



Weld Fitting are available in a wide range of materials, sizes, connections and configurations.



FTS offers a comprehensive range of weld fittings with different configurations such as straight weld nipples, elbows, reducers or directionally adjustable weld nipple fittings with O-ring seal.

Product range: Series L/S from 6 to 42 mm tube outer diameter. Material: stainless steel.

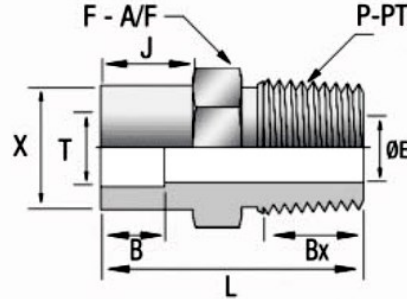
Nominal pressure PN: max. 630 bar



FAIKA TECHNO SYSTEMS

WELD FITTING

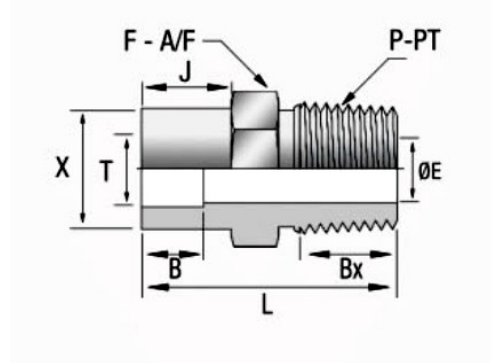
MALE CONNECTOR - TUBE SOCKET WELD (FRACTIONAL) X MALE PIPE THREADS (NPT)



T Tube O.D. (in.)	P Pipe Size, NPT	E Small Bore	B	L	J	Bx	F (in)	X	Work. Press. (PSIG)	Part No.
1/8	1/8	2.3	4.0	23.9	8.6	9.7	7/16	9.5	9100	WF-MC-TSW-FRAC-NPTM-1
1/8	1/4	2.3	4.0	29.0	8.6	14.2	9/16	9.5	7500	WF-MC-TSW-FRAC-NPTM-2
3/6	1/8	3.6	5.2	24.9	9.9	9.7	1/2	11.1	9100	WF-MC-TSW-FRAC-NPTM-3
3/6	1/4	3.6	5.2	30.2	9.9	14.2	9/16	11.1	7500	WF-MC-TSW-FRAC-NPTM-4
1/4	1/8	4.8	6.4	26.7	11.2	9.7	9/16	12.7	9100	WF-MC-TSW-FRAC-NPTM-5
1/4	1/4	4.8	6.4	31.2	11.2	14.2	9/16	12.7	7500	WF-MC-TSW-FRAC-NPTM-6
1/4	1/2	4.8	6.4	38.1	11.2	19.1	7/8	12.7	6600	WF-MC-TSW-FRAC-NPTM-7
5/16	1/8	6.4	8.0	28.7	12.7	9.7	5/8	15.1	9100	WF-MC-TSW-FRAC-NPTM-8
3/8	1/8	4.8	8.7	29.5	13.5	9.7	11/16	15.9	8100	WF-MC-TSW-FRAC-NPTM-9
3/8	1/4	7.1	8.7	34.0	13.5	14.2	11/16	15.9	7500	WF-MC-TSW-FRAC-NPTM-10
3/8	3/8	7.9	8.7	34.0	13.5	14.2	11/16	15.9	7200	WF-MC-TSW-FRAC-NPTM-11
3/8	1/2	7.9	8.7	40.4	13.5	19.1	7/8	15.9	6600	WF-MC-TSW-FRAC-NPTM-12
3/8	3/4	7.9	8.7	42.2	13.5	19.1	1-1/16	15.9	6400	WF-MC-TSW-FRAC-NPTM-13
1/2	1/8	4.8	10.3	31.8	15.0	9.7	13/16	19.8	7300	WF-MC-TSW-FRAC-NPTM-14
1/2	1/4	7.1	10.3	36.6	15.0	14.2	13/16	19.8	7300	WF-MC-TSW-FRAC-NPTM-15
1/2	3/8	10.4	10.3	36.6	15.0	14.2	13/16	19.8	7200	WF-MC-TSW-FRAC-NPTM-16
1/2	1/2	11.2	10.3	42.2	15.0	19.1	7/8	19.8	6600	WF-MC-TSW-FRAC-NPTM-17
1/2	3/4	11.2	10.3	43.7	15.0	19.1	1-1/16	19.8	6400	WF-MC-TSW-FRAC-NPTM-18
5/8	1/4	7.1	11.9	39.6	16.8	14.2	1	23.8	6600	WF-MC-TSW-FRAC-NPTM-19
5/8	3/8	10.4	11.9	39.6	16.8	14.2	1	23.8	6600	WF-MC-TSW-FRAC-NPTM-20
5/8	1/2	12.7	11.9	44.5	16.8	19.1	1	23.8	6600	WF-MC-TSW-FRAC-NPTM-21
5/8	3/4	12.7	11.9	45.2	16.8	19.1	1-1/16	23.8	6400	WF-MC-TSW-FRAC-NPTM-22
3/4	1/2	12.7	12.7	46.0	17.5	19.1	1-1/8	27.8	6000	WF-MC-TSW-FRAC-NPTM-23
3/4	3/4	16.8	12.7	46.0	17.5	19.1	1-1/8	27.8	6000	WF-MC-TSW-FRAC-NPTM-24
3/4	1	16.8	12.7	53.1	17.5	23.9	1-3/8	27.8	4600	WF-MC-TSW-FRAC-NPTM-25
7/8	3/4	18.3	12.7	48.5	17.5	19.1	1-3/8	33.3	5700	WF-MC-TSW-FRAC-NPTM-26
1	1/2	12.7	14.3	51.3	19.1	19.1	1-5/8	36.5	4900	WF-MC-TSW-FRAC-NPTM-27
1	3/4	18.3	14.3	51.3	19.1	19.1	1-5/8	36.5	4900	WF-MC-TSW-FRAC-NPTM-28
1	1	23.1	14.3	55.9	19.1	23.9	1-5/8	36.5	4600	WF-MC-TSW-FRAC-NPTM-29
1-1/4	3/4	18.3	15.9	54.4	20.6	19.1	1-7/8	44.5	4600	WF-MC-TSW-FRAC-NPTM-30
1-1/4	1	23.9	15.9	59.2	20.6	23.9	1-7/8	44.5	4600	WF-MC-TSW-FRAC-NPTM-31
1-1/4	1-1/4	26.9	15.9	59.9	20.6	24.6	1-7/8	44.5	4600	WF-MC-TSW-FRAC-NPTM-32
1-1/4	1-1/2	26.9	15.9	61.5	20.6	25.4	2	44.5	3500	WF-MC-TSW-FRAC-NPTM-33
1-1/2	1-1/4	31.8	17.0	63.2	21.8	24.6	2-1/8	50.8	2900	WF-MC-TSW-FRAC-NPTM-34
1-1/2	1-1/2	33.3	17.0	64.0	21.8	25.4	2-1/8	50.8	3500	WF-MC-TSW-FRAC-NPTM-35
2	2	46.0	19.8	75.4	24.6	26.2	2-1/8	66.7	2900	WF-MC-TSW-FRAC-NPTM-36



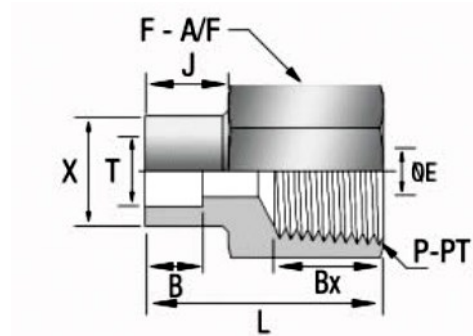
**MALE CONNECTOR - TUBE SOCKET WELD
(METRIC) X MALE PIPE THREADS (NPT)**



T Tube O.D. (mm)	P Pipe Size, NPT	E Small Bore	B	L	Bx	F	X	Work. Press. (PSIG)	Part No.
6	1/4	4.8	7.1	29.2	14.2	14.0	12.0	8000	WF-MC-TSW-MET-ODM-1
12	1/2	9.5	9.7	38.9	19.1	22.0	20.2	6820	WF-MC-TSW-MET-ODM-2
14	1/4	7.1	10.0	33.3	14.2	24.0	23.8	6930	WF-MC-TSW-MET-ODM-3
14	3/8	9.6	10.0	35.0	14.2	24.0	23.8	6930	WF-MC-TSW-MET-ODM-4
14	1/2	10.4	10.0	40.0	19.1	24.0	23.8	6930	WF-MC-TSW-MET-ODM-5
16	1/4	7.1	10.4	35.0	14.2	24.0	23.8	6190	WF-MC-TSW-MET-ODM-6
16	1/2	11.9	10.4	40.0	19.1	24.0	23.8	6190	WF-MC-TSW-MET-ODM-7
18	1/4	7.1	11.2	40.1	14.2	27.0	26.0	6050	WF-MC-TSW-MET-ODM-8
28	3/4	15.7	20.0	55.5	19.1	41.0	40.0	5040	WF-MC-TSW-MET-ODM-9
38	1-1/4	28.6	22.0	68.3	23.9	52.0	50.8	5000	WF-MC-TSW-MET-ODM-10



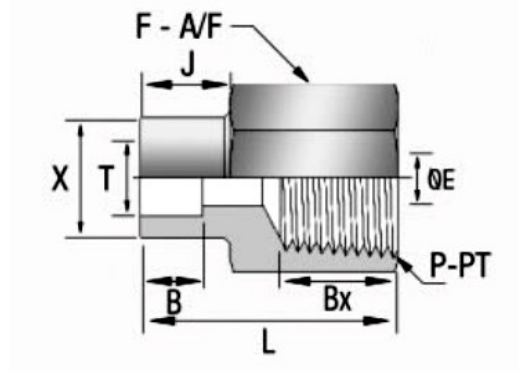
**FEMALE CONNECTOR - TUBE SOCKET WELD
(FRACTIONAL) X FEMALE PIPE THREADS (NPT)**



T Tube O.D. (in.)	P Pipe Size, NPT	E Small Bore	B	L	J	F (in)	X	Work. Press. (PSIG)	Part No.
1/8	1/8	2.3	4.0	24.1	8.6	9/16	9.5	6400	WF-FC-TSW-FRAC-NPTF-1
3/16	3/16	3.6	5.2	24.9	9.9	9/16	11.1	6400	WF-FC-TSW-FRAC-NPTF-2
1/4	1/8	4.8	6.4	25.7	11.2	9/16	12.7	6400	WF-FC-TSW-FRAC-NPTF-3
1/4	1/4	4.8	6.4	32.0	11.2	3/4	12.7	6600	WF-FC-TSW-FRAC-NPTF-4
1/4	3/4	4.8	6.4	45.7	11.2	1-1/4	12.7	4300	WF-FC-TSW-FRAC-NPTF-5
5/16	1/8	6.4	8.0	27.2	12.7	5/8	15.1	6400	WF-FC-TSW-FRAC-NPTF-6
3/8	1/8	7.9	8.7	28.2	13.5	11/16	15.9	6400	WF-FC-TSW-FRAC-NPTF-7
3/8	1/4	7.9	8.7	33.5	13.5	3/4	15.9	6600	WF-FC-TSW-FRAC-NPTF-8
3/8	3/8	7.9	8.7	36.1	13.5	7/8	15.9	5300	WF-FC-TSW-FRAC-NPTF-9
3/8	1/2	7.9	8.7	42.4	13.5	1-1/16	15.9	5200	WF-FC-TSW-FRAC-NPTF-10
3/8	3/4	7.9	8.7	47.2	13.5	1-1/4	15.9	4300	WF-FC-TSW-FRAC-NPTF-11
3/8	1	7.9	8.7	58.4	13.5	1-5/8	15.9	4500	WF-FC-TSW-FRAC-NPTF-12
1/2	1/8	8.6	10.3	29.7	15.0	13/16	19.8	6400	WF-FC-TSW-FRAC-NPTF-13
1/2	1/4	11.2	10.3	24.5	15.0	13/16	19.8	6600	WF-FC-TSW-FRAC-NPTF-14
1/2	3/8	11.2	10.3	36.6	15.0	7/8	19.8	5300	WF-FC-TSW-FRAC-NPTF-15
1/2	1/2	11.2	10.3	42.9	15.0	1-1/16	19.8	5200	WF-FC-TSW-FRAC-NPTF-16
5/8	3/8	12.7	11.9	38.6	16.8	1-1/16	23.8	5300	WF-FC-TSW-FRAC-NPTF-17
5/8	1/2	12.7	11.9	43.4	16.8	1-1/16	23.8	5200	WF-FC-TSW-FRAC-NPTF-18
5/8	1	12.7	11.9	59.2	16.8	1-5/8	23.8	4500	WF-FC-TSW-FRAC-NPTF-19
3/4	1/2	16.8	12.7	43.7	17.5	1-1/8	27.8	5200	WF-FC-TSW-FRAC-NPTF-20
3/4	3/4	16.8	12.7	47.8	17.5	1-1/4	27.8	4300	WF-FC-TSW-FRAC-NPTF-21
7/8	3/4	19.8	12.7	47.2	17.5	1-3/8	33.3	4300	WF-FC-TSW-FRAC-NPTF-22
1	1/2	18.3	14.3	47.0	19.1	1-5/8	36.5	4900	WF-FC-TSW-FRAC-NPTF-23
1	3/4	23.4	14.3	50.0	19.1	1-5/8	36.5	4300	WF-FC-TSW-FRAC-NPTF-24
1	1	23.4	14.3	57.9	19.1	1-5/8	36.5	4500	WF-FC-TSW-FRAC-NPTF-25
1-1/4	1-1/4	26.9	15.9	60.7	20.6	2	44.5	3500	WF-FC-TSW-FRAC-NPTF-26



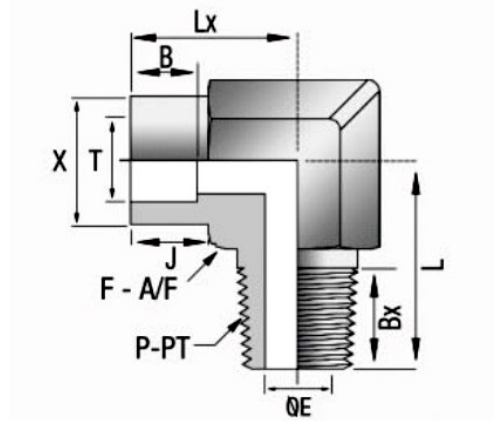
**FEMALE CONNECTOR - TUBE SOCKET WELD
(METRIC) X FEMALE PIPE THREADS (NPT)**



T Tube O.D. (mm)	P Pipe Size, NPT	E Small Bore	B	L	F	X	Work. Press. (PSIG)	Part No.
8	1/4	4.8	7.9	27.0	19.0	14.3	6600	WF-FC-TSW-MET-NPTF-1
10	1/4	7.1	7.9	29.0	19.0	16.5	6600	WF-FC-TSW-MET-NPTF-2
14	1/4	9.5	10.0	32.0	24.0	23.8	6930	WF-FC-TSW-MET-NPTF-3
28	3/4	19.8	20.0	54.1	41.0	40.0	4600	WF-FC-TSW-MET-NPTF-4



**MALE ELBOW - TUBE SOCKET WELD
(FRACTIONAL) X MALE PIPE THREADS**



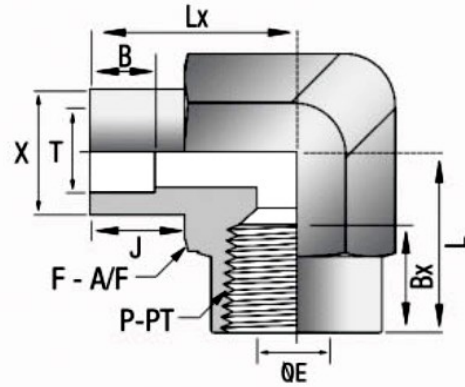
T Tube O.D. (in.)	P Pipe Size, NPT	E Small Bore	B	L	J	Lx	Bx	F (in)	X	Work. Press. (PSIG)	Part No.
1/8	1/8	2.3	4.0	18.8	8.6	17.8	9.7	1/2	9.5	9100	WF-ME-TSW-FRAC-NPTM-1
1/8	1/4	2.3	4.0	23.6	8.6	17.8	14.2	1/2	9.5	7500	WF-ME-TSW-FRAC-NPTM-2
3/16	1/8	3.6	5.2	18.8	9.9	19.1	9.7	1/2	11.1	9100	WF-ME-TSW-FRAC-NPTM-3
1/4	1/8	4.8	6.4	20.1	11.2	21.3	9.7	9/16	12.7	9100	WF-ME-TSW-FRAC-NPTM-4
1/4	1/4	4.8	6.4	24.6	11.2	21.3	14.2	9/16	12.7	7500	WF-ME-TSW-FRAC-NPTM-5
5/16	1/8	6.4	8.0	20.1	12.7	22.9	9.7	9/16	15.1	9100	WF-ME-TSW-FRAC-NPTM-6
3/8	1/4	7.9	8.7	28.4	13.5	27.4	14.2	13/16	15.9	7500	WF-ME-TSW-FRAC-NPTM-7
3/8	3/8	7.9	8.7	28.4	13.5	27.4	14.2	13/16	15.9	7200	WF-ME-TSW-FRAC-NPTM-8
3/8	1/2	7.9	8.7	33.3	13.5	27.4	19.1	13/16	15.9	5800	WF-ME-TSW-FRAC-NPTM-9
1/2	1/4	11.2	10.3	28.4	15.0	29.0	14.2	7/8	19.8	7300	WF-ME-TSW-FRAC-NPTM-10
1/2	3/8	11.2	10.3	28.4	15.0	29.0	14.2	7/8	19.8	7200	WF-ME-TSW-FRAC-NPTM-11
1/2	1/2	11.2	10.3	33.3	15.0	29.0	19.1	13/16	19.8	5800	WF-ME-TSW-FRAC-NPTM-12
5/8	1/2	12.7	11.9	37.1	16.8	34.5	19.1	1-1/16	23.9	5800	WF-ME-TSW-FRAC-NPTM-13
3/4	1/4	16.8	12.7	32.3	17.5	35.3	14.2	1-1/16	27.7	6000	WF-ME-TSW-FRAC-NPTM-14
3/4	1/2	16.8	12.7	37.1	17.5	35.3	19.1	1-1/16	27.7	5800	WF-ME-TSW-FRAC-NPTM-15
3/4	3/4	16.8	12.7	37.1	17.5	35.3	19.1	1-1/16	27.7	6000	WF-ME-TSW-FRAC-NPTM-16
1	3/4	18.3	14.3	46.7	19.1	16.7	19.1	1-5/8	36.6	4900	WF-ME-TSW-FRAC-NPTM-17
1	1	23.1	14.3	51.6	19.1	46.7	23.9	1-5/8	36.6	4400	WF-ME-TSW-FRAC-NPTM-18
1-1/4	1-1/4	26.9	15.9	57.7	20.6	53.3	24.6	1-7/8	44.5	3500	WF-ME-TSW-FRAC-NPTM-19
1-1/2	1-1/2	33.3	17.0	68.3	21.8	64.5	25.4	2-1/2	50.8	2900	WF-ME-TSW-FRAC-NPTM-20



FAIKA TECHNO SYSTEMS

WELD FITTING

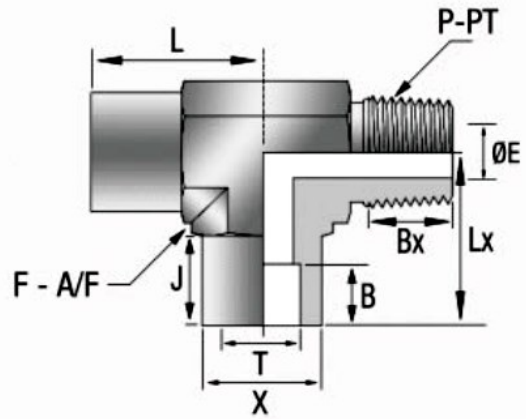
FEMALE ELBOW - TUBE SOCKET WELD (FRACTIONAL) X FEMALE PIPE THREADS (NPT)



T Tube O.D. (mm)	P Pipe Size, NPT	E Small Bore	B	L	J	Lx	F (in)	X	Work. Press. (PSIG)	Part No.
1/8	1/8	2.3	4.0	19.1	8.6	17.8	1/2	9.5	5500	WF-FE-TSW-FRAC-NPTF-1
3/16	1/8	3.6	5.2	19.1	9.9	19.1	1/2	11.1	5500	WF-FE-TSW-FRAC-NPTF-2
1/4	1/8	4.8	6.4	19.1	11.2	21.3	9/16	12.7	5500	WF-FE-TSW-FRAC-NPTF-3
1/4	1/4	4.8	6.4	22.4	11.2	23.1	11/16	12.7	5600	WF-FE-TSW-FRAC-NPTF-4
5/16	1/8	6.4	8.0	19.1	12.7	22.9	9/16	15.1	5500	WF-FE-TSW-FRAC-NPTF-5
3/8	1/4	7.9	8.7	22.4	13.5	25.4	11/16	15.9	5600	WF-FE-TSW-FRAC-NPTF-6
3/8	3/8	7.9	8.7	22.4	13.5	27.4	13/16	15.9	5000	WF-FE-TSW-FRAC-NPTF-7
3/8	1/2	7.9	8.7	28.4	16.5	30.2	1	15.9	4500	WF-FE-TSW-FRAC-NPTF-8
1/2	1/4	11.2	10.3	22.4	15.0	29.0	7/8	19.8	5600	WF-FE-TSW-FRAC-NPTF-9
1/2	3/8	11.2	10.3	22.4	15.0	29.0	7/8	19.8	5000	WF-FE-TSW-FRAC-NPTF-10
1/2	1/2	11.2	10.3	28.4	15.0	32.8	1-1/16	19.8	4500	WF-FE-TSW-FRAC-NPTF-11
5/8	1/2	12.7	11.9	28.4	16.8	34.5	1-1/16	23.8	4500	WF-FE-TSW-FRAC-NPTF-12
3/4	1/4	11.2	12.7	28.4	17.5	35.3	1-1/16	27.8	5600	WF-FE-TSW-FRAC-NPTF-13
3/4	3/4	16.8	12.7	31.8	17.5	40.1	1-5/16	27.8	3500	WF-FE-TSW-FRAC-NPTF-14
7/8	3/4	19.8	12.7	31.8	17.5	40.1	1-3/8	33.3	3500	WF-FE-TSW-FRAC-NPTF-15
1	3/8	14.7	14.3	44.5	19.1	46.7	1-5/8	36.5	4900	WF-FE-TSW-FRAC-NPTF-16
1	1	23.1	14.3	38.1	19.1	46.7	1-5/8	36.5	3900	WF-FE-TSW-FRAC-NPTF-17
1-1/4	1-1/4	26.9	15.9	47.8	20.6	53.3	1-7/8	44.5	3100	WF-FE-TSW-FRAC-NPTF-18
1-1/2	1	29.5	17.0	52.8	21.8	64.5	2-1/2	50.8	3700	WF-FE-TSW-FRAC-NPTF-19
1-1/2	1-1/2	33.3	17.0	54.1	21.8	64.5	2-1/2	50.8	2500	WF-FE-TSW-FRAC-NPTF-20



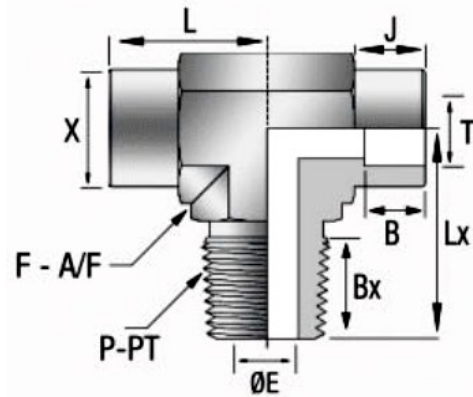
**MALE RUN TEE - TUBE SOCKET WELD
(FRACTIONAL) X MALE PIPE THREADS (NPT)**



T Tube O.D. (in.)	P Pipe Size, NPT	E Small Bore	L	Lx	X	F (in)	B	J	Bx	Work. Press. (PSIG)	Part No.
1/8	1/8	2.3	17.8	18.8	9.5	1/2	4.0	8.6	9.7	9100	WF-MRT-TSW-FRAC-NPTM-1
3/16	1/8	3.6	19.1	18.8	11.1	1/2	5.2	9.9	9.7	9100	WF-MRT-TSW-FRAC-NPTM-2
1/4	1/8	4.8	21.3	20.1	12.7	9/16	6.4	11.2	9.7	9100	WF-MRT-TSW-FRAC-NPTM-3
5/16	1/8	4.8	22.9	20.1	15.1	9/16	8.0	12.7	9.7	9100	WF-MRT-TSW-FRAC-NPTM-4
3/8	1/4	7.1	27.4	28.4	15.9	13/16	8.7	13.5	14.2	7500	WF-MRT-TSW-FRAC-NPTM-5
1/2	3/8	10.4	29.0	28.4	19.8	7/8	10.3	15.0	14.2	7200	WF-MRT-TSW-FRAC-NPTM-6
5/8	1/2	12.7	34.5	37.1	23.8	1-1/16	11.9	16.8	19.1	5800	WF-MRT-TSW-FRAC-NPTM-7
3/4	3/4	16.7	35.3	37.1	27.8	1-1/16	12.7	17.5	19.1	6000	WF-MRT-TSW-FRAC-NPTM-8
7/8	3/4	18.3	40.1	41.9	33.3	1-3/8	12.7	17.5	19.1	5700	WF-MRT-TSW-FRAC-NPTM-9
1	1	23.0	46.7	51.6	36.5	1-5/8	14.3	19.1	23.9	4400	WF-MRT-TSW-FRAC-NPTM-10
1-1/4	1-1/4	27.0	53.3	57.7	44.5	1-7/8	15.9	20.6	24.6	3500	WF-MRT-TSW-FRAC-NPTM-11
1-1/2	1-1/2	33.4	64.5	68.6	50.8	2-1/2	17.0	21.8	25.4	2900	WF-MRT-TSW-FRAC-NPTM-12
2	2	46.1	70.6	72.4	66.7	1-13/16	19.8	24.6	26.2	2600	WF-MRT-TSW-FRAC-NPTM-13



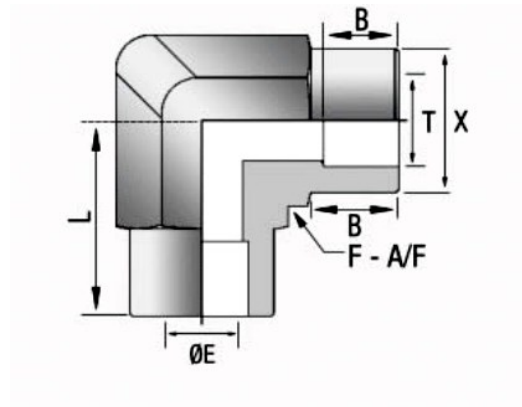
**MALE BRANCH TEE - TUBE SOCKET WELD
(FRACTIONAL) X MALE PIPE THREADS (NPT)**



T Tube O.D. (mm)	P Pipe Size, NPT	E Small Bore	L	Lx	X	F (in)	B	J	Bx	Work. Press. (PSIG)	Part No.
1/8	1/8	2.3	17.8	18.8	9.5	1/2	4.0	8.6	9.7	9100	WF-MBT-TSW-FRAC-NPTM-1
3/16	1/8	3.6	18.8	19.1	11.1	1/2	5.2	9.9	9.7	9100	WF-MBT-TSW-FRAC-NPTM-2
1/4	1/8	4.8	21.3	20.1	12.7	9/16	6.4	11.2	9.7	9100	WF-MBT-TSW-FRAC-NPTM-3
5/16	1/8	4.8	22.9	20.1	15.1	9/16	8.0	12.7	9.7	9100	WF-MBT-TSW-FRAC-NPTM-4
3/8	1/4	7.1	27.4	28.4	15.9	3/16	8.7	13.5	14.2	7500	WF-MBT-TSW-FRAC-NPTM-5
1/2	3/8	10.4	29.0	28.4	19.8	7/8	10.3	15.0	14.2	7200	WF-MBT-TSW-FRAC-NPTM-6
5/8	1/2	12.7	34.5	37.1	23.8	1-1/16	11.9	16.8	19.1	5800	WF-MBT-TSW-FRAC-NPTM-7
3/4	3/4	16.8	35.3	37.1	27.8	1-1/16	12.7	17.5	19.1	6000	WF-MBT-TSW-FRAC-NPTM-8
7/8	3/4	18.3	40.1	41.9	33.3	1-3/8	12.7	17.5	19.1	5700	WF-MBT-TSW-FRAC-NPTM-9
1	1	23.1	46.7	51.6	36.5	1-5/8	14.3	19.1	23.9	4400	WF-MBT-TSW-FRAC-NPTM-10
1-1/4	1-1/4	26.9	53.3	57.7	44.5	1-7/8	15.9	20.6	24.6	3500	WF-MBT-TSW-FRAC-NPTM-11
1-1/2	1-1/4	33.3	64.5	68.8	50.8	2-1/2	17.0	21.8	25.4	2900	WF-MBT-TSW-FRAC-NPTM-12
2	2	46.0	70.6	72.4	66.7	2-3/16	19.8	24.6	26.2	2600	WF-MBT-TSW-FRAC-NPTM-13



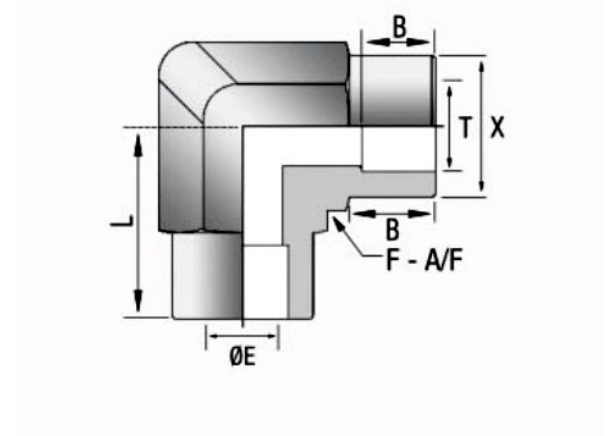
**UNION ELBOW - TUBE SOCKET WELD
(FRACTIONAL)**



T Tube O.D. (in.)	E Small Bore	B	L	J	F (in)	X	Work. Press. (PSIG)	Part No.
1/8	2.3	4.0	17.0	8.6	1/2	9.5	10200	WF-UE-TSW-FRAC-1
3/16	3.6	5.2	19.2	9.9	1/2	11.1	9600	WF-UE-TSW-FRAC-2
1/4	4.8	6.4	21.3	11.2	9/16	12.7	9600	WF-UE-TSW-FRAC-3
5/16	6.4	8.0	22.9	12.7	9/16	15.1	9900	WF-UE-TSW-FRAC-4
3/8	7.9	8.7	27.4	13.5	13/16	15.9	8100	WF-UE-TSW-FRAC-5
1/2	11.2	10.3	29.0	15.0	7/8	19.8	7300	WF-UE-TSW-FRAC-6
5/8	12.7	11.9	34.5	16.6	1-1/16	23.8	6600	WF-UE-TSW-FRAC-7
3/4	16.8	12.7	35.3	17.5	1-1/16	27.8	6000	WF-UE-TSW-FRAC-8
7/8	19.8	12.7	40.1	17.5	1-5/16	33.3	5700	WF-UE-TSW-FRAC-9
1	23.1	14.3	46.7	19.1	1-5/8	36.5	4400	WF-UE-TSW-FRAC-10
1-1/4	26.9	15.9	53.3	20.6	1-7/8	44.5	4600	WF-UE-TSW-FRAC-11
1-1/2	33.3	17.0	64.5	21.8	2-1/2	50.8	3700	WF-UE-TSW-FRAC-12
2	46.0	19.8	70.6	24.6	2-13/16	66.7	3300	WF-UE-TSW-FRAC-13



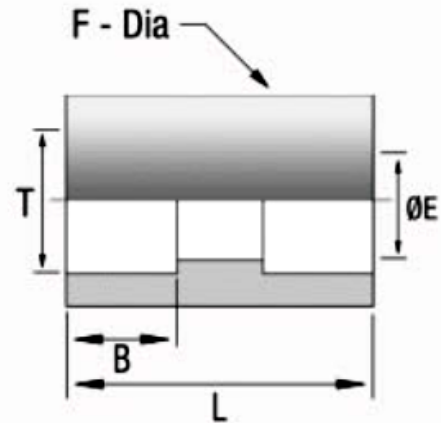
**UNION ELBOW - TUBE SOCKET WELD
(METRIC)**



T Tube O.D. (mm)	E Small Bore	B	L	F	X	Work. Press. (PSIG)	Part No.
10	7.4	7.9	24.6	14.3	16.5	8100	WF-UE-TSW-MET-1
12	9.5	9.7	29.7	17.5	20.21	6820	WF-UE-TSW-MET-2
14	10.4	10.0	31.7	20.6	23.8	6930	WF-UE-TSW-MET-3
16	12.7	10.4	34.7	20.6	23.8	6190	WF-UE-TSW-MET-4



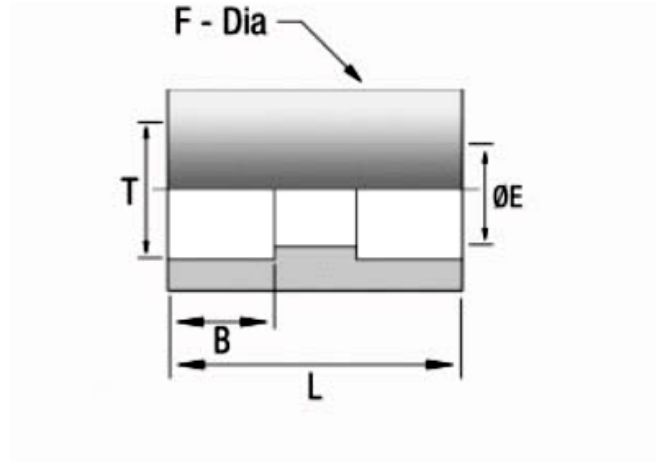
UNION - TUBE SOCKET WELD (FRACTIONAL)



T Tube O.D. (in.)	E Small Bore	B	L	F	Work. Press. (PSIG)	Part No.
1/8	2.3	4.0	17.5	9.5	10200	WF-U-TSW-FRACT-1
3/16	3.6	5.2	19.8	11.1	9600	WF-U-TSW-FRACT-2
1/4	4.8	6.4	22.4	12.7	9600	WF-U-TSW-FRACT-3
5/16	6.4	8.0	25.4	15.1	9900	WF-U-TSW-FRACT-4
3/8	7.9	8.7	26.9	15.9	8100	WF-U-TSW-FRACT-5
1/2	11.2	10.2	30.2	19.8	7300	WF-U-TSW-FRACT-6
5/8	12.7	11.9	33.3	23.8	6600	WF-U-TSW-FRACT-7
3/4	16.8	12.7	35.1	27.8	6000	WF-U-TSW-FRACT-8
7/8	19.8	12.7	35.1	33.3	5700	WF-U-TSW-FRACT-9
1	23.1	14.3	38.1	36.6	4900	WF-U-TSW-FRACT-10
1-1/4	26.9	15.9	41.3	44.5	4600	WF-U-TSW-FRACT-11
1-1/2	33.3	17.0	46.7	50.8	3700	WF-U-TSW-FRACT-12
2	46.0	19.8	54.1	66.7	3300	WF-U-TSW-FRACT-13



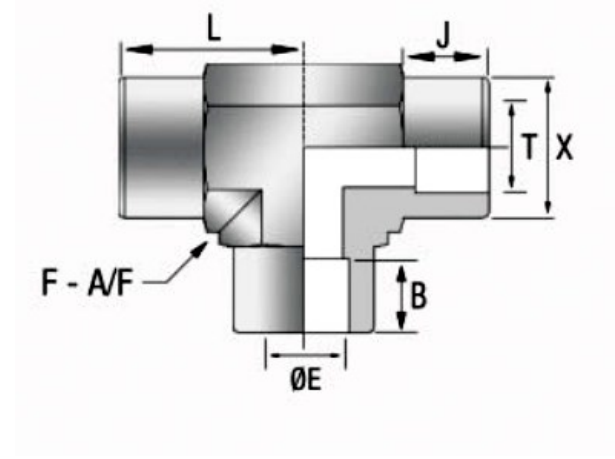
UNION - TUBE SOCKET WELD (METRIC)



T Tube O.D. (mm)	E Small Bore	B	L	F	Work. Press. (PSIG)	Part No.
08	7.4	7.9	22.4	14.3	8100	WF-U-TSW-MET-1
10	9.4	9.7	23.6	16.5	6820	WF-U-TSW-MET-2
12	10.4	10.0	26.9	20.2	6930	WF-U-TSW-MET-3
14	10.4	10.4	28.0	23.8	6190	WF-U-TSW-MET-4
16	12.7	10.4	30.2	23.8	6190	WF-U-TSW-MET-5
20	17.0	11.2	28.0	28.0	5510	WF-U-TSW-MET-6



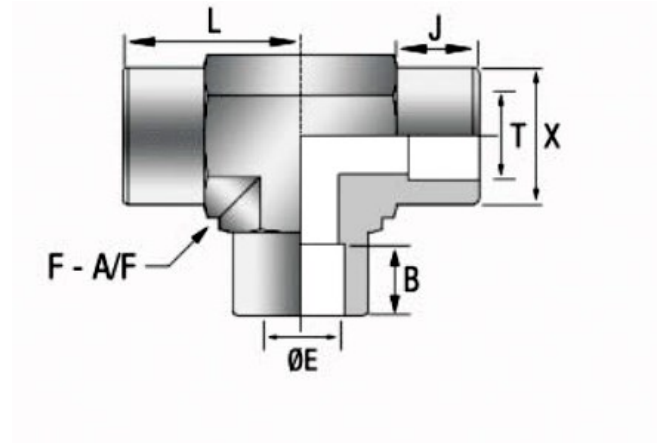
**FEMALE TEE - TUBE SOCKET WELD
(FRACTIONAL)**



T Tube O.D. (in.)	E Small Bore	B	J	L	F (in)	X	Work. Press. (PSIG)	Part No.
1/8	2.3	2.3	8.6	17.8	1/2	9.5	10200	WF-FT-TSW-FRAC-1
3/16	3.6	3.6	9.9	19.1	1/2	11.1	9600	WF-FT-TSW-FRAC-2
1/4	4.8	4.8	11.2	21.3	9/16	12.7	9600	WF-FT-TSW-FRAC-3
5/16	6.4	6.4	12.7	22.9	9/16	15.1	9900	WF-FT-TSW-FRAC-4
3/8	7.9	7.9	13.5	27.4	13/16	15.9	8100	WF-FT-TSW-FRAC-5
1/2	11.2	11.2	15.0	29.0	7/8	19.8	7300	WF-FT-TSW-FRAC-6
5/8	12.7	12.7	16.8	34.5	1-1/16	23.8	6600	WF-FT-TSW-FRAC-7
3/4	16.8	16.8	17.5	35.3	1-1/16	27.8	6000	WF-FT-TSW-FRAC-8
7/8	19.8	19.8	17.5	40.1	1-3/16	33.3	5700	WF-FT-TSW-FRAC-9
1	23.1	23.1	19.1	46.7	1-5/8	36.6	4400	WF-FT-TSW-FRAC-10
1-1/4	26.9	26.9	20.6	53.4	1-7/8	44.5	4600	WF-FT-TSW-FRAC-11
1-1/2	33.3	33.3	21.8	64.5	2-1/2	50.8	3700	WF-FT-TSW-FRAC-12
2	46.0	46.0	24.6	70.6	2-13/16	66.7	3300	WF-FT-TSW-FRAC-13



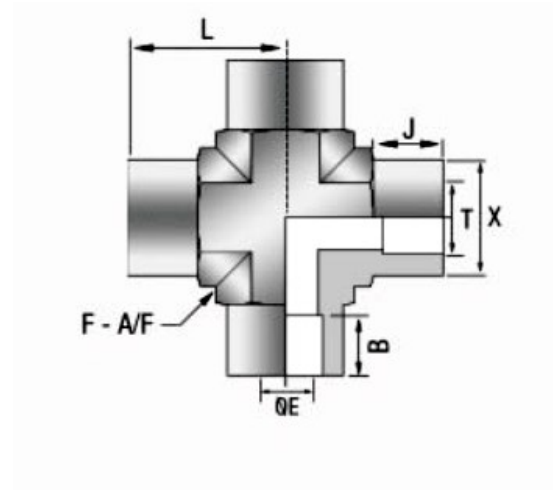
FEMALE TEE - TUBE SOCKET WELD (METRIC)



T Tube O.D. (mm)	E Small Bore	B	L	F	X	Work. Press. (PSIG)	Part No.
8	6.4	7.9	19.8	12.7	14.7	9790	WF-FT-TSW-MET-1
10	7.4	7.9	24.6	14.3	16.5	8100	WF-FT-TSW-MET-2
12	9.5	9.7	29.7	17.5	20.2	6820	WF-FT-TSW-MET-3
14	10.4	10.0	31.7	20.6	23.8	6930	WF-FT-TSW-MET-4
16	12.7	10.4	36.0	20.6	23.8	6190	WF-FT-TSW-MET-5
20	17.0	11.2	39.6	25.4	29.3	5510	WF-FT-TSW-MET-6
22	19.0	13.5	41.3	27.0	31.2	6850	WF-FT-TSW-MET-7
25	22.0	15.7	48.8	31.8	36.7	5450	WF-FT-TSW-MET-8



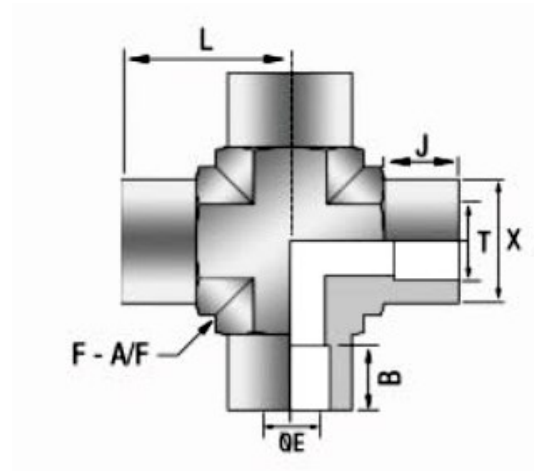
**UNION CROSS - TUBE SOCKET WELD
(FRACTIONAL)**



T Tube O.D. (in.)	E Small Bore	B	J	L	F (in)	X	Work. Press. (PSIG)	Part No.
1/8	2.3	4.0	8.6	17.8	1/2	9.5	10200	WF-UC-TSW-FRAC-1
3/16	3.6	5.2	9.9	19.1	1/2	11.1	9600	WF-UC-TSW-FRAC-2
1/4	4.8	6.4	11.2	21.3	9/16	12.7	9600	WF-UC-TSW-FRAC-3
5/16	6.4	8.0	12.7	22.9	9/16	15.1	9900	WF-UC-TSW-FRAC-4
3/8	7.9	8.7	13.5	27.2	13/16	15.9	8100	WF-UC-TSW-FRAC-5
1/2	11.2	10.3	15.0	29.0	7/8	19.8	7300	WF-UC-TSW-FRAC-6
5/8	12.7	11.9	16.8	34.5	1-1/16	23.8	6600	WF-UC-TSW-FRAC-7
3/4	16.8	12.7	17.5	35.3	1-1/16	27.8	6000	WF-UC-TSW-FRAC-8
1	23.1	14.3	19.1	46.7	1-5/16	36.5	4400	WF-UC-TSW-FRAC-9
1-1/4	26.9	15.9	20.6	53.3	1-7/8	44.5	4600	WF-UC-TSW-FRAC-10
1-1/2	33.3	17.0	21.8	54.5	2-9/16	50.8	3700	WF-UC-TSW-FRAC-11
2	46.0	19.8	24.6	70.6	2-9/16	66.7	3300	WF-UC-TSW-FRAC-12



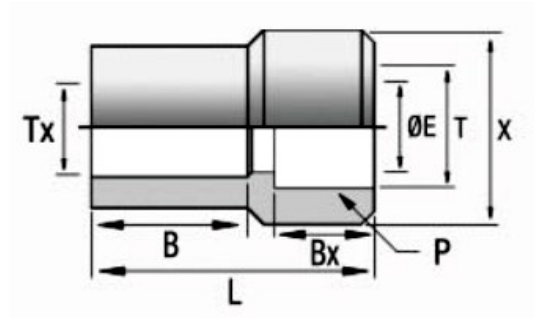
UNION CROSS - TUBE SOCKET WELD (METRIC)



T Tube O.D. (mm)	E Small Bore	B	L	F	X	Work. Press. (PSIG)	Part No.
8	6.4	7.9	19.8	12.7	14.7	9790	WF-UC-TSW-MET-1
10	7.1	7.9	24.6	14.3	16.5	8100	WF-UC-TSW-MET-2
12	9.5	9.7	29.7	17.5	20.2	6820	WF-UC-TSW-MET-3
14	10.4	10.0	31.7	20.6	23.8	6930	WF-UC-TSW-MET-4
16	12.7	10.4	36.0	20.6	23.8	6190	WF-UC-TSW-MET-5
20	17.0	11.2	39.6	25.4	29.3	5510	WF-UC-TSW-MET-6
22	19.0	13.5	41.3	27.0	31.2	6850	WF-UC-TSW-MET-7
25	22.0	15.7	48.8	31.8	36.7	5450	WF-UC-TSW-MET-8



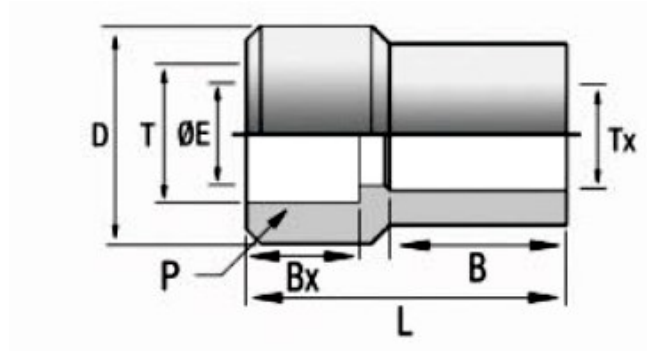
**REDUCING UNION - TUBE SOCKET WELD
(FRACTIONAL)**



T Tube O.D. (in.)	Tx Tube O.D. (in.)	L	X	B	E	Bx	Work. Press. (PSIG)	Part No.
3/8	1/4	22.4	15.2	7.9	4.8	7.1	8100	WF-RU-TSW-FRAC-1
1/2	1/4	24.3	18.5	9.7	4.8	7.1	6600	WF-RU-TSW-FRAC-2
1/2	3/8	26.1	18.5	9.7	7.1	7.9	6600	WF-RU-TSW-FRAC-3
3/4	3/8	29.8	26.4	11.2	7.1	7.9	5900	WF-RU-TSW-FRAC-4
3/4	1/2	31.6	26.4	11.2	10.4	9.7	5900	WF-RU-TSW-FRAC-5
1	3/4	32.1	34.5	15.7	16.0	11.2	5600	WF-RU-TSW-FRAC-6



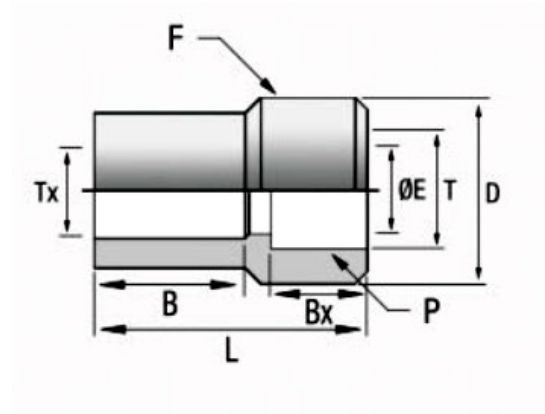
**REDUCING UNION - TUBE SOCKET WELD
(METRIC)**



T Tube O.D. (mm)	Tx Tube O.D. (mm)	L	D	B	E	Bx	Work. Press. (PSIG)	Part No.
14	10	26.0	23.8	10.4	7.4	7.9	6930	WF-RU-TSW-MET-1
25	14	30.0	34.5	15.7	10.4	10.0	5450	WF-RU-TSW-MET-2
25	22	35.8	34.5	15.7	19.0	13.5	5450	WF-RU-TSW-MET-3



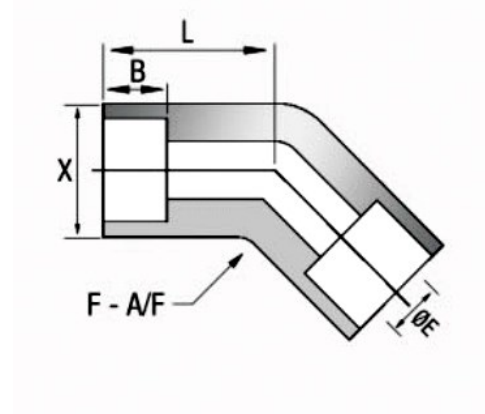
**REDUCING UNION - TUBE SOCKET WELD (FRACTIONAL)
X TUBE SOCKET WELD (METRIC)**



T Tube O.D. (in.)	Tx Tube O.D. (in.)	L	D	B	E	Bx	Work. Press. (PSIG)	Part No.
20	3/4	28.0	27.0	11.2	15.7	11.2	5510	WF-RU-TSW-FRAC-MET-1
28	3/4	36.8	40.0	20.0	15.7	11.2	5040	WF-RU-TSW-FRAC-MET-2



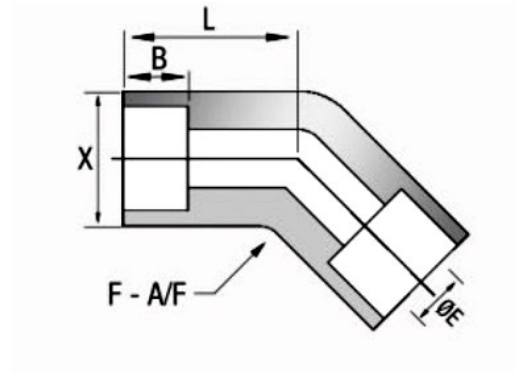
**UNION 45° ELBOW - TUBE SOCKET WELD
(FRACTIONAL)**



T Tube O.D. (mm)	L	X	B	F (in)	E	Work. Press. (PSIG)	Part No.
1/8	13.5	9.5	4.0	7/16	2.3	10200	WF-U45E-TSW-FRAC-1
3/16	18.5	11.1	5.8	9/16	3.6	9600	WF-U45E-TSW-FRAC-2
1/4	21.3	12.7	6.4	9/16	4.8	9600	WF-U45E-TSW-FRAC-3
5/16	21.8	15.1	8.0	9/16	6.4	9900	WF-U45E-TSW-FRAC-4
3/8	27.4	15.9	8.7	7/8	7.9	8100	WF-U45E-TSW-FRAC-5
1/2	29.0	19.8	10.3	7/8	11.2	7300	WF-U45E-TSW-FRAC-6
5/8	34.0	23.8	11.9	1-1/16	12.7	6600	WF-U45E-TSW-FRAC-7
3/4	34.0	27.8	12.7	1-1/16	16.8	6000	WF-U45E-TSW-FRAC-8
1	41.4	36.5	14.3	1-5/8	23.1	4400	WF-U45E-TSW-FRAC-9
1-1/4	41.1	44.5	15.9	1-7/8	26.9	4600	WF-U45E-TSW-FRAC-10
1-1/4	42.4	50.8	17.0	2-1/2	33.3	3700	WF-U45E-TSW-FRAC-11
2	42.4	66.8	19.8	2-1/2	46.0	3300	WF-U45E-TSW-FRAC-12



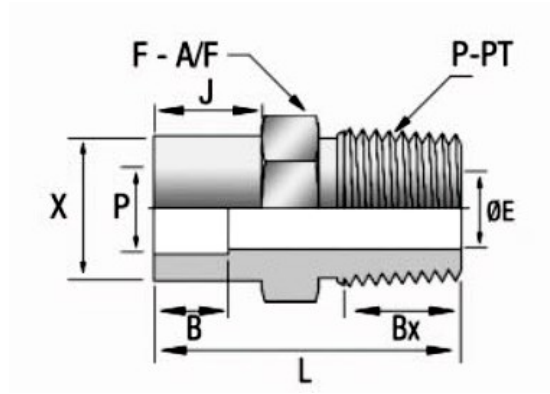
UNION 45° ELBOW - TUBE SOCKET WELD (METRIC)



T Tube O.D. (in.)	L	X	B	F (in)	E	Work. Press. (PSIG)	Part No.
8	17.3	14.7	7.9	12.7	6.4	97900	WF-U45E-TSW-MET-1
10	19.1	16.5	7.9	14.3	7.4	8100	WF-U45E-TSW-MET-2
12	21.3	20.2	9.7	17.5	9.5	6820	WF-U45E-TSW-MET-3
14	26.4	23.8	10.0	20.6	10.4	6930	WF-U45E-TSW-MET-4
16	26.4	23.8	10.4	20.6	12.7	6190	WF-U45E-TSW-MET-5
20	28.7	29.3	11.2	25.4	17.0	5510	WF-U45E-TSW-MET-6
22	29.7	31.2	13.5	27.0	19.0	6850	WF-U45E-TSW-MET-7
25	31.8	36.7	15.7	31.8	22.0	5450	WF-U45E-TSW-MET-8



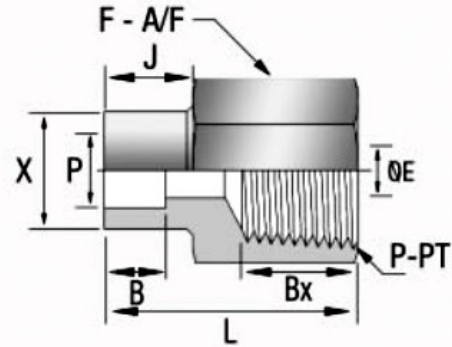
**MALE CONNECTOR - PIPE SOCKET WELD X
MALE PIPE THREADS (NPT)**



T Tube O.D. (NPS)	P Pipe Size, NPT	E Small Bore	B	L	Bx	F	X	Work. Press. (PSIG)	Part No.
1/4	1/4	7.1	9.9	35.2	14.2	23.8	22.4	8000	WF-MC-PSW-NPTM-1
1/4	1/2	9.1	9.9	40.0	19.1	23.8	22.4	7700	WF-MC-PSW-NPTM-2
3/8	3/8	9.7	9.9	38.0	14.2	27.0	26.2	7100	WF-MC-PSW-NPTM-3
3/8	1/2	11.9	9.9	42.9	19.1	27.0	26.2	7100	WF-MC-PSW-NPTM-4
1/2	3/8	9.7	9.9	40.3	14.2	33.3	31.8	6800	WF-MC-PSW-NPTM-5
1/2	1/2	11.9	9.9	45.2	19.1	33.3	31.8	6800	WF-MC-PSW-NPTM-6
3/4	1/2	11.9	13.0	54.3	19.1	38.1	37.3	5800	WF-MC-PSW-NPTM-7
3/4	3/4	15.7	13.0	54.3	19.1	38.1	37.3	5800	WF-MC-PSW-NPTM-8
1	3/4	15.7	13.0	55.8	19.1	47.6	74.2	6100	WF-MC-PSW-NPTM-9
1	1	22.4	13.0	60.6	23.9	47.6	47.2	5300	WF-MC-PSW-NPTM-10



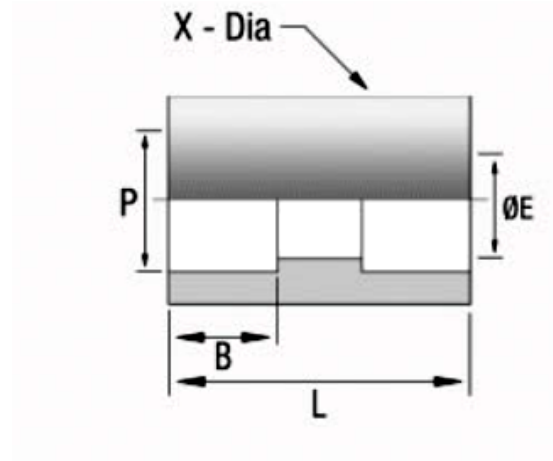
FEMALE CONNECTOR - PIPE SOCKET WELD X FEMALE PIPE THREADS (NPT)



Px Pipe Size (NPS)	Px Pipe Size, NPT	E Small Bore	B	L	Bx	F	X	Work. Press.	Part No.
1/4	1/4	9.1	9.9	33.5	15.0	23.8	22.4	8000	WF-FC-PSW-NPTF-1
1/4	3/8	9.1	9.9	33.5	15.0	23.8	22.4	6790	WF-FC-PSW-NPTF-2
3/8	3/8	12.4	9.9	34.1	15.0	27.0	26.2	7100	WF-FC-PSW-NPTF-3
3/8	1/2	12.4	9.9	39.1	19.8	27.0	26.2	4900	WF-FC-PSW-NPTF-4
1/2	1/2	15.7	9.9	40.0	19.8	33.3	31.8	6800	WF-FC-PSW-NPTF-5
1/2	3/4	15.7	9.9	40.6	20.6	33.3	31.8	4600	WF-FC-PSW-NPTF-6
3/4	3/4	20.8	13.0	53.2	20.6	38.1	37.3	5800	WF-FC-PSW-NPTF-7
3/4	1	20.8	13.0	58.1	25.4	41.3	37.3	4400	WF-FC-PSW-NPTF-8



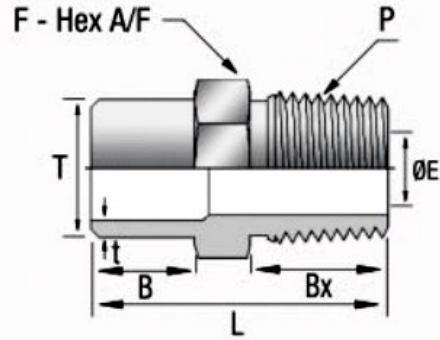
UNION - PIPE SOCKET WELD



P Pipe Size, NPT	E Small Bore	B	L	X	Work. Press. (PSIG)	Part No.
1/4	9.1	9.9	26.9	22.4	8100	WF-U-PSW-1
3/8	12.4	9.9	28.4	26.2	7100	WF-U-PSW-2
1/2	15.7	9.9	28.4	31.8	6800	WF-U-PSW-3
3/4	20.8	13.0	44.4	37.3	5800	WF-U-PSW-4
1	26.7	13.0	44.4	47.2	6100	WF-U-PSW-5



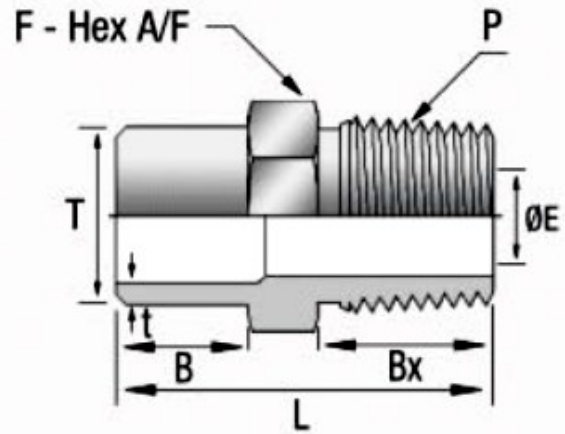
**MALE CONNECTOR - TUBE BUTT WELD (FRACTIONAL) X
MALE PIPE THREADS (NPT)**



T Tube O.D. (mm)	t Wall Thickness (in.)	P Pipe Size, NPT	L	B	Bx	F	E	Work. Press. (PSIG)	Part No.
1/4	0.065	1/4	29.7	9.7	14.2	14.3	7.1	8000	WF-MC-TBW-FRAC-NPTM-1
1/4	0.065	1/2	36.8	9.7	19.1	22.2	11.9	7700	WF-MC-TBW-FRAC-NPTM-2
3/8	0.095	1/4	29.7	9.7	14.2	14.3	7.1	800	WF-MC-TBW-FRAC-NPTM-3
3/8	0.095	1/2	36.8	9.7	19.1	22.2	11.9	7700	WF-MC-TBW-FRAC-NPTM-4
1/2	0.095	1/4	34.3	14.2	14.2	14.3	7.1	6780	WF-MC-TBW-FRAC-NPTM-5
1/2	0.095	1/2	41.1	14.2	19.1	22.2	11.9	6780	WF-MC-TBW-FRAC-NPTM-6
5/8	0.109	1/4	34.8	14.2	14.2	17.5	7.1	5760	WF-MC-TBW-FRAC-NPTM-7
5/8	0.109	1/2	41.1	14.2	19.1	22.2	11.9	5760	WF-MC-TBW-FRAC-NPTM-8
3/4	0.120	1/4	40.1	19.1	14.2	20.6	7.1	5530	WF-MC-TBW-FRAC-NPTM-9
3/4	0.120	1/2	46.2	19.1	19.1	22.2	11.9	5530	WF-MC-TBW-FRAC-NPTM-10
1	0.134	1/4	42.9	19.1	14.2	27.0	7.1	4480	WF-MC-TBW-FRAC-NPTM-11
1	0.134	1/2	47.8	19.1	19.1	27.0	11.9	4480	WF-MC-TBW-FRAC-NPTM-12



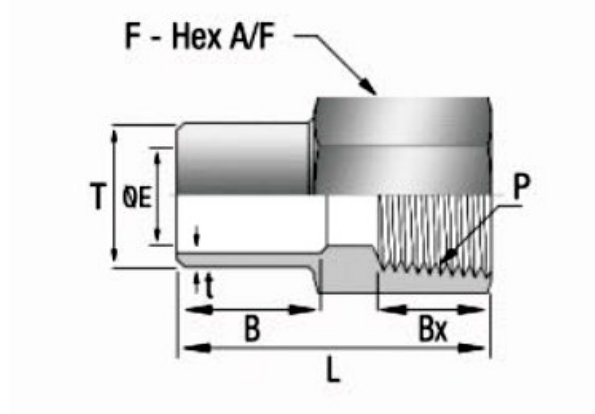
**MALE CONNECTOR - TUBE BUTT WELD
(METRIC) X MALE PIPE THREADS (NPT)**



T Tube O.D. (mm)	t Wall Thickness (in.)	P Pipe Size, NPT	L	B	Bx	F	E	Work. Press. (PSIG)	Part No.
12	2.2	1/4	34.3	14.2	14.2	14.0	7.1	6470	WF-MC-TBW-FRAC-NPTM-1
12	2.2	1/2	41.1	14.2	19.1	22.0	11.9	6470	WF-MC-TBW-FRAC-NPTM-2
14	2.5	1/4	34.3	14.2	14.2	15.0	7.1	6280	WF-MC-TBW-FRAC-NPTM-3
14	2.5	1/2	41.1	14.2	19.1	22.0	11.9	6280	WF-MC-TBW-FRAC-NPTM-4
15	2.5	1/4	34.8	14.2	14.2	16.0	7.1	5770	WF-MC-TBW-FRAC-NPTM-5
16	2.8	1/4	35.6	14.2	14.2	18.0	7.1	6140	WF-MC-TBW-FRAC-NPTM-6
16	2.8	1/2	41.1	14.2	19.1	22.0	11.9	6140	WF-MC-TBW-FRAC-NPTM-7
20	3.0	1/2	46.2	19.1	19.1	22.0	11.9	5110	WF-MC-TBW-FRAC-NPTM-8
22	3.0	1/4	41.2	19.1	14.2	24.0	7.1	4620	WF-MC-TBW-FRAC-NPTM-9
22	3.0	1/2	46.1	19.1	19.1	24.0	11.9	4620	WF-MC-TBW-FRAC-NPTM-10
25	3.5	3/4	47.8	19.1	19.1	27.0	15.7	4730	WF-MC-TBW-FRAC-NPTM-11
25	3.5	1	54.9	19.1	23.9	35.0	22.4	4730	WF-MC-TBW-FRAC-NPTM-12
28	4.0	1/2	54.2	21.4	19.1	30.0	11.9	4850	WF-MC-TBW-FRAC-NPTM-13



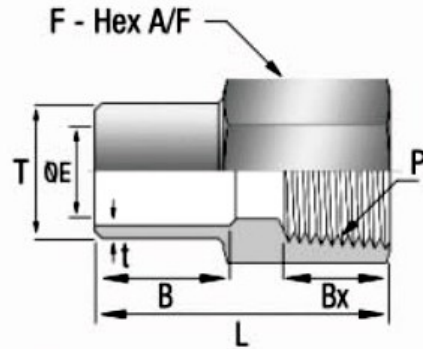
**FEMALE CONNECTOR - TUBE BUTT WELD
(FRACTIONAL) X FEMALE PIPE THREADS (NPT)**



T Tube O.D. (in.)	t Wall Thickness (in.)	P Pipe Size, NPT	L	B	Bx	F	E	Work. Press. (PSIG)	Part No.
1/4	0.065	1/4	27.9	9.7	15.0	19.1	3.0	6600	WF-FC-TBW-FRAC-NPTF-1
1/4	0.065	3/8	29.5	9.7	15.0	22.2	3.0	5300	WF-FC-TBW-FRAC-NPTF-2
3/8	0.095	1/4	27.9	9.7	15.0	19.1	4.7	6600	WF-FC-TBW-FRAC-NPTF-3
3/8	0.095	3/8	29.5	9.7	15.0	22.2	4.7	5300	WF-FC-TBW-FRAC-NPTF-4
1/2	0.095	1/4	34.0	14.2	15.0	19.1	7.9	6600	WF-FC-TBW-FRAC-NPTF-5
1/2	0.095	3/8	34.0	14.2	15.0	22.2	7.9	5300	WF-FC-TBW-FRAC-NPTF-6
1/2	0.095	1/2	38.9	14.2	19.8	27.0	7.9	4900	WF-FC-TBW-FRAC-NPTF-7



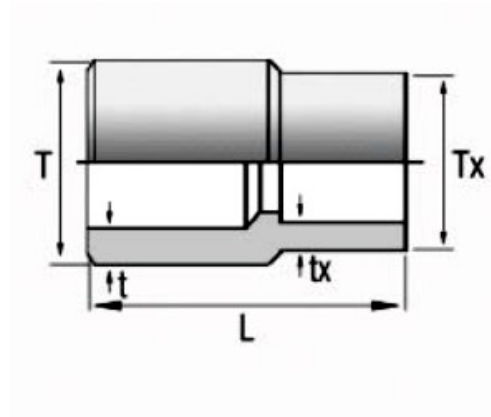
**FEMALE CONNECTOR - TUBE BUTT WELD
(METRIC) X FEMALE PIPE THREADS (NPT)**



T Tube O.D. (mm)	t Wall Thickness (in.)	P Pipe Size, NPT	L	B	Bx	F	E	Work. Press. (PSIG)	Part No.
14mm	2.5	1/4	33.0	14.2	15.0	19.0	9.0	6280	WF-FC-TBW-MET-NPTF-1
14mm	2.5	1/2	38.9	14.2	19.8	27.0	9.0	4900	WF-FC-TBW-MET-NPTF-2
20mm	3.0	1/2	43.7	19.1	19.8	27.0	14.0	4900	WF-FC-TBW-MET-NPTF-3
28mm	4.0	1/2	49.8	23.9	19.8	30.0	15.7	4850	WF-FC-TBW-MET-NPTF-4



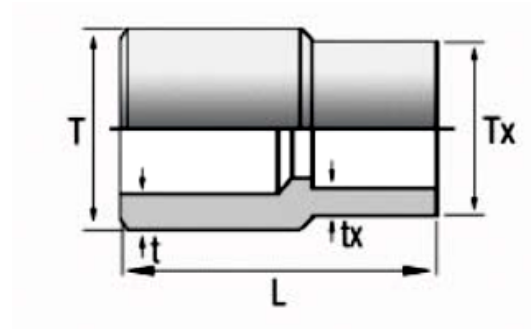
REDUCING UNION - TUBE BUTT WELD (FRACTIONAL)



T Tube O.D. (mm)	t Wall Thick- ness (in.)	Tx Tube O.D. (mm)	Tx Wall Thick- ness (in.)	L	Work. Press. (PSIG)	Part No.
20	3.0	14	2.5	38.1	6470	WF-RU-TBW-FRAC-1
22	3.0	14	2.5	38.1	5780	WF-RU-TBW-FRAC-2
22	3.0	18	2.8	38.1	5780	WF-RU-TBW-FRAC-3
25	3.5	22	3.0	38.1	5780	WF-RU-TBW-FRAC-4
38	5.0	25	3.5	38.1	5540	WF-RU-TBW-FRAC-5



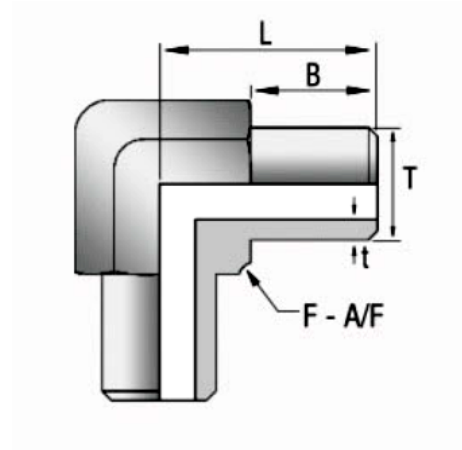
**REDUCING UNION - TUBE BUTT WELD
(METRIC)**



T Tube O.D. (mm)	t Wall Thick- ness (in.)	Tx Tube O.D. (in.)	Tx Wall Thick- ness (in.)	L	Work. Press. (PSIG)	Part No.
20	3.0	14	2.5	38.1	6470	WF-RU-TBW-MET-1
22	3.0	14	2.5	38.1	5780	WF-RU-TBW-MET-2
22	3.0	18	2.8	38.1	5780	WF-RU-TBW-MET-3
25	3.5	22	3.0	38.1	5780	WF-RU-TBW-MET-4
38	5.0	25	3.5	38.1	5540	WF-RU-TBW-MET-5



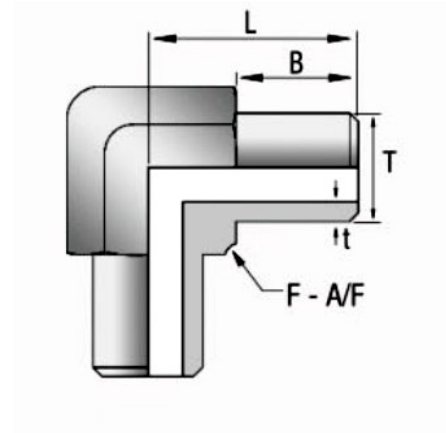
UNION ELBOW - TUBE BUTT WELD (FRACTIONAL)



T Tube O.D. (in.)	t Wall Thickness (.in)	L	B	F	Work. Press. (PSIG)	Part No.
1/4	0.065	16.3	9.7	9.5	10320	WF-UE-TBW-FRAC-1
3/8	0.095	18.0	9.7	11.1	9930	WF-UE-TBW-FRAC-2
1/2	0.095	24.4	14.2	14.3	6780	WF-UE-TBW-FRAC-3
3/4	0.120	33.3	19.1	20.6	5530	WF-UE-TBW-FRAC-4
1	0.134	37.1	19.1	27.0	4480	WF-UE-TBW-FRAC-5



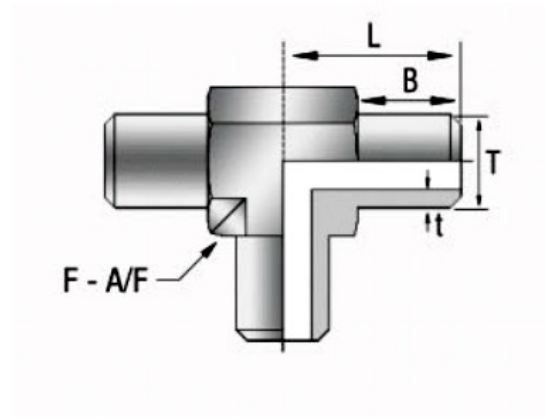
UNION ELBOW - TUBE BUTT WELD (METRIC)



T Tube O.D. (mm)	t Wall Thick- ness (.in)	L	B	F	Work. Press. (PSIG)	Part No.
10	2.2	18.0	9.7	11.1	8160	WF-UE-TBW-MET-1
14	2.5	25.4	14.2	15.9	6280	WF-UE-TBW-MET-2
16	2.8	26.2	14.2	17.5	6140	WF-UE-TBW-MET-3
20	3.0	33.3	19.1	20.6	5110	WF-UE-TBW-MET-4
22	3.0	35.3	19.1	23.8	4620	WF-UE-TBW-MET-5
25	3.5	37.1	19.1	27.0	4730	WF-UE-TBW-MET-6



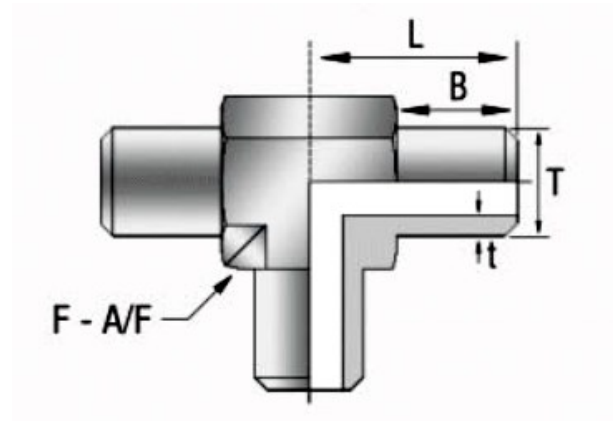
UNION TEE - TUBE BUTT WELD (FRACTIONAL)



T Tube O.D. (in.)	t Wall Thick- ness (.in)	L	B	F	Work. Press. (PSIG)	Part No.
1/4	0.065	16.3	9.7	9.5	10320	WF-UT-TBW-FRAC-1
3/8	0.095	18.0	9.7	11.1	9930	WF-UT-TBW-FRAC-2
1/2	0.095	24.4	14.2	14.3	6780	WF-UT-TBW-FRAC-3
3/4	0.120	33.3	19.1	20.6	5530	WF-UT-TBW-FRAC-4
1	0.134	37.1	19.1	27.0	4480	WF-UT-TBW-FRAC-5



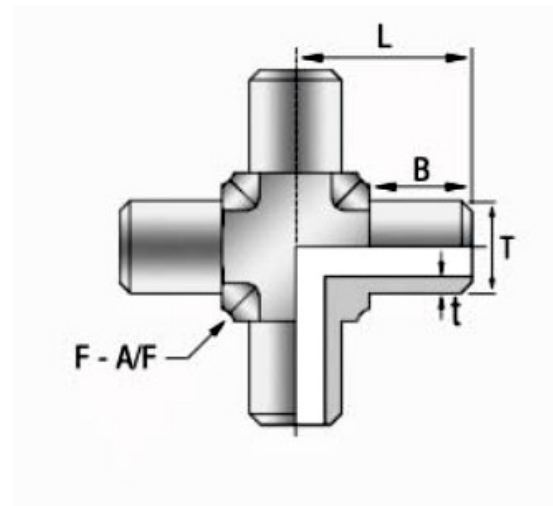
UNION TEE - TUBE BUTT WELD (METRIC)



T Tube O.D. (mm)	t Wall Thick- ness (in.)	L	B	F	Work. Press. (PSIG)	Part No.
6	1.8	16.3	9.7	9.5	12660	WF-UT-TBW-MET-1
8	1.8	16.3	9.7	9.5	8320	WF-UT-TBW-MET-2
10	2.2	18.0	9.7	11.1	8160	WF-UT-TBW-MET-3
12	2.2	24.4	14.2	14.3	6470	WF-UT-TBW-MET-4
14	2.5	25.4	14.2	15.9	6280	WF-UT-TBW-MET-5
16	2.8	26.2	14.2	17.5	6140	WF-UT-TBW-MET-6
20	3.0	33.3	19.1	20.6	5110	WF-UT-TBW-MET-7
22	3.0	35.3	19.1	23.8	4620	WF-UT-TBW-MET-8
25	3.5	37.1	19.1	27.0	4730	WF-UT-TBW-MET-9
32	4.5	49.3	23.9	34.9	4730	WF-UT-TBW-MET-10



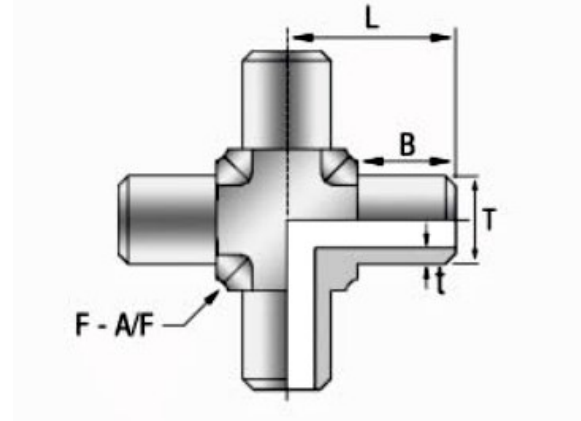
UNION CROSS - TUBE BUTT WELD (FRACTIONAL)



T Tube O.D. (in.)	t Wall Thick- ness (.in)	L	B	F	Work. Press. (PSIG)	Part No.
1/4	0.065	16.3	9.7	9.5	10320	WF-UC-TBW-FRAC-1
3/8	0.095	18.0	9.7	11.1	9930	WF-UC-TBW-FRAC-2
1/2	0.095	24.4	14.2	14.3	6780	WF-UC-TBW-FRAC-3
3/4	0.120	33.3	19.1	20.6	5530	WF-UC-TBW-FRAC-4
1	0.134	37.1	19.1	27.0	4480	WF-UC-TBW-FRAC-5



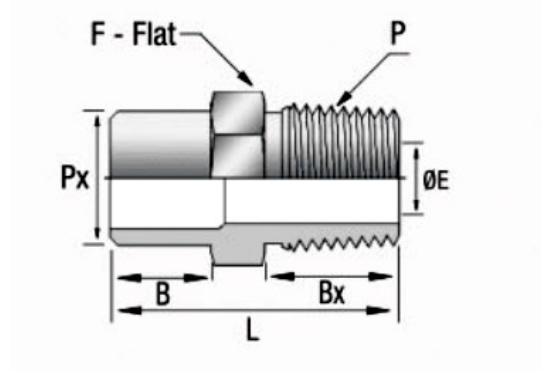
UNION CROSS - TUBE BUTT WELD (METRIC)



T Tube O.D. (mm)	t Wall Thickness (.in)	L	B	F	Work. Press. (PSIG)	Part No.
6	1.8	16.3	9.7	9.5	12660	WF-UC-TBW-MET-1
8	1.8	16.3	9.7	9.5	8320	WF-UC-TBW-MET-2
10	2.2	18.0	9.7	9.5	8160	WF-UC-TBW-MET-3



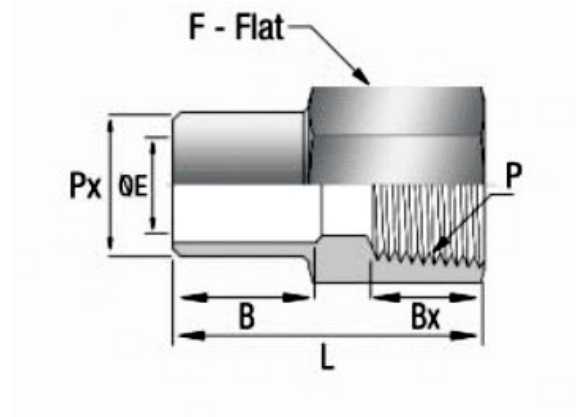
**MALE CONNECTOR - PIPE BUTT WELD X MALE PIPE
THREADS (NPT)**



Px Pipe Size (NPS with Sch80 WT)	P Pipe Size, NPT	L	B	F	Work. Press. (PSIG)	Part No.
1/4	1/4	34.3	14.2	14.3	8000	WF-MC-PBW-MPTM-1
1/4	1/2	41.3	14.2	22.2	7700	WF-MC-PBW-MPTM-2
3/8	1/4	34.8	14.2	17.5	6650	WF-MC-PBW-MPTM-3
3/8	1/2	41.3	14.2	22.2	6650	WF-MC-PBW-MPTM-4
1/2	1/4	41.3	19.1	22.2	6190	WF-MC-PBW-MPTM-5
1/2	1/2	46.2	19.1	22.2	6190	WF-MC-PBW-MPTM-6
3/4	1/4	42.9	19.1	27.0	5040	WF-MC-PBW-MPTM-7
3/4	1/2	47.8	19.1	27.0	5040	WF-MC-PBW-MPTM-8
1	1/4	50.0	23.9	34.9	4640	WF-MC-PBW-MPTM-9
1	1/2	54.8	23.9	34.9	4640	WF-MC-PBW-MPTM-10



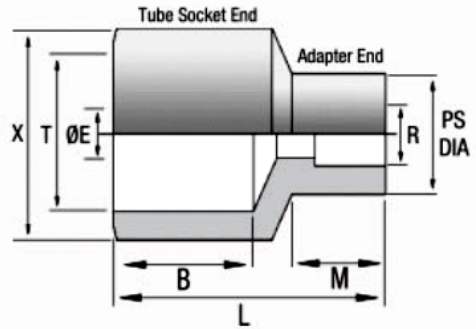
**FEMALE CONNECTOR - PIPE BUTT WELD X
MALE PIPE THREADS (NPT)**



Px Pipe Size (NPS with Sch80 WT)	P Pipe Size, NPT	L	B	F	Work. Press. (PSIG)	Part No.
1/4	1/2	38.9	14.2	27.0	4900	WF-FC-PBW-NPTM-1
3/8	1/2	38.9	14.2	27.0	4900	WF-FC-PBW-NPTM-2
1/2	1/4	37.3	19.1	22.2	7500	WF-FC-PBW-NPTM-3
1/2	1/2	43.7	19.1	27.0	4900	WF-FC-PBW-NPTM-4



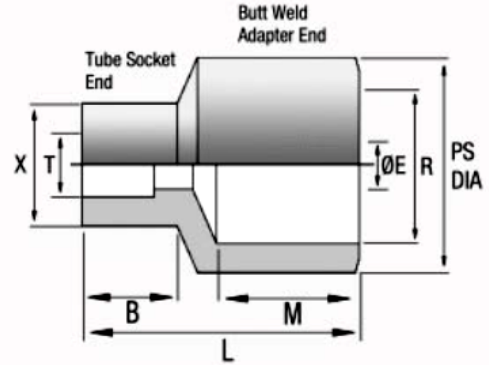
WELD ADAPTER - TUBE SOCKET WELD (FRACTIONAL) X PIPE BUTT WELD



T Tube O.D.	P Pipe Size, NPT	PS Pipe Size,	R Bore	X	M	L	B	E	Work. Press.	Part No.
3/16	1/8	10.41	5.33	11.18	9.65	19.81	5.08	3.56	8700	WF-WA-TSW-FRAC-PBW-1
1/4	1/8	10.41	5.33	12.70	9.65	21.34	6.35	4.83	8700	WF-WA-TSW-FRAC-PBW-2
5/16	1/8	10.41	5.33	14.99	9.65	23.62	7.87	5.33	8700	WF-WA-TSW-FRAC-PBW-3
3/8	1/4	13.72	7.62	16.00	14.22	28.45	8.64	7.62	8100	WF-WA-TSW-FRAC-PBW-4
1/2	1/4	13.72	7.62	19.81	14.22	31.24	10.41	7.62	8100	WF-WA-TSW-FRAC-PBW-5
1/2	3/8	17.27	10.67	19.81	14.22	30.23	10.41	10.41	6900	WF-WA-TSW-FRAC-PBW-6
5/8	1/2	21.34	13.97	23.68	19.05	36.32	11.94	12.70	4900	WF-WA-TSW-FRAC-PBW-7
3/4	1/4	13.72	7.62	27.69	14.22	35.81	12.70	7.62	6000	WF-WA-TSW-FRAC-PBW-8
3/4	3/8	17.27	10.67	27.69	14.22	34.80	12.70	10.67	6000	WF-WA-TSW-FRAC-PBW-9
3/4	1/2	21.34	13.97	27.69	19.05	38.35	12.70	13.97	6000	WF-WA-TSW-FRAC-PBW-10
3/4	3/4	26.67	18.54	27.69	19.05	36.83	12.70	16.76	5300	WF-WA-TSW-FRAC-PBW-11
1	1/4	13.72	7.62	36.58	14.22	39.88	14.22	7.62	4900	WF-WA-TSW-FRAC-PBW-12
1	3/8	17.27	10.67	36.58	14.22	38.86	14.22	10.67	4900	WF-WA-TSW-FRAC-PBW-13
1	1/2	21.34	13.97	36.58	19.05	42.42	14.22	13.97	4900	WF-WA-TSW-FRAC-PBW-14
1	3/4	26.67	18.54	36.58	19.05	40.89	14.22	18.54	4900	WF-WA-TSW-FRAC-PBW-15
1	1	33.27	24.13	36.58	23.88	43.69	14.22	23.11	4900	WF-WA-TSW-FRAC-PBW-16
1-1/2	1-1/2	48.26	38.10	50.80	26.16	48.77	17.02	33.27	3700	WF-WA-TSW-FRAC-PBW-17
2	2	60.45	49.28	66.80	26.92	53.34	19.81	45.97	3200	WF-WA-TSW-FRAC-PBW-18



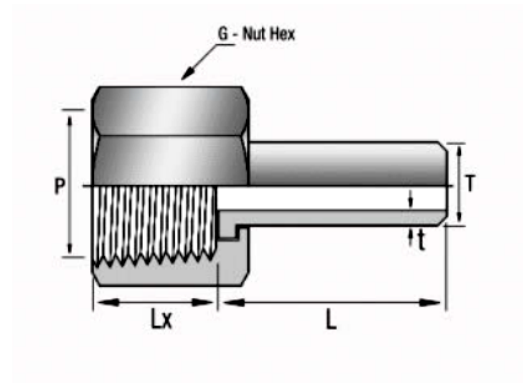
**ADAPTOR - TUBE SOCKET WELD
(FRACTIONAL) X PIPE BUTT WELD**



T Tube O.D. (.in)	P Pipe Size, (NPS)	PS Pipe OD	R Bore	X	L	D	B	Work. Press. (PSIG)	Part No.
1/8	1/8	10.41	5.33	9.65	9.65	18.54	4.06	8700	WF-A-TSW-FRAC-PBW-1
1/8	1/4	13.72	7.62	9.65	14.22	24.13	4.06	8200	WF-A-TSW-FRAC-PBW-2
3/16	1/2	21.34	13.97	11.18	19.05	32.00	5.08	6400	WF-A-TSW-FRAC-PBW-3
3/16	3/4	26.67	18.54	11.18	19.05	33.53	5.08	5300	WF-A-TSW-FRAC-PBW-4
1/4	1/4	13.72	7.62	12.70	14.22	25.65	6.35	8200	WF-A-TSW-FRAC-PBW-5
1/4	3/8	17.27	10.67	12.70	14.22	26.67	6.35	6900	WF-A-TSW-FRAC-PBW-6
1/4	1/2	21.34	13.97	12.70	19.05	32.77	6.35	6400	WF-A-TSW-FRAC-PBW-7
1/4	3/4	26.67	18.54	12.70	19.05	34.29	6.35	5300	WF-A-TSW-FRAC-PBW-8
1/4	1	33.27	24.13	12.70	23.88	40.89	6.35	4900	WF-A-TSW-FRAC-PBW-9
5/16	1/2	21.34	13.97	14.99	19.05	33.53	7.87	6400	WF-A-TSW-FRAC-PBW-10
3/8	3/8	17.27	10.67	16.00	14.22	28.19	8.64	6900	WF-A-TSW-FRAC-PBW-11
3/8	1/2	21.34	13.97	16.00	19.05	34.04	8.64	6400	WF-A-TSW-FRAC-PBW-12
3/8	3/4	26.67	18.54	16.00	19.05	35.56	8.64	5300	WF-A-TSW-FRAC-PBW-13
3/8	1	33.27	24.13	16.00	23.88	42.42	8.64	4900	WF-A-TSW-FRAC-PBW-14
3/8	1-1/2	48.26	38.10	16.00	26.16	49.02	8.64	3700	WF-A-TSW-FRAC-PBW-15
1/2	1/2	21.34	13.97	19.81	19.05	34.54	10.41	6400	WF-A-TSW-FRAC-PBW-16
1/2	3/4	26.67	18.54	19.81	19.05	36.07	10.41	5300	WF-A-TSW-FRAC-PBW-17
1/2	1	33.27	24.13	19.81	23.88	42.93	10.41	4900	WF-A-TSW-FRAC-PBW-18
5/8	3/4	26.67	18.54	23.88	19.05	36.58	11.94	5300	WF-A-TSW-FRAC-PBW-19
5/8	1	33.27	24.13	23.88	23.88	43.18	11.94	4900	WF-A-TSW-FRAC-PBW-20
3/4	1	33.27	24.13	27.69	23.88	42.93	12.70	4900	WF-A-TSW-FRAC-PBW-21
1	1-1/4	42.16	32.51	36.58	23.88	44.45	14.22	4100	WF-A-TSW-FRAC-PBW-22
1	1-1/2	48.26	38.10	36.58	26.16	48.51	14.22	3700	WF-A-TSW-FRAC-PBW-23
1-1/4	1-1/4	42.16	32.51	44.45	23.88	45.21	16.00	4100	WF-A-TSW-FRAC-PBW-24
1-1/4	1-1/2	48.26	38.10	44.45	26.16	48.01	16.00	3700	WF-A-TSW-FRAC-PBW-25



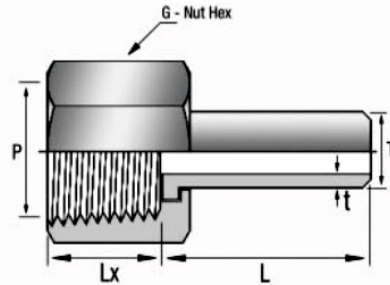
**PIPE TO TUBE BUTT WELD - FEMALE ISO PARALLEL /
BSPP PIPE THREADS X TUBE BUTT WELD (METRIC)**



P. Thread Size (in.)	T Tube OD	t Wall Thickness	L	G	Lx	Work. Press. (PSIG)	Part No.
1/2	12	2.2	34.0	27.0	11.0	6470	WF-PTBW-ISOF-P-1
1/2	14	2.5	34.0	27.0	11.0	6820	WF-PTBW-ISOF-P-2
1/2	18	2.8	2.8	27.0	11.0	6140	WF-PTBW-ISOF-P-3



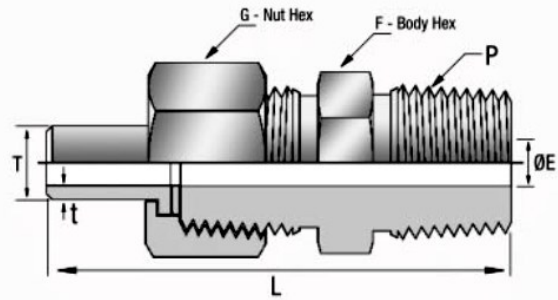
**PIPE TO TUBE BUTT WELD - FEMALE METRIC
PIPE THREAD X TUBE BUTT WELD (METRIC)**



P. Metric Thread Size	T Tube OD	t Wall Thickness	L	G	Lx	Work. Press. (PSIG)	Part No.
M12 X 1.5	6	1.8	25.0	16.0	9.0	12660	WF-PTBW-F-TBW-MET-1
M12 X 1.5	8	1.8	30.0	16.0	9.0	8320	WF-PTBW-F-TBW-MET-2
M14 X 1.5	8	1.8	30.0	18.0	9.0	8320	WF-PTBW-F-TBW-MET-3
M14 X 1.5	10	2.2	30.0	18.0	9.0	8160	WF-PTBW-F-TBW-MET-4
M16 X 1.5	8	1.8	30.0	22.0	9.0	8320	WF-PTBW-F-TBW-MET-5
M16 S X 1.5	10	2.2	30.0	22.0	9.0	8160	WF-PTBW-F-TBW-MET-6
M16 X 1.5	12	2.2	34.0	22.0	9.0	6470	WF-PTBW-F-TBW-MET-7
M18 X 1.5	10	2.2	34.0	22.0	10.0	8160	WF-PTBW-F-TBW-MET-8
M18 X 1.5	12	2.2	34.0	22.0	10.0	6470	WF-PTBW-F-TBW-MET-9
M18 X 1.5	14	2.2	34.0	22.0	10.0	6280	WF-PTBW-F-TBW-MET-10
M20 X 1.5	10	2.5	34.0	25.0	11.0	8160	WF-PTBW-F-TBW-MET-11
M20 X 1.5	12	2.2	34.0	25.0	11.0	6470	WF-PTBW-F-TBW-MET-12
M20 X 1.5	14	2.2	34.0	25.0	11.0	6280	WF-PTBW-F-TBW-MET-13
M20 X 1.5	15	2.5	34.0	25.0	11.0	6160	WF-PTBW-F-TBW-MET-14
M20 X 1.5	16	2.5	34.0	25.0	11.0	6140	WF-PTBW-F-TBW-MET-15
M22 X 1.5	14	2.8	34.0	27.0	11.0	6280	WF-PTBW-F-TBW-MET-16
M22 X 1.5	16	2.5	34.0	27.0	11.0	6140	WF-PTBW-F-TBW-MET-17
M24 X 1.5	16	2.8	34.0	30.0	11.0	6140	WF-PTBW-F-TBW-MET-18
M24 X 1.5	18	2.8	34.0	30.0	11.0	5670	WF-PTBW-F-TBW-MET-19
M24 X 1.5	20	2.8	34.0	30.0	11.0	5110	WF-PTBW-F-TBW-MET-20
M27 X 2	14	3.0	34.0	32.0	14.0	6280	WF-PTBW-F-TBW-MET-21
M27 X 2	16	2.5	34.0	32.0	14.0	6140	WF-PTBW-F-TBW-MET-22
M27 X 2	18	2.8	34.0	32.0	14.0	5670	WF-PTBW-F-TBW-MET-23
M27 X 2	20	3.0	40.0	32.0	14.0	5110	WF-PTBW-F-TBW-MET-24
M27 X 2	22	3.0	40.0	32.0	14.0	4620	WF-PTBW-F-TBW-MET-25
M30 X 2	22	3.0	40.0	35.0	18.0	4620	WF-PTBW-F-TBW-MET-26
M30 X 2	25	3.5	45.0	35.0	18.0	4730	WF-PTBW-F-TBW-MET-27
M33 X 2	28	4.0	45.0	41.0	18.0	5160	WF-PTBW-F-TBW-MET-28
M36 X 2	30	4.0	45.0	41.0	18.0	4760	WF-PTBW-F-TBW-MET-29



**MALE PIPE TO TUBE BUTT WELD - MALE NPT PIPE X
TUBE BUTT WELD (METRIC)**



P-NPT-Pipe Threads Size	T Tube O.D.	t Wall Thickness	L	F	G	E	Work. Press.	Part No.
1/8	14	2.5	69.0	19.0	22.0	4.8	6280	WF-MTBW-NPTM-TBW-MET-1
1/4	6	1.8	60.0	14.0	14.0	3.0	8240	WF-MTBW-NPTM-TBW-MET-2
1/4	8	1.8	73.2	14.0	16.0	4.0	8240	WF-MTBW-NPTM-TBW-MET-3
1/4	10	2.2	73.2	15.0	18.0	6.0	8160	WF-MTBW-NPTM-TBW-MET-4
1/4	12	2.2	73.2	18.0	22.0	7.0	6470	WF-MTBW-NPTM-TBW-MET-5
1/4	14	2.5	73.2	19.0	22.0	7.1	6280	WF-MTBW-NPTM-TBW-MET-6
1/4	16	2.8	73.2	22.0	25.0	7.1	6140	WF-MTBW-NPTM-TBW-MET-7
1/4	18	2.8	74.2	24.0	27.0	7.1	5670	WF-MTBW-NPTM-TBW-MET-8
3/8	14	2.5	73.2	19.0	22.0	9.7	6280	WF-MTBW-NPTM-TBW-MET-9
1/2	12	2.2	78.0	18.0	22.0	7.0	6470	WF-MTBW-NPTM-TBW-MET-10
1/2	14	2.5	78.0	19.0	22.0	9.0	6280	WF-MTBW-NPTM-TBW-MET-11
1/2	16	2.8	78.0	22.0	25.0	10.0	6140	WF-MTBW-NPTM-TBW-MET-12
1/2	22	3.0	82.0	30.0	32.0	11.9	4620	WF-MTBW-NPTM-TBW-MET-13
1/2	25	2.8	86.0	32.0	35.0	11.9	4730	WF-MTBW-NPTM-TBW-MET-14
1	25	3.5	103.0	35.0	35.0	17.0	4730	WF-MTBW-NPTM-TBW-MET-15