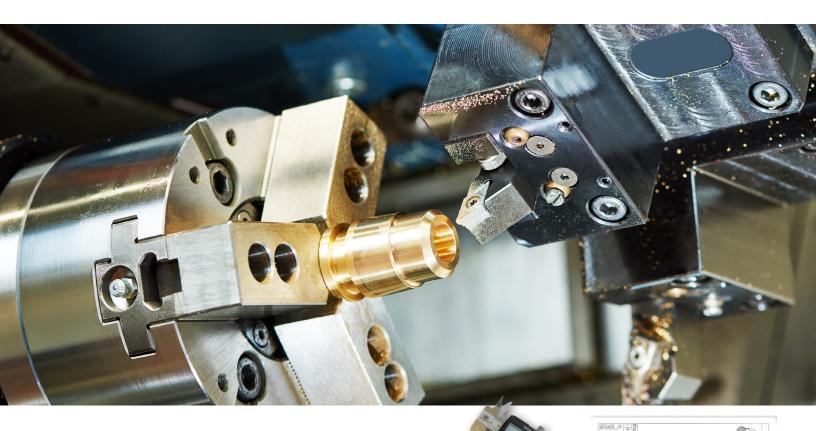




# PROUDLY MADE IN THE USA



ENGINEER, DESIGN, MANUFACTURE
We are the Leader of Made in the USA
Brass Fittings

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7604 WEDD ST., OVERLAND PARK, KS 66204

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## **PIPE FITTINGS**









| 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 | 1-1111/2 |
| 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**:

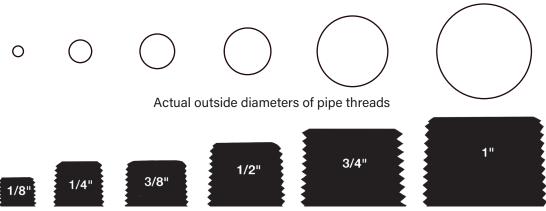
-65°F to +250°F (-53°C to +121°C).

**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.

**Approvals**: Meets specifications and standards

SAE J530, J531



**Actual Male Thread Profiles** 

## **PIPE**

BRASS FITTINGS MADE IN THE USA

# 90° FEMALE ELBOW



| SAE# | 130238 |
|------|--------|

| SAE PATTERN |                  |  |
|-------------|------------------|--|
| MAF#        | THREAD SIZE NPTF |  |
| 23500X2     | 1/8"             |  |
| 23500X4     | 1/4"             |  |
| 23500X6     | 3/8"             |  |
| 23500X8     | 1/2"             |  |
| 23500X12    | 3/4"             |  |

# TEE



| MAF#     | THREAD SIZE<br>NPTF |
|----------|---------------------|
| 23700X2  | 1/8"                |
| 23700X4  | 1/4"                |
| 23700X6  | 3/8"                |
| 23700X8  | 1/2"                |
| 23700X12 | 3/4"                |

**SAE PATTERN** 

SAE# 130438

## **CROSS**



| SAE PATTERN |                     |  |  |
|-------------|---------------------|--|--|
| MAF#        | THREAD SIZE<br>NPTF |  |  |
| 23950X2     | 1/8"                |  |  |
| 23950X4     | 1/4"                |  |  |
| 23950X6     | 3/8"                |  |  |
| 23950X8     | 1/2"                |  |  |

# **COUPLING**



SAE# 130138

| MAF#  | THREAD SIZE NPTF |
|-------|------------------|
| 103-2 | 1/8"             |
| 103-4 | 1/4"             |

| SAE PATTERN |                  |  |  |
|-------------|------------------|--|--|
| MAF#        | THREAD SIZE NPTF |  |  |
| 23300X1     | 1/16"            |  |  |
| 23300X2     | 1/8"             |  |  |
| 23300X4     | 1/4"             |  |  |
| 23300X6     | 3/8"             |  |  |
| 23300X8     | 1/2"             |  |  |
| 23300X12    | 3/4"             |  |  |

BRASS FITTINGS MADE IN THE USA

# **REDUCING COUPLING**



| SAE PATTERN |                  |  |
|-------------|------------------|--|
| MAF#        | THREAD SIZE NPTF |  |
| 23304X2     | 1/4" x 1/8"      |  |
| 23306X2     | 3/8" x 1/8"      |  |
| 23306X4     | 3/8" x 1/4"      |  |
| 23308X4     | 1/2" x 1/4"      |  |
| 23308X6     | 1/2" x 3/8"      |  |
| 23312X8     | 3/4" x 1/2"      |  |

SAE# 130138

## **UNION**



| MAF#  | THREAD SIZE<br>NPTF |
|-------|---------------------|
| 104-2 | 1/8"                |
| 104-4 | 1/4"                |
| 104-6 | 3/8"                |
| 104-8 | 1/2"                |

## CAP



| MAF#   | THREAD SIZE<br>NPTF |
|--------|---------------------|
| 108-2  | 1/8"                |
| 108-4  | 1/4"                |
| 108-6  | 3/8"                |
| 108-8  | 1/2"                |
| 108-12 | 3/4"                |

## 90° STREET ELBOW



Regular Pattern



**Short Pattern** 

| SAE PATTERN |                     |  |
|-------------|---------------------|--|
| MAF#        | THREAD SIZE<br>NPTF |  |
| 23400X2     | 1/8"                |  |
| 23401X2     | 1/8" short          |  |
| 23400X4     | 1/4"                |  |
| 23401X4     | 1/4" short          |  |
| 23400X6     | 3/8"                |  |
| 23401X6     | 3/8" short          |  |
| 23400X8     | 1/2"                |  |
| 23400X12    | 3/4"                |  |

SAE# 130239

DIMENSION DATA CAN CHANGE WITHOUT NOTICE. PLEASE CALL WHEN DIMENSIONS ARE CRITICAL.

## **PIPE**

**BRASS FITTINGS** MADE IN THE USA

## **HEX BUSHING**



| MAF#     | THREAD SIZE<br>NPTF MXF |
|----------|-------------------------|
| 110-42   | 1/4" x 1/8"             |
| 110-62   | 3/8" x 1/8"             |
| 110-64   | 3/8" x 1/4"             |
| 110-82   | 1/2" x 1/8"             |
| 110-84   | 1/2" x 1/4"             |
| 110-86   | 1/2" x 3/8"             |
| 110-122  | 3/4" x 1/8"             |
| 110-124  | 3/4" x 1/4"             |
| 110-126  | 3/4" x 3/8"             |
| 110-128  | 3/4" x 1/2"             |
| 110-164  | 1" x 1/4"               |
| 110-166  | 1" x 3/8"               |
| 110-168  | 1" x 1/2"               |
| 110-1612 | 1" x 3/4"               |



SAE# 130140

| SAE PATTERN |                         |  |
|-------------|-------------------------|--|
| MAF#        | THREAD SIZE<br>NPTF MXF |  |
| 23224X2     | 1/4" x 1/8"             |  |
| 23226X2     | 3/8" x 1/8"             |  |
| 23226X4     | 3/8" x 1/4"             |  |
| 23228X2     | 1/2" x 1/8"             |  |
| 23228X4     | 1/2" x 1/4"             |  |
| 23228X6     | 1/2" x 3/8"             |  |
| 23232X2     | 3/4" x 1/8"             |  |
| 23232X4     | 3/4" x 1/4"             |  |
| 23232X6     | 3/4" x 3/8"             |  |
| 23232X8     | 3/4" x 1/2"             |  |

## **SQUARE HEAD CORED PLUG**



| MAF#  | THREAD SIZE<br>NPTF |
|-------|---------------------|
| 109-4 | 1/4"                |
| 109-6 | 3/8"                |
| 109-8 | 1/2"                |

## **SQUARE HEAD SOLID PLUG**



| MAF#     | THREAD SIZE<br>NPTF MXF |   |
|----------|-------------------------|---|
| 110-42   | 1/4" x 1/8"             |   |
| 110-62   | 3/8" x 1/8"             |   |
| 110-64   | 3/8" x 1/4"             |   |
| 110-82   | 1/2" x 1/8"             |   |
| 110-84   | 1/2" x 1/4"             |   |
| 110-86   | 1/2" x 3/8"             |   |
| 110-122  | 3/4" x 1/8"             |   |
| 110-124  | 3/4" x 1/4"             |   |
| 110-126  | 3/4" x 3/8"             |   |
| 110-128  | 3/4" x 1/2"             |   |
| 110-164  | 1" x 1/4"               |   |
| 110-166  | 1" x 3/8"               |   |
| 110-168  | 1" x 1/2"               |   |
| 110-1612 | 1" x 3/4"               |   |
| 110-1012 | 1 7 3/4                 |   |
| SA       | LE PATTERN              |   |
| MAF#     | THREAD SIZE             |   |
| 2222472  | NPTF MXF                |   |
| 23224X2  | 1/4" x 1/8"             |   |
| 23226X2  | 3/8" x 1/8"             | _ |
| 23226X4  | 3/8" x 1/4"             |   |
| 23228X2  | 1/2" x 1/8"             |   |
| 23228X4  | 1/2" x 1/4"             |   |
| 23228X6  | 1/2" x 3/8"             |   |
| 23232X2  | 3/4" x 1/8"             |   |
| 23232X4  | 3/4" x 1/4"             |   |
| 23232X6  | 3/4" x 3/8"             |   |
| 23232X8  | 3/4" x 1/2"             |   |
|          |                         |   |
| MAF#     | THREAD SIZE<br>NPTF     |   |
| 109-4    | 1/4"                    |   |
| 109-6    | 3/8"                    |   |
| 109-8    | 1/2"                    |   |
|          |                         |   |
|          |                         |   |
|          |                         |   |
| MAF#     | THREAD SIZE NPTF        |   |
| MAF #    | THREAD SIZE NPTF 1/8"   |   |
|          | NPTF                    |   |
| 109SD-2  | NPTF<br>1/8"            |   |





**BRASS FITTINGS** MADE IN THE USA

## **COUNTERSUNK HEX PLUG**

3/4" taper thread



| MAF#     | THREAD SIZE<br>NPTF |
|----------|---------------------|
| 109AL-1  | 1/16"               |
| 109AL-2  | 1/8"                |
| 109AL-4  | 1/4"                |
| 109AL-6  | 3/8"                |
| 109AL-8  | 1/2"                |
| 109AL-12 | 3/4"                |

## **SLOTTED-HEAD PLUG**



| MAF#  | THREAD SIZE<br>NPTF |
|-------|---------------------|
| 117-2 | 1/8"                |
| 117-4 | 1/4"                |
| 117-6 | 3/8"                |
| 117-8 | 1/2"                |

## **CORED HEX PLUG**



| MAF#   | THREAD SIZE<br>NPTF |
|--------|---------------------|
| 121-4  | 1/4"                |
| 121-6  | 3/8"                |
| 121-8  | 1/2"                |
| 121-12 | 3/4"                |
| 121-16 | 1"                  |

## SOLID HEX HEAD PLUG



| MAF#    | THREAD SIZE NPTF |
|---------|------------------|
| 121S-2  | 1/8"             |
| 121S-4  | 1/4"             |
| 121S-6  | 3/8"             |
| 121S-8  | 1/2"             |
| 121S-12 | 3/4"             |

## **LOCKNUT**

- Jam Nuts
- Straight pipe thread



| MAF#   | THREAD SIZE<br>NPSL |
|--------|---------------------|
| 111-2  | 1/8"                |
| 111-4  | 1/4"                |
| 111-6  | 3/8"                |
| 111-8  | 1/2"                |
| 111-12 | 3/4"                |

## **PIPE**

BRASS FITTINGS MADE IN THE USA

## **CLOSE NIPPLE**



| MAF#   | THREAD SIZE<br>NPTF | LENGTH<br>(in.) |
|--------|---------------------|-----------------|
| 112-2  | 1/8"                | 0.75            |
| 112-4  | 1/4"                | 0.88            |
| 112-6  | 3/8"                | 1.00            |
| 112-8  | 1/2"                | 1.12            |
| 112-12 | 3/4"                | 1.31            |

## **LONG NIPPLE**



| MAF#     | THREAD SIZE<br>NPTF | LENGTH<br>(in.) |
|----------|---------------------|-----------------|
| 113-224  | 1/8"                | 1.50            |
| 113-232  | 1/8"                | 2.00            |
| 113-240  | 1/8"                | 2.50            |
| 113-248  | 1/8"                | 3.00            |
| 113-424  | 1/4"                | 1.50            |
| 113-432  | 1/4"                | 2.00            |
| 113-440  | 1/4"                | 2.50            |
| 113-448  | 1/4"                | 3.00            |
| 113-624  | 3/8"                | 1.50            |
| 113-632  | 3/8"                | 2.00            |
| 113-640  | 3/8"                | 2.50            |
| 113-648  | 3/8"                | 3.00            |
| 113-824  | 1/2"                | 1.50            |
| 113-832  | 1/2"                | 2.00            |
| 113-840  | 1/2"                | 2.50            |
| 113-848  | 1/2"                | 3.00            |
| 113-1224 | 3/4"                | 1.50            |
| 113-1232 | 3/4"                | 2.00            |
| 113-1240 | 3/4"                | 2.50            |
| 113-1248 | 3/4"                | 3.00            |

## **HEX NIPPLE**



SAE# 130137

| SAE PATTERN |                     |                 |      |
|-------------|---------------------|-----------------|------|
| MAF#        | THREAD SIZE<br>NPTF | LENGTH<br>(in.) | HEX  |
| 23325X2     | 1/8"                | 0.97            | 0.43 |
| 23325X4     | 1/4"                | 1.38            | 0.56 |
| 23325X6     | 3/8"                | 1.41            | 0.68 |
| 23325X8     | 1/2"                | 1.81            | 0.87 |
| 23325X12    | 3/4"                | 1.96            | 1.13 |



BRASS FITTINGS MADE IN THE USA

# **REDUCING HEX NIPPLE**



SAE# 130137

| SAE PATTERN |                     |                 |      |
|-------------|---------------------|-----------------|------|
| MAF#        | THREAD SIZE<br>NPTF | LENGTH<br>(in.) | HEX  |
| 23325X2X1   | 1/8" x 1/16"        | 0.98            | 0.43 |
| 23325X4X2   | 1/4" x 1/8"         | 1.19            | 0.56 |
| 23325X6X2   | 3/8" x 1/8"         | 1.12            | 0.68 |
| 23325X6X4   | 3/8" x 1/4"         | 1.41            | 0.68 |
| 23325X8X4   | 1/2" x 1/4"         | 1.62            | 0.87 |
| 23325X8X6   | 1/2" x 3/8"         | 1.62            | 0.87 |
| 23325X12X8  | 3/4" x 1/2"         | 1.79            | 1.06 |
| 23325X16X12 | 1"x 3/4"            | 1.7             | 1.37 |

## 45° STREET ELBOW



SAE# 130339

| SAE PATTERN |                           |  |
|-------------|---------------------------|--|
| MAF#        | 1 X 2 THREAD<br>SIZE NPTF |  |
| 23350X2     | 1/8"                      |  |
| 23350X4     | 1/4"                      |  |
| 23350X6     | 3/8"                      |  |
| 23350X8     | 1/2"                      |  |
| 23350X12    | 3/4"                      |  |

## STREET TEE



| MAF#  | 1 X 2 X 3 THREAD<br>SIZE NPTF |
|-------|-------------------------------|
| 127-4 | 1/4"                          |
| 127-6 | 3/8"                          |
| 127-8 | 1/2"                          |

| SAE PATTERN |                               |  |
|-------------|-------------------------------|--|
| MAF#        | 1 X 2 X 3 THREAD<br>SIZE NPTF |  |
| 23750X2     | 1/8"                          |  |
| 23750X4     | 1/4"                          |  |
| 23750X6     | 3/8"                          |  |
| 23750X8     | 1/2"                          |  |
| 23750X12    | 3/4"                          |  |

SAE# 130424



## **PIPE**

BRASS FITTINGS MADE IN THE USA

## **EXTENDER ADAPTER**



| MAF#     | THREAD SIZE<br>NPTF FXM |
|----------|-------------------------|
| 120-84   | 1/2" x 1/4"             |
| 120-88   | 1/2" x 1/2"             |
| 120-1612 | 1" x 3/4"               |



SAE# 130139

| SAE PATTERN |                       |  |
|-------------|-----------------------|--|
| MAF#        | THREAD SIZE  NPTF FXM |  |
| 23200X2     | 1/8" x 1/8"           |  |
| 23404X2     | 1/4" x 1/8"           |  |
| 23200X4     | 1/4" x 1/4"           |  |
| 23206X4     | 3/8" x 1/4"           |  |
| 23200X6     | 3/8" x 3/8"           |  |
| 23208X6     | 1/2" x 3/8"           |  |
| 23200X8     | 1/2" x 1/2"           |  |
| 23212X6     | 3/4" x 3/8"           |  |
| 23212X8     | 3/4" x 1/2"           |  |

## MALE BRANCH TEE

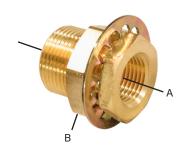


| SAE PATTERN |                     |  |
|-------------|---------------------|--|
| MAF#        | THREAD SIZE<br>NPTF |  |
| 23600X2     | 1/8"                |  |
| 23600X4     | 1/4"                |  |
| 23600X6     | 3/8"                |  |
| 23600X8     | 1/2"                |  |
| 23600X12    | 3/4"                |  |

SAE# 130425

## **BULKHEAD**

FEMALE PIPE X FEMALE PIPE



| MAF#      | A           | В            | HOLE<br>SIZE | LENGTH<br>(in.) |
|-----------|-------------|--------------|--------------|-----------------|
| 207ACBH-2 | 1/8-27 NPTF | 5/8-18 UNS   | 5/8"         | 1.50            |
| 207ACBH-4 | 1/4-18 NPTF | 3/4-16 UNS   | 3/4"         | 1.50            |
| 207ACBH-6 | 3/8-18 NPTF | 1-14 UNS     | 1"           | 1.32            |
| 207ACBH-8 | 1/2-14 NPTF | 1-1/8-14 UNS | 1-1/8"       | 1.50            |



## **HOSE BARB FITTINGS**









## Temperature and Working Pressure Ranges From -40°F to + 160°F at 150 PSI maximum.

#### Tolerance

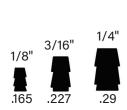
+/-.02 on all dimensions. Dimension Data can change without notice. Please call us when dimensions are critical.

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.

#### Actual Profile of Hose Barbs

















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

# **RIGID MALE PIPE ADAPTER**



| MAF#    | HOSE I.D. X<br>MALE NPTF |
|---------|--------------------------|
| 29-22   | 1/8" x 1/8"              |
| 29-32   | 3/16" x 1/8"             |
| 29-34   | 3/16" x 1/4"             |
| 29-42   | 1/4" x 1/8"              |
| 29-44   | 1/4" x 1/4"              |
| 29-46   | 1/4" x 3/8"              |
| 29-52   | 5/16" x 1/8"             |
| 29-54   | 5/16" x 1/4"             |
| 29-62   | 3/8" x 1/8"              |
| 29-64   | 3/8" x 1/4"              |
| 29-66   | 3/8" x 3/8"              |
| 29-68   | 3/8" x 1/2"              |
| 29-84   | 1/2" x 1/4"              |
| 29-86   | 1/2" x 3/8"              |
| 29-88   | 1/2" x 1/2"              |
| 29-812  | 1/2" x 3/4"              |
| 29-106  | 5/8" x 3/8"              |
| 29-108  | 5/8" x 1/2"              |
| 29-1012 | 5/8" x 3/4"              |
| 29-126  | 3/4" x 3/8"              |
| 29-128  | 3/4" x 1/2"              |
| 29-1212 | 3/4" x 3/4"              |

## MENDER/ SPLICER



| MAF#   | HOSE I.D. X<br>HOSE I.D. |
|--------|--------------------------|
| 29S-4  | 1/4"                     |
| 29S-5  | 5/16"                    |
| 29S-6  | 3/8"                     |
| 29S-8  | 1/2"                     |
| 29S-10 | 5/8"                     |
| 29S-12 | 3/4"                     |

## RIGID FEMALE PIPE ADAPTER



| MAF#   | HOSE I.D. X<br>FEMALE NPTF |
|--------|----------------------------|
| 29F-22 | 1/8" x 1/8"                |
| 29F-32 | 3/16" x 1/8"               |
| 29F-42 | 1/4" x 1/8"                |
| 29F-44 | 1/4" x 1/4"                |
| 29F-52 | 5/16" x 1/8"               |
| 29F-54 | 5/16" x 1/4"               |
| 29F-62 | 3/8" x 1/8"                |
| 29F-64 | 3/8" x 1/4"                |
| 29F-66 | 3/8" x 3/8"                |
| 29F-84 | 1/2" x 1/4"                |
| 29F-86 | 1/2" x 3/8"                |
| 29F-88 | 1/2" x 1/2"                |

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

BRASS FITTINGS MADE IN THE USA

#### **BALL END SWIVEL**

NPSM - Ball seat type



| MAF#    | HOSE I.D. X<br>NPSM |
|---------|---------------------|
| 29FS-22 | 1/8" x 1/8"         |
| 29FS-32 | 3/16" x 1/8"        |
| 29FS-34 | 3/16" x 1/4"        |
| 29FS-42 | 1/4" x 1/8"         |
| 29FS-44 | 1/4" x 1/4"         |
| 29FS-46 | 1/4" x 3/8"         |
| 29FS-54 | 5/16" x 1/4"        |
| 29FS-64 | 3/8" x 1/4"         |
| 29FS-66 | 3/8" x 3/8"         |
| 29FS-68 | 3/8" x 1/2"         |
| 29FS-88 | 1/2" x 1/2"         |

## **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



| MAF#     | HOSE ID X NPTF |
|----------|----------------|
| 29SB-32  | 3/16" x 1/8"   |
| 29SB-42  | 1/4" x 1/8"    |
| 29SB-44  | 1/4" x 1/4"    |
| 29SB-52  | 5/16" x 1/8"   |
| 29SB-54  | 5/16" x 1/4"   |
| 29SB-62  | 3/8" x 1/8"    |
| 29SB-64  | 3/8" x 1/4"    |
| 29SB-66  | 3/8" x 3/8"    |
| 29SB-106 | 5/8" x 3/8"    |
| 29SB-108 | 5/8" x 1/2"    |
| 29SB-128 | 3/4" x 1/2"    |

## 90° MALE ELBOW HOSE BARB X MALE PIPE



| MAF#     | HOSE ID X NPTF |
|----------|----------------|
| 29ESB-42 | 1/4" x 1/8"    |
| 29ESB-52 | 5/16" x 1/8"   |
| 29ESB-54 | 5/16" x 1/4"   |
| 29ESB-62 | 3/8" x 1/8"    |
| 29ESB-64 | 3/8" x 1/4"    |

## **BUBBLE BARB 90° MALE ELBOW**



| MAF#       | HOSE ID X NPTF |
|------------|----------------|
| 29ESB-66   | 3/8" x 3/8"    |
| 29ESB-106  | 5/8" x 3/8"    |
| 29ESB-108  | 5/8" x 1/2"    |
| 29ESB-1612 | 1" x 3/4"      |
| 20202 10.2 |                |

MID-AMERICA FITTINGS

## **PUSH ON BARB FITTINGS**









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

Pressure determined by tube material and hardness.

Advantages: Easy assembly. No clamps needed!!

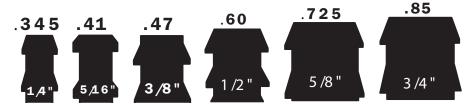
## Assembly Instructions

- 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.

Actual Profile of Push On Barbs



BRASS FITTINGS MADE IN THE USA

## **MALE ADAPTER**



| MAF#       | HOSE I.D. X<br>MALE NPTF |
|------------|--------------------------|
| 29PO1-42   | 1/4" x 1/8"              |
| 29PO1-44   | 1/4" x 1/4"              |
| 29PO1-52   | 5/16" x 1/8"             |
| 29PO1-54   | 5/16" x 1/4"             |
| 29PO1-62   | 3/8" x 1/8"              |
| 29PO1-64   | 3/8" x 1/4"              |
| 29PO1-66   | 3/8" x 3/8"              |
| 29PO1-68   | 3/8" x 1/2"              |
| 29PO1-86   | 1/2" x 3/8"              |
| 29PO1-88   | 1/2" x 1/2"              |
| 29PO1-108  | 5/8" x 1/2"              |
| 29PO1-1212 | 3/4" x 3/4"              |

## **HOSE SPLICER**



| MAF#     | HOSE I.D. |
|----------|-----------|
| 29PO8-4  | 1/4"      |
| 29PO8-5  | 5/16"     |
| 29PO8-6  | 3/8"      |
| 29PO8-8  | 1/2"      |
| 29PO8-10 | 5/8"      |
| 29PO8-12 | 3/4"      |

## SAE/JIC DUAL 45°/37° FEMALE SWIVEL



| MAF#       | HOSE I.D. X<br>DUAL SEAT |
|------------|--------------------------|
| 29PO5-44   | 1/4" x 1/4"              |
| 29PO5-45   | 1/4" x 5/16"             |
| 29PO5-55   | 5/16" x 5/16"            |
| 29PO5-88   | 1/2" x 1/2"              |
| 29PO5-1010 | 5/8" x 5/8"              |

## 45° SAE FLARE FEMALE SWIVEL



| MAF#       | HOSE I.D. X<br>45° FEMALE FLARE |
|------------|---------------------------------|
| 29PO6-66   | 3/8" x 3/8"                     |
| 29PO6-1212 | 3/4" x 3/4"                     |

DIMENSION DATA CAN CHANGE WITHOUT NOTICE. PLEASE CALL WHEN DIMENSIONS ARE CRITICAL.

## **GARDEN HOSE FITTINGS**









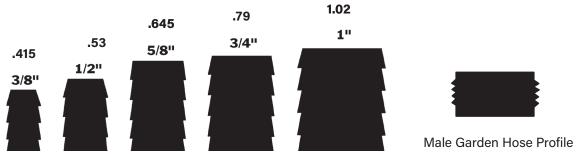
#### Temperature and Working Pressure Ranges

From +35°F to +100°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.

Actual Profile of Garden Hose Barbs





# **GARDEN HOSE FITTINGS**

BRASS FITTINGS MADE IN THE USA

## SWIVEL - FGH X FGH





| MAF# | FGH X<br>FGH |
|------|--------------|
| S3   | 3/4" x 3/4"  |
| S3W* | 3/4" x 3/4"  |

## **SWIVEL - FGH X FEMALE PIPE**

#### \*WASHER INCLUDED



| MAF# | FGH X<br>FEMALE NPTF |
|------|----------------------|
| S1   | 3/4" x 1/2"          |
| S1W* | 3/4" x 1/2"          |
| S2   | 3/4" x 3/4"          |
| S2W* | 3/4" x 3/4"          |

## **RIGID - FGH X FEMALE PIPE**



| MAF# | FGH X<br>FEMALE NPTF |
|------|----------------------|
| 73GH | 3/4" x 1/8"          |

## **SWIVEL - FGH X MALE PIPE**

#### \*WASHER INCLUDED



| MAF#       | FGH X<br>MALE NPTF |
|------------|--------------------|
| 102GH*     | 3/4" x 1/4"        |
| 102GH-LNG* | 3/4" x 1/4"        |
| 103GH*     | 3/4" x 3/8"        |
| 103GH-LNG* | 3/4" x 3/8"        |
| 104GH*     | 3/4" x 1/2"        |
| 105GH*     | 3/4" x 3/4"        |
| 105GHXD*   | 3/4" x 3/4"        |



# **GARDEN HOSE**

BRASS FITTINGS MADE IN THE USA

#### **RIGID - MGH X FEMALE PIPE**

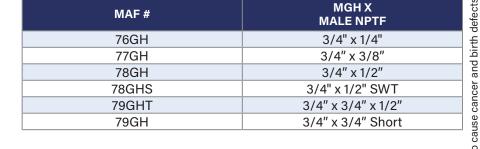


| MAF# | MGH X<br>FEMALE NPTF |
|------|----------------------|
| 80GH | 3/4" x 1/2"          |
| 81GH | 3/4" x 3/4"          |

## **RIGID - MGH X MALE PIPE**



**78GHS** 





79GHT

## **GARDEN HOSE NUT**





GHNK

**GHNH** 

| MAF# | SIZE    |
|------|---------|
| GHNK | Knurled |
| GHNH | Hex Nut |

## **GARDEN HOSE WASHERS**





| MAF#    | COLOR |
|---------|-------|
| GHW     | Black |
| GHW-12R | Red   |



#### **BARSTOCK BRASS GARDEN HOSE COUPLINGS**

#### **FEMALE SWIVEL ONLY**

## \*WASHER INCLUDED



| MAF#         | HOSE BARB X<br>FGH | SHANK<br>LENGTH (in.) | OVERALL<br>LENGTH (in.) |
|--------------|--------------------|-----------------------|-------------------------|
| 29FGH-612H*  | 3/8" x 3/4"        | 0.87                  | 1.40                    |
| 29FGH-812H*  | 1/2" x 3/4"        | 0.87                  | 1.40                    |
| 29FGH-1012H* | 5/8" x 3/4"        | 0.87                  | 1.40                    |
| 29FGH-1212H* | 3/4" x 3/4"        | 0.87                  | 1.40                    |

#### MALE END ONLY



| MAF#       | HOSE BARB X<br>MGH | SHANK<br>LENGTH (in.) | OVERALL<br>LENGTH (in.) |
|------------|--------------------|-----------------------|-------------------------|
| 29MGH-412  | 1/4" x 3/4"        | 0.87                  | 1.57                    |
| 29MGH-612  | 3/8" x 3/4"        | 0.87                  | 1.57                    |
| 29MGH-812  | 1/2" x 3/4"        | 0.87                  | 1.57                    |
| 29MGH-1012 | 5/8" x 3/4"        | 0.87                  | 1.57                    |
| 29MGH-1212 | 3/4" x 3/4"        | 0.87                  | 1.57                    |

## FEMALE SWIVEL ONLY - SHORT SHANK KNURLED NUT

## \*WASHER INCLUDED



| MAF#        | HOSE BARB X<br>FGH | SHANK<br>LENGTH (in.) | OVERALL<br>LENGTH (in.) |
|-------------|--------------------|-----------------------|-------------------------|
| 29FGH-612 * | 3/8" x 3/4"        | 0.87                  | 1.36                    |
| 29FGH-812*  | 1/2" x 3/4"        | 0.87                  | 1.36                    |
| 29FGH-1012* | 5/8" x 3/4"        | 0.87                  | 1.36                    |
| 29FGH-1212* | 3/4" x 3/4"        | 0.87                  | 1.36                    |

DIMENSION DATA CAN CHANGE WITHOUT NOTICE. PLEASE CALL WHEN DIMENSIONS ARE CRITICAL.



## **SAE 45° FLARE**





A MIDLAND INDUSTRIES COMPANY



| Tube<br>O.D.     | 1/8     | 3/16   | 1/4     | 5/16   | 3/8    | 7/16     | 1/2    | 5/8    | 3/4       |
|------------------|---------|--------|---------|--------|--------|----------|--------|--------|-----------|
| Thread<br>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°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°F to +250°F (-53°C to +121°C) range at maximum operating pressures.

#### Used With

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

#### Tolerance

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

#### Approvals

Meets all requirements of SAE J530, J531

#### **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° 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.

Actual O.D. of Flare Fittings



















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

## **SHORT ROD NUT**



SAE# 010110

| SAE PATTERN |                    |         |                 |      |  |
|-------------|--------------------|---------|-----------------|------|--|
| MAF#        | THREAD SIZE<br>UNF | THREAD  | LENGTH<br>(in.) | HEX  |  |
| 21110X2     | 1/8"               | 5/16-24 | 0.50            | 0.37 |  |
| 21110X3     | 3/16"              | 3/8-24  | 0.62            | 0.43 |  |
| 21110X4     | 1/4"               | 7/16-20 | 0.75            | 0.56 |  |
| 21110X5     | 5/16"              | 1/2-20  | 0.88            | 0.62 |  |
| 21110X6     | 3/8"               | 5/8-18  | 1.00            | 0.75 |  |
| 21110X8     | 1/2"               | 3/4-16  | 1.12            | 0.87 |  |
| 21110X10    | 5/8"               | 7/8-14  | 1.31            | 1.06 |  |

## LONG ROD NUT



SAE# 010111

| MAF#   | THREAD SIZE<br>UNF |
|--------|--------------------|
| 41L-3  | 3/16"              |
| 41L-4  | 1/4"               |
| 41L-5  | 5/16"              |
| 41L-6  | 3/8"               |
| 41L-8  | 1/2"               |
| 41L-10 | 5/8"               |

## **FLARED PLUG**



| MAF#  | THREAD<br>SIZE UNF |
|-------|--------------------|
| 39-2  | 1/8"               |
| 39-3  | 3/16"              |
| 39-4  | 1/4"               |
| 39-5  | 5/16"              |
| 39-6  | 3/8"               |
| 39-8  | 1/2"               |
| 39-10 | 5/8"               |

## **FLARED CAP**



| MAF#  | THREAD SIZE<br>UNF |
|-------|--------------------|
| 40-3  | 3/16"              |
| 40-4  | 1/4"               |
| 40-5  | 5/16"              |
| 40-6  | 3/8"               |
| 40-8  | 1/2"               |
| 40-10 | 5/8"               |
| 40-12 | 3/4"               |



# **SAE 45° FLARE**

BRASS FITTINGS MADE IN THE USA

# UNION



| SAE PATTERN |                    |                 |      |
|-------------|--------------------|-----------------|------|
| MAF#        | THREAD SIZE<br>UNF | LENGTH<br>(in.) | HEX  |
| 242X3       | 3/16"              | 1.06            | 0.37 |
| 242X4       | 1/4"               | 1.19            | 0.43 |
| 242X5       | 5/16"              | 1.34            | 0.50 |
| 242X6       | 3/8"               | 1.50            | 0.62 |
| 242X8       | 1/2"               | 1.81            | 0.75 |
| 242X10      | 5/8"               | 2.12            | 0.87 |
| 242X12      | 3/4"               | 2.44            | 1.06 |

SAE# 010101

## **REDUCING UNION**



| MAF#   | THREAD SIZE<br>UNF |
|--------|--------------------|
| 42R-64 | 3/8" x 1/4"        |
| 42R-84 | 1/2" x 1/4"        |
| 42R-86 | 1/2" x 3/8"        |

## **BULKHEAD UNION**



| MAF#   | THREAD SIZE<br>UNF |
|--------|--------------------|
| 42BH-6 | 3/8"               |

## **LOCKNUT ONLY**



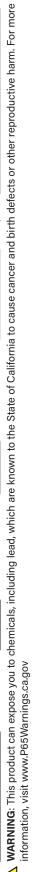
| MAF#   | THREAD SIZE<br>UNF |
|--------|--------------------|
| 41LN-6 | 3/8"               |

# **UNION TEE**



| SAE PATTERN |                    |  |
|-------------|--------------------|--|
| MAF#        | THREAD SIZE<br>UNF |  |
| 244X4       | 1/4"               |  |
| 244X6       | 3/8"               |  |
| 244X8       | 1/2"               |  |
| 244X10      | 5/8"               |  |

SAE# 010401



## **FEMALE ADAPTER**



| MAF#   | MALE FLARE X<br>FEMALE NPTF |
|--------|-----------------------------|
| 46-44  | 1/4" x 1/4"                 |
| 46-54  | 5/16" x 1/4"                |
| 46-64  | 3/8" x 1/4"                 |
| 46-66  | 3/8" x 3/8"                 |
| 46-86  | 1/2" x 3/8"                 |
| 46-88  | 1/2" x 1/2"                 |
| 46-108 | 5/8" x 1/2"                 |

## **MALE ADAPTER**



| MAF#    | MALE FLARE X<br>MALE NPTF |
|---------|---------------------------|
| 48-44   | 1/4" x 1/4"               |
| 48-46   | 1/4" x 3/8"               |
| 48-54   | 5/16" x 1/4"              |
| 48-56   | 5/16" x 3/8"              |
| 48-64   | 3/8" x 1/4"               |
| 48-66   | 3/8" x 3/8"               |
| 48-68   | 3/8" x 1/2"               |
| 48-84   | 1/2" x 1/4"               |
| 48-86   | 1/2" x 3/8"               |
| 48-88   | 1/2" x 1/2"               |
| 48-812  | 1/2" x 3/4"               |
| 48-1012 | 5/8" x 3/4"               |
| 48-128  | 3/4" x 1/2"               |
| 48-1212 | 3/4" x 3/4"               |



SAE# 010102

| SAE PATTERN |                           |                 |      |
|-------------|---------------------------|-----------------|------|
| MAF#        | MALE FLARE X<br>MALE NPTF | LENGTH<br>(in.) | HEX  |
| 248X2       | 1/8" x 1/8"               | 0.92            | 0.43 |
| 248X3       | 3/16" x 1/8"              | 1.00            | 0.43 |
| 248X4       | 1/4" x 1/8"               | 1.06            | 0.43 |
| 248X5       | 5/16" x 1/8"              | 1.16            | 0.50 |
| 248X6X2     | 3/8" x 1/8"               | 1.25            | 0.62 |
| 248X6X8     | 3/8" x 1/2"               | 1.69            | 0.87 |
| 248X8X8     | 1/2" x 1/2"               | 1.79            | 0.87 |
| 248X8X12    | 1/2" x 3/4"               | 1.75            | 1.06 |
| 248X10      | 5/8" x 1/2"               | 2.00            | 0.87 |



# **SAE 45° FLARE**

BRASS FITTINGS MADE IN THE USA

90° MALE ELBOW Barstock Elbow



SAE# 010202

| SAE PATTERN |                        |  |  |
|-------------|------------------------|--|--|
| MAF #       | MALE FLARE X MALE NPTF |  |  |
| 249X2       | 1/8" x 1/8"            |  |  |
| 249X3       | 3/16" x 1/8"           |  |  |
| 249X4       | 1/4" x 1/8"            |  |  |
| 249X4X4     | 1/4" x 1/4"            |  |  |
| 249X4X6     | 1/4" x 3/8"            |  |  |
| 249X5       | 5/16" x 1/8"           |  |  |
| 249X5X4     | 5/16" x 1/4"           |  |  |
| 249X6X2     | 3/8" x 1/8"            |  |  |
| 249X6       | 3/8" x 1/4"            |  |  |
| 249X6X6     | 3/8" x 3/8"            |  |  |
| 249X6X8     | 3/8" x 1/2"            |  |  |
| 249X8X4     | 1/2" x 1/4"            |  |  |
| 249X8       | 1/2" x 3/8"            |  |  |
| 249X8X8     | 1/2" x 1/2"            |  |  |
| 249X10      | 5/8" x 1/2"            |  |  |

# 45° ELBOW



SAE# 010302

| SAE PATTERN |                           |  |
|-------------|---------------------------|--|
| MAF#        | MALE FLARE X<br>MALE NPTF |  |
| 254X4       | 1/4" x 1/8"               |  |
| 254X4X4     | 1/4" x 1/4"               |  |
| 254X6       | 3/8" x 1/4"               |  |
| 254X6X6     | 3/8" x 3/8"               |  |
| 254X8       | 1/2" x 3/8"               |  |
| 254X8X8     | 1/2"x 1/2"                |  |
| 254X10      | 5/8" x 1/2"               |  |

# **UNION ELBOW**



| SAE PATTERN |                    |  |
|-------------|--------------------|--|
| MAF#        | THREAD SIZE<br>UNF |  |
| 255X4       | 1/4"               |  |
| 255X5       | 5/16"              |  |
| 255X6       | 3/8"               |  |
| 255X8       | 1/2"               |  |

## **FLARE REDUCER**



FLARE REDUCER - WITH GASKET

| MAF#    | FEMALE FLARE X<br>MALE FLARE |
|---------|------------------------------|
| 601-68  | 3/8" x 1/2"                  |
| 601-86  | 1/2" x 3/8"                  |
| 601-108 | 5/8" x 1/2"                  |

| MAF#      | FEMALE FLARE X<br>MALE FLARE |
|-----------|------------------------------|
| 601WG-68  | 3/8" x 1/2"                  |
| 601WG-86  | 1/2" x 3/8"                  |
| 601WG-108 | 5/8" x 1/2"                  |

## **INVERTED FLARE**

**BRASS FITTINGS** 

## INVERTED FLARE FITTINGS





A MIDLAND INDUSTRIES COMPANY

| Tul<br>O.I                 | be<br>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 in | ).<br>nch 5 | 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

| 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            |
|      |                 |                 |

good guide for proper selection. Temperature 73°F with copper tubing:

#### Vibration

Excellent resistance.

#### Temperature Range

-65°F to +250°F (-53°C to +121°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.

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

#### Tolerance

+/-.02 on all dimensions.

#### Approvals

Meets all requirements of SAE J530, J531.

#### 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° 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

| OTANDARD METRIO THIREADO |                              |       |                       |  |  |  |  |  |
|--------------------------|------------------------------|-------|-----------------------|--|--|--|--|--|
| Description<br>Tube Size | Thread Crest<br>O.D. (Pitch) |       | Thread<br>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

3/4"-18 7/8"-18 750 PSI 650 PSI 1-1/16"-16 550 PSI

# **INVERTED FLARE**

BRASS FITTINGS MADE IN THE USA

## **BRASS NUT**



SAE# 040110

| SAE PATTERN |       |  |  |  |  |
|-------------|-------|--|--|--|--|
| MAF#        | SIZE  |  |  |  |  |
| 41IFB-3     | 3/16" |  |  |  |  |
| 41IFB-4     | 1/4"  |  |  |  |  |
| 41IFB-5     | 5/16" |  |  |  |  |
| 41IFB-6     | 3/8"  |  |  |  |  |
| 41IFB-8     | 1/2"  |  |  |  |  |
| 41IFB-10    | 5/8"  |  |  |  |  |

## **UNION INTERNAL**



SAE# 040101

|        | SAE PATTERN                |                 |      |  |  |  |  |  |  |
|--------|----------------------------|-----------------|------|--|--|--|--|--|--|
| MAF#   | INV. FLARE X<br>INV. FLARE | LENGTH<br>(in.) | HEX  |  |  |  |  |  |  |
| 2302X3 | 3/16"                      | 0.62            | 0.43 |  |  |  |  |  |  |
| 2302X4 | 1/4"                       | 0.62            | 0.50 |  |  |  |  |  |  |
| 2302X5 | 5/16"                      | 0.70            | 0.56 |  |  |  |  |  |  |
| 2302X6 | 3/8"                       | 0.80            | 0.75 |  |  |  |  |  |  |
| 2302X8 | 1/2"                       | 0.91            | 0.90 |  |  |  |  |  |  |

## **MALE ADAPTER**



SAE# 040102

| MAF #   | INV. FLARE X<br>MALE NPTF |
|---------|---------------------------|
| 48IF-62 | 3/8" x 1/8"               |
| 48IF-66 | 3/8" x 3/8"               |
| 48IF-86 | 1/2" x 3/8"               |

| SAE PATTERN |                           |                 |      |  |  |  |  |
|-------------|---------------------------|-----------------|------|--|--|--|--|
| MAF#        | INV. FLARE X<br>MALE NPTF | LENGTH<br>(in.) | HEX  |  |  |  |  |
| 2202X3      | 3/16" x 1/8"              | 0.69            | 0.50 |  |  |  |  |
| 2202X4      | 1/4" x 1/8"               | 0.74            | 0.50 |  |  |  |  |
| 2234X4      | 1/4" x 1/4"               | 0.89            | 0.56 |  |  |  |  |
| 2202X5      | 5/16" x 1/8"              | 0.79            | 0.59 |  |  |  |  |
| 2202X6      | 3/8" x 1/4"               | 1.02            | 0.75 |  |  |  |  |

## **ELBOW**



| MAF#    | INV. FLARE X<br>MALE NPTF |
|---------|---------------------------|
| 49IF-44 | 1/4" x 1/4"               |
| 49IF-54 | 5/16" x 1/4"              |
| 49IF-62 | 3/8" x 1/8"               |
| 49IF-64 | 3/8" x 1/4"               |
| 49IF-66 | 3/8" x 3/8"               |
| 49IF-86 | 1/2" x 3/8"               |

 $\triangleleft$ 

## COMPRESSION **BRASS FITTINGS**





| 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<br>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.

#### Approvals

Meets all requirements of SAE J530, J531.

#### 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
- 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<br>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** 

5/16"-24 3/8"-24 7/16"-24 1/2"-24

5/16"

11/16"-20

13/16"-18

1"-18

3/4"

1-1/8"-18 75 PSI

9/16"-24

# **COMPRESSION**

BRASS FITTINGS MADE IN THE USA

# BRASS SLEEVE . FERRULES



SAE# 060115

| SAE PATTERN |       |  |  |  |  |
|-------------|-------|--|--|--|--|
| PART #      | SIZE  |  |  |  |  |
| 260X2       | 1/8"  |  |  |  |  |
| 260X3       | 3/16" |  |  |  |  |
| 260X4       | 1/4"  |  |  |  |  |
| 260X5       | 5/16" |  |  |  |  |
| 260X6       | 3/8"  |  |  |  |  |
| 260X7       | 7/16" |  |  |  |  |
| 260X8       | 1/2"  |  |  |  |  |
| 260X10      | 5/8"  |  |  |  |  |
| 260X12      | 3/4"  |  |  |  |  |
| 260X16      | 1"    |  |  |  |  |

## **BRASS NUT**



SAE# 060110

| SAE PATTERN |             |          |  |  |
|-------------|-------------|----------|--|--|
| PART #      | PART # SIZE |          |  |  |
| 261X2       | 1/8"        | 5/16-24  |  |  |
| 261X3       | 3/16"       | 3/8-24   |  |  |
| 261X4       | 1/4"        | 7/16-24  |  |  |
| 261X5       | 5/16"       | 1/2-24   |  |  |
| 261X6       | 3/8"        | 9/16-24  |  |  |
| 261X7       | 7/16"       | 5/8-24   |  |  |
| 261X8       | 1/2"        | 11/16-20 |  |  |
| 261X10      | 5/8"        | 13/16-18 |  |  |
| 261X12      | 3/4"        | 1-18     |  |  |
| 261X16 1"   |             | 1-1/4-18 |  |  |

## **UNION**



SAE# 060101BA

| SAE PATTERN |       |      |  |
|-------------|-------|------|--|
| PART #      | HEX   |      |  |
| 262X2       | 1/8"  | 0.31 |  |
| 262X3       | 3/16" | 0.37 |  |
| 262X4       | 1/4"  | 0.43 |  |
| 262X5       | 5/16" | 0.50 |  |
| 262X6       | 3/8"  | 0.56 |  |
| 262X8       | 1/2"  | 0.68 |  |
| 262X10      | 5/8"  | 0.81 |  |
| 262X12      | 3/4"  | 1.00 |  |

# **UNION TEE**



SAE# 060401

| SAE PATTERN |       |  |
|-------------|-------|--|
| PART #      | SIZE  |  |
| 264X2       | 1/8"  |  |
| 264X3       | 3/16" |  |
| 264X4       | 1/4"  |  |
| 264X5       | 5/16" |  |
| 264X6       | 3/8"  |  |
| 264X8       | 1/2"  |  |

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

BRASS FITTINGS MADE IN THE USA

## **MALE ADAPTER**



| MAF#    | COMP. X<br>MALE NPTF |
|---------|----------------------|
| 68-21   | 1/8" x 1/16"         |
| 68-44   | 1/4" x 1/4"          |
| 68-54   | 5/16" x 1/4"         |
| 68-56   | 5/16" x 3/8"         |
| 68-64   | 3/8" x 1/4"          |
| 68-66   | 3/8" x 3/8"          |
| 68-68   | 3/8" x 1/2"          |
| 68-128  | 3/4" x 1/2"          |
| 68-1212 | 3/4" x 3/4"          |
| 68-1412 | 7/8" x 3/4"          |

| SAE PATTERN |              |  |  |  |
|-------------|--------------|--|--|--|
| PART # SIZE |              |  |  |  |
| 268X2       | 1/8" x 1/8"  |  |  |  |
| 268X3       | 3/16" x 1/8" |  |  |  |
| 268X4       | 1/4" x 1/8"  |  |  |  |
| 268X5       | 5/16" x 1/8" |  |  |  |
| 268X6X2     | 3/8" x 1/8"  |  |  |  |
| 268X8X4     | 1/2" x 1/4"  |  |  |  |
| 268X8X8     | 1/2" x 1/2"  |  |  |  |
| 268X10      | 5/8" x 1/2"  |  |  |  |

SAE# 060102

## **MALE ELBOW**



SAE# 060202

| SAE PATTERN |              |  |  |
|-------------|--------------|--|--|
| PART #      | SIZE         |  |  |
| 269X2       | 1/8" x 1/8"  |  |  |
| 269X3       | 3/16" x 1/8" |  |  |
| 269X3X4     | 3/16" x 1/4" |  |  |
| 269X4       | 1/4" x 1/8"  |  |  |
| 269X4X4     | 1/4" x 1/4"  |  |  |
| 269X5       | 5/16" x 1/8" |  |  |
| 269X5X4     | 5/16" x 1/4" |  |  |
| 269X6X2     | 3/8" x 1/8"  |  |  |
| 269X6       | 3/8" x 1/4"  |  |  |
| 269X6X6     | 3/8" x 3/8"  |  |  |
| 269X6X8     | 3/8" x 1/2"  |  |  |
| 269X8X4     | 1/2" x 1/4"  |  |  |
| 269X8       | 1/2" x 3/8"  |  |  |
| 269X8X8     | 1/2" x 1/2"  |  |  |
| 269X10      | 5/8" x 1/2"  |  |  |



## **SPLIT SLEEVE FITTINGS**

**BRASS FITTINGS** MADE IN THE USA

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

## TRANSMISSION BRASS FITTINGS OR PRECISION GRIP 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



| MAF#   | TUBE O.D. |
|--------|-----------|
| 280X50 | 5/32"     |
| 280X2  | 1/8"      |

#### **NUT**



| MAF#   | TUBE O.D. |
|--------|-----------|
| 281X50 | 5/32"     |
| 281X2  | 1/8"      |

#### **DOUBLE END UNION**



| MAF#    | TUBE O.D. |
|---------|-----------|
| 283X50S | 5/32"     |
| 283X2   | 1/8"      |

#### CONNECTOR WITH NUT AND SLEEVE



| MAF#    | TUBE O.D. | PIPE THREAD |
|---------|-----------|-------------|
| 282X51S | 5/32"     | 1/16"       |
| 282X52S | 5/32"     | 1/8"        |
| 282X2X1 | 1/8"      | 1/16"       |
| 282X2   | 1/8"      | 1/8"        |

<sup>\*</sup>Add "N" to end of part # for white Vibraseal on pipe end.

#### **ELBOW**



| MAF#    | TUBE O.D. | PIPE THREAD |
|---------|-----------|-------------|
| 284X51S | 5/32"     | 1/16"       |
| 284X52S | 5/32"     | 1/8"        |
| 284X2X1 | 1/8"      | 1/16"       |
| 284X2   | 1/8"      | 1/8"        |

<sup>\*</sup>Add "N" to end of part # for white Vibraseal on pipe end.



**BRASS FITTINGS** MADE IN THE USA

#### D.O.T. AIR BRAKE - NYLON TUBING









| Tube<br>O.D      | 1/4     | 3/8      | 1/2      | 5/8      | 3/4  |
|------------------|---------|----------|----------|----------|------|
| Thread<br>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°F or where battery acid can drip on tubing.

#### Pressure

Maximum operating pressure of 150 PSI.

#### Vibration

Fair resistance.

#### Temperature Range

 $-40^{\circ}$ F to  $+200^{\circ}$ F ( $-40^{\circ}$ C to  $+93^{\circ}$ C).

#### Material

Brass C36000 1/2 Hard / C37700 1/2 Hard

#### 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     | Additional Number of Turn |  |
|----------|---------------------------|--|
| Size     | from Hand-Tight           |  |
| 1/4      | 3                         |  |
| 3/8, 1/2 | 4                         |  |
| 5/8, 3/4 | 3-1/2                     |  |



**BRASS FITTINGS** MADE IN THE USA

# **SLEEVE**



| SAE PATTERN |           |  |
|-------------|-----------|--|
| MAF#        | TUBE O.D. |  |
| NT60-3      | 3/16"     |  |
| NT60-4      | 1/4"      |  |
| NT60-6      | 3/8"      |  |
| NT60-8      | 1/2"      |  |
| NT60-10     | 5/8"      |  |
| NT60-12     | 3/4"      |  |

SAE# 100115

## NUT



| SA | E# | 10 | 01 | 10 |
|----|----|----|----|----|

| SAE PATTERN |           |  |  |
|-------------|-----------|--|--|
| MAF#        | TUBE O.D. |  |  |
| NT61-3      | 3/16"     |  |  |
| NT61-4      | 1/4"      |  |  |
| NT61-6      | 3/8"      |  |  |
| NT61-8      | 1/2"      |  |  |
| NT61-10     | 5/8"      |  |  |
| NT61-12     | 3/4"      |  |  |

## **UNION**



SAE# 100101BA

| SAE PATTERN |           |  |
|-------------|-----------|--|
| MAF#        | TUBE O.D. |  |
| NT62-3      | 3/16"     |  |
| NT62-4      | 1/4"      |  |
| NT62-6      | 3/8"      |  |
| NT62-8      | 1/2"      |  |
| NT62-10     | 5/8"      |  |
| NT62-12     | 3/4"      |  |

## **BULKHEAD UNION**



| MAF#     | TUBE O.D. |
|----------|-----------|
| NT62BH-4 | 1/4"      |
| NT62BH-6 | 3/8"      |
| NT62BH-8 | 1/2"      |

## STAINLESS STEEL INSERT



- 300 series stainless
- For SAE# J844 TUBING

| MAF#       | TUBE O.D. |
|------------|-----------|
| NT63SSI-3  | 3/16"     |
| NT63SSI-4  | 1/4"      |
| NT63SSI-6  | 3/8"      |
| NT63SSI-8  | 1/2"      |
| NT63SSI-10 | 5/8"      |
| NT63SSI-12 | 3/4"      |



**BRASS FITTINGS** MADE IN THE USA

## **BRASS INSERT**



| MAF#     | TUBE O.D. |
|----------|-----------|
| NT63B-4  | 1/4"      |
| NT63B-6  | 3/8"      |
| NT63B-8  | 1/2"      |
| NT63B-10 | 5/8"      |
| NT63B-12 | 3/4"      |

TEE



| SAE PATTERN |           |  |  |
|-------------|-----------|--|--|
| MAF#        | TUBE O.D. |  |  |
| NT264X4     | 1/4"      |  |  |
| NT264X6     | 3/8"      |  |  |
| NT64-8      | 1/2"      |  |  |
| NT64-10     | 5/8"      |  |  |

SAE# 100401BA

## **ELBOW**



| SAE PATTERN     |      |  |
|-----------------|------|--|
| MAF # TUBE O.D. |      |  |
| NT265X6         | 3/8" |  |
| NT65-4          | 1/4" |  |
| NT65-8          | 1/2" |  |

SAE# 100201BA

## **FEMALE ADAPTER**



| CA | □#  | 100 | 100 | $D \Lambda$ |
|----|-----|-----|-----|-------------|
| SA | L=# | 100 | เบอ | DA          |

| SAE PATTERN |                         |  |  |
|-------------|-------------------------|--|--|
| MAF#        | TUBE O.D. X FEMALE NPTF |  |  |
| NT66-42     | 1/4" x 1/8"             |  |  |
| NT66-44     | 1/4" x 1/4"             |  |  |
| NT66-62     | 3/8" x 1/8"             |  |  |
| NT66-64     | 3/8" x 1/4"             |  |  |
| NT66-66     | 3/8" x 3/8"             |  |  |
| NT66-86     | 1/2" x 3/8"             |  |  |
| NT66-88     | 1/2" x 1/2"             |  |  |

BRASS FITTINGS MADE IN THE USA

## **MALE ADAPTER**



SAE# 100102BA

| SAE PATTERN |                       |  |
|-------------|-----------------------|--|
| MAF#        | TUBE O.D. X MALE NPTF |  |
| NT68-42VS   | 1/4" x 1/8"           |  |
| NT68-44VS   | 1/4" x 1/4"           |  |
| NT68-46VS   | 1/4" x 3/8"           |  |
| NT68-62VS   | 3/8" x 1/8"           |  |
| NT68-64VS   | 3/8" x 1/4"           |  |
| NT68-66VS   | 3/8" x 3/8"           |  |
| NT68-68VS   | 3/8" x 1/2"           |  |
| NT68-84VS   | 1/2" x 1/4"           |  |
| NT68-86VS   | 1/2" x 3/8"           |  |
| NT68-88VS   | 1/2" x 1/2"           |  |
| NT68-106VS  | 5/8" x 3/8"           |  |
| NT68-108VS  | 5/8" x 1/2"           |  |
| NT68-1012VS | 5/8" x 3/4"           |  |
| NT68-128VS  | 3/4" x 1/2"           |  |
| NT68-1212VS | 3/4" x 3/4"           |  |

## MALE ELBOW



SAE# 100202BA

| SAE PATTERN |                       |  |
|-------------|-----------------------|--|
| MAF#        | TUBE O.D. X MALE NPTF |  |
| NT69-42VS   | 1/4" x 1/8"           |  |
| NT69-44VS   | 1/4" x 1/4"           |  |
| NT69-46VS   | 1/4" x 3/8"           |  |
| NT69-62VS   | 3/8" x 1/8"           |  |
| NT69-64VS   | 3/8" x 1/4"           |  |
| NT69-66VS   | 3/8" x 3/8"           |  |
| NT69-68VS   | 3/8" x 1/2"           |  |
| NT69-84VS   | 1/2" x 1/4"           |  |
| NT69-86VS   | 1/2" x 3/8"           |  |
| NT69-88VS   | 1/2" x 1/2"           |  |
| NT69-106VS  | 5/8" x 3/8"           |  |
| NT69-108VS  | 5/8" x 1/2"           |  |
| NT69-1012VS | 5/8" x 3/4"           |  |
| NT69-128VS  | 3/4" x 1/2"           |  |
| NT69-1212VS | 3/4" x 3/4"           |  |

## **FEMALE ELBOW**



| SA                | $-\mu$ | 10  | $\sim$ | $\sim$ | $\neg$           |
|-------------------|--------|-----|--------|--------|------------------|
| $\searrow \Delta$ | $-\pi$ | 111 | ハン     | 1 ≺    | $\bowtie \Delta$ |
|                   |        |     |        |        |                  |

| SAE PATTERN |                         |  |
|-------------|-------------------------|--|
| MAF#        | TUBE O.D. X FEMALE NPTF |  |
| NT70-44     | 1/4" x 1/4"             |  |
| NT70-86     | 1/2" x 3/8"             |  |
| NT70-108    | 5/8" x 1/2"             |  |

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BRASS FITTINGS MADE IN THE USA

#### MALE RUN TEE



SAE# 100424BA

| SAE PATTERN |                                                |  |
|-------------|------------------------------------------------|--|
| MAF#        | TUBE O.D. X MALE NPTF X TUBE O.D.<br>1 X 2 X 3 |  |
| NT71-42VS   | 1/4" x 1/8" x 1/4"                             |  |
| NT71-44VS   | 1/4" x 1/4" x 1/4"                             |  |
| NT71-644VS  | 3/8" x 1/4" x 1/4"                             |  |
| NT271X6X6VS | 3/8" x 3/8" x 3/8"                             |  |
| NT71-86VS   | 1/2" x 3/8" x 1/2"                             |  |

## MALE BRANCH TEE



| SAE PATTERN |                                                |
|-------------|------------------------------------------------|
| MAF#        | TUBE O.D. X TUBE O.D. X MALE NPTF<br>1 X 2 X 3 |
| NT72-42VS   | 1/4" x 1/4" x 1/8"                             |
| NT72-44VS   | 1/4" x 1/4" x 1/4"                             |
| NT272X6VS   | 3/8" x 3/8" x 1/4"                             |
| NT272X6X6VS | 3/8" x 3/8" x 3/8"                             |
| NT272X8X4VS | 1/2" x 1/2" x 1/4"                             |
| NT72-86VS   | 1/2" x 1/2" x 3/8"                             |
| NT72-88VS   | 1/2" x 1/2" x 1/2"                             |

SAE# 100425BA

#### 45° ELBOW



SAE# 100302BA

| SAE PATTERN  |                       |  |
|--------------|-----------------------|--|
| MAF#         | TUBE O.D. X MALE NPTF |  |
| NT6945-42VS  | 1/4" x 1/8"           |  |
| NT6945-44VS  | 1/4" x 1/4"           |  |
| NT6945-62VS  | 3/8" x 1/8"           |  |
| NT6945-64VS  | 3/8" x 1/4"           |  |
| NT6945-66VS  | 3/8" x 3/8"           |  |
| NT6945-68VS  | 3/8" x 1/2"           |  |
| NT6945-84VS  | 1/2" x 1/4"           |  |
| NT6945-86VS  | 1/2" x 3/8"           |  |
| NT6945-88VS  | 1/2" x 1/2"           |  |
| NT6945-106VS | 5/8" x 3/8"           |  |
| NT6945-108VS | 5/8" x 1/2"           |  |



## D.O.T. AIR BRAKE - HOSE/ ENDS

**BRASS FITTINGS** MADE IN THE USA

# 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:  $-40^{\circ}$ F to  $+120^{\circ}$  F ( $-40^{\circ}$ C to  $+48^{\circ}$ 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 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**



| MAF#   | HOSE I.D. SIZE |
|--------|----------------|
| HE60-6 | 3/8"           |
| HE60-8 | 1/2"           |

#### **NUT**



| MAF#   | HOSE I.D. SIZE |
|--------|----------------|
| HE61-6 | 3/8"           |
| HE61-8 | 1/2"           |

## NUT FOR USE WITH SPRING



| MAF#    | HOSE I.D.<br>SIZE | THREAD    |
|---------|-------------------|-----------|
| HE61N-6 | 3/8"              | 31/32-20  |
| HE61N-8 | 1/2"              | 1-3/32-20 |

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

#### **SPRING**



| MAF#    | HOSE I.D. |
|---------|-----------|
| HE61G-6 | 3/8"      |
| HE61G-8 | 1/2"      |

## **NUT AND SPRING ASSEMBLY**



| MAF#     | HOSE I.D.<br>SIZE |
|----------|-------------------|
| HE61NG-6 | 3/8"              |
| HE61NG-8 | 1/2"              |

## **UNION**



| MAF#   | HOSE I.D. | THREAD   |
|--------|-----------|----------|
| HE62-6 | 3/8"      | 31/32-20 |
| HE62-8 | 1/2"      | 1-1/8-20 |



| MAF#    | HOSE I.D. | THREAD   |
|---------|-----------|----------|
| HE62B-6 | 3/8"      | 31/32-20 |
| HE62B-8 | 1/2"      | 1-1/8-20 |

## **FEMALE CONNECTOR HOSE**



| MAF#     | HOSE I.D. X FEMALE ABS |
|----------|------------------------|
| HE68SB-6 | 3/8" x 3/4-20          |
| HE68SB-8 | 1/2" x 7/8-20          |

## MALE CONNECTOR



| MAF#     | HOSE I.D. X MALE PIPE |
|----------|-----------------------|
| HE68S-64 | 3/8" x 1/4"           |
| HE68S-66 | 3/8" x 3/8"           |
| HE68S-68 | 3/8" x 1/2"           |
| HE68S-86 | 1/2" x 3/8"           |
| HE68S-88 | 1/2" x 1/2"           |



## **D.O.T. AIR BRAKE - HOSE/ENDS**

**BRASS FITTINGS** MADE IN THE USA

## ADAPTER FOR SWIVEL TYPE REUSABLE AND CRIMPED ON



| MAF#    | MALE ABS<br>X MALE PIPE | ABS<br>THREAD |
|---------|-------------------------|---------------|
| 1390-64 | 3/8" x 1/4"             | 3/4-20        |
| 1390-66 | 3/8" x 3/8"             | 3/4-20        |
| 1390-68 | 3/8" x 1/2"             | 3/4-20        |
| 1390-86 | 1/2" x 3/8"             | 7/8-20        |
| 1390-88 | 1/2" x 1/2"             | 7/8-20        |

## **MALE ADAPTER**



| MAF#    | HOSE I.D.<br>X MALE PIPE |
|---------|--------------------------|
| HE68-64 | 3/8" x 1/4"              |
| HE68-66 | 3/8" x 3/8"              |
| HE68-68 | 3/8" x 1/2"              |
| HE68-86 | 1/2" x 3/8"              |
| HE68-88 | 1/2" x 1/2"              |

## **ADAPTER BODY**



| MAF#     | HOSE I.D.   |
|----------|-------------|
|          | X MALE PIPE |
| HE68B-64 | 3/8" x 1/4" |
| HE68B-66 | 3/8" x 3/8" |
| HE68B-68 | 3/8" x 1/2" |
| HE68B-86 | 1/2" x 3/8" |
| HE68B-88 | 1/2" x 1/2" |

## MALE ADAPTER WITH SPRING



| MAF#     | HOSE I.D.<br>X MALE PIPE |
|----------|--------------------------|
| HE68G-64 | 3/8" x 1/4"              |
| HE68G-66 | 3/8" x 3/8"              |
| HE68G-68 | 3/8" x 1/2"              |
| HE68G-86 | 1/2" x 3/8"              |
| HF68G-88 | 1/2" x 1/2"              |

EMAIL MAFSALES@MIDLANDINDUSTRIES.COM FOR PRICING INFORMATION





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







# LEAD FREE SOLUTIONS

# Mid-America Fittings also provides many Lead Free solutions, including:

Lead Free Brass Pipe Fittings - AB1953/S3874 Compliant

Lead Free Brass Flare Fittings - AB1953/S3874 Compliant

Lead Free Brass Compression Fittings - AB1953/S3874 Compliant

Lead Free Hose Barb Fittings - AB1953/S3874 Compliant

Lead Free Garden Hose Fittings - AB1953/S3874 Compliant

Shop our Full Line of Lead Free Options at <a href="https://www.midamericafittings.com/lead-free-fittings">www.midamericafittings.com/lead-free-fittings</a>
Or contact us and let us manufacture your Domestic Lead Free Fittings today!

#### 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.

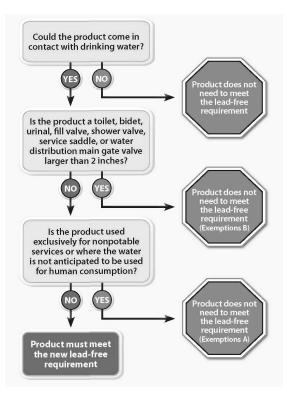
The term "lead-free" has been updated from notmore that 8% lead content to mean "not more than a weighted average of 0.25% lead when used with respect to the wetted surfaces of pipes, pipe fittings, plumbing fittings, and fixtures."

## How do I know which products must meet the new leadfree 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.









Based in Overland Park, Kansas, a suburb of Kansas City, Mid-America Fittings, LLC (MAF) is a leading manufacturer of engineered, professional grade, brass fittings, valves and custom components used by OEM's, as well as industrial, marine, institutional and plumbing wholesale distributors.

















# FOR MORE INFORMATION

CALL US

PHONE: 1-800-633-6771

**SHOP US** 

MIDAMERICAFITTINGS.COM

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MAFSALES@MIDLANDINDUSTIRES.COM

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