








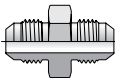
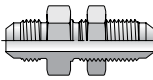
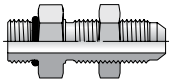
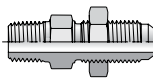
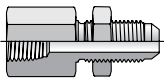
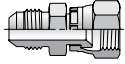
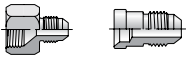
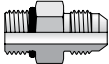
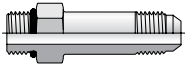



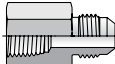


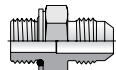

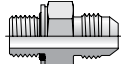
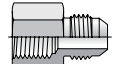

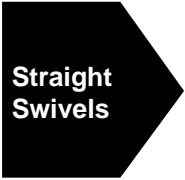
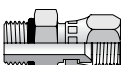

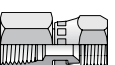






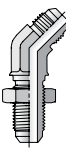
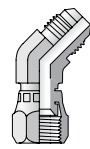
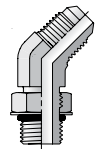
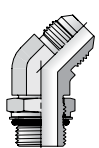
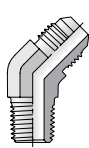
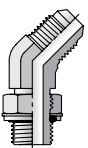
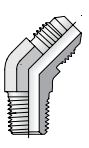
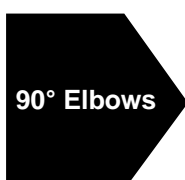
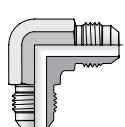


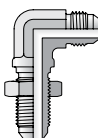
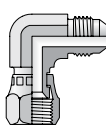
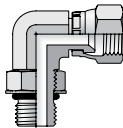
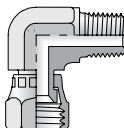
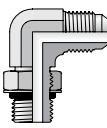
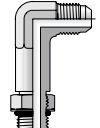
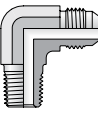
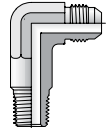
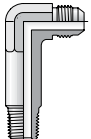
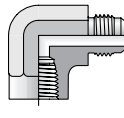
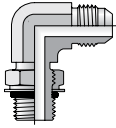
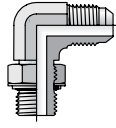
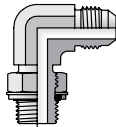
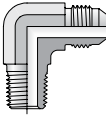

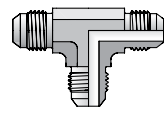
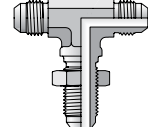
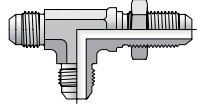
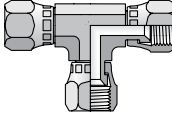
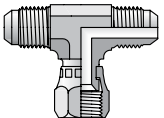
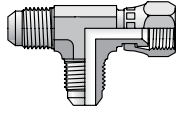
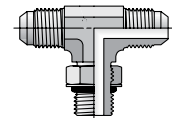
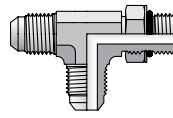
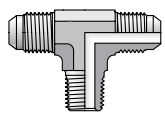
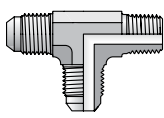
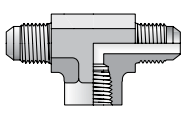
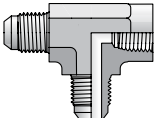
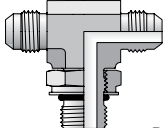
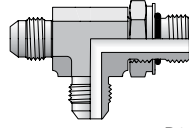
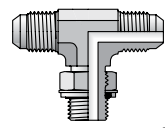
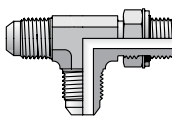
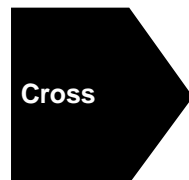

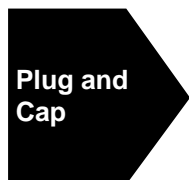



Triple-Lok™ & Triple-Lok™ 2 37° Flare Tube Fittings

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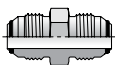
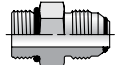


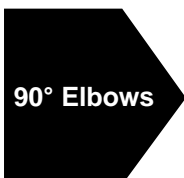
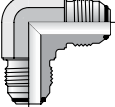
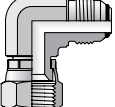
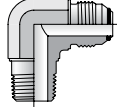
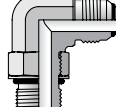
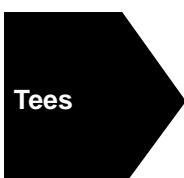
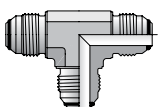
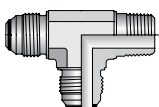
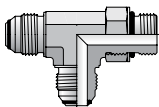


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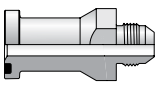
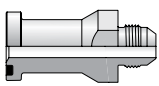
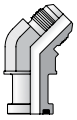
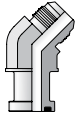
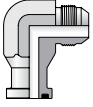
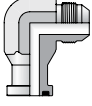
 <p>Nuts, Sleeves, Locknuts</p>	<p>BTX Nut</p>  <p>B9</p>	<p>TX and TX Metric Sleeve</p>  <p>B9</p>	<p>WLN Bulkhead Locknut</p>  <p>B10</p>	<p>SBR Braze Ring</p>  <p>B10</p>		
 <p>Straights</p>	<p>HTX Union</p>  <p>B10</p>	<p>LHTX Large Hex Union</p>  <p>B10</p>	<p>WTX Bulkhead Union</p>  <p>B11</p>	<p>WF50X SAE-ORB / 37° Bulkhead</p>  <p>B11</p>	<p>WFTX NPTF / 37° Bulkhead</p>  <p>B11</p>	
<p>WGTX NPTF / 37° Bulkhead</p>  <p>B12</p>	<p>HXH6 Extender and Expander</p>  <p>B12</p>	<p>TRTX / TRTXN Reducer</p>  <p>B13</p>	<p>F50X SAE-ORB / 37° Flare</p>  <p>B14</p>	<p>FF50X SAE-ORB / 37° – Long</p>  <p>B14</p>	<p>XHB3 Braze Socket / 37° Flare</p>  <p>B14</p>	
<p>FTX NPTF / 37° Flare</p>  <p>B15</p>	<p>FFTXX NPTF / 37° Flare – Long</p>  <p>B15</p>	<p>GTX NPTF / 37° Flare</p>  <p>B15</p>	<p>F870MX ISO 6149 / 37° Flare</p>  <p>B16</p>	<p>F82EDMX Metric-ED / 37° Flare</p>  <p>B16</p>	<p>F80MX Metric-ORR / 37° Flare</p>  <p>B16</p>	
<p>F42EDMX BSPP-ED / 37° Flare</p>  <p>B16</p>	<p>F40MX BSPP-ORR / 37° Flare</p>  <p>B17</p>	<p>G4MX BSPP / 37° Flare</p>  <p>B17</p>	<p>F3MX BSPT / 37° Flare</p>  <p>B17</p>	 <p>Straight Swivels</p>		
<p>F650X SAE-ORB / 37° Swivel</p>  <p>B18</p>	<p>F6X NPTF / 37° Swivel</p>  <p>B18</p>	<p>G6X NPTF / 37° Swivel</p>  <p>B18</p>	<p>F6870MX ISO-6149 / 37° Swivel</p>  <p>B18</p>	<p>F680MX Metric-ORR / 37° Swivel</p>  <p>B19</p>	<p>F682EDMX Metric-ED / 37° Swivel</p>  <p>B19</p>	
<p>F642EDMX BSPP-ED / 37° Swivel</p>  <p>B19</p>	<p>F63MX BSPT / 37° Swivel</p>  <p>B19</p>	 <p>45° Elbows</p>		<p>WNTX Bulkhead Union</p>  <p>B20</p>	<p>V6X 37° Swivel Elbow</p>  <p>B20</p>	<p>V50X SAE-ORB / 37° Flare</p>  <p>B20</p>
<p>V870MX ISO-6149 / 37° Flare</p>  <p>B20</p>	<p>VTX NPTF / 37° Flare</p>  <p>B21</p>	<p>V40MX BSPP-ORR / 37° Flare</p>  <p>B21</p>	<p>V3MX BSPT / 37° Flare</p>  <p>B21</p>	 <p>90° Elbows</p>		<p>ETX Union Elbow</p>  <p>B21</p>

<p>WETX Bulkhead Union</p>  <p>B22</p>	<p>C6X 37° Swivel Elbow</p>  <p>B22</p>	<p>AOEX6 SAE-ORB / 37° Swivel</p>  <p>B22</p>	<p>X6EF NPTF / 37° Swivel</p>  <p>B23</p>	<p>C50X SAE-ORB / 37° Flare</p>  <p>B23</p>	<p>CC50X SAE-ORB / 37° – Long</p>  <p>B23</p>
<p>CTX NPTF / 37° Flare</p>  <p>B24</p>	<p>CCTX NPTF / 37° Flare – Long</p>  <p>B24</p>	<p>CCCTX NPTF / 37° – Extra Long</p>  <p>B24</p>	<p>DTX NPTF / 37° Flare</p>  <p>B25</p>	<p>C870MX ISO-6149 / 37° Flare</p>  <p>B25</p>	<p>C80MX Metric-ORR / 37° Flare</p>  <p>B25</p>
<p>C40MX BSPP-ORR / 37° Flare</p>  <p>B26</p>	<p>C3MX BSPT / 37° Flare</p>  <p>B26</p>	<p>Tees</p> 	<p>JTX Union Tee</p>  <p>B26</p>	<p>WJTX Bulkhead Branch Tee</p>  <p>B27</p>	<p>WJJTX Bulkhead Run Tee</p>  <p>B27</p>
<p>JX6 37° Swivel Union Tee</p>  <p>B28</p>	<p>S6X 37° Swivel Branch Tee</p>  <p>B28</p>	<p>R6X 37° Swivel Run Tee</p>  <p>B28</p>	<p>S50X SAE-ORB Branch Tee</p>  <p>B29</p>	<p>R50X SAE-ORB Run Tee</p>  <p>B29</p>	<p>STX NPTF Branch Tee</p>  <p>B30</p>
<p>RTX NPTF Run Tee</p>  <p>B30</p>	<p>OTX NPTF Branch Tee</p>  <p>B30</p>	<p>MTX NPTF Run Tee</p>  <p>B30</p>	<p>S870MX ISO 6149 Branch Tee</p>  <p>B31</p>	<p>R870MX ISO 6149 Run Tee</p>  <p>B31</p>	<p>S40MX BSPP-ORR Branch Tee</p>  <p>B31</p>
<p>R40MX BSPP-ORR Run Tee</p>  <p>B31</p>	<p>Cross</p> 	<p>KTX Union Cross</p>  <p>B32</p>	<p>Plug and Cap</p> 	<p>PNTX 37° Plug</p>  <p>B32</p>	<p>FNTX 37° Cap</p>  <p>B32</p>
<p>T22X Mountie Cap</p>  <p>B32</p>					

Triple-Lok® 2 Soft Seal Flare Tube Fittings

 <p>Straights</p>	<p>HTXO Union</p>  <p>B33</p>	<p>F5OXO SAE-ORB / 37° Flare</p>  <p>B33</p>	<p>FTXO NPTF / 37° Flare</p>  <p>B33</p>	<p>GTXO NPTF / 37° Flare</p>  <p>B33</p>
 <p>90° Elbows</p>	<p>ETXO Union Elbow</p>  <p>B34</p>	<p>C6XO 37° Swivel Elbow</p>  <p>B34</p>	<p>CTXO NPTF / 37° Flare</p>  <p>B34</p>	<p>C5OXO SAE-ORB / 37° Flare</p>  <p>B34</p>
 <p>Tees</p>	<p>JTXO Union Tee</p>  <p>B35</p>	<p>RTXO 37° Swivel Run Tee</p>  <p>B35</p>	<p>R5OXO SAE-ORB Run Tee</p>  <p>B35</p>	

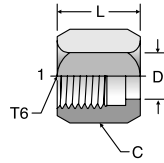
Flange Adapters (Shown in Section L)

 <p>SAE Flange Adapters</p>	<p>XHQ1 Code 61 / 37° Flare</p>  <p>L12</p>	<p>XHQ2 Code 62 / 37° Flare</p>  <p>L12</p>	<p>XVQ1 Code 61 / 37° Flare</p>  <p>L30</p>	<p>XVQ2 Code 62 / 37° Flare</p>  <p>L30</p>	<p>XEQ1 Code 61 / 37° Flare</p>  <p>L31</p>
<p>XEQ2 Code 62 / 37° Flare</p>  <p>L31</p>					

BTX

Nut
37° Flare

SAE 070110
HPD Base # 06B



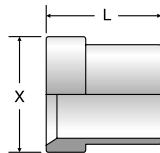
TUBE FITTING PART #	END SIZE		T6 UN/UNF-2B	C HEX (in.)	D (in.)	L (in.)	Material		
	(in.)	(mm)					-S	-SS	-B
2 BTX	1/8	—	5/16 - 24	3/8	0.180	0.55	•	•	•
3 BTX	3/16	—	3/8 - 24	7/16	0.240	0.61	•	•	•
4 BTX	1/4	6	7/16 - 20	9/16	0.310	0.62	•	•	•
5 BTX	5/16	8	1/2 - 20	5/8	0.380	0.68	•	•	•
6 BTX	3/8	10	9/16 - 18	11/16	0.440	0.73	•	•	•
8 BTX	1/2	12	3/4 - 16	7/8	0.570	0.85	•	•	•
10 BTX	5/8	14, 15, 16	7/8 - 14	1	0.700	0.98	•	•	•
12 BTX	3/4	18	1 1/16 - 12	1 1/4	0.840	1.03	•	•	•
20-12 BTX	—	20	1 1/16 - 12	1 1/4	0.862	0.87	•	•	•
14 BTX	7/8	—	1 3/16 - 12	1 3/8	0.960	1.09	•	•	•
16 BTX	1	25	1 5/16 - 12	1 1/2	1.090	1.13	•	•	•
20 BTX	1 1/4	28, 30, 32	1 5/8 - 12	2	1.350	1.23	•	•	•
24 BTX	1 1/2	35, 38	1 7/8 - 12	2 1/4	1.620	1.42	•	•	•
32 BTX	2	42, 50	2 1/2 - 12	2 7/8	2.170	1.75	•	•	•

Note: All stainless steel nuts are coated to prevent galling at assembly.

TX (inch)

Sleeve
37° Flare

SAE 070115
HPD Base # 06S

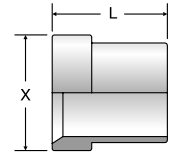


TUBE FITTING PART #	END SIZE (in.)	L (in.)	X (in.)	Material		
				-S	-SS	-B
2 TX	1/8	0.34	0.27	•	•	•
3 TX	3/16	0.34	0.33	•	•	•
4 TX	1/4	0.41	0.38	•	•	•
5 TX	5/16	0.44	0.45	•	•	•
6 TX	3/8	0.50	0.50	•	•	•
8 TX	1/2	0.56	0.68	•	•	•
10 TX	5/8	0.66	0.80	•	•	•
12 TX	3/4	0.69	0.97	•	•	•
14 TX	7/8	0.75	1.10	•	•	•
16 TX	1	0.78	1.22	•	•	•
20 TX	1 1/4	0.91	1.53	•	•	•
24 TX	1 1/2	1.13	1.78	•	•	•
32 TX	2	1.19	2.41	•	•	•

TX (metric)

Sleeve
37° Flare

SAE 070115



TUBE FITTING PART #	See Note	END SIZE (mm)	FITTING DASH SIZE	L (mm)	X (mm)	Material		
						-S	-SS	-B
TXS6	3	6	-4	10.4	9.6	•	•	•
5 TX	1	8	-5	11.2	11.4	•	•	•
TXS10	3	10	-6	12.7	12.7	•	•	•
TXS12	3	12	-8	14.2	17.3	•	•	•
TXS14	3	14	-10	16.8	20.3	•	•	•
TXS15	3	15	-10	16.8	20.3	•	•	•
10 TX	1	16	-10	16.8	20.3	•	•	•
TXS18	3	18	-12	17.3	24.6	•	•	•
20-12 TX	2	20	-12	17.3	24.6	•	•	•
TXS22	3	22	-14	19.0	27.8	•	•	•
TXS25	3	25	-16	19.8	31.0	•	•	•
TXS28	3	28	-20	23.1	38.9	•	•	•
TXS30	3	30	-20	23.1	38.9	•	•	•
TXS32	3	32	-20	23.1	38.9	•	•	•
TXS35	3	35	-24	28.4	45.2	•	•	•
24 TX	1	38	-24	28.4	45.2	•	•	•

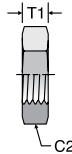
1. Inch sleeve for use with metric tubing.
2. Use with 20-12 BTX.
3. The part numbers above are for steel. Use "SS" in place of "S" for ordering stainless steel. Example: TXSS12

Dimensions and pressures for reference only, subject to change.

WLN

Bulkhead Locknut

SAE 080118 and 070118
HPD Base # 53-XN

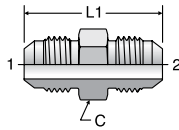


TUBE FITTING PART #	TUBE O.D. (in.)	C2 HEX (in.)	T1 (in.)	Material		
				-S	-SS	-B
3 WLN	3/16	5/8	0.22	•	•	•
4 WLN	1/4	11/16	0.28	•	•	•
5 WLN	5/16	3/4	0.28	•	•	•
6 WLN	3/8	13/16	0.27	•	•	•
8 WLN	1/2	1	0.31	•	•	•
10 WLN	5/8	1 1/8	0.36	•	•	•
12 WLN	3/4	1 3/8	0.41	•	•	•
14 WLN	7/8	1 1/2	0.41	•	•	•
16 WLN	1	1 5/8	0.41	•	•	•
20 WLN	1 1/4	1 7/8	0.41	•	•	•
24 WLN	1 1/2	2 1/8	0.41	•	•	•
32 WLN	2	2 3/4	0.41	•	•	•

HTX

Union
37° Flare / 37° Flare

SAE 070101
HPD Base # 0303



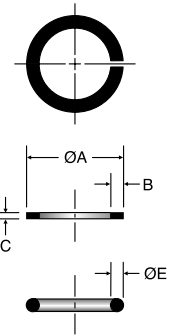
TUBE FITTING PART #	END SIZE		C HEX (in.)	L1 (in.)	Dynamic Pressure (x 1,000 PSI)			
	1 (in.)	2 (in.)			-S	-SS	-B	D
2 HTX	1/8	1/8	7/16	1.17	7.5	9.0	3.3	3.8
3 HTX	3/16	3/16	7/16	1.23	7.5	9.0	3.3	3.8
4 HTX	1/4	1/4	1/2	1.37	7.5	9.0	3.3	3.8
4-2 HTX	1/4	1/8	1/2	1.27	7.5	9.0	3.3	3.8
4-3 HTX	1/4	3/16	1/2	1.30	7.5	9.0	3.3	3.8
5 HTX	5/16	5/16	9/16	1.37	6.0	7.2	3.3	3.0
5-4 HTX	5/16	1/4	9/16	1.38	6.0	7.2	3.3	3.0
6 HTX	3/8	3/8	5/8	1.41	6.0	7.2	3.3	3.0
6-4 HTX	3/8	1/4	5/8	1.41	6.0	7.2	3.3	3.0
6-5 HTX	3/8	5/16	5/8	1.41	6.0	7.2	3.3	3.0
8 HTX	1/2	1/2	13/16	1.62	6.0	7.2	3.3	3.0
8-4 HTX	1/2	1/4	13/16	1.52	6.0	7.2	3.3	3.0
8-6 HTX	1/2	3/8	13/16	1.52	6.0	7.2	3.3	3.0
10 HTX	5/8	5/8	15/16	1.88	5.0	6.0	3.3	2.5
10-8 HTX	5/8	1/2	15/16	1.78	5.0	6.0	3.3	2.5
12 HTX	3/4	3/4	1 1/8	2.16	5.0	6.0	3.3	2.5
12-8 HTX	3/4	1/2	1 1/8	1.95	5.0	6.0	3.3	2.5
12-10 HTX	3/4	5/8	1 1/8	2.05	5.0	6.0	3.3	2.5
14 HTX	7/8	7/8	1 1/4	2.22	5.0	6.0	2.6	2.5
16 HTX	1	1	1 3/8	2.25	4.0	4.8	2.6	2.0
16-12 HTX	1	3/4	1 3/8	2.20	4.0	4.8	2.6	2.0
20 HTX	1 1/4	1 1/4	1 11/16	2.43	4.0	4.8	2.6	•
24 HTX	1 1/2	1 1/2	2	2.75	3.0	3.6	2.0	•
24-10 HTX	1 1/2	5/8	2	2.42	3.0	3.6	2.0	•
24-12 HTX	1 1/2	3/4	2	2.53	3.0	3.6	2.0	•
24-16 HTX	1 1/2	1	2	2.58	3.0	3.6	2.0	•
32 HTX	2	2	2 5/8	3.40	2.0	2.4	1.3	•
32-24 HTX	2	1 1/2	2 5/8	2.81	2.0	2.4	1.3	•

• Contact TFD

SBR

Braze Ring

SAE 080118 and 070118
HPD Base # 53-XN

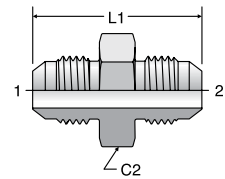


TUBE FITTING PART #	TUBE O.D. (in.)	A DIA. (in.)	B (in.)	C (in.)	E (in.)	Material		
						-S	-SS	-B
4SBR	1/4	0.260	—	—	0.05	•	•	•
6SBR	3/8	0.390	0.07	0.03	—	•	•	•
8SBR	1/2	0.515	0.07	0.03	—	•	•	•
10SBR	5/8	0.640	0.07	0.03	—	•	•	•
12SBR	3/4	0.765	0.08	0.04	—	•	•	•
14SBR	7/8	0.890	—	—	0.06	•	•	•
16SBR	1	1.015	0.08	0.04	—	•	•	•
20SBR	1 1/4	1.265	0.08	0.04	—	•	•	•
24SBR	1 1/2	1.515	0.08	0.04	—	•	•	•
32SBR	2	2.015	—	—	0.09	•	•	•

LHTX

Large Hex Union
37° Flare / 37° Flare

SAE 070119
HPD Base # 03L3



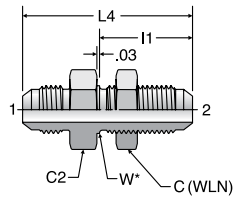
TUBE FITTING PART #	END SIZE		C2 HEX (in.)	L1 (in.)	Dynamic Pressure (x 1,000 PSI)		
	1 (in.)	2 (in.)			-S	-SS	-B
4 LHTX	1/4	1/4	11/16	1.38	7.5	9.0	3.3
4-3 LHTX	1/4	3/16	11/16	1.30	7.5	9.0	3.3
5 LHTX	5/16	5/16	3/4	1.37	6.0	7.2	3.3
6 LHTX	3/8	3/8	13/16	1.41	6.0	7.2	3.3
6-4 LHTX	3/8	1/4	13/16	1.41	6.0	7.2	3.3
8 LHTX	1/2	1/2	1	1.62	6.0	7.2	3.3
8-4 LHTX	1/2	1/4	1	1.52	6.0	7.2	3.3
8-6 LHTX	1/2	3/8	1	1.52	6.0	7.2	3.3
10 LHTX	5/8	5/8	1 1/8	1.88	5.0	6.0	3.3
12 LHTX	3/4	3/4	1 3/8	2.16	5.0	6.0	3.3
12-8 LHTX	3/4	1/2	1 3/8	1.95	5.0	6.0	3.3
16 LHTX	1	1	1 5/8	2.25	4.0	4.8	2.6
32 LHTX	2	2	2 3/4	3.40	2.0	2.4	1.3

Dimensions and pressures for reference only, subject to change.

WTX

Bulkhead Union
37° Flare / 37° Flare

SAE 070601
HPD Base # 0353
WTX-WLN – Body with locknut
(See page B10 for WLN)

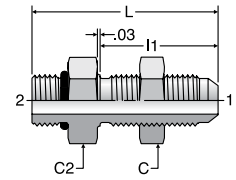


W* – Bulkhead pilot dia.
recommended clearance hole
+.015 over W dia.

WF5OX

ORB Bulkhead Connector
37° Flare / ORB

HPD Base # 0355
WF5OX-WLN – Body with locknut
(See page B10 for WLN)



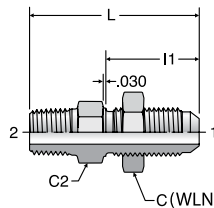
TUBE FITTING PART #	END SIZE		C HEX (in.)	C2 HEX (in.)	I1 (in.)	L4 (in.)	W DIA (in.)	MAX BULKHEAD WALL THICKNESS (in.)	Dynamic Pressure (x 1,000 PSI)		
	1 & 2 (in.)	2 (in.)							-S	-SS	-B
3 WTX	3/16	5/8	5/8	1.11	1.90	0.38	0.38	7.5	9.0	3.3	
4 WTX	1/4	11/16	11/16	1.20	2.07	0.44	0.38	7.5	9.0	3.3	
5 WTX	5/16	3/4	3/4	1.20	2.07	0.50	0.38	6.0	7.2	3.3	
6 WTX	3/8	13/16	13/16	1.28	2.18	0.56	0.44	6.0	7.2	3.3	
8 WTX	1/2	1	1	1.44	2.44	0.75	0.44	6.0	7.2	3.3	
10 WTX	5/8	1 1/8	1 1/8	1.58	2.74	0.88	0.44	5.0	6.0	3.3	
12 WTX	3/4	1 3/8	1 3/8	1.75	3.09	1.06	0.44	5.0	6.0	3.3	
14 WTX	7/8	1 1/2	1 1/2	1.75	3.12	1.19	0.44	5.0	6.0	3.3	
16 WTX	1	1 5/8	1 5/8	1.75	3.14	1.31	0.44	4.0	4.8	2.6	
20 WTX	1 1/4	1 7/8	1 7/8	1.80	3.31	1.63	0.44	4.0	4.8	2.6	
24 WTX	1 1/2	2 1/8	2 1/8	1.81	3.52	1.88	0.31	3.0	3.6	2.0	
32 WTX	2	2 3/4	2 3/4	2.09	4.20	2.50	0.35	2.0	2.4	1.3	

TUBE FITTING PART #	END SIZE		C HEX (in.)	C2 HEX (in.)	I1 (in.)	L (in.)	MAX BULKHEAD WALL THICKNESS (in.)	Dynamic Pressure (x 1,000 PSI)		
	1 (in.)	2 UN/UNF-2A						-S	-SS	-B
4 WF5OX	1/4	7/16 - 20	11/16	11/16	1.20	1.84	0.38	7.5	9.0	3.3
6 WF5OX	3/8	9/16 - 18	13/16	13/16	1.28	2.02	0.44	6.0	7.2	3.3
8 WF5OX	1/2	3/4 - 16	1	1	1.44	2.19	0.44	6.0	7.2	3.3
10 WF5OX	5/8	7/8 - 14	1 1/8	1 1/8	1.58	2.47	0.44	5.0	6.0	3.3
12 WF5OX	3/4	1 1/16 - 12	1 3/8	1 3/8	1.75	2.79	0.44	5.0	6.0	3.3
16 WF5OX	1	1 5/16 - 12	1 5/8	1 5/8	1.75	2.90	0.44	4.5	5.4	2.9

WFTX

Male Bulkhead Connector
37° Flare / NPTF

HPD Base # 0153
WFTX-WLN – Body with locknut
(See page B10 for WLN)



TUBE FITTING PART #	END SIZE		C HEX (in.)	C2 HEX (in.)	I1 (in.)	L (in.)	MAX BULKHEAD WALL THICKNESS (in.)	Dynamic Pressure (x 1,000 PSI)		
	1 (in.)	2 NPTF						-S	-SS	-B
4 WFTX	1/4	1/8 - 27	11/16	11/16	1.20	1.88	0.38	6.0	6.0	3.3
4-4 WFTX	1/4	1/4 - 18	11/16	11/16	1.20	2.10	0.38	6.0	6.0	3.3
6 WFTX	3/8	1/4 - 18	13/16	13/16	1.28	2.18	0.44	6.0	6.0	3.3
6-6 WFTX	3/8	3/8 - 18	13/16	13/16	1.28	2.16	0.44	6.0	6.0	3.3
6-8 WFTX	3/8	1/2 - 14	7/8	13/16	1.28	2.41	0.44	6.0	6.0	3.3
8 WFTX	1/2	3/8 - 18	1	1	1.44	2.34	0.44	6.0	6.0	3.3
8-8 WFTX	1/2	1/2 - 14	1	1	1.44	2.60	0.44	6.0	6.0	3.3
10 WFTX	5/8	1/2 - 14	1 1/8	1 1/8	1.58	2.74	0.44	5.0	5.0	3.3
12 WFTX	3/4	3/4 - 14	1 3/8	1 3/8	1.75	2.95	0.44	5.0	5.0	2.6
16 WFTX	1	1 - 11 1/2	1 5/8	1 5/8	1.75	3.14	0.44	4.5	4.5	2.0

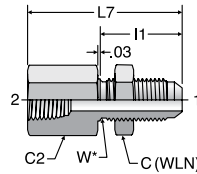
Dimensions and pressures for reference only, subject to change.



WGTX

Female Bulkhead Connector
37° Flare / NPTF

HPD Base # 0253
WGTX-WLN – Body with locknut
(See page B10 for WLN)

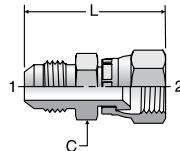


W* – Bulkhead pilot dia.
recommended clearance hole
+.015 over W dia.

TUBE FITTING PART #	END SIZE		C HEX (in.)	C2 HEX (in.)	I1 (in.)	L7 (in.)	W DIA (in.)	MAX BULKHEAD WALL THICKNESS (in.)	Dynamic Pressure (x 1,000 PSI)		
	1 (in.)	2 NPTF							-S	-SS	-B
4 WGTX	1/4	1/8 - 27	11/16	11/16	1.20	1.84	0.44	0.38	6.0	6.0	3.3
4-4 WGTX	1/4	1/4 - 18	11/16	3/4	1.20	2.11	0.44	0.38	6.0	6.0	3.3
6 WGTX	3/8	1/4 - 18	13/16	13/16	1.28	2.12	0.56	0.44	6.0	6.0	3.3
6-6 WGTX	3/8	3/8 - 18	13/16	7/8	1.28	2.24	0.56	0.44	6.0	6.0	3.3
8 WGTX	1/2	3/8 - 18	1	1	1.44	2.34	0.75	0.44	6.0	6.0	3.3
8-8 WGTX	1/2	1/2 - 14	1	1 1/8	1.44	2.61	0.75	0.44	5.0	5.0	3.3
10 WGTX	5/8	1/2 - 14	1 1/8	1 1/8	1.58	2.71	0.88	0.44	5.0	5.0	3.3
12 WGTX	3/4	3/4 - 14	1 3/8	1 3/8	1.75	2.95	1.06	0.44	4.0	4.0	2.6
14 WGTX	7/8	3/4 - 14	1 3/8	1 1/2	1.75	2.92	1.19	0.41	4.0	4.0	2.6
16 WGTX	1	1 - 11 1/2	1 5/8	1 5/8	1.75	3.19	1.31	0.44	3.0	3.0	2.0
24 WGTX	1 1/2	1 1/2-11 1/2	2 1/8	2 1/4	1.81	3.35	1.88	0.31	2.0	2.0	1.3

XHX6

Extender and Expander
37° Flare / 37° Flare Swivel



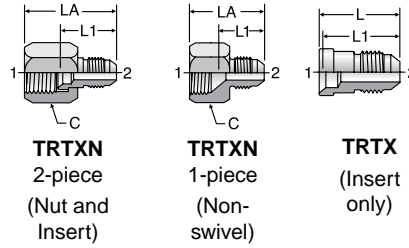
TUBE FITTING PART #	END SIZE		C HEX (in.)	L (in.)	Dynamic Pressure (x 1,000 PSI)		
	1 (in.)	2 (in.)			-S	-SS	-B
4 XHX6	1/4	1/4	9/16	1.39	7.5	7.7	3.3
6 XHX6	3/8	3/8	5/8	1.50	6.0	6.0	3.3
6-4 XHX6	3/8	1/4	5/8	1.50	6.0	6.0	3.3
8 XHX6	1/2	1/2	13/16	1.71	6.0	6.0	3.3
8-6 XHX6	1/2	3/8	13/16	1.72	6.0	6.0	3.3
10 XHX6	5/8	5/8	1	2.01	5.0	5.0	3.3
10-8 XHX6	5/8	1/2	15/16	1.93	5.0	5.0	3.3
12 XHX6	3/4	3/4	1 1/4	2.20	5.0	5.0	3.3
12-10 XHX6	3/4	5/8	1 1/8	2.19	5.0	5.0	3.3
16 XHX6	1	1	1 1/2	2.47	4.0	3.0	2.6
16-12 XHX6	1	3/4	1 1/2	2.24	4.0	3.0	2.6
20-16 XHX6	1 1/4	1	1 11/16	2.50	4.0	3.0	2.6

Dimensions and pressures for reference only, subject to change.

TRTX / TRTXN

Reducer
37° Flare

SAE 070123 / SAE 070123A
HPD Base # 0603 (TRTXN only)



TRTXN
2-piece
(Nut and
Insert)

TRTXN
1-piece
(Non-
swivel)

TRTX
(Insert
only)

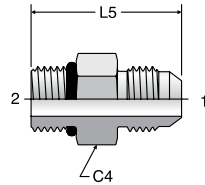
TUBE FITTING PART #			END SIZE		C HEX (in.)	L (TRTX) (in.)	LA (TRTXN) (in.)	L1 (TRTX & TRTXN) (in.)	Dynamic Pressure (x 1,000 PSI)		
TRTXN 2-pc. Design (with Large Nut)	TRTXN 1-pc. Design (Machined Female)	TRTX Reducer Insert (For 2-pc. Design Only)	1 (in.)	2 (in.)					-S	-SS	-B
4-2 TRTXN	-	4-2 TRTX	1/4	1/8	9/16	0.75	1.14	0.68	7.5	9.0	3.3
-	4-3 TRTXN	-	1/4	3/16	9/16	-	1.09	0.64	7.5	9.0	3.3
-	5-4 TRTXN	-	5/16	1/4	5/8	-	1.16	0.69	6.0	7.2	3.3
6-4 TRTXN	-	6-4 TRTX	3/8	1/4	11/16	0.97	1.40	0.90	6.0	7.2	3.3
-	6-5 TRTXN	-	3/8	5/16	11/16	-	1.19	0.73	6.0	7.2	3.3
8-4 TRTXN	-	8-4 TRTX	1/2	1/4	7/8	1.00	1.50	0.90	6.0	7.2	3.3
8-6 TRTXN	-	8-6 TRTX	1/2	3/8	7/8	1.00	1.50	0.90	6.0	7.2	3.3
10-4 TRTXN	-	10-4 TRTX	5/8	1/4	1	1.03	1.61	0.93	5.0	6.0	3.3
10-6 TRTXN	-	10-6 TRTX	5/8	3/8	1	1.03	1.61	0.93	5.0	6.0	3.3
-	10-8 TRTXN	-	5/8	1/2	1	-	1.48	0.85	5.0	6.0	3.3
12-4 TRTXN	-	12-4 TRTX	3/4	1/4	1 1/4	1.09	1.69	0.95	5.0	6.0	3.3
12-6 TRTXN	-	12-6 TRTX	3/4	3/8	1 1/4	1.09	1.69	0.95	5.0	6.0	3.3
12-8 TRTXN	-	12-8 TRTX	3/4	1/2	1 1/4	1.19	1.79	1.05	5.0	6.0	3.3
-	12-10 TRTXN	-	3/4	5/8	1 1/4	-	1.66	0.96	5.0	6.0	3.3
14-6 TRTXN	-	14-6 TRTX	7/8	3/8	1 3/8	1.13	1.78	1.00	5.0	6.0	3.3
14-10 TRTXN	-	14-10 TRTX	7/8	5/8	1 3/8	1.33	1.98	1.20	5.0	6.0	3.3
-	14-12 TRTXN	-	7/8	3/4	1 3/8	-	1.84	1.11	5.0	6.0	3.3
16-4 TRTXN	-	16-4 TRTX	1	1/4	1 1/2	1.22	1.90	1.09	4.5	5.4	2.9
16-6 TRTXN	-	16-6 TRTX	1	3/8	1 1/2	1.22	1.90	1.09	4.5	5.4	2.9
16-8 TRTXN	-	16-8 TRTX	1	1/2	1 1/2	1.27	1.95	1.14	4.5	5.4	2.9
16-10 TRTXN	-	16-10 TRTX	1	5/8	1 1/2	1.38	2.06	1.25	4.5	5.4	2.9
16-12 TRTXN	-	16-12 TRTX	1	3/4	1 1/2	1.47	2.15	1.34	4.5	5.4	2.9
-	16-14 TRTXN	-	1	7/8	1 1/2	-	1.91	1.15	4.5	5.4	2.9
-	-	20-8 TRTX	1 1/4	1/2	-	1.41	-	1.25	4.0	4.8	2.6
20-12 TRTXN	-	20-12 TRTX	1 1/4	3/4	2	1.53	2.17	1.37	4.0	4.8	2.6
20-16 TRTXN	-	20-16 TRTX	1 1/4	1	2	1.59	2.23	1.43	4.0	4.8	2.6
-	-	24-4 TRTX	1 1/2	1/4	-	1.47	-	1.32	3.0	3.6	2.0
24-8 TRTXN	-	24-8 TRTX	1 1/2	1/2	2 1/4	1.56	2.33	1.41	3.0	3.6	2.0
24-12 TRTXN	-	24-12 TRTX	1 1/2	3/4	2 1/4	1.63	2.40	1.48	3.0	3.6	2.0
24-16 TRTXN	-	24-16 TRTX	1 1/2	1	2 1/4	1.59	2.40	1.48	3.0	3.6	2.0
24-20 TRTXN	-	24-20 TRTX	1 1/2	1 1/4	2 1/4	1.69	2.46	1.54	3.0	3.6	2.0
-	-	32-12 TRTX	2	3/4	-	1.78	-	1.81	2.0	2.4	1.3
-	-	32-20 TRTX	2	1 1/4	-	1.78	-	1.59	2.0	2.4	1.3
32-24 TRTXN	-	32-24 TRTX	2	1 1/2	2 7/8	1.91	2.97	1.71	2.0	2.4	1.3

Dimensions and pressures for reference only, subject to change.

F50X

Straight Thread Connector
37° Flare / SAE-ORB

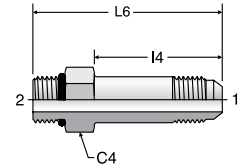
SAE 070120
HPD Base # 0503



FF50X

Long Straight Thread Connector
37° Flare / SAE-ORB

SAE 071720
HPD Base # 053E

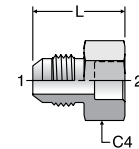


TUBE FITTING PART #	END SIZE		C4 HEX (in.)	L5 (in.)	Dynamic Pressure (x 1,000 PSI)			
	1 (in.)	2 UN/UNF-2A			-S	-SS	-B	D
2 F50X	1/8	5/16 - 24	7/16	1.06	7.5	9.0	3.3	3.8
3 F50X	3/16	3/8 - 24	1/2	1.10	7.5	9.0	3.3	3.8
3-2 F50X	3/16	5/16 - 24	1/2	1.10	7.5	9.0	3.3	3.8
4 F50X	1/4	7/16 - 20	9/16	1.23	7.5	9.0	3.3	3.8
4-2 F50X	1/4	5/16 - 24	9/16	1.17	7.5	9.0	3.3	3.8
4-3 F50X	1/4	3/8 - 24	9/16	1.19	7.5	9.0	3.3	3.8
4-5 F50X	1/4	1/2 - 20	5/8	1.23	6.0	7.2	3.3	3.0
4-6 F50X	1/4	9/16 - 18	11/16	1.29	6.0	7.2	3.3	3.0
4-8 F50X	1/4	3/4 - 16	7/8	1.38	6.0	7.2	3.3	3.0
4-10 F50X	1/4	7/8 - 14	1	1.49	5.0	6.0	3.3	2.5
5 F50X	5/16	1/2 - 20	5/8	1.23	6.0	7.2	3.3	3.0
5-4 F50X	5/16	7/16 - 20	9/16	1.23	6.0	7.2	3.3	3.0
5-6 F50X	5/16	9/16 - 18	11/16	1.30	6.0	7.2	3.3	3.0
5-8 F50X	5/16	3/4 - 16	7/8	1.37	6.0	7.2	3.3	3.0
6 F50X	3/8	9/16 - 18	11/16	1.30	6.0	7.2	3.3	3.0
6-4 F50X	3/8	7/16 - 20	5/8	1.27	6.0	7.2	3.3	3.0
6-5 F50X	3/8	1/2 - 20	5/8	1.27	6.0	7.2	3.3	3.0
6-8 F50X	3/8	3/4 - 16	7/8	1.38	6.0	7.2	3.3	3.0
6-10 F50X	3/8	7/8 - 14	1	1.50	5.0	6.0	3.3	2.5
6-12 F50X	3/8	1 1/16 - 12	1 1/4	1.66	5.0	6.0	3.3	2.5
8 F50X	1/2	3/4 - 16	7/8	1.48	6.0	7.2	3.3	3.0
8-4 F50X	1/2	7/16 - 20	13/16	1.50	6.0	7.2	3.3	3.0
8-6 F50X	1/2	9/16 - 18	13/16	1.44	6.0	7.2	3.3	3.0
8-10 F50X	1/2	7/8 - 14	1.00	1.60	5.0	6.0	3.3	2.5
8-12 F50X	1/2	1 1/16 - 12	1 1/4	1.76	5.0	6.0	3.3	2.5
8-16 F50X	1/2	1 5/16 - 12	1 1/2	1.78	4.5	5.4	2.9	2.3
10 F50X	5/8	7/8 - 14	1	1.70	5.0	6.0	3.3	2.5
10-6 F50X	5/8	9/16 - 18	11/16	1.71	5.0	6.0	3.3	2.5
10-8 F50X	5/8	3/4 - 16	15/16	1.64	5.0	6.0	3.3	2.5
10-12 F50X	5/8	1 1/16 - 12	1 1/4	1.86	5.0	6.0	3.3	2.5
10-16 F50X	5/8	1 5/16 - 12	1 1/2	1.89	4.5	5.4	2.9	2.5
12 F50X	3/4	1 1/16 - 12	1 1/4	1.97	5.0	6.0	3.3	2.5
12-8 F50X	3/4	3/4 - 16	1 1/8	1.94	5.0	6.0	3.3	2.5
12-10 F50X	3/4	7/8 - 14	1 1/8	1.88	5.0	6.0	3.3	2.5
12-14 F50X	3/4	1 3/16 - 12	1 3/8	1.96	5.0	6.0	3.3	2.5
12-16 F50X	3/4	1 5/16 - 12	1 1/2	1.99	4.5	5.4	2.9	2.3
12-20 F50X	3/4	1 5/8 - 12	1 7/8	2.08	4.0	4.8	2.6	•
14 F50X	7/8	1 3/16 - 12	1 3/8	1.99	5.0	6.0	3.3	2.5
14-16 F50X	7/8	1 5/16 - 12	1 1/2	2.02	4.5	5.4	2.9	2.3
16 F50X	1	1 5/16 - 12	1 1/2	2.04	4.5	5.4	2.9	2.3
16-8 F50X	1	3/4 - 16	1 3/8	1.78	4.5	5.4	2.9	2.3
16-10 F50X	1	7/8 - 14	1 3/8	2.08	4.5	5.4	2.9	2.3
16-12 F50X	1	1 1/16 - 12	1 3/8	1.99	4.5	5.4	2.9	2.3
16-14 F50X	1	1 3/16 - 12	1 3/8	2.05	4.5	5.4	2.9	2.3
16-20 F50X	1	1 5/8 - 12	1 7/8	2.12	4.0	4.8	2.6	•
16-24 F50X	1	1 7/8 - 12	2 1/8	2.20	3.0	3.6	2.0	•
20 F50X	1 1/4	1 5/8 - 12	1 7/8	2.17	4.0	4.8	2.6	•
20-12 F50X	1 1/4	1 1/16 - 12	1 11/16	2.30	4.0	4.8	2.6	•
20-16 F50X	1 1/4	1 5/16 - 12	1 11/16	2.33	4.0	4.8	2.6	•
20-24 F50X	1 1/4	1 7/8 - 12	2 1/8	2.24	3.0	3.6	2.0	•
24 F50X	1 1/2	1 7/8 - 12	2 1/8	2.38	3.0	3.6	2.0	•
24-20 F50X	1 1/2	1 5/8 - 12	2	2.53	3.0	3.6	2.0	•
24-32 F50X	1 1/2	2 1/2 - 12	2 3/4	2.53	2.0	2.4	1.3	•
32 F50X	2	2 1/2 - 12	2 3/4	2.78	2.0	2.4	1.3	•
32-24 F50X	2	1 7/8 - 12	2 5/8	2.94	2.0	2.4	1.3	•

TUBE FITTING PART #	END SIZE		C4 HEX (in.)	I4 (in.)	L6 (in.)	Dynamic Pressure (x 1,000 PSI)		
	1 (in.)	2 UN/UNF-2A				-S	-SS	-B
4 FF50X	1/4	7/16 - 20	9/16	1.39	2.08	7.5	9.0	3.3
4-6 FF50X	1/4	9/16 - 18	11/16	1.38	2.13	6.0	7.2	3.3
6 FF50X	3/8	9/16 - 18	11/16	1.56	2.31	6.0	7.2	3.3
8 FF50X	1/2	3/4 - 16	7/8	1.88	2.70	6.0	7.2	3.3
10 FF50X	5/8	7/8 - 14	1	2.09	3.04	5.0	6.0	3.3
12 FF50X	3/4	1 1/16 - 12	1 1/4	2.50	3.61	5.0	6.0	3.3
16 FF50X	1	1 5/16 - 12	1 1/2	2.84	3.98	4.5	5.4	2.9
20 FF50X	1 1/4	1 5/8 - 12	1 7/8	3.47	4.69	4.0	4.8	2.6

XHB3

Braze Socket
37° Flare / Inch Tube Braze



TUBE FITTING PART #	END SIZE		C4 HEX (in.)	L (in.)	Dynamic Pressure (x 1,000 PSI)		
	1 (in.)	2 (in.)			-S	-SS	-B
4 XHB3	1/4	1/4	9/16	0.97	7.5	7.5	3.3
6 XHB3	3/8	3/8	5/8	1.00	6.0	6.0	3.3
6-4 XHB3	3/8	1/4	5/8	1.00	6.0	6.0	3.3
6-8 XHB3	3/8	1/2	5/8	1.00	6.0	6.0	3.3
8 XHB3	1/2	1/2	13/16	1.12	6.0	6.0	3.3
8-10 XHB3	1/2	5/8	13/16	1.12	5.0	5.0	3.3
10 XHB3	5/8	5/8	15/16	1.21	5.0	5.0	3.3
10-8 XHB3	5/8	1/2	15/16	1.21	5.0	5.0	3.3
10-12 XHB3	5/8	3/4	1 1/8	1.37	5.0	5.0	3.3
12 XHB3	3/4	3/4	1 1/4	1.51	5.0	5.0	3.3
12-10 XHB3	3/4	5/8	1 1/8	1.51	5.0	5.0	3.3
12-16 XHB3	3/4	1	1 1/4	1.57	4.0	4.0	2.6
16 XHB3	1	1	1 3/8	1.63	4.0	4.0	2.6
16-20 XHB3	1	1 1/4	1 11/16	1.73	4.0	4.0	2.6
20 XHB3	1 1/4	1 1/4	1 11/16	1.71	4.0	4.0	2.6
20-24 XHB3	1 1/4	1 1/2	2	1.71	3.0	3.0	2.0
24 XHB3	1 1/2	1 1/2	2	1.84	3.0	3.0	2.0
32 XHB3	2	2	2 5/8	2.16	2.0	2.0	1.3

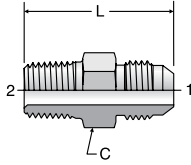
Note: Braze rings are on page B10.

Dimensions and pressures for reference only, subject to change.

FTX

Male Connector
37° Flare / NPTF

SAE 070102
HPD Base # 0103



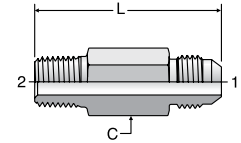
TUBE FITTING PART #	END SIZE		C HEX (in.)	L (in.)	Dynamic Pressure (x 1,000 PSI)			
	1 (in.)	2 NPTF			-S	-SS	-B	D
3 FTX	3/16	1/8 - 27	7/16	1.14	6.0	6.0	3.3	3.0
4 FTX	1/4	1/8 - 27	1/2	1.22	6.0	6.0	3.3	3.0
4-4 FTX	1/4	1/4 - 18	9/16	1.42	6.0	6.0	3.3	3.0
4-6 FTX	1/4	3/8 - 18	3/4	1.44	6.0	6.0	3.3	3.0
4-8 FTX	1/4	1/2 - 14	7/8	1.69	6.0	6.0	3.3	3.0
5 FTX	5/16	1/8 - 27	9/16	1.22	6.0	6.0	3.3	3.0
5-4 FTX	5/16	1/4 - 18	9/16	1.42	6.0	6.0	3.3	3.0
5-6 FTX	5/16	3/8 - 18	3/4	1.44	6.0	6.0	3.3	3.0
6 FTX	3/8	1/4 - 18	5/8	1.43	6.0	6.0	3.3	3.0
6-2 FTX	3/8	1/8 - 27	5/8	1.24	6.0	6.0	3.3	3.0
6-6 FTX	3/8	3/8 - 18	3/4	1.43	6.0	6.0	3.3	3.0
6-8 FTX	3/8	1/2 - 14	7/8	1.69	6.0	6.0	3.3	3.0
6-12 FTX	3/8	3/4 - 14	1 1/8	1.75	5.5	5.5	3.3	3.0
8 FTX	1/2	3/8 - 18	13/16	1.53	6.0	6.0	3.3	3.0
8-2 FTX	1/2	1/8 - 27	13/16	1.34	6.0	6.0	3.3	3.0
8-4 FTX	1/2	1/4 - 18	13/16	1.53	6.0	6.0	3.3	3.0
8-8 FTX	1/2	1/2 - 14	7/8	1.79	6.0	6.0	3.3	3.0
8-12 FTX	1/2	3/4 - 14	1 1/8	1.85	5.5	5.5	2.6	2.5
8-16 FTX	1/2	1 - 11 1/2	1 3/8	2.05	4.5	4.5	2.0	2.3
10 FTX	5/8	1/2 - 14	15/16	1.89	5.0	5.0	3.3	2.5
10-6 FTX	5/8	3/8 - 18	15/16	1.70	5.0	5.0	3.3	2.5
10-12 FTX	5/8	3/4 - 14	1 1/8	1.95	5.0	5.0	2.6	2.5
12 FTX	3/4	3/4 - 14	1 1/8	2.06	5.0	5.0	2.6	2.5
12-6 FTX	3/4	3/8 - 18	1 1/8	1.87	5.0	5.0	3.3	2.5
12-8 FTX	3/4	1/2 - 14	1 1/8	2.06	5.0	5.0	3.3	2.5
12-16 FTX	3/4	1 - 11 1/2	1 3/8	2.25	5.0	5.0	2.0	2.3
12-20 FTX	3/4	1 1/4 - 11 1/2	1 11/16	2.36	3.0	3.0	1.6	•
14 FTX	7/8	3/4 - 14	1 1/4	2.09	5.0	5.0	2.9	2.5
16 FTX	1	1 - 11 1/2	1 3/8	2.30	4.5	4.5	2.0	2.3
16-8 FTX	1	1/2 - 14	1 3/8	2.11	4.5	4.5	2.9	2.3
16-12 FTX	1	3/4 - 14	1 3/8	2.11	4.5	4.5	2.6	2.3
16-20 FTX	1	1 1/4 - 11 1/2	1 11/16	2.40	3.0	3.0	1.6	•
16-24 FTX	1	1 1/2 - 11 1/2	2	2.50	3.0	3.0	1.3	•
20 FTX	1 1/4	1 1/4 - 11 1/2	1 11/16	2.45	3.0	3.0	1.6	•
20-16 FTX	1 1/4	1 - 11 1/2	1 11/16	2.42	3.0	3.0	2.0	•
20-24 FTX	1 1/4	1 1/2 - 11 1/2	2	2.55	3.0	3.0	1.3	•
24 FTX	1 1/2	1 1/2 - 11 1/2	2	2.68	3.0	3.0	1.3	•
24-16 FTX	1 1/2	1 - 11 1/2	2	2.62	3.0	3.0	2.0	•
24-20 FTX	1 1/2	1 1/4 - 11 1/2	2	2.66	3.0	3.0	1.6	•
24-32 FTX	1 1/2	2 - 11 1/2	2 5/8	2.86	2.0	2.0	1.0	•
32 FTX	2	2 - 11 1/2	2 5/8	3.11	2.0	2.0	1.0	•
32-24 FTX	2	1 1/2 - 11 1/2	2 5/8	3.08	2.0	2.0	1.3	•
40 FTX	2 1/2	2 1/2 - 8	3 1/4	3.38	1.0	1.0	0.5	•

• Note: All "FTX" fittings include a 30° chamfer for sealing with NPSM swivel type fittings (steel only)

FFTX

Long Male Connector
37° Flare / NPTF

SAE 071802
HPD Base # 013E

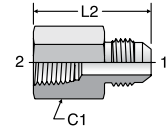


TUBE FITTING PART #	END SIZE		C (in.)	L (in.)	Dynamic Pressure (x 1,000 PSI)		
	1 (in.)	2 NPTF			-S	-SS	-B
4-4 FFTX	1/4	1/4 - 18	9/16	2.25	6.0	6.0	3.3
6 FFTX	3/8	1/4 - 18	5/8	2.25	6.0	6.0	3.3
6-6 FFTX	3/8	3/8 - 18	3/4	2.50	6.0	6.0	3.3
8 FFTX	1/2	3/8 - 18	13/16	2.75	6.0	6.0	3.3
8-8 FFTX	1/2	1/2 - 14	15/16	2.80	6.0	6.0	3.3
10 FFTX	5/8	1/2 - 14	15/16	3.12	5.0	5.0	3.3
12 FFTX	3/4	3/4 - 14	1 1/8	3.50	5.0	5.0	2.6

GTX

Female Connector
37° Flare / NPTF

SAE 070103
HPD Base # 0203



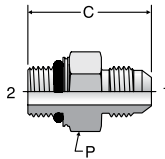
TUBE FITTING PART #	END SIZE		C1 HEX (in.)	L2 (in.)	Dynamic Pressure (x 1,000 PSI)		
	1 (in.)	2 NPTF			-S	-SS	-B
3 GTX	3/16	1/8 - 27	9/16	1.13	6.0	6.0	3.3
4 GTX	1/4	1/8 - 27	9/16	1.19	6.0	6.0	3.3
4-4 GTX	1/4	1/4 - 18	3/4	1.39	6.0	6.0	3.3
4-6 GTX	1/4	3/8 - 18	7/8	1.45	6.0	6.0	3.3
4-8 GTX	1/4	1/2 - 14	1 1/8	1.68	6.0	6.0	3.3
5 GTX	5/16	1/8 - 27	9/16	1.17	6.0	6.0	3.3
5-4 GTX	5/16	1/4 - 18	3/4	1.39	6.0	6.0	3.3
6 GTX	3/8	1/4 - 18	3/4	1.40	6.0	6.0	3.3
6-2 GTX	3/8	1/8 - 27	5/8	1.19	6.0	6.0	3.3
6-6 GTX	3/8	3/8 - 18	7/8	1.46	6.0	6.0	3.3
6-8 GTX	3/8	1/2 - 14	1 1/8	1.69	5.0	5.0	3.3
8 GTX	1/2	3/8 - 18	7/8	1.56	6.0	6.0	3.3
8-4 GTX	1/2	1/4 - 18	13/16	1.55	6.0	6.0	3.3
8-8 GTX	1/2	1/2 - 14	1 1/8	1.79	5.0	5.0	3.3
8-12 GTX	1/2	3/4 - 14	1 3/8	1.85	4.0	4.0	2.6
10 GTX	5/8	1/2 - 14	1 1/8	1.89	5.0	5.0	3.3
10-12 GTX	5/8	3/4 - 14	1 3/8	1.95	4.0	4.0	2.6
12 GTX	3/4	3/4 - 14	1 3/8	2.06	4.0	4.0	2.6
12-8 GTX	3/4	1/2 - 14	1 1/8	2.05	5.0	5.0	2.6
12-16 GTX	3/4	1 - 11 1/2	1 5/8	2.30	3.0	3.0	2.0
14 GTX	7/8	3/4 - 14	1 3/8	2.06	4.0	4.0	2.6
16 GTX	1	1 - 11 1/2	1 5/8	2.35	3.0	3.0	2.0
16-12 GTX	1	3/4 - 14	1 3/8	2.13	4.0	4.0	2.6
16-20 GTX	1	1 1/4 - 11 1/2	2	2.44	2.5	2.5	1.6
20 GTX	1 1/4	1 1/4 - 11 1/2	2	2.49	2.5	2.5	1.6
20-16 GTX	1 1/4	1 - 11 1/2	1 3/4	2.47	3.0	3.0	2.0
24 GTX	1 1/2	1 1/2 - 11 1/2	2 3/8	2.62	2.0	2.0	1.3
32 GTX	2	2 - 11 1/2	2 7/8	2.97	1.5	1.5	1.0

Dimensions and pressures for reference only, subject to change.



F87OMX

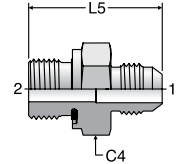
Male Connector – ISO 6149
37° Flare / ISO 6149



TUBE FITTING PART #	END SIZE		Male Metric Parallel Thread	C (mm)	P (mm)	Dynamic Pressure (x 1,000 PSI)		
	1					-S	-SS	-B
	(mm)	(in.)						
4M10F87OMX	6	1/4	M10x1	30.0	14	7.2	5.0	3.3
5M12F87OMX	8	5/16	M12x1.5	33.1	19	6.0	5.0	3.3
6M14F87OMX	10	3/8	M14x1.5	34.1	19	6.0	5.0	3.3
6M16F87OMX	10	3/8	M16x1.5	35.5	22	6.0	5.0	3.3
8M16F87OMX	12	1/2	M16x1.5	38.0	22	6.0	5.0	3.3
8M18F87OMX	12	1/2	M18x1.5	39.1	24	5.0	5.0	3.3
10M18F87OMX	14, 15, 16	5/8	M18x1.5	43.1	24	5.0	5.0	3.3
10M22F87OMX	14, 15, 16	5/8	M22x1.5	43.5	27	5.0	5.0	3.3
12M22F87OMX	18, 20	3/4	M22x1.5	48.0	27	5.0	5.0	3.3
12M27F87OMX	18, 20	3/4	M27x2	50.9	32	5.0	5.0	3.3
16M27F87OMX	25	1	M27x2	50.5	36	5.0	5.0	3.3
16M33F87OMX	25	1	M33x2	52.7	41	4.0	4.0	2.6
20M42F87OMX	30, 32	1 1/4	M42x2	55.0	50	4.0	3.0	2.0
24M48F87OMX	38	1 1/2	M48x2	59.4	55	3.0	2.0	1.3

F82EDMX

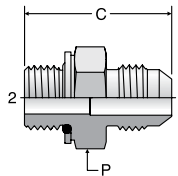
Male Connector – Metric
37° Flare / Metric-ED



TUBE FITTING PART #	END SIZE		Male Metric Parallel Thread	C4 (mm)	L5 (mm)	Dynamic Pressure (x 1,000 PSI)		
	1					-S	-SS	-B
	(mm)	(in.)						
4M10F82EDMX	6	1/4	M10x1	14	30.0	7.2	5.0	3.3
5M12F82EDMX	8	5/16	M12x1.5	17	34.0	6.0	5.0	3.3
6M14F82EDMX	10	3/8	M14x1.5	19	35.0	6.0	5.0	3.3
6M16F82EDMX	10	3/8	M16x1.5	22	36.0	6.0	5.0	3.3
8M16F82EDMX	12	1/2	M16x1.5	22	38.5	6.0	5.0	3.3
8M18F82EDMX	12	1/2	M18x1.5	24	38.5	5.0	5.0	3.3
10M18F82EDMX	14, 15, 16	5/8	M18x1.5	24	42.5	5.0	5.0	3.3
10M22F82EDMX	14, 15, 16	5/8	M22x1.5	27	44.5	5.0	5.0	3.3
12M22F82EDMX	18, 20	3/4	M22x1.5	27	49.0	5.0	5.0	3.3
12M27F82EDMX	18, 20	3/4	M27x2	32	51.0	5.0	5.0	3.3
16M33F82EDMX	25	1	M33x2	41	54.5	4.0	4.0	2.6
20M42F82EDMX	30, 32	1 1/4	M42x2	50	60.0	4.0	3.0	2.0

F80MX

Male Connector – Metric
37° Flare / Metric-ORR

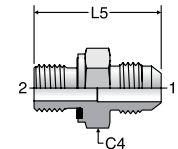


TUBE FITTING PART #	END SIZE		Male Metric Parallel Thread	C (mm)	P (mm)	Dynamic Pressure (x 1,000 PSI)		
	1					-S	-SS	-B
	(mm)	(in.)						
4M10F80MX	6	1/4	M10x1	30.0	14	5.0	5.0	3.3
5M12F80MX	8	5/16	M12x1.5	33.1	19	6.0	6.0	3.3
6M14F80MX	10	3/8	M14x1.5	34.1	19	5.0	5.0	3.3
8M16F80MX	12	1/2	M16x1.5	38.0	22	5.0	5.0	3.3
8M18F80MX	12	1/2	M18x1.5	39.1	24	3.6	3.6	2.3
10M18F80MX	14, 15, 16	5/8	M18x1.5	43.1	24	3.6	3.6	2.3
10M22F80MX	14, 15, 16	5/8	M22x1.5	43.5	27	3.6	3.6	2.3
12M22F80MX	18, 20	3/4	M22x1.5	48.0	27	3.6	3.6	2.3
12M24F80MX	18, 20	3/4	M24x1.5	44.5	30	3.0	3.0	2.0
12M27F80MX	18, 20	3/4	M27x2	50.9	32	3.0	3.0	2.0
16M27F80MX	25	1	M27x2	50.5	36	3.0	3.0	2.0
16M33F80MX	25	1	M33x2	52.7	41	3.0	3.0	2.0
20M42F80MX	30, 32	1 1/4	M42x2	54.9	50	3.0	3.0	2.0
24M48F80MX	38	1 1/2	M48x2	59.4	55	2.0	2.0	1.3

Note: If F80MX is not available, use F82EDMX.

F42EDMX

Male Connector – BSPP
37° Flare / BSPP-ED

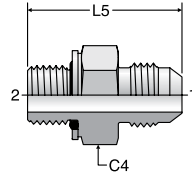


TUBE FITTING PART #	END SIZE			C4 (mm)	L5 (mm)	Dynamic Pressure (x 1,000 PSI)		
	1		2 BSPP			S	SS	B
	(mm)	(in.)						
4F42EDMX	6	1/4	1/8 - 28	14	30.2	7.2	5.0	3.3
4-4F42EDMX	6	1/4	1/4 - 19	19	35.0	6.0	5.0	3.3
4-6F42EDMX	6	1/4	3/8 - 19	22	36.0	6.0	5.0	3.3
4-8F42EDMX	6	1/4	1/2 - 14	27	39.5	5.0	5.0	3.3
5F42EDMX	8	5/16	1/8 - 28	14	30.0	6.0	5.0	3.3
5-4F42EDMX	8	5/16	1/4 - 19	19	35.0	6.0	5.0	3.3
5-6F42EDMX	8	5/16	3/8 - 19	22	36.0	6.0	5.0	3.3
6-2F42EDMX	10	3/8	1/8 - 28	17	31.2	6.0	5.0	3.3
6F42EDMX	10	3/8	1/4 - 19	19	35.0	6.0	5.0	3.3
6-6F42EDMX	10	3/8	3/8 - 19	22	36.0	6.0	5.0	3.3
6-8F42EDMX	10	3/8	1/2 - 14	27	39.5	5.0	5.0	3.3
8F42EDMX	12	1/2	3/8 - 19	22	38.6	6.0	5.0	3.3
8-4F42EDMX	12	1/2	1/4 - 19	19	39.0	6.0	5.0	3.3
8-8F42EDMX	12	1/2	1/2 - 14	27	42.0	5.0	5.0	3.3
8-12F42EDMX	12	1/2	3/4 - 14	32	45.7	5.0	5.0	3.3
10F42EDMX	14, 15, 16	5/8	1/2 - 14	27	45.0	5.0	5.0	3.3
10-6F42EDMX	14, 15, 16	5/8	3/8 - 19	24	43.0	5.0	5.0	3.3
10-12F42EDMX	14, 15, 16	5/8	3/4 - 14	32	48.2	5.0	5.0	3.3
12F42EDMX	18, 20	3/4	3/4 - 14	32	51.0	5.0	5.0	3.3
12-6F42EDMX	18, 20	3/4	3/8 - 19	27	50.0	5.0	5.0	3.3
12-8F42EDMX	18, 20	3/4	1/2 - 14	27	49.0	5.0	5.0	3.3
12-16F42EDMX	18, 20	3/4	1 - 11	41	53.5	4.0	4.0	2.6
16F42EDMX	25	1	1 - 11	41	55.0	4.0	4.0	2.6
16-12F42EDMX	25	1	3/4 - 14	36	53.0	4.0	4.0	2.6
16-20F42EDMX	25	1	1 1/4 - 11	50	59.0	4.0	4.0	2.6
20-16F42EDMX	30, 32	1 1/4	1 - 11	46	62.0	4.0	3.0	2.0
20F42EDMX	30, 32	1 1/4	1 1/4 - 11	50	60.0	4.0	3.0	2.0
20-24F42EDMX	30, 32	1 1/4	1 1/2 - 11	55	64.0	3.0	2.0	1.3
24F42EDMX	38	1 1/2	1 1/2 - 11	55	67.0	3.0	2.0	1.3
24-20F42EDMX	38	1 1/2	1 1/4 - 11	50	62.0	3.0	3.0	2.0

Dimensions and pressures for reference only, subject to change.

F4OMX

Male Connector – BSPP
37° Flare / BSPP-ORR

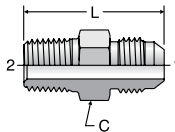


TUBE FITTING PART #	END SIZE			C4 (mm)	L5 (mm)	Dynamic Pressure (x 1,000 PSI)		
	1		2 BSPP			-S	-SS	-B
	(mm)	(in.)						
4F4OMX	6	1/4	1/8 - 28	17	28.3	5.0	5.0	3.3
4-4F4OMX	6	1/4	1/4 - 19	19	32.2	5.0	5.0	3.3
4-6F4OMX	6	1/4	3/8 - 19	22	33.1	5.0	5.0	3.3
4-8F4OMX	6	1/4	1/2 - 14	30	38.6	5.0	5.0	3.3
5-4F4OMX	8	5/16	1/4 - 19	19	32.2	5.0	5.0	3.3
5-6F4OMX	8	5/16	3/8 - 19	22	33.1	5.0	5.0	3.3
6F4OMX	10	3/8	1/4 - 19	19	32.5	5.0	5.0	3.3
6-6F4OMX	10	3/8	3/8 - 19	22	33.4	5.0	5.0	3.3
6-8F4OMX	10	3/8	1/2 - 14	30	38.0	5.0	5.0	3.3
8-4F4OMX	12	1/2	1/4 - 19	19	35.0	5.0	5.0	3.3
8F4OMX	12	1/2	3/8 - 19	22	35.9	5.0	5.0	3.3
8-8F4OMX	12	1/2	1/2 - 14	30	41.4	5.0	5.0	3.3
8-12F4OMX	12	1/2	3/4 - 14	36	42.2	4.0	4.0	2.6
10-6F4OMX	14, 15, 16	5/8	3/8 - 19	24	39.1	5.0	5.0	3.3
10F4OMX	14, 15, 16	5/8	1/2 - 14	30	43.1	5.0	5.0	3.3
12-8F4OMX	18, 20	3/4	1/2 - 14	30	46.7	5.0	5.0	3.3
12F4OMX	18, 20	3/4	3/4 - 14	36	47.5	4.0	3.6	2.3
12-16F4OMX	18, 20	3/4	1 - 11	46	52.6	4.0	3.6	2.3
16-12F4OMX	25	1	3/4 - 14	36	48.5	4.0	3.6	2.3
16F4OMX	25	1	1 - 11	46	53.6	4.0	3.6	2.3
16-20F4OMX	25	1	1 1/4 - 11	50	54.7	3.6	2.5	1.6
20F4OMX	30, 32	1 1/4	1 1/4 - 11	50	56.0	3.6	2.5	1.6
24-20F4OMX	38	1 1/2	1 1/4 - 11	50	60.4	3.0	2.0	1.3
24F4OMX	38	1 1/2	1 1/2 - 11	55	61.1	3.0	2.0	1.3

Note: If F4OMX is not available, use F42EDMX.

F3MX

Male Connector – BSPT
37° Flare / BSPT

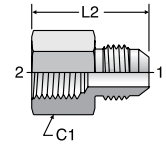


TUBE FITTING PART #	END SIZE			C HEX (mm)	L (mm)	Dynamic Pressure (x 1,000 PSI)		
	1		2 BSPT			-S	-SS	-B
	(mm)	(in.)						
4F3MX	6	1/4	1/8 - 28	13	30.7	4.5	4.5	2.9
4-4F3MX	6	1/4	1/4 - 19	14	35.3	4.5	4.5	2.9
5F3MX	8	5/16	1/8 - 28	14	30.7	4.5	4.5	2.9
5-4F3MX	8	5/16	1/4 - 19	14	35.3	4.5	4.5	2.9
6F3MX	10	3/8	1/4 - 19	17	35.6	4.5	4.5	2.9
6-6F3MX	10	3/8	3/8 - 19	19	36.4	4.5	4.5	2.9
6-8F3MX	10	3/8	1/2 - 14	22	42.9	4.5	4.5	2.9
8-4F3MX	12	1/2	1/4 - 19	19	38.1	4.5	4.5	2.9
8F3MX	12	1/2	3/8 - 19	19	38.9	4.5	4.5	2.9
8-8F3MX	12	1/2	1/2 - 14	22	45.5	4.5	4.5	2.9
10-6F3MX	14, 15, 16	5/8	3/8 - 19	24	43.2	4.5	4.5	2.9
10F3MX	14, 15, 16	5/8	1/2 - 14	24	48.0	4.5	4.5	2.9
10-12F3MX	14, 15, 16	5/8	3/4 - 14	27	48.3	2.3	2.3	1.5
12-8F3MX	18, 20	3/4	1/2 - 14	27	50.8	4.5	4.5	2.9
12F3MX	18, 20	3/4	3/4 - 14	27	50.8	2.3	2.3	1.5
12-16F3MX	18, 20	3/4	1 - 11	36	57.1	2.3	2.3	1.5
16-12F3MX	25	1	3/4 - 14	36	53.6	2.3	2.3	1.5
16F3MX	25	1	1 - 11	36	58.5	2.3	2.3	1.5
20-16F3MX	30, 32	1 1/4	1 - 11	46	61.4	2.3	2.3	1.5
20F3MX	30, 32	1 1/4	1 1/4 - 11	46	62.2	2.3	2.3	1.5
24F3MX	38	1 1/4	1 1/2 - 11	50	68.1	2.3	2.0	1.3

Dimensions and pressures for reference only, subject to change.

G4MX

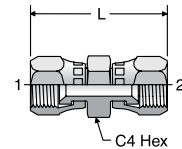
Female Connector – BSPP
37° Flare / BSPP



TUBE FITTING PART #	END SIZE			C1 (mm)	L2 (mm)	Dynamic Pressure (x 1,000 PSI)		
	1		2 BSPP			-S	-SS	-B
	(mm)	(in.)						
4G4MX	6	1/4	1/8 - 28	17	30.2	4.5	4.5	2.9
4-4G4MX	6	1/4	1/4 - 19	19	35.3	5.8	5.8	3.3
5G4MX	8	5/16	1/8 - 28	17	29.7	4.5	4.5	2.9
6G4MX	10	3/8	1/4 - 19	19	35.6	5.8	5.8	3.3
6-6G4MX	10	3/8	3/8 - 19	22	37.1	5.0	5.0	3.3
8G4MX	12	1/2	3/8 - 19	22	39.6	5.0	5.0	3.3
8-8G4MX	12	1/2	1/2 - 14	30	45.5	5.0	5.0	3.3
10G4MX	14, 15, 16	5/8	1/2 - 14	30	48.0	5.0	5.0	3.3
12G4MX	18, 20	3/4	3/4 - 14	36	52.3	4.5	4.5	2.9
16G4MX	25	1	1 - 11	46	59.7	4.0	4.0	2.6

HX6

Swivel Nut Union
37° Swivel / 37° Swivel



HPD Base # 0606

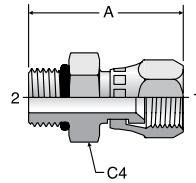
TUBE FITTING PART #	END SIZE		C4 HEX (in.)	L (in.)	Dynamic Pressure (x 1,000 PSI)		
	1 & 2 (in.)				-S	-SS	-B
4 HX6	1/4		9/16	1.48	7.5	7.7	3.3
6 HX6	3/8		11/16	1.75	6.0	6.0	3.3
8 HX6	1/2		7/8	2.02	6.0	6.0	3.3
10 HX6	5/8		1	2.24	5.0	5.0	3.3
12 HX6	3/4		1 1/4	2.31	5.0	5.0	3.3
16 HX6	1		1 1/2	2.75	4.0	3.0	2.6



F650X

Swivel Straight Thread Connector
37° Swivel / SAE-ORB

HPD Base # 0506

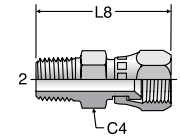


TUBE FITTING PART #	END SIZE		A (in.)	C4 HEX (in.)	Dynamic Pressure (x 1,000 PSI)		
	1 (in.)	2 UN/UNF-2A			-S	-SS	-B
4 F650X	1/4	7/16 - 20	1.31	9/16	7.5	7.5	3.3
4-6 F650X	1/4	9/16 - 18	1.33	11/16	6.0	7.2	3.3
5 F650X	5/16	1/2 - 20	1.39	5/8	6.0	7.2	3.3
6 F650X	3/8	9/16 - 18	1.43	11/16	6.0	7.2	3.3
6-4 F650X	3/8	7/16 - 20	1.37	9/16	6.0	7.2	3.3
6-8 F650X	3/8	3/4 - 16	1.50	7/8	6.0	7.2	3.3
8 F650X	1/2	3/4 - 16	1.61	7/8	6.0	7.2	3.3
8-6 F650X	1/2	9/16 - 18	1.54	13/16	6.0	7.2	3.3
8-10 F650X	1/2	7/8 - 14	1.78	1	5.0	6.0	3.3
10 F650X	5/8	7/8 - 14	1.81	1	5.0	6.0	3.3
10-8 F650X	5/8	3/4 - 16	1.75	1	5.0	6.0	3.3
10-12 F650X	5/8	1 1/16 - 12	1.85	1 1/4	5.0	6.0	3.3
12 F650X	3/4	1 1/16 - 12	2.07	1 1/4	5.0	6.0	3.3
12-10 F650X	3/4	7/8 - 14	2.10	1 1/4	5.0	6.0	3.3
12-16 F650X	3/4	1 5/16 - 12	2.04	1 1/2	4.5	4.5	2.9
16 F650X	1	1 5/16 - 12	2.14	1 1/2	4.0	3.0	2.6
16-12 F650X	1	1 1/16 - 12	2.14	1 1/2	4.0	3.0	2.6
20 F650X	1 1/4	1 5/8 - 12	2.55	2	4.0	3.0	2.6

F6X

Swivel Connector
37° Swivel / NPTF

HPD Base # 0106

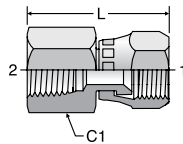


TUBE FITTING PART #	END SIZE		C4 (in.)	L8 (in.)	Dynamic Pressure (x 1,000 PSI)		
	1 (in.)	2 NPTF			-S	-SS	-B
4 F6X	1/4	1/8 - 27	9/16	1.21	6.0	6.0	3.3
4-4 F6X	1/4	1/4 - 18	9/16	1.54	6.0	6.0	3.3
5-4 F6X	5/16	1/4 - 18	5/8	1.60	6.0	6.0	3.3
6 F6X	3/8	1/4 - 18	11/16	1.66	5.0	5.0	3.3
6-6 F6X	3/8	3/8 - 18	3/4	1.69	5.0	5.0	3.3
8 F6X	1/2	3/8 - 18	7/8	1.74	5.0	5.0	3.3
8-8 F6X	1/2	1/2 - 14	7/8	1.97	5.0	5.0	3.3
10 F6X	5/8	1/2 - 14	1	2.05	5.0	5.0	3.3
10-6 F6X	5/8	3/8 - 18	1	1.84	5.0	5.0	3.3
12 F6X	3/4	3/4 - 14	1 1/4	2.15	5.0	5.0	3.3
12-8 F6X	3/4	1/2 - 14	1 1/4	2.15	5.0	5.0	3.3
16 F6X	1	1 - 11 1/2	1 1/2	2.50	3.6	3.6	2.3
16-12 F6X	1	3/4 - 14	1 1/2	2.33	3.6	3.6	2.3
20 F6X	1 1/4	1 1/4 - 11 1/2	2	2.76	3.0	3.0	2.0
24 F6X	1 1/2	1 1/2 - 11 1/2	2 1/4	3.05	2.5	2.5	1.6
32 F6X	2	2 - 11 1/2	2 5/8	3.53	2.0	2.0	1.3

G6X

Swivel Nut Female Connector
37° Swivel / NPTF

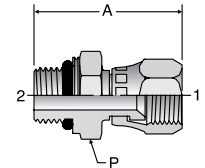
HPD Base # 0206



TUBE FITTING PART #	END SIZE		C1 (in.)	L (in.)	Dynamic Pressure (x 1,000 PSI)		
	1 (in.)	2 NPTF			-S	-SS	-B
4 G6X	1/4	1/8 - 27	9/16	1.27	6.0	6.0	3.3
4-4 G6X	1/4	1/4 - 18	3/4	1.43	6.0	6.0	3.3
6 G6X	3/8	1/4 - 18	3/4	1.44	5.0	5.0	3.3
6-6 G6X	3/8	3/8 - 18	7/8	1.54	5.0	5.0	3.3
6-8 G6X	3/8	1/2 - 14	1 1/8	1.80	5.0	5.0	3.3
8 G6X	1/2	3/8 - 18	7/8	1.69	5.0	5.0	3.3
8-8 G6X	1/2	1/2 - 14	1 1/8	1.94	5.0	5.0	3.3
10 G6X	5/8	1/2 - 14	1 1/8	1.98	5.0	5.0	3.3
12 G6X	3/4	3/4 - 14	1 3/8	2.01	4.0	4.0	2.6
12-8 G6X	3/4	1/2 - 14	1 1/4	2.00	5.0	5.0	3.3
16 G6X	1	1 - 11 1/2	1 5/8	2.48	3.0	3.0	2.0
20 G6X	1 1/4	1 1/4 - 11 1/2	2	2.86	2.5	2.5	1.6
24 G6X	1 1/2	1 1/2 - 11 1/2	2 3/8	3.01	2.0	2.0	1.3
32 G6X	2	2 - 11 1/2	2 7/8	3.40	1.5	1.5	1.0

F6870MX

Swivel - ISO 6149 Connector
37° Swivel / ISO 6149



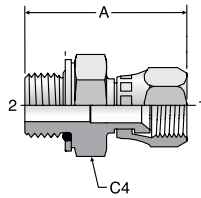
TUBE FITTING PART #	END SIZE		A (mm)	P (mm)	Dynamic Pressure (x 1,000 PSI)		
	1 (mm)	2 (in.) Male Metric Parallel Thread			-S	-SS	-B
4M10F6870MX	6	1/4 M10x1	31.9	14	7.2	5.0	3.3
5M12F6870MX	8	5/16 M12x1.5	35.6	17	6.0	5.0	3.3
6M14F6870MX	10	3/8 M14x1.5	37.2	19	5.0	5.0	3.3
8M16F6870MX	12	1/2 M16x1.5	41.8	22	5.0	5.0	3.3
10M22F6870MX	14, 15, 16	5/8 M22x1.5	47.6	27	5.0	5.0	3.3
12M27F6870MX	18, 20	3/4 M27x2	51.7	32	5.0	5.0	3.3
16M33F6870MX	25	1 M33x2	56.9	41	3.6	3.6	2.3

Dimensions and pressures for reference only, subject to change.



F68OMX

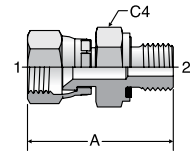
Swivel Metric ORR Connector
Metric-ORR / 37° Swivel



TUBE FITTING PART #	END SIZE			A (mm)	C4 (mm)	Dynamic Pressure (x 1,000 PSI)		
	1		Male Metric Parallel Thread			-S	-SS	-B
	(mm)	(in.)						
4M10F68OMX	6	1/4	M10x1	30.2	14	5.0	5.0	3.3
5M12F68OMX	8	5/16	M12x1.5	35.6	17	6.0	6.0	3.3
6M14F68OMX	10	3/8	M14x1.5	37.2	19	5.0	5.0	3.3
8M16F68OMX	12	1/2	M16x1.5	42.4	22	3.6	3.6	2.3
10M22F68OMX	14, 15, 16	5/8	M22x1.5	47.9	27	3.6	3.6	2.3
12M27F68OMX	18, 20	3/4	M27x2	52.3	32	3.0	3.0	2.0
16M33F68OMX	25	1	M33x2	57.4	41	3.0	3.0	2.0

F682EDMX

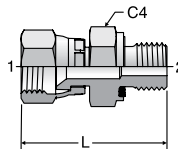
Metric-ED / 37° Swivel



TUBE FITTING PART #	END SIZE			A (mm)	C4 (mm)	Dynamic Pressure (x 1,000 PSI)		
	1		Male Metric Parallel Thread			-S	-SS	-B
	(mm)	(in.)						
4M10F682EDMX	6	1/4	M10x1	29.7	14	7.2	5.0	3.3
5M12F682EDMX	8	5/16	M12x1.5	36.6	17	6.0	5.0	3.3
6M14F682EDMX	10	3/8	M14x1.5	38.2	19	5.0	5.0	3.3
8M16F682EDMX	12	1/2	M16x1.5	42.3	22	5.0	5.0	3.3
10M22F682EDMX	14, 15, 16	5/8	M22x1.5	48.6	27	5.0	5.0	3.3
12M27F682EDMX	18, 20	3/4	M27x2	51.7	32	5.0	5.0	3.3
16M33F682EDMX	25	1	M33x2	59.0	41	3.6	3.6	2.3

F642EDMX

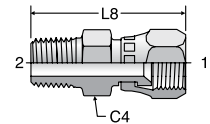
Swivel – BSPP Connector
37° Swivel / BSPP-ED



TUBE FITTING PART #	END SIZE			C4 (mm)	L (mm)	Dynamic Pressure (x 1,000 PSI)		
	1		2 BSPP			-S	-SS	-B
	(mm)	(in.)						
4F642EDMX	6	1/4	1/8 - 28	14	29.7	7.2	5.0	3.3
4-4F642EDMX	6	1/4	1/4 - 19	19	35.2	6.0	5.0	3.3
5F642EDMX	8	5/16	1/8 - 28	14	32.8	6.0	5.0	3.3
5-4F642EDMX	8	5/16	1/4 - 19	19	37.2	6.0	6.0	3.3
6F642EDMX	10	3/8	1/4 - 19	19	38.7	5.0	5.0	3.3
6-6F642EDMX	10	3/8	3/8 - 19	22	39.2	5.0	5.0	3.3
8F642EDMX	12	1/2	3/8 - 19	22	42.3	5.0	5.0	3.3
8-4F642EDMX	12	1/2	1/4 - 19	19	42.3	5.0	5.0	3.3
10F642EDMX	14, 15, 16	5/8	1/2 - 14	27	48.6	5.0	5.0	3.3
10-6F642EDMX	14, 15, 16	5/8	3/8 - 19	22	46.6	5.0	5.0	3.3
12F642EDMX	18, 20	3/4	3/4 - 14	32	51.7	5.0	5.0	3.3
12-8F642EDMX	18, 20	3/4	1/2 - 14	27	49.7	5.0	5.0	3.3
16F642EDMX	25	1	1 - 11	41	59.0	3.6	3.6	2.3
16-12F642EDMX	25	1	3/4 - 14	32	57.0	3.6	3.6	2.3
20F642EDMX	28, 30, 32	1 1/4	1 1/4 - 11	50	63.4	3.6	3.0	2.0
20-16F642EDMX	28, 30, 32	1 1/4	1 - 11	41	65.9	3.6	3.0	2.0
24F642EDMX	35, 38	1 1/2	1 1/2 - 11	55	74.1	2.5	2.0	1.3
24-20F642EDMX	35, 38	1 1/2	1 1/4 - 11	50	69.1	2.5	2.0	1.3

F63MX

Swivel – BSPT Connector
37° Swivel / BSPT



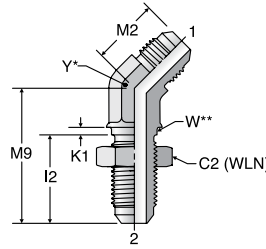
TUBE FITTING PART #	END SIZE			C4 (mm)	L8 (mm)	Dynamic Pressure (x 1,000 PSI)		
	1		2 BSPT			-S	-SS	-B
	(mm)	(in.)						
4F63MX	6	1/4	1/8 - 20	13	31.0	4.5	4.5	2.9
4-4F63MX	6	1/4	1/4 - 19	14	35.7	4.5	4.5	2.9
5-4F63MX	8	5/16	1/4 - 19	14	38.4	4.5	4.5	2.9
6F63MX	10	3/8	1/4 - 19	14	39.7	4.5	4.5	2.9
6-6F63MX	10	3/8	3/8 - 19	19	39.7	4.5	4.5	2.9
8-4F63MX	12	1/2	1/4 - 19	19	42.8	4.5	4.5	2.9
8F63MX	12	1/2	3/8 - 19	19	42.8	4.5	4.5	2.9
10F63MX	14, 15, 16	5/8	1/2 - 14	22	51.2	4.5	4.5	2.9
12-8F63MX	20	3/4	1/2 - 14	27	53.2	4.5	4.5	2.9
12F63MX	18, 20	3/4	3/4 - 14	27	53.2	2.3	2.3	1.5
16-12F63MX	25	1	3/4 - 14	32	55.7	2.3	2.3	1.5
16F63MX	25	1	1 - 11	36	62.5	2.3	2.3	1.5
20F63MX	30, 32	1 1/4	1 1/4 - 11	46	70.6	2.3	2.3	1.5

Dimensions and pressures for reference only, subject to change.

WNTX

45° Bulkhead Union Elbow
37° Flare / 37° Flare

SAE 070801
HPD Base # 3353
WNTX-WLN – Body with locknut
(See page B10 for WLN)



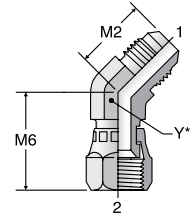
Y* – Across wrench flats.
W** – Bulkhead pilot dia.
recommended clearance hole
+.015 over W dia.

TUBE FITTING PART #	END SIZE		C2 HEX (in.)	I2 (in.)	K1 (in.)	M2 (in.)	M9 (in.)	W DIA (in.)	MAX BULKHEAD WALL THICKNESS (in.)	Y (in.)	Dynamic Pressure (x 1,000 PSI)		
	1 & 2 (in.)										-S	-SS	-B
4 WNTX	1/4	11/16	1.02	0.09	0.72	1.53	0.44	0.25	7/16	7.5	7.7	3.3	
5 WNTX	5/16	3/4	1.02	0.09	0.77	1.66	0.56	0.25	9/16	6.0	6.0	3.3	
6 WNTX	3/8	13/16	1.09	0.09	0.83	1.67	0.56	0.35	9/16	6.0	6.0	3.3	
8 WNTX	1/2	1	1.25	0.13	0.98	1.94	0.75	0.35	3/4	6.0	6.0	3.3	
10 WNTX	5/8	1 1/8	1.39	0.13	1.11	2.17	0.82	0.35	7/8	5.0	5.0	3.3	
12 WNTX	3/4	1 3/8	1.56	0.13	1.28	2.44	1.06	0.35	1 1/16	5.0	5.0	2.9	
16 WNTX	1	1 5/8	1.56	0.13	1.47	2.56	1.31	0.35	1 5/16	4.0	3.5	2.3	
20 WNTX	1 1/4	1 7/8	1.61	0.13	1.59	2.66	1.63	0.35	1 5/8	4.0	3.0	2.0	

V6X

45° Swivel Nut Elbow
37° Flare / 37° Swivel

SAE 070321
HPD Base # 3703



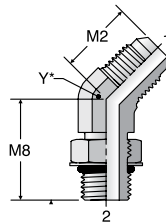
Y* – Across wrench flats

TUBE FITTING PART #	END SIZE		M2 (in.)	M6 (in.)	Y (in.)	Dynamic Pressure (x 1,000 PSI)		
	1 & 2 (in.)					-S	-SS	-B
4 V6X	1/4		0.72	0.94	7/16	7.5	7.7	3.3
5 V6X	5/16		0.77	1.00	9/16	6.0	6.0	3.3
6 V6X	3/8		0.83	1.12	9/16	6.0	6.0	3.3
8 V6X	1/2		0.98	1.28	3/4	6.0	6.0	3.3
10 V6X	5/8		1.11	1.44	7/8	5.0	5.0	3.3
12 V6X	3/4		1.28	1.50	1 1/16	5.0	5.0	3.3
14 V6X	7/8		1.45	1.62	1 3/16	5.0	5.0	3.3
16 V6X	1		1.47	1.75	1 5/16	4.0	3.0	2.6
20 V6X	1 1/4		1.59	2.03	1 5/8	4.0	3.0	2.6
24 V6X	1 1/2		1.78	2.18	1 7/8	3.0	2.5	2.0
32 V6X	2		2.22	2.76	2 1/2	2.0	1.5	1.3

V50X

45° Straight Thread Elbow
37° Flare / SAE-ORB

SAE 070320
HPD Base # 3503

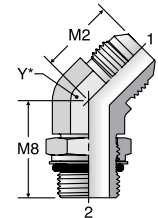


Y* – Across wrench flats

TUBE FITTING PART #	END SIZE		M2 (in.)	M8 (in.)	Y (in.)	Dynamic Pressure (x 1,000 PSI)			
	1 (in.)	2 UN/UNF-2A				-S	-SS	-B	D
4 V50X	1/4	7/16 - 20	0.72	1.05	7/16	6.0	6.0	3.3	3.0
4-6 V50X	1/4	9/16 - 18	0.82	1.14	9/16	6.0	5.4	3.3	3.0
5 V50X	5/16	1/2 - 20	0.77	1.05	9/16	6.0	5.4	3.3	3.0
6 V50X	3/8	9/16 - 18	0.83	1.14	9/16	6.0	5.4	3.3	3.0
6-4 V50X	3/8	7/16 - 20	0.83	1.08	9/16	6.0	5.4	3.3	3.0
6-8 V50X	3/8	3/4 - 16	0.86	1.30	3/4	6.0	5.4	3.3	3.0
8 V50X	1/2	3/4 - 16	0.98	1.30	3/4	6.0	5.4	3.3	3.0
8-6 V50X	1/2	9/16 - 18	0.98	1.09	3/4	6.0	5.4	3.3	3.0
8-10 V50X	1/2	7/8 - 14	1.00	1.52	7/8	5.0	5.4	3.3	2.5
8-12 V50X	1/2	1 1/16 - 12	1.04	1.73	1 1/16	5.0	5.4	3.3	2.5
10 V50X	5/8	7/8 - 14	1.11	1.52	7/8	5.0	5.4	3.3	2.5
10-8 V50X	5/8	3/4 - 16	1.11	1.38	7/8	5.0	5.4	3.3	2.5
10-12 V50X	5/8	1 1/16 - 12	1.16	1.73	1 1/16	5.0	5.4	3.3	2.5
12 V50X	3/4	1 1/16 - 12	1.28	1.73	1 1/16	5.0	5.4	3.3	2.5
12-10 V50X	3/4	7/8 - 14	1.28	1.58	1 1/16	5.0	5.4	3.3	2.5
12-16 V50X	3/4	1 5/16 - 12	1.42	1.86	1 5/16	4.0	3.0	2.6	2.0
14 V50X	7/8	1 3/16 - 12	1.45	1.86	1 5/16	5.0	5.4	3.3	2.5
16 V50X	1	1 5/16 - 12	1.47	1.86	1 5/16	4.0	3.0	2.6	2.0
16-12 V50X	1	1 1/16 - 12	1.47	1.86	1 5/16	4.0	3.0	2.6	2.0
16-20 V50X	1	1 5/8 - 12	1.55	1.91	1 5/8	4.0	2.5	2.0	•
20 V50X	1 1/4	1 5/8 - 12	1.59	1.91	1 5/8	4.0	2.5	2.0	•
20-16 V50X	1 1/4	1 5/16 - 12	1.59	1.91	1 5/8	4.0	2.5	2.0	•
24 V50X	1 1/2	1 7/8 - 12	1.78	1.91	1 7/8	3.0	2.0	1.5	•
32 V50X	2	2 1/2 - 12	2.22	1.86	2 1/2	2.0	1.5	1.3	•

V870MX

Male 45° Elbow – ISO 6149
37° Flare / ISO 6149



Y* – Across wrench flats

TUBE FITTING PART #	END SIZE		Male Metric Parallel Thread	M2 (mm)	M8 (mm)	Y (mm)	Dynamic Pressure (x 1,000 PSI)		
	1 (mm)	2 (in.)					-S	-SS	-B
4M12V870MX	6	1/4	M12X1.5	19.6	27.0	13	6.0	6.0	3.3
6M14V870MX	10	3/8	M14X1.5	21.1	28.0	14	6.0	6.0	3.3
8M16V870MX	12	1/2	M16 X 1.5	24.9	33.0	19	5.0	5.0	3.3
10M22V870MX	14, 15, 16	5/8	M22 X 1.5	28.2	37.5	22	5.0	5.0	3.3
12M27V870MX	18, 20	3/4	M27 X 2.0	32.5	46.0	27	5.0	5.0	3.3
16M33V870MX	25	1	M33 X 2.0	37.3	45.5	33	4.0	4.0	2.6

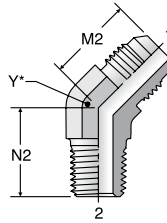
Dimensions and pressures for reference only, subject to change.



VTX

45° Male Elbow
37° Flare / NPTF

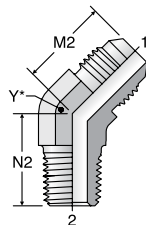
SAE 070302
HPD Base # 3103



Y* – Across wrench flats

TUBE FITTING PART #	END SIZE		M2 (in.)	N2 (in.)	Y (in.)	Dynamic Pressure (x 1,000 PSI)		
	1 (in.)	2 NPTF				-S	-SS	-B
	2 VTX	1/8						
3 VTX	3/16	1/8 - 27	0.69	0.52	7/16	6.0	6.0	3.3
4 VTX	1/4	1/8 - 27	0.72	0.64	7/16	6.0	6.0	3.3
4-4 VTX	1/4	1/4 - 18	0.82	0.86	9/16	6.0	6.0	3.3
4-6 VTX	1/4	3/8 - 18	0.85	0.95	3/4	6.0	6.0	3.3
5 VTX	5/16	1/8 - 27	0.77	0.64	9/16	6.0	6.0	3.3
5-4 VTX	5/16	1/4 - 18	0.82	0.86	9/16	6.0	6.0	3.3
6 VTX	3/8	1/4 - 18	0.83	0.86	9/16	6.0	6.0	3.3
6-2 VTX	3/8	1/8 - 27	0.83	0.67	9/16	6.0	6.0	3.3
6-6 VTX	3/8	3/8 - 18	0.87	0.95	3/4	6.0	6.0	3.3
6-8 VTX	3/8	1/2 - 14	0.88	1.17	7/8	6.0	6.0	3.3
8 VTX	1/2	3/8 - 18	0.98	0.95	3/4	6.0	6.0	3.3
8-4 VTX	1/2	1/4 - 18	0.98	0.95	3/4	6.0	6.0	3.3
8-8 VTX	1/2	1/2 - 14	0.99	1.17	7/8	6.0	6.0	3.3
8-12 VTX	1/2	3/4 - 14	1.04	1.20	1 1/16	4.0	4.0	2.6
10 VTX	5/8	1/2 - 14	1.11	1.17	7/8	5.0	5.0	3.3
10-6 VTX	5/8	3/8 - 18	1.11	0.98	7/8	5.0	5.0	3.3
10-12 VTX	5/8	3/4 - 14	1.28	1.20	1 1/16	4.0	4.0	2.6
12 VTX	3/4	3/4 - 14	1.28	1.20	1 1/16	4.0	4.0	2.6
12-8 VTX	3/4	1/2 - 14	1.28	1.20	1 1/16	5.0	5.0	2.9
12-16 VTX	3/4	1 - 11 1/2	1.42	1.49	1 5/16	3.0	3.0	2.0
14 VTX	7/8	3/4 - 14	1.45	1.30	1 5/16	4.0	4.0	2.3
16 VTX	1	1 - 11 1/2	1.47	1.48	1 5/16	3.0	3.0	2.0
16-12 VTX	1	3/4 - 14	1.47	1.29	1 5/16	4.0	4.0	2.3
16-20 VTX	1	1 1/4 - 11 1/2	1.59	1.67	1 5/8	2.5	2.5	1.6
20 VTX	1 1/4	1 1/4 - 11 1/2	1.59	1.67	1 5/8	2.5	2.5	1.6
20-16 VTX	1 1/4	1 - 11 1/2	1.59	1.63	1 5/8	3.0	3.0	2.0
24 VTX	1 1/2	1 1/2 - 11 1/2	1.78	1.77	1 7/8	2.5	2.5	1.6
32 VTX	2	2 - 11 1/2	2.22	2.11	2 1/2	2.0	2.0	1.3

Note: All "VTX" fittings include a 30° chamfer for sealing with NPSM swivel type fittings (steel only).



Y* – Across wrench flats

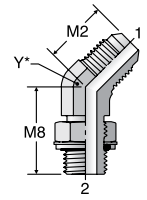
V3MX

Male 45° Elbow – BSPT
37° Flare / BSPT

TUBE FITTING PART #	END SIZE		M2 (mm)	N2 (mm)	Y (mm)	Dynamic Pressure (x 1,000 PSI)			
	1 (mm)	2 BSPT				-S	-SS	-B	
	4V3MX	6							1/4
4-4V3MX	6	1/4	1/4 - 19	20.8	21.8	14	4.5	4.5	2.9
6V3MX	10	3/8	1/4 - 19	21.1	21.8	14	4.5	4.5	2.9
6-6V3MX	10	3/8	3/8 - 19	22.1	24.1	19	4.5	4.5	2.9
8V3MX	12	1/2	3/8 - 19	24.9	24.1	19	4.5	4.5	2.9
8-8V3MX	12	1/2	1/2 - 14	25.2	29.7	22	4.5	4.5	2.9
12V3MX	18, 20	3/4	3/4 - 14	32.5	30.5	27	2.3	2.3	1.5

V40MX

Male 45° Elbow – BSPP
37° Flare / BSPP-ORR



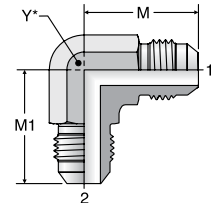
Y* – Across wrench flats

TUBE FITTING PART #	END SIZE		M2 (mm)	M8 (mm)	Y (mm)	Dynamic Pressure (x 1,000 PSI)			
	1 (mm)	2 BSPP				-S	-SS	-B	
	4V40MX	6							1/4
6V40MX	10	3/8	1/4 - 19	21.1	29.0	14	3.6	3.6	2.3
8V40MX	12	1/2	3/8 - 19	24.9	33.0	19	3.6	3.6	2.3
10V40MX	14,15,16	5/8	1/2 - 14	28.2	38.5	22	3.6	3.6	2.3
12V40MX	18,20	3/4	3/4 - 14	32.5	44.0	27	3.6	3.6	2.3
16V40MX	25	1	1 - 11	37.3	47.0	33	3.6	3.6	2.3

ETX

Union Elbow
37° Flare / 37° Flare

SAE 070201
HPD Base # 2303



Y* – Across wrench flats

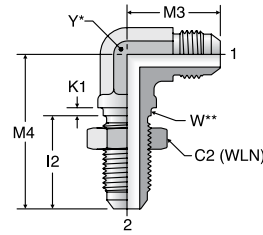
TUBE FITTING PART #	END SIZE		M (in.)	M1 (in.)	Y (in.)	Dynamic Pressure (x 1,000 PSI)		
	1 (in.)	2 (in.)				-S	-SS	-B
	2 ETX	1/8						
3 ETX	3/16	3/16	0.83	0.83	7/16	7.5	7.7	3.3
4 ETX	1/4	1/4	0.89	0.89	7/16	7.5	7.7	3.3
5 ETX	5/16	5/16	0.97	0.97	9/16	6.0	6.0	3.3
6 ETX	3/8	3/8	1.06	1.06	9/16	6.0	6.0	3.3
6-4 ETX	3/8	1/4	1.06	1.05	9/16	6.0	6.0	3.3
8 ETX	1/2	1/2	1.25	1.25	3/4	6.0	6.0	3.3
8-6 ETX	1/2	3/8	1.25	1.14	3/4	6.0	6.0	3.3
10 ETX	5/8	5/8	1.45	1.45	7/8	5.0	5.0	3.3
10-8 ETX	5/8	1/2	1.45	1.33	7/8	5.0	5.0	3.3
12 ETX	3/4	3/4	1.66	1.66	1 1/16	5.0	5.0	3.3
12-8 ETX	3/4	1/2	1.66	1.42	1 1/16	5.0	5.0	3.3
12-10 ETX	3/4	5/8	1.66	1.54	1 1/16	5.0	5.0	3.3
14 ETX	7/8	7/8	1.80	1.80	1 3/16	5.0	5.0	3.3
16 ETX	1	1	1.81	1.81	1 5/16	4.0	3.5	2.3
16-12 ETX	1	3/4	1.81	1.77	1 5/16	4.0	3.5	2.3
20 ETX	1 1/4	1 1/4	2.06	2.06	1 5/8	4.0	3.0	2.0
24 ETX	1 1/2	1 1/2	2.33	2.33	1 7/8	3.0	2.0	1.3
32 ETX	2	2	3.06	3.06	2 1/2	2.0	1.5	1.0

Dimensions and pressures for reference only, subject to change.

WETX

Bulkhead Union Elbow
37° Flare / 37° Flare

SAE 070701
HPD Base # 2353
WETX-WLN – Body with locknut
(See page B10 for WLN)



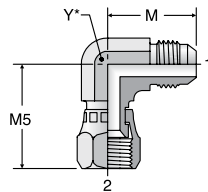
Y* – Across wrench flats.
W** – Bulkhead pilot dia.
recommended clearance hole
+.015 over W dia.

TUBE FITTING PART #	END SIZE		C2 HEX (in.)	I2 (in.)	K1 (in.)	M3 (in.)	M4 (in.)	W DIA (in.)	MAX BULKHEAD WALL THICKNESS (in.)	Y (in.)	Dynamic Pressure (x 1,000 PSI)		
	1 & 2 (in.)										-S	-SS	-B
3 WETX	3/16		5/8	0.92	0.09	0.94	1.50	0.38	0.25	7/16	7.5	7.7	3.3
4 WETX	1/4		11/16	1.20	0.09	0.97	1.59	0.44	0.25	7/16	7.5	7.7	3.3
5 WETX	5/16		3/4	1.02	0.09	1.06	1.72	0.50	0.25	9/16	6.0	6.0	3.3
6 WETX	3/8		13/16	1.09	0.09	1.09	1.81	0.56	0.35	9/16	6.0	6.0	3.3
8 WETX	1/2		1	1.25	0.13	1.36	2.11	0.75	0.35	3/4	6.0	6.0	3.3
10 WETX	5/8		1 1/8	1.39	0.13	1.56	2.39	0.88	0.35	7/8	5.0	5.0	3.3
12 WETX	3/4		1 3/8	1.56	0.13	1.78	2.67	1.06	0.35	1 1/16	5.0	5.0	3.3
14 WETX	7/8		1 1/2	1.56	0.13	1.92	2.80	1.19	0.35	1 5/8	5.0	5.0	3.3
16 WETX	1		1 5/8	1.56	0.13	1.94	2.80	1.31	0.35	1 5/8	4.0	3.5	2.3
20 WETX	1 1/4		1 7/8	1.61	0.13	2.17	3.13	1.63	0.35	1 5/8	4.0	3.0	2.0

C6X

Swivel Nut Elbow
37° Flare / 37° Swivel

SAE 070221
HPD Base # 3903



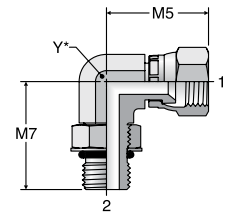
Y* – Across wrench flats

TUBE FITTING PART #	END SIZE		M (in.)	M5 (in.)	Y (in.)	Dynamic Pressure (x 1,000 PSI)			
	1 (in.)	2 (in.)				-S	-SS	-B	D
3 C6X	3/16	3/16	0.83	1.00	7/16	7.5	7.7	3.3	3.8
4 C6X	1/4	1/4	0.89	1.00	7/16	7.5	7.7	3.3	3.8
5 C6X	5/16	5/16	0.95	1.06	9/16	6.0	6.0	3.3	3.0
6 C6X	3/8	3/8	1.06	1.25	9/16	6.0	6.0	3.3	3.0
8 C6X	1/2	1/2	1.25	1.38	3/4	6.0	6.0	3.3	3.0
10 C6X	5/8	5/8	1.45	1.62	7/8	5.0	5.0	3.3	2.5
12 C6X	3/4	3/4	1.66	1.75	1 1/16	5.0	5.0	3.3	2.5
12-24 C6X	3/4	1 1/2	2.11	2.59	1 7/8	3.0	2.5	2.0	•
14 C6X	7/8	7/8	1.81	1.78	1 5/16	5.0	5.0	3.3	2.5
16 C6X	1	1	1.81	2.00	1 5/16	4.0	3.0	2.6	2.0
16-12 C6X	1	3/4	1.81	1.87	1 5/16	4.0	3.0	2.6	2.0
20 C6X	1 1/4	1 1/4	2.06	2.31	1 5/8	4.0	3.0	2.6	•
24 C6X	1 1/2	1 1/2	2.33	2.59	1 7/8	3.0	2.5	2.0	•
32 C6X	2	2	3.06	3.51	2 1/2	2.0	1.5	1.3	•

AOEX6

Swivel Elbow Straight
Thread Connector
SAE-ORB / 37° Swivel

HPD Base # 2506



Y* – Across wrench flats

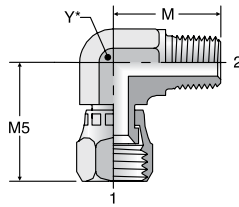
TUBE FITTING PART #	END SIZE		M5 (in.)	M7 (in.)	Y (in.)	Dynamic Pressure (x 1,000 PSI)		
	1 (in.)	2 UN/UNF-2A				-S	-SS	-B
4 AOEX6	1/4	7/16 - 20	1.00	1.03	7/16	6.0	6.0	3.3
6 AOEX6	3/8	9/16 - 18	1.25	1.25	9/16	6.0	6.0	3.3
8 AOEX6	1/2	3/4 - 16	1.38	1.45	3/4	6.0	6.0	3.3
10 AOEX6	5/8	7/8 - 14	1.62	1.70	7/8	5.0	5.0	3.3
12 AOEX6	3/4	1 1/16 - 12	1.75	1.94	1 1/16	5.0	5.0	3.3
16 AOEX6	1	1 5/16 - 12	2.00	2.05	1 5/16	4.0	3.0	2.6

Dimensions and pressures for reference only, subject to change.

X6EF

Swivel Elbow Connector
37° Swivel / NPTF

HPD Base # 2106



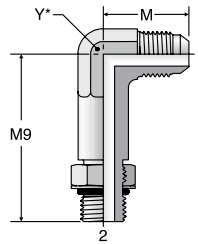
Y* – Across wrench flats

TUBE FITTING PART #	END SIZE		M (in.)	M5 (in.)	Y (in.)	Dynamic Pressure (x 1,000 PSI)		
	1 (in.)	2 NPTF				-S	-SS	-B
4 X6EF	1/4	1/8 - 27	0.78	1.01	7/16	6.0	6.0	3.3
4-4 X6EF	1/4	1/4 - 18	1.09	1.13	9/16	6.0	6.0	3.3
6 X6EF	3/8	1/4 - 18	1.09	1.25	9/16	6.0	6.0	3.3
6-6 X6EF	3/8	3/8 - 18	1.22	1.27	3/4	6.0	6.0	3.3
8 X6EF	1/2	3/8 - 18	1.22	1.38	3/4	6.0	6.0	3.3
8-8 X6EF	1/2	1/2 - 14	1.47	1.48	7/8	6.0	6.0	3.3
10 X6EF	5/8	1/2 - 14	1.47	1.62	7/8	5.0	5.0	3.3
12 X6EF	3/4	3/4 - 14	1.59	1.75	1 1/16	4.0	4.0	2.6
16 X6EF	1	1 - 11	1.97	2.01	1 5/16	3.0	3.0	2.0

CC50X

Long Straight Thread Elbow
37° Flare / SAE-ORB

SAE 071520
HPD Base # 5503



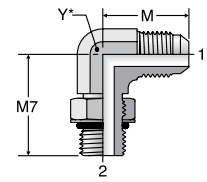
Y* – Across wrench flats

TUBE FITTING PART #	END SIZE		M (in.)	M9 (in.)	Y (in.)	Dynamic Pressure (x 1,000 PSI)		
	1 (in.)	2 UN/UNF-2A				-S	-SS	-B
4 CC50X	1/4	7/16 - 20	0.89	1.73	9/16	6.0	6.0	3.3
6 CC50X	3/8	9/16 - 18	1.06	2.08	9/16	6.0	5.4	3.3
8 CC50X	1/2	3/4 - 16	1.25	2.50	7/8	6.0	5.4	3.3
10 CC50X	5/8	7/8 - 14	1.45	2.89	7/8	5.0	5.4	3.3
12 CC50X	3/4	1 1/16 - 12	1.66	3.34	1 1/16	5.0	5.4	3.3
16 CC50X	1	1 5/16 - 12	1.81	3.72	1 5/16	4.0	3.0	2.6

C50X

Straight Thread Elbow
37° Flare / SAE-ORB

SAE 070220
HPD Base # 2503



Y* – Across wrench flats

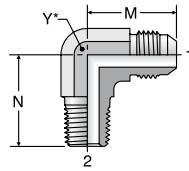
TUBE FITTING PART #	END SIZE		M (in.)	M7 (in.)	Y (in.)	Dynamic Pressure (x 1,000 PSI)			
	1 (in.)	2 UN/UNF-2A				-S	-SS	-B	D
2 C50X	1/8	5/16 - 24	0.77	0.94	7/16	5.0	6.0	3.3	3.0
3 C50X	3/16	3/8 - 24	0.83	0.94	7/16	5.0	6.0	3.3	3.0
4 C50X	1/4	7/16 - 20	0.89	1.03	7/16	6.0	6.0	3.3	3.0
4-2 C50X	1/4	5/16 - 24	0.89	0.92	7/16	5.0	6.0	3.3	3.0
4-6 C50X	1/4	9/16 - 18	1.05	1.25	9/16	6.0	5.4	3.3	3.0
4-8 C50X	1/4	3/4 - 16	1.13	1.45	3/4	6.0	5.4	3.3	3.0
5 C50X	5/16	1/2 - 20	0.95	1.13	9/16	6.0	5.4	3.3	3.0
5-4 C50X	5/16	7/16 - 18	0.95	1.13	9/16	6.0	5.4	3.3	3.0
5-6 C50X	5/16	9/16 - 18	1.06	1.25	9/16	6.0	5.4	3.3	3.0
6 C50X	3/8	9/16 - 18	1.06	1.25	9/16	6.0	5.4	3.3	3.0
6-4 C50X	3/8	7/16 - 20	1.06	1.19	9/16	6.0	5.4	3.3	3.0
6-5 C50X	3/8	1/2 - 20	1.06	1.19	9/16	6.0	5.4	3.3	3.0
6-8 C50X	3/8	3/4 - 16	1.14	1.45	3/4	6.0	5.4	3.3	3.0
6-10 C50X	3/8	7/8 - 14	1.23	1.70	7/8	6.0	5.4	3.3	3.0
8 C50X	1/2	3/4 - 16	1.25	1.45	3/4	6.0	5.4	3.3	3.0
8-4 C50X	1/2	7/16 - 20	1.25	1.26	3/4	6.0	5.4	3.3	3.0
8-6 C50X	1/2	9/16 - 18	1.25	1.34	3/4	6.0	5.4	3.3	3.0
8-10 C50X	1/2	7/8 - 14	1.33	1.70	7/8	5.0	5.4	3.3	3.0
8-12 C50X	1/2	1 1/16 - 12	1.42	1.94	1 1/16	5.0	5.4	3.3	3.0
8-16 C50X	1/2	1 5/16 - 12	1.52	2.05	1 5/16	4.0	3.0	2.6	3.0
10 C50X	5/8	7/8 - 14	1.45	1.70	7/8	5.0	5.4	3.3	2.5
10-6 C50X	5/8	9/16 - 18	1.45	1.41	7/8	5.0	5.4	3.3	2.5
10-8 C50X	5/8	3/4 - 16	1.45	1.55	7/8	5.0	5.4	3.3	2.5
10-12 C50X	5/8	1 1/16 - 12	1.53	1.94	1 1/16	5.0	5.4	3.3	2.5
10-16 C50X	5/8	1 5/16 - 12	1.64	2.05	1 5/16	4.0	3.0	2.6	2.5
12 C50X	3/4	1 1/16 - 12	1.66	1.94	1 1/16	5.0	5.4	3.3	2.5
12-8 C50X	3/4	3/4 - 16	1.66	1.63	1 1/16	5.0	5.4	3.3	2.5
12-10 C50X	3/4	7/8 - 14	1.66	1.78	1 1/16	5.0	5.4	3.3	2.5
12-14 C50X	3/4	1 3/16 - 12	1.77	2.00	1 5/16	5.0	5.4	3.3	2.5
12-16 C50X	3/4	1 5/16 - 12	1.76	2.05	1 5/16	4.0	3.0	2.6	2.5
12-20 C50X	3/4	1 5/8 - 12	1.97	2.25	1 5/8	4.0	3.0	2.6	2.5
14 C50X	7/8	1 3/16 - 12	1.80	2.05	1 5/16	5.0	5.4	3.3	2.5
16 C50X	1	1 5/16 - 12	1.81	2.05	1 5/16	4.0	3.0	2.6	2.0
16-12 C50X	1	1 1/16 - 12	1.81	2.05	1 5/16	4.0	3.0	2.6	2.0
16-14 C50X	1	1 3/16 - 12	1.81	2.05	1 5/16	4.0	3.0	2.6	2.0
16-20 C50X	1	1 5/8 - 12	2.01	2.25	1 5/8	4.0	2.5	2.0	•
16-24 C50X	1	1 7/8 - 12	2.16	2.39	1 7/8	3.0	2.5	2.0	•
20 C50X	1 1/4	1 5/8 - 12	2.06	2.25	1 5/8	4.0	2.5	2.0	•
20-16 C50X	1 1/4	1 5/16 - 12	2.06	2.25	1 5/8	4.0	2.5	2.0	•
20-24 C50X	1 1/4	1 7/8 - 12	2.20	2.39	1 7/8	3.0	2.5	2.0	•
24 C50X	1 1/2	1 7/8 - 12	2.33	2.39	1 7/8	3.0	2.0	1.5	•
24-20 C50X	1 1/2	1 5/8 - 12	2.33	2.39	1 7/8	3.0	2.0	1.5	•
32 C50X	2	2 1/2 - 12	3.06	2.89	2 1/2	2.0	1.5	1.3	•
32-24 C50X	2	1 7/8 - 12	3.06	2.89	2 1/2	2.0	1.5	1.3	•

Dimensions and pressures for reference only, subject to change.

CTX

Male Elbow
37° Flare / NPTF

SAE 070202
HPD Base # 2103

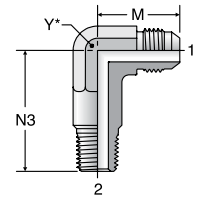


Y* – Across wrench flats

CCTX

Long Male Elbow
37° Flare / NPTF

SAE 071502
HPD Base # 5603



Y* – Across wrench flats

TUBE FITTING PART #	END SIZE		M (in.)	N (in.)	Y (in.)	Dynamic Pressure (x 1,000 PSI)			
	1 (in.)	2 NPTF				-S	-SS	-B	D
2 CTX	1/8	1/8 - 27	0.77	0.72	5/16	6.0	6.0	3.3	3.0
3 CTX	3/16	1/8 - 27	0.83	0.72	3/8	6.0	6.0	3.3	3.0
4 CTX	1/4	1/8 - 27	0.89	0.78	7/16	6.0	6.0	3.3	3.0
4-4 CTX	1/4	1/4 - 18	1.05	1.09	9/16	6.0	6.0	3.3	3.0
4-6 CTX	1/4	3/8 - 18	1.12	1.22	3/4	6.0	6.0	3.3	3.0
4-8 CTX	1/4	1/2 - 14	1.21	1.47	7/8	6.0	6.0	3.3	3.0
5 CTX	5/16	1/8 - 27	0.95	0.78	9/16	6.0	6.0	3.3	3.0
5-4 CTX	5/16	1/4 - 18	1.05	1.09	9/16	6.0	6.0	3.3	3.0
5-6 CTX	5/16	3/8 - 18	1.12	1.22	3/4	6.0	6.0	3.3	3.0
6 CTX	3/8	1/4 - 18	1.06	1.09	9/16	6.0	6.0	3.3	3.0
6-2 CTX	3/8	1/8 - 27	1.06	0.90	9/16	6.0	6.0	3.3	3.0
6-6 CTX	3/8	3/8 - 18	1.14	1.22	3/4	6.0	6.0	3.3	3.0
6-8 CTX	3/8	1/2 - 14	1.22	1.47	7/8	6.0	6.0	3.3	3.0
6-12 CTX	3/8	3/4 - 14	1.31	1.59	1 1/16	4.0	4.0	2.6	2.0
8 CTX	1/2	3/8 - 18	1.25	1.22	3/4	6.0	6.0	3.3	3.0
8-4 CTX	1/2	1/4 - 18	1.25	1.22	3/4	6.0	6.0	3.3	3.0
8-8 CTX	1/2	1/2 - 14	1.33	1.47	7/8	6.0	6.0	3.3	3.0
8-12 CTX	1/2	3/4 - 14	1.42	1.59	1 1/16	4.0	4.0	2.6	2.0
8-16 CTX	1/2	1 - 11 1/2	1.52	1.97	1 5/16	3.0	3.0	2.0	1.5
10 CTX	5/8	1/2 - 14	1.45	1.47	7/8	5.0	5.0	3.3	2.5
10-6 CTX	5/8	3/8 - 18	1.45	1.28	7/8	5.0	5.0	3.3	2.5
10-12 CTX	5/8	3/4 - 14	1.53	1.59	1 1/16	4.0	4.0	2.6	2.0
10-16 CTX	5/8	1 - 11 1/2	1.64	1.97	1 5/16	3.0	3.0	2.0	1.5
12 CTX	3/4	3/4 - 14	1.66	1.59	1 1/16	4.0	4.0	2.6	2.0
12-6 CTX	3/4	3/8 - 18	1.66	1.40	1 1/16	5.0	5.0	3.3	2.0
12-8 CTX	3/4	1/2 - 14	1.66	1.59	1 1/16	5.0	5.0	2.9	2.0
12-16 CTX	3/4	1 - 11 1/2	1.76	1.97	1 5/16	3.0	3.0	2.0	1.5
14 CTX	7/8	3/4 - 14	1.80	1.69	1 5/16	4.0	4.0	2.3	2.0
16 CTX	1	1 - 11 1/2	1.81	1.97	1 5/16	3.0	3.0	2.0	1.5
16-8 CTX	1	1/2 - 14	1.81	1.66	1 5/16	4.0	4.0	2.3	1.5
16-12 CTX	1	3/4 - 14	1.81	1.78	1 5/16	4.0	4.0	2.3	1.5
16-20 CTX	1	1 1/4 - 11 1/2	2.01	2.38	1 5/8	2.5	2.5	1.6	•
20 CTX	1 1/4	1 1/4 - 11 1/2	2.06	2.38	1 5/8	2.5	2.5	1.6	•
20-16 CTX	1 1/4	1 - 11 1/2	2.06	2.06	1 5/8	3.0	3.0	2.0	•
20-24 CTX	1 1/4	1 1/2 - 11 1/2	2.21	2.64	1 7/8	2.5	2.5	1.6	•
24 CTX	1 1/2	1 1/2 - 11 1/2	2.33	2.64	1 7/8	2.5	2.5	1.6	•
24-20 CTX	1 1/2	1 1/4 - 11 1/2	2.33	2.25	1 7/8	2.5	2.5	1.6	•
24-32 CTX	1 1/2	2 - 11 1/2	2.81	3.00	2 1/2	2.0	2.0	1.3	•
32 CTX	2	2 - 11 1/2	3.06	3.00	2 1/2	2.0	2.0	1.3	•
32-24 CTX	2	1 1/2 - 11 1/2	3.06	2.97	2 1/2	2.0	2.0	1.3	•
40 CTX	2 1/2	2 1/2 - 8	2.86	3.57	3 1/4	1.0	1.0	0.6	•

Note: All steel "CTX" fittings have a 30° chamfer for sealing with NPSM swivel type fittings.

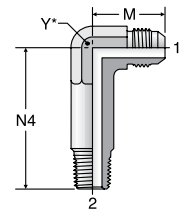
TUBE FITTING PART #	END SIZE		M (in.)	N3 (in.)	Y (in.)	Dynamic Pressure (x 1,000 PSI)		
	1 (in.)	2 NPTF				-S	-SS	-B
4 CCTX	1/4	1/8 - 27	0.89	1.17	7/16	6.0	6.0	3.3
4-4 CCTX	1/4	1/4 - 18	1.05	1.58	9/16	6.0	6.0	3.3
5 CCTX	5/16	1/8 - 27	0.95	1.17	9/16	6.0	6.0	3.3
6 CCTX	3/8	1/4 - 18	1.06	1.58	9/16	6.0	6.0	3.3
6-6 CCTX	3/8	3/8 - 18	1.14	1.82	3/4	6.0	6.0	3.3
8 CCTX	1/2	3/8 - 18	1.25	1.82	3/4	6.0	6.0	3.3
8-8 CCTX	1/2	1/2 - 14	1.33	2.17	7/8	6.0	6.0	3.3
8-12 CCTX	1/2	3/4 - 14	1.42	2.44	1 1/16	4.0	4.0	2.6
10 CCTX	5/8	1/2 - 14	1.45	2.17	7/8	5.0	5.0	3.3
12 CCTX	3/4	3/4 - 14	1.66	2.44	1 1/16	4.0	4.0	2.6
14 CCTX	7/8	3/4 - 14	1.80	2.59	1 5/16	4.0	4.0	2.3
16 CCTX	1	1 - 11 1/2	1.81	3.01	1 5/16	3.0	3.0	2.0
20 CCTX	1 1/4	1 1/4 - 11 1/2	2.06	3.69	1 5/8	2.5	2.5	1.6

Note: All steel "CCTX" fittings have a 30° chamfer for sealing with NPSM swivel type fittings.

CCCTX

Extra Long Male Elbow
37° Flare / NPTF

SAE 071602
HPD Base # 5703



Y* – Across wrench flats

TUBE FITTING PART #	END SIZE		M (in.)	N4 (in.)	Y (in.)	Dynamic Pressure (x 1,000 PSI)		
	1 (in.)	2 NPTF				-S	-SS	-B
4 CCCTX	1/4	1/8 - 27	0.89	1.56	7/16	6.0	6.0	3.3
4-4 CCCTX	1/4	1/4 - 18	1.05	2.07	9/16	6.0	6.0	3.3
5 CCCTX	5/16	1/8 - 27	0.97	1.63	9/16	6.0	6.0	3.3
6 CCCTX	3/8	1/4 - 18	1.06	2.07	9/16	6.0	6.0	3.3
6-6 CCCTX	3/8	3/8 - 18	1.14	2.34	3/4	6.0	6.0	3.3
8 CCCTX	1/2	3/8 - 18	1.25	2.34	3/4	6.0	6.0	3.3
8-8 CCCTX	1/2	1/2 - 14	1.33	2.87	7/8	6.0	6.0	3.3
10 CCCTX	5/8	1/2 - 14	1.45	2.87	7/8	5.0	5.0	3.3
12 CCCTX	3/4	3/4 - 14	1.66	3.28	1 1/16	4.0	4.0	2.3
16 CCCTX	1	1 - 11 1/2	1.81	4.05	1 5/16	3.0	3.0	2.0
20 CCCTX	1 1/4	1 1/4 - 11 1/2	2.06	5.00	1 5/8	2.5	2.5	1.6

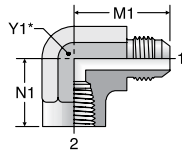
Note: All steel "CCCTX" fittings have a 30° chamfer for sealing with NPSM swivel type fittings.

Dimensions and pressures for reference only, subject to change.

DTX

Female Elbow
37° Flare / NPTF

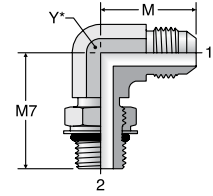
SAE 070203
HPD Base # 2203



Y* – Across wrench flats

C870MX

Male Elbow – ISO 6149
37° Flare / ISO 6149



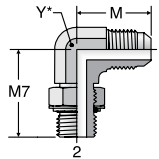
Y* – Across wrench flats

TUBE FITTING PART #	END SIZE		M1 (in.)	N1 (in.)	Y1 (in.)	Dynamic Pressure (x 1,000 PSI)		
	1 (in.)	2 NPTF				-S	-SS	-B
4 DTX	1/4	1/8 - 27	1.08	0.66	9/16	5.0	5.0	3.3
4-4 DTX	1/4	1/4 - 18	1.22	0.88	3/4	5.0	5.0	3.3
5 DTX	5/16	1/8 - 27	1.08	0.66	9/16	5.0	5.0	3.3
5-4 DTX	5/16	1/4 - 18	1.22	0.88	3/4	5.0	5.0	3.3
6 DTX	3/8	1/4 - 18	1.23	0.88	3/4	5.0	5.0	3.3
6-2 DTX	3/8	1/8 - 27	1.23	0.67	9/16	5.0	5.0	3.3
6-6 DTX	3/8	3/8 - 18	1.31	1.02	7/8	4.5	4.5	2.9
8 DTX	1/2	3/8 - 18	1.42	1.02	7/8	4.5	4.5	2.9
8-4 DTX	1/2	1/4 - 18	1.42	1.01	3/4	4.5	4.5	2.9
8-8 DTX	1/2	1/2 - 14	1.52	1.23	1 1/16	3.0	3.0	2.0
10 DTX	5/8	1/2 - 14	1.64	1.23	1 1/16	3.0	3.0	2.0
12 DTX	3/4	3/4 - 14	1.89	1.36	1 5/16	3.0	3.0	2.0
12-8 DTX	3/4	1/2 - 14	1.89	1.35	1 1/16	3.0	3.0	2.0
14 DTX	7/8	3/4 - 14	1.86	1.42	1 5/16	3.0	3.0	2.0
16 DTX	1	1 - 11 1/2	2.17	1.62	1 5/8	1.8	1.8	1.2
20 DTX	1 1/4	1 1/4 - 11 1/2	2.33	1.70	1 7/8	1.5	1.5	1.0
24 DTX	1 1/2	1 1/2 - 11 1/2	2.89	2.08	2 1/2	1.5	1.5	1.0

TUBE FITTING PART #	END SIZE		Male Metric Parallel Thread	M (mm)	M7 (mm)	Y (mm)	Dynamic Pressure (x 1,000 PSI)		
	1 (mm)	2 (in.)					-S	-SS	-B
4M10C870MX	6	1/4	M10x1	22.6	27.1	11	6.0	5.0	3.3
5M12C870MX	8	5/16	M12x1.5	24.1	30.5	13	6.0	5.0	3.3
6M14C870MX	10	3/8	M14x1.5	26.9	33.5	14	6.0	5.0	3.3
8M16C870MX	12	1/2	M16x1.5	31.8	38.0	19	5.0	5.0	3.3
8M18C870MX	12	1/2	M18x1.5	31.8	38.0	19	5.0	5.0	3.3
10M18C870MX	14, 15, 16	5/8	M18x1.5	36.8	41.5	22	5.0	5.0	3.3
10M22C870MX	14, 15, 16	5/8	M22x1.5	36.8	42.5	22	5.0	5.0	3.3
12M22C870MX	18, 20	3/4	M22x.15	42.2	45.0	27	5.0	5.0	3.3
12M27C870MX	18, 20	3/4	M27x2	42.2	51.0	27	5.0	5.0	3.3
16M33C870MX	25	1	M33x2	46.0	53.0	33	4.0	4.0	2.6

C80MX

Male Elbow – Metric-ORR
37° Flare / Metric-ORR



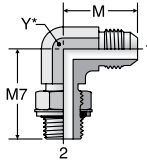
Y* – Across wrench flats

TUBE FITTING PART #	END SIZE		Male Metric Parallel Thread	M (mm)	M7 (mm)	Y (mm)	Dynamic Pressure (x 1,000 PSI)		
	1 (mm)	2 (in.)					-S	-SS	-B
4M10C80MX	6	1/4	M10x1	22.6	27.1	11	3.6	3.6	2.3
5M12C80MX	8	5/16	M12x1.5	24.1	30.5	13	3.6	3.6	2.3
6M14C80MX	10	3/8	M14x1.5	26.9	33.5	14	3.6	3.6	2.3
8M16C80MX	12	1/2	M16x1.5	31.8	38.0	19	3.6	3.6	2.3
8M18C80MX	12	1/2	M18x1.5	31.8	38.0	19	3.6	3.6	2.3
10M18C80MX	14, 15, 16	5/8	M18x1.5	36.8	41.5	22	3.6	3.6	2.3
10M22C80MX	14, 15, 16	5/8	M22x1.5	36.8	42.5	22	3.6	3.6	2.3
12M22C80MX	18, 20	3/4	M22x.15	42.2	45.0	27	3.6	3.6	2.3
12M27C80MX	18, 20	3/4	M27x2.0	42.2	51.0	27	2.5	2.5	1.6
16M33C80MX	25	1	M33x2.0	46.0	53.0	33	2.0	2.0	1.3

Dimensions and pressures for reference only, subject to change.

C40MX

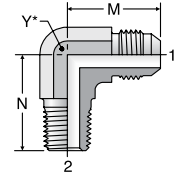
Male Elbow – BSPP
37° Flare / BSPP-ORR



Y* – Across wrench flats

C3MX

Male Elbow – BSPT
37° Flare / BSPT



Y* – Across wrench flats

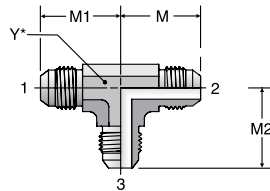
TUBE FITTING PART #	END SIZE			M (mm)	M7 (mm)	Y (mm)	Dynamic Pressure (x 1,000 PSI)		
	1		2				-S	-SS	-B
	(mm)	(in.)	BSPP						
4C40MX	6	1/4	1/8-28	22.6	26.5	11	3.6	3.6	2.3
4-4C40MX	6	1/4	1/4-19	26.9	32.0	14	3.6	2.9	1.9
5C40MX	8	5/16	1/8-28	24.1	27.0	13	3.6	3.6	2.3
5-4C40MX	8	5/16	1/4-19	26.6	32.0	14	3.6	2.9	1.9
5-6C40MX	8	5/16	3/8-19	28.5	37.0	19	3.6	2.9	1.9
6C40MX	10	3/8	1/4-19	26.9	32.0	14	3.6	2.9	1.9
6-6C40MX	10	3/8	3/8-19	29.0	37.0	19	3.6	2.9	1.9
8-4C40MX	12	1/2	1/4-19	31.8	37.0	19	3.6	2.9	1.9
8C40MX	12	1/2	3/8-19	31.8	37.0	19	3.6	2.9	1.9
8-8C40MX	12	1/2	1/2-14	33.8	43.0	22	3.6	2.9	1.9
10-6C40MX	16	5/8	3/8-19	36.8	36.0	22	3.6	2.9	1.9
10C40MX	14,15,16	5/8	1/2-14	36.8	43.0	22	3.6	2.9	1.9
10-12C40MX	15	5/8	3/4-14	39.2	49.5	27	3.6	2.9	1.9
12-8C40MX	18,20	3/4	1/2-14	42.2	49.5	27	3.6	2.9	1.9
12C40MX	18,20	3/4	3/4-14	42.2	49.5	27	3.6	2.9	1.9
12-16C40MX	18	3/4	1-11	44.7	52.0	33	3.6	2.9	1.9
16-12C40MX	25	1	3/4-14	46.0	47.0	33	3.6	2.9	1.9
16C40MX	25	1	1-11	46.0	52.0	33	3.6	2.9	1.9
20-16C40MX	30,32	1 1/4	1-11	52.3	57.0	41	3.6	2.3	1.5
20C40MX	30,32	1 1/4	1 1/4-11	52.3	57.0	41	3.0	2.3	1.5
24-20C40MX	38	1 1/2	1 1/4-11	59.2	60.5	48	3.0	2.0	1.3
24C40MX	38	1 1/2	1 1/2-11	59.2	60.5	48	2.0	2.0	1.3

TUBE FITTING PART #	END SIZE			M (mm)	N (mm)	Y (mm)	Dynamic Pressure (x 1,000 PSI)		
	1		2				-S	-SS	-B
	(mm)	(in.)	BSPT						
4C3MX	6	1/4	1/8 - 28	22.6	19.8	11	4.5	4.5	2.9
4-4C3MX	6	1/4	1/4 - 19	26.6	27.7	14	4.5	4.5	2.9
5C3MX	8	5/16	1/8 - 28	24.1	19.8	13	4.5	4.5	2.9
5-4C3MX	8	5/16	1/4 - 19	26.6	27.7	14	4.5	4.5	2.9
6C3MX	10	3/8	1/4 - 19	26.9	27.7	14	4.5	4.5	2.9
6-6C3MX	10	3/8	3/8 - 19	29.0	31.0	19	4.5	4.5	2.9
6-8C3MX	10	3/8	1/2 - 14	31.0	37.3	22	4.5	4.5	2.9
8-4C3MX	12	1/2	1/4 - 19	31.8	31.0	19	4.5	4.5	2.9
8C3MX	12	1/2	3/8 - 19	31.8	31.0	19	4.5	4.5	2.9
8-8C3MX	12	1/2	1/2 - 14	33.8	37.3	22	4.5	4.5	2.9
10-6C3MX	14,15,16	5/8	3/8 - 19	36.8	32.5	22	4.5	4.5	2.9
10C3MX	14,15,16	5/8	1/2 - 14	36.8	37.3	22	4.5	4.5	2.9
10-12C3MX	14,15,16	5/8	3/4 - 14	39.2	40.4	27	2.3	2.3	1.5
12-8C3MX	18,20	3/4	1/2 - 14	42.2	40.4	27	4.5	4.5	2.9
12C3MX	18,20	3/4	3/4 - 14	42.2	40.4	27	2.3	2.3	1.5
16-12C3MX	25	1	3/4 - 14	46.0	45.2	33	2.3	2.3	1.5
16C3MX	25	1	1 - 11	46.0	50.0	33	2.3	2.3	1.5
20-16C3MX	30,32	1 1/4	1 - 11	52.3	59.7	41	2.3	2.3	1.5
20C3MX	30,32	1 1/4	1 1/4 - 11	52.3	60.5	41	2.3	2.3	1.5
24C3MX	38	1 1/2	1 1/2 - 11	59.2	67.1	48	2.3	2.0	1.3

JTX

Union Tee
37° Flare (all three ends)

SAE 070401
HPD Base # 033T



Y* – Across wrench flats

TUBE FITTING PART #	END SIZE			M (in.)	M1 (in.)	M2 (in.)	Y (in.)	Dynamic Pressure (x 1,000 PSI)		
	1	2	3					-S	-SS	-B
	(in.)	(in.)	(in.)							
2 JTX	1/8	1/8	1/8	0.77	0.77	0.77	5/16	7.5	7.7	3.3
3 JTX	3/16	3/16	3/16	0.83	0.83	0.83	7/16	7.5	7.7	3.3
4 JTX	1/4	1/4	1/4	0.89	0.89	0.89	7/16	7.5	7.7	3.3
4-4-3 JTX	1/4	1/4	3/16	0.89	0.89	0.81	7/16	7.5	7.7	3.3
5 JTX	5/16	5/16	5/16	0.95	0.95	0.95	9/16	6.0	6.0	3.3
6 JTX	3/8	3/8	3/8	1.06	1.06	1.06	9/16	6.0	6.0	3.3
8 JTX	1/2	1/2	1/2	1.25	1.25	1.25	3/4	6.0	6.0	3.3
10 JTX	5/8	5/8	5/8	1.45	1.45	1.45	7/8	5.0	5.0	3.3
12 JTX	3/4	3/4	3/4	1.66	1.66	1.66	1 1/16	5.0	5.0	2.9
12-12-8 JTX	3/4	3/4	1/2	1.66	1.66	1.42	1 1/16	5.0	5.0	2.9
12-16-12 JTX	3/4	1	3/4	1.77	1.81	1.77	1 5/16	4.0	3.5	2.3
14 JTX	7/8	7/8	7/8	1.80	1.80	1.80	1 5/16	5.0	5.0	2.9
16 JTX	1	1	1	1.81	1.81	1.81	1 5/16	4.0	3.5	2.3
20 JTX	1 1/4	1 1/4	1 1/4	2.06	2.06	2.06	1 5/8	4.0	3.0	2.0
24 JTX	1 1/2	1 1/2	1 1/2	2.33	2.33	2.33	1 7/8	3.0	2.0	1.5
24-16-16 JTX	1 1/2	1	1	2.33	2.16	2.16	1 7/8	3.0	2.0	1.5
32 JTX	2	2	2	3.06	3.06	3.06	2 1/2	2.0	1.5	1.0

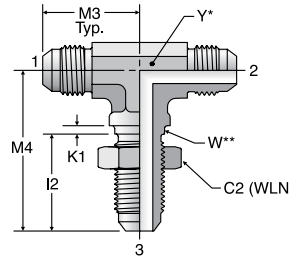
Dimensions and pressures for reference only, subject to change.



WJTX

Bulkhead Branch Tee
37° Flare (all three ends)

SAE 070959
HPD Base # 543T
WJTX-WLN – Body with locknut
(See page B10 for WLN)



Y* – Across wrench flats.
W** – Bulkhead pilot dia.
recommended clearance hole
+.015 over W dia.

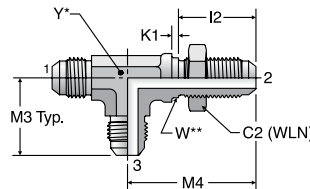
TUBE FITTING PART #	END SIZE (in.)	C2 HEX (in.)	I2 (in.)	K1 (in.)	M3 (in.)	M4 (in.)	W DIA (in.)	MAX BULKHEAD WALL THICKNESS (in.)	Y (in.)	Dynamic Pressure (x 1,000 PSI)		
										-S	-SS	-B
4 WJTX	1/4	11/16	1.02	0.09	0.97	1.59	0.44	0.25	7/16	7.5	7.7	3.3
6 WJTX	3/8	13/16	1.09	0.09	1.09	1.81	0.56	0.35	9/16	6.0	6.0	3.3
8 WJTX	1/2	1	1.25	0.13	1.36	2.11	0.75	0.35	3/4	6.0	6.0	3.3
10 WJTX	5/8	1 1/8	1.39	0.13	1.56	2.39	0.88	0.35	1 1/16	5.0	5.0	3.3
12 WJTX	3/4	1 3/8	1.56	0.13	1.78	2.67	1.06	0.35	1 1/16	5.0	5.0	2.9
16 WJTX	1	1 5/8	1.56	0.13	1.94	2.80	1.31	0.35	1 5/16	4.0	3.5	2.3
20 WJTX***	1 1/4	1 7/8	1.61	0.13	2.17	3.12	1.63	0.35	1 5/8	4.0	3.0	2.0

***Machined from one-piece milled bar stock.

WJJTX

Bulkhead Run Tee
37° Flare (all three ends)

SAE 070958
HPD Base # 533T
WJJTX-WLN – Body with locknut
(See page B10 for WLN)



Y* – Across wrench flats.
W** – Bulkhead pilot dia.
recommended clearance hole
+.015 over W dia.

TUBE FITTING PART #	END SIZE (in.)	C2 HEX (in.)	I2 (in.)	K1 (in.)	M3 (in.)	M4 (in.)	W DIA (in.)	MAX BULKHEAD WALL THICKNESS (in.)	Y (in.)	Dynamic Pressure (x 1,000 PSI)		
										-S	-SS	-B
4 WJJTX	1/4	11/16	1.02	0.09	0.97	1.59	0.44	0.25	7/16	7.5	7.7	3.3
6 WJJTX	3/8	13/16	1.09	0.09	1.09	1.81	0.56	0.35	9/16	6.0	6.0	3.3
8 WJJTX	1/2	1	1.25	0.13	1.36	2.11	0.75	0.35	3/4	6.0	6.0	3.3
10 WJJTX	5/8	1 1/8	1.39	0.13	1.56	2.39	0.88	0.35	7/8	5.0	5.0	3.3
12 WJJTX	3/4	1 3/8	1.56	0.13	1.78	2.67	1.06	0.35	1 1/16	5.0	5.0	2.9
16 WJJTX***	1	1 5/8	1.56	0.13	1.94	2.80	1.31	0.35	1 7/16	4.0	3.5	2.3
20 WJJTX***	1 1/4	1 7/8	1.61	0.13	2.17	3.12	1.63	0.35	1 5/8	4.0	3.0	2.0

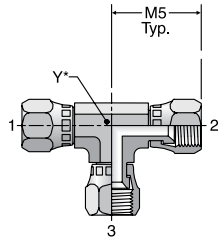
***Machined from one-piece milled bar stock.

Dimensions and pressures for reference only, subject to change.

JX6

Swivel Nut Union Tee
37° Swivel (all three ends)

HPD Base # 069T



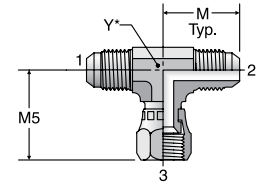
Y* – Across wrench flats

TUBE FITTING PART #	END SIZE			Dynamic Pressure (x 1,000 PSI)		
	1-3 (in.)	M5 (in.)	Y (in.)	-S	-SS	-B
				7.5	7.7	3.3
4 JX6	1/4	1.00	7/16	7.5	7.7	3.3
6 JX6	3/8	1.25	9/16	6.0	6.0	3.3
8 JX6	1/2	1.38	3/4	6.0	6.0	3.3
10 JX6	5/8	1.62	3/4	5.0	5.0	3.3
12 JX6	3/4	1.75	1 1/16	5.0	5.0	3.3
16 JX6	1	2.00	1 3/16	4.0	3.0	2.6

S6X

Swivel Nut Branch Tee
37° Flare / 37° Flare / 37° Swivel

SAE 070433
HPD Base # 393T



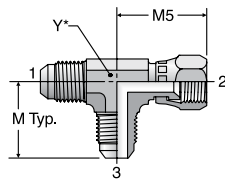
Y* – Across wrench flats

TUBE FITTING PART #	END SIZE				Dynamic Pressure (x 1,000 PSI)		
	1-3 (in.)	M (in.)	M5 (in.)	Y (in.)	-S	-SS	-B
					7.5	7.7	3.3
4 S6X	1/4	0.89	1.00	7/16	7.5	7.7	3.3
5 S6X	5/16	0.95	1.06	9/16	6.0	6.0	3.3
6 S6X	3/8	1.06	1.25	9/16	6.0	6.0	3.3
8 S6X	1/2	1.25	1.38	3/4	6.0	6.0	3.3
10 S6X	5/8	1.45	1.62	7/8	5.0	5.0	3.3
12 S6X	3/4	1.66	1.75	1 1/16	5.0	5.0	3.3
14 S6X	7/8	1.80	1.78	1 5/16	5.0	5.0	3.3
16 S6X	1	1.81	2.00	1 5/16	4.0	3.0	2.6
20 S6X	1 1/4	2.06	2.31	1 5/8	4.0	3.0	2.6
24 S6X	1 1/2	2.33	2.59	1 7/8	3.0	2.5	2.0

R6X

Swivel Nut Run Tee
37° Flare / 37° Swivel / 37° Flare

SAE 070432
HPD Base # 063T



Y* – Across wrench flats

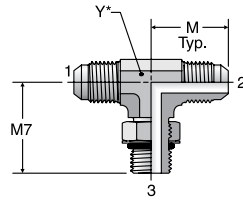
TUBE FITTING PART #	END SIZE				Dynamic Pressure (x 1,000 PSI)		
	1-3 (in.)	M (in.)	M5 (in.)	Y (in.)	-S	-SS	-B
					7.5	7.7	3.3
4 R6X	1/4	0.89	1.00	7/16	7.5	7.7	3.3
5 R6X	5/16	0.95	1.06	9/16	6.0	6.0	3.3
6 R6X	3/8	1.06	1.25	9/16	6.0	6.0	3.3
8 R6X	1/2	1.25	1.38	3/4	6.0	6.0	3.3
10 R6X	5/8	1.45	1.62	7/8	5.0	5.0	3.3
12 R6X	3/4	1.66	1.75	1 1/16	5.0	5.0	3.3
14 R6X	7/8	1.80	1.78	1 5/16	5.0	5.0	3.3
16 R6X	1	1.81	2.00	1 5/16	4.0	3.0	2.6
20 R6X	1 1/4	2.06	2.31	1 5/8	4.0	3.0	2.6
24 R6X	1 1/2	2.33	2.59	1 7/8	3.0	2.5	2.0

Dimensions and pressures for reference only, subject to change.

S50X

Straight Thread Branch Tee
37° Flare / 37° Flare /
SAE-ORB

SAE 070429
HPD Base # 253T



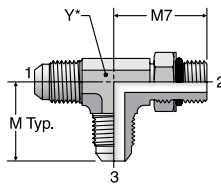
Y* – Across wrench flats

TUBE FITTING PART #	END SIZE			M (in.)	M7 (in.)	Y (in.)	Dynamic Pressure (x 1,000 PSI)			
	1 (in.)	2 (in.)	3 UN/UNF-2A (in.)				-S	-SS	-B	-D
4 S50X	1/4	1/4	7/16 - 20	0.89	1.03	7/16	6.0	6.0	3.3	3.0
4-4-6 S50X	1/4	1/4	9/16 - 18	1.05	1.25	9/16	6.0	5.4	3.3	3.0
5 S50X	5/16	5/16	1/2 - 20	0.97	1.13	9/16	6.0	5.4	3.3	3.0
6 S50X	3/8	3/8	9/16 - 18	1.06	1.25	9/16	6.0	5.4	3.3	3.0
6-6-8 S50X	3/8	3/8	3/4 - 16	1.14	1.45	3/4	6.0	5.4	3.3	3.0
8 S50X	1/2	1/2	3/4 - 16	1.25	1.45	3/4	6.0	5.4	3.3	3.0
8-8-10 S50X	1/2	1/2	7/8 - 14	1.33	1.70	7/8	5.0	5.4	3.3	2.5
10 S50X	5/8	5/8	7/8 - 14	1.45	1.70	7/8	5.0	5.4	3.3	2.5
10-10-12 S50X	5/8	5/8	1 1/16 - 12	1.53	1.94	1 1/16	5.0	5.4	3.3	2.5
12 S50X	3/4	3/4	1 1/16 - 12	1.66	1.94	1 1/16	5.0	5.4	3.3	2.5
12-12-16 S50X	3/4	3/4	1 5/16 - 12	1.76	2.05	1 5/16	4.0	3.0	2.6	2.0
16 S50X	1	1	1 5/16 - 12	1.81	2.05	1 5/16	4.0	3.0	2.6	2.0
20 S50X	1 1/4	1 1/4	1 5/8 - 12	2.06	2.25	1 5/8	4.0	2.5	2.0	•
24 S50X	1 1/2	1 1/2	1 7/8 - 12	2.33	2.39	1 7/8	3.0	2.0	1.5	•
32 S50X	2	2	2 1/2 - 12	3.06	2.89	2 1/2	2.0	1.5	1.3	•

R50X

Straight Thread Run Tee
37° Flare / SAE-ORB /
37° Flare

SAE 070428
HPD Base # 053T



Y* – Across wrench flats

TUBE FITTING PART #	END SIZE			M (in.)	M7 (in.)	Y (in.)	Dynamic Pressure (x 1,000 PSI)			
	1 (in.)	2 UN/UNF-2A (in.)	3 (in.)				-S	-SS	-B	-D
4 R50X	1/4	7/16 - 20	1/4	0.89	1.03	7/16	6.0	6.0	3.3	3.0
4-6-4 R50X	1/4	9/16 - 18	1/4	1.05	1.25	9/16	6.0	5.4	3.3	3.0
5 R50X	5/16	1/2 - 20	5/16	0.97	1.13	9/16	6.0	5.4	3.3	3.0
6 R50X	3/8	9/16 - 18	3/8	1.06	1.25	9/16	6.0	5.4	3.3	3.0
6-8-6 R50X	3/8	3/4 - 16	3/8	1.14	1.45	3/4	6.0	5.4	3.3	3.0
8 R50X	1/2	3/4 - 16	1/2	1.25	1.45	3/4	6.0	5.4	3.3	3.0
8-6-8 R50X	1/2	9/16 - 18	1/2	1.25	1.33	3/4	6.0	5.4	3.3	3.0
8-10-8 R50X	1/2	7/8 - 14	1/2	1.33	1.70	7/8	5.0	5.4	3.3	2.5
8-12-8 R50X	1/2	1 1/16 - 12	1/2	1.42	1.94	1 1/16	5.0	5.4	3.3	2.5
10 R50X	5/8	7/8 - 14	5/8	1.45	1.70	7/8	5.0	5.4	3.3	2.5
10-12-10 R50X	5/8	1 1/16 - 12	5/8	1.53	1.94	1 1/16	5.0	5.4	3.3	2.5
12 R50X	3/4	1 1/16 - 12	3/4	1.66	1.94	1 1/16	5.0	5.4	3.3	2.5
12-16-12 R50X	3/4	1 5/16 - 12	3/4	1.76	2.05	1 5/16	4.0	3.0	2.6	2.0
16 R50X	1	1 5/16 - 12	1	1.81	2.05	1 5/16	4.0	3.0	2.6	2.0
20 R50X	1 1/4	1 5/8 - 12	1 1/4	2.06	2.25	1 5/8	4.0	2.5	2.0	•
24 R50X	1 1/2	1 7/8 - 12	1 1/2	2.33	2.39	1 7/8	3.0	2.0	1.5	•
32 R50X	2	2 1/2 - 12	2	3.06	2.89	2 1/2	2.0	1.5	1.3	•

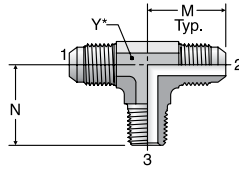
Dimensions and pressures for reference only, subject to change.



STX

Male Branch Tee
37° Flare / 37° Flare / NPTF

SAE 070425
HPD Base # 213T



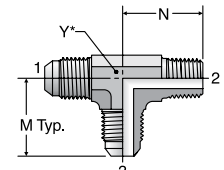
Y* – Across wrench flats

TUBE FITTING PART #	END SIZE		M (in.)	N (in.)	Y (in.)	Dynamic Pressure (x 1,000 PSI)		
	1 & 2 (in.)	3 NPTF				-S	-SS	-B
	3 STX	3/16						
4 STX	1/4	1/8 - 27	0.89	0.78	7/16	6.0	6.0	3.3
4-4-4 STX	1/4	1/4 - 18	1.05	1.09	9/16	6.0	6.0	3.3
4-4-6 STX	1/4	3/8 - 18	1.12	1.22	3/4	6.0	6.0	3.3
5 STX	5/16	1/8 - 27	0.95	0.78	9/16	6.0	6.0	3.3
5-5-4 STX	5/16	1/4 - 18	1.05	1.09	9/16	6.0	6.0	3.3
6 STX	3/8	1/4 - 18	1.06	1.09	9/16	6.0	6.0	3.3
6-6-6 STX	3/8	3/8 - 18	1.14	1.22	3/4	6.0	6.0	3.3
8 STX	1/2	3/8 - 18	1.25	1.22	3/4	6.0	6.0	3.3
8-8-8 STX	1/2	1/2 - 14	1.33	1.47	7/8	6.0	6.0	3.3
10 STX	5/8	1/2 - 14	1.45	1.47	7/8	5.0	5.0	3.3
12 STX	3/4	3/4 - 14	1.66	1.59	1 1/16	4.0	4.0	2.6
14 STX	7/8	3/4 - 14	1.80	1.69	1 5/16	4.0	4.0	2.3
16 STX	1	1 - 11 1/2	1.81	1.97	1 5/16	3.0	3.0	2.0
20 STX	1 1/4	1 1/4 - 11 1/2	2.06	2.38	1 5/8	2.5	2.5	1.6
24 STX	1 1/2	1 1/2 - 11 1/2	2.33	2.64	1 7/8	2.5	2.5	1.6

RTX

Male Run Tee
37° Flare / NPTF / 37° Flare

SAE 070424
HPD Base # 013T



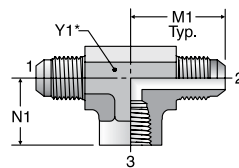
Y* – Across wrench flats

TUBE FITTING PART #	END SIZE		M (in.)	N (in.)	Y (in.)	Dynamic Pressure (x 1,000 PSI)		
	1 & 2 (in.)	3 NPTF				-S	-SS	-B
	3 RTX	3/16						
4 RTX	1/4	1/8 - 27	0.89	0.78	7/16	6.0	6.0	3.3
4-4-4 RTX	1/4	1/4 - 18	1.05	1.09	9/16	6.0	6.0	3.3
5 RTX	5/16	1/8 - 27	0.95	0.78	9/16	6.0	6.0	3.3
5-4-5 RTX	5/16	1/4 - 18	1.05	1.09	9/16	6.0	6.0	3.3
6 RTX	3/8	1/4 - 18	1.06	1.09	9/16	6.0	6.0	3.3
6-6-6 RTX	3/8	3/8 - 18	1.14	1.22	3/4	6.0	6.0	3.3
8 RTX	1/2	3/8 - 18	1.25	1.22	3/4	6.0	6.0	3.3
8-8-8 RTX	1/2	1/2 - 14	1.33	1.47	7/8	6.0	6.0	3.3
10 RTX	5/8	1/2 - 14	1.45	1.47	7/8	5.0	5.0	3.3
12 RTX	3/4	3/4 - 14	1.66	1.59	1 1/16	4.0	4.0	2.6
12-8-12 RTX	3/4	1/2 - 14	1.66	1.59	1 1/16	5.0	5.0	2.9
14 RTX	7/8	3/4 - 14	1.80	1.69	1 5/16	4.0	4.0	2.3
16 RTX	1	1 - 11 1/2	1.81	1.97	1 5/16	3.0	3.0	2.0
20 RTX	1 1/4	1 1/4 - 11 1/2	2.06	2.38	1 5/8	2.5	2.5	1.6
24 RTX	1 1/2	1 1/2 - 11 1/2	2.33	2.64	1 7/8	2.5	2.5	1.6

OTX

Female Branch Tee
37° Flare / 37° Flare / NPTF

SAE 070427
HPD Base # 223T



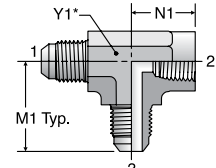
Y* – Across wrench flats

TUBE FITTING PART #	END SIZE		M1 (in.)	N1 (in.)	Y1 (in.)	Dynamic Pressure (x 1,000 PSI)		
	1 & 2 (in.)	3 NPTF				-S	-SS	-B
	4 OTX	1/4						
4-4-4 OTX	1/4	1/4 - 18	1.13	0.88	3/4	5.0	5.0	3.3
5 OTX	5/16	1/8 - 27	1.08	0.66	9/16	5.0	5.0	3.3
6 OTX	3/8	1/4 - 18	1.23	0.88	3/4	5.0	5.0	3.3
6-6-6 OTX	3/8	3/8 - 18	1.23	1.02	7/8	4.5	4.5	2.9
8 OTX	1/2	3/8 - 18	1.42	1.02	7/8	4.5	4.5	2.9
8-8-8 OTX	1/2	1/2 - 14	1.42	1.23	1 1/16	3.0	3.0	2.0
10 OTX	5/8	1/2 - 14	1.64	1.23	1 1/16	3.0	3.0	2.0
12 OTX	3/4	3/4 - 14	1.89	1.36	1 5/16	3.0	3.0	2.0
14 OTX	7/8	3/4 - 14	1.86	1.42	1 5/16	3.0	3.0	2.0
16 OTX	1	1 - 11 1/2	2.17	1.62	1 5/8	1.8	1.8	1.2
20 OTX	1 1/4	1 1/4 - 11 1/2	2.33	1.70	1 7/8	1.5	1.5	1.0
24 OTX	1 1/2	1 1/2 - 11 1/2	2.89	2.08	2 1/2	1.5	1.5	1.0

MTX

Female Run Tee
37° Flare / NPTF / 37° Flare

SAE 070426
HPD Base # 023T



Y* – Across wrench flats

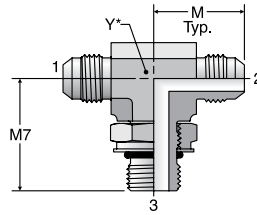
TUBE FITTING PART #	END SIZE		M1 (in.)	N1 (in.)	Y1 (in.)	Dynamic Pressure (x 1,000 PSI)		
	1 & 3 (in.)	2 NPTF				-S	-SS	-B
	4 MTX	1/4						
4-4-4 MTX	1/4	1/4 - 18	1.13	0.88	3/4	5.0	5.0	3.3
6 MTX	3/8	1/4 - 18	1.23	0.88	3/4	5.0	5.0	3.3
8 MTX	1/2	3/8 - 18	1.42	1.02	7/8	4.5	4.5	2.9
8-8-8 MTX	1/2	1/2 - 14	1.42	1.23	1 1/16	3.0	3.0	2.0
10 MTX	5/8	1/2 - 14	1.64	1.23	1 1/16	3.0	3.0	2.0
12 MTX	3/4	3/4 - 14	1.89	1.36	1 5/16	3.0	3.0	2.0
14 MTX	7/8	3/4 - 14	1.86	1.42	1 5/16	3.0	3.0	2.0
16 MTX	1	1 - 11 1/2	2.17	1.62	1 5/8	1.8	1.8	1.2
20 MTX	1 1/4	1 1/4 - 11 1/2	2.33	1.70	1 7/8	1.5	1.5	1.0
24 MTX	1 1/2	1 1/2 - 11 1/2	2.89	2.08	2 1/2	1.5	1.5	1.0

Dimensions and pressures for reference only, subject to change.



S870MX

ISO 6149 Branch Tee
37° Flare / 37° Flare / ISO 6149

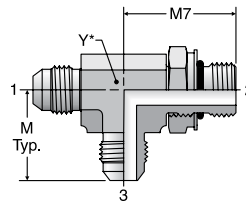


Y* – Across wrench flats

TUBE FITTING PART #	END SIZE		Male Metric Parallel Thread	M (mm)	M7 (mm)	Y (mm)	Dynamic Pressure (x 1,000 PSI)			
	1 & 2						3	-S	-SS	-B
	(mm)	(in.)								
6M14S870MX	10	3/8	M14 x 1.5	26.9	33.5	14	6.0	6.0	3.3	
8M16S870MX	12	1/2	M16 x 1.5	31.8	38.0	19	5.0	5.0	3.3	
10M22S870MX	14,15,16	5/8	M22 x 1.5	36.8	42.5	22	5.0	5.0	3.3	
12M27S870MX	18,20	3/4	M27 x 2	42.2	51.0	27	5.0	5.0	3.3	

R870MX

ISO 6149 Run Tee
37° Flare / ISO 6149 / 37° Flare

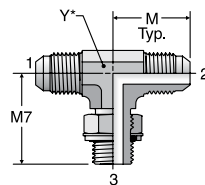


Y* – Across wrench flats

TUBE FITTING PART #	END SIZE		Male Metric Parallel Thread	M (mm)	M7 (mm)	Y (mm)	Dynamic Pressure (x 1,000 PSI)			
	1 & 3						2	-S	-SS	-B
	(mm)	(in.)								
6M14R870MX	10	3/8	M14 x 1.5	26.9	33.5	14	6.0	6.0	3.3	
8M16R870MX	12	1/2	M16 x 1.5	31.8	38.0	19	5.0	5.0	3.3	
10M22R870MX	14,15,16	5/8	M22 x 1.5	36.8	42.5	22	5.0	5.0	3.3	
12M27R870MX	18, 20	3/4	M27 x 1.5	42.2	51.0	27	5.0	5.0	3.3	

S40MX

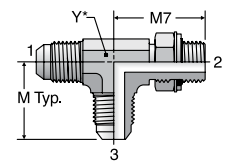
Male Branch Tee – BSPP
37° Flare / 37° Flare /
BSPP-ORR



Y* – Across wrench flats

R40MX

Male Run Tee – BSPP
37° Flare / BSPP-ORR /
37° Flare



Y* – Across wrench flats

TUBE FITTING PART #	END SIZE			M (mm)	M7 (mm)	Y (mm)	Dynamic Pressure (x 1,000 PSI)		
	1 & 2		3				-S	-SS	-B
	(mm)	(in.)							
4S40MX	6	1/4	1/8 - 28	22.6	26.5	11	3.6	3.6	2.3
6S40MX	10	3/8	1/4 - 19	26.9	32.0	14	3.6	2.9	1.9
8S40MX	12	1/2	3/8 - 19	31.8	37.0	19	3.6	2.9	1.9
10S40MX	14,15,16	5/8	1/2 - 14	36.8	43.0	22	3.6	2.9	1.9
12S40MX	18,20	3/4	3/4 - 14	42.2	49.5	27	3.6	2.9	1.9
16S40MX	25	1	1 - 11	46.0	52.0	33	3.6	2.9	1.9

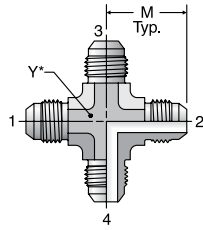
TUBE FITTING PART #	END SIZE			M (mm)	M7 (mm)	Y (mm)	Dynamic Pressure (x 1,000 PSI)		
	1 & 3		2				-S	-SS	-B
	(mm)	(in.)							
4R40MX	6	1/4	1/8 - 28	22.6	26.5	11	3.6	3.6	2.3
6R40MX	10	3/8	1/4 - 19	26.6	32.0	14	3.6	2.9	1.9
8R40MX	12	1/2	3/8 - 19	31.8	36.8	19	3.6	2.9	1.9
10R40MX	14,15,16	5/8	1/2 - 14	36.8	43.0	22	3.6	2.9	1.9
12R40MX	18,20	3/4	3/4 - 14	42.2	49.5	27	3.6	2.9	1.9
16R40MX	25	1	1 - 11	46.0	52.0	33	3.6	2.9	1.9
20R40MX	28, 30, 32	1 1/4	1 1/4 - 11	52.3	57.0	41	3.0	2.3	1.5

Dimensions and pressures for reference only, subject to change.

KTX

Union Cross
37° Flare (all four ends)

SAE 070501
HPD Base # 033X



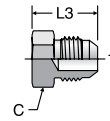
Y* – Across wrench flats

TUBE FITTING PART #	END SIZE	M (in.)	Y (in.)	Dynamic Pressure (x 1,000 PSI)		
				-S	-SS	-B
	4 KTX	1/4	0.89	7/16	7.5	7.7
5 KTX	5/16	0.95	9/16	6.0	6.0	3.3
6 KTX	3/8	1.06	9/16	6.0	6.0	3.3
8 KTX	1/2	1.25	3/4	6.0	6.0	3.3
10 KTX	5/8	1.45	7/8	5.0	5.0	3.3
12 KTX	3/4	1.66	1 1/16	5.0	5.0	2.9
16 KTX	1	1.81	1 5/16	4.0	3.5	2.3

PNTX

Plug
37° Flare

SAE 070109
HPD Base # 03CP

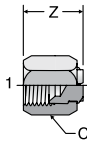


TUBE FITTING PART #	END SIZE	C HEX (in.)	L3 (in.)	Dynamic Pressure (x 1,000 PSI)		
				-S	-SS	-B
	2 PNTX	1/8	7/16	0.70	7.5	9
3 PNTX	3/16	7/16	0.73	7.5	9	3.3
4 PNTX	1/4	1/2	0.80	7.5	9	3.3
5 PNTX	5/16	9/16	0.80	6.0	7.2	3.3
6 PNTX	3/8	5/8	0.84	6.0	7.2	3.3
8 PNTX	1/2	13/16	0.94	6.0	7.2	3.3
10 PNTX	5/8	15/16	1.10	5.0	6.0	3.3
12 PNTX	3/4	1 1/8	1.28	5.0	6.0	3.3
14 PNTX	7/8	1 1/4	1.31	5.0	5.0	3.3
16 PNTX	1	1 3/8	1.33	4.5	5.4	2.9
20 PNTX	1 1/4	1 11/16	1.45	4.0	4.8	2.6
24 PNTX	1 1/2	2	1.65	4.0	4.8	2.6
32 PNTX	2	2 5/8	2.05	2.0	2.4	1.3

FNTX

Cap
37° Flare

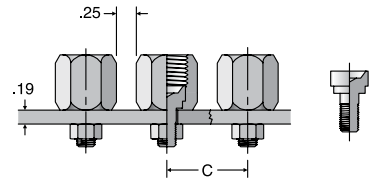
SAE 070112A
HPD Base # 06CP



TUBE FITTING PART #	END SIZE	C HEX (in.)	Z (in.)	Dynamic Pressure (x 1,000 PSI)		
				-S	-SS	-B
	2 FNTX	1/8	3/8	0.60	7.5	9.0
3 FNTX	3/16	7/16	0.66	7.5	9.0	3.3
4 FNTX	1/4	9/16	0.67	7.5	9.0	3.3
5 FNTX	5/16	5/8	0.77	6.0	7.2	3.3
6 FNTX	3/8	11/16	0.81	6.0	7.2	3.3
8 FNTX	1/2	7/8	0.94	6.0	7.2	3.3
10 FNTX	5/8	1	1.07	5.0	6.0	3.3
12 FNTX	3/4	1 1/4	1.24	5.0	6.0	3.3
14 FNTX	7/8	1 3/8	1.26	5.0	6.0	3.3
16 FNTX	1	1 1/2	1.29	4.5	5.4	2.9
20 FNTX	1 1/4	2	1.39	4.0	4.8	2.6
24 FNTX	1 1/2	2 1/4	1.70	3.0	3.6	2.0
32 FNTX	2	2 7/8	2.01	2.0	2.4	1.3

T22X

Mountie Cap

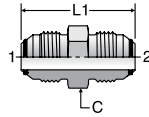


TUBE FITTING PART #	END SIZE		C (in.)	L (in.)	Dynamic Pressure (x 1,000 PSI)		
	1 (in.)	2 UNC/UNF-2A			-S	-SS	-B
	4 T22X	1/4	1/4 - 20	0.91	0.72	7.5	9.0
6 T22X	3/8	1/4 - 20	1.08	0.81	6.0	7.2	3.3
8 T22X	1/2	5/16 - 18	1.25	0.97	6.0	7.2	3.3

Dimensions and pressures for reference only, subject to change.

HTXO

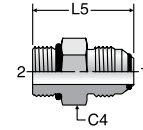
Union
37° Flare



TUBE FITTING PART #	END SIZE		C HEX (in.)	L1 (in.)	Dynamic Pressure (x 1,000 PSI) -SS
	1 & 2 (in.)				
4 HTXO	1/4	1/2	1.39	9.0	
6 HTXO	3/8	5/8	1.42	7.7	
8 HTXO	1/2	13/16	1.66	7.7	
10 HTXO	5/8	15/16	1.98	6.0	
12 HTXO	3/4	1 1/8	2.24	6.0	
16 HTXO	1	1 3/8	2.41	5.4	
20 HTXO	1 1/4	1 11/16	2.58	5.0	
24 HTXO	1 1/2	2	2.90	5.0	

F5OXO

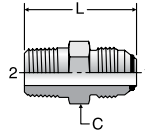
Straight Thread Connector
37° Flare / SAE-ORB



TUBE FITTING PART #	END SIZE		C4 HEX (in.)	L5 (in.)	Dynamic Pressure (x 1,000 PSI) -SS
	1 (in.)	2 UN/UNF-2A			
4 F5OXO	1/4	7/16 - 20	9/16	1.23	9.0
4-6 F5OXO	1/4	9/16 - 18	11/16	1.28	7.7
6 F5OXO	3/8	9/16 - 18	11/16	1.30	7.7
6-4 F5OXO	3/8	7/16 - 20	5/8	1.27	7.7
6-8 F5OXO	3/8	3/4 - 16	7/8	1.38	7.7
8 F5OXO	1/2	3/4 - 16	7/8	1.48	7.7
8-6 F5OXO	1/2	9/16 - 18	13/16	1.44	7.7
10 F5OXO	5/8	7/8 - 14	1	1.75	6.0
12 F5OXO	3/4	1 1/16 - 12	1 1/4	1.97	6.0
16 F5OXO	1	1 5/16 - 12	1 1/2	2.05	5.4
20 F5OXO	1 1/4	1 5/8 - 12	1 7/8	2.17	5.0
24 F5OXO	1 1/2	1 7/8 - 12	2 1/8	2.37	4.0
32 F5OXO	2	2 1/2 - 12	2 3/4	2.78	2.4

FTXO

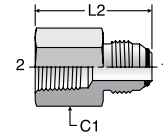
Male Connector
37° Flare / NPTF



TUBE FITTING PART #	END SIZE		C HEX (in.)	L (in.)	Dynamic Pressure (x 1,000 PSI) -SS
	1 (in.)	2 NPTF			
4 FTXO	1/4	1/8 - 27	1/2	1.23	6.0
4-4 FTXO	1/4	1/4 - 18	9/16	1.43	6.0
6 FTXO	3/8	1/4 - 18	5/8	1.45	6.0
6-6 FTXO	3/8	3/8 - 18	3/4	1.46	6.0
8 FTXO	1/2	3/8 - 18	13/16	1.53	6.0
8-8 FTXO	1/2	1/2 - 14	7/8	1.78	6.0
10 FTXO	5/8	1/2 - 14	15/16	1.94	5.0
12 FTXO	3/4	3/4 - 14	1 1/8	2.10	5.0
16 FTXO	1	1 - 11 1/2	1 3/8	2.38	4.5
20 FTXO	1 1/4	1 1/4 - 11 1/2	1 11/16	2.52	3.0
24 FTXO	1 1/2	1 1/2 - 11 1/2	2	2.76	3.0
32 FTXO	2	2 - 11 1/2	2 5/8	3.18	2.0

GTXO

Female Connector
37° Flare / NPTF

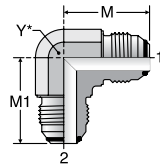


TUBE FITTING PART #	END SIZE		C1 HEX (in.)	L2 (in.)	Dynamic Pressure (x 1,000 PSI) -SS
	1 (in.)	2 NPTF			
4 GTXO	1/4	1/8 - 27	9/16	1.20	6.0
6 GTXO	3/8	1/4 - 18	3/4	1.41	6.0
8 GTXO	1/2	3/8 - 18	7/8	1.58	6.0
10 GTXO	5/8	1/2 - 14	1 1/8	1.94	5.0
12 GTXO	3/4	3/4 - 14	1 3/8	2.10	4.8
16 GTXO	1	1 - 11 1/2	1 5/8	2.43	3.6
20 GTXO	1 1/4	1 1/4 - 11 1/2	2	2.56	3.0
24 GTXO	1 1/2	1 1/2 - 11 1/2	2 3/8	2.70	2.4

Dimensions and pressures for reference only, subject to change.

ETXO

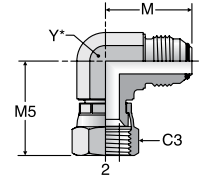
Union Elbow
37° Flare / 37° Flare



TUBE FITTING PART #	END SIZE		M (in.)	M1 (in.)	Y (in.)	Dynamic Pressure (x 1,000 PSI) -SS
	1 & 2 (in.)					
4 ETXO	1/4		0.90	0.90	7/16	7.7
6 ETXO	3/8		1.08	1.08	9/16	6.0
8 ETXO	1/2		1.25	1.25	3/4	6.0
10 ETXO	5/8		1.50	1.50	7/8	5.0
12 ETXO	3/4		1.70	1.70	1 1/16	5.0
16 ETXO	1		1.89	1.89	1 5/16	5.0
20 ETXO	1 1/4		2.13	2.13	1 5/8	5.0
24 ETXO	1 1/2		2.41	2.41	1 7/8	5.0

C6XO

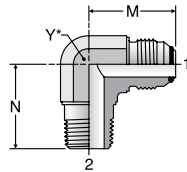
Swivel Nut Elbow
37° Flare / 37° Swivel



TUBE FITTING PART #	END SIZE		C3 (in.)	M (in.)	M5 (in.)	M10 (in.)	Y (in.)	Dynamic Pressure (x 1,000 PSI) -SS
	1 & 2 (in.)	HEX (in.)						
4 C6XO	1/4	9/16	0.90	1.00	0.66	7/16	7.7	
6 C6XO	3/8	11/16	1.08	1.25	0.88	9/16	6.0	
8 C6XO	1/2	7/8	1.25	1.38	0.95	3/4	6.0	
10 C6XO	5/8	1	1.50	1.62	1.13	7/8	5.0	
12 C6XO	3/4	1 1/4	1.70	1.75	1.19	1 1/16	5.0	
16 C6XO	1	1 1/2	1.89	2.00	1.41	1 5/16	2.5	
20 C6XO	1 1/4	2	2.13	2.31	1.69	1 5/8	2.5	

CTXO

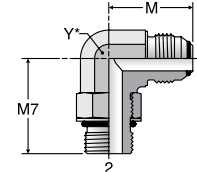
Male Elbow
37° Flare / NPTF



TUBE FITTING PART #	END SIZE		M (in.)	N (in.)	Y (in.)	Dynamic Pressure (x 1,000 PSI) -SS
	1 (in.)	2 NPTF				
4 CTXO	1/4	1/8 - 27	0.90	0.78	7/16	6.0
4-4 CTXO	1/4	1/4 - 18	1.06	1.09	9/16	6.0
6 CTXO	3/8	1/4 - 18	1.08	1.09	9/16	6.0
6-6 CTXO	3/8	3/8 - 18	1.16	1.22	3/4	6.0
8 CTXO	1/2	3/8 - 18	1.25	1.22	3/4	6.0
8-8 CTXO	1/2	1/2 - 14	1.33	1.47	7/8	6.0
10 CTXO	5/8	1/2 - 14	1.51	1.47	7/8	5.0
12 CTXO	3/4	3/4 - 14	1.70	1.59	1 1/16	4.0
16 CTXO	1	1 - 11 1/2	1.89	1.97	1 5/16	3.0
20 CTXO	1 1/4	1 1/4 - 11 1/2	2.13	2.38	1 5/8	2.5
24 CTXO	1 1/2	1 1/2 - 11 1/2	2.41	2.64	1 7/8	2.5
32 CTXO	2	2 - 11 1/2	3.13	3.00	2 1/2	2.0

C5OXO

Straight Thread Elbow
37° Flare / SAE-ORB

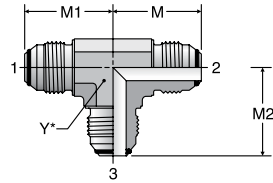


TUBE FITTING PART #	END SIZE		M (in.)	M7 (in.)	Y (in.)	Dynamic Pressure (x 1,000 PSI) -SS
	1 (in.)	2 UN/UNF-2A				
4 C5OXO	1/4	7/16 - 20	0.90	1.03	7/16	6.0
6 C5OXO	3/8	9/16 - 18	1.08	1.25	9/16	5.4
8 C5OXO	1/2	3/4 - 16	1.25	1.45	3/4	5.4
10 C5OXO	5/8	7/8 - 14	1.50	1.70	7/8	5.4
12 C5OXO	3/4	1 1/16 - 12	1.70	1.94	1 1/16	5.4
16 C5OXO	1	1 5/16 - 12	1.89	2.05	1 5/16	3.7
20 C5OXO	1 1/4	1 5/8 - 12	2.13	2.25	1 5/8	2.8
24 C5OXO	1 1/2	1 7/8 - 12	2.41	2.39	1 7/8	2.5
32 C5OXO	2	2 1/2 - 12	3.13	2.89	2 1/2	1.5

Dimensions and pressures for reference only, subject to change.

JTXO

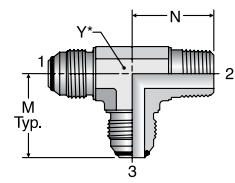
Union Tee
37° Flare (all three ends)



TUBE FITTING PART #	END SIZE		M (in.)	M1 (in.)	M2 (in.)	Y (in.)	Dynamic Pressure (x 1,000 PSI) -SS
	1 - 3 (in.)	M (in.)					
4 JTXO	1/4	0.90	0.90	0.90	0.90	7/16	7.7
6 JTXO	3/8	1.08	1.08	1.08	1.08	9/16	6.0
8 JTXO	1/2	1.25	1.25	1.25	1.25	3/4	6.0
10 JTXO	5/8	1.50	1.50	1.50	1.50	7/8	5.0
12 JTXO	3/4	1.70	1.70	1.70	1.70	1 1/16	5.0
16 JTXO	1	1.89	1.89	1.89	1.89	1 5/16	5.0
20 JTXO	1 1/4	2.13	2.13	2.13	2.13	1 5/8	5.0
24 JTXO	1 1/2	2.41	2.41	2.41	2.41	1 7/8	5.0

RTXO

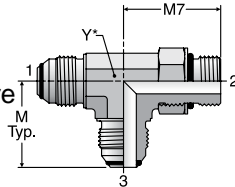
Male Run Tee
37° Flare / NPTF / 37° Flare



TUBE FITTING PART #	END SIZE		M (in.)	N (in.)	Y (in.)	Dynamic Pressure (x 1,000 PSI) -SS
	1 & 3 (in.)	2 NPTF				
4 RTXO	1/4	1/8 - 27	0.90	0.78	7/16	6.0
6 RTXO	3/8	1/4 - 18	1.08	1.09	9/16	6.0
8 RTXO	1/2	3/8 - 18	1.25	1.22	3/4	6.0
10 RTXO	5/8	1/2 - 14	1.51	1.47	7/8	5.0
12 RTXO	3/4	3/4 - 14	1.70	1.59	1 1/16	4.0
16 RTXO	1	1 - 11 1/2	1.89	1.97	1 5/16	3.0
20 RTXO	1 1/4	1 1/4 - 11 1/2	2.13	2.38	1 5/8	2.5
24 RTXO	1 1/2	1 1/2 - 11 1/2	2.41	2.64	1 7/8	2.5

R5OXO

Straight Thread Run Tee
37° Flare / SAE-ORB / 37° Flare



TUBE FITTING PART #	END SIZE		M (in.)	M7 (in.)	Y (in.)	Dynamic Pressure (x 1,000 PSI) -SS
	1 (in.)	2 UN/UNF-2A				
4 R5OXO	1/4	7/16 - 20	0.90	1.03	7/16	6.0
6 R5OXO	3/8	9/16 - 18	1.08	1.25	9/16	5.4
8 R5OXO	1/2	3/4 - 16	1.25	1.45	3/4	5.4
10 R5OXO	5/8	7/8 - 14	1.51	1.70	7/8	5.4
12 R5OXO	3/4	1 1/16 - 12	1.70	1.94	1 1/16	5.4
16 R5OXO	1	1 5/16 - 12	1.89	2.05	1 5/16	3.7
20 R5OXO	1 1/4	1 5/8 - 12	2.13	2.25	1 5/8	2.8

Dimensions and pressures for reference only, subject to change.