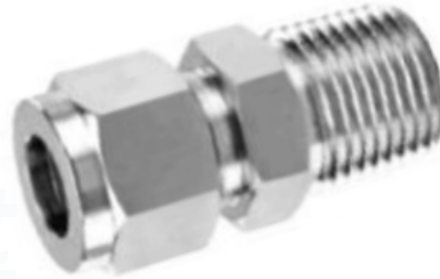
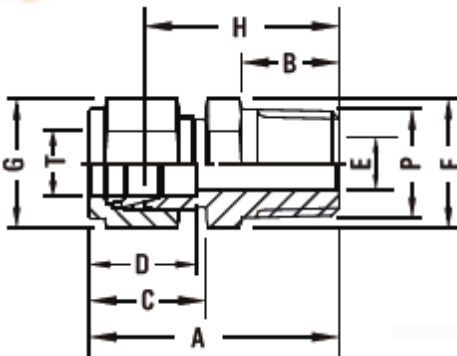


Male Connector



METRIC RANGE

Dimensions in mm

T TUBE OD	P NPT Male	A Length	B	C	F A/F	G A/F	H	PART NO
3	1/8	30.5	9.6	15.3	11	11	23.9	A3MMC2
3	1/4	35.6						A3MMC4
6	1/8	32.8	9.6	15.3	14	14	25.0	A6MMC2
6	1/4	37.9	14.3	17.7	14	14	30.5	A6MMC4
6	3/8	38.4	14.3	17.7	19	14	31.0	A6MMC6
6	1/2	44.7	19.1	17.7		14	37.3	A6MMC8
8	1/8	34.2	9.6	18.6	14	16	26.7	A8MMC2
8	1/4	38.7	14.3	18.6	14	16	31.2	A8MMC4
8	3/8	39.3	14.3	18.6	19	16	31.8	A8MMC6
8	1/2	45.6	19.1	18.6	22	16	38.1	A8MMC8
10	1/8	36.3	9.6					A10MMC2
10	1/4	40.9	14.3	19.5	19	19	33.3	A10MMC4
10	3/8	40.9	14.3	19.5	19	19	33.3	A10MMC6
10	1/2	46.5	19.1	19.5	22	19	38.9	A10MMC8
12	1/4	43.4	14.3	22.0	22	22	33.3	A12MMC4
12	3/8	43.4	14.3	22.0	22	22	33.3	A12MMC6
12	1/2	49.0	19.1	22.0	22	22	38.9	A12MMC8
12	3/4	50.5	19.1	22.0	27	22	40.4	A12MMC12
12	1	57.1	23.8	22.0	35	22	47.0	A12MMC16
14	1/4	44.1	14.3	22.0	24	25	34.0	A14MMC4
14	3/8	44.1	14.3	22.0	24	25	34.0	A14MMC6
14	1/2	49.0	19.1	22.0	24	25	38.9	A14MMC8
15	1/2	49.0	19.1	22.0	24	25	38.9	A15MMC8
16	3/8	44.1	14.3	22.0	24	25	34.0	A16MMC6
16	1/2	49.0	19.1	22.0	24	25	38.9	A16MMC8
16	3/4	50.5	19.1	22.0	27	25	40.4	A16MMC12

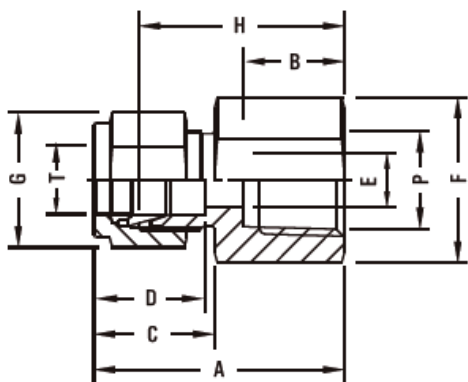
T TUBE OD	P NPT Male	A Length	B	C	F A/F	G A/F	H	PART NO
18	1/2	50.5	19.1	22.0	27	30	40.4	A18MMC8
18	3/4	50.5	19.1	22.0	27	30	40.4	A18MMC12
20	1/2	52.3	19.1	22.0	30	32	42.2	A20MMC8
20	3/4	52.3	19.1	22.0	30	32	42.2	A20MMC12
22	3/4	52.3	19.1	22.0	30	32	42.2	A22MMC12
22	1	57.1	23.8	22.0	35	32	47.0	A22MMC16
25	1/2	57.5	19.1	26.5	35	38	45.2	A25MMC8
25	3/4	57.5	19.1	26.5	35	38	45.2	A25MMC12
25	1	62.3	23.8	26.5	35	38	50.0	A25MMC16

INCHES RANGE

Dimensions in inches

T TUBE OD	P NPT Male	A Length	B	C	F A/F	G A/F	H	PART NO
1/16	1/16	0.94	0.38	0.44	5/16	5/16	0.78	A1MC1
1/16	1/8	1.00	0.38	0.44	1/2	5/16	0.84	A1MC2
1/8	1/8	1.19	0.38	0.63	1/2	7/16	0.91	A2MC2
1/8	1/4	1.41	0.56	0.63	9/16	7/16	1.13	A2MC4
1/4	1/8	1.29	0.38	0.70	1/2	9/16	1.00	A4MC2
1/4	1/4	1.50	0.56	0.70	9/16	9/16	1.19	A4MC4
1/4	3/8	1.51	0.56	0.70	11/16	9/16	1.19	A4MC6
1/4	1/2	1.73	0.75	0.70	7/8	9/16	1.44	A4MC8
5/16	1/4	1.52	0.56	0.73	9/16	5/8	1.23	A5MC2
3/8	1/8	1.38	0.38	0.76	5/8	11/16	1.09	A6MC2
3/8	1/4	1.57	0.56	0.76	5/8	11/16	1.28	A6MC4
3/8	3/8	1.57	0.56	0.76	11/16	11/16	1.28	A6MC6
3/8	1/2	1.79	0.75	0.76	7/8	11/16	1.50	A6MC8
1/2	1/4	1.17	0.56	0.86	13/16	7/8	1.31	A8MC4
1/2	3/8	1.71	0.56	0.86	13/16	7/8	1.31	A8MC6
1/2	1/2	1.90	0.75	0.86	7/8	7/8	1.50	A8MC8
1/2	3/4	1.93	0.75	0.86	1-1/16	7/8	1.53	A8MC12
5/8	3/8	1.74	0.56	0.86	15/16	1	1.34	A10MC6
5/8	1/2	1.93	0.75	0.86	15/16	1	1.53	A10MC8
3/4	1/2	1.99	0.75	0.86	1-1/16	1-1/8	1.59	A12MC8
3/4	3/4	1.99	0.75	0.86	1-1/16	1-1/8	1.59	A12MC12
3/4	1	2.21	0.94	0.86	1-3/16	1-1/8	1.81	A12MC16
1	3/4	2.26	0.75	1.04	1-3/8	1-1/2	1.78	A16MC12
1	1	2.45	0.94	1.04	1-3/8	1-1/2	1.97	A16MC16

Female Connector



METRIC RANGE

Dimensions in mm

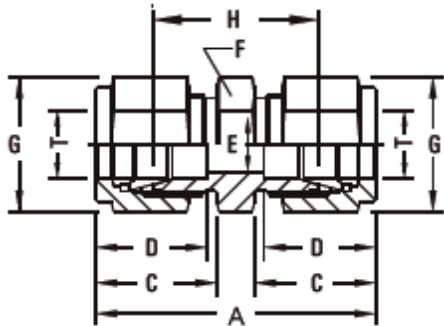
T TUBE OD	P NPT Male	A Length	B	C	F A/F	G A/F	H	PART NO
4	1/8	30.16	10	16.67	14	12	23.02	A4MFC2
6	1/8	31.75	10	18.26	14	14	23.81	A6MFC2
6	1/4	36.51	14	18.26	19	14	28.58	A6MFC4
6	3/8	38.07	14	18.26	22	14	30.16	A6MFC6
6	1/2	43.66	19	18.26	27	14	35.72	A6MFC8
8	1/8	32.54	10	19.05	14	17	24.61	A8MFC2
8	1/4	37.31	14	19.05	19	17	29.37	A8MFC4
10	1/8	33.34	10	19.84	17	19	25.40	A10MFC2
10	1/4	38.10	14	19.84	19	19	30.16	A10MFC4
10	3/8	39.69	14	19.82	22	19	31.75	A10MFC6
10	1/2	44.45	19	19.84	27	19	36.51	A10MFC8
12	1/4	42.07	14	22.23	22	22	31.75	A12MFC4
12	3/8	42.07	14	22.23	22	22	31.75	A12MFC6
12	1/2	46.83	19	22.23	27	22	36.51	A12MFC8
16	1/2	46.83	19	22.23	27	27	36.51	A16MFC8
18	1/2	46.83	19	22.23	27	30	36.51	A18MFC8
18	3/4	48.42	19	22.23	32	30	38.10	A18MFC12
20	1/2	46.83	19	22.23	27	30	36.51	A20MFC8
20	3/4	48.42	19	22.23	32	30	38.10	A20MFC12
25	3/4	53.18	19	26.19	36	41	41.28	A25MFC12
25	1	61.91	24	26.19	41	41	50.00	A25MFC16

IMPERIAL RANGE

Dimensions in inches

T TUBE OD	P NPT Male	A Lengt h	B	C	F A/F	G A/F	H	PART NO
1/16	1/16	0.94	0.36	0.44	1/2	5/16	0.78	A1FC1
1/8	1/8	1.16	0.39	0.63	9/16	7/16	0.88	A2FC2
1/8	1/4	1.16	0.59	0.63	3/4	7/16	1.06	A2FC4
3/16	1/8	1.17	0.39	0.63	9/16	9/16	0.91	A3FC2
1/4	1/8	1.23	0.39	0.70	9/16	9/16	0.94	A4FC2
1/4	1/4	1.41	0.59	0.70	3/4	9/16	1.12	A4FC4
1/4	3/8	1.48	0.59	0.70	7/8	9/16	1.19	A4FC6
1/4	1/2	1.70	0.78	0.70	1-1/16	9/16	1.41	A4FC8
5/16	1/8	1.26	0.39	0.73	3/4	5/8	0.97	A5FC2
5/16	1/4	1.45	0.59	0.73	3/4	5/8	1.16	A5FC4
3/8	1/8	1.29	0.39	0.76	5/8	11/16	1.00	A6FC2
3/8	1/4	1.48	0.59	0.76	3/4	11/16	1.19	A6FC4
3/8	3/8	1.54	0.59	0.76	7/8	11/16	1.25	6FC6
3/8	1/2	1.73	0.78	0.76	1-1/16	11/16	1.44	A6FC8
1/2	1/2	1.65	0.59	0.86	13/16	7/8	1.25	A8FC4
1/2	3/8	1.65	0.59	0.86	7/8	7/8	1.25	A8FC6
1/2	1/2	1.84	0.78	0.86	1-1/16	7/8	1.44	A8FC8
5/8	3/8	1.65	0.59	0.86	5/16	1	1.25	A10FC6
5/8	1/2	1.84	0.78	0.86	1-1/16	1	1.44	A10FC8
3/4	1/2	1.84	0.78	0.86	1-1/16	1-1/8	1.44	A12FC8
3/4	3/4	1.90	0.81	0.86	1-5/16	1-1/8	1.50	A12FC12
1	3/4	2.10	0.81	1.04	1-3/8	1-1/2	1.62	A16FC12
1	1	2.45	1.00	1.04	1-5/8	1-1/2	1.97	A16FC16

Equal Union



METRIC RANGE

Dimensions in mm

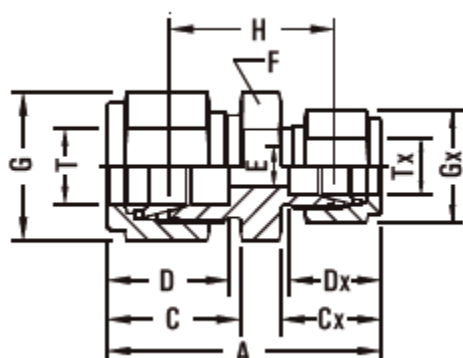
T TUBE OD	A Length	C	F A/F	G A/F	H	PART NO
4	38.50	16.67	12	12	24.21	A4MU
6	42.07	18.26	14	14	26.19	A6MU
8	44.04	19.05	14	17	28.18	A8MU
10	46.04	19.84	17	19	30.16	A10MU
12	51.59	22.23	22	22	30.96	A12MU
16	52.39	22.23	24	27	31.71	A16MU
18	53.98	22.23	27	30	33.34	A18MU
20	53.98	22.23	30	32	33.44	A20MU
25	64.29	26.19	36	41	40.48	A25MU

IMPERIAL RANGE

Dimensions in inches

T TUBE OD	A Length	C	F A/F	G A/F	H	PART NO
1/16	1.00	0.44	5/16	5/16	0.69	A1U
1/8	1.44	0.63	1/2	7/16	0.88	A2U
3/16	1.47	0.63	7/16	1/2	0.95	A3U
1/4	1.61	0.70	1/2	9/16	1.03	A4U
5/16	1.68	0.73	9/16	5/8	1.10	A5U
3/8	1.77	0.76	5/8	11/16	1.19	A6U
1/2	2.02	0.86	13/16	5/8	1.22	A8U
5/8	2.05	0.86	15/16	1	1.25	A10U
3/4	2.11	0.86	1-1/16	1-1/8	1.31	A12U
1	2.55	1.04	1-3/8	1-1/2	1.59	A16U

Reducing Union



METRIC RANGE

Dimensions in mm

T TUBE OD	Tx TUBE OD	A Length	F A/F	G A/F	Gx A/F	H	PART NO
6	4	40.48	14	14	12	25.40	A6-4MRU
8	6	43.26	14	17	14	27.38	A8-6MRU
10	6	44.45	17	19	14	28.58	A10-6MRU
10	8	45.24	17	19	17	29.37	A10-8MRU
12	6	47.63	22	22	14	29.37	A12-6MRU
12	10	49.21	22	22	19	30.96	A12-10MRU
16	10	50.01	24	27	19	31.75	A16-10MRU
16	12	52.39	24	27	22	31.75	A16-12MRU
20	12	53.98	27	30	22	33.34	A20-12MRU
20	16	53.98	27	30	27	33.34	A20-16MRU
25	20	60.32	36	41	30	38.10	A25-16MRU

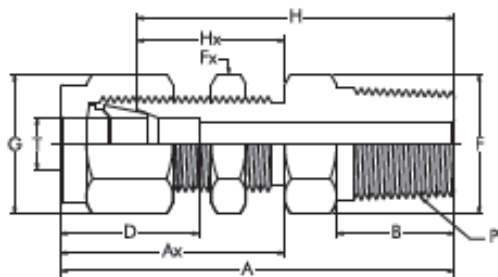
IMPERIAL RANGE

Dimensions in inches

T TUBE OD	Tx TUBE OD	A Length	F A/F	G A/F	Gx A/F	H	PART NO
1/8	1/16	1.25	½	7/16	5/16	0.81	A2RU1
3/16	1/8	1.48	½	1/2	7/16	0.92	A3RU2
1/4	1/16	1.37	½	9/16	5/16	0.91	A4RU1
1/4	1/8	1.56	½	9/16	7/16	0.97	A4RU2
1/4	3/16	1.55	½	9/16	1/2	1.00	A4RU6
5/16	1/4	1.66	9/16	5/8	9/16	1.08	A5RU4
3/8	1/4	1.70	5/8	11/16	9/16	1.12	A6RU4
3/8	5/16	1.74	5/8	11/16	5/8	1.16	A6RU5

T TUBE OD	Tx TUBE OD	A Length	F A/F	G A/F	Gx A/F	H	PART NO
1/2	1/4	1.85	13/16	5/8	9/16	1.16	A8RU4
1/2	3/8	1.91	13/16	7/8	11/16	1.22	A8RU6
5/8	3/8	1.94	15/16	1	11/16	1.25	A10RU6
5/8	1/2	2.05	15/16	1	7/8	1.25	A10RU8
3/4	1/2	2.11	1-1/16	1-1/8	7/8	1.31	A12RU8
3/4	5/8	2.11	1-1/16	1-1/8	1	1.31	A12RU10
1	3/4	2.47	1-3/8	1-1/2	1-1/8	1.59	A16RU12

Bulkhead Male Connector

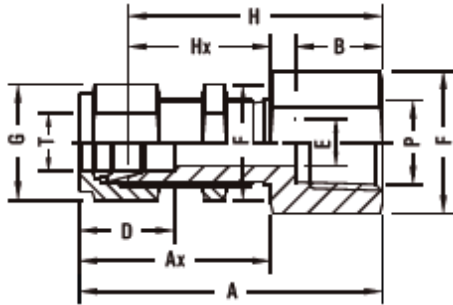


IMPERIAL RANGE

Dimensions in inches

T TUBE OD	P NPT Male	A Length	Ax	Fx A/F	F A/F	G A/F	H	PART NO
1/8	1/8	1.95	1.32	5/8	5/8	9/16	1.66	A2MBH2
1/4	1/4	2.10	1.32	5/8	5/8	9/16	1.81	A4MBH4
3/8	3/8	2.26	1.45	3/4	3/4	11/16	1.97	A6MBH6
1/2	1/2	2.68	1.65	15/16	15/16	7/8	2.28	A8MBH8

Bulkhead Female Connector

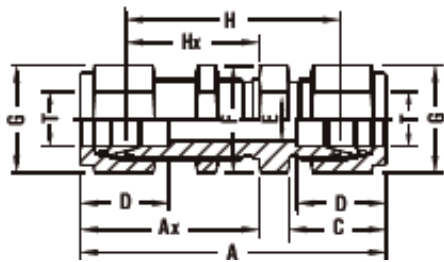


IMPERIAL RANGE

Dimensions in inches

T TUBE OD	P NPT Male	A Length	Ax	Fx A/F	F A/F	G A/F	H	PART NO
1/8	1/8	1.85	1.32	5/8	5/8	9/16	1.56	A2FBH2
1/4	1/4	2.04	1.32	5/8	3/4	9/16	1.75	A4FBH4
3/8	3/8	2.17	1.45	3/4	3/4	11/16	1.88	A6FBH6
1/2	1/2	2.62	1.65	15/16	1-1/16	7/8	2.22	A8FBH8

Bulkhead Union



METRC RANGE

Dimensions in mm

T TUBE OD	A Length	Ax	F A/F	G A/F	H	PART NO
4	54.77	32.54	14	12	40.48	A4MBHU
6	58.74	34.13	17	14	42.86	A6MBHU
8	61.91	36.51	17	17	46.04	A8MBHU
10	63.50	37.71	19	19	47.63	A10MBHU
12	71.44	42.07	24	22	50.80	A12MBHU
16	73.03	42.86	27	27	50.80	A16MBHU
18	73.03	47.63	30	30	58.74	A18MBHU

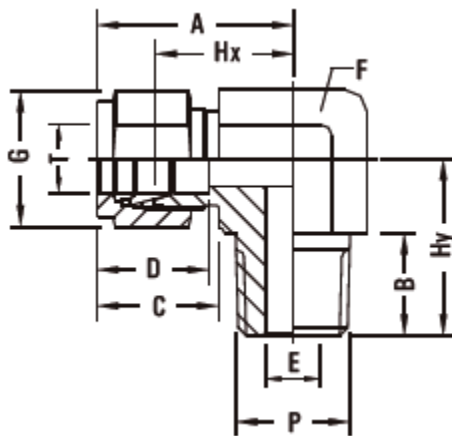
20	79.38	47.63	30	30	58.74	A20MBHU
25	95.25	57.15	41	41	71.44	A25MBHU

IMPERIAL RANGE

Dimensions in inches

T TUBE OD	A Length	Ax	F A/F	G A/F	H	PART NO
1/8	2.10	1.25	1/2	7/16	0.77	A2BHU
3/16	2.11	1.26	9/16	1/2	1.59	A3BHU
1/4	2.27	1.32	5/8	9/16	1.69	A4BHU
5/16	2.39	1.41	11/16	5/8	1.81	A5BHU
3/8	2.46	1.45	3/4	11/16	1.88	A6BHU
1/2	2.80	1.65	15/16	7/8	2.00	A8BHU
5/8	2.87	1.69	1	1	2.06	A10BHU
3/4	3.11	1.87	1-3/16	1-1/8	2.31	A12BHU
1	3.75	2.26	1-5/8	1-1/2	2.81	A16BHU

Male Elbow



METRIC RANGE

Dimensions in mm

T TUBE OD	P NPT Male	A Length	B	F A/F	G A/F	H	PART NO
4	1/8	24.61	9.53	12	12	19.05	A4MME2
6	1/8	26.19	9.53	12	14	19.80	A6MME2
6	1/4	26.19	14.29	12	14	19.80	A6MME4
6	3/8	27.60	14.29	14	14	21.33	A6MME6

6	1/2	29.40	19.05	19	14	23.11	A6MME8
8	1/8	28.58	9.53	14	17	22.22	A8MME2
8	1/4	28.58	14.29	14	17	22.22	A8MME4
8	3/8	28.58	14.24	14	17	22.22	A8MME6
8	1/2	31.75	19.05	19	17	24.00	A8MME8
10	1/8	28.90	9.53	14	19	23.11	A10MME2
10	1/4	28.90	14.29	14	19	23.11	A10MME4
10	3/8	28.90	14.29	14	19	23.11	A10MME6
10	1/2	30.60	19.05	19	19	24.89	A10MME8
12	1/4	35.80	14.29	19	22	24.89	A12MME4
12	3/8	35.80	14.29	19	22	24.89	A12MME6
12	1/2	35.80	19.05	19	22	24.89	A12MME8
16	3/8	36.51	14.29	19	27	26.19	A16MME6
16	1/2	36.51	19.05	19	27	26.19	A16MME8
18	1/2	39.69	19.05	27	30	29.37	A18MME8
18	3/4	39.69	19.05	27	30	29.37	A18MME6
20	1/2	39.69	19.05	27	30	29.37	A20MME8
20	3/4	39.69	19.05	27	30	29.37	A20MME12
25	3/4	45.24	19.05	32	41	33.34	A25MME12
25	1	45.24	23.81	32	41	33.4	A25MME16

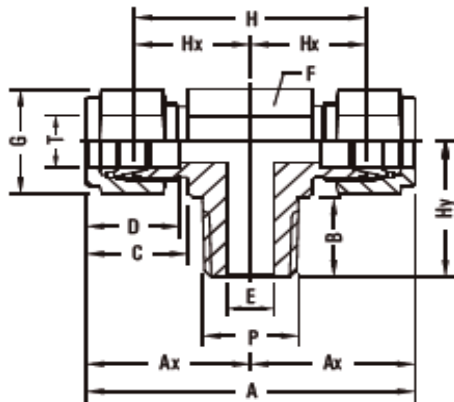
IMPERIAL RANGE

Dimensions in inches

T TUBE OD	P NPT Male	A Length	B	F A/F	G A/F	H	PART NO
1/16	1/16	0.72	0.38	0.47	5/16	0.56	A1ME1
1/16	1/8	0.72	0.38	0.47	5/16	0.56	A1ME2
1/8	1/16	0.99	0.38	0.47	7/16	0.72	A2ME1
1/8	1/8	0.94	0.38	0.47	7/16	0.72	A2ME2
1/8	¼	0.97	0.56	0.47	7/16	0.72	A2ME4
3/16	1/8	1.01	0.38	0.47	1/2	0.75	A3ME2
1/4	1/8	1.07	0.38	0.47	9/16	0.78	A4ME2
1/4	1/4	1.07	0.56	0.47	9/16	0.78	A4ME4
1/4	3/8	1.17	0.56	0.55	9/16	0.84	A4ME6
1/4	1/2	1.26	0.75	0.75	9/16	0.91	A4ME8
5/16	1/8	1.17	0.38	0.55	5/8	0.88	A5ME2
5/16	1/4	1.17	0.56	0.55	5/8	0.88	A5ME4
3/8	1/8	1.20	0.38	0.55	11/16	0.91	A6ME2
3/8	1/4	1.20	0.56	0.55	11/16	0.91	A6ME4
3/8	3/8	1.23	0.56	0.55	11/16	0.91	A6ME6
3/8	1/2	1.32	0.75	0.75	11/16	0.98	A6ME8
1/2	1/4	1.38	0.56	0.75	7/8	0.98	A8ME4
1/2	3/8	1.38	0.56	0.75	7/8	0.98	A8ME6
1/2	1/2	1.44	0.75	0.75	7/8	0.98	A8ME8

5/8	3/8	1.46	0.56	0.94	1	1.06	A10ME6
5/8	1/2	1.46	0.75	0.94	1	1.06	A10ME8
3/4	1/2	1.51	0.75	1.06	1-1/8	1.11	A12ME8
3/4	3/4	1.51	0.75	1.06	1-1/8	1.11	A12ME12
1	3/4	1.79	0.94	1.25	1-1/2	1.31	A16ME12
1	1	1.79	0.94	1.25	1-1/2	1.31	A16ME16

Male Branch Tee



METRIC RANGE

Dimensions in mm

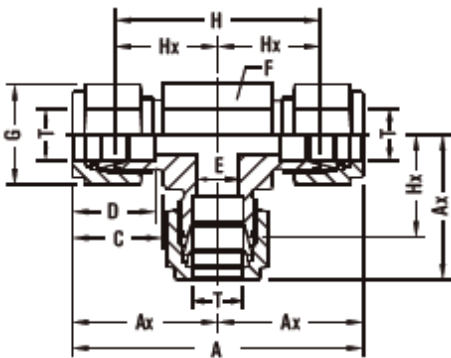
T TUBE OD	P NPT Male	A Length	B	F A/F	G A/F	H	PART NO
4	1/16	52.30	9.53	12	12	19.05	A4MMBT1
4	1/8	52.30	9.53	12	12	19.05	A4MMBT2
4	1/4	52.30	14.29	12	12	19.05	A4MMBT4
6	1/8	54.42	9.53	12	14	19.80	A6MMBT2
6	1/4	54.42	14.29	12	14	19.80	A6MMBT4
6	3/8	57.46	14.29	14	14	21.33	A6MMBT6
6	1/2	61.00	19.05	19	14	23.10	A6MMBT8
8	1/8	59.40	9.53	14	17	22.22	A8MMBT2
8	1/4	59.40	14.29	14	17	22.22	A8MMBT4
8	3/8	59.40	14.29	14	17	22.22	A8MMBT6
8	1/2	63.00	19.50	19	17	24.00	A8MMBT8
10	1/8	61.60	9.53	14	19	23.10	A10MMBT2
10	1/4	61.60	14.29	14	19	23.10	A10MMBT4
10	3/8	61.60	14.29	14	19	23.10	A10MMBT6
10	1/2	65.18	19.05	19	19	24.89	A10MMBT8
12	1/4	69.98	14.29	19	22	24.89	A12MMBT4
12	3/8	65.18	14.29	19	22	24.89	A12MMBT6
12	1/2	65.18	19.05	19	22	24.89	A12MMBT8
16	1/2	72.78	19.05	24	27	26.19	A16MMBT8

IMPERIAL RANGE

Dimensions in inches

T TUBE OD	P NPT Male	A Length	B	F A/F	G A/F	H	PART NO
1/8	1/8	1.98	0.38	0.47	7/16	0.72	A2MBT2
1/8	1/4	1.98	0.56	0.47	7/16	0.72	A2MBT4
3/16	1/8	2.02	0.38	0.47	1/2	0.75	A3MBT2
1/4	1/8	2.14	0.38	0.47	9/16	0.78	A4MBT2
1/4	1/4	2.14	0.56	0.47	9/16	0.78	A4MBT4
1/4	3/8	2.26	0.56	0.55	9/16	0.84	A4MBT6
5/16	1/8	2.32	0.38	0.55	5/8	0.87	A5MBT2
3/8	1/8	2.42	0.38	0.55	11/16	0.91	A6MBT2
3/8	1/4	2.42	0.56	0.55	11/16	0.91	A6MBT4
3/8	3/8	2.42	0.56	0.55	11/16	0.91	A6MBT6
3/8	1/2	2.42	0.75	0.75	11/16	0.91	A6MBT8
1/2	1/4	2.76	0.56	0.75	7/8	0.98	A8MBT4
1/2	3/8	2.76	0.56	0.75	7/8	0.98	A8MBT6
1/2	1/2	2.76	0.75	0.75	7/8	0.98	A8MBT8
5/8	1/2	2.92	0.75	0.75	1	1.06	A10MBT8

Union Tee



MATRIC RANGE

Dimensions in mm

T TUBE OD	A Length	D	Ax	F A/F	G A/F	H	PART NO
4	52.30	14.29	19.00	12	12	38.00	A4MUT
6	54.40	15.88	19.80	12	14	39.60	A6MUT
8	59.40	16.67	22.20	14	17	44.40	A8MUT
10	61.60	17.46	23.10	14	19	46.20	A10MUT

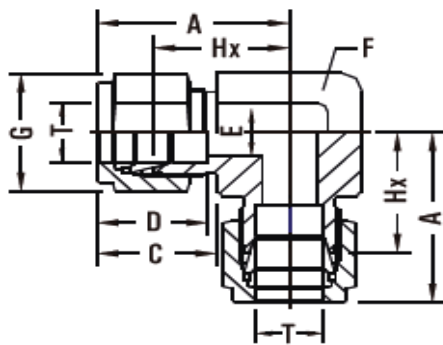
12	70.00	23.02	24.90	19	22	49.80	A12MUT
16	72.78	24.61	26.19	24	27	52.38	A16MUT
18	78.74	24.61	29.37	27	30	58.74	A18MUT
20	78.74	24.61	29.37	27	30	58.74	A20MUT
25	90.48	30.96	67.08	32	41	67.08	A25MUT

IMPERIAL RANGE

Dimensions in inches

T TUBE OD	A Length	D	Ax	F A/F	G A/F	H	PART NO
1/16	1.44	0.34	0.56	0.47	5/16	1.12	A1UT
1/8	1.98	0.50	0.72	0.47	7/16	1.44	A2UT
3/16	2.02	0.54	0.75	0.47	1/2	1.50	A3UT
1/4	2.25	0.60	0.78	0.47	9/16	1.56	A4UT
5/16	2.34	0.64	0.88	0.55	5/8	1.76	A5UT
3/8	2.40	0.66	0.91	0.55	11/16	1.82	A6UT
1/2	2.76	0.90	0.98	0.75	7/8	1.96	A8UT
5/8	2.92	0.96	1.06	0.94	1	2.12	A10UT
3/4	3.02	0.96	1.11	1.06	1-1/8	2.22	A12UT
1	3.58	1.23	1.31	1.25	1-1/2	2.62	A16UT

Union Elbow



METRIC RANGE

Dimensions in mm

T TUBE OD	A Length	D	F A/F	G A/F	Hx	PART NO
4	24.61	14.29	12	12	19.05	A4MELU
6	26.19	15.88	12	14	19.81	A6MELU
8	28.58	16.67	14	17	22.23	A8MELU
10	29.37	17.46	14	19	23.11	A10MELU
12	34.93	23.02	19	22	24.89	A12MELU
16	36.51	24.61	24	27	26.19	A16MELU
18	39.69	24.61	27	30	29.37	A18MELU

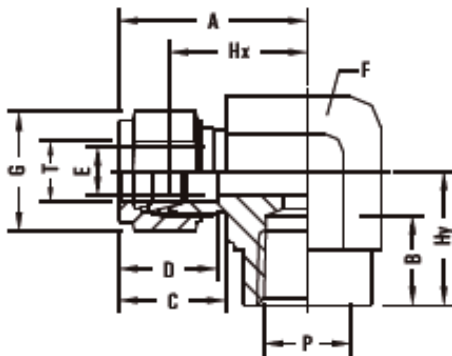
20	39.69	26.00	27	30	29.37	A20MELU
25	45.24	30.96	32	41	33.34	A25MELU

IMPERIAL RANGE

Dimensions in inches

T TUBE OD	A Length	D	F A/F	G A/F	Hx	PART NO
1/16	0.72	0.34	0.47	5/16	0.56	A1ELU
1/8	0.94	0.53	0.47	7/16	0.72	A2ELU
3/16	1.01	0.54	0.47	1/2	0.75	A3ELU
1/4	1.07	0.60	0.47	9/16	0.78	A4ELU
5/16	1.17	0.64	0.55	5/8	0.88	A5ELU
3/8	1.20	0.66	0.55	11/16	0.91	A6ELU
1/2	1.38	0.90	0.74	7/8	0.98	A8ELU
5/8	1.46	0.96	0.94	1	1.06	A10ELU
3/4	1.51	0.96	1.06	1-1/8	1.11	A12ELU
1	1.79	1.23	1.26	1-1/2	1.31	A16ELU

Female Elbow



METRIC RANGE

Dimensions in mm

T TUBE OD	P NPT Male	A Length	B	F A/F	G A/F	Hx	PART NO
4	1/8	24.20	10	12	12.70	17.80	A4MFE2
6	1/8	26.40	10	14	14.00	19.00	A6MFE2
6	1/4	29.70	14	19	14.00	22.30	A6MFE4
6	3/8	34.50	14	22	14.00	23.00	A6MFE6
6	1/2	34.50	19	27	14.00	27.00	A6MFE8
8	1/8	29.70	10	14	17.00	22.35	A8MFE2
8	1/4	30.48	14	19	17.00	23.20	A8MFE4
8	3/8	33.50	14	22	17.00	25.00	A8MFE6

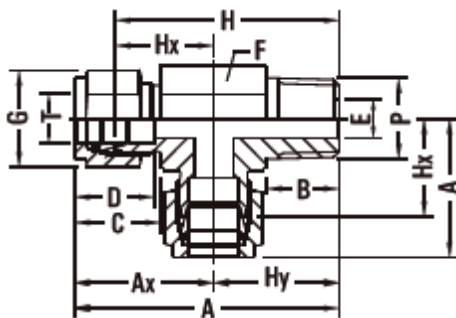
8	1/2	33.50	19	27	17.00	30.00	A8MFE8
10	1/8	30.40	10	17	19.00	23.22	A10MFE2
10	1/4	31.24	14	19	19.00	23.88	A10MFE4
10	3/8	33.50	14	22	19.00	25.00	A10MFE6
10	1/2	35.80	19	27	19.00	28.50	A10MFE8
12	1/4	35.00	14	22	22.00	25.00	A12MFE4
12	3/8	36.32	14	22	22.00	25.00	A12MFE6
12	1/2	38.60	19	27	22.00	25.00	A12MFE8
16	1/2	38.60	19	27	27.00	28.50	A16MFE8

IMPERIAL RANGE

Dimensions in inches

T TUBE OD	P NPT Male	A Length	B	F A/F	G A/F	Hx	PART NO
1/8	1/8	0.95	0.39	0.50	7/16	0.69	A2FE2
1/8	1/4	1.07	0.59	0.69	7/16	0.81	A2FE4
3/16	1/8	0.98	0.39	0.50	1/2	0.72	A3FE2
1/4	1/8	1.04	0.39	0.50	9/16	0.75	A4FE2
1/4	1/4	1.17	0.59	0.69	9/16	0.88	A4FE4
5/16	1/8	1.17	0.39	0.63	5/8	0.88	A5FE2
5/16	1/4	1.20	0.59	0.69	5/8	0.91	A5FE4
3/8	1/8	1.20	0.39	0.63	11/16	0.91	A6FE2
3/8	1/4	1.23	0.59	0.69	11/16	0.94	A6FE4
3/8	3/8	1.32	0.59	0.81	11/16	1.03	A6FE6
3/8	1/2	1.41	0.78	1.00	11/16	1.12	A6FE8
1/2	1/4	1.38	0.59	0.81	7/8	0.98	A8FE2
1/2	3/8	1.43	0.59	0.80	7/8	1.03	A8FE6
1/2	1/2	1.52	0.78	1.00	7/8	1.12	A8FE8
5/8	3/8	1.46	0.59	0.94	1	1.06	A10FE6
5/8	1/2	1.53	0.78	1.00	1	1.12	A10FE8
3/4	1/2	1.51	0.78	1.06	1-1/8	1.11	A12FE8
3/4	3/4	1.65	0.81	1.25	1-1/8	1.25	A12FE12

Male Run Tee



METRIC RANGE



Dimensions in mm

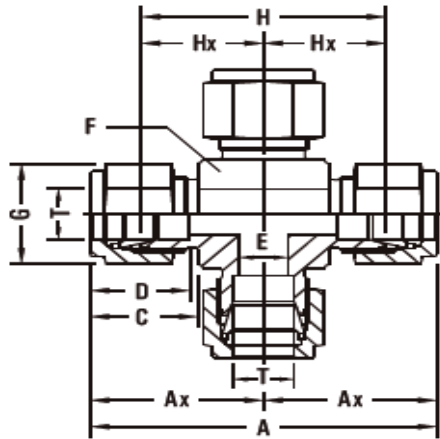
T TUBE OD	P NPT Male	A Length	B	Hx	F A/F	G A/F	H	PART NO
4	1/16	45.45	9.53	19.05	12	12	38.10	A4MRT1
4	1/8	45.45	9.53	19.05	12	12	38.10	A4MRT2
4	1/4	50.00	14.29	19.05	12	12	38.10	A4MRT4
6	1/8	46.51	9.53	19.81	12	14	39.62	A6MRT2
6	1/4	51.09	14.29	19.81	12	14	39.62	A6MRT4
6	3/8	54.14	14.29	21.34	14	14	42.68	A6MRT6
6	1/2	62.51	19.05	23.11	19	14	43.22	A6MRT8
8	1/8	50.56	9.53	22.23	14	17	44.46	A8MRT2
8	1/4	55.13	14.29	22.23	14	17	44.46	A8MRT4
8	3/8	55.13	14.29	22.23	14	17	44.46	A8MRT6
8	1/2	63.50	19.05	24.00	19	17	48.00	A8MRT8
10	1/8	51.64	9.53	23.11	14	19	46.22	A10MRT2
10	1/4	56.21	14.29	23.11	14	19	46.22	A10MRT4
10	3/8	56.21	14.29	23.11	14	19	46.22	A10MRT6
10	1/2	64.59	19.05	24.89	19	19	49.78	A10MRT8
12	1/4	62.42	14.29	24.89	19	22	49.78	A12MRT4
12	3/8	62.42	14.29	24.89	19	22	49.78	A12MRT6
12	1/2	66.99	19.05	24.89	19	22	49.78	A12MRT8
16	1/2	71.32	19.05	24.89	24	27	52.38	A16MRT8

IMPERIAL RANGE

Dimensions in inches

T TUBE OD	P NPT Male	A Length	B	Hx	F A/F	G A/F	H	PART NO
1/8	1/8	1.76	0.38	0.72	0.47	7/16	0.72	A2RT2
1/8	1/4	1.94	0.56	0.72	0.47	7/16	0.72	A2RT4
3/16	1/8	1.76	0.38	0.75	0.47	1/2	0.75	A3RT2
1/4	1/8	1.83	0.38	0.78	0.47	9/16	0.78	A4RT2
1/4	1/4	2.01	0.56	0.78	0.47	9/16	0.78	A4RT4
5/16	1/8	1.98	0.38	0.87	0.55	5/8	0.87	A5RT2
3/8	1/4	2.21	0.56	0.91	0.55	11/16	0.91	A6RT4
1/2	3/8	2.46	0.56	2.06	0.74	7/8	0.98	A8RT8
1/2	1/2	2.64	0.75	2.24	0.74	7/8	0.98	A8RT8
5/8	1/2	2.85	0.75	2.40	0.74	1	1.06	A10RT8

Union Cross



METRIC RANGE

Dimensions in mm

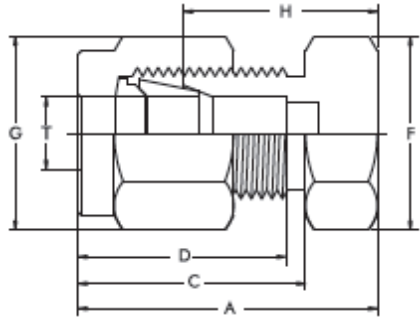
T TUBE OD	A Length	D	F A/F	G A/F	H	PART NO
4	52.30	14.29	12	22	38.00	A4MUC
6	54.40	15.88	12	14	39.60	A6MUC
8	59.40	16.67	14	17	44.40	A8MUC
10	61.60	17.46	14	19	46.20	A10MUC
12	70.00	23.02	17	22	49.80	A12MUC
16	72.78	24.61	24	27	52.39	A16MUC

MPERIAL RANGE

Dimensions in inches

T TUBE OD	A Length	D	F A/F	G A/F	H	PART NO
1/8	1.98	0.53	0.50	7/16	1.44	A2UC
3/16	2.02	0.54	0.50	1/2	1.50	A3UC
1/4	2.14	0.60	0.50	9/16	1.56	A4UC
5/16	2.34	0.64	0.62	5/8	1.76	A5UC
3/8	2.40	0.66	0.62	11/16	1.82	A6UC
1/2	2.76	0.90	0.81	7/8	1.96	A8UC
5/8	2.92	0.96	0.81	1	2.12	A10UC

Tube End Closure(Cap)



METRIC RANGE

Dimensions in mm

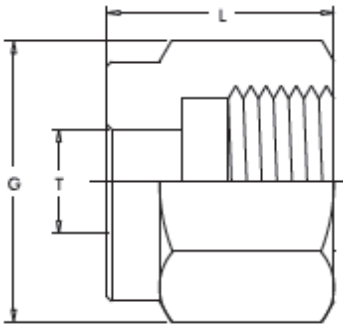
T TUBE OD	A Length	D	F A/F	G A/F	H	PART NO
4	21.83	14.29	12	12	14.68	A4MTC
6	23.81	15.88	14	14	15.88	A6MTC
8	25.00	16.67	14	17	17.67	A8MTC
10	26.19	17.46	17	19	18.26	A10MTC
12	29.37	23.02	22	22	19.05	A12MTC
16	30.16	24.61	24	27	19.84	A16MTC
18	31.75	24.61	27	30	21.43	A18MTC
20	31.75	24.61	27	30	21.43	A20MTC
25	38.10	30.96	36	41	26.19	A25MTC

IMPERIAL RANGE

Dimensions in inches

T TUBE OD	A Length	D	F A/F	G A/F	H	PART NO
1/16	0.59	0.34	5/16	5/16	0.44	A1TC
1/8	0.81	0.53	1/2	7/16	0.53	A2TC
3/16	0.84	0.54	7/16	1/2	0.58	A3TC
1/4	0.91	0.60	1/2	9/16	0.62	A4TC
5/16	0.96	0.64	9/16	5/8	0.67	A5TC
3/8	1.01	0.66	5/8	11/16	0.72	A6TC
1/2	1.15	0.90	13/16	7/8	0.75	A8TC
5/8	1.18	0.96	15/16	1	0.78	A10TC
3/4	1.24	0.96	1-1/16	1-1/8	0.84	A12TC
1	1.51	1.23	1-3/8	1-1/2	1.03	A16TC

Nut



METRIC RANGE

Dimensions in mm

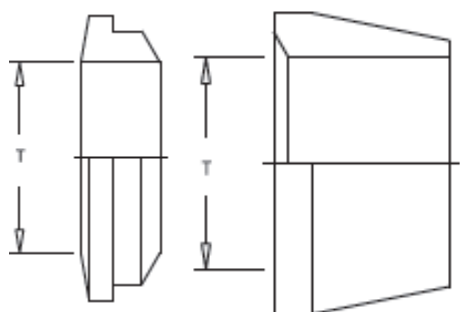
T TUBE OD	L Length	G A/F	PART NO
4	11.80	12	A4MN
6	12.70	14	A6MN
8	13.49	17	A8MN
10	14.29	19	A10MN
12	17.46	22	A12MN
16	17.46	27	A16MN
18	17.46	30	A18MN
20	17.46	30	A20MN
25	20.64	41	A25MN

IMPERIAL RANGE

Dimensions in inches

T TUBE OD	L Length	G A/F	PART NO
1/16	0.31	5/16	A1N
1/8	0.47	7/16	A2N
3/16	0.47	1/2	A3N
¼	0.50	9/16	A4N
5/16	0.53	5/8	A5N
3/8	0.56	11/16	A6N
½	0.69	7/8	A8N
5/8	0.69	1	A10N
¾	0.69	1-1/8	A12N
1	0.80	1-1/2	A16N

Ferrules



BACK FERRUL

FRONT FERRUL



METRIC RANGE

Dimensions in mm

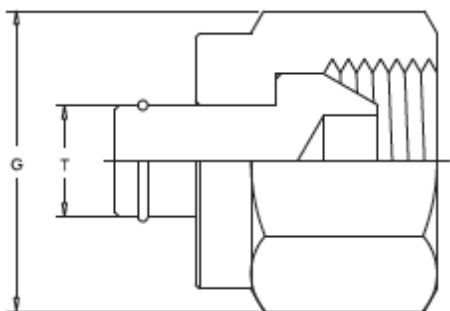
T TUBE OD	PART NO FRONT F	PART NO BACK F
4	A4MFF	A4MBF
6	A6MFF	A6MBF
8	A8MFF	A8MBF
10	A10MFF	A10MBF
12	A12MFF	A12MBF
16	A16MFF	A16MBF
18	A18MFF	A18MBF
20	A20MFF	A20MBF
25	A25MFF	A25MBF

IMPERIAL RANGE

Dimensions in inches

T TUBE OD	PART NO FRONT F	PART NO BACK F
1/16	A1FF	A1BF
1/8	A2FF	A2BF
3/16	A3FF	A3BF
1/4	A4FF	A4BF
5/16	A5FF	A5BF
3/8	A6FF	A6BF
1/2	A8FF	A8BF
5/8	A10FF	A10BF
3/4	A12FF	A12BF
1	A16FF	A16BF

Fitting End Closure(Plug)



METRIC RANGE

Dimensions in mm

T TUBE OD	G A/F	PART NO
4	12	A4MTC
6	14	A6MTC
8	17	A8MTC
10	19	A10MTC
12	22	A12MTC
16	27	A16MTC
18	30	A18MTC
20	30	A20MTC
25	41	A25MTC

IMPERIAL RANGE

Dimensions in inches

T TUBE OD	G A/F	PART NO
1/16	5/16	A1TC
1/8	7/16	A2TC
3/16	1/2	A3TC
1/4	9/16	A4TC
5/16	5/8	A5TC
3/8	11/16	A6TC
1/2	7/8	A8TC
5/8	1	A10TC
3/4	1-1/8	A12TC
1	1-1/2	A16TC