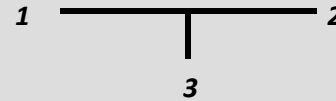




**Features:**

- Recommended Maximum abnormal pressure (MAP): 700 psig, 48 bar
- In conformance with Refrigeration Fitting Standards SAE J513, Military Standards MS-35867 through MS-35873 inclusive, MS-35919, MS-24815 and MS-16993
- Fabricated from brass forgings or drawn brass rod eliminating the possibility of seepage by porosity
- Accurately machined and fully protected against damage during shipping, handling and storage to assure tight leak-proof joints
- Smooth interior finish provides unrestricted flow and reduced pressure drop

Tees are described by first sizing the run (1 to 2) and then the branch (3).



The letter in the first position of the catalog number is derived from the name of the fitting. Examples:

- U - Unions
- E - Elbows
- F - Fuse Plugs
- B - Bonnets
- T - Tees
- N - Nuts

The numeral in the second position of the catalog number designates the combination of threads on the fitting.

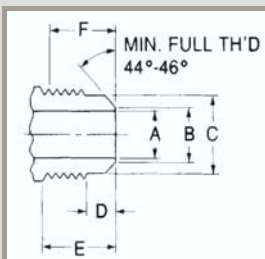
- 1 - External Pipe Thread (U1, E1, T1)
- 2 - Flare to Flare Fitting (U2, E2, T2)
- 4 - Forged Nut

Indicators preceding the numeral in the second position of the catalog number designate the following:

- R - Internal pipe to flare fitting (excludes tees)
- S - Short (forged nuts)
- R - Reducing flare nut (forged nuts)
- R - Pipe thread to flare on the run (tees)

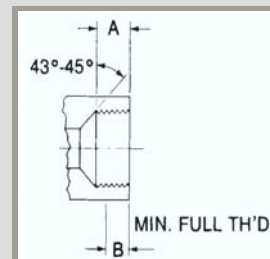
The last two characters in the catalog number designate the size. (Flare sizes are designated by numerals, pipe sizes are designated by letters.)

- |          |         |
|----------|---------|
| 3 - 3/16 | A - 1/8 |
| 4 - 1/4  | B - 1/4 |
| 5 - 5/16 | C - 3/8 |
| 6 - 3/8  | D - 1/2 |
| 8 - 1/2  | E - 3/4 |
| 10 - 5/8 | F - 1   |
| 12 - 3/4 |         |



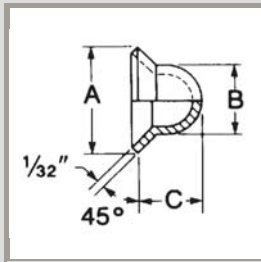
**External Flare:**

Size	A (in)	B (in)	C (in)	D (in)	E (in)	Min Rull Thread F (in)	Size Thread
3/16	0.13	0.16	0.30	0.13	0.44	0.43	3/8 - 24
1/4	0.19	0.22	0.34	0.16	0.50	0.41	7/16 - 20
5/16	0.22	0.25	0.41	0.19	0.56	0.47	1/2 - 20
3/8	0.28	0.31	0.53	0.22	0.53	0.53	5/8 - 18
1/2	0.41	0.44	0.64	0.25	0.75	0.66	3/4 - 16
5/8	0.50	0.53	0.75	0.28	0.88	0.75	7/8 - 14
3/4	0.63	0.72	0.94	0.28	1.00	0.91	1 1/16 - 14



**Internal Flare:**

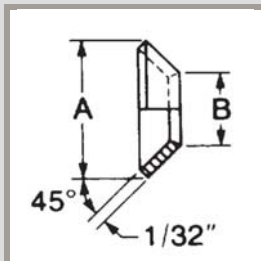
Size	A (in)	Min Rull Thread F (in)	Size Thread
3/16	0.28	0.22	3/8 - 24
1/4	0.34	0.27	7/16 - 20
5/16	0.38	0.30	1/2 - 20
3/8	0.44	0.34	5/8 - 18
1/2	0.53	0.44	3/4 - 16
5/8	0.66	0.55	7/8 - 14
3/4	0.78	0.67	1 1/16 - 14



**Copper Flare Seal Bonnets**

### Copper Flare Seal Bonnets

Cat Number	Part Number	Size Flare	A (in)	B (in) *	C (in)	Box Qty	Wt(lb)
B1-3	A 04737	3/16	0.31	0.16	0.16	25	0.001
B1-4	A 00414	1/4	0.36	0.22	0.22	100	0.001
B1-5	A 04935	5/16	0.42	0.28	0.28	50	0.004
B1-6	A 00415	3/8	0.55	0.36	0.34	100	0.005
B1-8	A 00416	1/2	0.66	0.47	0.41	100	0.007
B1-10	A 00485	5/8	0.77	0.61	0.44	20	0.010
B1-12	A 04738	3/4	0.95	0.72	0.56	25	0.015



**Copper Flare Gaskets**

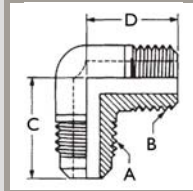
### Copper Flare Gaskets

Cat Number	Part Number	Size Flare	A (in)	B (in) *	C (in)	Box Qty	Wt(lb)
B2-4	A 00401	1/4	0.36	0.19		100	0.001
B2-5	A 04811	5/16	0.42	0.22		50	0.017
B2-6	A 00402	3/8	0.55	0.28		100	0.002
B2-8	A 00403	1/2	0.66	0.41		100	0.002
B2-10	A 05186	5/8	0.77	0.50		50	0.003
B2-12	A 04822	3/4	0.95	0.63		25	0.005

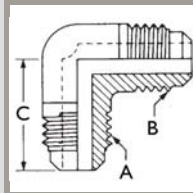
\* C Dimension: Copper Flare Seal Bonnet +/- 1/64



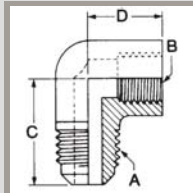
**Half Union - Flare to NPTFE**



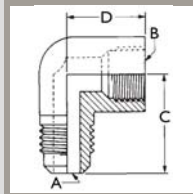
**Union - Flare to Flare**



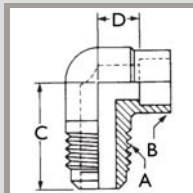
**External Flare to NPTFI**



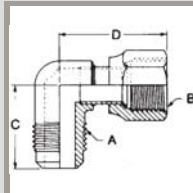
**External FI to Internal FI**



**Half Union - Flare to Solder**



**Ext FI to Int FI Swivel**



**Half Union - Flare to NPTFE**

Cat Number	Part Number	Flare A (in)	B (in)	C (in)	D (in)	Box Qty	Wt(lb)
E1-4A	A 00335	1/4	1/8	0.94	0.78	25	0.040
E1-4B	A 04890	1/4	1/4	0.91	0.94	25	0.055
E1-4C	A 04812	1/4	3/8	0.94	1.03	25	0.082
E1-6A	A 04937	3/8	1/8	1.03	0.91	25	0.080
E1-6B	A 00337	3/8	1/4	1.06	1.06	25	0.077
E1-6C	A 04889	3/8	3/8	1.06	1.09	25	0.108
E1-6D	A 04886	3/8	1/2	1.13	1.34	25	0.160
E1-8B	A 05044	1/2	1/4	1.22	1.19	10	0.135
E1-8C	A 00339	1/2	3/8	1.22	1.13	15	0.140
E1-8D	A 04887	1/2	1/2	1.28	1.38	15	0.180
E1-8E	A 05072	1/2	3/4	1.34	1.38	10	0.231
E1-10C	A 04856	5/8	3/8	1.47	1.25	10	0.225
E1-10D	A 04538	5/8	1/2	1.47	1.44	10	0.240
E1-10E	A 05054	5/8	3/4	1.47	1.50	10	0.255

**Union - Flare to Flare**

Cat Number	Part Number	Flare A (in)	B (in)	C (in)	D (in)	Box Qty	Wt(lb)
E2-4	A 00147	1/4	1/4	0.91		25	0.074
E2-6	A 00146	3/8	3/8	1.06		25	0.095
E2-8	A 00145	1/2	1/2	1.22		15	0.150
E2-10	A 04539	5/8	5/8	1.47		10	0.250

**External Flare to NPTFI**

Cat Number	Part Number	Flare A (in)	B (in)	C (in)	D (in)	Box Qty	Wt(lb)
E3-4A	A 04630	1/4	1/8	0.91	0.91	25	0.050
E3-4B	A 05007	1/4	1/4	1.06	0.66	25	0.140

**External Flare to Internal Flare**

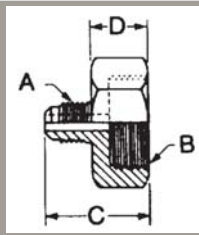
Cat Number	Part Number	Flare A (in)	B (in)	C (in)	D (in)	Box Qty	Wt(lb)
E4-44	A 04898 *	1/4	1/4	0.94	0.88	25	0.065
E4-66	A 08082 *	3/8	3/8	1.22	1.06	25	0.170

**Half Union - Flare to Solder**

Cat Number	Part Number	Flare A (in)	B (in)	C (in)	D (in)	Box Qty	Wt(lb)
ES2-44	A 03449	1/4	1/4	0.84	0.36	25	0.035
ES2-66	A 03511	3/8	3/8	1.08	0.47	20	0.081
ES2-88	A 07851	1/2	1/2	1.22	0.47	10	0.120

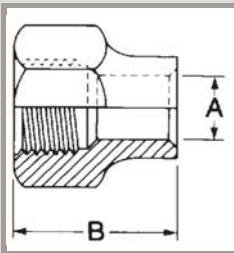
**External Flare to Internal Flare Swivel**

Cat Number	Part Number	Flare A (in)	B (in)	C (in)	D (in)	Box Qty	Wt(lb)
ES4-44	A 15940	1/4	1/4	0.91	1.25	4	0.103
ES4-66	A 15941	3/8	3/8	1.08	1.42	4	0.133
ES4-88	A 15943	1/2	1/2	1.22	1.53	4	0.202

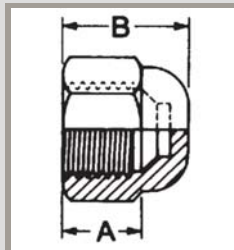


### Refrigerant Drum Adaptors

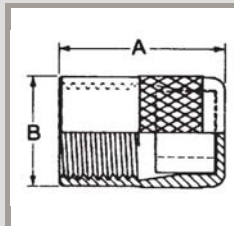
Cat Number	Part Number	Flare A (in)	NPSM B (in) *	C (in)	D (in)	Hex	Box Qty	Wt(lb)	Replacement Gasket
K1-1	A 08073	1/4	3/4	1.13	0.44	1 1/4	10	0.159	A 08074
K1-3	A 08274	3/8	3/4	1.25	0.44	1 1/4	10	0.187	A 08074
K1-5	A 08276	1/2	3/4	1.38	0.44	1 1/4	10	0.194	A 08074
K1-8	A 08166	1/4	1/2	1.13	0.44	1 1/8	10	0.148	A 08167



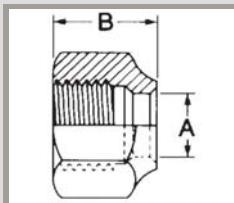
**Long Forged Nuts**



**Flare Seal Cap**



**Flare Seal Cap  
Finger Tightening**



**Short Forged**

**Long Forged Nuts**

Cat Number	Part Number	Flare A (in)	Size Tube	Hex	A (in)	B (in)	Box Qty	Wt(lb)
N4-4	A 00440	1/4	1/4	5/8	0.26	0.94	25	0.048
N4-6	A 00441	3/8	3/8	13/16	0.38	1.06	25	0.075
N4-8	A 00442	1/2	1/2	15/16	0.51	1.19	10	0.108
N4-10	A 01112	5/8	5/8	1 1/16	0.63	1.44	5	0.185
N4-12	A 04731	3/4	3/4	1 5/16	0.76	1.75	5	0.345

**Flare Seal Caps**

Cat Number	Part Number	Flare A (in)	Size Tube	Hex	A (in)	B (in)	Box Qty	Wt(lb)
N5-4	A 04544	1/4		9/16	0.34	0.56	50	0.025
N5-5	A 04758	5/16		5/8	0.38	0.56	25	0.027
N5-6	A 04545	3/8		3/4	0.44	0.69	25	0.045
N5-8	A 04546	1/2		7/8	0.55	0.81	25	0.069
N5-10	A 04560	5/8		1 1/16	0.63	0.94	10	0.137
N5-12	A 04951	3/4		1 5/16	0.75	1.09	10	0.210

**Flare Seal Caps - Finger Tightening**

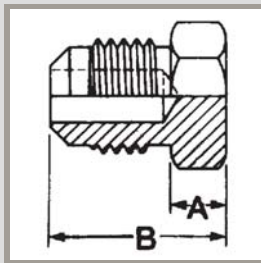
Cat Number	Part Number	Flare A (in)	Size Tube	Hex	A (in)	B (in)	Box Qty	Wt(lb)
NFT5-4	A 16447	1/4			0.56	0.48	N/A	0.014
NFT5-6	A 16448	3/8			0.73	0.67	N/A	0.038

**Short Forged Reducing Nuts**

Cat Number	Part Number	Flare A (in)	Size Tube	Hex	A (in)	B (in)	Box Qty	Wt(lb)
NRS4-43	A 05132	1/4	3/16	5/8	0.19	0.59	10	0.027
NRS4-54	A 05247	5/16	1/4	11/16	0.26	0.63	10	0.055
NRS4-64	A 05140	3/8	1/4	13/16	0.26	0.69	25	0.060
NRS4-65	A 05282	3/8	5/16	13/16	0.32	0.69	10	0.027
NRS4-86	A 05141	1/2	3/8	15/16	0.38	0.81	15	0.094
NRS4-108	A 05228	5/8	1/2	1 1/16	0.51	0.94	15	0.125

**Short Forged Nuts**

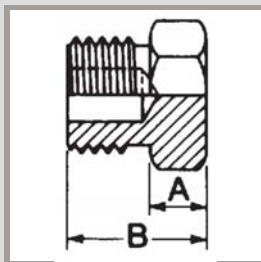
Cat Number	Part Number	Flare A (in)	Size Tube	Hex	A (in)	B (in)	Box Qty	Wt(lb)
NS4-3	A 05238	3/16	3/16	1/2	0.19	0.53	50	0.024
NS4-4	A 05051	1/4	1/4	5/8	0.26	0.59	50	0.035
NS4-5	A 05239	5/16	5/16	11/16	0.32	0.63	25	0.040
NS4-6	A 05052	3/8	3/8	13/16	0.38	0.69	25	0.052
NS4-8	A 05053	1/2	1/2	15/16	0.51	0.81	15	0.084
NS4-10	A 05157	5/8	5/8	1 1/16	0.63	0.94	10	0.120
NS4-12	A 05222	3/4	3/4	1 5/16	0.76	1.13	10	0.235



**Flare Plug**

### Flare Plugs

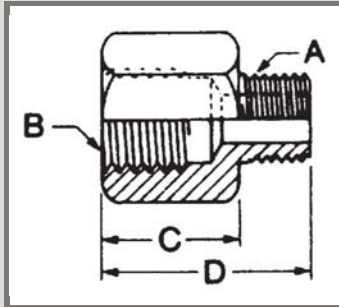
Cat Number	Part Number	Flare A (in)	Hex	A (in)	B (in)	Box Qty	Wt(lb)
P2-3	A 05045	3/16	3/8	0.16	0.59	15	0.016
P2-4	A 00121	1/4	7/16	0.19	0.69	25	0.022
P2-5	A 00124	5/16	1/2	0.22	0.78	15	0.034
P2-6	A 00122	3/8	5/8	0.25	0.88	25	0.070
P2-8	A 00123	1/2	3/4	0.31	1.06	25	0.095
P2-10	A 04536	5/8	7/8	0.31	1.19	15	0.137
P2-12	A 04757	3/4	1 1/16	0.31	1.31	10	0.225



**Brass Pipe Plug**

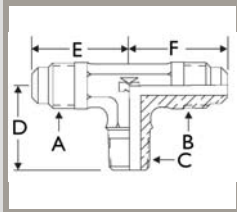
### Brass Pipe Plugs

Cat Number	Part Number	Flare A (in)	Hex	A (in)	B (in)	Box Qty	Wt(lb)
P3-A	A 00250	1/8	1/2	0.19	0.63	50	0.030
P3-B	A 00249	1/4	11/16	0.25	0.81	50	0.056
P3-C	A 00425	3/8	11/16	0.25	0.75	25	0.058
P3-D	A 04759	1/2	7/8	0.31	0.88	25	0.108
P3-E	A 05004	3/4	1 1/8	0.31	1.03	10	0.305

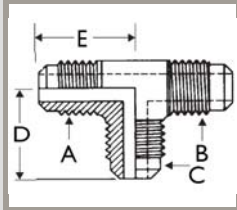


External Pipe Thread to Internal Pipe Thread

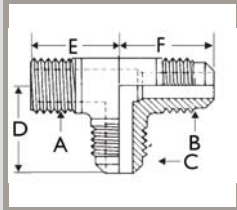
Cat Number	Part Number	NPTE A (in)	NPTI B (in)	C (in)	D (in)	Hex	Box Qty	Wt(lb)
R1-AB	A 08756	1/8	1/4	0.61	0.92	11/16	25	0.054
R1-BA	A 00630	1/4	1/8	0.19	0.69	9/16	25	0.020
R1-CB	A 00631	3/8	1/4	0.25	0.75	11/16	25	0.034
R1-DB	A 00492	1/2	1/4	0.28	0.84	7/8	25	0.080
R1-DC	A 00632	1/2	3/8	0.28	0.84	7/8	25	0.051
R1-EC	A 00493	3/4	3/8	0.31	0.92	1 1/16	10	0.111
R1-ED	A 00633	3/4	1/2	0.31	0.92	1 1/16	10	0.092



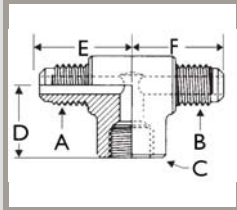
**Two-Way**



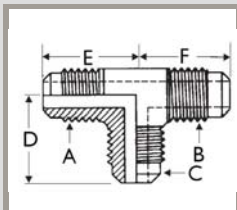
**Three-Way**



**Right Angle Two-Way**



**Three-Way, Internal Branch**



**Three-Way Reducing**

**Two-Way**

Cat Number	Part Number	A (in)	B (in)	C (in)	D (in)	E (in)	F (in)	Box Qty	Wt(lb)
		Flare	Flare	NPTFE					
T1-4A	A 00345	1/4	1/4	1/8	0.81	0.94	0.94	25	0.066
T1-4B	A 04859	1/4	1/4	1/4	1.03	0.91	0.91	25	0.103
T1-8C	A 00349	1/2	1/2	3/8	1.13	1.22	1.22	15	0.191

**Three-Way**

Cat Number	Part Number	A (in)	B (in)	C (in)	D (in)	E (in)	F (in)	Box Qty	Wt(lb)
		Flare	Flare	Flare					
T2-4	A 00340	1/4	1/4	1/4	0.94	0.94		25	0.065
T2-6	A 00342	3/8	3/8	3/8	1.06	1.06		15	0.143
T2-8	A 00344	1/2	1/2	1/2	1.22	1.22		15	0.196
T2-12	A 04749	3/4	3/4	3/4	1.66	1.66		5	0.502

**Right Angle Two-Way**

Cat Number	Part Number	A (in)	B (in)	C (in)	D (in)	E (in)	F (in)	Box Qty	Wt(lb)
		NPTFE	Flare	Flare					
T3-4A	A 00127	1/8	1/4	1/4	0.94	0.80	0.94	25	0.070
T3-4B	A 04998	1/4	1/4	1/4	0.94	1.06	0.94	25	0.088
T3-6C	A 04941	3/8	3/8	3/8	1.06	1.09	1.06	25	0.140
T3-8C	A 04778	3/8	1/2	1/2	1.22	1.13	1.22	15	0.182

**Three-Way, Internal Branch**

Cat Number	Part Number	A (in)	B (in)	C (in)	D (in)	E (in)	F (in)	Box Qty	Wt(lb)
		Flare	Flare	Flare					
T6-4	A 06330 *	1/4	1/4	1/4	0.94	0.91		25	0.085

**Three-Way Reducing**

Cat Number	Part Number	A (in)	B (in)	C (in)	D (in)	E (in)	F (in)	Box Qty	Wt(lb)
		Flare	Flare	NPTFE					
TR2-68	A 04547	3/8	3/8	1/2	1.22	1.13		15	0.194
TR2-86	A 04559	1/2	1/2	3/8	1.13	1.22		15	0.191

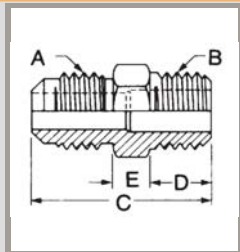
\*Gasket Furnished



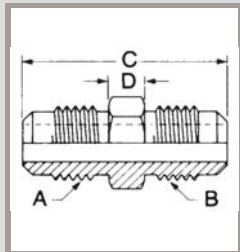


### Half Union - Flare to NPTFE

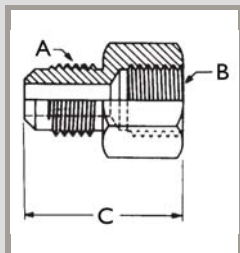
Cat Number	Part Number	A (in) Flare	B (in) NPTFE	C (in)	D (in)	E (in)	Hex	Box Qty	Wt(lb)
U1-3A	A 01117	3/16	1/8	1.00	0.38	0.19	7/16	15	0.025
U1-4A	A 00330	1/4	1/8	1.06	0.38	0.19	7/16	25	0.030
U1-4B	A 04585	1/4	1/4	1.25	0.56	0.19	9/16	25	0.047
U1-4C	A 01197	1/4	3/8	1.31	0.56	0.25	11/16	25	0.071
U1-4D	A 04628	1/4	1/2	1.56	0.75	0.31	7/8	25	0.114
U1-5A	A 00331	5/16	1/8	1.16	0.38	0.31	1/2	25	0.040
U1-5B	A 05036	5/16	1/4	1.34	0.56	0.22	9/16	25	0.055
U1-5C	A 01198	5/16	3/8	1.38	0.56	0.25	11/16	25	0.075
U1-6A	A 05003	3/8	1/8	1.25	0.38	0.25	5/8	25	0.065
U1-6B	A 00332	3/8	1/4	1.44	0.56	0.25	5/8	25	0.075
U1-6C	A 01199	3/8	3/8	1.44	0.56	0.25	11/16	25	0.090
U1-6D	A 04993	3/8	1/2	1.69	0.75	0.31	7/8	25	0.135
U1-8A	A 05034	1/2	1/8	1.44	0.38	0.31	3/4	10	0.094
U1-8B	A 04439	1/2	1/4	1.63	0.56	0.31	3/4	10	0.108
U1-8C	A 00334	1/2	3/8	1.63	0.56	0.31	3/4	10	0.119
U1-8D	A 04780	1/2	1/2	1.81	0.75	0.31	7/8	10	0.155
U1-8E	A 05066	1/2	3/4	1.94	0.75	0.44	1 1/16	10	0.228
U1-10B	A 05035	5/8	1/4	1.81	0.56	0.38	7/8	10	0.155
U1-10C	A 01195	5/8	3/8	1.81	0.56	0.38	7/8	10	0.168
U1-10D	A 04540	5/8	1/2	2.00	0.75	0.38	7/8	10	0.180
U1-10E	A 04827	5/8	3/4	2.06	0.75	0.44	1 1/16	5	0.250
U1-12C	A 05005	3/4	3/8	2.00	0.56	0.44	1 1/16	10	0.265
U1-12D	A 04739	3/4	1/2	2.19	0.75	0.44	1 1/16	5	0.286
U1-12E	A 04740	3/4	3/4	2.19	0.75	0.44	1 1/16	5	0.290



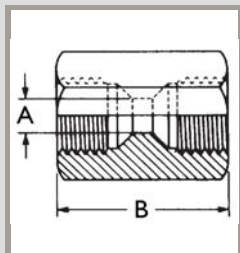
Half Union - Flare to NPTFE



Union- Flare to Flare



Half Union - Flare to NPTFI



Internal Flare Union

### Unions - Flare to Flare

Cat Number	Part Number	A (in) Flare	B (in) Flare	C (in)	D (in)	E (in)	Hex	Box Qty	Wt(lb)
U2-4	A 00325	1/4	1/4	1.19	0.19		7/16	25	0.026
U2-5	A 00326	5/16	5/16	1.34	0.22		1/2	25	0.050
U2-6	A 00327	3/8	3/8	1.50	0.25		5/8	25	0.092
U2-8	A 00329	1/2	1/2	1.81	0.31		3/4	15	0.141
U2-10	A 04845	5/8	5/8	2.13	0.38		7/8	10	0.215
U2-12	A 04733	3/4	3/4	2.44	0.44		1 1/16	10	0.368

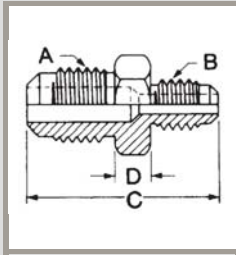
### Half Union - Flare to NPTFI

Cat Number	Part Number	A (in) Flare	B (in) NPTFI	C (in)	D (in)	E (in)	Hex	Box Qty	Wt(lb)
U3-4A	A 04622	1/4	1/8	1.03			9/16	25	0.042
U3-4B	A 04625	1/4	1/4	1.25			11/16	25	0.065
U3-4C	A 04961	1/4	3/8	1.28			13/16	15	0.081
U3-6A	A 04927	3/8	1/8	1.13			5/8	10	0.103
U3-6B	A 04624	3/8	1/4	1.31			11/16	25	0.083
U3-6C	A 04627	3/8	3/8	1.38			13/16	15	0.100
U3-6D	A 08104	3/8	1/2	1.63			1	15	0.163
U3-8B	A 04928	1/2	1/4	1.41			3/4	15	0.112
U3-8C	A 04727	1/2	3/8	1.50			13/16	15	0.119
U3-8D	A 04728	1/2	1/2	1.75			1	15	0.181
U3-10C	A 04929	5/8	3/8	1.59			7/8	10	0.160
U3-10D	A 04819	5/8	1/2	1.81			1	10	0.195
U3-10E	A 04977	5/8	3/4	1.91			1 1/4	10	0.286

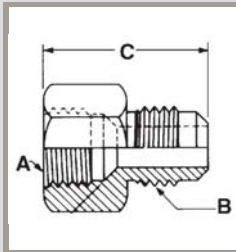
### Internal Flare Unions

Cat Number	Part Number	A (in) Flare	B (in)	C (in)	D (in)	E (in)	Hex	Box Qty	Wt(lb)
U4-4	A 00385 *	1/4		1.00			5/8	10	0.065
U4-6	A 00386 *	3/8		1.25			13/16	10	0.118
U4-8	A 00387 *	1/2		1.44			15/16	10	0.175

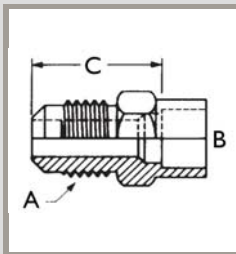
\* 2 Gaskets Furnished



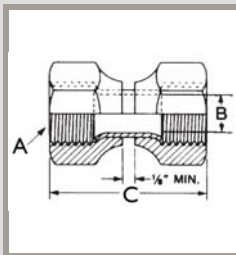
**Reducing Unions - Fl to Fl**



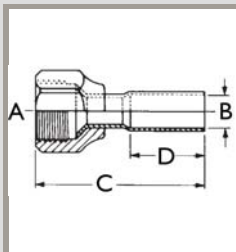
**Internal Fl to External Fl**



**Half Union - Ext Fl to Solder**



**Internal Fl Swivel Unions**



**Internal Fl to Extension Solder**

**Reducing Unions - Flare to Flare**

Cat Number	Part Number	A (in) Flare	B (in) Flare	C (in)	D (in)	E (in)	Hex	Box Qty	Wt(lb)
UR2-43	A 05270	1/4	3/16	1.13	0.19		7/16	15	0.030
UR2-54	A 08730	5/16	1/4	1.28	0.22		1/2	10	0.046
UR2-64	A 01171	3/8	1/4	1.38	0.25		5/8	15	0.072
UR2-65	A 04981	3/8	5/16	1.44	0.25		5/8	10	0.078
UR2-84	A 00356	1/2	1/4	1.56	0.31		3/4	15	0.100
UR2-86	A 00149	1/2	3/8	1.69	0.31		3/4	25	0.127
UR2-106	A 05334	5/8	3/8	1.88	0.38		7/8	10	0.175
UR2-108	A 04846	5/8	1/2	2.00	0.38		7/8	15	0.192
UR2-128	A 04734	3/4	1/2	2.19	0.44		1 1/16	10	0.290
UR2-1210	A 04784	3/4	5/8	2.31	0.44		1 1/16	10	0.332

**Internal Flare to External Flare**

Cat Number	Part Number	A (in) Flare	B (in) Flare	C (in)	D (in)	E (in)	Hex	Box Qty	Wt(lb)
UR3-43	A 05147	1/4	3/16	1.03			5/8	10	0.047
UR3-46	A 05041	1/4	3/8	1.13			5/8	15	0.070
UR3-48	A 08127	1/4	1/2	1.25			3/4	10	0.112
UR3-64	A 00479	3/8	1/4	1.22			13/16	15	0.078
UR3-68	A 04888	3/8	1/2	1.41			13/16	15	0.110
UR3-84	A 00480	1/2	1/4	1.38			15/16	15	0.107
UR3-86	A 00481	1/2	3/8	1.44			15/16	15	0.120
UR3-108	A 04770	5/8	1/2	1.69			1 1/16	10	0.180
UR3-810	A 04879	1/2	5/8	1.63			15/16	10	0.169
UR3-1012	A 04878	5/8	3/4	1.91			1 1/16	10	0.265
UR3-1210	A 04826	3/4	5/8	1.97			1 5/16	10	0.241

**Half Union - External Flare to Solder**

Cat Number	Part Number	A (in) Flare	B (in) OD	C (in)	D (in)	E (in)	Hex	Box Qty	Wt(lb)
US3-44	A 03431	1/4	1/4	0.69			7/16	50	0.025
US3-45	A 03466	1/4	5/16	0.69			7/16	25	0.023
US3-46	A 03494	1/4	3/8	0.69			1/2	25	0.029
US3-64	A 03443	3/8	1/4	0.88			5/8	25	0.070
US3-65	A 03464	3/8	5/16	0.88			5/8	25	0.061
US3-66	A 03492	3/8	3/8	0.88			5/8	25	0.063
US3-68	A 03547	3/8	1/2	0.88			5/8	10	0.062
US3-86	A 03504	1/2	3/8	1.06			3/4	25	0.112
US3-88	A 03546	1/2	1/2	1.06			3/4	15	0.096
US3-108	A 03519	5/8	1/2	1.25			7/8	10	0.160
US3-610	A 06601	3/8	5/8	0.88			3/4	10	0.075
US3-810	A 02259	1/2	5/8	1.06			3/4	10	0.100
US3-1010	A 02258	5/8	5/8	1.25			7/8	10	0.155
US3-1012	A 02272	5/8	3/4	1.25			7/8	10	0.150
US3-1014	A 02378	5/8	7/8	1.25			1	10	0.166
US3-1212	A 05307	3/4	3/4	1.44			1 1/16	5	0.246
US3-1214	A 05425	3/4	7/8	1.31			1 1/16	5	0.249

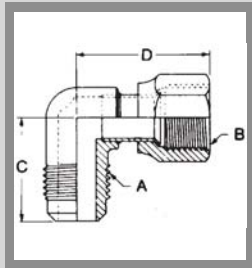
**Internal Flare Swivel Unions**

Cat Number	Part Number	A (in) Flare	B (in)	C (in)	D (in)	E (in)	Hex	Box Qty	Wt(lb)
US4-4	A 13563	1/4		1.38			5/8	15	0.080
US4-5	A 13564	5/16		1.44			11/16	15	0.085
US4-6	A 13565	3/8		1.56			13/16	15	0.121
US4-8	A 13567	1/2		1.81			15/16	15	0.175
US4-10	A 13568	5/8		2.06			1 1/16	15	0.270

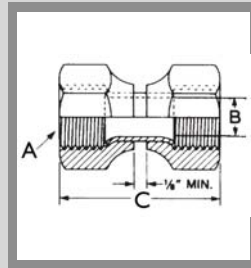
**Internal Flare to Extension Solder**

Cat Number	Part Number	A (in)	B (in)	C (in)	D (in)	E (in)	Hex	Box Qty	Wt(lb)
US5-44	A 15725	1/4	1/4	1.63	0.81	0.00		25	0.043
US5-66	A 15726	3/8	3/8	1.69	0.81	0.00		25	0.074
US5-88	A 15727	1/2	1/2	1.94	0.88	0.00		20	0.104
US5-1010	A 15728	5/8	5/8	2.31	1.00			10	0.160
US5-1212	A 15729	3/4	3/4	2.88	1.25	0.00		10	0.318

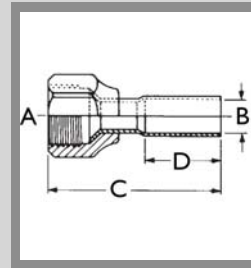
\* 2 Gaskets Furnished



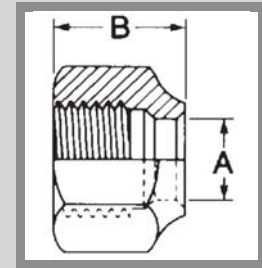
**External Flare to Internal Flare Swivel**



**Internal Flare Swivel Union**



**Internal Flare to Extension Solder**



**Short Forged Nuts**

## 90° Elbows

### External Flare to Internal Flare Swivel

Part Number	Male Flare A (in)	Female Flare B (in)	C (in)	D (in)	Hex (mm)	Box Qty	Wt(lb)
A 15940H	1/4	1/4	0.91	1.25	17	4	
A 15941H	3/8	3/8	1.08	1.42	22	4	
A 15943H	1/2	1/2	1.25	1.55	26	4	

## Connectors

### Internal Flare Swivel Unions

Part Number	A (in) Female Flare	B (in) OD	C (in)	D (in)	Hex (mm)	Box Qty	Wt(lb)
A 13563H	1/4	1/4	1.38		17	15	
A 13565H	3/8	3/8	1.56		22	15	
A 13567H	1/2	1/2	1.81		26	15	
A 13568H	5/8	5/8	2.06		29	15	

### Internal Flare to Extension Solder

Part Number	A (in) Female Flare	B (in) ODS	C (in)	D (in)	Hex (mm)	Box Qty	Wt(lb)
A 15725H	1/4	1/4	1.60	0.81	17	25	
A 15726H	3/8	3/8	1.71	0.81	22	25	
A 15727H	1/2	1/2	1.89	0.88	26	20	
A 15728H	5/8	5/8	2.29	1.00	29	10	
A 15729H	3/4	3/4	2.85	1.25	36	10	

## Nuts

### Short Forged Nuts

Part Number	Flare A (in)	Size Tube	Hex (mm)	A (in)	B (in)	Box Qty	Wt(lb)
A 05051H	1/4	1/4	17	0.26	0.59	N/A	0.040
A 05052H	3/8	3/8	22	0.38	0.71	N/A	0.080
A 05053H	1/2	1/2	26	0.51	0.86	N/A	0.130
A 05157H	5/8	5/8	29	0.63	1.03	N/A	0.180
A 05222H	3/4	3/4	36	0.76	1.18	N/A	