
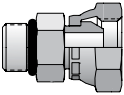
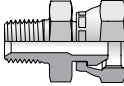
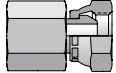

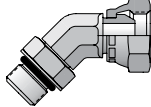
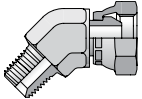
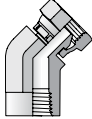

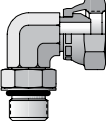
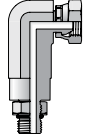
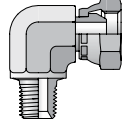
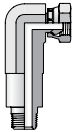
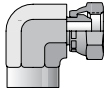

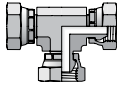
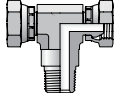
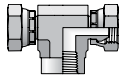




# Pipe Swivels

G

 <p><b>Straights</b></p>	<p><b>0507</b> SAE-ORB / NPSM Swivel</p>  <p>G5</p>	<p><b>0107</b> NPTF / NPSM Swivel</p>  <p>G5</p>	<p><b>0207</b> NPTF / NPSM Swivel</p>  <p>G5</p>	 <p><b>45° Elbows</b></p>	<p><b>3507</b> SAE-ORB / NPSM Swivel</p>  <p>G5</p>
<p><b>3107</b> NPTF / NPSM Swivel</p>  <p>G6</p>	<p><b>3207</b> NPTF / NPSM Swivel</p>  <p>G6</p>	 <p><b>90° Elbows</b></p>	<p><b>2507</b> SAE-ORB / NPSM Swivel</p>  <p>G6</p>	<p><b>5507</b> SAE-ORB / NPSM Swivel</p>  <p>G6</p>	<p><b>2107</b> NPTF / NPSM Swivel</p>  <p>G7</p>
<p><b>5607</b> NPTF / NPSM Swivel Long Drop</p>  <p>G7</p>	<p><b>2207</b> NPTF / NPSM Swivel</p>  <p>G7</p>	 <p><b>Tees</b></p>	<p><b>077T</b> NPSM Swivel / NPSM Swivel / NPSM Swivel</p>  <p>G7</p>	<p><b>217T</b> NPSM Swivel / NPSM Swivel / NPTF</p>  <p>G8</p>	<p><b>227T</b> NPSM Swivel / NPSM Swivel / NPTF</p>  <p>G8</p>

## Pipe Swivels

Pipe swivel connections are one of the most traditional types of hydraulic connections. NPSM swivel adapters add versatility to male NPT hose and adapter connections. They are especially suited for manufacturers and end users that rely on this versatility. As a result, equipment manufacturers can simplify their hose assembly requirements by specifying NPSM adapters. See Fig. G1 for an illustration of this product flexibility.

Parker offers a full line of NPSM pipe swivel adapters. Fourteen configurations are available as standard, many of which are available in steel and stainless steel. Parker's pipe swivels are designed for use with male NPT/NPTF hose fittings and adapters with a 30° machined seat.

## How Pipe Swivel Fittings Work

Pipe swivel adapters are manufactured in accordance to SAE J514 specifications, and thus are designed to work in conjunction with several manufacturers' hose and adapter products. Unlike most pipe thread connections, NPSM swivel adapters do not seal on the threads. NPSM swivel connections incorporate parallel threads, as opposed to tapered. Sealing is accomplished between the nose of the swivel and the mating seat of the NPT pipe thread. This creates a metal-to-metal seal as shown in Fig. G2. Thus, a mating NPT male connector must have this 30° seat to ensure proper sealing. A full internal 30° seat with surface finish requirements of 125 Ra or better is required. See SAE J516 for specific requirements of the 30° seat.

**Not all male NPT ends have the 30° seat. Parts that have this seat will include a note in the catalog.**

### Threads:

NPTF:	ANSI B1.20.1, FED-STD-H28/7
NPT:	SAEJ476, ANSI B1.20.3, FED-STD-H28/8
NPSM:	ANSI B1.20.1, FED-STD-H28/7
*UN/UNF:	ANSI B1.1, FED-STD-H28/2 (*Class 2A or 2B)

## Reference Locations

**Assembly and Installation:** Please refer to Section S for the assembly and installation instructions for Pipe Swivels.

**Standard material specifications:** Please refer to Table U1 located in the Appendix Section.

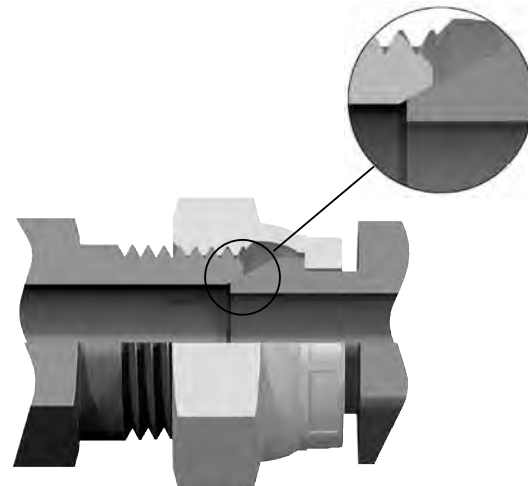


Adapter Port Connection



NPSM / NPT Union

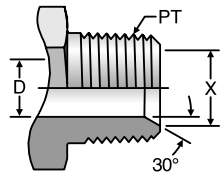
**Fig. G1 — Illustration of the flexibility of the NPT Port and Hose Adapter system**



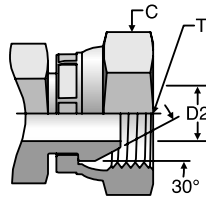
**Fig. G2 — Illustration showing how NPSM swivel adapters seal on mating chamfer in male pipe thread**

Dimensions and pressures for reference only, subject to change.

## Pipe Swivel (NPSM) Ends



Male Pipe End



NPSM Pipe Swivel

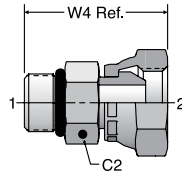
	NPT/NPTF Thread	NPSM Thread	Hex - Swivel	Drill - Male	Drill - Swivel	Chamfer Dia.	Thread Length
Size	PT NPT/NPTF	T NPSM	C (in.)	D (in.)	D2 (in.)	X (in.)	L (in.)
<b>2</b>	1/8-27	1/8-27	9/16	0.188	0.156	0.281	0.38
<b>4</b>	1/4-18	1/4-18	11/16	0.281	0.219	0.344	0.56
<b>6</b>	3/8-18	3/8-18	7/8	0.406	0.344	0.469	0.56
<b>8</b>	1/2-14	1/2-14	1	0.531	0.469	0.625	0.75
<b>12</b>	3/4-14	3/4-14	1 1/4	0.719	0.641	0.813	0.75
<b>16</b>	1-11 1/2	1-11 1/2	1 1/2	0.938	0.844	1.031	0.94
<b>20</b>	1 1/4-11 1/2	1 1/4-11 1/2	1 7/8	1.250	1.141	1.344	0.97
<b>24</b>	1 1/2-11 1/2	1 1/2-11 1/2	2 1/8	1.500	1.359	1.625	1.00
<b>32</b>	2-11 1/2	2-11 1/2	2 5/8	1.938	1.813	2.063	1.03

Dimensions and pressures for reference only, subject to change.

# 0507

Straight Thread Adapter  
SAE-ORB / NPSM Swivel

SAE 140157

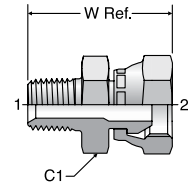


TUBE FITTING PART #	END SIZE		C2 HEX BODY (in.)	W4 (in.)	Dynamic Pressure (x 1,000 PSI)		
	1	2			-S	-SS	-B
	UN/UNF-2A	NPSM					
0507-4-2	7/16 - 20	1/8 - 27	9/16	1.21	6.0	6.0	3.3
0507-4-4	7/16 - 20	1/4 - 18	9/16	1.32	6.0	6.0	3.3
0507-5-4	1/2 - 20	1/4 - 18	5/8	1.32	6.0	6.0	3.3
0507-6-4	9/16 - 18	1/4 - 18	11/16	1.35	6.0	6.0	3.3
0507-6-6	9/16 - 18	3/8 - 18	11/16	1.37	6.0	6.0	3.3
0507-6-8	9/16 - 18	1/2 - 14	3/4	1.57	5.0	5.0	3.3
0507-8-4	3/4 - 16	1/4 - 18	7/8	1.43	6.0	6.0	3.3
0507-8-6	3/4 - 16	3/8 - 18	7/8	1.45	6.0	6.0	3.3
0507-8-8	3/4 - 16	1/2 - 14	7/8	1.56	5.0	5.0	3.3
0507-8-12	3/4 - 16	3/4 - 14	1	1.79	4.0	4.0	2.6
0507-10-6	7/8 - 14	3/8 - 18	1	1.59	5.0	5.0	3.3
0507-10-8	7/8 - 14	1/2 - 14	1	1.73	5.0	5.0	3.3
0507-10-12	7/8 - 14	3/4 - 14	1 1/4	1.88	4.0	4.0	2.6
0507-12-8	1 1/16 - 12	1/2 - 14	1 1/4	1.88	5.0	5.0	3.3
0507-12-12	1 1/16 - 12	3/4 - 14	1 1/4	1.97	4.0	4.0	2.6
0507-12-16	1 1/16 - 12	1 - 11 1/2	1 1/2	2.12	3.0	3.0	1.9
0507-14-12	1 3/16 - 12	3/4 - 14	1 3/8	1.97	4.0	4.0	2.6
0507-16-12	1 5/16 - 12	3/4 - 14	1 1/2	1.90	4.0	4.0	2.6
0507-16-16	1 5/16 - 12	1 - 11 1/2	1 1/2	2.12	3.0	3.0	1.9
0507-20-16	1 5/8 - 12	1 - 11 1/2	1 7/8	2.20	3.0	3.0	1.9
0507-20-20	1 5/8 - 12	1 1/4 - 11 1/2	1 7/8	2.21	2.5	2.5	1.6
0507-24-24	1 7/8 - 12	1 1/2 - 11 1/2	2 1/8	2.39	2.0	2.0	1.3
0507-32-32	2 1/2 - 12	2 - 11 1/2	2 3/4	2.49	1.5	1.5	1.0

# 0107

Male Pipe Adapter  
NPTF / NPSM Swivel

SAE 140130

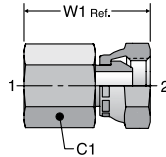


TUBE FITTING PART #	END SIZE		C1 HEX (in.)	W (in.)	Dynamic Pressure (x 1,000 PSI)		
	1	2			-S	-SS	-B
	NPTF	NPSM					
0107-2-2	1/8 - 27	1/8 - 27	9/16	1.09	6.0	6.0	3.3
0107-2-4	1/8 - 27	1/4 - 18	5/8	1.24	6.0	6.0	3.3
0107-4-2	1/4 - 18	1/8 - 27	11/16	1.39	6.0	6.0	3.3
0107-4-4	1/4 - 18	1/4 - 18	11/16	1.43	6.0	6.0	3.3
0107-4-6	1/4 - 18	3/8 - 18	13/16	1.45	6.0	6.0	3.3
0107-4-8	1/4 - 18	1/2 - 14	15/16	1.44	5.0	5.0	3.3
0107-6-4	3/8 - 18	1/4 - 18	11/16	1.49	6.0	6.0	3.3
0107-6-6	3/8 - 18	3/8 - 18	7/8	1.51	6.0	6.0	3.3
0107-6-8	3/8 - 18	1/2 - 14	15/16	1.73	5.0	5.0	3.3
0107-8-4	1/2 - 14	1/4 - 18	1	1.75	6.0	6.0	3.3
0107-8-6	1/2 - 14	3/8 - 18	7/8	1.70	6.0	6.0	3.3
0107-8-8	1/2 - 14	1/2 - 14	1	1.91	5.0	5.0	3.3
0107-8-12	1/2 - 14	3/4 - 14	1 1/4	2.04	4.0	4.0	2.6
0107-12-8	3/4 - 14	1/2 - 14	1 1/8	1.91	5.0	5.0	2.6
0107-12-12	3/4 - 14	3/4 - 14	1 1/4	2.04	4.0	4.0	2.6
0107-12-16	3/4 - 14	1 - 11 1/2	1 1/2	2.17	3.0	3.0	1.9
0107-16-12	1 - 11 1/2	3/4 - 14	1 3/8	2.29	4.0	4.0	1.9
0107-16-16	1 - 11 1/2	1 - 11 1/2	1 1/2	2.37	3.0	3.0	1.9
0107-16-20	1 - 11 1/2	1 1/4 - 11 1/2	1 3/4	2.38	2.5	2.5	1.6
0107-20-16	1 1/4 - 11 1/2	1 - 11 1/2	1 7/8	2.46	3.0	3.0	1.6
0107-20-20	1 1/4 - 11 1/2	1 1/4 - 11 1/2	1 7/8	2.47	2.5	2.5	1.6
0107-20-24	1 1/4 - 11 1/2	1 1/2 - 11 1/2	2 1/8	2.58	2.0	2.0	1.3
0107-24-20	1 1/2 - 11 1/2	1 1/4 - 11 1/2	2 1/8	2.51	2.5	2.5	1.3
0107-24-24	1 1/2 - 11 1/2	1 1/2 - 11 1/2	2 1/8	2.61	2.0	2.0	1.3
0107-32-32	2 - 11 1/2	2 - 11 1/2	2 5/8	2.80	1.5	1.5	1.0

# 0207

Female Pipe Adapter  
NPTF / NPSM Swivel

SAE 140131

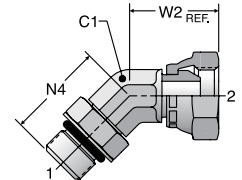


TUBE FITTING PART #	END SIZE		C1 HEX (in.)	W1 (in.)	Dynamic Pressure (x 1,000 PSI)		
	1	2			-S	-SS	-B
	NPTF	NPSM					
0207-2-2	1/8 - 27	1/8 - 27	9/16	1.02	6.0	6.0	3.3
0207-2-4	1/8 - 27	1/4 - 18	11/16	1.33	6.0	6.0	3.3
0207-4-2	1/4 - 18	1/8 - 27	9/16	1.32	6.0	6.0	3.3
0207-4-4	1/4 - 18	1/4 - 18	11/16	1.43	6.0	6.0	3.3
0207-6-4	3/8 - 18	1/4 - 18	7/8	1.49	6.0	6.0	3.3
0207-6-6	3/8 - 18	3/8 - 18	7/8	1.51	6.0	6.0	3.3
0207-6-8	3/8 - 18	1/2 - 14	1	1.64	5.0	5.0	3.3
0207-8-4	1/2 - 14	1/4 - 18	1	1.70	5.0	5.0	3.3
0207-8-6	1/2 - 14	3/8 - 18	1	1.73	5.0	5.0	3.3
0207-8-8	1/2 - 14	1/2 - 14	1	1.79	5.0	5.0	3.3
0207-12-8	3/4 - 14	1/2 - 14	1 1/4	1.85	4.0	4.0	2.6
0207-12-12	3/4 - 14	3/4 - 14	1 1/4	1.97	4.0	4.0	2.6
0207-16-12	1 - 11 1/2	3/4 - 14	1 1/2	2.28	3.0	3.0	1.9
0207-16-16	1 - 11 1/2	1 - 11 1/2	1 1/2	2.37	3.0	3.0	1.9
0207-20-20	1 1/4 - 11 1/2	1 1/4 - 11 1/2	1 7/8	2.38	2.5	2.5	1.6
0207-24-24	1 1/2 - 11 1/2	1 1/2 - 11 1/2	2 1/8	2.42	2.0	2.0	1.3
0207-32-32	2 - 11 1/2	2 - 11 1/2	2 5/8	2.55	1.5	1.5	1.0

# 3507

45° Straight Thread Elbow  
SAE-ORB / NPSM Swivel

SAE 140357



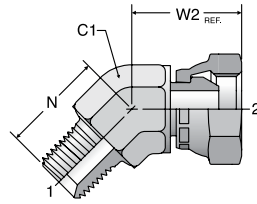
TUBE FITTING PART #	END SIZE		C1 HEX (in.)	N4 (in.)	W2 (in.)	Dynamic Pressure (x 1,000 PSI)		
	1	2				-S	-SS	-B
	UN/UNF-2A	NPSM						
3507-4-4	7/16 - 20	1/4 - 18	7/16	1.05	0.79	6.0	6.0	3.3
3507-6-4	9/16 - 18	1/4 - 18	9/16	1.11	0.94	6.0	6.0	3.3
3507-6-6	9/16 - 18	3/8 - 18	9/16	1.14	1.03	6.0	6.0	3.3
3507-6-8	9/16 - 18	1/2 - 14	3/4	1.08	1.16	5.0	5.0	3.3
3507-8-6	3/4 - 16	3/8 - 18	3/4	1.30	1.02	6.0	6.0	3.3
3507-8-8	3/4 - 16	1/2 - 14	3/4	1.30	1.18	5.0	5.0	3.3
3507-8-12	3/4 - 16	3/4 - 14	3/4	1.41	1.37	3.0	3.0	1.9
3507-10-6	7/8 - 14	3/8 - 18	1 1/16	1.35	0.98	5.0	5.0	3.3
3507-10-8	7/8 - 14	1/2 - 14	7/8	1.52	1.17	5.0	5.0	3.3
3507-10-12	7/8 - 14	3/4 - 14	1 1/16	1.36	1.40	3.0	3.0	1.9
3507-12-8	1 1/16 - 12	1/2 - 14	1 1/16	1.73	1.12	5.0	5.0	3.3
3507-12-12	1 1/16 - 12	3/4 - 14	1 1/16	1.73	1.37	3.0	3.0	1.9
3507-16-16	1 5/16 - 12	1 - 11 1/2	1 5/16	1.86	1.52	2.5	2.5	1.6

Dimensions and pressures for reference only, subject to change.

### 3107

45° Male Pipe Elbow  
NPTF / NPSM Swivel

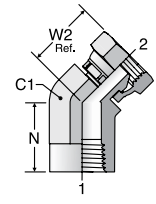
SAE 140330



TUBE FITTING PART #	END SIZE		C1 HEX (in.)	N (in.)	W2 (in.)	Dynamic Pressure (x 1,000 PSI)		
	1 NPTF	2 NPSM				-S	-SS	-B
3107-2-2	1/8 - 27	1/8 - 27	7/16	0.52	0.77	6.0	6.0	3.3
3107-4-4	1/4 - 18	1/4 - 18	9/16	0.86	0.91	6.0	6.0	3.3
3107-6-6	3/8 - 18	3/8 - 18	3/4	0.95	1.10	6.0	6.0	3.3
3107-6-8	3/8 - 18	1/2 - 14	1 1/16	1.09	1.16	5.0	5.0	3.3
3107-8-4	1/2 - 14	1/4 - 18	1 1/16	1.34	0.96	5.0	5.0	3.3
3107-8-6	1/2 - 14	3/8 - 18	7/8	1.17	1.10	6.0	6.0	3.3
3107-8-8	1/2 - 14	1/2 - 14	7/8	1.17	1.17	5.0	5.0	3.3
3107-8-12	1/2 - 14	3/4 - 14	1 1/16	1.50	1.24	3.0	3.0	1.9
3107-12-8	3/4 - 14	1/2 - 14	1 1/16	1.20	1.23	4.0	4.0	1.9
3107-12-12	3/4 - 14	3/4 - 14	1 1/16	1.20	1.37	3.0	3.0	1.9
3107-12-16	3/4 - 14	1 - 11 1/2	1 5/16	1.50	1.32	2.5	2.5	1.6
3107-16-12	1 - 11 1/2	3/4 - 14	1 5/16	1.48	1.47	3.0	3.0	1.6
3107-16-16	1 - 11 1/2	1 - 11 1/2	1 5/16	1.48	1.52	2.5	2.5	1.6
3107-20-16	1 1/4 - 11 1/2	1 - 11 1/2	1 5/8	1.75	1.55	2.5	2.5	1.3
3107-20-20	1 1/4 - 11 1/2	1 1/4 - 11 1/2	1 5/8	1.67	1.61	2.0	2.0	1.3
3107-24-24	1 1/2 - 11 1/2	1 1/2 - 11 1/2	1 7/8	1.77	1.77	2.0	2.0	1.3
3107-32-32	2 - 11 1/2	2 - 11 1/2	2 1/2	2.11	1.89	1.1	1.1	0.7

### 3207

45° Female Pipe Elbow  
NPTF / NPSM Swivel

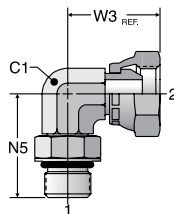


TUBE FITTING PART #	END SIZE		C1 HEX (in.)	N (in.)	W2 (in.)	Dynamic Pressure (x 1,000 PSI)		
	1 NPTF	2 NPSM				-S	-SS	-B
3207-4-4	1/4 - 18	1/4 - 18	3/4	0.91	0.94	5.0	5.0	3.3
3207-6-6	3/8 - 18	3/8 - 18	7/8	1.00	0.97	4.5	4.5	2.9
3207-8-8	1/2 - 14	1/2 - 14	1 1/16	1.01	1.12	3.0	3.0	1.9
3207-12-12	3/4 - 14	3/4 - 14	1 5/16	1.25	1.31	3.0	3.0	1.9
3207-16-16	1 - 11 1/2	1 - 11 1/2	1 5/8	1.44	1.55	1.8	1.8	1.1

### 2507

Straight Thread Elbow  
SAE-ORB / NPSM Swivel

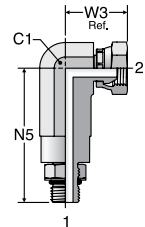
SAE 140257



TUBE FITTING PART #	END SIZE		C1 HEX (in.)	N5 (in.)	W3 (in.)	Dynamic Pressure (x 1,000 PSI)		
	1 UN/UNF-2A	2 NPSM				-S	-SS	-B
2507-4-4	7/16 - 20	1/4 - 18	7/16	1.03	0.97	6.0	6.0	3.3
2507-4-6	7/16 - 20	3/8 - 18	9/16	1.28	1.23	6.0	6.0	3.3
2507-6-4	9/16 - 18	1/4 - 18	9/16	1.25	1.06	6.0	6.0	3.3
2507-6-6	9/16 - 18	3/8 - 18	9/16	1.25	1.10	6.0	6.0	3.3
2507-6-8	9/16 - 18	1/2 - 14	3/4	1.41	1.29	5.0	5.0	3.3
2507-8-4	3/4 - 16	1/4 - 18	3/4	1.30	1.09	6.0	6.0	3.3
2507-8-6	3/4 - 16	3/8 - 18	3/4	1.45	1.19	6.0	6.0	3.3
2507-8-8	3/4 - 16	1/2 - 14	3/4	1.45	1.33	5.0	5.0	3.3
2507-8-12	3/4 - 16	3/4 - 14	3/4	1.62	1.65	3.0	3.0	1.9
2507-10-6	7/8 - 14	3/8 - 18	7/8	1.70	1.26	5.0	5.0	3.3
2507-10-8	7/8 - 14	1/2 - 14	7/8	1.70	1.40	5.0	5.0	3.3
2507-10-12	7/8 - 14	3/4 - 14	7/8	1.78	1.62	3.0	3.0	1.9
2507-12-8	1 1/16 - 12	1/2 - 14	1 1/16	1.94	1.50	5.0	5.0	3.3
2507-12-12	1 1/16 - 12	3/4 - 14	1 1/16	1.94	1.65	3.0	3.0	1.9
2507-12-16	1 1/16 - 12	1 - 11 1/2	1 3/16	2.08	1.91	2.5	2.5	1.6
2507-16-12	1 5/16 - 12	3/4 - 14	1 3/16	2.08	1.89	3.0	3.0	1.9
2507-16-16	1 5/16 - 12	1 - 11 1/2	1 5/16	2.05	1.91	2.5	2.5	1.6
2507-20-20	1 5/8 - 12	1 1/4 - 11 1/2	1 5/8	2.25	2.16	2.0	2.0	1.3
2507-24-24	1 7/8 - 12	1 1/2 - 11 1/2	1 7/8	2.39	2.31	1.1	1.1	0.7

### 5507

Long Straight Thread Elbow  
SAE-ORB / NPSM Swivel



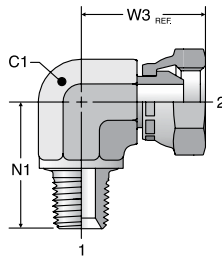
TUBE FITTING PART #	END SIZE		C1 HEX (in.)	N5 (in.)	W3 (in.)	Dynamic Pressure (x 1,000 PSI)		
	1 UN/UNF-2A	2 NPSM				-S	-SS	-B
5507-4-4	7/16 - 20	1/4 - 18	3/4	2.19	1.13	6.0	6.0	3.3
5507-6-6	9/16 - 18	3/8 - 18	7/8	2.59	1.20	6.0	6.0	3.3
5507-8-6	3/4 - 16	3/8 - 18	7/8	2.47	1.20	6.0	6.0	3.3

Dimensions and pressures for reference only, subject to change.

### 2107

Male Pipe Elbow  
NPTF / NPSM Swivel

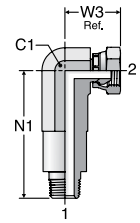
SAE 140230



TUBE FITTING PART #	END SIZE		C1 HEX (in.)	N1 (in.)	W3 (in.)	Dynamic Pressure (x 1,000 PSI)		
	1 NPTF	2 NPSM				-S	-SS	-B
	2107-2-2	1/8 - 27						
2107-2-4	1/8 - 27	1/4 - 18	7/16	1.00	0.97	6.0	6.0	3.3
2107-4-2	1/4 - 18	1/8 - 27	9/16	1.02	1.05	6.0	6.0	3.3
2107-4-4	1/4 - 18	1/4 - 18	9/16	1.09	1.06	6.0	6.0	3.3
2107-4-6	1/4 - 18	3/8 - 18	3/4	1.09	1.28	6.0	6.0	3.3
2107-6-4	3/8 - 18	1/4 - 18	3/4	1.22	1.17	6.0	6.0	3.3
2107-6-6	3/8 - 18	3/8 - 18	3/4	1.22	1.28	6.0	6.0	3.3
2107-6-8	3/8 - 18	1/2 - 14	3/4	1.22	1.33	5.0	5.0	3.3
2107-8-4	1/2 - 14	1/4 - 18	7/8	1.69	1.18	6.0	6.0	3.3
2107-8-6	1/2 - 14	3/8 - 18	7/8	1.47	1.35	6.0	6.0	3.3
2107-8-8	1/2 - 14	1/2 - 14	7/8	1.47	1.40	5.0	5.0	3.3
2107-8-12	1/2 - 14	3/4 - 14	1 1/16	1.47	1.65	3.0	3.0	1.9
2107-12-6	3/4 - 14	3/8 - 18	1 1/16	1.59	1.48	4.0	4.0	2.6
2107-12-8	3/4 - 14	1/2 - 14	1 1/16	1.59	1.53	4.0	4.0	2.6
2107-12-12	3/4 - 14	3/4 - 14	1 1/16	1.59	1.65	3.0	3.0	1.9
2107-12-16	3/4 - 14	1 - 11 1/2	1 3/16	2.19	1.72	2.5	2.5	1.6
2107-16-12	1 - 11 1/2	3/4 - 14	1 5/16	1.97	1.82	3.0	3.0	1.9
2107-16-16	1 - 11 1/2	1 - 11 1/2	1 5/16	1.97	1.91	2.5	2.5	1.6
2107-16-20	1 - 11 1/2	1 1/4 - 11 1/2	1 7/16	2.41	1.87	2.0	2.0	1.3
2107-20-16	1 1/4 - 11 1/2	1 - 11 1/2	1 5/8	2.62	1.98	2.5	2.5	1.6
2107-20-20	1 1/4 - 11 1/2	1 1/4 - 11 1/2	1 5/8	2.38	2.11	2.0	2.0	1.3
2107-24-24	1 1/2 - 11 1/2	1 1/2 - 11 1/2	1 7/8	2.64	2.31	2.0	2.0	1.0
2107-32-32	2 - 11 1/2	2 - 11 1/2	2 1/2	3.00	2.70	1.1	1.1	0.7

### 5607

Long Male Pipe Elbow  
NPTF / NPSM Swivel

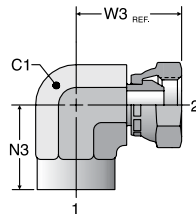


TUBE FITTING PART #	END SIZE		C1 HEX (in.)	N1 (in.)	W3 (in.)	Dynamic Pressure (x 1,000 PSI)		
	1 NPTF	2 NPSM				-S	-SS	-B
	5607-2-2	1/8 - 27						
5607-4-4	1/4 - 18	1/4 - 18	3/4	2.25	1.16	6.0	6.0	3.3
5607-6-6	3/8 - 18	3/8 - 18	7/8	2.76	1.20	6.0	6.0	3.3
5607-8-8	1/2 - 14	1/2 - 14	1 1/16	3.19	1.48	5.0	5.0	3.3
5607-12-12	3/4 - 14	3/4 - 14	1 5/16	3.66	1.69	3.0	3.0	1.9
5607-16-16	1 - 11 1/2	1 - 11 1/2	1 7/8	4.31	2.15	2.5	2.5	1.6

### 2207

Female Pipe Elbow  
NPTF / NPSM Swivel

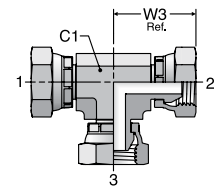
SAE 140231



TUBE FITTING PART #	END SIZE		C1 HEX (in.)	N3 (in.)	W3 (in.)	Dynamic Pressure (x 1,000 PSI)		
	1 NPTF	2 NPSM				-S	-SS	-B
	2207-2-2	1/8 - 27						
2207-4-4	1/4 - 18	1/4 - 18	3/4	0.88	1.17	5.0	5.0	3.3
2207-4-6	1/4 - 18	3/8 - 18	7/8	0.88	1.26	4.5	4.5	2.9
2207-6-6	3/8 - 18	3/8 - 18	7/8	1.02	1.26	4.5	4.5	2.9
2207-8-6	1/2 - 14	3/8 - 18	1 1/16	1.37	1.34	3.0	3.0	1.9
2207-8-8	1/2 - 14	1/2 - 14	1 1/16	1.23	1.53	3.0	3.0	1.9
2207-12-12	3/4 - 14	3/4 - 14	1 5/16	1.36	1.82	3.0	3.0	1.9
2207-16-16	1 - 11 1/2	1 - 11 1/2	1 5/8	1.62	2.10	1.8	1.8	1.1
2207-20-20	1 1/4 - 11 1/2	1 1/4 - 11 1/2	1 7/8	1.70	2.21	1.5	1.5	1.0
2207-24-24	1 1/2 - 11 1/2	1 1/2 - 11 1/2	2 1/2	2.08	2.83	1.5	1.5	1.0
2207-32-32	2 - 11 1/2	2 - 11 1/2	2 13/16	2.39	3.00	1.1	1.1	0.7

### 077T

NPSM Union Tee  
NPSM Swivel (all three ends)



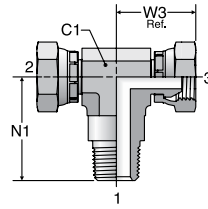
TUBE FITTING PART #	END SIZE			C1 HEX (in.)	W3 (in.)	Dynamic Pressure (x 1,000 PSI)		
	1 NPSM	2 NPSM	3 NPSM			-S	-SS	-B
	077T-2	1/8 - 27	1/8 - 27					
077T-4	1/4 - 18	1/4 - 18	1/4 - 18	9/16	1.06	6.0	7.2	3.3
077T-6	3/8 - 18	3/8 - 18	3/8 - 18	3/4	1.15	6.0	7.2	3.3
077T-8	1/2 - 14	1/2 - 14	1/2 - 14	3/4	1.29	5.0	6.0	3.3
077T-12	3/4 - 14	3/4 - 14	3/4 - 14	1 1/16	1.65	3.0	3.6	1.9

Dimensions and pressures for reference only, subject to change.



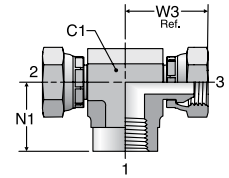
### 217T

Male Pipe Branch Tee  
NPTF / NPSM Swivel /  
NPSM Swivel



### 227T

Female Pipe Branch Tee  
NPTF / NPSM Swivel /  
NPSM Swivel



TUBE FITTING PART #	END SIZE			C1 HEX (in.)	N1 (in.)	W3 (in.)	Dynamic Pressure (x 1,000 PSI)		
	1	2	3				-S	-SS	-B
	NPTF	NPSM	NPSM						
217T-2-2	1/8 - 27	1/8 - 27	1/8 - 27	9/16	0.97	0.92	6.0	6.0	3.3
217T-4-4	1/4 - 18	1/4 - 18	1/4 - 18	9/16	1.19	1.03	6.0	6.0	3.3
217T-6-6	3/8 - 18	3/8 - 18	3/8 - 18	3/4	1.50	1.15	6.0	6.0	3.3
217T-8-6	1/2 - 14	3/8 - 18	1/2 - 14	3/4	1.69	1.21	6.0	6.0	3.3
217T-8-8	1/2 - 14	1/2 - 14	1/2 - 14	3/4	1.81	1.35	5.0	5.0	3.3
217T-12-12	3/4 - 14	3/4 - 14	3/4 - 14	1 1/16	2.00	1.60	3.0	3.0	1.9
217T-16-16	1 - 11 1/2	1 - 11 1/2	1 - 11 1/2	1 1/16	2.37	1.86	2.5	2.5	1.6

TUBE FITTING PART #	END SIZE			C1 HEX (in.)	N1 (in.)	W3 (in.)	Dynamic Pressure (x 1,000 PSI)		
	1	2	3				-S	-SS	-B
	NPTF	NPSM	NPSM						
227T-4-4	1/4 - 18	1/4 - 18	1/4 - 18	3/4	0.94	1.13	5.0	5.0	3.2
227T-6-6	3/8 - 18	3/8 - 18	3/8 - 18	7/8	1.00	1.20	4.5	4.5	2.9
227T-8-8	1/2 - 14	1/2 - 14	1/2 - 14	1 1/16	1.17	1.46	3.0	3.0	1.9
227T-12-12	3/4 - 14	3/4 - 14	3/4 - 14	1 3/16	1.44	1.60	3.0	3.0	1.9

Dimensions and pressures for reference only, subject to change.