

Steel Fittings

Swivel Adapters

9000 Pipe Fittings

Typical Application:
Pressure hydraulic systems.

Material: Carbon steel, AISI/
SAE 12L14.

Pressure: See chart.

Plating: Zinc, yellow dichro-
mate finish.

Sealing Method: Metal
to metal, 30° cone-NPSM
thread on pipe swivel
end. Sealing methods vary
depending on swivel adapter
type.

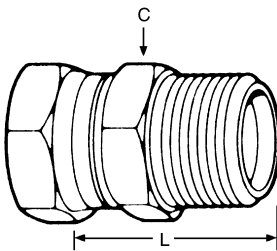
Pipe Fittings 9000 Series Pressure Rating Chart

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)

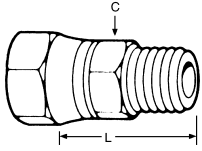


NPSM SWIVEL NUT	MALE PIPE THREAD	CATALOG NUMBER	HEX C	L
1/8-27	1/8-27	9205x2x2	9/16	.900
1/8-27	1/4-18	9205x2x4	11/16	1.187
1/4-18	1/8-27	9205x4x2	11/16	0.940
1/4-18	1/4-18	9205x4x4	11/16	1.200
1/4-18	3/8-18	9205x4x6	11/16	1.200
1/4-18	1/2-14	9205x4x8	7/8	1.500
3/8-18	1/4-18	9205x6x4	5/8	1.210
3/8-18	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

Steel Fittings

Swivel Adapters

Female 37° JIC Swivel to Male Pipe Adapter

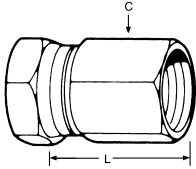


Note: C and L dimensions subject to change.

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

Female Pipe Swivel to Female Pipe Straight

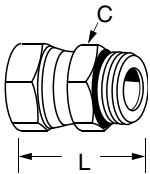
(Ref. SAE No. 140131)



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 O-Ring to Female Pipe Swivel

(Ref. SAE No. 140157)



Replacement O-rings page 254.

Note: C and L dimensions subject to change.

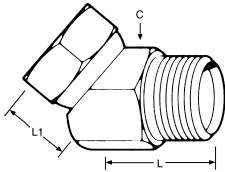
STRAIGHT THREAD	NPSM SWIVEL NUT	CATALOG NUMBER	HEX C	L
7/16-20	1/4-18	9315x4x4	9/16	.970
7/16-20	3/8-18	9315x4x6	5/8	1.060
1/2-20	1/4-18	9315x5x4	5/8	1.109
9/16-18	1/4-18	9315x6x4	11/16	1.171
9/16-18	3/8-18	9315x6x6	11/16	1.090
9/16-18	1/2-14	9315x6x8	13/16	1.210
3/4-16	1/4-18	9315x8x4	7/8	1.234
3/4-16	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
3/4-14	3/8-18	9315x10x6	1	1.375
3/4-14	1/2-14	9315x10x8	1	1.400
3/4-14	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

Steel Fittings

Swivel Adapters

45° Swivel Elbow Female Pipe Swivel to Male Pipe

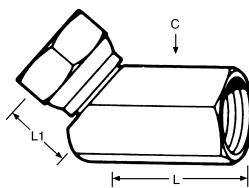
(Ref. SAE No. 140330)



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	.500

45° Swivel Elbow Female Pipe Swivel to Female Pipe

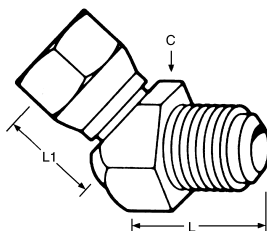
(Ref. SAE No. 140331)



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° Swivel Elbow Female 45° SAE to Male 45° 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

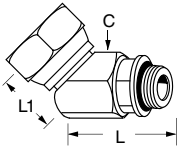
Note: C and L dimensions subject to change.

Steel Fittings

Swivel Adapters

45° Swivel Elbow Male Straight Thread O-Ring to Female Pipe Swivel 45° Elbow

(Ref. SAE No. 140357)

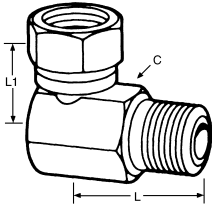


Replacement O-rings page 254.

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	3/8-16	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 11-1/2	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)



Note: C and L dimensions subject to change.

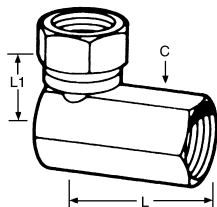
NPSM SWIVEL NUT	MALE PIPE THREAD	CATALOG NUMBER	HEX C	L	L1
1/8-27	1/8-27	9405x2x2	9/16	.720	.700
1/8-27	1/4-18	9405x2x4	11/16	1.190	.750
1/4-18	1/8-27	9405x4x2	11/16	1.060	.780
1/4-18	1/4-18	9405x4x4	11/16	.980	.750
1/4-18	3/8-18	9405x4x6	11/16	1.090	.810
1/4-18	1/2-14	9405x4x8	1	1.810	.940
3/8-18	1/4-18	9405x6x4	13/16	1.090	.900
3/8-18	3/8-18	9405x6x6	7/8	1.090	.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	1.350	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

Steel Fittings

Swivel Adapters

90° Elbow Female Pipe Swivel to Female Pipe

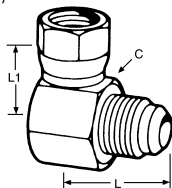
(Ref. SAE No. 140231)



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	1-11-1/2	9455x12x16	1-1/2	1.750	1.380
1-11-1/2	3/4-14	9455x16x12	1-1/2	1.750	1.380
1-11-1/2	1-11-1/2	9455x16x16	1-1/2	1.690	1.460
1-1/4-11-1/2	1-1/4-11-1/2	9455x20x20	1-7/8	1.850	1.630
1-1/2-11-1/2	1-1/2-11-1/2	9455x24x24	2-1/8	2.250	1.750
2-11-1/2	2-11 1/2	9455x32x32	2-5/8	2.500	2.310

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

(Steel)



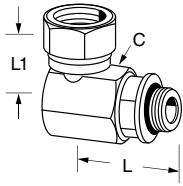
TUBE O.D.	CATALOG NUMBER	HEX C	L	L1
3/8	9151x6x6	3/4	1.00	.69
1/2	9151x8x8	1	1.25	.99
5/8	9151x10x10	1-1/4	1.44	1.09

Steel Fittings

Swivel Adapters

90° Elbow Male Straight Thread O-Ring to Female Pipe Swivel

(Ref. SAE No. 140257)

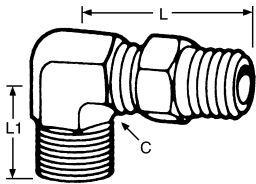


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Note: C and L dimensions subject to change.

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	1-11-1/2	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	1-1/4-11-1/2	9515x20x20	1-7/8	2.484	1.656
1-7/8-12	1-1/2-11-1/2	9515x24x24	2-1/8	2.609	1.734
2-1/2-12	2-11-1/2	9515x32x32	2-5/8	3.250	2.312

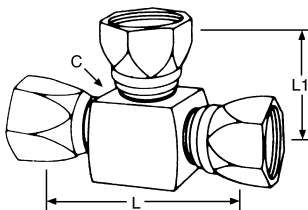
90° Elbow Male Pipe Swivel to Male Pipe Rigid



Not for use with liquids over 212°F.

MALE PIPE SWIVEL	MALE PIPE RIGID	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

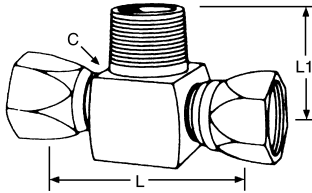


NPSM SWIVEL	CATALOG NUMBER	HEX C	L	L1
1/8-27	9705x2x2x2	1/2	1.406	.660
1/4-18	9705x4x4x4	11/16	1.720	.780
3/8-18	9705x6x6x6	7/8	1.720	.940
1/2-14	9705x8x8x8	1	2.200	1.000
3/4-14	9705x12x12x12	1-1/4	2.780	1.250
1-11-1/2	9705x16x16x16	1-1/2	3.060	1.390
1 1/4-11 1/2	9705x20x20x20	1-7/8	3.320	1.660

Steel Fittings

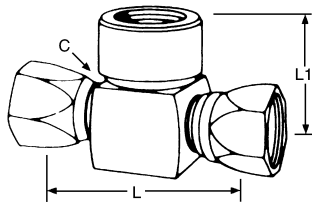
Swivel Adapters

Female Pipe Swivel to Male Pipe Branch Tee



SWIVEL THREAD	NPSM MALE PIPE	CATALOG NUMBER	HEX C	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	1.500
3/8-18	3/8-18	9406x6x6x6	1	1.874	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 THREAD	FEMALE PIPE	CATALOG NUMBER	HEX C	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	.937
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.