

Instrumentation



SMITH-COOPER®
INTERNATIONAL

Instrumentation

Specifications

- Instrumentation fittings meet ANSI B31.1, ANSI B31.3, ASME Sec. VIII
- Instrumentation fitting wall thickness conform to SAE-J-514
- NPT pipe threads conform to ANSI B2-1
- Straight threads conform to ANSI B1-1 (unified threads clause 2A & 2B)
- Instrumentation fittings made from material that conforms to ASTM A276 316 SS (barstock) and ASTM A-182 G F 316 (forgings)
- Instrumentation fitting ferrules conform to ASTM A276 316 SS (min hardness Rockwell B-90)
- Instrumentation fitting ferrules composed of 316 SS
- Nuts are silver plated to 5 microns for anti-galling

Testing

- The following tests are carried out at various stages of manufacture and are in accordance with BS-4368-Part-IV:
 - Visual / dimensional check
 - Pneumatic pressure test at 2000 psi
 - Hydraulic leak test at 10,000 psi
 - Pressure impulse & vibration test at vibration frequency of 23-47 Hz with 5 mm amplitude, and 30-40 CPM for a minimum of 20 million cycles
 - Minimum burst pressure test at a steady rate of 3000 PSI per min, up to 15,000 psi
 - Make-and-break test hydraulically tested at 6,000 psi and 10,000 psi
 - Temperature cycling test: temperature increased from ambient to 320° C in min. held for 60 min, reduced to ambient, then hydraulically at 10,000 psi
 - Vacuum test at 700 m bar vacuum, deterioration in vacuum not to exceed 20 m bar in 20 mins.
 - Helium leak test at 15 PSI, leak not to exceed 2 x 10 STD cc per sec

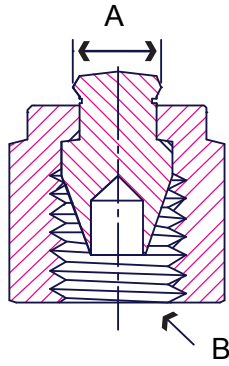


Fig. AFEC – Fitting End Closure

Tube OD IN	Part Number	A IN	B IN	Packing	Weight LB
1/8	S76AFEC001	1/8	7/16	100	0.04
1/4	S76AFEC002	1/4	9/16	100	0.05
3/8	S76AFEC003	3/8	11/16	60	0.09
1/2	S76AFEC004	1/2	7/8	20	0.1
5/8	S76AFEC005	5/8	1	50	0.1
3/4	S76AFEC006	3/4	1-1/8	20	0.2
1	S76AFEC010	1	1-1/2	20	0.2

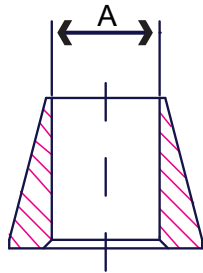


Fig. AFF – Front Ferrule

Tube OD IN	Part Number	A IN	Packing	Weight LB
1/8	S76AFF001	1/8	500	0.007
3/16	S76AFF316	3/16	500	0.007
1/4	S76AFF002	1/4	500	0.009
5/16	S76AFF516	5/16	500	0.01
3/8	S76AFF003	3/8	300	0.01
1/2	S76AFF004	1/2	200	0.01
5/8	S76AFF005	5/8	150	0.04
3/4	S76AFF006	3/4	100	0.05
1	S76AFF010	1	1	0.06

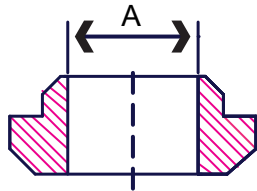


Fig. ABF – Back Ferrule

Tube OD IN	Part Number	A IN	Packing	Weight LB
1/8	S76ABF001	1/8	500	0.004
3/16	S76ABF316	3/16	500	0.004
1/4	S76ABF002	1/4	500	0.007
5/16	S76ABF516	5/16	500	0.009
3/8	S76ABF003	3/8	300	0.01
1/2	S76ABF004	1/2	200	0.01
5/8	S76ABF005	5/8	150	0.03
3/4	S76ABF006	3/4	100	0.04
1	S76ABF010	1	1	0.05

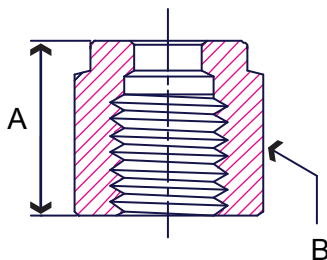


Fig. AHN – Hex Nut

Tube OD IN	Part Number	A IN	B IN	Packing	Weight LB
1/8	S76AHN001	0.47	7/16	100	0.01
1/4	S76AHN002	0.50	9/16	100	0.02
5/16	S76AHN516	0.53	5/8	100	0.03
3/8	S76AHN003	0.56	11/16	100	0.04
1/2	S76AHN004	0.69	7/8	60	0.07
5/8	S76AHN005	0.69	1	50	0.08
3/4	S76AHN006	0.69	1-1/8	30	0.09
1	S76AHN010	0.81	1-1/2	30	0.09

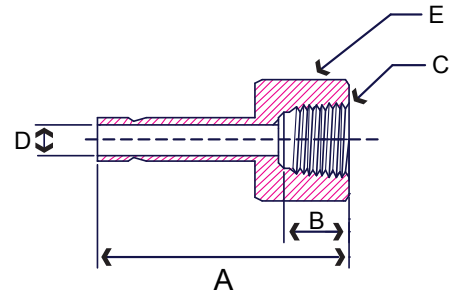


Fig. AFA – Female Adapter

Tube OD x NPT IN	Part Number	A IN	B IN	C IN	D IN	E IN	Packing	Weight LB
1/8 x 1/8	S76AFA001001	1.23	0.41	1/8	0.09	9/16	100	0.07
1/8 x 1/4	S76AFA001002	1.38	0.59	1/4	0.09	3/4	100	0.08
1/4 x 1/8	S76AFA002001	1.29	0.41	1/8	0.19	9/16	100	0.07
1/4 x 1/4	S76AFA002002	1.45	0.59	1/4	0.19	3/4	60	0.07
1/4 x 3/8	S76AFA002003	1.54	0.59	3/8	0.19	7/8	40	0.08
1/4 x 1/2	S76AFA002004	1.78	0.78	1/2	0.19	1-1/16	20	0.1
5/16 x 1/8	S76AFA516001	1.35	0.41	1/8	0.19	9/16	100	0.06
5/16 x 1/4	S76AFA516002	1.47	0.59	1/4	0.25	3/4	60	0.07
3/8 x 1/4	S76AFA003002	1.49	0.59	1/4	0.28	3/4	40	0.1
3/8 x 3/8	S76AFA003003	1.58	0.59	3/8	0.28	7/8	40	0.1
1/2 x 1/4	S76AFA004002	1.71	0.59	1/4	0.39	3/4	40	0.1
1/2 x 3/8	S76AFA004003	1.78	0.59	3/8	0.39	7/8	30	0.07
1/2 x 1/2	S76AFA004004	2.03	0.78	1/2	0.39	1-1/16	10	0.1
5/8 x 1/4	S76AFA005002	1.90	0.59	1/4	0.39	15/16	40	0.2
5/8 x 3/8	S76AFA005003	1.90	0.59	3/8	0.39	15/16	40	0.3
5/8 x 1/2	S76AFA005004	2.08	0.78	1/2	0.50	1-1/16	20	0.3
3/4 x 1/2	S76AFA006004	2.08	0.78	1/2	0.59	1-1/16	10	0.4
3/4 x 3/4	S76AFA006006	2.15	0.81	3/4	0.59	1-5/16	10	0.5
3/4 x 1	S76AFA006010	2.29	1.00	1	0.59	1-5/8	10	0.8
1 x 1	S76AFA010010	2.53	1.00	1	0.80	1-5/8	10	0.5

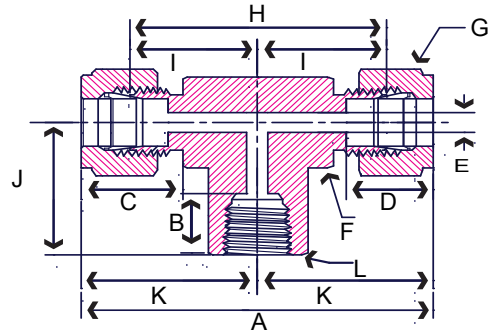


Fig. AFBT – Female Branch Tee

Tube OD x NPT IN	Part Number	A IN	B IN	C IN	D IN	E IN	F IN	G IN	H IN	I IN	J IN	K IN	L IN	Packing	Weight LB
1/8 x 1/8	S76AFBT001001	1.92	0.41	0.60	0.50	0.09	1/2	7/16	1.40	0.70	0.74	0.96	1/8	40	0.1
1/8 x 1/4	S76AFBT001002	2.16	0.59	0.60	0.50	0.09	3/4	7/16	1.64	0.82	0.88	1.08	1/4	30	0.1
3/16 x 1/8	S76AFBT316001	2.00	0.41	0.63	0.54	0.12	1/2	1/2	1.48	0.74	0.75	1.00	1/8	40	0.1
1/4 x 1/8	S76AFBT002001	2.10	0.41	0.70	0.60	0.19	1/2	9/16	1.52	0.76	0.74	1.05	1/8	30	0.1
1/4 x 1/4	S76AFBT002002	2.32	0.59	0.70	0.60	0.19	11/16	9/16	1.74	0.87	0.87	1.16	1/4	30	0.2
5/16 x 1/4	S76AFBT516002	2.40	0.59	0.73	0.64	0.25	3/4	5/8	1.82	0.91	0.88	1.20	1/4	20	0.2
3/8 x 1/4	S76AFBT003002	2.44	0.59	0.76	0.66	0.28	11/16	11/16	1.84	0.93	0.87	1.22	1/4	20	0.3
3/8 x 3/8	S76AFBT003003	2.60	0.59	0.76	0.66	0.28	13/16	11/16	2.02	1.01	0.87	1.30	3/8	20	0.3
1/2 x 3/8	S76AFBT004003	2.82	0.59	0.86	0.90	0.41	13/16	7/8	2.02	1.01	0.87	1.41	3/8	10	0.3
1/2 x 1/2	S76AFBT004004	3.04	0.78	0.86	0.90	0.41	1	7/8	2.24	1.12	1.11	1.52	1/2	10	0.5
5/8 x 1/2	S76AFBT005004	3.04	0.78	0.86	0.96	0.50	1	1	2.24	1.12	1.11	1.52	1/2	10	1.1
3/4 x 1/2	S76AFBT006004	3.14	0.78	0.86	0.96	0.62	1-1/16	1-1/8	2.34	1.17	1.12	1.57	1/2	5	1.5
3/4 x 3/4	S76AFBT006006	3.50	0.81	0.86	0.96	0.62	1-3/8	1-1/8	2.70	1.35	1.24	1.75	3/4	5	1.6
1 x 3/4	S76AFBT010006	3.86	0.81	1.04	1.23	0.88	1-7/16	1-1/2	2.90	1.45	1.25	1.93	3/4	5	1.5
1 x 1	S76AFBT010010	4.22	1.00	1.04	1.23	0.88	1-5/8	1-1/2	3.26	1.63	1.50	2.11	1	5	1.6

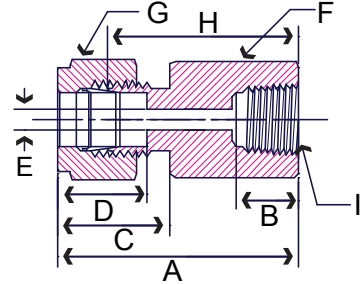


Fig. AFC – Female Connector

Tube OD x NPT IN	Part Number	A IN	B IN	C IN	D IN	E IN	F IN	G IN	H IN	I IN	Packing	Weight LB
1/8 x 1/8	S76AFC001001	1.12	0.40	0.60	0.50	0.09	9/16	7/16	0.86	1/8	30	0.08
1/8 x 1/4	S76AFC001002	1.31	0.59	0.60	0.50	0.09	3/4	7/16	1.05	1/4	30	0.09
3/16 x 1/8	S76AFC316001	1.17	0.39	0.63	0.54	0.12	9/16	1/2	0.91	1/8	30	0.09
1/4 x 1/8	S76AFC002001	1.22	0.39	0.70	0.60	0.19	9/16	9/16	0.93	1/8	100	0.09
1/4 x 1/4	S76AFC002002	1.40	0.59	0.70	0.60	0.19	3/4	9/16	1.11	1/4	60	0.09
1/4 x 3/8	S76AFC002003	1.47	0.59	0.70	0.60	0.19	7/8	9/16	1.18	3/8	40	0.1
1/4 x 1/2	S76AFC002004	1.66	0.78	0.70	0.60	0.19	1-1/16	9/16	1.37	1/2	20	0.1
5/16 x 1/8	S76AFC516001	1.26	0.41	0.73	0.64	0.25	9/16	5/8	0.97	1/8	100	0.1
5/16 x 1/4	S76AFC516002	1.44	0.59	0.73	0.64	0.25	3/4	5/8	1.15	1/4	60	0.1
3/8 x 1/8	S76AFC003001	1.29	0.41	0.76	0.66	0.28	5/8	11/16	1.00	1/8	40	0.1
3/8 x 1/4	S76AFC003002	1.47	0.59	0.76	0.66	0.28	3/4	11/16	1.18	1/4	40	0.1
3/8 x 3/8	S76AFC003003	1.53	0.59	0.76	0.66	0.28	7/8	11/16	1.24	3/8	30	0.1
3/8 x 1/2	S76AFC003004	1.72	0.78	0.76	0.66	0.28	1-1/16	11/16	1.48	1/2	20	0.1
1/2 x 1/4	S76AFC004002	1.58	0.59	0.86	0.90	0.41	13/16	7/8	1.18	1/4	30	0.1
1/2 x 3/8	S76AFC004003	1.64	0.59	0.86	0.90	0.41	7/8	7/8	1.24	3/8	20	0.1
1/2 x 1/2	S76AFC004004	1.83	0.78	0.86	0.90	0.41	1-1/16	7/8	1.43	1/2	10	0.2
1/2 x 3/4	S76AFC004006	1.90	0.81	0.86	0.90	0.41	1-5/16	7/8	1.50	3/4	10	0.3
5/8 x 3/8	S76AFC005003	1.65	0.59	0.86	0.96	0.50	15/16	1.00	1.25	3/8	15	0.3
5/8 x 1/2	S76AFC005004	1.84	0.78	0.86	0.96	0.50	1-1/16	1.00	1.44	1/2	15	0.4
3/4 x 1/2	S76AFC006004	1.83	0.78	0.86	0.96	0.62	1-1/16	1-1/8	1.43	1/2	10	0.5
3/4 x 3/4	S76AFC006006	1.91	0.81	0.86	0.96	0.62	1-5/16	1-1/8	1.49	3/4	10	0.6
1 x 3/4	S76AFC010006	2.09	0.81	1.04	1.23	0.88	1-3/8	1-1/2	1.61	3/4	10	0.5
1 x 1	S76AFC010010	2.44	1.00	1.04	1.23	0.88	1-5/8	1-1/2	1.96	1	10	0.6

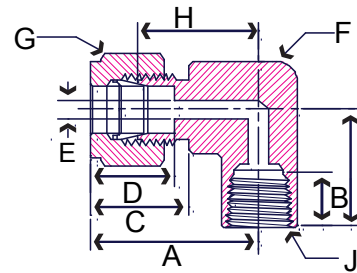


Fig. AFE – Female Elbow

Tube OD x NPT IN	Part Number	A IN	B IN	C IN	D IN	E IN	F IN	G IN	H IN	I IN	J IN	Packing	Weight LB
1/8 x 1/8	S76AFE001001	0.96	0.41	0.60	0.50	0.09	1/2	7/16	0.71	0.74	1/8	40	0.09
1/8 x 1/4	S76AFE001002	1.07	0.59	0.60	0.50	0.09	11/16	7/16	0.81	0.87	1/4	30	0.1
3/16 x 1/8	S76AFE316001	1.00	0.41	0.63	0.54	0.12	1/2	1/2	0.74	0.75	1/8	40	0.1
3/16 x 1/4	S76AFE316002	1.10	0.59	0.63	0.54	0.12	3/4	1/2	0.81	0.88	1/4	30	0.1
1/4 x 1/8	S76AFE002001	1.05	0.41	0.70	0.60	0.19	1/2	9/16	0.76	0.74	1/8	40	0.1
1/4 x 1/4	S76AFE002002	1.16	0.59	0.70	0.60	0.19	11/16	9/16	0.87	0.87	1/4	30	0.2
1/4 x 3/8	S76AFE002003	1.24	0.59	0.70	0.60	0.19	13/16	9/16	0.95	0.87	3/8	30	0.3
1/4 x 1/2	S76AFE002004	1.35	0.78	0.70	0.60	0.19	1	9/16	1.06	1.11	1/2	20	0.4
5/16 x 1/4	S76AFE516002	1.19	0.59	0.73	0.64	0.25	11/16	5/8	0.90	0.87	1/4	30	0.3
3/8 x 1/8	S76AFE003001	1.20	0.41	0.76	0.66	0.28	5/8	11/16	0.91	0.75	1/8	30	0.2
3/8 x 1/4	S76AFE003002	1.22	0.59	0.76	0.66	0.28	11/16	11/16	0.93	0.87	1/4	30	0.3
3/8 x 3/8	S76AFE003003	1.30	0.59	0.76	0.66	0.28	13/16	11/16	1.01	0.87	3/8	20	0.3
3/8 x 1/2	S76AFE003004	1.41	0.78	0.76	0.66	0.28	1	11/16	1.12	1.11	1/2	20	0.3
1/2 x 1/4	S76AFE004002	1.41	0.59	0.86	0.90	0.41	13/16	7/8	1.01	0.87	1/4	10	0.3
1/2 x 3/8	S76AFE004003	1.41	0.59	0.86	0.90	0.41	13/16	7/8	1.01	0.87	3/8	10	0.4
1/2 x 1/2	S76AFE004004	1.52	0.78	0.86	0.90	0.41	1	7/8	1.12	1.11	1/2	10	0.5
5/8 x 3/8	S76AFE005003	1.50	0.59	0.86	0.96	0.50	15/16	1.00	1.10	0.88	3/8	15	0.4
5/8 x 1/2	S76AFE005004	1.52	0.78	0.86	0.96	0.50	1-1/16	1	1.16	1.11	1/2	15	0.5
3/4 x 1/2	S76AFE006004	1.56	0.78	0.86	0.96	0.62	1-1/16	1-1/8	1.16	1.11	1/2	10	0.6
3/4 x 3/4	S76AFE006006	1.75	0.81	0.86	0.96	0.62	1-3/8	1-1/8	1.35	1.24	3/4	10	0.8
3/4 x 1	S76AFE006010	1.93	1.00	0.86	0.96	0.62	1-5/8	1-1/8	1.53	1.50	1	10	1.1
1 x 1	S76AFE010010	2.10	1.00	1.04	1.23	0.88	1-11/16	1-1/2	1.62	1.49	1	10	0.9

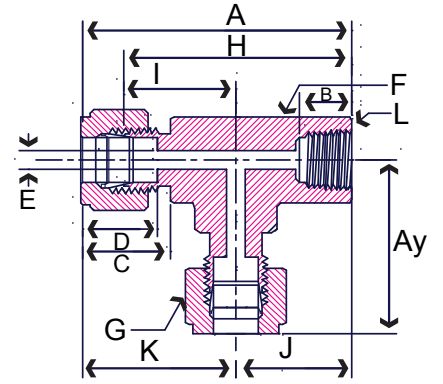


Fig. AFRT – Female Run Tee

Tube OD x NPT IN	Part Number	A IN	B IN	C IN	D IN	E IN	F IN	G IN	H IN	I IN	J IN	K IN	L IN	Packing	Weight LB
1/8 x 1/8	S76AFRT001001	1.71	0.41	0.60	0.50	0.09	1/2	7/16	1.44	0.70	0.74	0.96	1/8	40	0.1
1/8 x 1/4	S76AFRT001002	1.96	0.59	0.60	0.50	0.09	3/4	7/16	1.07	0.82	0.88	1.08	1/4	30	0.1
1/4 x 1/8	S76AFRT002001	1.81	0.41	0.70	0.60	0.19	1/2	9/16	1.50	0.76	0.74	1.05	1/8	40	0.1
1/4 x 1/4	S76AFRT002002	2.05	0.59	0.70	0.60	0.19	11/16	9/16	1.79	0.87	0.87	1.16	1/4	30	0.2
3/16 x 1/8	S76AFRT316001	1.75	0.41	0.63	0.54	0.12	1/2	1/2	1.49	0.74	0.75	1.00	1/8	40	0.1
5/16 x 1/4	S76AFRT516002	2.08	0.59	0.73	0.64	0.25	3/4	5/8	1.79	0.91	0.88	1.20	1/4	20	0.2
3/8 x 1/4	S76AFRT003002	2.10	0.59	0.76	0.66	0.28	11/16	11/16	1.79	0.93	0.87	1.22	1/4	20	0.3
3/8 x 3/8	S76AFRT003003	2.17	0.59	0.76	0.66	0.28	7/8	11/16	1.88	1.01	0.87	1.30	3/8	10	0.3
1/2 x 3/8	S76AFRT004003	2.29	0.59	0.86	0.90	0.41	13/16	7/8	1.88	1.01	0.87	1.41	3/8	10	0.3
1/2 x 1/2	S76AFRT004004	2.68	0.78	0.86	0.90	0.41	1-1/16	7/8	2.27	1.16	1.12	1.56	1/2	10	0.5
5/8 x 1/2	S76AFRT005004	2.64	0.78	0.86	0.96	0.50	1-1/16	1.00	2.24	1.12	1.12	1.52	1/2	10	1.1
3/4 x 1/2	S76AFRT006004	2.69	0.78	0.86	0.96	0.62	1-1/16	1-1/8	2.29	1.17	1.12	1.57	3/4	5	1.5
3/4 x 3/4	S76AFRT006006	3.00	0.81	0.86	0.96	0.62	1-3/8	1-1/8	2.59	1.35	1.24	1.75	3/4	5	1.6
1 x 3/4	S76AFRT010006	3.17	0.81	1.04	1.23	0.88	1-3/8	1-1/2	2.68	1.44	1.24	1.92	3/4	5	1.5
1 x 1	S76AFRT010010	3.60	1.00	1.04	1.23	0.88	1-11/16	1-1/2	3.11	1.62	1.49	2.10	1	5	1.6

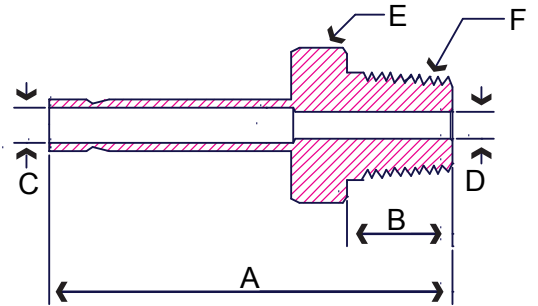


Fig. AMA – Male Adapter

Tube OD x NPT IN	Part Number	A IN	B IN	C IN	D IN	E IN	F IN	Packing	Weight LB
1/8 x 1/8	S76AMA001001	1.15	0.38	0.19	0.09	7/16	1/8	100	0.07
1/8 x 1/4	S76AMA001002	1.36	0.56	0.28	0.09	9/16	1/4	100	0.07
1/4 x 1/8	S76AMA002001	1.24	0.38	0.19	0.19	7/16	1/8	100	0.07
1/4 x 1/4	S76AMA002002	1.45	0.56	0.19	0.19	9/16	1/4	100	0.07
1/4 x 3/8	S76AMA002003	1.48	0.56	0.19	0.19	11/16	3/8	60	0.08
1/4 x 1/2	S76AMA002004	1.70	0.75	0.19	0.19	7/8	1/2	30	0.1
5/16 x 1/8	S76AMA516001	1.28	0.38	0.19	0.25	7/16	1/8	100	0.08
5/16 x 1/4	S76AMA516002	1.49	0.56	0.25	0.25	9/16	1/4	100	0.08
3/8 x 1/4	S76AMA003002	1.52	0.56	0.28	0.28	9/16	1/4	60	0.09
3/8 x 3/8	S76AMA003003	1.55	0.56	0.28	0.28	11/16	3/8	60	0.09
3/8 x 1/2	S76AMA003004	1.77	0.75	0.28	0.28	7/8	1/2	40	0.1
1/2 x 1/4	S76AMA004002	1.75	0.56	0.39	0.28	9/16	1/4	30	0.08
1/2 x 3/8	S76AMA004003	1.77	0.56	0.39	0.39	11/16	3/8	30	0.07
1/2 x 1/2	S76AMA004004	1.99	0.75	0.39	0.39	7/8	1/2	30	0.1
5/8 x 1/4	S76AMA005004	2.05	0.75	0.47	0.50	7/8	1/2	20	0.2
3/4 x 1/2	S76AMA006004	2.05	0.75	0.47	0.59	7/8	1/2	10	0.3
3/4 x 3/4	S76AMA006006	2.05	0.75	0.59	0.59	1-11/16	3/4	10	0.6
3/4 x 1	S76AMA006010	2.31	0.94	0.59	0.59	1-3/8	1	10	0.6
1 x 3/4	S76AMA010006	2.31	0.75	0.80	0.62	1-1/16	3/4	10	0.6
1 x 1	S76AMA010010	2.60	0.94	0.80	0.80	1-3/8	1	10	0.6

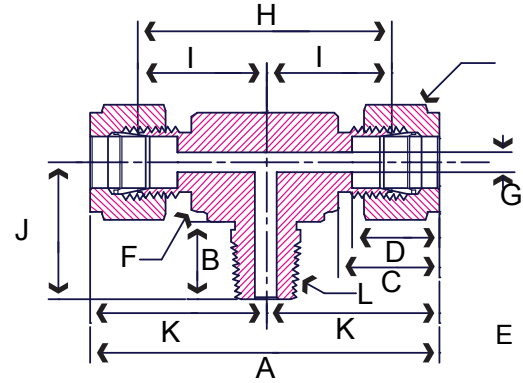


Fig. AMBT – Male Branch Tee

Tube OD x NPT IN	Part Number	A IN	B IN	C IN	D IN	E IN	F IN	G IN	H IN	I IN	J IN	K IN	L IN	Packing	Weight LB
1/8 x 1/8	S76AMBT001001	1.84	0.38	0.60	0.50	0.09	7/16	7/16	1.32	0.66	0.69	1.84	1/8	40	0.1
1/8 x 1/4	S76AMBT001002	1.92	0.56	0.60	0.50	0.09	1/2	7/16	1.40	0.70	0.91	1.92	1/4	30	0.1
3/16 x 1/8	S76AMBT316001	1.92	0.38	0.63	0.54	0.12	1/2	1/2	1.40	0.70	0.70	0.96	1/8	40	0.1
1/4 x 1/8	S76AMBT002001	2.10	0.38	0.70	0.60	0.19	1/2	9/16	1.52	0.76	0.73	2.10	1/8	30	0.1
1/4 x 1/4	S76AMBT002002	2.10	0.56	0.70	0.60	0.19	1/2	9/16	1.52	0.76	0.91	2.10	1/4	30	0.1
1/4 x 1/2	S76AMBT002004	2.50	0.75	0.70	0.60	0.19	7/8	9/16	1.92	0.96	1.30	1.25	1/2	20	0.2
5/16 x 1/8	S76AMBT516001	2.34	0.38	0.73	0.64	0.19	5/8	5/8	1.76	0.88	0.82	1.17	1/8	40	0.1
3/8 x 1/4	S76AMBT003002	2.38	0.56	0.76	0.66	0.28	5/8	11/16	1.80	0.90	0.99	2.38	1/4	30	0.2
3/8 x 3/8	S76AMBT003003	2.60	0.56	0.76	0.66	0.28	13/16	11/16	2.02	1.01	1.10	2.60	3/8	20	0.2
1/2 x 3/8	S76AMBT004003	2.82	0.56	0.86	0.90	0.38	13/16	7/8	2.02	1.01	1.10	2.82	3/8	10	0.4
1/2 x 1/2	S76AMBT004004	2.82	0.75	0.86	0.90	0.41	13/16	7/8	2.02	1.01	1.29	2.82	1/2	10	0.7
5/8 x 1/2	S76AMBT005004	3.04	0.75	0.86	0.96	0.47	1	1	2.24	1.12	1.40	3.04	1/2	1	0.8
3/4 x 1/2	S76AMBT006004	3.14	0.75	0.86	0.96	0.47	1-1/16	1-1/8	2.34	1.17	1.45	1.57	1/2	5	0.3
3/4 x 3/4	S76AMBT006006	3.12	0.75	0.86	0.96	0.62	1-1/16	1-1/8	2.32	1.16	1.44	3.12	3/4	5	0.8
1 x 3/4	S76AMBT010006	3.86	0.75	1.04	1.23	0.62	1-7/16	1-1/2	2.90	1.45	1.64	1.93	3/4	5	0.3
1 x 1	A76AMBT010010	3.86	0.94	1.04	1.23	0.88	1-7/16	1-1/2	2.90	1.45	1.83	1.93	1	5	0.6

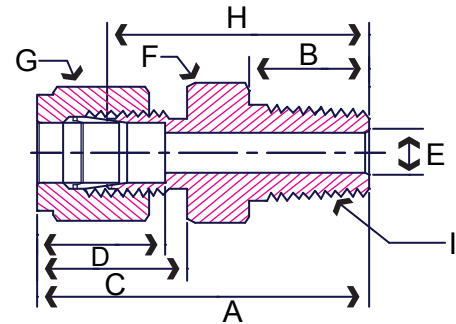


Fig. AMC – Male Connector

Tube OD x NPT IN	Part Number	A IN	B IN	C IN	D IN	E IN	F IN	G IN	H IN	I IN	Packing	Weight LB
1/8 x 1/8	S76AMC001001	1.19	0.38	0.60	0.50	0.09	7/16	7/16	0.93	1/8	100	0.08
1/8 x 1/4	S76AMC001002	1.39	0.56	0.60	0.50	0.09	9/16	7/16	1.13	1/4	100	0.08
3/16 x 1/8	S76AMC316001	1.23	0.38	0.63	0.54	0.12	7/16	1/2	0.97	1/8	100	0.08
3/16 x 1/4	S76AMC316002	1.43	0.56	0.63	0.54	0.12	9/16	1/2	1.17	1/4	30	0.08
1/4 x 1/8	S76AMC002001	1.28	0.38	0.70	0.60	0.19	1/2	9/16	0.99	1/8	100	0.07
1/4 x 1/4	S76AMC002002	1.48	0.56	0.70	0.60	0.19	9/16	9/16	1.19	1/4	100	0.08
1/4 x 3/8	S76AMC002003	1.50	0.56	0.70	0.60	0.19	11/16	9/16	1.21	3/8	60	0.09
1/4 x 1/2	S76AMC002004	1.75	0.75	0.70	0.60	0.19	7/8	9/16	1.46	1/2	30	0.1
5/16 x 1/8	S76AMC516001	1.34	0.38	0.73	0.64	0.19	9/16	5/8	1.05	1/8	100	0.1
5/16 x 1/4	S76AMC516002	1.51	0.56	0.73	0.64	0.25	9/16	5/8	1.22	1/4	40	0.1
3/8 x 1/8	S76AMC003001	1.38	0.38	0.76	0.66	0.19	5/8	11/16	1.09	1/8	100	0.1
3/8 x 1/4	S76AMC003002	1.56	0.56	0.76	0.66	0.28	5/8	11/16	1.27	1/4	60	0.1
3/8 x 3/8	S76AMC003003	1.56	0.56	0.76	0.66	0.28	11/16	11/16	1.27	3/8	40	0.1
3/8 x 1/2	S76AMC003004	1.81	0.75	0.76	0.66	0.28	7/8	11/16	1.52	1/2	30	0.1
1/2 x 1/4	S76AMC004002	1.70	0.56	0.86	0.90	0.28	13/16	7/8	1.30	1/4	30	0.1
1/2 x 3/8	S76AMC004003	1.70	0.56	0.86	0.90	0.38	13/16	7/8	1.30	3/8	30	0.1
1/2 x 1/2	S76AMC004004	1.92	0.75	0.86	0.90	0.41	7/8	7/8	1.52	1/2	30	0.2
1/2 x 3/4	S76AMC004006	1.98	0.75	0.86	0.96	0.41	1-1/16	7/8	1.58	3/4	20	0.2
5/8 x 3/8	S76AMC005003	1.73	0.56	0.86	0.96	0.38	15/16	1	1.33	3/8	20	0.2
5/8 x 1/2	S76AMC005004	1.92	0.75	0.86	0.96	0.47	15/16	1	1.52	1/2	20	0.3
3/4 x 1/2	S76AMC006004	1.98	0.75	0.86	0.96	0.47	1-1/16	1-1/8	1.58	1/2	15	0.4
3/4 x 3/4	S76AMC006006	1.98	0.75	0.86	0.96	0.62	1-1/16	1-1/8	1.58	3/4	15	0.4
3/4 x 1	S76AMC006010	2.24	0.94	0.86	0.96	0.62	1-3/8	1-1/8	1.84	1	10	0.5
1 x 3/4	S76AMC010006	2.26	0.75	1.04	1.23	0.62	1-3/8	1-1/2	1.78	3/4	15	0.4
1 x 1	S76AMC010010	2.45	0.94	1.04	1.23	0.88	1-3/8	1-1/2	1.97	1	10	0.5

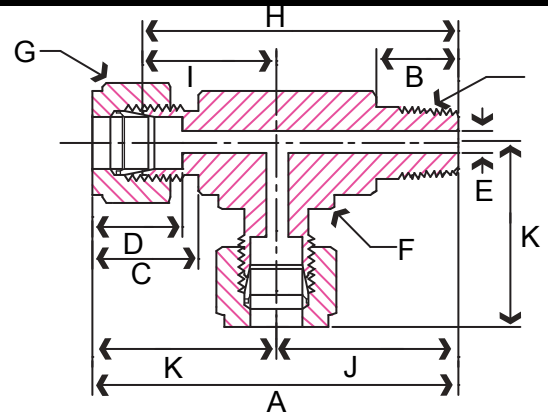


Fig. AMRT – Male Run Tee

Tube OD x NPT IN	Part Number	A IN	B IN	C IN	D IN	E IN	F IN	G IN	H IN	I IN	J IN	K IN	L IN	Packing	Weight LB
1/8 x 1/8	S76AMRT001001	1.61	0.38	0.60	0.50	0.09	7/16	7/16	1.35	0.66	0.92	0.93	1/8	40	0.1
1/8 x 1/4	S76AMRT001002	1.87	0.56	0.60	0.50	0.09	1/2	7/16	1.61	0.70	0.96	0.97	1/4	30	0.1
3/16 x 1/8	S76AMRT316001	1.66	0.38	0.63	0.54	0.12	1/2	1/2	1.40	0.70	0.70	0.96	1/8	40	0.1
1/4 x 1/8	S76AMRT002001	1.98	0.38	0.70	0.60	0.19	1/2	9/16	1.48	0.76	1.05	1.06	1/8	30	0.1
1/4 x 1/4	S76AMRT002002	1.96	0.56	0.70	0.60	0.19	1/2	9/16	1.67	0.76	1.05	1.06	1/4	30	0.1
5/16 x 1/8	S76AMRT516001	1.99	0.38	0.73	0.64	0.19	5/8	5/8	1.70	0.88	0.82	1.17	1/8	40	0.1
3/8 x 1/4	S76AMRT003002	2.18	0.56	0.76	0.66	0.28	5/8	11/16	1.89	0.90	1.19	1.20	1/4	20	0.2
3/8 x 3/8	S76AMRT003003	2.40	0.56	0.76	0.66	0.28	13/16	11/16	2.11	1.01	1.30	1.31	3/8	10	0.2
1/2 x 3/8	S76AMRT004003	2.51	0.56	0.86	0.90	0.38	13/16	7/8	2.11	1.01	1.41	1.42	3/8	10	0.4
1/2 x 1/2	S76AMRT004004	2.70	0.75	0.86	0.90	0.41	13/16	7/8	2.30	1.01	1.41	1.42	1/2	10	0.7
5/8 x 1/2	S76AMRT005004	2.86	0.75	0.86	0.96	0.47	15/16	1	2.46	1.00	1.49	1.50	1/2	10	0.8
3/4 x 1/2	S76AMRT006004	3.02	0.75	0.86	0.96	0.47	1-1/16	1-1/8	2.62	1.17	1.45	1.57	1/2	5	0.8
3/4 x 3/4	S76AMRT006006	3.00	0.75	0.86	0.96	0.62	1-1/16	1-1/8	2.60	1.16	1.56	1.57	3/4	5	1.3

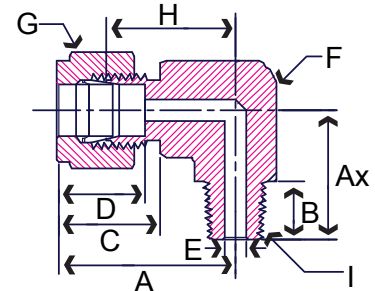


Fig. AME – Male Elbow

Tube OD x NPT IN	Part Number	A IN	B IN	C IN	D IN	E IN	F IN	G IN	H IN	I IN	Packing	Weight LB
1/8 x 1/8	S76AME001001	0.92	0.38	0.60	0.50	0.09	7/16	7/16	0.66	1/8	50	0.06
1/8 x 1/4	S76AME001002	0.96	0.56	0.60	0.50	0.09	1/2	7/16	0.70	1/4	40	0.07
3/16 x 1/8	S76AME316001	1.00	0.38	0.63	0.54	0.12	1/2	1/2	0.74	1/8	40	0.08
1/4 x 1/8	S76AME002001	1.05	0.38	0.70	0.60	0.19	1/2	9/16	0.76	1/8	40	0.1
1/4 x 1/4	S76AME002002	1.05	0.56	0.70	0.60	0.19	1/2	9/16	0.76	1/4	30	0.1
1/4 x 3/8	S76AME002003	1.16	0.56	0.70	0.60	0.19	11/16	9/16	0.87	3/8	20	0.1
1/4 x 1/2	S76AME002004	1.24	0.75	0.70	0.60	0.19	13/16	9/16	0.95	1/2	20	0.1
5/16 x 1/8	S76AME516001	1.13	0.38	0.73	0.64	0.19	9/16	5/8	0.84	1/8	40	0.1
5/16 x 1/4	S76AME516002	1.12	0.56	0.73	0.64	0.25	9/16	5/8	0.84	1/4	40	0.1
3/8 x 1/8	S76AME003001	1.20	0.38	0.76	0.66	0.19	5/8	11/16	0.91	1/8	40	0.1
3/8 x 1/4	S76AME003002	1.19	0.56	0.76	0.66	0.28	5/8	11/16	0.90	1/4	30	0.1
3/8 x 3/8	S76AME003003	1.22	0.56	0.76	0.66	0.28	11/16	11/16	0.93	3/8	20	0.2
3/8 x 1/2	S76AME003004	1.30	0.75	0.76	0.66	0.28	13/16	11/16	1.01	1/2	10	0.2
1/2 x 1/4	S76AME004002	1.41	0.56	0.86	0.90	0.28	13/16	7/8	1.01	1/4	10	0.2
1/2 x 3/8	S76AME004003	1.41	0.56	0.86	0.90	0.38	13/16	7/8	1.01	3/8	10	0.2
1/2 x 1/2	S76AME004004	1.41	0.75	0.86	0.90	0.41	13/16	7/8	1.01	1/2	10	0.3
5/8 x 3/8	S76AME005003	1.50	0.56	0.86	0.96	0.38	15/16	1.00	1.10	3/8	15	0.4
5/8 x 1/2	S76AME005004	1.49	0.75	0.86	0.96	0.47	15/16	1	1.09	1/2	15	0.4
3/4 x 1/2	S76AME006004	1.56	0.75	0.86	0.96	0.47	1-1/16	1-1/8	1.16	1/2	10	0.7
3/4 x 3/4	S76AME006006	1.56	0.75	0.86	0.96	0.62	1-1/16	1-1/8	1.16	3/4	10	0.8
3/4 x 1	S76AME006010	1.75	0.94	0.86	0.96	0.62	1-7/16	1-1/8	1.35	1	10	0.8
1 x 3/4	S76AME010006	1.92	0.75	1.04	1.23	0.62	1-3/8	1-1/2	1.44	3/4	5	1.0
1 x 1	S76AME010010	1.92	0.75	1.04	1.23	0.88	1-3/8	1-1/2	1.44	1	5	1.0

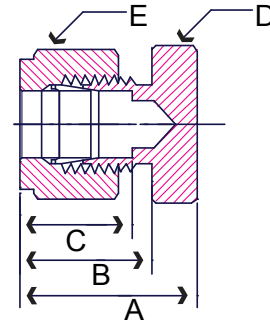


Fig. ATEC – Tube End Closure (Cap)

Tube OD IN	Part Number	A IN	B IN	C IN	D IN	E IN	F IN	Packing	Weight LB
1/8	S76ATEC001	0.78	0.60	0.50	7/16	7/16	0.52	100	0.06
3/16	S76ATEC316	0.84	0.63	0.54	7/16	1/2	0.58	100	0.07
1/4	S76ATEC002	0.92	0.70	0.60	1/2	9/16	0.62	100	0.07
5/16	S76ATEC516	0.96	0.73	0.64	9/16	5/8	0.65	100	0.1
3/8	S76ATEC003	1.00	0.76	0.66	5/8	11/16	0.71	60	0.1
1/2	S76ATEC004	1.14	0.86	0.90	13/16	7/8	0.74	30	0.1
5/8	S76ATEC005	1.17	0.86	0.96	15/16	1	0.77	40	0.3
3/4	S76ATEC006	1.23	0.86	0.96	1-1/16	1-1/8	0.83	10	0.3
1	S76ATEC010	1.80	1.04	1.23	1-3/8	1-1/2	1.02	1	0.5

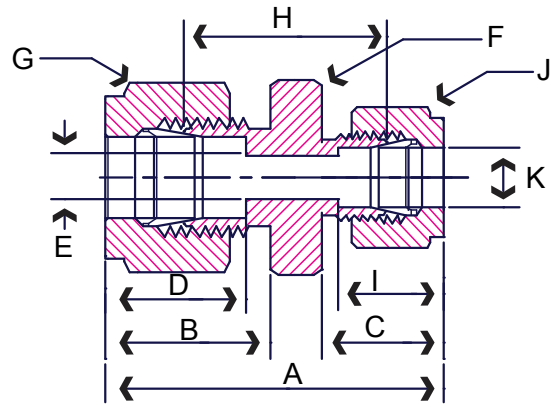
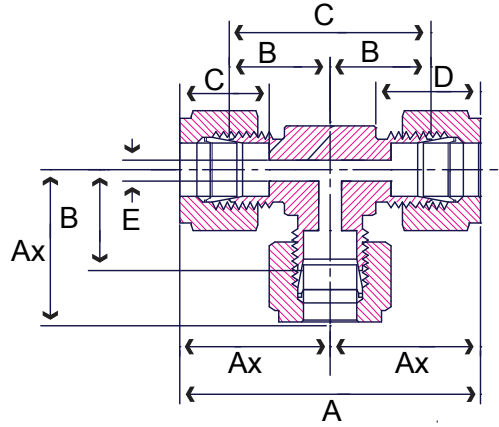


Fig. ARU – Reducing Union

Tube OD IN	Part Number	A IN	B IN	C IN	D IN	E IN	F IN	G IN	H IN	I IN	J IN	K IN	Packing	Weight LB
1/4 x 1/8	S76ARU002001	1.51	0.70	0.60	0.60	0.09	1/2	9/16	0.96	0.50	7/16	1/8	100	0.08
5/16 x 1/4	S76ARU516002	1.65	0.73	0.70	0.64	0.19	9/16	5/8	1.07	0.60	9/16	1/4	60	0.1
3/8 x 1/8	S76ARU003001	1.61	0.76	0.60	0.66	0.09	5/8	11/16	1.06	0.50	7/16	1/8	60	0.1
3/8 x 1/4	S76ARU003002	1.69	0.76	0.70	0.66	0.19	5/8	11/16	1.11	0.60	9/16	1/4	40	0.1
1/2 x 1/4	S76ARU004002	1.84	0.86	0.70	0.90	0.19	13/16	7/8	1.15	0.60	9/16	1/4	20	0.3
1/2 x 3/8	S76ARU004003	1.90	0.86	0.76	0.90	0.28	13/16	7/8	1.21	0.66	11/16	3/8	20	0.3
5/8 x 3/8	S76ARU005003	1.93	0.86	0.76	0.96	0.28	15/16	1	1.24	0.66	11/16	3/8	30	0.4
5/8 x 1/2	S76ARU005004	2.04	0.86	0.86	0.96	0.41	15/16	1	1.24	0.90	7/8	1/2	30	0.4
3/4 x 1/2	S76ARU006004	2.10	0.86	0.86	0.96	0.50	1-1/16	1-1/8	1.30	0.90	7/8	1/2	10	0.5
3/4 x 5/8	S76ARU006005	2.10	0.86	0.86	0.96	0.62	1-1/16	1-1/8	1.30	0.96	1	5/8	10	0.5
1 x 3/4	S76ARU010006	2.10	1.04	0.86	0.96	0.62	1-3/8	1-1/2	1.58	1.23	1-1/8	3/4	1	0.5



INSTRUMENTATION

Fig. AUT – Union Tee

Tube OD IN	Part Number	A IN	B IN	C IN	D IN	E IN	F IN	G IN	Packing	Weight LB
1/8	S76AUT001	1.76	1.22	0.87	0.50	0.09	3/8	7/16	40	0.2
3/16	S76AUT316	1.92	1.40	0.96	0.54	0.12	1/2	1/2	40	0.1
1/4	S76AUT002	2.12	1.52	1.05	0.60	0.19	1/2	9/16	30	0.2
5/16	S76AUT516	2.34	1.74	1.16	0.64	0.25	5/8	5/8	20	0.3
3/8	S76AUT003	2.40	1.80	1.19	0.66	0.28	5/8	11/16	20	0.4
1/2	S76AUT004	2.84	2.02	1.41	0.96	0.41	13/16	7/8	10	0.7
5/8	S76AUT005	3.06	2.24	1.52	0.96	0.50	1	1	10	0.8
3/4	S76AUT006	3.14	2.32	1.56	0.96	0.62	1-1/16	1-1/8	5	1.0
1	S76AUT010	3.86	2.88	1.92	1.23	0.88	1-3/8	1-1/2	1	1.0

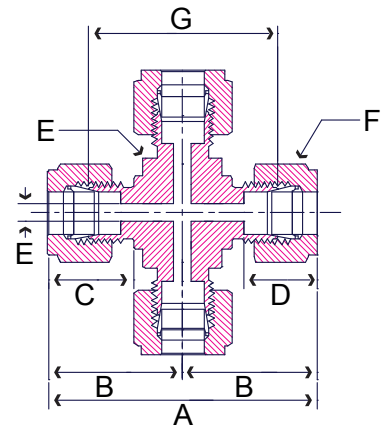


Fig. AUC – Union Cross

Tube OD IN	Part Number	A IN	B IN	C IN	D IN	E IN	F IN	G IN	Packing	Weight LB
1/8	S76AUCR001	1.74	0.87	0.60	0.50	3/8	7/16	1.22	40	0.2
3/16	S76AUCR316	1.92	0.96	0.63	0.54	1/2	1/2	1.40	40	0.2
1/4	S76AUCR002	2.10	1.05	0.70	0.60	1/2	9/16	1.52	20	0.2
5/16	S76AUCR516	2.32	1.16	0.73	0.64	5/8	5/8	1.74	20	0.4
3/8	S76AUCR003	2.38	1.19	0.76	0.66	5/8	11/16	1.80	20	0.4
1/2	S76AUCR004	2.82	1.41	0.86	0.41	13/16	7/8	2.02	4	0.5
5/8	S76AUCR005	3.04	1.52	0.86	0.96	15/16	1.00	2.26	10	0.9
3/4	S76AUCR006	3.12	1.56	0.86	0.96	1-1/16	1-1/8	2.34	2	1.3
1	S76AUCR010	3.85	1.92	1.05	1.23	1-3/8	1-1/2	2.90	2	1.3

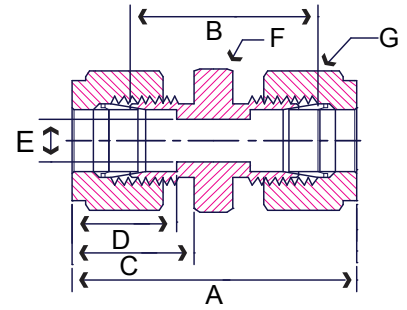


Fig. ASU – Straight Union

Tube OD IN	Part Number	A IN	B IN	C IN	D IN	E IN	F IN	G IN	Packing	Weight LB
1/8	S76ASU001	1.39	0.87	0.60	0.50	0.09	7/16	7/16	100	0.08
3/16	S76ASU316	1.47	0.95	0.63	0.54	0.12	7/16	1/2	100	0.1
1/4	S76ASU002	1.60	1.02	0.70	0.60	0.19	1/2	9/16	60	0.1
5/16	S76ASU516	1.68	1.10	0.73	0.64	0.25	9/16	5/8	40	0.1
3/8	S76ASU003	1.75	1.18	0.76	0.66	0.28	5/8	11/16	40	0.1
1/2	S76ASU004	2.01	1.21	0.86	0.90	0.41	13/16	7/8	20	0.3
5/8	S76ASU005	2.04	1.24	0.86	0.96	0.50	15/16	1	30	0.4
3/4	S76ASU006	2.10	1.30	0.86	0.96	0.62	1-1/16	1-1/8	10	0.5
1	S76ASU010	2.54	1.58	1.04	1.23	0.88	1-3/8	1-1/2	10	0.7

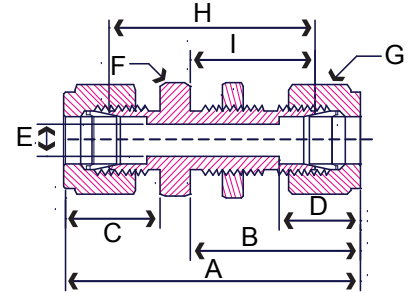


Fig. ABHU – Bulkhead Union

Tube OD IN	Part Number	A IN	B IN	C IN	D IN	E IN	F IN	G IN	H IN	I IN	Packing	Weight LB
1/8	S76ABHU001	2.01	1.22	0.60	0.50	0.09	1/2	7/16	1.49	0.96	100	0.09
3/16	S76SBHU316	2.11	1.26	0.63	0.54	0.12	9/16	1/2	1.59	1.00	100	0.1
1/4	S76ABHU002	2.26	1.31	0.70	0.60	0.19	5/8	9/16	1.68	1.02	60	0.1
5/16	S76ABHU516	2.38	1.40	0.73	0.64	0.25	11/16	5/8	1.80	1.11	40	0.1
3/8	S76ABHU003	2.44	1.44	0.76	0.66	0.28	3/4	11/16	1.86	1.15	30	0.2
1/2	S76ABHU004	2.79	1.64	0.86	0.90	0.41	15/16	7/8	1.99	1.24	20	0.3
5/8	S76ABHU005	2.85	1.67	0.86	0.96	0.50	1-1/16	1	2.05	1.27	20	0.5
3/4	S76ABHU006	3.10	1.86	0.86	0.96	0.63	1-3/16	1-1/8	2.30	1.46	10	0.7
1	S76ABHU010	3.76	2.25	1.04	1.23	0.88	1-5/8	1-1/2	2.80	1.77	10	0.9

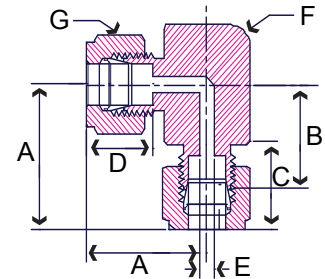


Fig. AUE – Union Elbow

Tube OD IN	Part Number	A IN	B IN	C IN	D IN	E IN	F IN	G IN	Packing	Weight LB
1/8	S76AUE001	0.87	0.61	0.43	0.34	0.05	3/8	5/16	50	0.1
3/16	S76AUE316	1.00	0.74	0.63	0.54	0.12	1/2	1/2	50	0.1
1/4	S76AUE002	1.05	0.76	0.70	0.60	0.19	1/2	9/16	40	0.1
5/16	S76AUE516	1.12	0.83	0.73	0.64	0.25	9/16	5/8	30	0.2
3/8	S76AUE003	1.19	0.90	0.76	0.66	0.28	5/8	11/16	30	0.3
1/2	S76AUE004	1.41	1.01	0.86	0.90	0.41	13/16	7/8	20	0.3
5/8	S76AUE005	1.49	1.09	0.86	0.96	0.50	15/16	1	20	0.4
3/4	S76AUE006	1.56	1.16	0.86	0.96	0.62	1-1/16	1-1/8	10	0.4
1	S76AUE010	1.92	1.44	1.04	1.23	0.88	1-3/8	1-1/2	10	0.4

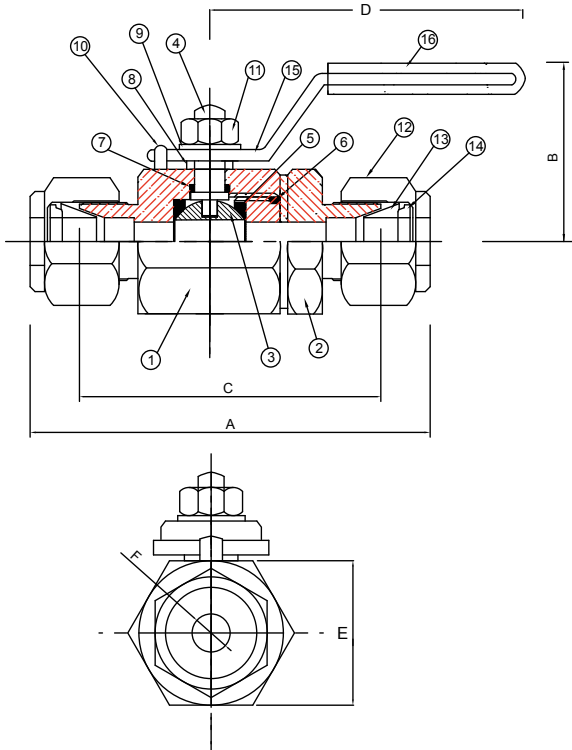


Fig. S64ST4 & S64ST6 – Seamless Instrumentation Tubing

Tube OD IN	Wall Thickness IN	Part Number		ID IN	Tube Length FT	Weight LB/Ft
		304/L	316/L			
1/8	0.035	S64ST4035001	S64ST6035001	0.055	20	0.03
1/8	0.049	S64ST4049001	S64ST6049001	0.027	20	0.04
1/4	0.028	S64ST4028002	S64ST6028002	0.194	20	0.06
1/4	0.035	S64ST4035002	S64ST6035002	0.180	20	0.08
1/4	0.049	S64ST4049002	S64ST6049002	0.152	20	0.1
1/4	0.065	S64ST4065002	S64ST6065002	0.120	20	0.1
1/4	0.083	S64ST4083002	S64ST6083002	0.084	20	0.1
5/16	0.035	S64ST4035516	S64ST6035516	0.243	20	0.1
3/8	0.035	S64ST4035003	S64ST6035003	0.305	20	0.1
3/8	0.049	S64ST4049003	S64ST6049003	0.277	20	0.1
3/8	0.065	S64ST4065003	S64ST6065003	0.245	20	0.2
3/8	0.083	S64ST4083003	S64ST6083003	0.209	20	0.2
1/2	0.035	S64ST4035004	S64ST6035004	0.430	20	0.1
1/2	0.049	S64ST4049004	S64ST6049004	0.402	20	0.2
1/2	0.065	S64ST4065004	S64ST6065004	0.370	20	0.3
1/2	0.083	S64ST4083004	S64ST6083004	0.334	20	0.4
1/2	0.120	S64ST4120004	S64ST6120004	0.260	20	0.5
5/8	0.035	S64ST4035005	S64ST6035005	0.555	20	0.2
5/8	0.049	S64ST4049005	S64ST6049005	0.527	20	0.3
5/8	0.065	S64ST4065005	S64ST6065005	0.495	20	0.3
5/8	0.083	S64ST4083005	S64ST6083005	0.509	20	0.5
3/4	0.035	S64ST4035006	S64ST6035006	0.680	20	0.2
3/4	0.049	S64ST4049006	S64ST6049006	0.652	20	0.3
3/4	0.065	S64ST4065006	S64ST6065006	0.620	20	0.4
3/4	0.083	S64ST4083006	S64ST6083006	0.584	20	0.6
3/4	0.095	S64ST4095006	S64ST6095006	0.560	20	0.7
1	0.035	S64ST4035010	S64ST6035010	0.930	20	0.3
1	0.049	S64ST4049010	S64ST6049010	0.902	20	0.4
1	0.065	S64ST4065010	S64ST6065010	0.870	20	0.6
1	0.083	S64ST4083010	S64ST6083010	0.834	20	0.8
1	0.095	S64ST4095010	S64ST6095010	0.810	20	0.9
1	0.120	S64ST4120010	S64ST6120010	0.760	20	1.1
1-1/4	0.065	S64ST4065012	S64ST6065012	1.120	20	0.8



Size: 1/4" to 1"
 Material: 316 stainless steel construction
 Ends: Double ferrule compression tube ends
 Pressure: 1000 psi @ 200°F

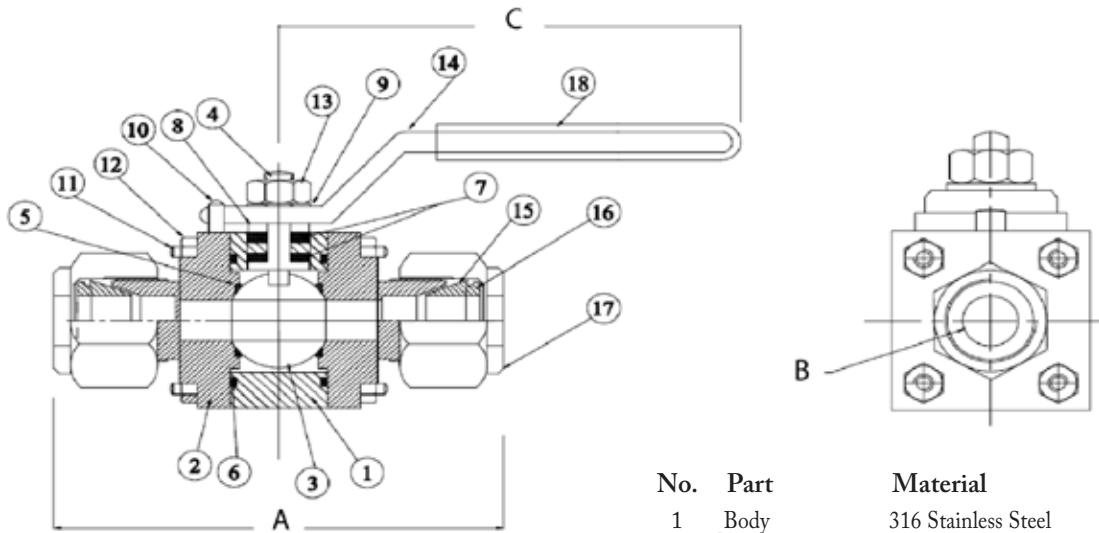


No.	Part	Material
1	Body	316 Stainless Steel
2	Adapter	316 Stainless Steel
3	Ball	316 Stainless Steel
4	Stem	316 Stainless Steel
5	Seats	PTFE
6	Joint Seals	PTFE
7	Gland Seals	316 Stainless Steel
8	Retainer	410 Stainless Steel
9	Washer	Alloy Steel
10	Stop Pin	304 Stainless Steel
11	Stem Nut	304 Stainless Steel
12	Nut	316 Stainless Steel
13	Front Ferrule	316 Stainless Steel
14	Back Ferrule	316 Stainless Steel
15	Handle	304 Stainless Steel
16	Sleeve	PVC

Size IN	Part Number	Weight LB	A IN	B IN	C IN	D IN	E IN	F IN
1/4	S76BVH002	0.40	2.93	1.33	2.34	3.71	0.86	0.19
3/8	S76BVH003	0.44	3.12	1.40	2.50	3.71	0.86	0.27
1/2	S76BVH004	0.72	3.51	1.64	2.73	3.90	1.09	0.35
3/4	S76BVH006	1.05	3.90	1.83	2.93	5.27	1.25	0.39
1	S76BVH010	1.62	4.25	1.85	3.26	5.31	1.77	0.75



Size: 1/4" to 1"
 Material: 316 stainless steel construction
 Ends: Double ferrule compression tube ends
 Pressure: 3000 psi @ 200°F

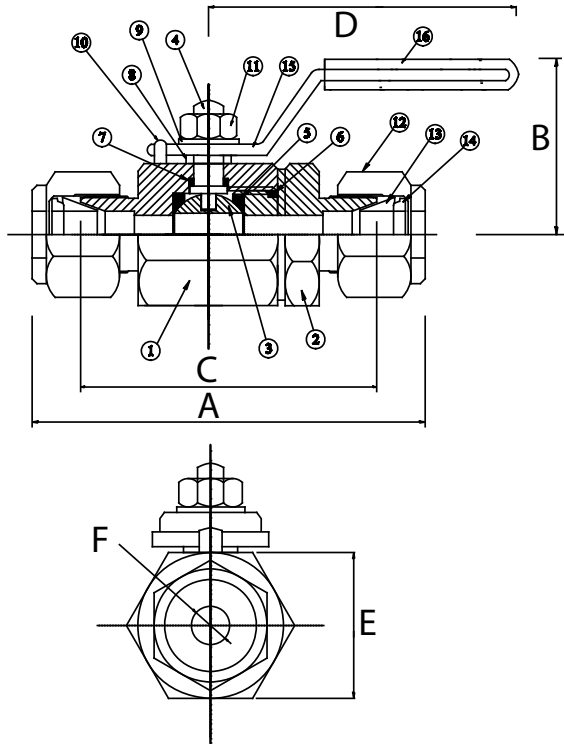


No.	Part	Material
1	Body	316 Stainless Steel
2	Adapter	316 Stainless Steel
3	Ball	316 Stainless Steel
4	Stem	316 Stainless Steel
5	Seats	PTFE
6	Joint Seal	PTFE
7	Gland Seal	PTFE
8	Retainer	304 Stainless Steel
9	Washer	304 Stainless Steel
10	Stop Pin	304 Stainless Steel
11	Stud	304 Stainless Steel
12	Nut	304 Stainless Steel
13	Stem Nut	304 Stainless Steel
14	Handle	304 Stainless Steel
15	Front Ferrule	316 Stainless Steel
16	Back Ferrule	316 Stainless Steel
17	Nut	316 Stainless Steel
18	Sleeve	PVC

Size IN	Part Number	Weight LB	A IN	B IN	C IN
1/4	S76BVH3002	0.62	2.95	0.19	3.74
3/8	S76BVH3003	0.74	3.15	0.28	3.74
1/2	S76BVH3004	0.86	3.46	0.39	3.74
3/4	S76BVH3006	1.68	3.86	0.47	5.31
1	S76BVH3010	2.52	4.65	0.75	5.91



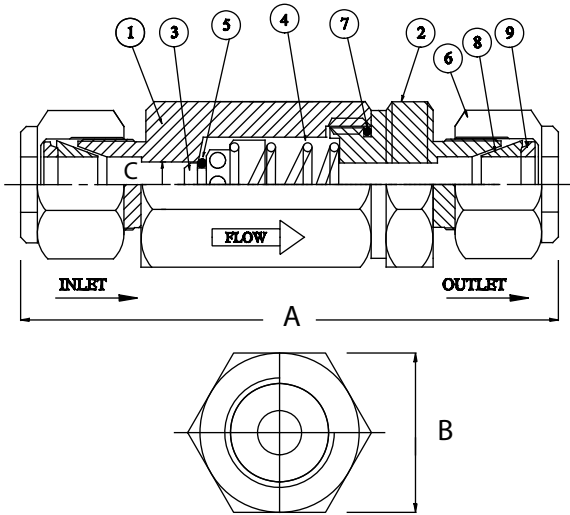
Size: 1/4" to 1"
 Material: 316 stainless steel construction
 Ends: Double ferrule compression tube ends
 Pressure: 6000 psi @ 200°F



No.	Part	Material
1	Body	316 Stainless Steel
2	Adapter	316 Stainless Steel
3	Ball	316 Stainless Steel
4	Stem	316 Stainless Steel
5	Seats	Delrin
6	Joint Seals	Viton
7	Gland Seals	PTFE
8	Retainer	304 Stainless Steel
9	Washer	304 Stainless Steel
10	Stop Pin	304 Stainless Steel
11	Stem Nut	304 Stainless Steel
12	Nut	316 Stainless Steel
13	Front Ferrule	316 Stainless Steel
14	Back Ferrule	316 Stainless Steel
15	Handle	304 Stainless Steel
16	Sleeve	PVC

Size IN	Part Number	Weight LB	A IN	B IN	C IN	D IN	E IN	F IN
1/4	S76BVH6002	0.40	2.95	1.34	2.36	3.74	0.87	0.19
3/8	S76BVH6003	0.44	3.15	1.42	2.56	3.74	0.98	0.28
1/2	S76BVH6004	0.72	3.54	1.57	2.76	3.74	1.10	0.39
3/4	S76BVH6006	1.05	3.94	1.85	3.07	5.31	1.65	0.59
1	S76BVH6010	1.62	4.25	1.85	3.27	5.31	1.77	0.75

Size: 1/4" to 1"
 Material: 316 stainless steel construction
 Ends: Double ferrule compression tube ends
 Pressure: 3000 psi @ 200°F
 Cracking Pressure: 7 psi

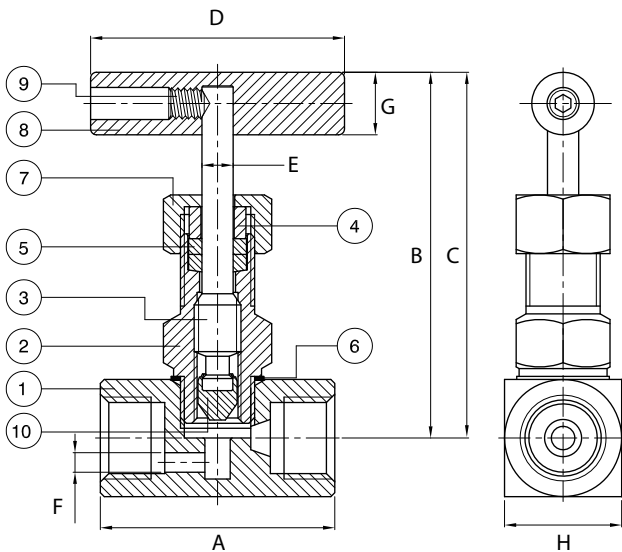


No.	Part	Material
1	Body	316 Stainless Steel
2	Adapter	316 Stainless Steel
3	Poppet	316 Stainless Steel
4	Spring	316 Stainless Steel
5	Seal	Viton
6	Nut	316 Stainless Steel
7	Joint	Viton
8	Front Ferrule	316 Stainless Steel
9	Back Ferrule	316 Stainless Steel

Size IN	Part Number	Weight LB	A IN	B IN	C IN
1/4	S76PCV3002	0.3	2.95	0.75	0.19
3/8	S76PCV3003	0.3	3.07	0.87	0.28
1/2	S76PCV3004	0.5	3.46	0.98	0.39
3/4	S76PCV3006	0.6	4.13	1.10	0.59
1	S76PCV3010	1.5	4.53	1.77	0.75



Size: 1/4" to 1"
 Material: 316 stainless steel
 Ends: NPT threaded
 Pressure: 6000 psi
 Temperature: 0°F to 650°F



No.	Part	Material
1	Body	316 Stainless Steel
2	Bonnet	316 Stainless Steel
3	Stem	316 Stainless Steel
4	Gland	316 Stainless Steel
5	Packing	PTFE
6	Body Seal	PTFE
7	Gland Nut	316 Stainless Steel
8	Handle	410 Stainless Steel
9	Set Screw	Alloy Steel
10	Disc	316 Stainless Steel

Size IN	Part Number	Weight LB	A IN	B IN	C IN	D IN	E IN	F IN	G IN	H IN	Cv
1/4	S7166NV002	1.0	1.77	2.56	3.23	2.36	0.28	0.12	0.51	0.87	0.4
3/8	S7166NV003	1.1	1.97	2.64	3.35	2.36	0.28	0.12	0.51	0.98	0.4
1/2	S7166NV004	1.6	2.36	3.39	4.21	2.56	0.31	0.16	0.63	1.18	0.75
3/4	S7166NV006	1.9	2.56	3.46	4.37	2.56	0.31	0.20	0.63	1.38	0.9
1	S7166NV010	3.1	3.27	3.94	5.12	3.15	0.39	0.28	0.75	1.81	1.8