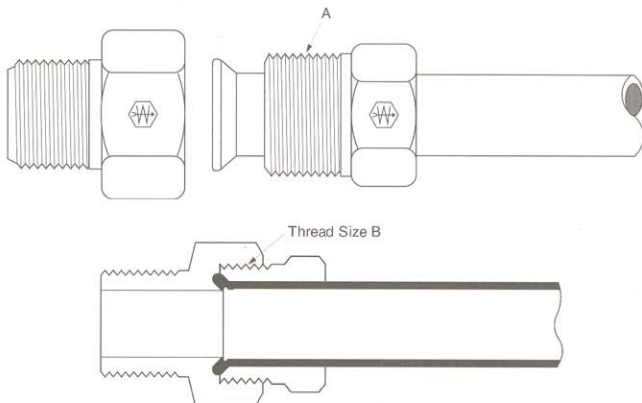


Inverted Flare

Brass
Fittings

⚠ Refer to safety information regarding proper selection of tubing and tube fittings on page 1.



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 Size-B	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 (special order).

• Pressure

Working pressure up to 2000 psi depending on tube size. Will withstand burst pressure of standard tubing - up to 5000 psi with Bundy-weld (double flared) and 3500 psi with copper tubing, depending on size.

• Vibration

Excellent resistance.

• Temperature Range

-65°F to +250°F (-53°C to +121°C) range at maximum operating pressures.

• Material

CA360 Brass.

• Used With

Copper, brass, aluminum and steel hydraulic tubing that can be flared. See page 28-32 for material compatibility.

• 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.

• Conformance

Listed by Underwriter's Laboratories (available on special order) for fuel equipment, refrigeration and gas. Meets specifications and standards of ASA, ASME, SAE and MS (Military Standards).

• How to Order

Order individually by catalog number.

• NOTE:

Refer to current price list for availability of cataloged items. Configurations and dimensions subject to change without notice. Additional information can be found in SAE J512.

• 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. See page 26 for flare data.
 - 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 a wrench until a solid feeling is encountered. From that point, apply a one-sixth turn.

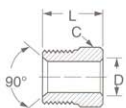
NOTE: Do not over-torque as it may damage the fittings or split the tubing at the flare.

Label Set: **W-8022** (adhesive)
CL-490 (non-adhesive)

Tube Nut

(Steel)

(Ref. SAE No. 040110)



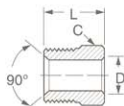
*3/8" Tube to 11/16-18 Male Thread

Tube O.D.	Catalog Number	Hex C	D	L
1/8	105x2	5/16	.132	.52
3/16	105x3	3/8	.196	.56
1/4	105x4	7/16	.259	.56
5/16	105x5	1/2	.321	.62
3/8	105x6	5/8	.384	.66
3/8	105x6x7*	11/16	.387	.66
7/16	105x7	11/16	.444	.68
1/2	105x8	3/4	.508	.74
5/8	105x10	7/8	.632	.80
3/4	105x12	1-1/16	.757	.88
7/8	105x14	1-3/16	.882	1.06
1	105x16	1-3/8	1.008	1.18

Tube Nut

(Brass)

(Ref. SAE No. 040110)

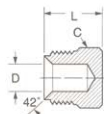


Tube O.D.	Catalog Number	Hex C	D	L
3/16	100x3	3/8	.196	.56
1/4	100x4	7/16	.259	.56
5/16	100x5	1/2	.321	.62
3/8	100x6	5/8	.384	.66
1/2	100x8	3/4	.508	.74

Plug

(Steel)

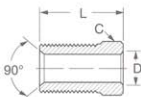
(Ref. SAE No. 040109)



Tube O.D.	Catalog Number	Hex C	D	L
3/16	131x3	3/8	.188	.53
1/4	131x4	7/16	.188	.54
5/16	131x5	1/2	.250	.59
3/8	131x6	5/8	.312	.66

Tube Nut Long

(Steel)

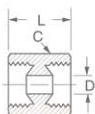


NOTE: Required for wheel cylinders with deep port connection.

Tube O.D.	Catalog Number	Hex C	D	L
3/16	7896x3	3/8	.196	.844
1/4	7896x4	7/16	.257	.812

Union

(Ref. SAE No. 040101)



Tube O.D.	Catalog Number	Hex C	D	L
1/8	302x2	13/32	.078	.59
3/16	302x3	15/32	.125	.62
1/4	302x4	17/32	.188	.62
5/16	302x5	19/32	.219	.70
3/8	302x6	3/4	.281	.80
1/2	302x8	29/32	.406	.91

Inverted Flare

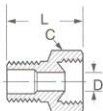
**Brass
Fittings**

Adapter SAE 45° Flare to Inv. Flare



SAE Tube Size	Inverted Male	Catalog Number	Hex C	D	L
1/4	3/16	1518	7/16	.189	1.031
1/4	1/4	1522	7/16	.188	1.031
3/8	5/16	1553	5/8	.234	1.340
3/8	3/8	1563	5/8	.282	1.380
3/8	7/16	1554	11/16	.282	1.400

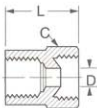
Male Connector (Ref. SAE No. 040102)



NOTE: Pipe end drill may be reduced or increased from seat dimension 'D'.

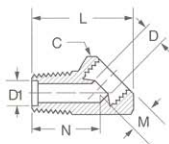
Tube O.D.	Male Pipe Thread	Catalog Number	Hex C	D	L
1/8	1/8	202x2	13/32	.078	.62
3/16	1/8	202x3	15/32	.125	.70
1/4	1/8	202x4	17/32	.188	.74
1/4	1/4	202x4x4	9/16	.188	.89
5/16	1/8	202x5	19/32	.219	.79
5/16	1/4	202x5x4	19/32	.220	.98
3/8	1/8	202x6x2	3/4	.281	.89
3/8	1/4	202x6	3/4	.281	1.03
3/8	3/8	202x6x6	3/4	.281	1.01
1/2	1/4	202x8x4	29/32	.406	1.08
1/2	3/8	202x8	29/32	.406	1.07
1/2	1/2	202x8x8	29/32	.406	1.26
5/8	1/2	202x10	1-1/16	.531	1.32
3/4	3/4	202x12	1-1/4	.625	1.39
7/8	3/4	202x14	1-3/8	.750	1.38

Female Connector (Ref. SAE No. 040103)



Tube O.D.	Fem. Pipe Thread	Catalog Number	Hex C	D	L
3/16	1/8	252x3	1/2	.125	.75
1/4	1/8	252x4	17/32	.188	.75
5/16	1/8	252x5	19/32	.219	.78
3/8	1/4	252x6*	3/4	.281	1.03
1/2	3/8	252x8*	29/32	.406	1.09

45° Male Elbow (Ref. SAE No. 040302)



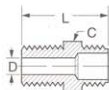
Tube O.D.	Male Pipe Thread	Catalog Number	Hex C	D	D1	L	M	N
3/16	1/8	352x3	17/32	.125	.156	.88	.25	.55
1/4	1/8	352x4	9/16	.188	.188	.94	.27	.58
5/16	1/8	352x5	5/8	.219	.203	1.00	.34	.56
5/16	1/4	352x5x4*	5/8	.219	.203	1.16	.23	.83
3/8	1/8	352x6x2*	25/32	.281	.281	1.34	.38	.69
3/8	1/4	352x6	25/32	.281	.219	1.34	.41	.84
1/2	3/8	352x8*	7/8	.406	.375	1.44	.38	.91
5/8	1/2	352x10*	1-1/16	.531	.500	1.75	.45	1.09

*MTO - Made To Order

BRASS

WEATHERHEAD®

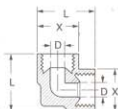
Fuel Line Adapter



Inv. Tube Size	Male Pipe Thread	Catalog Number	Hex C	D	L
1/2-20	1/8	1514	1/2	.219	.90

90° Union Elbow

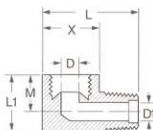
(Ref. SAE No. 040201)



Tube O.D.	Catalog Number	D	L	X
1/4	502x4	.188	.77	.53
5/16	502x5*	.219	.86	.59
3/8	502x6*	.281	1.04	.72

90° Male Elbow

(Ref. SAE No. 040202)

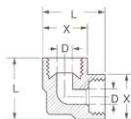


Tube O.D.	Male Pipe Thread	Catalog Number	D	D1	L	L1	M	X
1/8	1/8	402x2	.078	.116	.80	.47	.27	.42
3/16	1/8	402x3	.125	.125	.85	.47	.27	.47
1/4	1/8	402x4	.188	.177	.92	.55	.33	.53
1/4	1/8	431x4*	.188	.062	.91	.53	.33	.53
1/4	1/4	402x4x4	.188	.188	1.09	.58	.28	.56
5/16	1/8	402x5	.219	.219	.98	.67	.47	.59
5/16	1/4	402x5x4	.219	.219	1.16	.75	.45	.59
3/8	1/8	402x6x2	.281	.219	1.14	.75	.54	.76
3/8	1/4	402x6	.281	.281	1.32	.82	.53	.76
3/8	3/8	402x6x6	.281	.312	1.32	.84	.50	.75
1/2	1/4	402x8x4*	.406	.281	1.47	.94	.59	.91
1/2	3/8	402x8	.406	.375	1.48	.94	.59	.91
1/2	1/2	402x8x8	.406	.406	1.67	1.09	.66	.91
5/8	3/8	402x10x6*	.531	.437	1.62	1.11	.67	1.06
5/8	1/2	402x10*	.531	.500	1.82	1.11	.67	1.06
3/4	1/2	402x12x8	.625	.531	2.01	1.30	.80	1.25
7/8	3/4	402x14	.750	.750	2.12	1.46	.94	1.38
1	1	402x16	.812	.812	2.44	1.70	1.02	1.50

* .062 dia. restricted hole through pipe end.
Available on special order with any restricted hole size up to .172 dia.

90° Female Elbow

(Ref. SAE No. 040203)



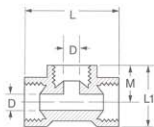
Tube O.D.	Fem. Pipe Thread	Catalog Number	D	L	X
3/16	1/8	452x3*	.125	.81	.50
1/4	1/8	452x4	.188	.81	.53
5/16	1/8	452x5	.219	.88	.59
3/8	1/4	452x6	.281	1.05	.75

Inverted Flare

**Brass
Fittings**

Union Tee

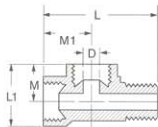
(Ref. SAE No. 040401)



Tube O.D.	Catalog Number	D	L	L1	M
1/8	702x2	.078	.94	.53	.330
3/16	702x3	.125	1.09	.62	.390
1/4	702x4	.188	1.13	.69	.420
5/16	702x5	.219	1.25	.75	.450
3/8	702x6	.281	1.48	.94	.560
1/2	702x8+	.406	1.76	1.12	.670
7/8	702x14	.750	2.37	1.62	.937

Male Run Tee

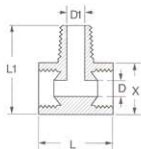
(Ref. SAE No. 040424)



Tube O.D.	Male Pipe Thread	Catalog Number	D	L	L1	M	M1
3/16	1/8	752x3+	.125	1.25	.62	.39	.53
1/4	1/8	752x4	.188	1.31	.69	.42	.56
5/16	1/8	752x5+	.219	1.47	.75	.45	.62
3/8	1/4	752x6+	.281	1.83	.94	.56	.75

Male Branch Tee

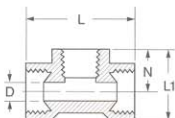
(Ref. SAE No. 040425)



Tube O.D.	Male Pipe Thread	Catalog Number	D	D1	L	L1	X
3/16	1/8	602x3	.125	.219	.82	.84	.47
1/4	1/8	602x4	.188	.219	.84	.91	.53
5/16	1/8	602x5	.219	.219	.95	.97	.59
3/8	1/4	602x6	.281	.344	1.16	1.31	.75

Female Branch Tee

(Ref. SAE No. 040427)



Tube O.D.	Fem. Pipe Thread	Catalog Number	D	L	L1	N
3/16	1/8	652x3	.125	1.10	.62	.39
1/4	1/8	652x4+	.188	1.12	.69	.42
5/16	1/8	652x5+	.219	1.26	.75	.45
3/8	1/4	652x6+	.281	1.47	.94	.56
1/2	3/8	652x8+	.406	1.75	1.12	.67