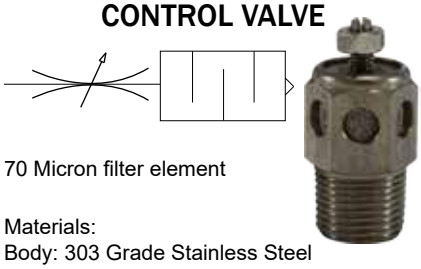


Materials:
Body: Brass
Element: 40 Micron Sintered Bronze
Max Operating Pressure: 300PSI
Temperature: 35° to 300°F
• Application: Provide infinite variation of metering air flow at acceptable sound levels on air valve exhaust ports with complete safety
• The speed of an operating cylinder or air tool 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	List Price
940-800	1/8"	9.04
940-801	1/4"	10.63
940-803	3/8"	15.05
940-804	1/2"	19.38
940-805	3/4"	35.77
940-806	1"	58.11

VALVES/ MUFFLERS/ FILTERS

STAINLESS SPEED CONTROL VALVE

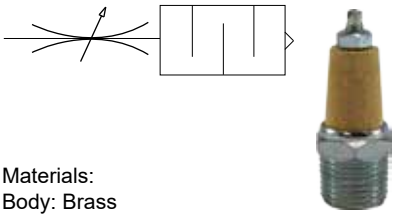


70 Micron filter element

Materials:
Body: 303 Grade Stainless Steel
Element: 316 Grade Stainless Steel
Max Operating Pressure: 300PSI
Temperature: 35° to 392°F

Part #	Size	List Price
940-810	1/8"	53.15
940-811	1/4"	64.89
940-812	3/8"	63.87
940-813	1/2"	83.61
940-814	3/4"	119.96
940-815	1"	163.23

MUFFLER W/ FLOW ADJUSTMENT

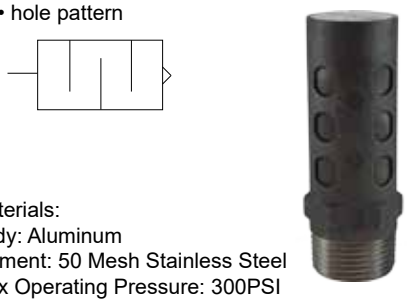


Materials:
Body: Brass
Element: Sintered Bronze
Max Operating Pressure: 300PSI
Temperature: 35° to 300°F

Part #	Size	List Price
28-379	1/8"	8.38
28-380	1/4"	10.00
28-381	3/8"	16.21
28-382	1/2"	15.58

HIGH FLOW ALUMINUM MUFFLER

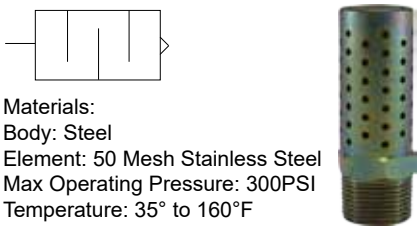
• hole pattern



Materials:
Body: Aluminum
Element: 50 Mesh Stainless Steel
Max Operating Pressure: 300PSI
Temperature: 35° to 160°F

Part #	Size	List Price
940-822	1/8"	15.00
940-823	1/4"	6.92
940-824	3/8"	9.36
940-825	1/2"	10.98
940-826	3/4"	19.02
940-827	1"	22.40

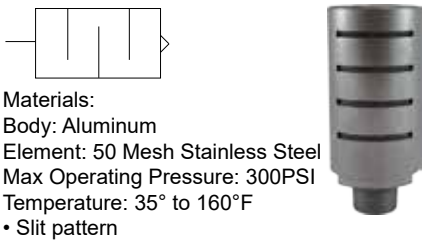
HIGH FLOW STEEL MUFFLER



Materials:
Body: Steel
Element: 50 Mesh Stainless Steel
Max Operating Pressure: 300PSI
Temperature: 35° to 160°F

Part #	Size	List Price
28-373	1/8"	9.10
28-374	1/4"	8.25
28-375	3/8"	11.30
28-376	1/2"	13.41
28-377	3/4"	23.51
28-378	1"	26.09

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	List Price
28-367	1/8"	22.46
28-368	1/4"	20.43
28-369	3/8"	29.11
28-370	1/2"	26.75
28-371	3/4"	55.14
28-372	1"	57.02

PLASTIC HIGH FLOW MUFFLER

Materials:
Body: Black Nylon
Element:50 Mesh Stainless Steel
Max Operating Pressure: 150PSI
Temperature: 35° to 120°F

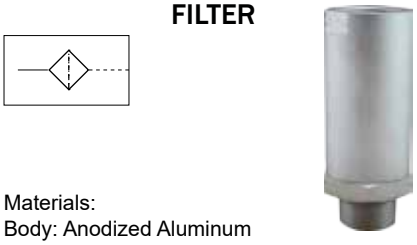
Part #	Size	List Price
28-363	1/8"	7.23
28-364	1/4"	7.94
28-365	3/8"	16.53
28-366	1/2"	16.53

NIPPLE INLINE FILTER

Materials:
Body: Brass
Element: 40 Micron Sintered Bronze
Max Operating Pressure: 300PSI
Temperature: 35° to 300°F

Part #	Size	List Price
940-845	1/8"	15.59
940-846	1/4"	14.89
940-847	3/8"	21.18
940-848	1/2"	20.38

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	List Price
940-840	1/8"	24.15
940-841	1/4"	21.96
940-842	3/8"	32.27
940-843	1/2"	75.43
940-844	3/4"	79.43

I have never let my schooling interfere with my education.

– Mark Twain

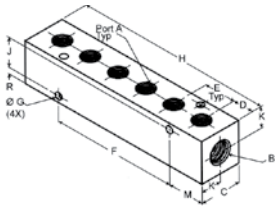
AIR REGULATOR

- 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	List Price
AR2	1/4"	1/8	0.05~0.85Mpa(0.5~8.5kgf/cm2)(7.25psi~123psi)	20.80

MANIFOLDS

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	List Price	A - out NPT	B - in NPT	C	D	E	F	G	H	J	K	M	R
28-450	4	19.27	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	75.04						3.00		4.75				
28-456	10	25.96						6.00		7.75				
28-458	3	19.13						0.88		3.00				
28-459	4	20.52						1.75		3.88				
28-460	5	22.08						2.63		4.75				
28-464	9	27.37						6.13		8.25				
28-465	10	28.29						7.00		9.13				
28-467	3	28.92	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	30.48						2.25		5.38				
28-469	5	31.87						3.38		6.50				
28-470	6	82.44						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	List Price
320-120	1/4" Inlet	10.94
320-121	3/8" Inlet	28.00
320-122	1/2" Inlet	43.96

three 1/4" Outlets

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.
• 1/ Blister card.

NEW

Part #	Male NPT	Pop-off Pressure	Air Flow	List Price
87001	1/4"	70 PSI	70 CFM	17.25
87002	1/4"	125 PSI	120 CFM	17.25
87003	1/4"	150 PSI	140 CFM	17.25
87004	1/4"	200 PSI	170 CFM	17.25

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.

Part #	Male NPT	Pop-off Pressure	List Price
87008	1/4"	125 PSI	7.36
87009	1/4"	150 PSI	7.36

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	List Price
87020	1/2" NPT Male	3/8" Tube Compression male	20	13.66
87021	1/2" NPT Male	1/2" Tube Compression male	20	13.66
87023	1/2" NPT Male	1/2" NPT Female	20	19.60

A man is what he thinks about all day long. –Ralph Waldo Emerson

MULTI-PURPOSE AIR VENT

Part #	Size	List Price
46-048	1/8"	3.74
46-048S*	1/8" SS	5.92

#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	List Price
32-782	3/16"	3.80

INFLATOR

INT x 3/16

Part #	Size	List Price
32-783	3/16"	3.66

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	List Price
20-780	1/8"	2.15	9/16"	9.27

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	List Price
46-620	1/8	7.51

1/8" NPT 1.207"LONG SPRING CORE

7/16" Hex

1/8 x INT

Part #	Size	List Price
46-621	1/8	7.02

1/4" NPT 1.46" LONG SPRING CORE

9/16" Hex

w/ Black cap

1/4 x INT

Part #	Size	List Price
46-622	1/4	7.85

TANK VALVE ACCESSORIES

BLACK PLASTIC CAP

No gasket

Inflation needle theads

Part #	List Price
46-630	0.22

SHORT NICKEL PLATED DOME CAP

Dome skirted type

Inflation needle thead

Part #	List Price
46-631	1.14

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	List Price
320-053	1/4"	9.66

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	List Price
320-054	1/4"	9.38

SAFETY BLOW GUN

- N/P steel handle with plastic sleeve
- Brass Valve
- Zinc body
- Aluminum nozzle

90 PSI

1/8" Outlet

Part #	Size	List Price
320-050	1/4" Inlet	9.29

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	List Price
320-055	1/4"	10.92

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

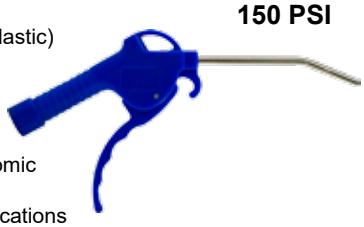
Part #	Size	List Price
320-036	1/4"	7.84

PISTOL GRIP BLO-GUN

150 PSI

Material
- 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	List Price
320-035	1/4"	8.92

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	List Price
320-070	1/8 - 27	7.83

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	List Price
320-075	1/8 MIP x Female Neelde Thread	2.98

51-338 SST10 411BT 2056

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)	List Price
320-021	20-120psi	2 psi	Metal	Metal	4 sided plastic	3.50
320-022	10-120psi	2 psi	Plastic	Metal	4 sided plastic	6.02
320-023	20-120psi	2 psi	Metal	Metal	4 sided plastic	30.12

INFLATION NEEDLE

• See thread note below

Part #	List Price
320-095	0.33

1 PIECE BLOW GUN TAPERED NOZZLE

Part #	Size	List Price
320-076	NT	0.80

1 PIECE BLOW GUN STANDARD NOZZLE

Part #	Size	List Price
320-077		0.80

VOLUME REGULATOR

Part #	FIP X MIP	List Price
46-615	1/4	7.00

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 #	List Price
320-410	6.58

1 PIECE EXTENSION

Part #	Size	List Price
320-080	NT	0.84

1 PIECE BLOW GUN ADAPTER

Part #	Size	List Price
320-078	Female NT x 1/8 MPT	1.10

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	List Price
307-030	25'	1/4" NPT	9.73
307-031	50'	1/4" NPT	20.02

HEX BALL FOOT CHUCK

Part #		List Price
46-600	1/4 FPT Live Air	3.51

MALE BALL FOOT CHUCK

Part #		List Price
46-605	1/4 MIP Live Air	4.34

BALL FOOT CHUCK W/ 1/4 ID HOSE BARB

Part #		List Price
46-607	1/4 ID Live Air	3.50

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 #		List Price
320-000	1/4	32.14

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 #		List Price
320-005	1/4	10.48

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	List Price
320-010	10-120 psi	2 psi	1/4 FPT	12"	32.06
320-011	10-120 psi	2 psi	1/4 FPT	12"	42.35

16PCS-AIR ACCESSORY SET
PART# 87-400

LIST PRICE: 33.00

Contents of blister card package

Components and part#'s		Page #
1pc-1/4"FNPT industrial coupler	28-540	344
2pcs-1/4"FNPT industrial plugs	28-534	345
2pcs-1/4"MNPT industrial plugs	28-546	345
1pc-1/4" male connector	28-212	8
1pc-1/4" double female connector	28-059	3
1pc-ball foot chuck	46-600	358
1pc-blow gun	320-050	356
1pc-dial tire gauge	320-410	357
1pc-tapered rubber tip	320-070	356
1pc-blow gun safety nozzle	320-075	356
1pc-blow gun tapered nozzle	320-076	357
2pcs-inflation needles	320-095	357
1pc-25ft. nylon recoil hose	307-030	357

10PCS-AIR ACCESSORY SET
PART# 87-402

LIST PRICE: 15.12

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	356
1pc-blow gun tapered nozzle	320-076	357
1pc-ball foot chuck	46-605	358
1pc-blow gun	320-050	356
1pc-1/4"FNPT industrial coupler	28-540	344
1pc-1/4" FNPT industrial plug	28-534	345
1pc-1/4"MNPT industrial plug	28-546	345
2pcs-inflation needles	320-095	357

7PCS-AIR ACCESSORY SET
PART# 87-404

LIST PRICE: 7.80

Contents of blister card package

Components and part#'s		Page #
1pc-blow gun rubber tip	320-070	356
1pc-blow gun safety nozzle	320-075	356
1pc-blow gun tapered nozzle	320-076	357
1pc-extension	320-080	357
1pc-blow gun	320-050	356
2pcs-inflation needles	320-095	357

11PCS-AIR ACCESSORY SET
PART# 87-406

LIST PRICE: 17.70

Contents of blister card package

Components and part#'s		Page #
1pc-blow gun rubber tip	320-070	356
1pc-blow gun safety nozzle	320-075	356
1pc-blow gun tapered nozzle	320-076	357
1pc-blow gun standard nozzle	320-077	357
1pc-blow gun adapter	320-078	357
1pc-hose&chuck assembly	320-414	357
1pc-blow gun	320-050	357
1pc-inflation needle	320-095	357
1pc-1/4"FNPT industrial coupler	28-540	344
1pc-1/4" FNPT industrial plug	28-534	345
1pc-1/4"MNPT industrial plug	28-546	345

17PCS-AIR ACCESSORY SET

PART# 87-408

LIST PRICE: 17.40

Contents of blister card package

Components and part#'s		Page #
1pc-1/4" double female connector	50004	410
2pcs-1/4" double male connectors	54044	410
1pc-blow gun safety nozzle	320-075	356
1pc-blow gun tapered nozzle	320-076	357
1pc-dual-foot tire chuck	320-005	358
1pc-tire gauge	320-021	357
1pc-blow gun	320-050	356
1pc-1/4" FNPT industrial coupler	28-540S	344
2pcs-1/4" FNPT industrial plug	28-534	345
4pcs-1/4" MNPT industrial plug	28-546	345
2pcs-inflation needles	320-095	357

12PCS-AIR ACCESSORY SET

PART# 87-410

LIST PRICE: 32.94

Contents of blister card package

Components and part#'s		Page #
1pc-blow gun safety nozzle	320-075	356
1pc-blow gun tapered nozzle	320-076	357
1pc-blow gun rubber nozzle	320-070	356
1pc-ball foot tire chuck	46-600	358
1pc-blow gun	320-050	.56
1pc-1/4"FNPT industrial coupler	28-540	344
1pc-1/4" MNPT industrial coupler	28-552	344
2pcs-1/4"FNPT industrial plug	28-534B	345
2pcs-1/4"MNPT industrail plug	28-546B	345
1pc-inflation needle	320-095	347

20PCS-AIR ACCESSORY SET

PART# 87-412

LIST PRICE: 34.80

Contents of blister card package

Components and part#'s		Page #
1pc-dual-foot tire chuck	320-005	358
1pc-tire gauge	320-021	357
1pc-blow gun rubber nozzle	320-070	356
1pc-blow gun adapter	320-078	357
1pc-1/4" double male connector	54044	410
1pc-1/4" double female connector	50004	410
1pc-blow gun safety nozzle	320-075	356
1pc-blow gun tapered nozzle	320-076	357
1pc-thread seal tape	982-107	365
1pc-blow gun	320-050	356
2pcs-1/4"FNPT industrial coupler	28-540S	344
2pcs-1/4"FNPT industrial plug	28-534	345
3pcs-1/4"MNPT industrial plug	28-546	345
2pcs-inflation needles	320-095	357
1pc-1/4"x 25Ft coil Nylon hose	307-030	357

1/4" X 1/4" NPT INDUSTRIAL 7PCS
PART# 87-414

LIST PRICE: 8.64

Contents of blister card package

Components and part#'s		Page #
2pc-1/4"x1/4" FNPT T I/M coupler	28-540S	344
2pcs-1/4"x1/4" FNPT I/M plugs	28-534	345
2pcs-1/4"x1/4"MNPT I/M plugs	28-546	345
1pc-double 1/4" MNPT fitting	54044	410

1/4" X 1/4" NPT INDUSTRIAL 5PCS
PART# 87-416

LIST PRICE: 5.52

Contents of blister card package

Components and part#'s		Page #
1pc-1/4"x1/4"FNPT I/M coupler	28-540S	344
4pc-1/4"X1/4" MNPT I/M plug	28-546	345

1/4" X 1/4" NPT INDUSTRIAL 5PCS
PART# 87-418

LIST PRICE: 4.68

Contents of blister card package

Components and part#'s		Page #
1pc-1/4"x1/4"FNPT I/M coupler	28-540S	344
1pc-1/4"x1/4"FNPT I/M plug	28-534	345
1pc-1/4"X1/4" MNPT I/M plug	28-546	345
1pc-double 1/4" MNPT fitting	54-044	410

1/4" X 1/4" NPT INDUSTRIAL 3PCS
PART# 87-420

LIST PRICE: 4.38

Contents of blister card package

Components and part#'s		Page #
1pc-1/4"x1/4" FNPT I/M coupler	28-540S	344
1pc-1/4"x1/4" FNPT I/M plug	28-534	345
1pc-1/4"x1/4" MNPT I/M plug	28-546	345

3/8" X 1/4" NPT AUTOMOTIVE 5PCS KIT
PART# 87-422

LIST PRICE: 16.20

Contents of blister card package

Components and part#'s		Page #
1pc-3/8"x1/4" FNPT Automotive coupler	28-525S	348
2pcs-3/8"x1/4"MNPT Automotive plugs	28-512	348
1pc-double 1/4"MNPT fitting	28-212	8
1pc-double 1/4"FNPT fitting	28-059	3

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.

1-1/2" FACE
1/8" NPT LOWER MOUNT

Part #	PSI	List Price
80-501	0-15	9.40
80-502	0-30	9.40
80-503	0-60	9.40
80-504	0-100	9.40
80-505	0-160	9.40
80-506	0-200	9.40

LOWER MOUNT

• Plastic lens (window)

2" FACE
1/4" LOWER MOUNT

Part #	PSI	List Price
80-001	0-15	10.45
80-002	0-30	9.50
80-003	0-60	10.45
80-004	0-100	10.45
80-005	0-160	10.45
80-006	0-200	10.45
80-007	0-300	9.50
80-020	30-0 Vacuum	16.00

2-1/2" FACE
1/4" LOWER MOUNT

Part #	PSI	List Price
80-031	0-15	13.48
80-032	0-30	13.48
80-033	0-60	14.48
80-034	0-100	13.48
80-035	0-160	13.48
80-036	0-200	13.48

1-1/2" FACE
1/8" NPT CENTER BACK MOUNT

Part #	PSI	List Price
80-511	0-15	9.45
80-512	0-30	9.45
80-513	0-60	9.45
80-514	0-100	9.45
80-515	0-160	9.45
80-516	0-200	9.45

CENTER BACK MOUNT

2" FACE
1/4" CENTER BACK MOUNT

Part #	PSI	List Price
80-301	0-15	10.85
80-302	0-30	10.85
80-303	0-60	10.85
80-304	0-100	10.85
80-305	0-160	10.85
80-306	0-200	10.85
80-307	0-300	10.85

2-1/2" FACE
1/4" CENTER BACK MOUNT

Part #	PSI	List Price
80-331	0-15	12.15
80-332	0-30	12.15
80-333	0-60	12.15
80-334	0-100	12.15
80-335	0-160	12.15
80-336	0-200	12.15

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	List Price
80-601	0-15	24.95
80-602	0-30	24.95
80-603	0-60	24.95
80-604	0-100	24.95
80-605	0-160	24.95
80-606	0-200	24.95

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

- 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	List Price
80-061	0-15	28.05
80-062	0-30	28.05
80-063	0-60	28.05
80-064	0-100	28.05
80-065	0-160	28.05
80-066	0-200	28.05
80-067	0-300	28.05
80-068	0-400	28.05
80-069	0-600	28.05
80-100	0-1000	28.05
80-101	0-1500	28.05
80-102	0-2000	28.05
80-103	0-3000	28.05
80-104	0-5000	28.05
80-105	0-10000	28.05
80-080	30-0 Vacuum	28.05
80-081	-30 to +30	28.05

4" FACE 1/4" LOWER MOUNT

Part #	PSI	List Price
80-463	0-100	75.35

CENTER BACK MOUNT

1-1/2" FACE 1/8" CENTER BACK MOUNT

Part #	PSI	List Price
80-611	0-15	25.05
80-612	0-30	25.05
80-613	0-60	25.05
80-614	0-100	25.05
80-615	0-160	25.05
80-616	0-200	25.05

2-1/2" FACE 1/4" CENTER BACK MOUNT

Part #	PSI	List Price
80-201	0-15	29.43
80-202	0-30	29.43
80-204	0-60	29.43
80-203	0-160	29.43
80-205	0-100	29.43
80-206	0-200	29.43
80-207	0-300	29.43
80-208	0-400	29.43
80-209	0-600	29.43

GAUGES/ SYPHON

Water Test Gauge

0-300 PSI DIAL
3/4" FEMALE HOSE CONNECTION

Part #	Face Size	List Price
991-249	2"	24.04
991-250	2-1/2"	24.04

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 #	List Price
991-251	27.77

PNEUMATIC ACCESSORIES

GAS TEST GAUGE

Pressure test residential and commerical pipe systems

Part #	Face Size	List Price
GT15	0-15	21.94
GT30	0-30	21.94
GT60	0-60	24.78

BODY ONLY

Part #	Face Size	List Price
991-259	3/4" FIP x 1/4" TAP	13.50

SYPHON

BRASS

Syphons protect instruments from effects of hot pressure media commonly used in steam applications

Part #	Size	List Price
995-210	1/4" 90°	41.98
995-211	1/4" 180°	46.40
995-212	1/4" 270°	63.22
995-213	1/4" 360°	67.78

STEEL

Syphons protect instruments from effects of hot pressure media commonly used in steam applications

Part #	Size	List Price
995-214	1/4" 90°	16.04
995-215	1/4" 180°	17.32
995-216	1/4" 270°	19.67
995-217	1/4" 360°	20.88

PNEUMATIC ACCESSORIES — TAPES/ SEALANT

PTFE THREAD SEAL TAPE

- Density 0.4
- Thickness 3.5 MIL
- Meets MIL specs T-27730A

Part #	Size	Case Qty	List Price
982-107	1/2" x 260"	500	1.34
982-108	1/2" x 520"	500	1.50
982-109	3/4" x 260"	350	2.50
982-110	3/4" x 520"	350	2.50

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	List Price
982-135	1/2" x 260"	250	6.72
982-136	1/2" x 520"	150	9.12
982-137	3/4" x 260"	150	8.10
982-138	3/4" x 520"	150	12.60

GREEN OXYGEN TAPE

- Density 1.2
- Thickness 3.5MIL
- Meets MIL specs T-27730A & CID A-A 58092

Part #	Size	Case Qty	List Price
982-130	1/2" x 260"	250	1.44
982-131	1/2" x 520"	150	2.47
982-132	3/4" x 520"	150	3.72

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	List Price
982-120	1/2" x 1368"	250	5.40
982-121	3/4" x 1368"	150	7.68
982-122	1" x 1296"	150	9.36

YELLOW GAS LINE TAPE

- Density 0.9
- Thickness 4MIL
- Meets MIL specs T-27730A

Part #	Size	Case Qty	List Price
982-125	1/2" x 260"	250	1.31
982-126	1/2" x 520"	150	2.35
982-127	3/4" x 520"	150	3.66

PVC ELECTRICAL TAPE

Rated to 176 degrees fahrenheit
Suitable for use up to 600V
UL Listed
Individually wrapped in cellophane

Part #	Size	List Price
982140	3/4" X 60' Black	2.88

THREAD SEALANT

GASOILA SOFT-SET THREAD SEALANT WITH PTFE

Part#	Size	Units per case	List Price
983100	1/4 pt. Brush	24	40.07
983101	1/2 pt. Brush	24	55.98
983102	1 pt. Brush	12	98.62

PLS 2 PREMIUM THREAD AND GASKET SEALER

Part#	Size	Units per case	List Price
983110	1/4 pt. Brush	12	62.52
983111	1 pt. Brush	6	212.64

GASOILA NT NON-PTFE THREAD SEALANT

Part#	Size	Units per case	List Price
983120	1/2 pt. Brush	12	53.10
983121	1 pt. Brush	6	93.67

JC-30 GASOILA HIGH-FILL

Part#	Size	Units per case	List Price
983115	1/4 pt. Brush	12	53.34
983116	1 pt. Brush	6	123.00

FREE ALL DEEP PENETRATING OIL

Part#	Size	Units per case	List Price
983125	6 oz. Aerosol	12	20.93
983126	11 oz. Aerosol	12	31.08

LUBE-IT ALL DEEP LUBRICATING OIL

Part#	Size	Units per case	List Price
983130	6 oz. Aerosol	12	19.86

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	List Price
39404	12'	6"	6"	74.67
39400	15'	12"	12"	82.64
39402	15'	40"	12"	104.15
39406	20'	12"	12"	115.06

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	List Price
39839	5th Wheel slider coil	up to 54"	(2) 1/4" MPT	25.94
39838	5th Wheel slider coil	up to 72"	(2) 1/4" MPT	30.43

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	List Price
39825	Combo 3 in 1 assembly 15 ft.	406.36
39962	Combo 4 in 1 assembly 15 ft.	600.86

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	List Price
39855	3/8" Quick fix hose fitting	7.08
*39856	3/8" Quick fix hose kit- clam pack	11.33
39857	1/2" Quick fix hose fitting	9.00

*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	List Price
39425	40"	Chrome finish	86.48
39426	40"	Zinc Plated Steel	80.76

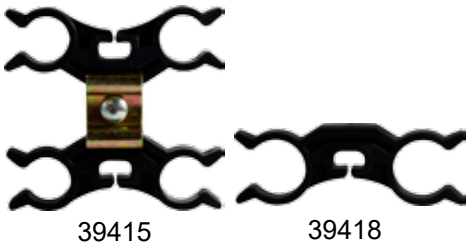
HOSE HOLDERS

39409 39410 39411 39413 39416 39412

- ABS Plastic
- 2, 3 and 4 Hold

Part #	Size	Description	List Price
39409	1/2"	2-Hose Holder Hex Head	3.30
39410	1/2"	2-Hose Holder	4.66
39411	1/2"	3-Hose Holder	4.26
39413	1/2"	3-Hose Hex Head w Cable tie	6.60
39416	1/2"	4-Hose V Bolt w Cable Tie	6.90
39412	1/2"	4-Hose Holder	5.34

HOSE SEPARATORS



39415 39418

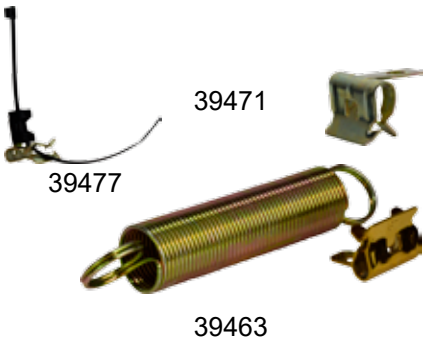
- ABS Plastic

Part #	Size	Description	List Price
39414	3/8"	2-Hose Separator	1.00
39415	3/8"	4-Hose Separator	3.31
39418	1/2"	2-Hose Separator	4.66
39419	1/2"	4-Hose Separator	5.34

TENDER KIT COMPONENTS

Part #	Description	List Price
39411	3 hole holder	4.26
39469	Clip Carabiner	4.26
39472	1-1/2" ID Hanger Bracket	5.33
39473	Yoke	2.03

• Sold individually



SPRING WITH TANDEM FRAME CLIP

- Steel spring and clip - yellow dichromate finish
- 3/4" OD
- Beam clip

Part #	Description	List Price
39477	Frame Clip with Cable Tie	2.10

Part #	Length	Description	List Price
39463	6“ Spring	Tandem frame clip	4.39
39464	3“ Spring	Tandem frame clip	2.96
39471	Frame clip only		1.71

CLIPS

Part #	Description	List Price
95631	ABS Clip for 1/2" Air Hose	0.43
95640	5" Axle Clip	2.22
95641	5-3/4" Axle Clip	2.34

Two men look out the same bars; One sees mud, the other sees stars....

– Frederick Langbridge

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	List Price
39442	16" / 1pc	1pc	1pc		24.23
39444	16" / 2 pcs	1pc	1pc	2pcs	48.91
39446	20"/ 1pc	1pc	1pc		25.09
39448	20"/ 2pcs	1pc	1pc	2pcs	34.11
39452	25" / 1pc	1pc	1pc		17.09
39453	25" / 2pcs	1pc	1pc	2pcs	34.11

HYDRAULIC TENDER KIT

Part #	Spring & Tube Length/ #pcs	Large Clip	Hanger Bracket	Yoke	List Price
39457	25" / 2pcs	1pcs	1pc	2pcs	40.26

SLIDER BAR KITS

Part #	Spring & Tube Length/ #pcs	Large Clip	3 Hole Clamp	Slider Bar Length	Yoke	List Price
39437	16" / 1pc	1pc	1pc	43"		96.54
39438	16" / 2pcs	1pc	1pc	43"	2pcs	96.94
39459	20"/ 2pcs	1pc	1pc	43"	2pcs	76.20
39460	25" / 1pc	1pc	1pc	43"		58.97
39461	25" / 2pcs	1pc	1pc	43"	2pcs	73.97
39470	16" / 1pc	1pc	1pc	38"		92.20
39462	16" / 2pcs	1pc	1pc	38"	2pcs	121.51
39451	25" / 1pc	1pc	1pc	38"		52.26
39454	25" / 2pcs	1pc	1pc	38"	2pcs	67.29

Spring & Tube

Slider Bar

BARS, SPRINGS, TUBES

Part #	Spring & Tube Length/ #pcs	List Price
39443	16" Tube only	8.30
39447	20" Tube only	9.06
39436	25" Tube only	11.25
39466	16" Spring only	7.52
39467	20" Spring only	8.52
39468	25" Spring only	9.00
39474	38" Slider Bar	32.69
39475	43" Slider Bar	66.66

ALUMINUM GLADHANDS

PORT A

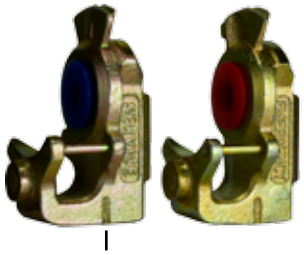
- **½ " FPT port**
- Aluminum Casting
- Permanent Clamp Screw
- Black rubber seals
- Stainless Steel filter
- Meet SAE J318 requirements

Part #	Description	Material	Seal	Filter	Port A	List Price
39870	Universal	Aluminum	Blk Rubber	No	1/2"	6.00
39871	Universal with filter	Aluminum	Blk Rubber	Yes	1/2"	6.56
39877	Emergency Red	Aluminum	Blk Rubber	No	1/2"	6.00
39878	Emergency with filter	Aluminum	Blk Rubber	Yes	1/2"	8.23
39874	Service Blue	Aluminum	Blk Rubber	No	1/2"	6.00
39875	Service with filter	Aluminum	Blk Rubber	Yes	1/2"	8.23

PLATED ALUMINUM GLADHANDS

Part #	Description	Material	Seal	Filter	Port A	List Price
39832	Universal Standard	Plated Aluminum	Blk Rubber	No	1/2"	11.43
39833	Service - Blue	Plated Aluminum	Blk Rubber	No	1/2"	11.43
39834	Emergency - Red	Plated Aluminum	Blk Rubber	No	1/2"	11.43
39828	Service 38 degree	Plated Aluminum	Blk Rubber	No	1/2"	16.25
39829	Emergency 38 drgree	Plated Aluminum	Blk Rubber	No	1/2"	16.25
39830	Service 38 degree	Plated Aluminum	Blk Rubber	No	3/8"	23.11
39831	Emergency 38 drgree	Plated Aluminum	Blk Rubber	No	3/8"	23.11

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	List Price
39506	Universal	Cast Iron	Black Polyurethane	No	1/2"	17.15
39507	Emergency	Cast Iron	Red Polyurethane	No	1/2"	17.15
39508	Service	Cast Iron	Blue Polyurethane	No	1/2"	17.15

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	List Price
39511	Emergency	Aluminum	Blk Rubber	No	Unplugged	Plugged	12.83
39512	Service	Aluminum	Blk Rubber	No	Unplugged	Plugged	12.83

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	List Price
39509	Service with blue poly seal	Yes	1/2"	8.45
39510	Emergency with red poly seal	Yes	1/2"	8.45

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

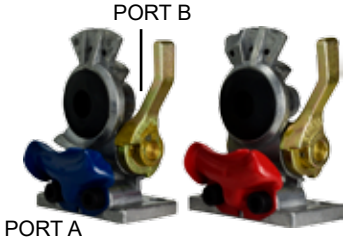
Part #	Description	Material	Seal	Filter	List Price
39515	Service (Blue)	Aluminum	Blk Rubber	yes	48.11
39516	Emergency (Red)	Aluminum	Blk Rubber	yes	48.11

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	List Price
39520	1/2" Service (Blue)	Aluminum	Blk Rubber	No	62.11
39521	3/8" Service (Blue)	Aluminum	Blk Rubber	No	62.06
39522	1/2" Emergency (Red)	Aluminum	Blk Rubber	No	62.11
39524	3/8" Emergency (Red)	Aluminum	Blk Rubber	No	62.06

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	List Price
39531	Emergency (Red)	Aluminum	Blk Rubber	No	3/8"	1/4"	59.26
39530	Service (Blue)	Aluminum	Blk Rubber	No	3/8"	1/4"	59.26

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	List Price
39535	Poly grip hardware	27.03

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	List Price
39537	Sure grip	23.03

GLADHAND PACIFIER SEAL

- Seals Gladhand from moisture, dirt and debris

Part #	Description	List Price
39566	Gladhand pacifier	3.00

GLADHAND SEALS

Seal Options:

- Rubber
- Polyurethane
- With screen filter
- Double lip
- Filter screen only

Part #	Description	List Price
39540	Black Rubber	0.71
39541	Blue, Polyurethane	1.40
39542	Red, Polyurethane	1.40
39543	Black, Polyurethane	1.43
39556	Blue with a screen filter Polyurethane	3.20
39557	Red with a screen filter Polyurethane	3.20
39558	Black with a screen filter Polyurethane	3.29
39550	Blue Double lip, Polyurethane	2.23
39551	Red Double Lips, Polyurethane	2.31
39552	Double Lip, Polyurethane	3.06
39544	Grey, Closed Style, Polyurethane	1.43
39560	Filter, Screen, Gladhand	1.03
39559	Filter, Screen, Gladhand	1.75

39565

DUMMY GLADHAND COUPLING KIT

• 6 ½" coupling length

Part #	Connection	Vent	Material	List Price
39563	Chain	Yes	Steel Yellow Zinc plated	5.76
39564	Chain	No	Steel Yellow Zinc plated	5.76
39565	Cable	N/A	Aluminum	8.61

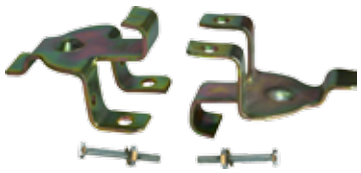
NYLON GLADHAND AND PLUG HOLDER

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	List Price
39574	1 plug slot	28.29
39575	2 plug slot	34.11

GLADHAND HOLDER KIT



• Steel - Zinc Yellow Dichromate
• Holds gladhands when disconnected

Part #	Description	List Price
39573	Holder Kit	10.94
39572	Bracket only	5.37

GLADHAND LOCK

• Red molded plastic
• Prevents unwanted connections with trailers
• Protects idle units
• Unviversal for Aluminum and Iron Gladhands
• Supplied with 2-keys

Part #	Description	List Price
39570	Gladhand Lock w/ 2 keys	34.26

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	List Price
39860	King Pin Lock w/ 2 keys	36.91

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	List Price
39672	2 1/2"	4.0"	9.89"	13.89"	push/pull	235.52
39673	2 1/2"	6.0"	11.89"	17.89"	push/pull	239.97
39674	2 1/2"	8.0"	13.89"	21.89"	push/pull	240.03
39675	2 1/2"	6.0"	13.75"	19.75"	Spring return	335.91
39676	3 1/2"	8.0"	15.60"	24.28"	push/pull	370.88
39677	3 1/2"	10.0"	16.92"	26.95"	push/pull	377.00

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	List Price
39654	4"	24"	34.5"	58.5"	push/pull	942.67

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	List Price
39655	2-1/2"	4.0"	13.37	Push/Pull	144.54
39656	2-1/2"	6.0"	17.37	Push/Pull	157.18
39657	2-1/2"	8.0"	21.37	Push/Pull	170.79
39658	2-1/2"	4.0"	14.71	Spring Ret	322.63
39659	2-1/2"	6.0"	19.75	Spring Ret	195.95
39660	3-1/2"	6.0"	20.23	Push/Pull	259.33
39661	3-1/2"	8.0"	24.23	Push/Pull	276.79
39662	3-1/2"	8.0"	26.98	Push/Pull	297.61
39663	3-1/2"	10.0"	28.98	Push/Pull	288.42

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	List Price
39665	6"	3"	Yes	Spring Ret	780.60
39667	6"	4.38"	No	Spring Ret	780.60

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	List Price
39669	Fifth Wheel Air Cylinder	314.89

AIR TANK DRAIN PULL VALVE

Part #	Size	Description	List Price
39595	1/4" male	5ft nylon coated pull cable	12.77
39596	1/4" male	4ft nylon coated pull cable	11.94
39597	1/4" male	3ft nylon coated pull cable	11.77
39600	1/4" male	Air valve only	11.54

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	List Price
39604	1/4"	30.51
39605	3/8"	23.49
39606	1/2"	22.69

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	List Price
39592	6-1/8" NPT	Air Brake Governors D-2 style	24.09

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	List Price
39610*	3/8" NPT In-Line quick release valve	14.97
39611**	1/2" NPT In-Line quick release valve	14.97

* 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	List Price
39613	1/2" NPT	4, 1/2"NPT	4 psi no Bracket	59.44
39614	1/2" NPT	4, 1/2"NPT	4 psi Relay Valve	59.73
39615	3/4" NPT	2, 1/2" NPT	4 psi Relay Valve	61.17

R-14 RELAY VALVE

- ¼" Relay Valve with two delivery and supply ports
- Replaces Bendix 103010

Part #	Supply Port	Delivery Port	Description	List Price
39616	2-3/4"NPT	2-1/2"NPT	4 psi Relay Valve	75.30

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	List Price
39684	2, 1/4" FPT	Three way Solenoid	75.43

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	List Price
39687	4 stud Solenoid	40.34
39688	3 stud Solenoid	37.14

AIR SOLENOID VALVE

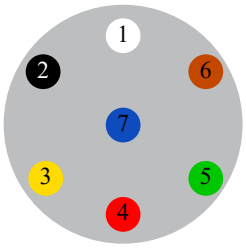
- Operates a minimum of 50,000 cycles.
- 100 psi max pressure.
- 1/4" Thread
- 10 Watts, 12 VDC
- Replaces Neway 90054075

Part #	Description	List Price
39689	12V Closed	188.54
39690	12V Open	185.49

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



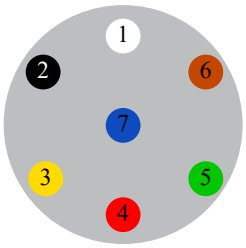
ABS

Part #	Length	Description	List Price
39736	12'	Coiled Electrical Cord, ABS w/12 in lead, w/plugs, Green	126.39
39737	15'	Coiled Electrical Cord, ABS w/12 in lead, w/plugs, Green	141.09

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	List Price
39738	12'	Coiled Electrical Cord, w/12 in lead, w/plugs, Black	104.30
39739	15'	Coiled Electrical Cord, w/15 in lead, w/plugs, Black	125.97

STANDARD - ECONOMY

Part #	Length	Description	List Price
39740	12'	Coiled Electrical Cord, w/12 in lead, w/plugs, Black	80.94
39741	15'	Coiled Electrical Cord, w/12 in lead, w/plugs, Black	92.91

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	List Price
39752	6ft, 14awg w/12" Lead at 2 ends	65.60
39753	8 ft, 14awg w/12" Lead at 2 ends	69.61
39754	12ft,14awg w/12" Lead at 2 ends	79.61

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	List Price
39748	12' with 12" Lead, both ends 4/14awg	66.00
39749	15' with 12" Lead, both ends 4/14awg	73.66

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	List Price
39744	12' Coil With 12" Lead at 2 ends 4awg	226.31
39745	15' Coil With 12" Lead at 2 ends 4awg	261.77

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	List Price
39742	12' Coil With 12" Lead both ends 4awg	245.49
39743	15' Coil With 12" Lead both ends 4awg	261.40

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	List Price
39757	7-Way Single Grip Plug w/Spring Guard	13.43
39758	7-Way Single Grip Plug NO Spring.	10.26
39772	7-Way Double Grip Plug w/Spring.	11.74
39773	7-Way Double Grip Plug NO Spring Guard	11.27
39788	7-way ISO plug	22.57

SOCKETS

Part #	Description	List Price
39774	Solid Pin 7-Way Metal Socket	20.20
39775	Split Pin 7-Way Metal Socket	14.85
39789	7-way, ISO socket	29.17

7 WAY DOUBLE GRIP PLUG

- T-Grip weather guard
- Plastic grip

Part #	Description	List Price
39818	7-Way Double Grip Plug, Plastic	12.79

6 AND 7 WAY ADAPTER

Part #	Description	List Price
39786	Seven way plug to Six Way Socket Adapter	61.54
39787	Six way plug to Seven Way socket Adapter	83.17

RV 7-WAY PLUG

- Primarily used in RV applications.
- Constructed of molded PVC for impact resistance
- Blade Style Pin

Part #	Description	List Price
39819	7-way Plastic plug	13.46

RV 7-WAY SOCKET

- RV Screw-type socket
- 6-24 VDC.
- Mounting 2-1/4" inch on center .
- Constructed of molded PVC

Part #	Description	List Price
39820	7-way socket	13.80

6 - WAY PLUGS AND SOCKETS

Part #	Description	List Price
39782	6-Way Double Grip Metal Plug w/Spring Guard.	9.71
39783	6-Way Metal Socket.	10.77

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	List Price
39778	4-Way Double Grip Metal Plug w/Spring Guard.	8.60
39779	4-Way Metal Socket.	9.03

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	List Price
39768	2 Pole Double Grip Metal Plug w/Spring Guard.	24.86
39769	2 Pole Metal Socket	28.26

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	List Price
39764	1-Way Double Grip Plug w/Spring Guard.	22.06
39765	1-Way Double Grip Plug w/Spring Guard and Ground Kit	24.40
39766	1-Way Metal Socket	19.34
39767	1-Way Metal Socket and Ground Kit	20.97

GROUND KIT

Part #	Description	List Price
39809	Ground Kit (Bolt, Nut and Wire Lug) for 1-Way Plug or Socket	1.60

PROTECTOR BOOT FOR PLUG

- Protective rubber boot seals out moisture and contaminants

Part #	Description	List Price
39807	Protector Boot	1.14

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	List Price
39792	No circuit breakers	33.09
39793	15amp Plastic with circuit breakers	57.23
39794	20amp Plastic with circuit breakers	57.23
39795	30amp Plastic with circuit breakers	57.23

7 WAY CIRCUIT CHASER

- Instantly finds short or faulty circuits
- Portable

Part #	Description	List Price
39805	7 way circuit	19.72

CIRCUIT BREAKERS - PLASTIC

- Colored Battery molded Stud
- 12 Volt
- Meets SAE j553 requirements
- Nuts included

Part #	Description	List Price
39800	15 AMP	5.86
39801	20 AMP	5.86
39802	25 AMP	5.86
39803	30 AMP	5.86

NOSE BOX - DEEP

- Zinc - extra deep

Part #	Description	List Price
39814	Deep Nose Box	31.69

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	List Price
39712	12", 4 Gauge ground strap	14.60

STAINLESS STEEL BATTERY NUT

Part #	Type	List Price
39713	3/8"	3.60

RUBBER GROMMET

- Black Rubber

Part #	ID	OD	List Price
95450	5/16"	9/16"	0.29
95451	5/8"	1 1/4"	0.46
95452	3/4"	1 3/4"	0.80

Action may not always bring happiness; but there is not happiness without action.

—Benjamin Disraeli

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	List Price
39465	2 pack whistle	9.12

CABLE TIE STRAPS - NYLON

- Used to secure and bundle
- CSA Certified
- RoHs Compliant
- UV or Standard

STANDARD

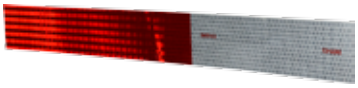
Part #	Length	Strength	Package Qty	List Price
95601	7 1/2"	50lb	100	11.40
95602	11"	50 lb	100	13.68
95603	14.5"	50 lb	100	22.23
95604	24"	175 lb	50	48.45
95605	36"	175lb	50	57.00
95606	48"	175 lb	50	88.35

UV BLACK

Part #	Length	Strength	Package Qty	List Price
95610	7 1/2"	50lb	100	11.40
95611	14"	50 lb	100	22.23
95612	24"	175lb	50	48.45
95613	36"	175lb	50	57.00

CONSPICUITY TAPE

95620

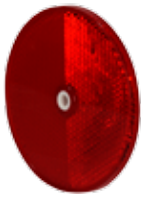


Tape is designed for trucks, trailers, and other vehicles for easy nighttime vehicle recognition and increased road safety. It is a high quality, durable microprismatic retroreflective material with a pressure sensitive adhesive. The solid construction does not require edge sealing. Conspicuity tape 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.	List Price
95620	2" x 150' Roll of 11" Red / 7" White	0.32	310.00
95621	2" x 150' Roll of 6" Red / 6" White	0.32	292.94
95622	2" x 150' Roll of solid white	0.32	292.94
95623	2" x 18", kiss cut strip, white	0.03	5.02
95624	2" x 18" kiss cut strip of 11" Red / 7" White	0.03	4.63

95625



95627

- Meets or exceeds ANSI/ASAE S279, ANSI/ASAE S276 & ASTM D-4956
- 7 year durability

Part #	Description	App. Wt.	List Price
95625	1" X 150' Roll of solid yellow	0.17	168.38
95626	2" X 150' Roll of solid yellow	0.32	431.83
95627	3" round all plastic reflector, Red	0.06	7.48
95628	3 3/4" x 6 1/2" American flag, type IV HIP	0.02	9.03

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	List Price
990790	10"	EPDM	Tarp strap with S hook	50	2.26
990791	15"	EPDM	Tarp strap with S hook	50	2.34
990792	21"	EPDM	Tarp strap with S hook	50	2.51
990793	31"	EPDM	Tarp strap with S hook	50	3.42
990794	41"	EPDM	Tarp strap with S hook	50	5.06

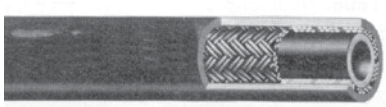
NYLON DOT AIR BRAKE TUBING

- 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	List Price
38-950B2	Black	2000'	1/8"	0.023"	1800.00
38-950	Black	100'	1/8"	0.023"	101.70
38-95BA	Black	50'	1/8"	0.023"	60.00
38-951B1	Black	1000'	5/32"	0.032"	1380.00
38-951	Black	100'	5/32"	0.032"	1380.00
38-951BA	Black	50'	5/32"	0.032"	105.00
38-953B1	Black	1000'	3/16"	0.035"	1800.00
38-953	Black	100'	3/16"	0.035"	198.00
38-953BA	Black	50'	3/16"	0.035"	120.00
38-9523	Black	1000'	1/4"	0.040"	1500.00
38-9522	Black	500'	1/4"	0.040"	697.50
38-952	Black	100'	1/4"	0.040"	142.80
38-952BA	Black	50'	1/4"	0.040"	76.74
38-952U1	Blue	1000'	1/4"	0.040"	1080.00
38-952U	Blue	100'	1/4"	0.040"	178.73
38-952UA	Blue	50'	1/4"	0.040"	90.00
38-952O	Orange	100'	1/4"	0.040"	120.00
38-952OA	Orange	50'	1/4"	0.040"	90.00
38-952G1	Green	1000'	1/4"	0.040"	1140.00
38-952G	Green	100'	1/4"	0.040"	142.80
38-952GA	Green	50'	1/4"	0.040"	90.00
38-952R1	Red	1000'	1/4"	0.040"	1140.00
38-952R	Red	100'	1/4"	0.040"	133.39
38-952RA	Red	50'	1/4"	0.040"	90.00
38-952Y1	Yellow	1000'	1/4"	0.040"	1140.00
38-952Y	Yellow	100'	1/4"	0.040"	120.00
38-952YA	Yellow	50'	1/4"	0.040"	90.00
38-954B5	Black	500'	5/16"	0.040"	750.00
38-954	Black	100'	5/16"	0.040"	156.00
38-954BA	Black	50'	5/16"	0.040"	141.00
38-960B5	Black	500'	3/8"	0.062"	1472.00
38-960	Black	100'	3/8"	0.062"	280.72
38-960BA	Black	50'	3/8"	0.062"	158.40
38-960U5	Blue	500'	3/8"	0.062"	965.61
38-960U	Blue	100'	3/8"	0.062"	366.47
38-960UA	Blue	50'	3/8"	0.062"	156.00
38-960O5	Orange	500'	3/8"	0.062"	960.00
38-960O	Orange	100'	3/8"	0.062"	210.00
38-960OA	Orange	50'	3/8"	0.062"	156.00
38-960G5	Green	500'	3/8"	0.062"	960.00
38-960G	Green	100'	3/8"	0.062"	270.00
38-960GA	Green	50'	3/8"	0.062"	156.00
38-960R5	Red	500'	3/8"	0.062"	960.00
38-960R	Red	100'	3/8"	0.062"	270.00
38-960RA	Red	50'	3/8"	0.062"	156.00

Part Number	Color	Length	Nominal O.D.	Nominal Wall	List Price
38-960Y5	Yellow	500'	3/8"	0.062"	960.00
38-960Y	Yellow	100'	3/8"	0.062"	270.00
38-960YA	Yellow	50'	3/8"	0.062"	156.00
38-965B5	Black	500'	1/2"	0.062"	1799.55
38-965	Black	100'	1/2"	0.062"	384.80
38-965BA	Black	50'	1/2"	0.062"	198.00
38-965U5	Blue	500'	1/2"	0.062"	1290.00
38-965U	Blue	100'	1/2"	0.062"	450.00
38-965UA	Blue	50'	1/2"	0.062"	198.00
38-965O5	Orange	500'	1/2"	0.062"	1290.00
38-965O	Orange	100'	1/2"	0.062"	270.00
38-965OA	Orange	50'	1/2"	0.062"	198.00
38-965G5	Green	500'	1/2"	0.062"	1290.00
38-965G	Green	100'	1/2"	0.062"	270.00
38-965GA	Green	50'	1/2"	0.062"	198.00
38-965R5	Red	500'	1/2"	0.062"	1290.00
38-965R	Red	100'	1/2"	0.062"	463.68
38-965RA	Red	50'	1/2"	0.062"	198.00
38-965Y5	Yellow	500'	1/2"	0.062"	1290.00
38-965Y	Yellow	100'	1/2"	0.062"	270.00
38-965YA	Yellow	50'	1/2"	0.062"	198.00
38-970BC	Black	250'	5/8"	0.092"	1140.00
38-970	Black	100'	5/8"	0.092"	478.43
38-970BA	Black	50'	5/8"	0.092"	243.00
38-970GC	Green	250'	5/8"	0.092"	1140.00
38-970G	Green	100'	5/8"	0.092"	462.00
38-970GA	Green	50'	5/8"	0.092"	309.00
38-970RC	Red	250'	5/8"	0.092"	1140.00
38-970R	Red	100'	5/8"	0.092"	462.00
38-970RA	Red	50'	5/8"	0.092"	290.70
38-975BC	Black	250'	3/4"	0.092"	1904.82
38-975	Black	100'	3/4"	0.092"	797.50
38-975BA	Black	50'	3/4"	0.092"	348.00
38-975GC	Green	250'	3/4"	0.092"	1470.00
38-975G	Green	100'	3/4"	0.092"	594.00
38-975GA	Green	50'	3/4"	0.092"	414.00

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	List Price
38-920	3/16	13/32	25'	160.50
38-926	5/16	9/16	25'	196.50
38-923	1/4	1/2	25'	172.50
38-927	3/8	5/8	50'	252.00

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	List Price
38-910	3/8	3/4	50'	120.44
38-915	1/2	7/8	50'	180.48

If we all did the things we are capable of doing, we would literally astound ourselves.

– Thomas A. Edison

HYDRAULIC ADAPTERS & ACCESSORIES

STEEL ADAPTERS

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HYDRAULIC VALVES & ACCESSORIES

Hydraulic Motor 425
Hydraulic Gear Pump 426
Flow Control Valve 428
Variable Flow Counter 429
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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 recommend 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, we recommend 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 recommend 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.

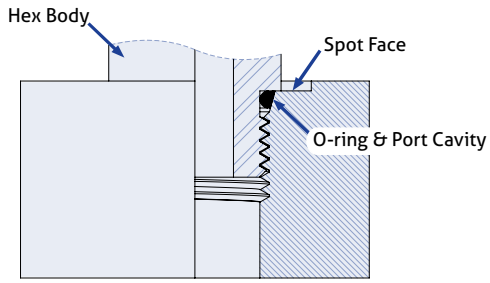
If more than one value or range is given, use the lower value first and increase only if required. Over-torquing can damage a fitting or mating component.

SAE O-Ring Boss Port Specifications

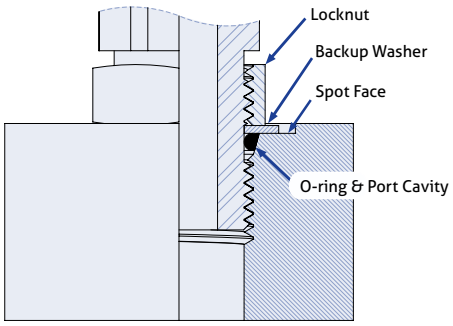
O-ring Boss ports (ORB) provide a seal by trapping the fitting's O-ring inside a port cavity. When a fitting is installed into the port, the O-ring is trapped between the fitting body hex or washer and port cavity.

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

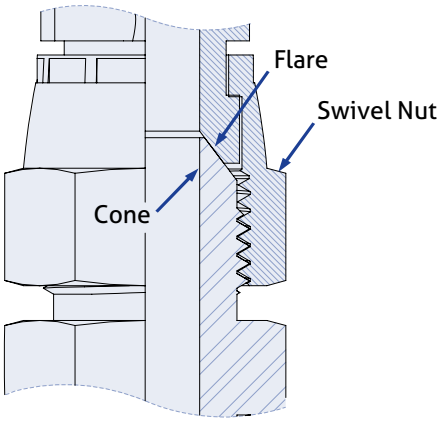
** = Heavy duty studs included on ORFS fittings per SAE J1926/2 & J1453

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.

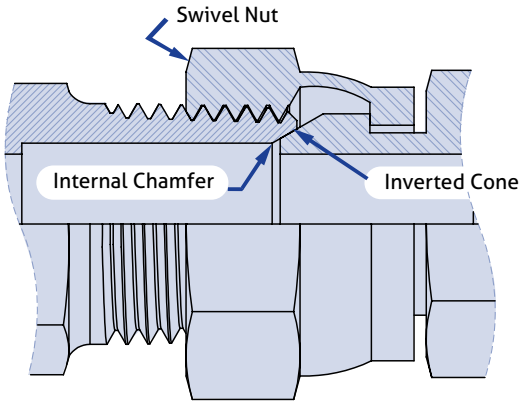
JIC Specifications							
Dash Size	Tube Size	Thread	Working Pressure		Torque		
			Male	Female Swivel Nut	JIC Rigid	JIC Swivel	Bulkhead Locknut
			(psi)	(psi)	(FFWR)	(FFWR)	(ft-lbs) +25% -0%
02	1/8	5/16-24	5000	5000	1/4 - 1/2	2	4
03	3/16	3/8-24	5000	5000	1/4 - 1/2	2	6
04	1/4	7/16-20	5000	4500	1/4 - 1/2	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*

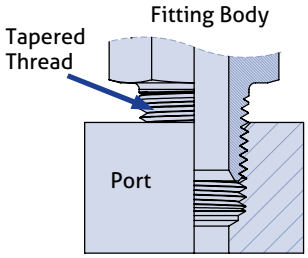
Pipe & Pipe Swivel Adapter Specifications

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.



NPTF & NPSM Union



NPT & NPTF Assembly

NPT and NPTF pipe threads seal by wedging the tapered threads through deformation into each other. Both 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						

NPT, 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.

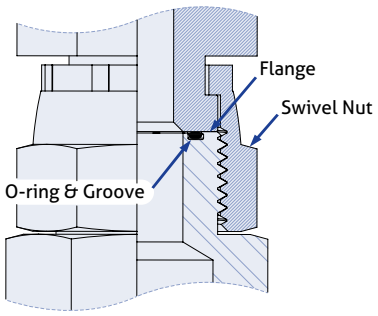
-Elebert Hubbard

O-ring Face Seal Adapter Specifications

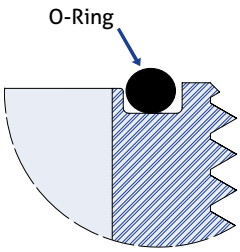
O-ring face seal fittings include a precision groove in the face of the male fitting. Sealing occurs when an O-ring is trapped in the groove by a smooth flat flange that is clamped against the face with a nut or nut and sleeve. The flat flange may be formed or brazed onto the end of a tube, or is machined on a fitting.

There are two SAE groove types:

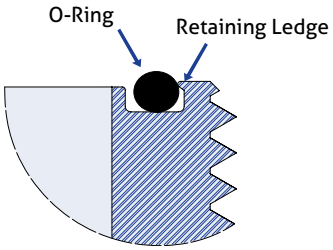
- Type A: The original style A O-ring has no retaining ledge.
- Type B: The Type B groove has a retaining ledge (half dovetail) that improves O-ring retention. The Type B style is more commonly found and is a design improvement over the Type A.



ORFS Fitting Assembly



Detail View of Cross Section of Groove Type A



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%*		
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.								

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**

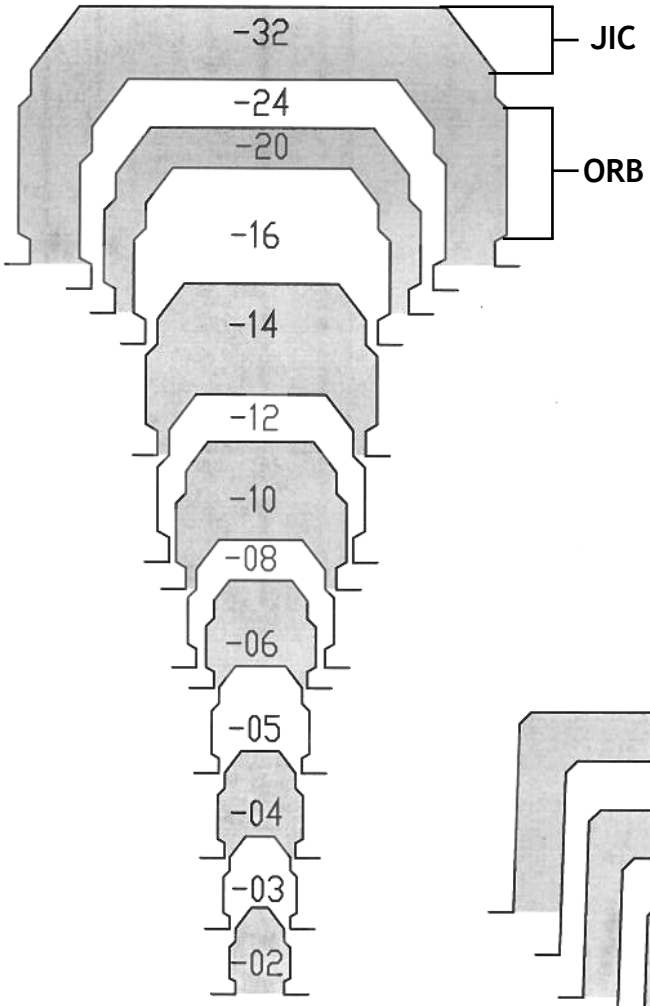
BSPP & BSPT Specifications				
Dash Size	BSPT & BSPP		Torque	
	THREAD SIZE	MAJOR OD*	BSPP Swivel Union	BSPT
		(inch)		
02	1/8-28	0.383	2	2-3
04	1/4-19	0.518	2	2-3
06	3/8-19	0.656	2	2-3
08	1/2-14	0.825	2	2-3
10	5/8-14	0.929	2	2-3
12	3/4-14	1.041	2	2-3
16	1-11	1.309	1 1/2	1 1/2 - 2 1/2
20	1 1/4-11	1.650	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**

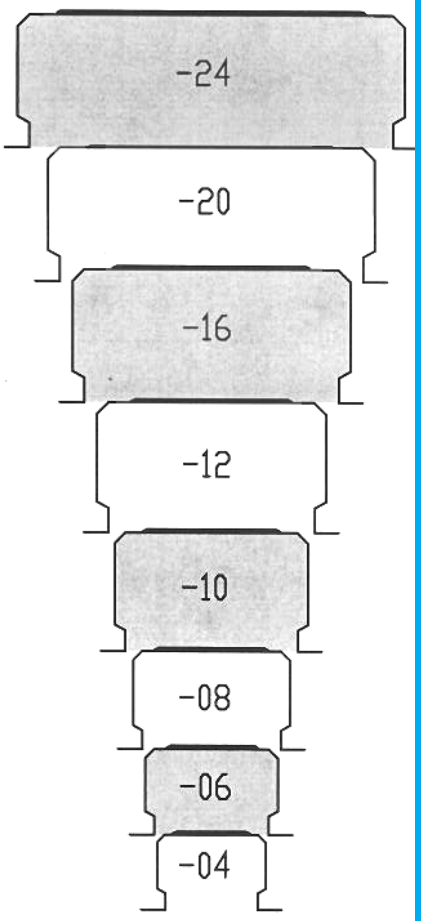
Metric DIN 3852-1 Threads	
Dash Size	THREAD SIZE
	(mm)
08	8 x 1.0
10	10 x 1.0
12	12 x 1.5
14	14 x 1.5
16	16 x 1.5
18	18 x 1.5
20	20 x 1.5
22	22 x 1.5
24	24 x 1.5
26	26 x 1.5
27	27 x 2.0
30	30 x 2.0
33	33 x 2.0
39	39 x 2.0
42	42 x 2.0
48	48 x 2.0
60	60 X 2.0
Values are from DIN 3852-1	

HYDRAULIC ADAPTERS — PROFILE SIZE CHART

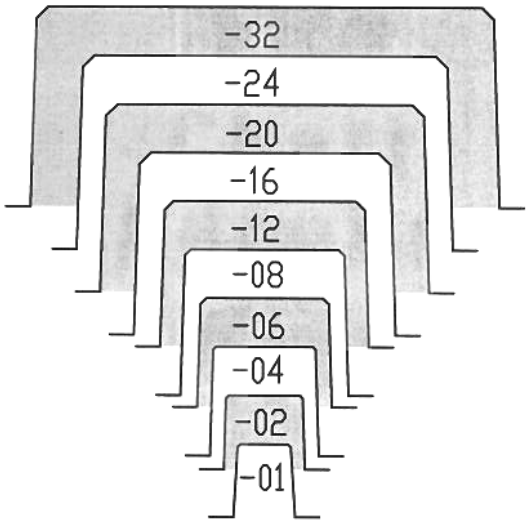
MALE JIC/ MALE O-RING BOSS

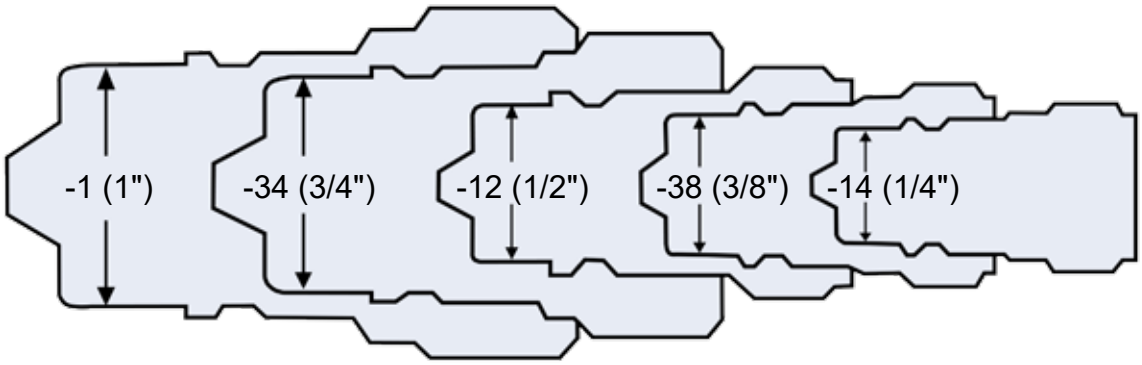


O-RING FACE SEAL

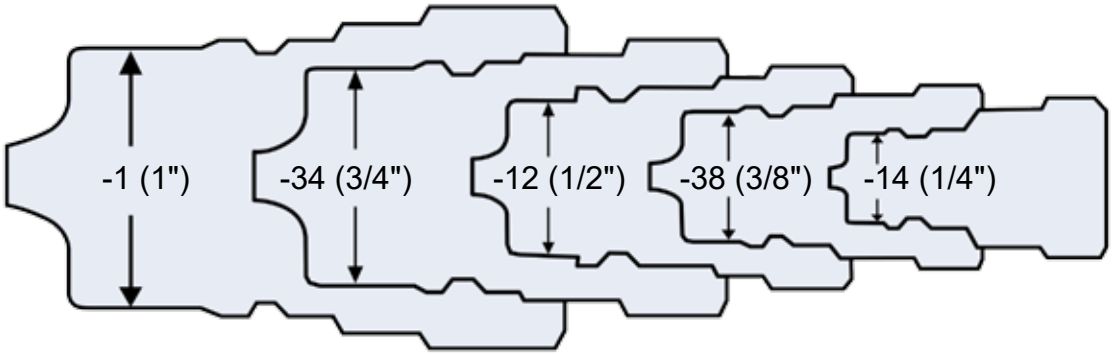


MALE PIPE

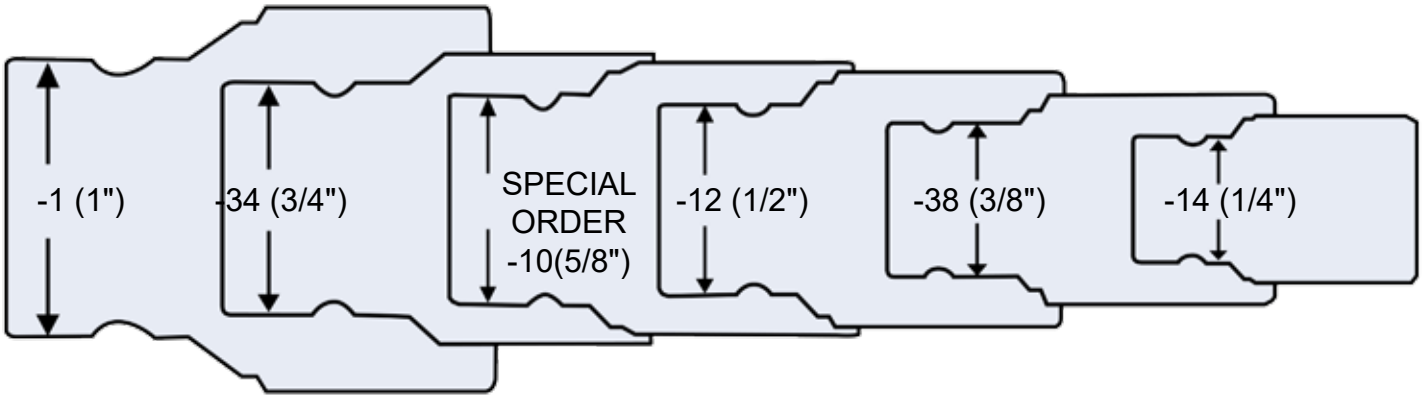




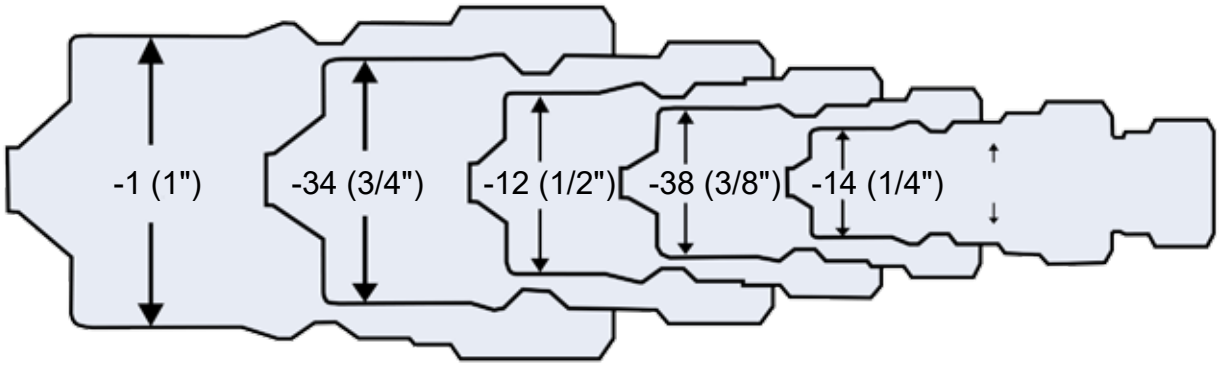
AG INTERCHANGE - NV SERIES



ISO 7241 - 1 - ISO A - ANV SERIES



ISO 16028 - FF SERIES



ISO 7241 - 1 ISO B - HNV SERIES

STEEL PIPE SWIVEL ADAPTERS

MALE PIPE SWIVEL ADAPTER

SAE 140130

Part #	Male Pipe 1	Female NPSM 2	List Price
1404-2-2	1/8	1/8	1.80
1404-4-2	1/4	1/8	3.86
1404-4-4	1/4	1/4	1.83
1404-6-6	3/8	3/8	3.83
1404-6-8	3/8	1/2	3.49
1404-8-4	1/2	1/4	4.29
1404-8-6	1/2	3/8	5.03
1404-8-8	1/2	1/2	3.50
1404-12-8	3/4	1/2	5.53
1404-12-12	3/4	3/4	5.10
1404-12-16	3/4	1	11.83
1404-16-12	1	3/4	11.36
1404-16-16	1	1	9.05
1404-20-16	1-1/4	1	18.92
1404-20-20	1-1/4	1-1/4	16.71
1404-24-24	1-1/2	1-1/2	22.29
1404-32-32	2	2	49.67

1404 2045R 1210 9205R 0107

FEMALE PIPE SWIVEL ADAPTER

SAE 140131

Part #	Female Pipe 1	Female NPSM 2	List Price
1405-2-2	1/8	1/8	3.00
1405-4-4	1/4	1/4	2.45
1405-6-4	3/8	1/4	2.90
1405-6-6	3/8	3/8	3.31
1405-6-8	3/8	1/2	3.72
1405-8-4	1/2	1/4	5.06
1405-8-8	1/2	1/2	3.87
1405-12-12	3/4	3/4	5.52
1405-16-12	1	3/4	13.10
1405-16-16	1	1	8.13
1405-20-20	1-1/4	1-1/4	25.52
1405-24-24	1-1/2	1-1/2	26.38
1405-32-32	2	2	41.52

1405 2046R 1212 9255 C207

MALE PIPE ELBOW SWIVEL ADAPTER

SAE 140230

Part #	Male Pipe 1	Female NPSM 2	List Price
1501-2-2	1/8	1/8	2.69
1501-4-2	1/4	1/8	2.79
1501-4-4	1/4	1/4	2.44
1501-6-4	3/8	1/4	6.56
1501-6-6	3/8	3/8	3.73
1501-8-6	1/2	3/8	4.43
1501-8-8	1/2	1/2	5.04
1501-12-8	3/4	1/2	8.46
1501-12-12	3/4	3/4	7.78
1501-16-12	1	3/4	17.20
1501-16-16	1	1	11.96
1501-20-20	1-1/4	1-1/4	26.64
1501-32-32	2	2	80.79

1501 2047R 1218 9405 2107

FEMALE UNION ELBOW SWIVEL ADAPTER

SAE 140231

Part #	Female Pipe 1	Female NPSM 2	List Price
1502-2-2	1/8	1/8	4.38
1502-4-4	1/4	1/4	3.80
1502-6-4	3/8	1/4	6.45
1502-6-6	3/8	3/8	4.02
1502-6-8	3/8	1/2	13.15
1502-8-6	1/2	3/8	5.47
1502-8-8	1/2	1/2	6.48
1502-12-12	3/4	3/4	10.44
1502-16-16	1	1	31.33
1502-20-20	1-1/4	1-1/4	28.66
1502-24-24	1-1/2	1-1/2	57.61

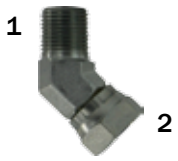
1502 2207 1216 94SSR

FEMALE PIPE SWIVELS

HYDRAULIC ADAPTERS

MALE 45° PIPE ELBOW SWIVEL ADAPTER

SAE 140330

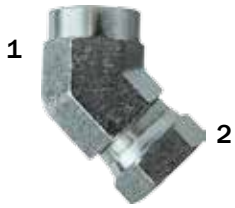


Part #	Male Pipe 1	Female NPSM 2	List Price
1503-2-2	1/8	1/8	4.10
1503-4-4	1/4	1/4	3.47
1503-6-4	3/8	1/4	4.08
1503-6-6	3/8	3/8	3.76
1503-8-6	1/2	3/8	6.11
1503-8-8	1/2	1/2	4.82
1503-12-8	3/4	1/2	10.42
1503-12-12	3/4	3/4	7.16
1503-16-12	1	3/4	13.11
1503-16-16	1	1	14.04

1503 2049R 3107 1214 9355R

FEMALE 45° UNION ELBOW SWIVEL ADAPTER

SAE 140331



Part #	Female Pipe 1	Female NPSM 2	List Price
1504-2-2	1/8	1/8	6.81
1504-4-4	1/4	1/4	5.09
1504-6-6	3/8	3/8	5.56
1504-8-8	1/2	1/2	9.61
1504-12-12	3/4	3/4	10.67
1504-16-16	1	1	18.15

1504 2050R 1249 9385R

MALE SWIVEL BRANCH TEE

Part #	Female NPSM 1 & 2	Male Pipe 3	List Price
1601-2-2	1/8	1/8	8.24
1601-4-4	1/4	1/4	6.83
1601-6-6	3/8	3/8	10.35
1601-8-8	1/2	1/2	14.30
1601-12-12	3/4	3/4	26.91
1601-16-16	1	1	49.99

1601 2254R 1258 9406R

FEMALE SWIVEL TEE

Part #	Female NPSM 1 & 2	Female Pipe 3	List Price
1602-4-4	1/4	1/4	5.63
1602-6-6	3/8	3/8	9.41
1602-8-8	1/2	1/2	24.22
1602-12-12	3/4	3/4	19.37
1602-16-16	1	1	39.10

1602 2253R 1259 9456R

FEMALE SWIVEL UNION TEE

Part #	Female NPSM 1,2 & 3	List Price
1603-4-4	1/4	9.95
1603-6-6	3/8	14.46
1603-8-8	1/2	14.00
1603-12-12	3/4	19.29
1603-16-16	1	57.10

1603 2255 1223 9705R

LONG JIC TUBE NUT

SAE 070111

Part #	Tube O.D	JIC Thread Size	List Price
0304-4	1/4	7/16-20	2.62
0304-6	3/8	9/16-18	2.22
0304-8	1/2	3/4-16	2.99
0304-10	5/8	7/8-14	4.14
0304-12	3/4	1-1/16-12	7.61
0304-16	1	1-5/16-12	14.16

304 221000 0304 C5115

JIC CAP

SAE 070112
MS 51532

Part #	Tube O.D.	JIC Thread Size	List Price
0304-C-2	1/8	5/16-24	1.48
0304-C-3	3/16	3/8-24	2.44
0304-C-4	1/4	7/16-20	0.78
0304-C-5	5/16	1/2-20	0.75
0304-C-6	3/8	9/16-18	0.97
0304-C-8	1/2	3/4-16	0.92
0304-C-10	5/8	7/8-14	1.66
0304-C-12	3/4	1-1/16-12	1.93
0304-C-14	7/8	1-3/16-12	3.33
0304-C-16	1	1-5/16-12	3.35
0304-C-20	1-1/4	1-5/8-12	6.03
0304-C-24	1-1/2	1-7/8-12	10.66
0304-C-32	2	2-1/2-12	20.83

820 304 210292 FNTX 1329 C5129

JIC TUBE NUT (SLEEVE REQUIRED)

SAE 070110
MS 51531

Part #	Tube O.D	JIC Thread Size	List Price
0318-2	1/8	5/16-24	0.64
0318-3	3/16	3/8-24	0.64
0318-4	1/4	7/16-20	0.44
0318-5	5/16	1/2-20	0.84
0318-6	3/8	9/16-18	0.80
0318-8	1/2	3/4-16	1.30
0318-10	5/8	7/8-14	1.39
0318-12	3/4	1-1/16-12	2.40
0318-14	7/8	1-3/16-12	3.05
0318-16	1	1-5/16-12	3.38
0318-20	1-1/4	1-5/8-12	6.99
0318-24	1-1/2	1-7/8-12	10.46
0318-32	2	2-1/2-12	29.06

318 1290 BTX 1311 C5105

JIC TUBE SLEEVE

SAE 070115
MS 51533

Part #	Tube O.D	List Price
0319-2	1/8	0.81
0319-3	3/16	0.51
0319-4	1/4	0.42
0319-5	5/16	0.42
0319-6	3/8	0.46
0319-8	1/2	0.60
0319-10	5/8	0.72
0319-12	3/4	0.95
0319-14	7/8	1.80
0319-16	1	1.94
0319-20	1-1/4	2.86
0319-24	1-1/2	5.59
0319-32	2	9.63

319 900605 TX 1253 C5165

JIC TUBE UNION

SAE 070101
MS 51501

1

2

Part #	JIC Thread Size 1	JIC Thread Size 2	List Price
2403-2-2	5/16-24	5/16-24	2.06
2403-3-3	3/8-24	3/8-24	1.34
2403-4-4	7/16-20	7/16-20	1.02
2403-5-5	1/2-20	1/2-20	1.91
2403-6-6	9/16-18	9/16-18	2.17
2403-6-4	9/16-18	7/16-20	2.78
2403-8-8	3/4-16	3/4-16	1.95
2403-8-6	3/4-16	9/16-18	2.00
2403-10-10	7/8-14	7/8-14	3.23
2403-10-8	7/8-14	3/4-16	2.50
2403-12-12	1-1/16-12	1-1/16-12	3.48
2403-12-8	1-1/16-12	3/4-16	4.27
2403-12-10	1-1/16-12	7/8-14	4.98
2403-14-14	1-3/16-12	1-3/16-12	8.16
2403-16-16	1-5/16-12	1-5/16-12	5.43
2403-16-12	1-5/16-12	1-1/16-12	10.48
2403-20-20	1-5/8-12	1-5/8-12	10.61
2403-24	1-7/8-12	1-7/8-12	14.35
2403-32	2-1/2-12	2-1/2-12	46.62

2403 2027 HTX 1204 C5305

STRAIGHTS STEEL JIC FLARE 37°

JIC MALE CONNECTOR

SAE 070102
MS 51500

Part #	JIC Thread Size 1	MalePipe Thread 2	List Price
2404-2-2	5/16-24	1/8	2.16
2404-4-2	7/16-20	1/8	0.99
2404-4-4	7/16-20	1/4	1.38
2404-4-6	7/16-20	3/8	1.53
2404-4-8	7/16-20	1/2	3.00
2404-6-2	9/16-18	1/8	1.65
2404-6-4	9/16-18	1/4	1.09
2404-6-6	9/16-18	3/8	1.89
2404-6-8	9/16-18	1/2	3.70
2404-8-4	3/4-16	1/4	2.48
2404-8-6	3/4-16	3/8	2.10
2404-8-8	3/4-16	1/2	1.72
2404-8-12	3/4-16	3/4	2.95
2404-8-16	3/4-16	1	6.10
2404-10-8	7/8-14	1/2	2.66
2404-10-12	7/8-14	3/4	6.73
2404-12-6	1-1/16-12	3/8	6.50
2404-12-8	1-1/16-12	1/2	3.09
2404-12-12	1-1/16-12	3/4	3.71
2404-12-16	1-1/16-12	1	5.81
2404-16-12	1-5/16-12	3/4	6.91
2404-16-16	1-5/16-12	1	5.81
2404-20-16	1-5/8-12	1	7.02
2404-20-20	1-5/8-12	1-1/4	8.02
2404-24-16	1-7/8-12	1	45.80
2404-24-20	1-7/8-12	1-1/4	15.76
2404-24-24	1-7/8-12	1-1/2	11.00
2404-32-24	2-1/2-12	1-1/2	60.68
2404-32-32	2-1/2-12	2	33.11

2404 2021R FTX 1202R C5205 816

Work keeps at bay three great evils: boredom, vice and need.

- Voltaire

JIC FEMALE CONNECTOR

SAE 070103
MS 51503

Part #	JIC Thread Size 1	Female Pipe Size 2	List Price
2405-2-2	5/16-24	1/8	1.77
2405-3-2	3/8-24	1/8	2.28
2405-4-2	7/16-20	1/8	1.48
2405-4-4	7/16-20	1/4	1.81
2405-6-4	9/16-18	1/4	1.81
2405-6-6	9/16-18	3/8	2.23
2405-8-4	3/4-16	1/4	4.80
2405-8-6	3/4-16	3/8	4.60
2405-8-8	3/4-16	1/2	3.79
2405-10-6	7/8-14	3/8	4.99
2405-10-8	7/8-14	1/2	3.18
2405-12-8	1-1/16-12	1/2	6.05
2405-12-12	1-1/16-12	3/4	6.86
2405-16-12	1-5/16-12	3/4	18.50
2405-16-16	1-5/16-12	1	7.78
2405-20-20	1-5/8-12	1-1/4	22.50
2405-24-24	1-7/8-12	1-1/2	27.97
2405-32-32	2-1/2-12	2	72.19

2405 2022R GTX 1230R C5255

JIC REDUCER/ EXPANDER

Part #	Female JIC Thread Size 1	Male JIC Thread Size 2	List Price
2406-6-4	9/16-18	7/16-20	2.36
2406-6-8	9/16-18	3/4-16	2.93
2406-8-4	3/4-16	7/16-20	2.84
2406-8-6	3/4-16	9/16-18	2.86
2406-8-12	3/4-16	1-1/16-12	5.08
2406-10-4	7/8-14	7/16-20	5.15
2406-10-6	7/8-14	9/16-18	4.48
2406-10-8	7/8-14	3/4-16	4.43
2406-12-4	1-1/16-12	7/16-20	6.00
2406-12-6	1-1/16-12	9/16-18	5.46
2406-12-8	1-1/16-12	3/4-16	4.91
2406-12-10	1-1/16-12	7/8-14	5.93
2406-16-4	1-5/16-12	7/16-20	6.68
2406-16-12	1-5/16-12	1-1/16-12	8.55
2406-16-20	1-5/16-12	1-5/8-12	12.24
2406-20-12	1-5/8-12	1-1/16-12	15.66
2406-20-16	1-5/8-12	1-5/16-12	15.67
2406-24-16	1-7/8-12	1-5/16-12	44.19
2406-32-24	2-1/2-12	1-7/8-12	66.95

2406 C5015 2215 TRTX 1246

PLUG

SAE 070109
MS 51518

Part #	Tube O.D.	JIC Thread Size	List Price
2408-2	1/8	5/16-24	2.63
2408-3	3/16	3/8-24	1.01
2408-4	1/4	7/16-20	1.06
2408-5	5/16	1/2-20	0.95
2408-6	3/8	9/16-18	0.93
2408-8	1/2	3/4-16	1.30
2408-10	5/8	7/8-14	1.71
2408-12	3/4	1-1/16-12	2.50
2408-14	7/8	1-3/16-12	4.90
2408-16	1	1-5/16-12	3.66
2408-20	1-1/4	1-5/8-12	7.82
2408-24	1-1/2	1-7/8-12	11.81
2408-32	2	2-1/2-12	25.83

2408 430549 PNTX 1254 C5229

JIC UNION ELBOW

SAE 070201
MS 51505

Part #	JIC Thread Size 1	JIC Thread Size 2	List Price
2500-2-2	5/16-24	5/16-24	4.73
2500-4-4	7/16-20	7/16-20	2.12
2500-5-5	1/2-20	1/2-20	3.15
2500-6-6	9/16-18	9/16-18	2.23
2500-6-4	9/16-18	7/16-20	3.43
2500-8-8	3/4-16	3/4-16	3.47
2500-8-6	3/4-16	9/16-18	3.68
2500-10-10	7/8-14	7/8-14	6.33
2500-12-12	1-1/16-12	1-1/16-12	6.71
2500-16-16	1-5/16-12	1-5/16-12	15.86
2500-20-20	1-5/8-12	1-5/8-12	24.80
2500-24-24	1-7/8-12	1-7/8-12	45.68
2500-32-32	2-1/2-12	2-1/2-12	78.13

2500 2039 1234 C5505 821

STEEL 37° JIC FLARE SHAPES

JIC MALE ELBOW

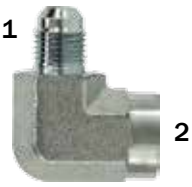
SAE 070202
MS 51504

Part #	JIC Thread Size 1	Male Pipe Size 2	List Price
2501-4-2	7/16-20	1/8	1.96
2501-4-4	7/16-20	1/4	2.10
2501-4-8	7/16-20	1/2	5.05
2501-6-2	9/16-18	1/8	2.77
2501-6-4	9/16-18	1/4	2.83
2501-6-6	9/16-18	3/8	2.90
2501-6-8	9/16-18	1/2	3.84
2501-8-4	3/4-16	1/4	3.53
2501-8-6	3/4-16	3/8	3.95
2501-8-8	3/4-16	1/2	3.33
2501-8-12	3/4-16	3/4	6.65
2501-10-6	7/8-14	3/8	4.39
2501-10-8	7/8-14	1/2	4.33
2501-12-8	1-1/16-12	1/2	7.15
2501-12-12	1-1/16-12	3/4	5.42
2501-12-16	1-1/16-12	1	8.64
2501-16-12	1-5/16-12	3/4	9.74
2501-16-16	1-5/16-12	1	8.01
2501-16-20	1-5/16-12	1-1/4	19.21
2501-20-20	1-5/8-12	1-1/4	19.11
2501-24-24	1-7/8-12	1-1/2	29.48
2501-32-32	2-1/2-12	2	77.47

1208R C5405 2501 2024R CTX 822

JIC FEMALE ELBOW

SAE 070203
MS 51506



Part #	JIC Thread Size 1	Female Pipe Size 2	List Price
2502-4-2	7/16-20	1/8	3.63
2502-4-4	7/16-20	1/4	2.80
2502-6-4	9/16-18	1/4	4.28
2502-6-6	9/16-18	3/8	3.78
2502-8-6	3/4-16	3/8	6.10
2502-8-8	3/4-16	1/2	6.72
2502-12-12	1-1/16-12	3/4	8.43
2502-16-16	1-5/16-12	1	14.60
2502-20-20	1-5/8-12	1-1/4	34.62

2502 2025R DTX 1240R C5455

SHAPES STEEL JIC FLARE 37°

HYDRAULIC ADAPTERS

JIC MALE 45° ELBOW

SAE 070302
MS 51508

Part #	JIC Thread Size 1	Male Pipe Size 2	List Price
2503-2-2	5/16-24	1/8	5.43
2503-4-4	7/16-20	1/4	2.64
2503-6-4	9/16-18	1/4	2.70
2503-6-6	9/16-18	3/8	3.34
2503-6-8	9/16-18	1/2	3.99
2503-8-6	3/4-16	3/8	3.43
2503-8-8	3/4-16	1/2	4.59
2503-10-8	7/8-14	1/2	6.20
2503-12-12	1-1/16-12	3/4	6.44
2503-12-16	1-1/16-12	1	11.14
2503-16-16	1-5/16-12	1	13.50
2503-16-20	1-5/16-12	1-1/4	24.91
2503-20-16	1-5/8-12	1	36.28
2503-20-20	1-5/8-12	1-1/4	23.80

2503 2023R VTX 1206R C5355 823

JIC MALE BRANCH TEE

Part #	JIC Thread Size 1&2	Pipe Thread Size 3	List Price
2601-4-4	7/16-20	1/4	4.38
2601-6-6	9/16-18	3/8	6.29
2601-8-8	3/4-16	1/2	6.00
2601-12-12	1-1/16-12	3/4	11.15

2601 2030R STX 1221R C5605

JIC FEMALE BRANCH TEE

SAE 070427
MS 51513

Part #	JIC Thread Size 1 & 2	Female Pipe Size 3	List Price
2602-4-4	7/16-20	1/4	5.77
2602-6-6	9/16-18	3/8	5.94
2602-8-8	3/4-16	1/2	8.21

2602 2031R OTX 1228R C6566

JIC UNION TEE

SAE 070401
MS 51510

Part #	JIC Thread Size 1 & 2	JIC Thread Size 3	List Price
2603-2-2	5/16-24	5/16-24	3.97
2603-3-3	3/8-24	3/8-24	3.43
2603-4-4	7/16-20	7/16-20	3.24
2603-6-6	9/16-18	9/16-18	3.47
2603-8-8	3/4-16	3/4-16	5.89
2603-10-10	7/8-14	7/8-14	6.67
2603-12-12	1-1/16-12	1-1/16-12	9.57
2603-16-16	1-5/16-12	1-5/16-12	13.51

2603 2033 JTX 1220 C5705

STEEL BULKHEAD FITTINGS

LOCK NUT

SAE 070118
MS 51860

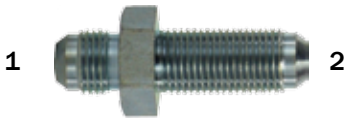
*** Lock Nut no longer included on fittings**

Part #	Thread Size	List Price
0306-2	5/16-24	0.48
0306-4	7/16-20	0.65
0306-5	1/2-20	0.81
0306-6	9/16-18	0.56
0306-8	3/4-16	1.05
0306-10	7/8-14	1.02
0306-12	1-1/16-12	2.14
0306-14	1-3/16-12	3.18
0306-16	1-5/16-12	2.94
0306-20	1-5/8-12	2.78

1306 894 210212 WLN 1332 C5624

JIC BULKHEAD UNION

SAE 070601
MS 51520



Part #	JIC Thread Size 1	JIC Thread Size 2	List Price
2700-2-2	5/16-24	5/16-24	2.95
2700-4-4	7/16-20	7/16-20	2.54
2700-5-5	1/2-20	1/2-20	3.32
2700-6-6	9/16-18	9/16-18	2.67
2700-8	3/4-16	3/4-16	4.28
2700-10	7/8-14	7/8-14	4.70
2700-12	1-1/16-12	1-1/16-12	5.29
2700-14	1-3/16-12	1-3/16-12	38.42
2700-16	1-5/16-12	1-5/16-12	10.88

2700 2041R WTX 1260 C5325

JIC BULKHEAD UNION ELBOW

SAE 070701
MS 51507

Part #	JIC Thread Size 1	JIC Bulkhead Thread 2	List Price
2701-4	7/16-20	7/16-20	3.44
2701-5	1/2-20	1/2-20	5.49
2701-6	9/16-18	9/16-18	4.89
2701-8	3/4-16	3/4-16	5.73
2701-10	7/8-14	7/8-14	8.95
2701-12	1-1/16-12	1-1/16-12	14.60
2701-16	1-5/16-12	1-5/16-12	17.12
2701-20	1-5/8-12	1-5/8-12	38.53

2701 2043R WETX 1262 C5525

JIC BULKHEAD UNION 45° ELBOW

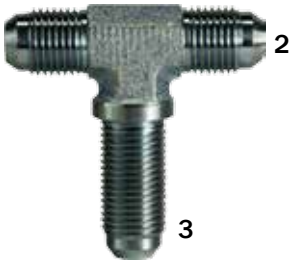
SAE 070801
MS 51509

Part #	JIC Thread Size 1	JIC Thread Size 2	List Price
2702-4	7/16-20	7/16-20	3.30
2702-6	9/16-18	9/16-18	6.18
2702-8	3/4-16	3/4-16	7.38
2702-10	7/8-14	7/8-14	8.57
2702-12	1-1/16-12	1-1/16-12	12.48
2702-16	1-5/16-12	1-5/16-12	16.86

2702 2042 WNTX 1261 C5375

JIC BULKHEAD BRANCH TEE

SAE 070959
MS 51515

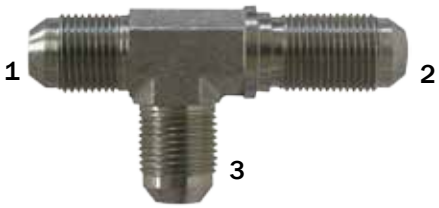


Part #	JIC Thread Size 1&2	JIC Thread Size 3	List Price
2703-4	7/16-20	7/16-20	6.43
2703-6	9/16-18	9/16-18	6.52
2703-8	3/4-16	3/4-16	11.46
2703-10	7/8-14	7/8-14	13.78
2703-12	1-1/16-12	1-1/16-12	20.62
2703-16	1-5/16-12	1-5/16-12	33.05

2703 203002 WJT 1283 C5725

JIC BULKHEAD RUN TEE

SAE 070958
MS 51516



Part #	JIC Thread Size 1&3	JIC Thread Size 2	List Price
2704-4	7/16-20	7/16-20	6.62
2704-6	9/16-18	9/16-18	6.14
2704-8	3/4-16	3/4-16	14.22
2704-10	7/8-14	7/8-14	18.14
2704-12	1-1/16-12	1-1/16-12	20.70
2704-16	1-5/16-12	1-5/16-12	25.72

2704 203008 WJJT 1284 C5726

JIC TO FEMALE PIPE BULKHEAD

Part #	JIC Thread Size 1	Female Pipe Size 2	List Price
2705-4-4	7/16-20	1/4	3.43
2705-6-6	9/16-18	3/8	5.52
2705-8-8	3/4-16	1/2	7.40
2705-12-12	1-1/16-12	3/4	16.33
2705-16-16	1-5/16-12	1	20.37

2705 2239 WGTX C5275

JIC TO MALE PIPE BULKHEAD

Part #	JIC Thread Size 1	Pipe Thread Size 2	List Price
2706-4-4	7/16-20	1/4	2.98
2706-6-6	9/16-18	3/8	4.50
2706-8-8	3/4-16	1/2	5.84
2706-12-12	1-1/16-12	3/4	13.40
2706-16-16	1-5/16-12	1	19.47

2706 2240

** Lock Nuts sold separately - pg. 403*

STEEL PIPE FITTINGS

HYDRAULIC ADAPTERS

PIPE COUPLING

910

SAE 140138

Part #	Female Pipe 1	Female Pipe 2	List Price
5000-2	1/8	1/8	1.96
5000-4-2	1/4	1/8	3.28
5000-4	1/4	1/4	1.66
5000-6-4	3/8	1/4	2.45
5000-6-6	3/8	3/8	2.35
5000-8-4	1/2	1/4	4.45
5000-8-6	1/2	3/8	3.16
5000-8	1/2	1/2	3.38
5000-12-12	3/4	3/4	3.90
5000-16-12	1	3/4	13.45
5000-16	1	1	6.25
5000-20-20	1-1/4	1-1/4	15.48
5000-24	1-1/2	1-1/2	29.61
5000-32	2	2	79.72

5000 2096 GG 1273 C3309

HEX PIPE NIPPLES

SAE 140137

Part #	Male Pipe 1	Male Pipe 2	List Price
5404-2	1/8	1/8	0.93
5404-4-2	1/4	1/8	1.30
5404-4	1/4	1/4	1.45
5404-6-2	3/8	1/8	4.24
5404-6-4	3/8	1/4	1.83
5404-6	3/8	3/8	1.56
5404-8-4	1/2	1/4	2.43
5404-8-6	1/2	3/8	2.39
5404-8	1/2	1/2	2.06
5404-12-6	3/4	3/8	4.88
5404-12-8	3/4	1/2	3.14
5404-12	3/4	3/4	3.54
5404-16-12	1	3/4	10.90
5404-16	1	1	6.25
5404-20-16	1-1/4	1	11.60
5404-20	1-1/4	1-1/4	11.83
5404-24-20	1-1/2	1-1/4	27.22
5404-24	1-1/2	1-1/2	16.96
5404-32-24	2	1-1/2	52.56
5404-32	2	2	39.87

5404 2083 FF 1252 C3069 911

EXPANDING PIPE ADAPTER

SAE 140139

Part #	Male Pipe 1	Female Pipe 2	List Price
5405-2-2	1/8	1/8	6.38
5405-2-4	1/8	1/4	2.09
5405-4-2	1/4	1/8	2.39
5405-4-4	1/4	1/4	1.71
5405-6-4	3/8	1/4	3.67
5405-6-6	3/8	3/8	4.13
5405-6-8	3/8	1/2	4.13
5405-8-8	1/2	1/2	5.59
5405-8-12	1/2	3/4	5.73
5405-12-12	3/4	3/4	13.87
5405-16-16	1	1	15.96
5405-16-20	1	1-1/4	20.71
5405-20-20	1-1/4	1-1/4	26.64
5405-20-24	1-1/4	1-1/2	26.58
5405-24-24	1-1/2	1-1/2	34.05

920 5405 2040 FG-(R) 1274 C3209(R)

HEX REDUCER BUSHING

SAEF1 140140

Part #	Male Pipe	Female Pipe	List Price
5406-4-2	1/4	1/8	0.92
5406-6-2	3/8	1/8	1.84
5406-6-4	3/8	1/4	2.25
5406-8-2	1/2	1/8	2.10
5406-8-4	1/2	1/4	1.40
5406-8-6	1/2	3/8	2.52
5406-12-2	3/4	1/8	3.02
5406-12-4	3/4	1/4	4.36
5406-12-6	3/4	3/8	3.95
5406-12-8	3/4	1/2	3.99
5406-16-4	1	1/4	6.89
5406-16-6	1	3/8	10.98
5406-16-8	1	1/2	5.89
5406-16-12	1	3/4	6.18
5406-20-16	1-1/4	1	10.87
5406-24-20	1-1/2	1-1/4	17.90
5406-32-20	2	1-1/4	27.25
5406-32-24	2	1-1/2	28.59

5406 2081 PTR 1250 C3109 912

HEX HEAD PLUG

SAE 130109E

Part #	Male Pipe	List Price
5406-P-2	1/8	0.64
5406-P-4	1/4	0.96
5406-P-6	3/8	0.93
5406-P-8	1/2	1.53
5406-P-12	3/4	3.00
5406-P-16	1	4.44
5406-P-20	1-1/4	9.15
5406-P-24	1-1/2	15.03
5406-P-32	2	24.61

933 5406P 2082 HP 1251 C3159

HOLLOW HEX PLUG

SAE 130109

Part #	Male Pipe	List Price
5406-HHP-2	1/8	0.41
5406-HHP-4	1/4	0.32
5406-HHP-6	3/8	0.43
5406-HHP-8	1/2	0.74
5406-HHP-12	3/4	1.27
5406-HHP-16	1	3.78
5406-HHP-20	1-1/4	7.20
5406-HHP-24	1-1/2	18.47

C3169 2222

FLUSH HOLLOW HEX PLUG W/ 7/8 TAPER

Part #	Male Pipe	List Price
5406-FLP-2	1/8	0.42
5406-FLP-4	1/4	0.65
5406-FLP-6	3/8	0.98
5406-FLP-8	1/2	1.27
5406-FLP-12	3/4	3.54

SQUARE HEAD PLUG

SAE 130109A

Part #	Male Pipe	List Price
5406-SHP-2	1/8	0.50
5406-SHP-4	1/4	0.52
5406-SHP-6	3/8	0.95
5406-SHP-8	1/2	1.32
5406-SHP-12	3/4	1.41
5406-SHP-16	1	5.63
5406-SHP-20	1-1/4	24.19
5406-SHP-24	1-1/2	24.98
5406-SHP-32	2	31.79

C3179

PIPE CAP

Part #	Female Pipe	List Price
5406-C-2	1/8	1.51
5406-C-4	1/4	1.30
5406-C-6	3/8	1.99
5406-C-8	1/2	2.56
5406-C-12	3/4	5.71
5406-C-16	1	9.31

HPC

MALE ELBOW

SAE 140237

Part #	Male Pipe 1	Male Pipe 2	List Price
5500-2	1/8	1/8	2.73
5500-4	1/4	1/4	2.45
5500-6	3/8	3/8	3.44
5500-8-4	1/2	1/4	7.65
5500-8	1/2	1/2	4.72
5500-12-8	3/4	1/2	10.47
5500-12-12	3/4	3/4	7.15
5500-16	1	1	10.60
5500-16-12	1	3/4	14.78
5500-20-20	1-1/4	1-1/4	22.56

919 5500 2085 CR 1275 C3529

STEEL PIPE FITTINGS

HYDRAULIC ADAPTERS

45° MALE ELBOW

Part #	Male Pipe 1	Male Pipe 2	List Price
5501-2-2	1/8	1/8	4.73
5501-4-4	1/4	1/4	3.39
5501-6-6	3/8	3/8	4.65
5501-8	1/2	1/2	9.04
5501-12-12	3/4	3/4	8.98
5501-16-16	1	1	37.52

5501 2247

90° STREET ELBOW

SAE 140239

Part #	Male Pipe 1	Female Pipe 2	List Price
5502-2	1/8	1/8	2.12
5502-4	1/4	1/4	2.97
5502-6-4	3/8	1/4	3.72
5502-6	3/8	3/8	4.15
5502-8-4	1/2	1/4	7.50
5502-8-6	1/2	3/8	6.00
5502-8-8	1/2	1/2	6.20
5502-12	3/4	3/4	7.47
5502-16-16	1	1	15.10
5502-20	1-1/4	1-1/4	25.55
5502-24	1-1/2	1-1/2	73.55

5502 2089 CD 1234R C3409 914

45° STREET ELBOW

SAE 140339

Part #	Male Pipe 1	Female Pipe 2	List Price
5503-2	1/8	1/8	2.62
5503-4	1/4	1/4	2.86
5503-6	3/8	3/8	3.31
5503-8	1/2	1/2	5.85
5503-12-12	3/4	3/4	6.54
5503-16	1	1	16.57

5503 CD45 1244

FEMALE ELBOW

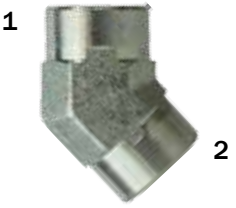
SAE 140238

Part #	Female Pipe 1	Female Pipe 2	List Price
5504-2	1/8	1/8	2.59
5504-4	1/4	1/4	3.18
5504-6	3/8	3/8	3.93
5504-8-6	1/2	3/8	5.97
5504-8	1/2	1/2	6.41
5504-12	3/4	3/4	8.17
5504-16	1	1	13.14
5504-20	1-1/4	1-1/4	30.59
5504-24	1-1/2	1-1/2	69.76

5504 2087 DD 1245 C3509 916

45° FEMALE ELBOW

SAE 140338

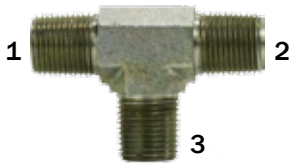


Part #	Female Pipe 1	Female Pipe 2	List Price
5505-4	1/4	1/4	4.31
5505-6	3/8	3/8	6.06
5505-8	1/2	1/2	9.23
5505-12	3/4	3/4	10.94
5505-16	1	1	17.53
5505-20	1-1/4	1-1/4	27.20

5505 DD45 1241 C3559

MALE PIPE TEE

SAE 140437

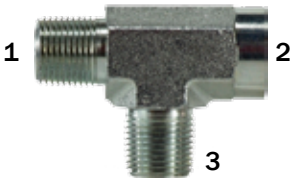


Part #	Male Pipe 1 & 2	Male Pipe 3	List Price
5600-2-2	1/8	1/8	10.39
5600-4-4	1/4	1/4	4.47
5600-6-6	3/8	3/8	6.54
5600-8-8	1/2	1/2	12.38
5600-12	3/4	3/4	14.78
5600-16	1	1	24.23

5600 2257 RRS

FEMALE RUN PIPE TEE

SAE 1404276



Part #	Male Pipe 1 & 3	Female Pipe 2	List Price
5603-2-2	1/8	1/8	4.16
5603-4-4	1/4	1/4	5.11
5603-6-6	3/8	3/8	5.09
5603-8-8	1/2	1/2	9.12
5603-12	3/4	3/4	16.73
5603-16	1	1	21.65

5603 2093 MMO 1277

FEMALE BRANCH PIPE TEE

SAE 140427

Part #	Male Pipe 1 & 2	Female Pipe 3	List Price
5601-2-2	1/8	1/8	7.52
5601-4-4	1/4	1/4	7.05
5601-6-6	3/8	3/8	7.81
5601-12	3/4	3/4	25.22
5601-16	1	1	33.19

901 5601 2256

MALE BRANCH PIPE TEE

Part #	Female Pipe 1 & 2	Male Pipe 3	List Price
5604-2-2	1/8	1/8	4.72
5604-4-4	1/4	1/4	6.80
5604-6-6	3/8	3/8	8.12
5604-8-8	1/2	1/2	9.47
5604-12	3/4	3/4	12.91
5604-16	1	1	23.71

904 5604 2091 MMS 1278 C3609

STREET PIPE TEE

SAE 140424

Part #	Male Pipe 1	Female Pipe 2 & 3	List Price
5602-2-2	1/8	1/8	3.61
5602-4-4	1/4	1/4	5.44
5602-6-6	3/8	3/8	6.85
5602-8-8	1/2	1/2	10.08
5602-12	3/4	3/4	12.30
5602-16	1	1	22.55

902 5602 2092 MRO 1276 C3759

FEMALE PIPE TEE

SAE 140438

Part #	Female Pipe	List Price
5605-2-2	1/8	2.29
5605-4-4	1/4	5.24
5605-6-6	3/8	6.50
5605-8	1/2	7.38
5605-12	3/4	11.09
5605-16	1	23.28
5605-20	1-1/4	41.44

917 5605 2090 1225 C3709

STEEL O-RING ADAPTERS

JIC TO O-RING CONNECTOR

SAE 070120
MS 51525

Part #	JIC Thread Size 1	O-Ring Thread 2	List Price
6400-2	5/16-24	5/16-24	4.59
6400-4	7/16-20	7/16-20	1.19
6400-4-2	7/16-20	5/16-24	1.83
6400-4-6	7/16-20	9/16-18	1.38
6400-4-8	7/16-20	3/4-16	3.31
6400-5	1/2-20	1/2-20	1.74
6400-6	9/16-18	9/16-18	1.57
6400-6-4	9/16-18	7/16-20	1.51
6400-6-8	9/16-18	3/4-16	1.76
6400-6-10	9/16-18	7/8-14	2.98
6400-6-12	9/16-18	1-1/16-12	4.62
6400-8	3/4-16	3/4-16	1.69
6400-8-4	3/4-16	7/16-20	3.30
6400-8-6	3/4-16	9/16-18	1.76
6400-8-10	3/4-16	7/8-14	2.25
6400-8-12	3/4-16	1-1/16-12	3.44
6400-10	7/8-14	7/8-14	2.48
6400-10-8	7/8-14	3/4-16	3.19
6400-10-12	7/8-14	1-1/16-12	3.80
6400-12	1-1/16-12	1-1/16-12	3.44
6400-12-8	1-1/16-12	3/4-16	5.12
6400-12-10	1-1/16-12	7/8-14	4.10
6400-12-14	1-1/16-12	1-3/16-12	5.86
6400-12-16	1-1/16-12	1-5/16-12	4.25
6400-16	1-5/16-12	1-5/16-12	5.48
6400-16-12	1-5/16-12	1-1/16-12	11.07
6400-16-20	1-5/16-12	1-5/8-12	15.45
6400-20	1-5/8-12	1-5/8-12	10.62
6400-20-24	1-5/8-12	1-7/8-12	20.39
6400-24-32	1-7/8-12	2-1/2-12	74.91

6400 202702R F50X 1231 C5315

O-RING HEX NIPPLE UNION

Part #	O-Ring Thread 1	O-Ring Thread 2	List Price
6403-O-6	9/16-18	9/16-18	5.12
6403-O-8	3/4-16	3/4-16	4.87
6403-O-12	1-1/16-12	1-1/16-12	8.49

HYDRAULIC ADAPTERS

O-RING TO PIPE ADAPTER

Part #	O-Ring Thread 1	Male Pipe Thread 2	List Price
6401-4-4	7/16-20	1/4	1.06
6401-6-4	9/16-18	1/4	2.00
6401-6-6	9/16-18	3/8	2.00
6401-8-6	3/4-16	3/8	3.11
6401-8-8	3/4-16	1/2	2.91
6401-10-8	7/8-14	1/2	4.56
6401-12-8	1-1/16-12	1/2	4.82
6401-12-12	1-1/16-12	3/4	4.90
6401-16-16	1-5/16-12	1	8.41
6401-20-20	1-5/8-12	1-1/4	16.13

6401 F5X 1264R C3249

O-RING TO 37° JIC - SWIVEL ADAPTER

Part #	O-Ring Thread 1	JIC Thread Size 2	List Price
6402-O-4-4	7/16-20	7/16-20	3.31
6402-O-6-6	9/16-18	9/16-18	2.77
6402-O-8-8	3/4-16	3/4-16	3.88
6402-O-10-10	7/8-14	7/8-14	7.82
6402-O-12-12	1-1/16-12	1-1/16-12	7.05

6402 2266 F65X 1213 9316

FEMALE O-RING TO MALE PIPE ADAPTER

Part #	O-Ring Thread 1	Male Pipe Thread 2	List Price
6404-4-4	7/16-20	1/4	3.35
6404-6-4	9/16-18	1/4	6.64
6404-6-6	9/16-18	3/8	2.95
6404-6-8	9/16-18	1/2	4.68
6404-8-8	3/4-16	1/2	3.81
6404-10-8	7/8-14	1/2	5.46
6404-12-12	1-1/16-12	3/4	7.13

6404 2246R 1267R C3239 FHG5

O-RING TO FEMALE PIPE ADAPTER

Part #	O-Ring Thread 1	Female Pipe Thread 2	List Price
6405-O-4-2	7/16-20	1/8	1.93
6405-O-4-4	7/16-20	1/4	2.72
6405-O-6-4	9/16-18	1/4	2.60
6405-O-6-6	9/16-18	3/8	2.82
6405-O-8-4	3/4-16	1/4	4.33
6405-O-8-6	3/4-16	3/8	2.59
6405-O-8-8	3/4-16	1/2	4.46
6405-O-10-6	7/8-14	3/8	3.81
6405-O-10-8	7/8-14	1/2	5.69
6405-O-12-8	1-1/16-12	1/2	7.97
6405-O-12-12	1-1/16-12	3/4	6.37
6405-O-16-12	1-5/16-12	3/4	8.41
6405-O-16-16	1-5/16-12	1	12.05
6405-O-20-20	1-5/8-12	1-1/4	15.66
6405-O-24-24	1-7/8-12	1-1/2	30.31
6405-O-32-32	2-1/2-12	2	32.22

6405 2216R F50G 1268R C3269

O-RING HEX HEAD PLUG

SAE 090109A

Not all sizes are solid

Part #	O-Ring Thread	List Price
6408-O-2	5/16-24	0.78
6408-O-4	7/16-20	0.74
6408-O-5	1/2-20	1.13
6408-O-6	9/16-18	0.88
6408-O-8	3/4-16	1.10
6408-O-10	7/8-14	1.94
6408-O-12	1-1/16-12	2.39
6408-O-14	1-3/16-20	4.40
6408-O-16	1-5/16-12	3.27
6408-O-20	1-5/8-12	6.67
6408-O-24	1-7/8-12	9.39

6408 900598 P50N 1265 7237

O-RING HOLLOW - HEX HEAD PLUG

SAE 090109B

Part #	O-Ring Thread	List Price
6408-H-O-2	5/16-24	1.10
6408-H-O-4	7/16-20	0.70
6408-H-O-5	1/2-20	1.01
6408-H-O-6	9/16-18	0.74
6408-H-O-8	3/4-16	1.28
6408-H-O-10	7/8-14	2.09
6408-H-O-12	1-1/16-12	3.94
6408-H-O-14	1-3/16-20	7.15
6408-H-O-16	1-5/16-12	3.95
6408-H-O-20	1-5/8-12	8.64
6408-H-O-24	1-7/8-12	10.55
6408-H-O-32	2-1/2-12	30.92

6408HHP FF2138 HP50N 1256 7238 6409

O-RING PORT REDUCER/EXPANDER

Part #	O-Ring Thread 1	O-Ring Thread 2	List Price
6410-O-8-4	3/4-16	7/16-20	3.27
6410-O-8-6	3/4-16	9/16-18	3.35
6410-O-8-8	3/4-16	3/4-16	3.84
6410-O-12-8	1-1/16-12	3/4-16	5.89

6410 FF1010 F50G5 1270 7033

FEMALE SWIVELS JIC

JIC SWIVEL NUT ELBOW

SAE 070221
MS 51521

Part #	JIC Thread Size 1	JIC Thread Size 2	List Price
6500-4	7/16-20	7/16-20	2.88
6500-6	9/16-18	9/16-18	3.85
6500-8	3/4-16	3/4-16	4.65
6500-10	7/8-14	7/8-14	7.34
6500-12	1-1/16-12	1-1/16-12	8.20
6500-16	1-5/16-12	1-5/16-12	14.82
6500-24	1-7/8-12	1-7/8-12	50.75

6500 2071R C6X 1236 G5506

JIC SWIVEL TO MALE PIPE ELBOW

Part #	JIC Thread Size 1	Male Pipe Thread 2	List Price
6501-4-4	7/16-20	1/4	3.66
6501-6-6	9/16-18	3/8	5.84
6501-8-8	3/4-16	1/2	8.58
6501-10-8	7/8-14	1/2	7.57
6501-12-12	1-1/16-12	3/4	8.99
6501-16-16	1-5/16-12	1	12.91

6501 2250 1247R TF5406

JIC SWIVEL 45° ELBOW

SAE 070321
MS 51522

Part #	JIC Thread Size 1	JIC Thread Size 2	List Price
6502-4	7/16-20	7/16-20	3.10
6502-6	9/16-18	9/16-18	4.45
6502-8	3/4-16	3/4-16	5.01
6502-10	7/8-14	7/8-14	5.93
6502-12	1-1/16-12	1-1/16-12	6.91
6502-16	1-5/16-12	1-5/16-12	14.40

6502 2070R V6X 1237 C5356

HYDRAULIC ADAPTERS

JIC SWIVEL TO FEMALE - PIPE ELBOW

Part #	JIC Thread Size 1	Female Pipe Thread 2	List Price
6503-4-4	7/16-20	1/4	11.00
6503-6-6	9/16-18	3/8	12.22
6503-8-8	3/4-16	1/2	11.86
6503-12-12	1-1/16-12	3/4	22.68

JIC SWIVEL CONNECTOR

Part #	JIC Thread Size 1	JIC Thread Size 2	List Price
6504-4-4	7/16-20	7/16-20	3.81
6504-6-6	9/16-18	9/16-18	3.81
6504-8-8	3/4-16	3/4-16	4.59
6504-10-10	7/8-14	7/8-14	6.18
6504-12-12	1-1/16-12	1-1/16-12	6.98
6504-16-16	1-5/16-12	1-5/16-12	10.27
6504-20-20	1-5/8-12	1-5/8-12	29.05

6504 1205

JIC SWIVEL TO MALE - PIPE ADAPTER

Part #	JIC Thread Size 1	Male Pipe Thread 2	List Price
6505-4-2	7/16-20	1/8	3.71
6505-4-4	7/16-20	1/4	2.32
6505-4-6	7/16-20	3/8	2.31
6505-6-4	9/16-18	1/4	2.70
6505-6-6	9/16-18	3/8	3.32
6505-8-6	3/4-16	3/8	5.10
6505-8-8	3/4-16	1/2	4.26
6505-12-12	1-1/16-12	3/4	6.55
6505-16-16	1-5/16-12	1	10.61
6505-24-24	1-7/8-12	1-1/2	30.96

6505 2018 F6X 1211 9100R

JIC SWIVEL TO FEMALE PIPE ADAPTER

Part #	JIC Thread Size 1	Female Pipe Thread 2	List Price
6506-4-2	7/16-20	1/8	4.81
6506-4-4	7/16-20	1/4	3.89
6506-6-4	9/16-18	1/4	4.22
6506-6-6	9/16-18	3/8	4.40
6506-6-8	9/16-18	1/2	4.36
6506-8-6	3/4-16	3/8	4.94
6506-8-8	3/4-16	1/2	4.09
6506-10-6	7/8-14	3/8	7.21
6506-12-12	1-1/16-12	3/4	8.69
6506-16-16	1-5/16-12	1	13.96
6506-20-20	1-5/8-12	1-1/4	25.31

6506 2242 1215

JIC SWIVEL BRANCH TEE

SAE 070433
MS 51524

Part #	JIC Thread Size 1 & 2	JIC Female Thread 3	List Price
6600-4-4	7/16-20	7/16-20	4.71
6600-6-6	9/16-18	9/16-18	6.19
6600-8-8	3/4-16	3/4-16	6.14
6600-10	7/8-14	7/8-14	9.69
6600-12	1-1/16-12	1-1/16-12	15.29
6600-16	1-5/16-12	1-5/16-12	27.18
6600-20	1-5/8-12	1-5/8-12	35.16

6600 203101R 65X 1227 C5707

JIC SWIVEL RUN TEE

SAE 070432
MS 51523

Part #	JIC Thread Size 1 & 3	JIC Female Thread 2	List Price
6602-4	7/16-20	7/16 -20	3.46
6602-5	1/2-20	1/2-20	5.01
6602-6	9/16-18	9/16-18	4.00
6602-8	3/4-16	3/4-16	6.27
6602-12	1-1/16-12	1-1/16-12	13.07
6602-16	1-5/16-12	1-5/16-12	24.26
6602-24	1-7/8-12	1-7/8-12	54.52

6602 203102R R6X 1248 C5706

NWO = Nut, Washer & O-Ring

STEEL SAE O-RING ADAPTERS

HYDRAULIC ADAPTERS

JIC TO O-RING ELBOW CONNECTOR

SAE 070220
MS 51527

Part #	JIC Thread Size 1	O-Ring Thread Size 2	List Price
6801-NWO-4	7/16-20	7/16-20	2.35
6801-NWO-4-6	7/16-20	9/16-18	3.33
6801-NWO-6	9/16-18	9/16-18	2.37
6801-NWO-6-4	9/16-18	7/16-20	3.56
6801-NWO-8	3/4-16	3/4-16	4.15
6801-NWO-8-6	3/4-16	9/16-18	4.29
6801-NWO-8-10	3/4-16	7/8-14	6.73
6801-NWO-8-12	3/4-16	1-1/16-12	9.66
6801-NWO-10	7/8-14	7/8-14	6.13
6801-NWO-10-8	7/8-14	3/4-16	5.34
6801-NWO-12	1-1/16-12	1-1/16-12	9.06
6801-NWO-12-10	1-1/16-12	7/8-14	8.22
6801-NWO-12-16	1-1/16-12	1-5/16-12	13.06
6801-NWO-16	1-5/16-12	1-5/16-12	14.02
6801-NWO-20	1-5/8-12	1-5/8-12	22.82

6801 2062R C50X 1238L C5515

JIC TO O-RING 45° ELBOW

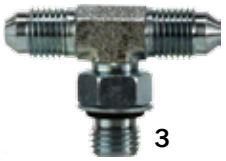
SAE 070320
MS 51528

Part #	JIC Thread Size 1	O-Ring Thread Size 2	List Price
6802-NWO-2	5/16-24	5/16-24	5.45
6802-NWO-4	7/16-20	7/16-20	3.33
6802-NWO-6	9/16-18	9/16-18	3.41
6802-NWO-8	3/4-16	3/4-16	4.74
6802-NWO-8-6	3/4-16	9/16-18	5.94
6802-NWO-8-10	3/4-16	7/8-14	9.62
6802-NWO-10	7/8-14	7/8-14	7.07
6802-NWO-10-8	7/8-14	3/4-16	7.78
6802-NWO-12	1-1/16-12	1-1/16-12	12.83
6802-NWO-16	1-5/16-12	1-5/16-12	15.60
6802-NWO-20	1-5/8-12	1-5/8-12	30.16

6802 2061 V50X 1240R C5365

JIC TO O-RING - BRANCH TEE

SAE 070429
MS 51529

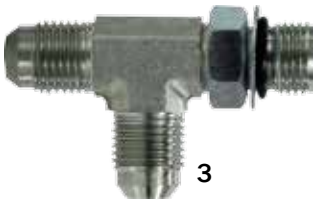


Part #	JIC Thread Size 1 & 2	O-Ring Thread Size 3	List Price
6803-NWO-4	7/16-20	7/16-20	5.30
6803-NWO-6	9/16-18	9/16-18	8.28
6803-NWO-8	3/4-16	3/4-16	7.35
6803-NWO-10	7/8-14	7/8-14	10.57
6803-NWO-12	1-1/16-12	1-1/16-12	12.61
6803-NWO-16	1-5/16-12	1-5/16-12	22.68

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	List Price
6804-NWO-4	7/16-20	7/16-20	5.97
6804-NWO-6	9/16-18	9/16-18	6.44
6804-NWO-8	3/4-16	3/4-16	8.29
6804-NWO-10	7/8-14	7/8-14	14.64
6804-NWO-12	1-1/16-12	1-1/16-12	25.89
6804-NWO-16	1-5/16-12	1-5/16-12	23.81

6804 203005R R50X 1266R C5716

O-RING TO - FEMALE PIPE ELBOW

Part #	O-Ring Thread Size 1	Pipe Thread Size 2	List Price
6805-NWO-4-4	7/16-20	1/4	4.23
6805-NWO-6-6	9/16-18	3/8	5.63
6805-NWO-8-8	3/4-16	1/2	7.38
6805-NWO-10-8	7/8-14	1/2	8.63
6805-NWO-12-8	1-1/16-12	1/2	18.53
6805-NWO-12-12	1-1/16-12	3/4	28.38
6805-NWO-16-16	1-5/16-12	1	21.59

6805 206801R AE0G 1264 C3459

O-RING TO MALE PIPE ELBOW

Part #	O-Ring Thread Size 1	Pipe Thread Size 2	List Price
6806-NWO-4-4	7/16-20	1/4	3.59
6806-NWO-6-6	9/16-18	3/8	7.84
6806-NWO-8-8	3/4-16	1/2	5.91
6806-NWO-12-12	1-1/16-12	3/4	13.48
6806-NWO-16-16	1-5/16-12	1	23.28

6806 1263 TF3569

O-RING TO 37° JIC SWIVEL NUT TO O-RING ELBOW

Part #	O-Ring Thread Size 1	JIC Thread Size 2	List Price
6809-NWO-4-4	7/16-20	7/16-20	4.46
6809-NWO-6-6	9/16-18	9/16-18	5.79
6809-NWO-8-8	3/4-16	3/4-16	12.06
6809-NWO-12-12	1-1/16-12	1-1/16-12	13.22

FEMALE O-RING TO MALE O-RING ELBOW

Part #	O-Ring Thread Size 1	O-Ring Thread Size 2	List Price
6815-NWO-4-4	7/16-20	7/16-20	5.67
6815-NWO-6-6	9/16-18	9/16-18	5.42
6815-NWO-8-8	3/4-16	3/4-16	10.00
6815-NWO-10-10	7/8-14	7/8-14	22.20
6815-NWO-12-12	1-1/16-12	1-1/16-12	27.67

MALE O-RING SWIVEL ADAPTER

SAE 140157

Part #	O-Ring Thread Size 1	Female NPSM Size 2	List Price
6900-O-4-2	7/16-20	1/8	6.26
6900-O-4-4	7/16-20	1/4	1.98
6900-O-6-4	9/16-18	1/4	3.53
6900-O-6-6	9/16-18	3/8	2.60
6900-O-6-8	9/16-18	1/2	4.59
6900-O-8-6	3/4-16	3/8	3.24
6900-O-8-8	3/4-16	1/2	3.06
6900-O-8-12	3/4-16	3/4	3.56
6900-O-10-8	7/8-14	1/2	4.22
6900-O-10-12	7/8-14	3/4	6.59
6900-O-12-8	1-1/16-12	1/2	6.11
6900-O-12-12	1-1/16-12	3/4	5.49
6900-O-16-16	1-5/16-12	1	13.07

6900 2066R 1235 9315

90° O-RING SWIVEL ADAPTER

SAE 140257

Part #	O-Ring Thread Size 1	Female NPSM Size 2	List Price
6901-NWO-4-4	7/16-20	1/4	3.49
6901-NWO-6-4	9/16-18	1/4	4.97
6901-NWO-6-6	9/16-18	3/8	4.87
6901-NWO-6-8	9/16-18	1/2	7.53
6901-NWO-8-4	3/4-16	1/4	8.25
6901-NWO-8-6	3/4-16	3/8	5.08
6901-NWO-8-8	3/4-16	1/2	5.90
6901-NWO-8-12	3/4-16	3/4	11.31
6901-NWO-10-6	7/8-14	3/8	5.29
6901-NWO-10-8	7/8-14	1/2	7.65
6901-NWO-12-6	1-1/16-12	3/8	8.70
6901-NWO-12-8	1-1/16-12	1/2	19.19
6901-NWO-12-12	1-1/16-12	3/4	18.24
6901-NWO-16-12	1-5/16-12	3/4	29.84
6901-NWO-16-16	1-5/16-12	1	20.63
6901-NWO-20-20	1-5/8-12	1-1/4	38.89

6401 2068R 1271 9515

STEEL SAE O-RING

45° O-RING SWIVEL ADAPTER

SAE 140357

Part #	O-Ring Thread Size 1	Female NPSM Size 2	List Price
6902-NWO-4-4	7/16-20	1/4	8.03
6902-NWO-6-4	9/16-18	1/4	7.48
6902-NWO-6-6	9/16-18	3/8	6.37
6902-NWO-8-8	3/4-16	1/2	9.33
6902-NWO-10-8	7/8-14	1/2	10.00
6902-NWO-12-8	1-1/16-12	1/2	12.20
6902-NWO-12-12	1-1/16-12	3/4	15.68
6902-NWO-16-16	1-5/16-12	1	20.00

6902 2067R 1272 9365

O-RINGS

VITON 75 SAE BOSS O-RING

Fluorocarbon

Part #	O-Ring Thread	List Price
4001-2-2	5/16-24	0.78
4001-4-4	7/16-20	1.02
4001-6-6	9/16-18	0.89
4001-8-8	3/4-16	1.17
4001-10	7/8-14	1.41
4001-12	1-1/16-12	1.86
4001-16	1-5/16-12	2.15
4001-20	1-5/8-12	3.86
4001-24	1-7/8-12	9.89
4001-32	2-1/2-12	13.65

HYDRAULIC ADAPTERS

NITRILE 90 SAE BOSS O-RING

Part #	O-Ring Thread	List Price
4000-2-2	5/16-24	0.26
4000-4-4	7/16-20	0.27
4000-6-6	9/16-18	0.34
4000-8-8	3/4-16	0.34
4000-10	7/8-14	0.42
4000-12	1-1/16-12	1.54
4000-14	1-3/16-12	0.57
4000-16	1-5/16-12	0.77
4000-20	1-5/8-12	1.04
4000-24	1-7/8-12	1.08
4000-32	2-1/2-12	1.47

BRAZE TUBE NUT (SLEEVE REQUIRED)

SAE 520110

Part #	Tube O.D.	Braze Tube O.D.	List Price
FSO318-4	1/4	.25	1.03
FSO318-6	3/8	.38	2.45
FSO318-8	1/2	.50	2.28
FSO318-10	5/8	.62	3.25
FSO318-12	3/4	.72	5.56
FSO318-16	1	1.00	8.09
FSO318-20	1 1/4	1.25	6.98
FSO318-24	1 1/2	1.50	10.37

FF318 FF1311

BRAZE TUBE SLEEVE

SAE 520115

Part #	Tube O.D.	List Price
FSO319-4	1/4	1.68
FSO319-6	3/8	1.88
FSO319-8	1/2	2.00
FSO319-10	5/8	2.82
FSO319-12	3/4	2.68
FSO319-16	1	4.66
FSO319-20	1-1/4	4.76
FSO319-24	1-1/2	6.58

FF319 FF3019

See Page 414 for JIC Nut and Sleeve

CAP

SAE 520112

- Two Piece Nut/ Insert

Part #	Tube O.D.	Face Seal Thread	List Price
FSO304-C-4	1/4	9/16-18	2.87
FSO304-C-6	3/8	11/16-16	2.04
FSO304-C-8	1/2	13/16-16	3.52
FSO304-C-10	5/8	1-14	4.80
FSO304-C-12	3/4	1-3/16-12	4.63
FSO304-C-16	1	1-7/16-12	8.16
FSO304-C-20	1-1/4	1-11/16-12	16.52
FSO304-C-24	1-1/2	2-12	18.43

FF304C

BULKHEAD LOCKNUT

SAE 520118

Part #	Thread Size	List Price
FSO306-4	9/16-18	2.31
FSO306-6	11/16-16	3.17
FSO306-8	13/16-16	3.49
FSO306-12	1-3/16-12	5.92
FSO306-16	1-7/16-12	6.92

FF403

MALE UNION CONNECTOR

SAE 520102

Part #	Tube O.D.	Face Seal Thread 1&2	List Price
FSO2403-4-4	1/4	9/16-18	3.71
FSO2403-6-6	3/8	11/16-16	5.83
FSO2403-8-8	1/2	13/16-16	6.13
FSO2403-12-12	3/4	1-3/16-12	10.22
FSO2403-16-16	1	1-7/16-12	12.96

FF2403 FF1203

MALE O-RING FACE SEAL ADAPTER

Part #	Face Seal Thread 1	Male Pipe Size 2	List Price
FSO2404-4-4	9/16-18	1/4-18	3.81
FSO2404-6-4	11/16-16	1/4-18	3.92
FSO2404-6-6	11/16-16	3/8-18	4.33
FSO2404-8-4	13/16-16	1/4-18	4.48
FSO2404-8-8	13/16-16	1/2-14	5.23
FSO2404-12-12	1-3/16-12	3/4-14	8.76
FSO2404-16-16	1-7/16-12	1-11-1/2	10.79

FF2404 4205 FLO

O-RING FACE SEAL ADAPTERS

HYDRAULIC ADAPTERS

FEMALE ORFS TO MALE ORFS REDUCER

Part #	Female Face Seal Size 1	Male Face Seal Thread 2	List Price
FSO2406-6-4	11/16-16	9/16-18	10.25
FSO2406-8-4	13/16-16	9/16-18	20.38
FSO2406-10-6	1-14	11/16-16	34.00
FSO2406-10-8	1-14	13/16-16	8.25
FSO2406-12-6	1-3/16-12	11/16-16	9.33

FF2406 TRLON

PLUG

SAE 520109

Part #	Tube O.D.	Face Seal Thread	List Price
FSO2408-4	1/4	9/16-18	2.88
FSO2408-6	3/8	11/16-16	1.59
FSO2408-8	1/2	13/16-16	2.92
FSO2408-10	5/8	1-14	3.46
FSO2408-12	3/4	1-3/8-12	4.49
FSO2408-16	1	1-7/16-12	6.90
FSO2408-20	1-1/4	1-11/16-12	12.99
FSO2408-24	1-1/2	2-12	11.00

FF2408 FF1254 4229 PNLO

ORFS UNION ELBOW 90°

Part #	Face Seal Thread 1	Face Seal Thread 2	List Price
FS2500-4-4	9/16-18	9/16-18	4.44
FS2500-6-6	11/16-16	11/16-16	8.93
FS2500-10-10	1-14	1-14	7.86
FS2500-12-12	1-3/16-12	1-3/16-12	15.39
FS2500-16-16	1-7/16-12	1-7/16-12	14.00

FF2500 4505 ELO

ORFS TO MALE ELBOW

SAE 520202

Part #	Face Seal Thread 1	Male Pipe Thread 2	List Price
FS2501-4-4	9/16-18	1/4	5.07
FS2501-6-4	11/16-16	1/4	6.95
FS2501-6-6	11/16-16	3/8	5.21
FS2501-8-6	13/16-16	3/8	6.14
FS2501-8-8	13/16-16	1/2	8.08
FS2501-12-12	1-3/8-12	3/4	11.39
FS2501-16-16	1-7/16-12	1	16.22
FS2501-20-20	1-11/16-12	1-1/4	35.83

FF2501 FF1208 4405 CLO

ORFS TO PIPE ELBOW 45°

Part #	Face Seal Thread 1	Male Pipe Thread 2	List Price
FS2503-4-4	9/16-18	1/4	5.87
FS2503-6-6	11/16-16	3/8	7.94
FS2503-8-8	13/16-16	1/2	6.05
FS2503-12-12	1-3/16-12	3/4	9.84
FS2503-16-16	1-7/16-12	1	18.14

FF2503 4355 VLO

ORFS UNION TEE

Part #	Face Seal Thread 1+2+3	List Price
FS2603-4-4	9/16-18	6.14
FS2603-6-6	11/16-16	11.04
FS2603-8-8	13/16-16	8.43
FS2603-12-12	1-3/16-12	17.14

FF2603 4705 JLO

MALE ORFS TO ORB CONNECTOR

SAE 520120

Part #	Face Seal Thread 1	O-Ring Thread 2	List Price
FS6400-O-4-4	9/16-18	7/16-20	1.93
FS6400-O-4-6	9/16-18	9/16-18	1.99
FS6400-O-6-4	11/16-16	7/16-20	6.03
FS6400-O-6-6	11/16-16	9/16-18	1.72
FS6400-O-6-8	11/16-16	3/4-16	6.95
FS6400-O-8-6	13/16-16	9/16-18	6.62
FS6400-O-10-8	1-14	3/4-16	7.95
FS6400-O-10-10	1-14	7/8-14	7.76
FS6400-O-12-8	1-3/16-12	3/4-16	7.93
FS6400-O-12-10	1-3/16-12	7/8-14	7.62
FS6400-O-12-12	1-3/16-12	1-1/16-12	7.58
FS6400-O-12-16	1-3/16-12	1-5/16-12	9.71
FS6400-O-16-12	1-7/16-12	1-1/16-12	9.97
FS6400-O-16-16	1-7/16-12	1-5/16-12	10.19
FS6400-O-20-20	1-11/16-12	1-5/8-12	16.35
FS6400-O-24-24	2-12	1-7/8-12	30.74

4315 FF6400 FF1231

MALE FLAT FACE TO FEMALE 37 ° SWIVEL

Part #	Face Seal Thread 1	JIC Thread 2	List Price
FS6402-4-4	9/16-18	7/16-20	4.81
FS6402-6-6	11/16-16	9/16-18	8.05
FS6402-8-8	13/16-16	3/4-16	6.61
FS6402-10-10	1-14	7/8-14	8.10
FS6402-12-12	1-3/16-12	1-1/16-12	59.52

FF6402 FF1294

SWIVEL NUT ELBOW

Part #	Face Seal Thread 1	Face Seal Thread 2	List Price
FS6500-4-4	9/16-18	9/16-18	7.24
FS6500-6-6	11/16-16	11/16-16	7.24
FS6500-8-8	13/16-16	13/16-16	12.16
FS6500-12-12	1-3/16-12	1-3/16-12	17.53

FF6500 FF1236

MALE JIC 37° FLARE TO FEMALE FLAT FACE SWIVEL

Part #	JIC Thread Size 1	Face Seal Thread 2	List Price
FS6504-4-4	7/16-20	9/16-18	7.60
FS6504-6-6	9/16-18	11/16-16	7.69
FS6504-8-8	3/4-16	13/16-16	7.66
FS6504-10-10	7/8-14	1-14	40.70
FS6504-16-16	1-5/16-12	1-7/16-12	79.62

FF6504 FF1296

O-RING ELBOW CONNECTOR

Part #	Face Seal Thread 1	O-Ring Thread 2	List Price
FS6801-4-4	9/16-18	7/16-20	5.23
FS6801-6-6	11/16-16	9/16-18	6.44
FS6801-8-6	13/16-16	9/16-18	5.44
FS6801-8-8	13/16-16	3/4-16	6.58
FS6801-12-12	1-3/16-12	1-1/16-12	16.39
FS6801-16-16	1-7/16-12	1-5/16-12	25.43
FS6801-20-20	1-11/16-12	1-5/8-12	32.85

FF6801 FF1238 4515

ORFS TO O-RING ELBOW 45°

Part #	Face Seal Thread 1	O-Ring Size 2	List Price
FS6802-4-4	9/16-18	7/16-20	5.18
FS6802-6-6	11/16-16	9/16-18	7.24
FS6802-8-8	13/16-16	3/4-16	8.43
FS6802-10-10	1-14	7/8-14	11.48
FS6802-12-12	1-3/16-12	1-1/16-12	14.44
FS6802-16-16	1-7/16-12	1-5/16-12	32.29
FS6802-20-20	1-11/16-12	1-5/8-12	33.76

FF6802 4365 V5OLO

STEEL BSPT ADAPTERS

STRAIGHT THREAD SWIVEL NUT ELBOW

Part #	O-Ring Thread 1	Face Seal Thread 2	List Price
FS6809-4-4	7/16-20	9/16-18	8.81
FS6809-6-6	9/16-18	11/16-16	9.24
FS6809-8-8	3/4-16	13/16-16	10.72
FS6809-12-12	1-1/16-12	1-3/16-12	32.52

FF6809 FF1239 4535 AOELC

STEEL BSPT ADAPTERS

JIC MALE CONNECTOR BSPT

Part #	JIC Thread Size 1	Male BSPT 2	List Price
7000-4-2	7/16-20	1/8-28	7.86
7000-4-4	7/16-20	1/4-19	8.09
7000-6-4	9/16-18	1/4-19	12.26
7000-6-6	9/16-18	3/8-19	9.55
7000-6-8	9/16-18	1/2-14	22.55
7000-8-6	3/4-16	3/8-19	9.67
7000-8-8	3/4-16	1/2-14	10.33
7000-8-12	3/4-16	3/4-14	24.60
7000-10-8	7/8-14	1/2-14	18.10
7000-10-12	7/8-14	3/4-14	21.77
7000-12-8	1-1/16-12	1/2-14	31.96
7000-12-12	1-1/16-12	3/4-14	15.63
7000-16-16	1-5/16-12	1-11	45.75
7000-20-20	1-5/8-12	1-1/4-11	150.48

3404 3O5

JIC MALE ELBOW BSPT

Part #	JIC Thread Size 1	Male BSPT 2	List Price
7200-4-2	7/16-20	1/8-28	20.35
7200-4-4	7/16-20	1/4-19	14.54
7200-6-4	9/16-18	1/4-19	18.52
7200-6-6	9/16-18	3/8-19	22.76
7200-6-8	9/16-18	1/2-14	41.73
7200-8-6	3/4-16	3/8-19	28.53
7200-8-8	3/4-16	1/2-14	20.37
7200-12-12	1-1/16-12	3/4-14	28.00
7200-16-16	1-5/16-12	1-11	80.86

3501 315

HYDRAULIC ADAPTERS

BSPT HEX NIPPLE

Part #	Male BSPT 1	Male BSPT 2	List Price
7520-2-2	1/8-28	1/8-28	17.08
7520-4-4	1/4-19	1/4-19	4.80
7520-6-6	3/8-19	3/8-19	13.74
7520-8-8	1/2-14	1/2-14	15.24
7520-10-10	5/8-14	5/8-14	39.46
7520-12-12	3/4-14	3/4-14	23.74

3520 MBT

BSPT PLUG

Part #	BSPT	List Price
9508-2	1/8-28	8.26
9508-4	1/4-19	5.95
9508-6	3/8-19	6.37
9508-8	1/2-14	11.11
9508-12	3/4-14	24.18
9508-16	1-11	27.33

100B-Y KA-RM MHL 296

STEEL BSPP ADAPTERS

BSPP HEX NIPPLE

Part #	Male BSPP 1	Male BSPP 2	List Price
7420-2-2	1/8-28	1/8-28	14.64
7420-4-2	1/4-19	1/8-28	11.43
7420-6-4	3/8-19	1/4-19	10.88
7420-6-6	3/8-19	3/8-19	14.22
7420-8-6	1/2-14	3/8-19	14.29
7420-8-8	1/2-14	1/2-14	18.19
7420-10-8	5/8-14	1/2-14	24.49
7420-12-8	3/4-14	1/2-14	24.04
7420-12-12	3/4-14	3/4-14	31.42
7420-16-12	1-11	3/4-14	36.04
7420-16-16	1-11	1-11	53.56

3420 MB 9022

BSPP COUPLING

Part #	BSPP	List Price
7425-2	1/8-28	21.77
7425-4	1/4-19	13.29
7425-8	1/2-14	16.19
7425-10	5/8-14	27.21
7425-12	3/4-14	38.55
7425-16	1-11	64.63

3425 FB

JIC TO FEMALE BSPP STRAIGHT SWIVEL

Part #	JIC Thread Size 1	Female BSPP Swivel 2	List Price
7240-4	7/16-20	1/4-19	21.54
7240-6	9/16-18	3/8-19	19.47
7240-8	3/4-16	1/2-14	26.53
7240-10	7/8-14	5/8-14	38.55
7240-12	1-1/16-12	3/4-14	40.59
7240-16	1-5/16-12	1-11	54.42

3240 MJFBS

JIC TO BSPP MALE ELBOW

Part #	JIC Thread Size 1	Male BSPP 2	List Price
7202-NWO-4-2	7/16-20	1/8-28	40.67
7202-NWO-4-4	7/16-20	1/4-19	31.93
7202-NWO-6-4	9/16-18	1/4-19	16.17
7202-NWO-6-6	9/16-18	3/8-19	24.10
7202-NWO-6-8	9/16-18	1/2-14	32.25
7202-NWO-8-6	3/4-16	3/8-19	24.79
7202-NWO-8-8	3/4-16	1/2-14	35.14
7202-NWO-8-12	3/4-16	3/4-14	47.60
7202-NWO-10-8	7/8-14	1/2-14	40.04
7202-NWO-12-12	1-1/16-12	3/4-14	31.07
7202-NWO-12-16	1-1/16-12	1-11	91.43
7202-NWO-16-16	1-5/16-12	1-11	56.92

3801 315

JIC TO BSPP 45° ELBOW

Part #	JIC Thread Size 1	Male BSPP 2	List Price
7802-4	7/16-20	1/4-19	36.12
7802-6	9/16-18	3/8-19	55.56
7802-8	3/4-16	1/2-14	73.70
7802-12	1-1/16-12	3/4-14	99.77
7802-16	1-5/16-12	1-11	103.40

3802 35J

BSPP TO MALE PIPE NIPPLE

Part #	Male BSPP Size 1	Male Pipe Thread Size 2	List Price
7825-2	1/8-28	1/8	10.15
7825-4	1/4-19	1/4	5.66
7825-6	3/8-19	3/8	11.02
7825-8	1/2-14	1/2	12.67
7825-12	3/4-14	3/4	11.70
7825-16	1-11	1	21.83

MBMP 3825

JIC TO BSPP MALE CONNECTOR

Part #	JIC Thread Size 1	Male BSPP 2	List Price
7002-4-2	7/16-20	1/8-28	7.14
7002-4-4	7/16-20	1/4-19	8.33
7002-4-6	7/16-20	3/8-19	8.08
7002-4-8	7/16-20	1/2-14	31.74
7002-6-4	9/16-18	1/4-19	6.00
7002-6-6	9/16-18	3/8-19	9.50
7002-6-8	9/16-18	1/2-14	7.86
7002-8-6	3/4-16	3/8-19	7.47
7002-8-8	3/4-16	1/2-14	10.10
7002-8-12	3/4-16	3/4-14	21.37
7002-10-8	7/8-14	1/2-14	19.11
7002-12-12	1-1/16-12	3/4-14	11.57
7002-12-16	1-1/16-12	1-11	31.84
7002-16-16	1-5/16-12	1-11	30.10

30J 3800

STEEL BSPP ADAPTERS

JIC TO BSPP STRAIGHT SWIVEL

Part #	JIC Thread Size 1	Male BSPP 2	List Price
7022-4-2	7/16-20	1/8-28	20.41
7022-4-4	7/16-20	1/4-19	20.42
7022-6-4	9/16-18	1/4-19	24.27
7022-6-6	9/16-18	3/8-19	17.67
7022-8-6	3/4-16	3/8-19	21.70
7022-8-8	3/4-16	1/2-14	17.91
7022-10-8	7/8-14	1/2-14	20.18
7022-12-12	1-1/16-12	3/4-14	50.15
7022-16-16	1-5/16-12	1-11	89.94

3402 3055

HEX HEAD PLUG BSPP

Part #	Male BSPP	List Price
9522-P-2	1/8-28	4.23
9522-P-4	1/4-19	3.60
9522-P-6	3/8-19	5.24
9522-P-8	1/2-14	6.17
9522-P-12	3/4-14	9.80
9522-P-16	1-11	20.39

3408

HOLLOW HEX PLUG BSPP

Part #	Male BSPP	List Price
9522-H-2	1/8-28	4.07
9522-H-4	1/4-19	4.57
9522-H-6	3/8-19	7.30
9522-H-8	1/2-14	11.17
9522-H-12	3/4-14	16.77
9522-H-16	1-11	43.58

3408 HHP

FEMALE ADAPTER BSPP

Part #	Female Pipe 1	Male BSPP 2	List Price
7042-2-2	1/8	1/8-28	7.87
7042-4-2	1/4	1/8-28	20.95
7042-4-4	1/4	1/4-19	12.76
7042-6-6	3/8	3/8-19	16.43
7042-8-8	1/2	1/2-14	28.57
7042-12-12	3/4	3/4-14	31.43
7042-16-16	1	1-11	38.94

3455 MMFP

STEEL METRIC ADAPTERS

MALE CONNECTOR

Part #	JIC Thread Size 1	Metric Thread 2	List Price
7005-4-10	7/16-20	10x1.0	7.14
7005-4-12	7/16-20	12x1.5	8.23
7005-4-14	7/16-20	14x1.5	8.47
7005-4-18	7/16-20	18x1.5	12.10
7005-5-12	1/2-20	12x1.5	12.38
7005-5-14	1/2-20	14x1.5	70.07
7005-6-14	9/16-18	14x1.5	7.30
7005-6-16	9/16-18	16x1.5	10.27
7005-6-18	9/16-18	18x1.5	13.07
7005-8-16	3/4-16	16x1.5	8.44
7005-8-18	3/4-16	18x1.5	10.27
7005-8-22	3/4-16	22x1.5	13.77
7005-10-18	7/8-14	18x1.5	13.54
7005-10-20	7/8-14	20x1.5	15.40
7005-10-22	7/8-14	22x1.5	17.61
7005-12-22	1-1/16-12	22x1.5	30.77
7005-12-27	1-1/16-12	27x1.5	47.00

Port-seal crush washer and O-ring included 7400 30J (R) 7011

MALE ELBOW

Part #	JIC Thread Size 1	Metric Thread 2	List Price
7205-NWO-4-10	7/16-20	10x1.0	29.93
7205-NWO-4-12	7/16-20	12x1.5	36.38
7205-NWO-4-14	7/16-20	14x1.5	23.13
7205NWO-5-12	1/2-20	12x1.5	59.81
7205-NWO-6-14	9/16-18	14x1.5	44.76
7205-NWO-6-16	9/16-18	16x1.5	33.91
7205-NWO-8-16	3/4-16	16x1.5	39.69
7205-NWO-8-18	3/4-16	18x1.5	13.10
7205-NWO-8-22	3/4-16	22x1.5	24.00
7205-NWO-10-18	7/8-14	18x1.5	20.80

Port-seal crush washer and O-ring included

7801 315 (R)

STRAIGHT SWIVEL

Part #	JIC Thread Size 1	Metric Thread 2	List Price
7025-4-10	7/16-20	10x1.0	24.94
7025-4-12	7/16-20	12x1.5	57.45
7025-5-12	1/2-20	12x1.5	29.75
7025-6-14	9/16-18	14x1.5	29.36
7025-6-16	9/16-18	16x1.5	27.21
7025-8-16	3/4-16	16x1.5	79.72
7025-10-22	7/8-14	22x1.5	61.22
7025-12-27	1-1/16-12	27x2.0	42.36
7025-16-33	1-5/16-12	33x2.0	52.24

7402 30JS (R)

HEX HEAD PLUG METRIC PARALLEL

Part #	Metric Thread	List Price
8555-P-10	10x1.0	1.93
8555-P-12	12x1.5	8.69
8555-P-14	14x1.5	12.11
8555-P-16	16x1.5	2.46
8555-P-18	18x1.5	20.64
8555-P-20	20x1.5	4.00
8555-P-22	22x1.5	4.66
8555-P-26	26x1.5	20.72
8555-P-30	30x1.5	56.01

7408

HOLLOW HEX HEAD PLUG METRIC PARALLEL

Part #	Metric Thread	List Price
8555-H-10	10x1.0	4.23
8555-H-12	12x1.5	3.50
8555-H-14	14x1.5	6.41
8555-H-16	16x1.5	10.60
8555-H-18	18x1.5	12.23
8555-H-20	20x1.5	17.95
8555-H-22	22x1.5	10.56
8555-H-26	26x1.5	55.65
8555-H-30	30x1.5	35.78

7408 HHP

FEMALE ADAPTER

Part #	Female Pipe Thread 1	Metric Thread 2	List Price
7045-2-10	1/8	10x1.0	9.23
7045-4-12	1/4	12x1.5	19.89
7045-4-14	1/4	14x1.5	21.77
7045-6-12	3/8	12x1.5	33.06
7045-6-16	3/8	16x1.5	27.21
7045-6-18	3/8	18x1.5	18.74
7045-8-16	1/2	16x1.5	52.96
7045-8-18	1/2	18x1.5	27.65
7045-8-22	1/2	22x1.5	20.77
7045-12-27	3/4	27x2.0	51.88
7045-16-33	1	33x2.0	99.56

MMFP (R)

QUICK DISCONNECT

HYDRAULIC ADAPTERS

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	List Price
61-150	3/4	1/2	3000	56.45
61-152	3/4	3/4	3000	56.45
61-153	1	1	3000	71.16
61-154	1-1/4	1-1/4	2750	98.74
61-155	1-1/2	1-1/2	2500	151.28

Part #	Body Size	Female NPT	Max PSI	List Price
61-050	3/4	1/2	3000	56.45
61-052	3/4	3/4	3000	56.45
61-053	1	1	3000	71.16
61-054	1-1/4	1-1/4	2750	98.74
61-055	1-1/2	1-1/2	2500	151.28

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	List Price
ANV-14-F	1/4"	1/4"	10.43
ANV-38-F	3/8"	3/8"	11.75
ANV-12-F	1/2"	1/2"	15.81
ANV-34-F	3/4"	3/4"	33.06
ANV-1-F	1"	1"	42.86

ISO-A FEMALE PIPE PLUG

Part #	Body Size	NPT	List Price
ANV-14-M	1/4"	1/4"	4.53
ANV-38-M	3/8"	3/8"	6.38
ANV-12-M	1/2"	1/2"	7.34
ANV-34-M	3/4"	3/4"	10.95
ANV-1-M	1"	1"	18.65

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

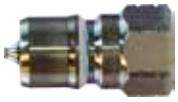
B=BRASS

BRASS - HNV SERIES PLUG

BRASS - HNV SERIES COUPLER

ISO-B FEMALE PIPE COUPLER

Part #	Body Size	NPT	List Price
HNV-14-F	1/4"	1/4"	11.46
HNV-14-F-B	1/4"	1/4"	19.05
HNV-38-F	3/8"	3/8"	12.00
HNV-38-F-B	3/8"	3/8"	30.48
HNV-12-F	1/2"	1/2"	17.39
HNV-12-F-B	1/2"	1/2"	34.77
HNV-34-F	3/4"	3/4"	28.00
HNV-34-F-B	3/4"	3/4"	72.06
HNV-1-F	1"	1"	44.73
HNV-1-F-B	1"	1"	112.92



ISO-B FEMALE PIPE PLUG

Part #	Body Size	NPT	List Price
HNV-14-M	1/4"	1/4"	5.40
HNV-14-M-B	1/4"	1/4"	9.01
HNV-38-M	3/8"	3/8"	6.64
HNV-38-M-B	3/8"	3/8"	13.33
HNV-12-M	1/2"	1/2"	7.81
HNV-12-M-B	1/2"	1/2"	22.61
HNV-34-M	3/4"	3/4"	13.75
HNV-34-M-B	3/4"	3/4"	27.05
HNV-1-M	1"	1"	23.63
HNV-1-M-B	1"	1"	40.95

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

FF Series
HTMN
74N

FEMALE PIPE COUPLER

Part #	Body Size	NPT	List Price
FF-14-F	1/4"	1/4"	34.15
FF-38-F	3/8"	3/8"	45.53
FF-12-F	1/2"	1/2"	71.20
FF-3812-F	3/8"	1/2"	42.60
FF-1234-F	1/2"	3/4"	60.63
FF-3416-F	3/4"	1"	78.86
FF-34-F	3/4"	3/4"	68.87
FF-1-F	1"	1"	136.37

FEMALE PIPE PLUG

Part #	Body Size	NPT	List Price
FF-14-M	1/4"	1/4"	20.31
FF-38-M	3/8"	3/8"	22.97
FF-12-M	1/2"	1/2"	32.65
FF-3812-M	3/8"	1/2"	18.93
FF-1234-M	1/2"	3/4"	30.27
FF-3416-M	3/4"	1"	41.50
FF-34-M	3/4"	3/4"	26.66
FF-1-M	1"	1"	62.40

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			

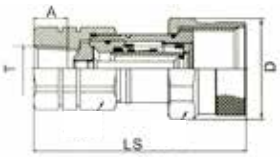
Standard seal material is **NBR**

Test Fluid-Oil = 200 SUS

APPLICATIONS
• Widely used in public equipment
• Portable construction equipment.
• Hydraulic tools
• Vehicles

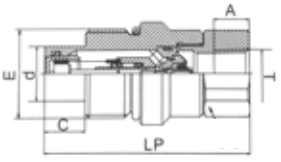
FEATURES
• New valve design provides better resistance from high flow and the pressure of impulse, thus providing advanced performance.
• Special nipple design for connecting under pressure, allows connection and disconnection with high residual pressures.
• The LSQ-VEP series employs a threaded sleeve 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	List Price
LSQ-VEP-12-SF	4.09	1.13	0.67	1/2	168.37
LSQ-VEP-34-SF	4.49	2.13	0.79	3/4	218.97
LSQ-VEP-1-SF	5.28	2.33	0.83	1	277.48
LSQ-VEP-20-SF	5.71	2.72	0.83	1-1/4	320.85
LSQ-VEP-24-SF	7.41	3.63	0.83	1-1/2	682.91



FEMALE PLUG

Part #	LS	D	A	NPT	List Price
LSQ-VEP-12-PF	4.09	1.13	0.67	1/2	168.37
LSQ-VEP-34-PF	4.49	2.13	0.79	3/4	197.30
LSQ-VEP-1-PF	5.28	2.33	0.83	1	227.63
LSQ-VEP-20-PF	5.71	2.72	0.83	1-1/4	320.85
LSQ-VEP-24-PF	7.41	3.63	0.83	1-1/2	652.73

QUICK DISCONNECT

HYDRAULIC ADAPTERS

Snap-Tite 60 Series

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

FEMALE PIPE COUPLER

Part #	Body Size	NPT	List Price
NV-14-F	1/4"	1/4"	10.43
NV-38-F	3/8"	3/8"	11.75
NV-12-F	1/2"	1/2"	32.14
NV-34-F	3/4"	3/4"	53.57
NV-1-F	1"	1"	72.07

FEMALE PIPE PLUG

Part #	Body Size	NPT	List Price
NV-14-M	1/4"	1/4"	3.76
NV-38-M	3/8"	3/8"	9.75
NV-12-M	1/2"	1/2"	14.62
NV-34-M	3/4"	3/4"	27.10
NV-1-M	1"	1"	40.13

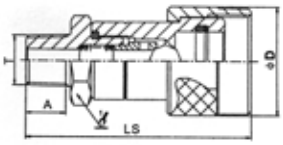
FEATURES

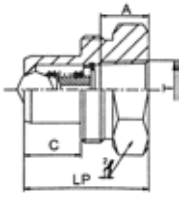
- Heavy duty heat treated poppet: valves are standard with rugged, specially-designed seals made of nitrite for leak-free performance in the toughest application.
- High-strength steel valve guides designed for high flow rates and made extra tough for agricultural service.
- Dependable hardened chrome 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	List Price
KZE-B-14-SM	2.40	1.14	0.87	0.55	1/4	22.60
KZE-B-38-SM	2.91	1.38	0.98	0.57	3/8	23.74

FEMALE COUPLER

Part #	LS	D	Hex	A	NPT	List Price
KZE-B-14-PF	1.30	0.44	0.75	0.51	1/4	10.74
KZE-B-38-PF	1.38	0.63	1.26	0.55	3/8	11.34

(Charlynn 101 / Danfoss DH / White HS / Parker ME-MB-TE-TJ / -RR-USA HP)

The MMPH series gear set, shaft distribution flow, hydraulic motor is a compact, high efficient, low speed high torque design which can be used in either parallel or series systems.

Part #		MMPH50	MMPH80	MMPH100	MMPH125	MMPH160	MMPH200	MMPH250	MMPH315	MMPH400
List Price		448.39	450.48	462.99	476.55	486.98	495.33	505.76	515.15	559.57
Displacement cm3/rev(cu.in/rev)		51.7 (3.15)	77.7 (4.75)	96.2 (5.9)	118 (7.2)	156 (9.5)	190 (11.6)	231 (14.1)	312 (19)	387 (23.6)
Max Speed rpm	Cont.	880	740	590	475	370	295	240	190	150
	Int.	975	825	675	595	465	370	295	235	185
Max Torque NW (in.lbs)	Cont.	81 (717)	129(1140)	161(1425)	202(1790)	245(2170)	286(2530)	360(3185)	406(3575)	435(3850)
	Int.	108(956)	171(1514)	213(1885)	268(2372)	342(3026)	390(3450)	456(4035)	505(4470)	533(4717)
Max performance KW/ (HP)	Cont.	7(9.4)	9.1(12.2)	9(12.1)	9.1(12.2)	8.7(11.65)	8.1(10.85)	8.2(11)	7.2(9.7)	6.1(8.2)
	Int.	8.9(12)	11.8(15.8)	11.9(15.95)	11.8(15.8)	11.9(15.95)	10.9(14.7)	10.1(13.5)	8.6(11.5)	7.2(9.65)
Max Differential Mpa/ (PSI)	Cont.	12.5(1840)	12.5(1840)	12.5(1840)	12.5(1840)	12.5(1840)	11(1625)	11(1625)	11(1625)	10(1450)
	Int.	16.5(2425)	16.5(2425)	16.5(2425)	16.5(2425)	16.5(2425)	16.5(2425)	14(2060)	12.5(1840)	10.5(1540)
Max flow L/min. / (gpm)	Cont.	45(11.85)	60(15.8)	60(15.8)	60(15.8)	60(15.8)	60(15.8)	60(15.8)	60(15.8)	60(15.8)
	Int.	50(13.15)	75(19.75)	75(19.75)	75(19.75)	75(19.75)	75(19.75)	75(19.75)	75(19.75)	75(19.75)
Weight	lb.	5.6	5.7	5.9	6	6.2	6.4	6.6	6.9	7.4

ORDERING INFORMATION

MMPH	50	H2	K	P
MODEL SERIES	**FRAME SIZE** (cu.in/rev)	**MOUNTING FLANGE TYPE**	**DRIVE SHAFT**	**PORT SIZE**
MMPH (GEROTOR)	**MMPH** / **MMRS**	H4 - 4 Bolt	K - 1 Inch Woodruff Key	P - 1/2 NPTF
MMRS (GEROTOR)	50 (3.15) / 50 (3.13)	H2 - SAE "A" 2 Bolt	S - SAE - 6B Spline	S - 7/8-14 SAE "O" Ring
	80 (4.74) / 80 (4.92)	H6 - Magneto	H - 1 Inch parallel 0.40 dia. crosshole	F - Manifold
	100 (5.87) / 100 (6.15)		H1 - 1 Inch parallel 0.31 dia. crosshole	
	125 (7.19) / 125 (7.62)			
	160 (9.49) / 160 (9.59)			
	200 (11.59) / 200 (12.15)			
	250 (15.25) / 250 (15.38)			
	315 (19.02) / 315 (19.2)			
	400 (23.57) / 375 (22.58)			

(Charlynn 103 & 158 / Danfoss DS / Parker ME-MB-TE-TJ / RR-USA HR)

The MMRS series advanced gear set, shaft distribution flow, hydraulic motor is a compact, low noise, highly efficient torque low speed design. The gear set also affords a reliable smooth start-up at low pressure. The special design of the drive linkage and high pressure capability of the shaft seal provides a long life and these motors can be used in either series or parallel operation.

Part #		MMRS50	MMRS80	MMRS100	MMRS125	MMRS160	MMRS200	MMRS250	MMRS315	MMRS375
List Price		538.10	555.83	560.00	576.69	592.34	599.64	624.67	628.84	659.09
Displacement cm3/rev(cu.in/rev)		51.3 (3.13)	80.6 (4.92)	100.8 (6.15)	124.9 (7.62)	157.2 (9.59)	199.2 (12.15)	252 (15.38)	314.5 (19.2)	370 (22.58)
Max Speed rpm	Rated	755	750	600	475	375	300	240	190	160
	Cont.	970	940	750	600	470	375	300	240	200
Max Torque NW (in.lbs)	Cont.	100(885)	190(1682)	240(2124)	292(2584)	363(3273)	358(3168)	352(3115)	360(3186)	420(3717)
	Int.	126(1115)	220(1947)	280(2478)	340(3010)	430(3806)	448(3965)	470(4159)	470(4159)	548(4850)
Max performance KW/ (HP)	Cont.	7.7(10.3)	15(20.10)	15(20.10)	14(18.75)	14(18.75)	11(14.75)	9(12.10)	7.2(9.7)	6.1(8.2)
	Int.	9.7(13)	17(22.8)	17(22.8)	16(21.45)	16(21.45)	14(18.75)	12(16.10)	9(12.10)	12(16.10)
Max Differential Mpa/ (PSI)	Cont.	14(2061)	17.5(2576)	17.5(2576)	17.5(2576)	16.5(2429)	13(1914)	11(1619)	8.5(1251)	8.5(1251)
	Int.	17.5(2576)	20(2944)	20(2944)	20(2944)	20(2944)	17.5(2576)	14(2061)	11.5(1693)	11.5(1693)
Max flow L/min. / (gpm)	Cont.	40(10.5)	60(15.8)	60(15.8)	60(15.8)	60(15.8)	60(15.8)	60(15.8)	60(15.8)	60(15.8)
	Int.	50(13.1)	75(19.75)	75(19.75)	75(19.75)	75(19.75)	75(19.75)	75(19.75)	75(19.75)	75(19.75)
Weight	lb.	6.7	6.9	6.9	7.2	7.5	8.0	8.5	9.0	9.3

HYDRAULIC GEAR PUMP

MODEL # MGP-F10

- All Aluminium construction.
- 7 Displacement sizes from 0.07 to 0.37 cu. in/rev.
- Mounting flange is SAE AA-2 bolt.
- Ports are SAE-8 inlet and SAE-6 outlet.
- Drive shaft is a 1/2 inch straight shaft with 1/8 key.

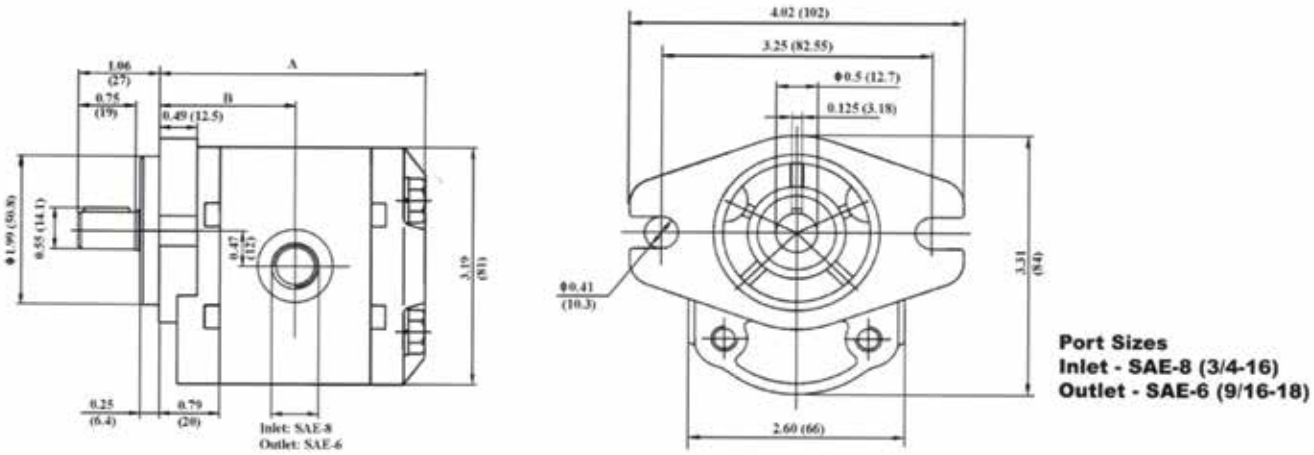
Recommended working conditions:

- Filtration 25 micron or better.
- Oil Viscosity 6 to 200 cSt.
- Inlet pressure 12 to 32 psi abs.
- Oil Temperature -25 to 55 degrees C (-12 to 175 F°).
- Ambient -22 to 55 C° (-8 to 130 F°).

Part #	Displacement cu.in/rev	PSI	Speed RPM		Weight Lbs	List Price
			Rated	Max		
MGP-F10-13	0.07	3625	2000	5000	2.02	323.30
MGP-F10-20	0.12	3625	2000	5000	2.31	332.86
MGP-F10-27	0.16	3625	2000	5000	2.68	332.86
MGP-F10-34	0.20	3625	2000	5000	2.99	332.86
MGP-F10-41	0.25	3625	2000	4000	3.34	391.08
MGP-F10-51	0.31	3625	2000	4000	3.78	391.08
MGP-F10-61	0.37	3625	2000	4000	4.18	391.08

- Displacement (cu.in/ rev) x speed (RPM)/ 231 Volumetric efficiency %≥93
- GPM X 231/ RPM = CU.IN

INSTALLATION DATA



Part #	A		B	
	Millimeters	Inches	Millimeters	Inches
MGP-F10-13	82	3.23	42	1.65
MGP-F10-20	84	3.3	43	1.69
MGP-F10-27	86	3.39	44	1.73
MGP-F10-34	88	3.46	45	1.77

Part #	A		B	
	Millimeters	Inches	Millimeters	Inches
MGP-F10-41	90	3.54	46	1.81
MGP-F10-51	93	3.66	47.5	1.87
MGP-F10-61	96	3.78	49	1.93

ORDERING INFORMATION

MGP	F10	16	P	C
Aluminum Gear Pump	High Pressure Series	Displacement cm3/rev (see chart) 13/20/27/34 41/51/61	Drive Shaft P-1/2 Dia	Rotation Direction C-Clockwise A-Counter Clockwise (viewed from drive shaft end)

MODEL # MGP-F20

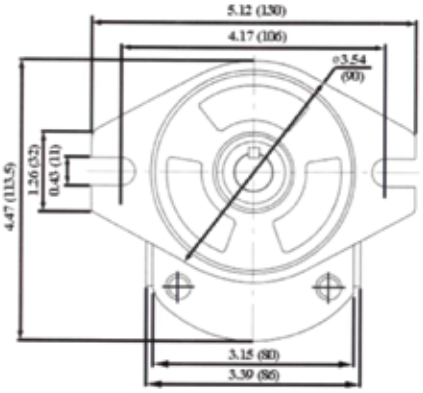
- Aluminium construction.
- 8 Displacement sizes from 0.36 to 1.52 cu. in/rev.
- Mounting flange is SAE A-2 bolt.
- Ports are SAE-12 inlet and SAE-10 outlet.
- Drive shaft is a 5/8 inch diameter straight with 5/32 straight key.

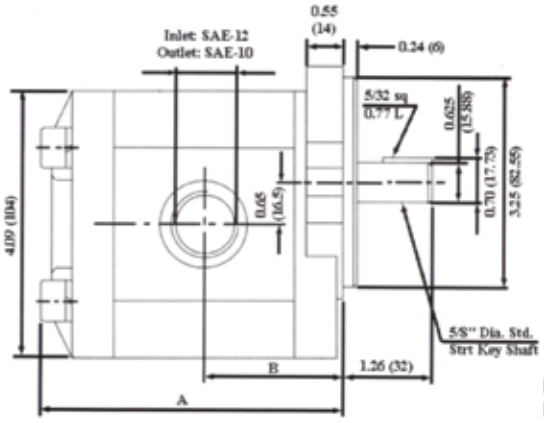
Recommended working conditions:

- Filtration 25 micron or better.
- Oil Viscosity 6 to 200 cSt.
- Inlet pressure 12 to 32 psi abs.
- Oil Temperature -25 to 55 degrees C (-12 to 175 F°).
- Ambient -22 to 55 C° (-8 to 130 F°).

Part #	Displacement cu.in/rev	PSI	Speed RPM		Weight Lbs	List Price
			Rated	Max		
MGP-F20-06	0.36	3650	2000	3000	5.35	391.60
MGP-F20-08	0.48	3650	2000	3600	5.61	391.60
MGP-F20-10	0.61	3650	2000	3600	5.72	391.60
MGP-F20-12	0.73	3650	2000	3600	5.91	391.60
MGP-F20-14	0.85	3650	2000	3600	6.00	408.34
MGP-F20-16	0.97	2900	2000	3600	6.27	408.34
MGP-F20-20	1.22	2900	2000	3600	6.73	408.34
MGP-F20-25	1.52	2900	2000	3600	7.19	408.34

INSTALLATION DATA





Port Sizes
Inlet - SAE-12 (1 1/16-12)
Outlet - SAE-10 (7/8-14)

Part #	A		B	
	Millimeters	Inches	Millimeters	Inches
MGP-F20-06	98	3.87	45	1.77
MGP-F20-08	100	3.95	47	1.85
MGP-F20-10	104	4.12	48	1.89
MGP-F20-12	108	4.25	50	1.97

Part #	A		B	
	Millimeters	Inches	Millimeters	Inches
MGP-F20-14	110	4.35	51	2
MGP-F20-16	114	4.50	52.5	2.07
MGP-F20-20	120	4.72	56	2.2
MGP-F20-25	128	5.05	60	2.36

ORDERING INFORMATION

MGP	F20	16	P	C
Aluminum Gear Pump	High Pressure Series	Displacement cm3/rev (see chart) 06/08/10/12/14/16 20/25	Drive Shaft P-5/8 Dia Straight P1-3/4 Dia Straight S9-Spline 9 tooth	Rotation Direction C-Clockwise A-Counter Clockwise (viewed from drive shaft end)

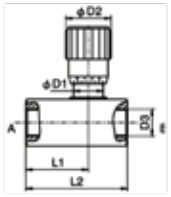
MM-FC SERIES FLOW CONTROL VALVES

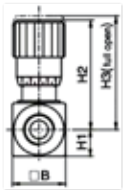
FEATURES:
• Micrometer adjustment knob for accurate valve setting.
• Rugged construction.
TECHNICAL DATA:
• Materials

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





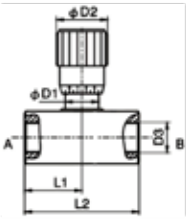
Part#	B	D1	D2	D3	H1	H2	H3	L1	L2	WEIGHT (lbs)	List Price
MMFC4NPT	1.10	0.76	1.18	1/4 NPT	0.55	2.41	2.67	1.54	2.52	0.90	65.09
MMFC6NPT	1.10	0.76	1.18	3/8 NPT	0.55	2.41	2.67	1.69	2.75	0.90	61.90
MMFC8NPT	1.50	0.95	1.46	1/2 NPT	0.75	3.07	3.41	2.05	3.27	2.00	67.80
MMFC12NPT	1.50	0.95	1.46	3/4 NPT	0.75	3.08	3.41	2.19	3.50	2.00	76.19
MMFC16NPT	1.89	1.38	1.89	1 NPT	0.94	4.03	4.50	2.79	4.60	4.20	143.52
MMFC20NPT	2.38	1.96	2.28	1-1/4 NPT	1.18	5.25	5.88	3.39	6.07	9.55	249.44

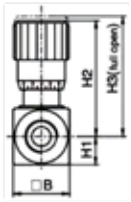
MM-NV SERIES NEEDLE VALVES

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





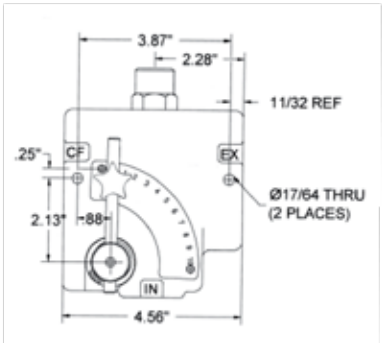
Part#	B	D1	D2	D3	H1	H2	H3	L1	L2	WEIGHT (lbs)	List Price
MMNV4NPT	1.10	0.76	1.18	1/4 NPT	0.55	2.41	2.67	1.07	2.13	0.90	54.88
MMNV6NPT	1.10	0.76	1.18	3/8 NPT	0.55	2.41	2.67	1.07	2.13	0.90	72.22
MMNV8NPT	1.50	0.95	1.46	1/2 NPT	0.75	3.07	3.41	1.34	2.38	2.00	83.06
MMNV12NPT	1.50	0.95	1.46	3/4 NPT	0.75	3.08	3.41	1.54	3.09	2.00	77.39
MMNV16NPT	1.89	1.38	1.89	1 NPT	0.94	4.03	4.50	1.81	3.62	4.20	117.24

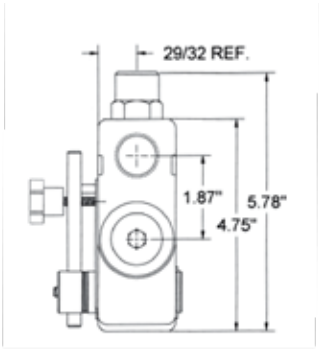
PRESSURE COMPENSATING VARIABLE FLOW CONTROL

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	List Price
MFC-38-N	3/8" - NPT	0-8 gpm	194.11
MFC-12-N	1/2" - NPT	0-16 gpm	194.11
MFC-34-N	3/4" - NPT	0-30 gpm	194.11

SCREW-ON TYPE AIR BREATHERS

• Chrome Plated Steel • 1/4 To 1 Inch NPT • 40 Micron Breather

Part Number	Flow cfm	NPT	List Price
MB40-04	10	1/4	16.96
MB40-06	10	3/8	22.68
MB40-08	10	1/2	23.78
MB40-12	25	3/4	27.77
MB40-16	25	1	36.11

Part#	Page	Part#	Page	Part#	Page	Part#	Page	Part#	Page	Part#	Page
0304-10	399	100025	207	10-040	50	10-106	52	10-208	54	10-257LF	159
0304-12	399	1000265	207	10-041	50	10-106L	52	10-209	54	10-258	55
0304-16	399	10-003	49	10-041LF	159	10-106LF	159	10-210	54	10-258LF	159
0304-4	399	100035	207	10-042	50	10-107	52	10-211	54	10-259	55
0304-6	399	1000365	207	10-042LF	159	10-108	52	10-212	54	10-259L	55
0304-8	399	10-003L	49	10-043	50	10-108L	52	10-213	54	10-260	55
0304-C-10	399	10-004	49	10-044	50	10-108LF	159	10-214	54	10-260L	55
0304-C-12	399	100045	207	10-045	50	10-109	52	10-215	54	10-261	55
0304-C-14	399	1000465	207	10-046	50	10-109L	52	10-216	54	10-262	55
0304-C-16	399	10-005	49	10-047	50	10-109LF	159	10-217	54	10-262LF	159
0304-C-2	399	10-006	49	10-048	50	10-110	52	10-218	54	10-263	55
0304-C-20	399	100065	207	10-049	50	10-110L	52	10-219	54	10-263L	55
0304-C-24	399	1000665	207	10-051	50	10-110LF	159	10-220	54	10-263LF	159
0304-C-3	399	10-007	49	10-052	50	10-111	52	10-221	54	10-264	55
0304-C-32	399	10-008	49	10-053	50	10-112	52	10-227	54	10-264L	55
0304-C-4	399	100085	207	10-054	50	10-117	53	10-228	54	10-264LF	159
0304-C-5	399	1000865	207	10-055	50	10-118	53	10-228L	54	10-265	55
0304-C-6	399	1001125	207	10-056	50	10-118LF	159	10-229	54	10-265L	55
0304-C-8	399	10011265	207	10-058	50	10-119	53	10-229L	54	10-265LF	159
0306-10	402	1001165	207	10-063	51	10-120	53	10-229LF	159	10-266	55
0306-12	402	10011665	207	10-064	51	10-121	53	10-230	54	10-267	55
0306-14	402	1001205	207	10-065	51	10-122	53	10-231	54	10-267LF	159
0306-16	402	10012065	207	10-066	51	10-123	53	10-232	54	10-268	55
0306-2	402	1001245	207	10-067	51	10-131	52	10-233	54	10-268L	55
0306-20	402	10012465	207	10-068	51	10-133	52	10-234	54	10-268LF	159
0306-4	402	10-013	49	10-069	51	10-135	59	10-235	54	10-269	55
0306-5	402	10-013	86	10-074	51	10-136	59	10-235L	54	10-269L	55
0306-6	402	10-014	49	10-075	51	10-137	59	10-236	54	10-269LF	159
0306-8	402	100145	207	10-075LF	159	10-157	53	10-236L	54	10-270	55
0318-10	399	1001465	207	10-076	51	10-158	53	10-236LF	159	10-270LF	159
0318-12	399	10-015	49	10-077	51	10-159	53	10-237	54	10-271	55
0318-14	399	10-015L	49	10-077LF	159	10-159LF	159	10-237L	54	10-272	55
0318-16	399	10-015LF	159	10-078	51	10-160	53	10-237LF	159	10-272L	55
0318-2	399	10-016	49	10-078LF	159	10-161	53	10-238	54	10-272LF	159
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0318-6	399	100185	207	10-086	51	10-171	53	10-241LF	159	10-276	55
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0319-14	399	10-019LF	159	10-090	51	10-175	53	10-243	54	10-279	55
0319-16	399	10-020	49	10-094	52	10-176	53	10-244	54	10-280	55
0319-2	399	10-020L	49	10-095	52	10-178	53	10-244L	54	10-283	56
0319-20	399	10-021	49	10-097	52	10-179	53	10-245	54	10-283B	56
0319-24	399	10-021LF	159	10-098	52	10-180	53	10-246	54	10-284	56
0319-3	399	10-022	49	10-099	52	10-181	53	10-247	54	10-284B	56
0319-32	399	10-023	49	10-100	52	10-182	53	10-248	54	10-285	56
0319-4	399	10-024	49	1010002	323	10-187	53	10-253	55	10-286	56
0319-5	399	10-025	49	1010008	323	10-188	53	10-254	55	10-286B	56
0319-6	399	10-026	49	1010011	323	10-189	53	10-255	55	10-286L	56
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10-002	49	10-039	50	10-105	52	10-207	54	10-257	55	10-289	56

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