

Typical Application: Pressure hydraulic systems.

Pressure: See chart on this page for pressure ratings.

Sealing Method: Metal to metal, 30° cone-NPSM thread on swivel end.

Material: Carbon steel, AISI/SAE 12L14.

Plating: Zinc, yellow dichromate finish.

Label Set: FS-100 (Adhesive)

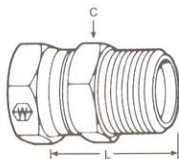
9000 Pipe Fittings

Pipe Fittings 9000 Series Pressure Rating Chart

Connection Type	End Size									
	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	
Male Pipe (NPTF)*	5000	5000	4000	3000	2500	2000	1500	1000	1000	
Female Pipe (NPTF)*	5000	5000	4000	3000	2500	2000	1500	1500	1000	

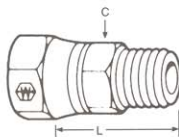
* Pressure ratings shown are the pressure ratings for the fitting and are not necessarily the pressure ratings applicable in an assembly with hydraulic hose. The applicable pressure rating for an assembly with hydraulic hose is the lower value specified for the hose and the fitting unless otherwise agreed to by the supplier and user.

Female Pipe Swivel to Male Pipe (Ref. SAE No. 140130)



NPSM Swivel Nut	Male Pipe Thread	Catalog Number	Hex C	L
1/8-27	1/8-27	9205x2x2	9/16	.900
1/8-27	1/4-18	9205x2x4	11/16	1.187
1/4-18	1/8-27	9205x4x2	11/16	0.940
1/4-18	1/4-18	9205x4x4	11/16	1.200
1/4-18	3/8-18	9205x4x6	11/16	1.200
1/4-18	1/2-14	9205x4x8	7/8	1.500
3/8-18	1/4-18	9205x6x4	5/8	1.210
3/8-18	3/8-18	9205x6x6	3/4	1.240
3/8-18	1/2-14	9205x6x8	7/8	1.540
1/2-14	3/8-18	9205x8x6	7/8	1.330
1/2-14	1/2-14	9205x8x8	1	1.640
1/2-14	3/4-14	9205x8x12	1-1/4	1.620
3/4-14	1/2-14	9205x12x8	1	1.720
3/4-14	3/4-14	9205x12x12	1-1/4	1.680
3/4-14	1-11-1/2	9205x12x16	1-1/2	1.984
1-11-1/2	3/4-14	9205x16x12	1-1/2	1.800
1-11-1/2	1-11-1/2	9205x16x16	1-1/2	2.010
1-11-1/2	1-1/4-11-1/2	9205x16x20	1-11/16	2.080
1-1/4-11-1/2	1-11-1/2	9205x20x16	1-7/8	2.100
1-1/4-11-1/2	1-1/4-11-1/2	9205x20x20	1-7/8	2.140
1-1/4-11-1/2	1-1/2-11-1/2	9205x20x24	2-1/8	2.187
1-1/2-11-1/2	1-1/4-11-1/2	9205x24x20	2-1/8	2.093
1-1/2-11-1/2	1-1/2-11-1/2	9205x24x24	2-1/8	2.270
2-11-1/2	2-11-1/2	9205x32x32	2-5/8	2.420

Female JIC 37° Swivel to Male Pipe Adapter



Tube O.D.	Male Pipe Thread	Catalog Number	Hex C	L
1/4	1/4	9100x4x4	9/16	1.130
5/16	1/4	9100x5x4	11/16	1.170
3/8	1/4	9100x6x4	11/16	1.290
3/8	3/8	9100x6x6	11/16	1.290
1/2	3/8	9100x8x6	7/8	1.430
1/2	1/2	9100x8x8	7/8	1.610
5/8	3/8	9100x10x6	1	1.400
5/8	1/2	9100x10x8	1	1.600
3/4	1/2	9100x12x8	1-1/8	1.650
3/4	3/4	9100x12x12	1-1/8	1.650
1	3/4	9100x16x12	1-3/8	1.750
1	1	9100x16x16	1-3/8	1.940
1-1/4	1-1/4	9100x20x20	1-7/8	2.090

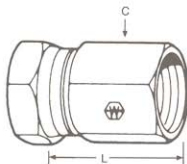
NOTE: C and L dimensions subject to change.

NPSM Female Swivel Adapters

Steel
Fittings

Female Pipe Swivel to Female Pipe Straight

(Ref. SAE No. 140131)



NPSM Swivel Nut	Fem. Pipe Thread	Catalog Number	Hex C	L
1/8-27	1/8-27	9255x2x2	9/16	.880
1/4-18	1/4-18	9255x4x4	11/16	1.170
1/4-18	3/8-18	9255x4x6	7/8	1.312
3/8-18	1/4-18	9255x6x4	11/16	1.250
3/8-18	3/8-18	9255x6x6	7/8	1.310
3/8-18	1/2-14	9255x6x8	1	1.453
1/2-14	3/8-18	9255x8x6	1	1.500
1/2-14	1/2-14	9255x8x8	1	1.500
3/4-14	3/4-14	9255x12x12	1-1/4	1.620
3/4-14	1-11-1/2	9255x12x16	1-1/2	1.906
1-11-1/2	1-11-1/2	9255x16x16	1-1/2	2.000
1-1/4-11-1/2	1-1/4-11-1/2	9255x20x20	1-7/8	2.000
1-1/2-11-1/2	1-1/2-11-1/2	9255x24x24	2-1/8	2.000
2-11-1/2	2-11-1/2	9255x32x32	2-5/8	2.120

Male Straight Thread to Female Pipe Swivel

(Ref. SAE No. 140157)



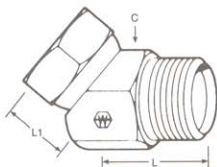
Straight Thread	NPSM Swivel Nut	Catalog Number	Hex C	L
7/16-20	1/4-18	9315x4x4	9/16	.970
7/16-20	3/8-18	9315x4x6	5/8	1.060
1/2-20	1/4-18	9315x5x4	5/8	1.109
9/16-18	1/4-18	9315x6x4	11/16	1.171
9/16-18	3/8-18	9315x6x6	11/16	1.090
9/16-18	1/2-14	9315x6x8	13/16	1.210
3/4-16	1/4-18	9315x8x4	7/8	1.234
3/4-16	3/8-18	9315x8x6	7/8	1.200
3/4-16	1/2-14	9315x8x8	7/8	1.260
3/4-16	3/4-14	9315x8x12	1	1.406
7/8-14	3/8-18	9315x10x6	1	1.375
7/8-14	1/2-14	9315x10x8	1	1.400
7/8-14	3/4-14	9315x10x12	1	1.546
1-1/16-12	1/2-14	9315x12x8	1-1/4	1.453
1-1/16-12	3/4-14	9315x12x12	1-1/4	1.600
1-3/16-12	3/4-14	9315x14x12	1-3/8	1.703
1-5/16-12	3/4-14	9315x16x12	1-1/2	1.734
1-5/16-12	1-11-1/2	9315x16x16	1-1/2	1.710
1-5/8-12	1-11-1/2	9315x20x16	1-7/8	1.828
1-5/8-12	1-1/4-11-1/2	9315x20x20	1-7/8	1.890
1-7/8-12	1-1/2-11-1/2	9315x24x24	2-1/8	1.953
2-1/2-12	2-11-1/2	9315x32x32	2-3/4	2.156

Replacement O-rings page 194.

NOTE: C and L dimensions subject to change.

45° Elbow - Female Pipe Swivel to Male Pipe

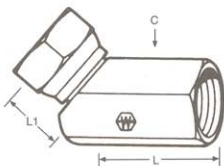
(Ref. SAE No. 140330)



NPSM Swivel Nut	Male Pipe Thread	Catalog Number	Hex C	L	L1
1/8-27	1/8-27	9355x2x2	9/16	.620	.500
1/4-18	1/8-27	9355x4x2	11/16	.660	.470
1/4-18	1/4-18	9355x4x4	11/16	1.020	.670
1/4-18	3/8-18	9355x4x6	7/8	1.060	.620
1/4-18	1/2-14	9355x4x8	1	1.380	.730
3/8-18	1/4-18	9355x6x4	7/8	1.000	.750
3/8-18	3/8-18	9355x6x6	7/8	1.060	.750
3/8-18	1/2-14	9355x6x8	1	1.060	.750
1/2-14	3/8-18	9355x8x6	1	1.310	.910
1/2-14	1/2-14	9355x8x8	1	1.310	.910
1/2-14	3/4-14	9355x8x12	1-1/4	1.31	.910
3/4-14	1/2-14	9355x12x8	1-1/4	1.500	1.000
3/4-14	3/4-14	9355x12x12	1-1/4	1.500	1.000
3/4-14	1-11-1/2	9355x12x16	1-1/2	1.500	1.030
1-11-1/2	3/4-14	9355x16x12	1-1/2	1.310	1.050
1-11-1/2	1-11-1/2	9355x16x16	1-1/2	1.500	1.060
1-11-1/2	1-1/4-11-1/2	9355x16x20	1-7/8	1.800	1.300
1-1/4-11-1/2	1-1/4-11-1/2	9355x20x20	1-7/8	1.750	1.250
1-1/2-11-1/2	1-1/2-11-1/2	9355x24x24	2-1/8	1.940	1.380
2-11-1/2	2-11-1/2	9355x32x32	2-5/8	2.000	1.500

45° Elbow - Female Pipe Swivel to Female Pipe

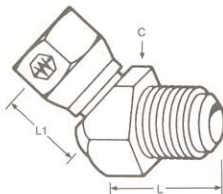
(Ref. SAE No. 140331)



NPSM Swivel Nut	Fem. Pipe Thread	Catalog Number	Hex C	L	L1
1/8-27	1/8-27	9385x2x2	1/2	.620	.500
1/4-18	1/4-18	9385x4x4	11/16	1.020	.670
1/4-18	3/8-18	9385x4x6	7/8	1.062	.625
3/8-18	3/8-18	9385x6x6	7/8	1.060	.750
3/8-18	1/2-14	9385x6x8	1	1.310	.750
1/2-14	1/2-14	9385x8x8	1	1.310	1.270
3/4-14	3/4-14	9385x12x12	1-1/4	1.500	1.000
3/4-14	1-11-1/2	9385x12x16	1-1/2	1.500	1.031
1-11-1/2	1-11-1/2	9385x16x16	1-1/2	1.500	1.000
1-1/4-11-1/2	1-1/4-11-1/2	9385x20x20	1-7/8	1.790	1.250
1-1/2-11-1/2	1-1/2-11-1/2	9385x24x24	2-1/8	1.940	1.380
2-11-1/2	2-11-1/2	9385x32x32	2-5/8	2.000	1.500

45° Elbow - Female SAE 45° Flare Swivel to Male SAE

(Steel)



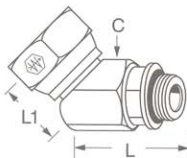
Tube O.D.	Catalog Number	Hex C	L	L1
3/8	9154x6x6	3/4	1.400	.429
1/2	9154x8x8	1	1.760	.598
5/8	9154x10x10	1-1/4	1.920	.645

NOTE: C and L dimensions subject to change.

NPSM Female Swivel Adapters

Steel Fittings

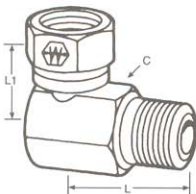
45° Elbow - Male Straight Thread to Female Pipe Swivel (Ref. SAE No. 140357)



Replacement O-rings page 194.

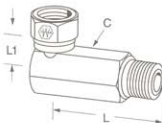
Straight Thread	NPSM Swivel Nut	Catalog Number	Hex		
			C	L	L1
7/16-20	1/4-18	9365x4x4	11/16	1.062	.656
7/16-20	3/8-18	9365x4x6	7/8	1.062	.656
9/16-18	3/8-18	9365x6x6	7/8	1.062	.703
9/16-18	1/2-14	9365x6x8	1	1.062	.812
3/4-16	3/8-18	9365x8x6	1	1.125	.875
3/4-16	1/2-14	9365x8x8	1	1.125	.812
7/8-14	1/2-14	9365x10x8	1	1.500	.781
1-1/16-12	3/4-14	9365x12x12	1-1/4	1.500	1.046
1-5/16-12	1-11-12	9365x16x16	1-1/2	1.625	1.062
1-5/8-12	1-1/4-11-1/2	9365x20x20	1-7/8	1.281	1.171
1-7/8-12	1-1/2-11-1/2	9365x24x24	2-1/8	1.609	1.343

90° Elbow - Female Pipe Swivel to Male Pipe (Ref. SAE No. 140230)



NPSM Swivel Nut	Male Pipe Thread	Catalog Number	Hex		
			C	L	L1
1/8-27	1/8-27	9405x2x2	9/16	.720	.700
1/8-27	1/4-18	9405x2x4	11/16	1.190	.750
1/4-18	1/8-27	9405x4x2	11/16	1.060	.780
1/4-18	1/4-18	9405x4x4	11/16	.980	.750
1/4-18	3/8-18	9405x4x6	11/16	1.500	.810
1/4-18	1/2-14	9405x4x8	1	1.500	.940
3/8-18	1/4-18	9405x6x4	13/16	1.500	.900
3/8-18	3/8-18	9405x6x6	7/8	1.500	.900
3/8-18	1/2-14	9405x6x8	1	1.350	1.020
3/8-18	3/4-14	9405x6x12	1-1/4	2.000	1.120
1/2-14	3/8-18	9405x8x6	1	1.280	1.020
1/2-14	1/2-14	9405x8x8	1	1.810	1.020
1/2-14	3/4-14	9405x8x12	1-1/4	1.490	1.140
1/2-14	1-11-1/2	9405x8x16	1-1/2	2.380	1.250
3/4-14	3/4-14	9405x12x12	1-1/4	1.490	1.200
3/4-14	1-11-1/2	9405x12x16	1-1/2	2.380	1.380
1-11-1/2	3/4-14	9405x16x12	1-1/2	2.190	1.440
1-11-1/2	1-11-1/2	9405x16x16	1-1/2	2.380	1.440
1-11-1/2	1-1/4-11-1/2	9405x16x20	1-7/8	1.578	2.620
1-1/4-11-1/2	1-11 1/2	9405x20x16	1-7/8	2.530	1.660
1-1/4-11-1/2	1-1/4-11-1/2	9405x20x20	1-7/8	2.070	1.630
1-1/4-11-1/2	1-1/2-11-1/2	9405x20x24	2-1/8	2.810	1.780
1-1/2-11-1/2	1-1/2-11-1/2	9405x24x24	2-1/8	2.810	1.750
2-11-1/2	2-11-1/2	9405x32x32	2-5/8	3.120	2.310

90° Elbow Long - Female Pipe Swivel to Male Pipe

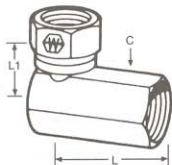


NPSM Swivel Nut	Male Pipe Thread	Catalog Number	Hex		
			C	L	L1
1/8-27	1/8-27	9405X2X2LL	9/16	1.90	.70
1/4-18	1/4-18	9405X4X4LL	11/16	2.57	.75
3/8-18	3/8-18	9405X6X6LL	13/16	3.16	.90
1/2-14	1/2-14	9405X8X8LL	1	3.67	1.02
3/4-14	3/4-14	9405X12X12LL	1-1/4	4.29	1.20
1-11-1/2	1-11-1/2	9405X16X16LL	1-1/2	5.06	1.46

NOTE: C and L dimensions subject to change.

90° Elbow - Female Pipe Swivel to
Female Pipe

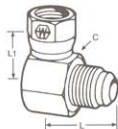
(Ref. SAE No. 140231)



NPSM Swivel Nut	Fem. Pipe Thread	Catalog Number	Hex C	L	L1
1/8-27	1/8-27	9455x2x2	9/16	.640	.700
1/4-18	1/4-18	9455x4x4	11/16	.870	.750
1/4-18	3/8-18	9455x4x6	13/16	1.000	.810
1/4-18	1/2-14	9455x4x8	1	1.250	.940
3/8-18	1/4-18	9455x6x4	13/16	1.000	.900
3/8-18	3/8-18	9455x6x6	13/16	1.000	.900
3/8-18	1/2-14	9455x6x8	1	1.250	1.000
1/2-14	3/8-18	9455x8x6	1	1.220	1.020
1/2-14	1/2-14	9455x8x8	1	1.250	1.000
1/2-14	3/4-14	9455x8x12	1-1/4	1.440	1.120
3/4-14	1/2-14	9455x12x8	1-1/4	1.440	1.250
3/4-14	3/4-14	9455x12x12	1-1/4	1.490	1.200
3/4-14	1-11/12	9455x12x16	1-1/2	1.750	1.380
1-11/12	3/4-14	9455x16x12	1-1/2	1.750	1.380
1-11/12	1-11/12	9455x16x16	1-1/2	1.690	1.460
1-1/4-11/12	1-1/4-11/12	9455x20x20	1-7/8	1.850	1.630
1-1/2-11/12	1-1/2-11/12	9455x24x24	2-1/8	2.250	1.750
2-11/12	2-11/12	9455x32x32	2-5/8	2.500	2.310

90° Elbow - SAE 45° Female Swivel to
Male SAE 45°

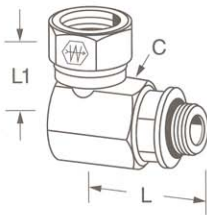
(Steel)



Tube O.D.	Catalog Number	Hex C	L	L1
3/8	9151x6x6	3/4	1.00	.69
1/2	9151x8x8	1	1.25	.99
5/8	9151x10x10	1-1/4	1.44	1.09

90° Elbow - Male Straight Thread to
Female Pipe Swivel

(Ref. SAE No. 140257)



Straight Thread	NPSM Swivel Nut	Catalog Number	Hex C	L	L1
7/16-20	1/4-18	9515x4x4	11/16	1.090	.781
7/16-20	3/8-18	9515x4x6	7/8	1.100	.900
9/16-18	1/4-18	9515x6x4	11/16	1.187	.781
9/16-18	3/8-18	9515x6x6	7/8	1.296	.937
9/16-18	1/2-14	9515x6x8	1	1.484	1.000
3/4-16	3/8-18	9515x8x6	1	1.515	1.000
3/4-16	1/2-14	9515x8x8	1	1.515	1.000
3/4-16	3/4-14	9515x8x12	1-1/4	1.656	1.250
7/8-14	3/8-18	9515x10x6	1	1.640	1.000
7/8-14	1/2-14	9515x10x8	1	1.640	1.025
7/8-14	3/4-14	9515x10x12	1-1/4	1.781	1.250
1-1/16-12	1/2-14	9515x12x8	1-1/4	1.921	1.125
1-1/16-12	3/4-14	9515x12x12	1-1/4	1.921	1.250
1-3/16-12	3/4-14	9515x14x12	1-1/4	1.921	1.250
1-5/16-12	3/4-14	9515x16x12	1-1/2	2.093	1.375
1-5/16-12	1-11/12	9515x16x16	1-1/2	2.093	1.390
1-5/8-12	3/4-14	9515x20x12	1-7/8	2.484	1.562
1-5/8-12	1-1/4-11/12	9515x20x20	1-7/8	2.484	1.656
1-7/8-12	1-1/2-11/12	9515x24x24	2-1/8	2.609	1.734
2-1/2-12	2-11/12	9515x32x32	2-5/8	3.250	2.312

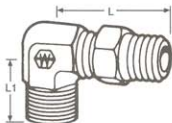
Replacement O-rings page 194.

NOTE: C and L dimensions subject to change.

NPSM Female Swivel Adapters

Steel
Fittings

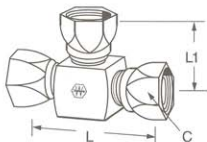
90° Elbow - Male Pipe Swivel to Male Pipe Rigid



Not for use with liquids over 212°F.

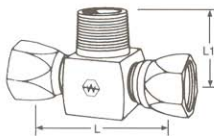
Male Pipe Swivel	Male Pipe	Catalog Number	Hex C	L	L1
1/4-18	1/4-18	9435x4x4	9/16	1.870	1.060
3/8-18	3/8-18	9435x6x6	3/4	1.950	1.220
1/2-14	1/2-14	9435x8x8	7/8	2.250	1.470

Female Pipe Swivel Tee



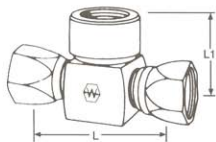
NPSM Swivel Nut	Catalog Number	Across Flats	L	L1	Hex C
1/8-27	9705x2x2x2	1/2	1.406	.660	9/16
1/4-18	9705x4x4x4	11/16	1.720	.780	11/16
3/8-18	9705x6x6x6	7/8	1.720	.940	7/8
1/2-14	9705x8x8x8	1	2.200	1.000	1
3/4-14	9705x12x12x12	1-1/4	2.780	1.250	1-1/4
1-11-1/2	9705x16x16x16	1-1/2	3.060	1.390	1-1/2
1-1/4-11-1/2	9705x20x20x20	1-7/8	3.320	1.660	1-7/8

Female Pipe Swivel to Male Pipe Branch Tee



NPSM Swivel Nut	Male Pipe	Catalog Number	Across Flats	L	L1
1/8-27	1/8-27	9406x2x2x2	9/16	1.380	.940
1/4-18	1/4-18	9406x4x4x4	11/16	1.500	1.190
1/4-18	3/8-18	9406x4x4x6	7/8	1.744	1.500
1/4-18	1/2-14	9406x4x4x8	7/8	1.880	1.750
3/8-18	3/8-18	9406x6x6x6	1	1.880	1.750
3/8-18	1/2-14	9406x6x6x8	1	2.000	1.750
1/2-14	1/2-14	9406x8x8x8	1	2.000	1.810
1/2-14	3/4-14	9406x8x8x12	1-1/4	2.250	2.000
3/4-14	3/4-14	9406x12x12x12	1-1/4	2.380	2.000
3/4-14	1-11-1/2	9406x12x12x16	1-1/2	2.756	2.375
1-11-1/2	3/4-14	9406x16x16x12	1-1/2	2.780	2.187
1-11-1/2	1-11-1/2	9406x16x16x16	1-1/2	2.880	2.380
1-1/4-11-1/2	1-1/4-11-1/2	9406x20x20x20	1-7/8	3.240	2.620
1-1/2-11-1/2	1-1/2-11-1/2	9406x24x24x24	2-1/8	3.500	2.810

Female Pipe Swivel to Female Pipe Branch Tee



NPSM Swivel Nut	Female Pipe	Catalog Number	Across Flats	L	L1
1/8-27	1/8-27	9456x2x2x2	1/2	1.312	.687
1/4-18	1/4-18	9456x4x4x4	11/16	1.625	.937
1/4-18	3/8-18	9456x4x4x6	7/8	1.744	1.062
3/8-18	3/8-18	9456x6x6x6	7/8	1.874	1.062
3/8-18	1/2-14	9456x6x6x8	1	2.000	1.250
1/2-14	1/2-14	9456x8x8x8	1	2.000	1.250
1/2-14	3/4-14	9456x8x8x12	1-1/4	2.250	1.437
3/4-14	3/4-14	9456x12x12x12	1-1/4	2.500	1.437
3/4-14	1-11-1/2	9456x12x12x16	1-1/2	2.750	1.750
1-11-1/2	1-11-1/2	9456x16x16x16	1-1/2	2.780	1.750
1-1/4-11-1/2	1-1/4-11-1/2	9456x20x20x20	1-7/8	3.312	2.000

NOTE: C and L dimensions subject to change.

mm-in