



# ORFS FITTINGS

*O-RING FACE SEAL FITTINGS & ACCESSORIES*





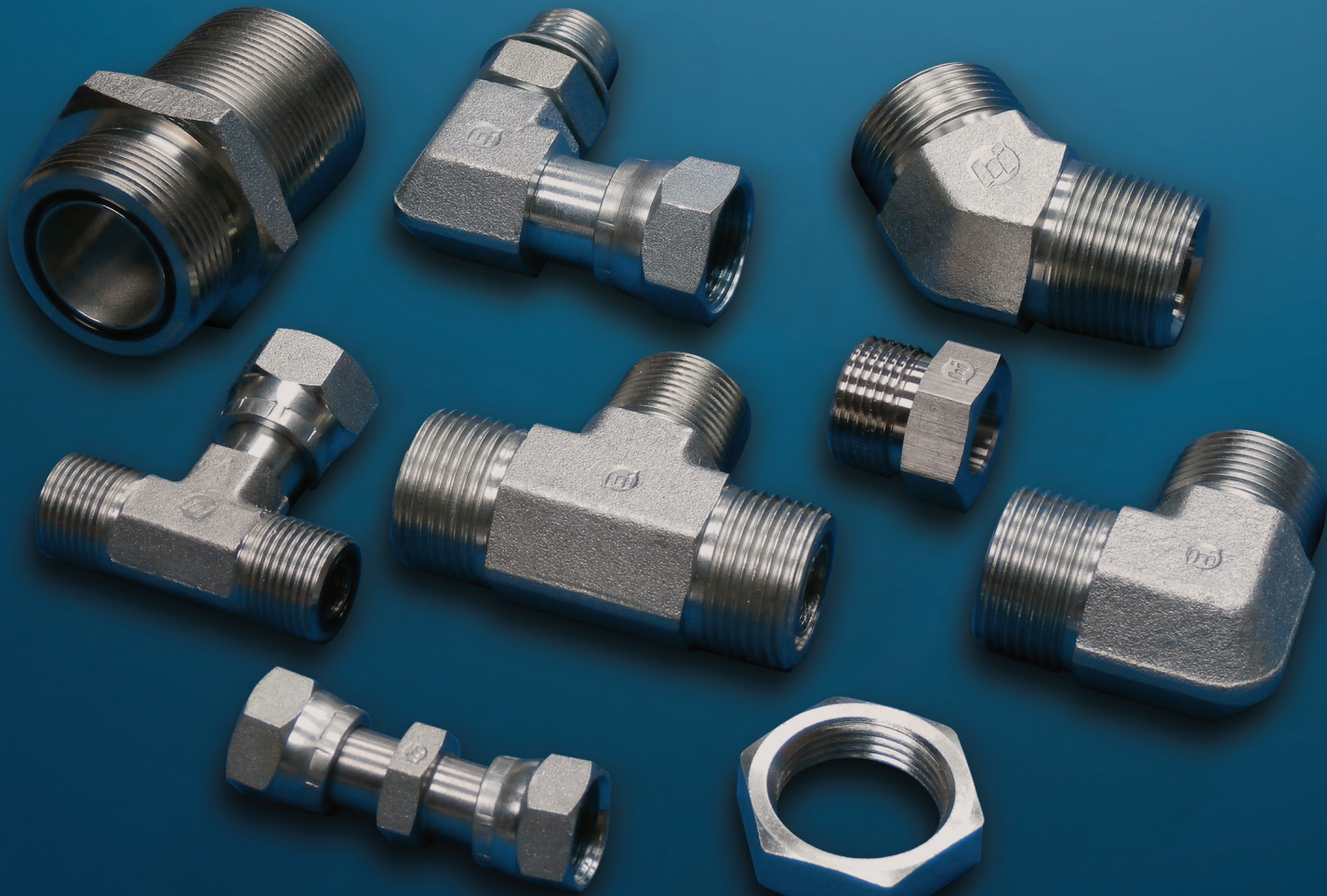
# O-RING FACE SEAL

As the name implies, O-ring Face Seal (ORFS) fittings incorporate an O-ring at the face of the fitting and are designed to eliminate leaks in high pressure hydraulic systems. These elastomeric seals provide a leak-proof, drop-in replacement for SAE 37° flared tube fittings, literally eliminating hydraulic leaks when used properly. When the connection is tightened the seal compresses creating a metal-to-metal seal with a leak barrier provided by the O-ring. The flat face sleeve also eliminates twisting of the tube and provides support during assembly.

**Contact a Brennan representative to learn more: (888) 331-1523**

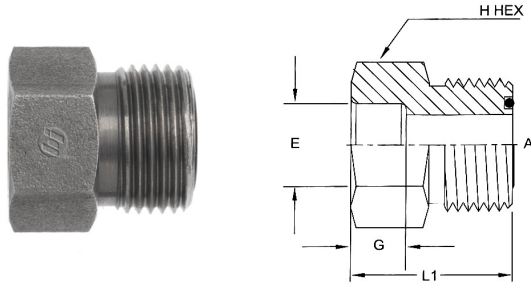
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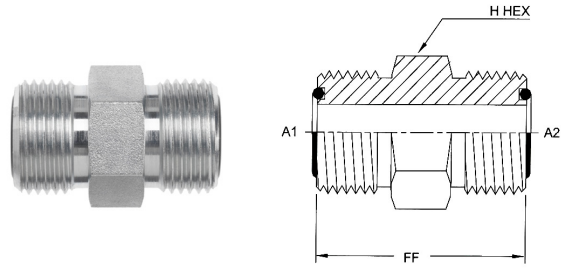
# STRAIGHTS

## FS0403 BORE-MFS STRAIGHT



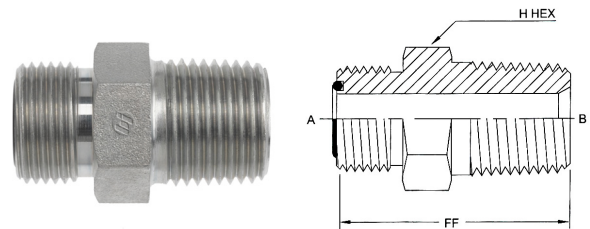
PART NO.	E* BORE	A THREAD	G* DEPTH	L1 LGTH	H HEX
FS0403-04-04	0.256	9/16-18	0.330	0.86	0.625
FS0403-04-06	0.256	11/16-16	0.330	0.900	0.750
FS0403-06-04	0.381	9/16-18	0.330	0.86	0.750
FS0403-06-06	0.381	11/16-16	0.330	0.900	0.750
FS0403-06-08	0.381	13/16-16	0.330	0.970	0.875
FS0403-08-06	0.506	11/16-16	0.330	0.900	0.875
FS0403-08-08	0.506	13/16-16	0.330	0.970	0.875
FS0403-08-10	0.506	1-14	0.330	1.070	1.062
FS0403-08-12	0.506	1-3/16-12	0.330	1.16	1.250
FS0403-10-08	0.631	13/16-16	0.330	0.970	1.062
FS0403-10-10	0.631	1-14	0.330	1.07	1.062
FS0403-10-12	0.631	1-3/16-12	0.330	1.160	1.250
FS0403-12-08	0.757	13/16-16	0.490	1.130	1.250
FS0403-12-10	0.757	1-14	0.490	1.23	1.250
FS0403-12-12	0.757	1-3/16-12	0.490	1.32	1.250
FS0403-12-16	0.757	1-7/16-12	0.490	1.460	1.500
FS0403-16-12	1.007	1-3/16-12	0.550	1.380	1.500
FS0403-16-16	1.007	1-7/16-12	0.550	1.520	1.500
FS0403-16-20	1.007	1-11/16-12	0.550	1.52	1.750
FS0403-20-16	1.258	1-7/16-12	0.550	1.520	1.750
FS0403-20-20	1.258	1-11/16-12	0.550	1.520	1.750
FS0403-24-20	1.508	1-11/16-12	0.550	1.520	2.000
FS0403-24-24	1.508	2-12	0.550	1.52	2.125

## FS2403 MFS-MFS STRAIGHT



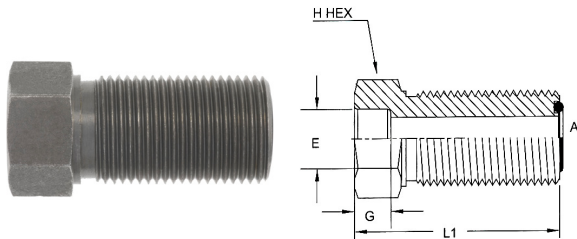
PART NO.	A1 TUBE	A2 TUBE O.D.	A1 THREAD	A2 THREAD	FF LGTH	H HEX
FS2403-04-04	1/4	1/4	9/16-18	9/16-18	1.080	0.625
FS2403-06-04	3/8	1/4	11/16-16	9/16-18	1.17	0.750
FS2403-06-06	3/8	3/8	11/16-16	11/16-16	1.22	0.750
FS2403-08-06	1/2	3/8	13/16-16	11/16-16	1.33	0.875
FS2403-08-08	1/2	1/2	13/16-16	13/16-16	1.39	0.875
FS2403-10-08	5/8	1/2	1-14	13/16-16	1.570	1.062
FS2403-10-10	5/8	5/8	1-14	1-14	1.68	1.062
FS2403-12-08	3/4	1/2	1-3/16-12	13/16-16	1.69	1.250
FS2403-12-10	3/4	5/8	1-3/16-12	1-14	1.800	1.250
FS2403-12-12	3/4	3/4	1-3/16-12	1-3/16-12	1.860	1.250
FS2403-16-12	1	3/4	1-7/16-12	1-3/16-12	1.92	1.500
FS2403-16-16	1	1	1-7/16-12	1-7/16-12	1.94	1.500
FS2403-20-16	1-1/4	1	1-11/16-12	1-7/16-12	2.020	1.750
FS2403-20-20	1-1/4	1-1/4	1-11/16-12	1-11/16-12	2.020	1.750
FS2403-24-20	1-1/2	1-1/4	2-12	1-11/16-12	2.090	2.125
FS2403-24-24	1-1/2	1-1/2	2-12	2-12	2.09	2.125

## FS2404 MFS-MP STRAIGHT



PART NO.	TUBE O.D.	A THREAD	B THREAD	FF LGTH	H HEX
FS2404-04-02	1/4	9/16-18	1/8-27	1.080	0.625
FS2404-04-04	1/4	9/16-18	1/4-18	1.26	0.625
FS2404-04-06	1/4	9/16-18	3/8-18	1.260	0.750
FS2404-04-08	1/4	9/16-18	1/2-14	1.500	0.938
FS2404-06-02	3/8	11/16-16	1/8-27	1.160	0.750
FS2404-06-04	3/8	11/16-16	1/4-18	1.340	0.750
FS2404-06-06	3/8	11/16-16	3/8-18	1.34	0.750
FS2404-06-08	3/8	11/16-16	1/2-14	1.550	0.938
FS2404-08-04	1/2	13/16-16	1/4-18	1.480	0.875
FS2404-08-06	1/2	13/16-16	3/8-18	1.45	0.875
FS2404-08-08	1/2	13/16-16	1/2-14	1.640	0.938
FS2404-08-12	1/2	13/16-16	3/4-14	1.690	1.125
FS2404-08-16	1/2	13/16-16	1-11-1/2	1.80	1.375
FS2404-10-08	5/8	1-14	1/2-14	1.82	1.062
FS2404-10-12	5/8	1-14	3/4-14	1.820	1.250
FS2404-10-16	5/8	1-14	1-11-1/2	1.950	1.375
FS2404-12-08	3/4	1-3/16-12	1/2-14	1.94	1.250
FS2404-12-12	3/4	1-3/16-12	3/4-14	1.94	1.250
FS2404-12-16	3/4	1-3/16-12	1-11-1/2	2.130	1.375

## FS0406 BORE-MFS BULKHEAD

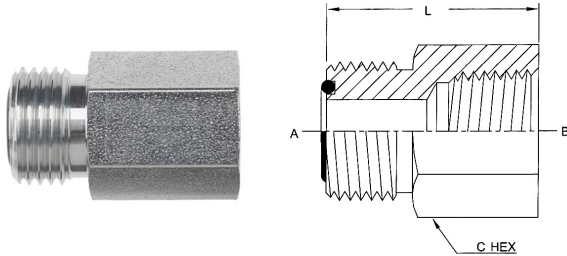


PART NO.	E* BORE	A THREAD	G DEPTH	L1 LGTH	H HEX
FS0406-08-08	0.506	13/16-16	0.330	1.91	0.875
FS0406-10-08	0.631	13/16-16	0.330	1.91	1.062

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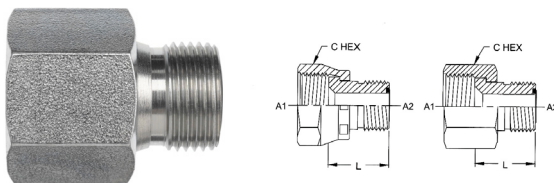
PART NO.	TUBE O.D.	A THREAD	B THREAD	FL LGTH	H HEX
FS2404-16-12	1	1-7/16-12	3/4-14	2.00	1.500
FS2404-16-16	1	1-7/16-12	1-11-1/2	2.190	1.500
FS2404-16-20	1	1-7/16-12	1-1/4-11-1/2	2.300	1.750
FS2404-16-24	1	1-7/16-12	1-1/2-11-1/2	2.400	2.000
FS2404-20-16	1-1/4	1-11/16-12	1-11-1/2	2.27	1.750
FS2404-20-20	1-1/4	1-11/16-12	1-1/4-11-1/2	2.30	1.750
FS2404-24-24	1-1/2	2-12	1-1/2-11-1/2	2.400	2.125

## FS2405 FS-FP STRAIGHT



PART NO.	TUBE O.D.	A THREAD	B NPTF	LLGTH	C HEX
FS2405-04-04	1/4	9/16-18	1/4-18	1.250	0.750
FS2405-06-04	3/8	11/16-16	1/4-18	1.290	0.750
FS2405-08-08	1/2	13/16-16	1/2-14	1.640	1.125

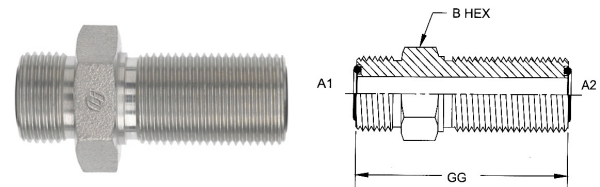
## FS2406 FFS-MFS TUBE END REDUCER



PART NO.	A1 TUBE O.D.	A2 TUBE O.D.	A1 THREAD	A2 THREAD	LLGTH	C HEX
FS2406-06-04	3/8	1/4	11/16-16	9/16-18	0.770	0.812
FS2406-08-04	3/8	1/4	13/16-16	9/16-18	0.860	0.938
FS2406-08-06	1/2	3/8	13/16-16	11/16-16	0.880	0.938
FS2406-10-04	5/8	1/4	1-14	9/16-18	0.900	1.125
FS2406-10-06	5/8	3/8	1-14	11/16-16	0.950	1.125
FS2406-10-08	5/8	1/2	1-14	13/16-16	1.010	1.125
FS2406-10-12	5/8	3/4	1-14	1-3/16-12	1.063	1.125
FS2406-12-04	3/4	1/4	1-3/16-12	9/16-18	0.980	1.375
FS2406-12-06	3/4	3/8	1-3/16-12	11/16-16	1.030	1.375
FS2406-12-08	3/4	1/2	1-3/16-12	13/16-16	1.090	1.375
FS2406-12-10	3/4	5/8	1-3/16-12	1-14	1.160	1.375
FS2406-12-16	3/4	1	1-3/16-12	1-7/16-12	1.240	1.375
FS2406-16-06	1	3/8	1-7/16-12	11/16-16	1.09	1-5/8
FS2406-16-08	1	1/2	1-7/16-12	13/16-16	1.150	1.625
FS2406-16-10	1	5/8	1-7/16-12	1-14	1.260	1.625
FS2406-16-12	1	3/4	1-7/16-12	1-3/16-12	1.300	1.625

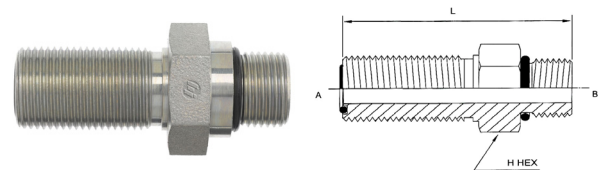
PART NO.	A1 TUBE O.D.	A2 TUBE O.D.	A1 THREAD	A2 THREAD	LLGTH	C HEX
FS2406-16-20	1	1-1/4	1-7/16-12	1-11/16-12	1.330	1.625
FS2406-20-12	1-1/4	3/4	1-11/16-12	1-3/16-12	1.320	1.875
FS2406-20-16	1-1/4	1	1-11/16-12	1-7/16-12	1.514	1.875
FS2406-20-24	1-1/4	1-1/2	1-11/16-12	2-12	1.514	1.875
FS2406-24-12	1-1/2	3/4	2-12	1-3/16-12	1.320	2-1/4
FS2406-24-16	1-1/2	1	2-12	1-7/16-12	1.340	2.250
FS2406-24-20	1-1/2	1-1/4	2-12	1-11/16-12	1.340	2.250

## FS2700 MFS-MFS BULKHEAD UNION



PART NO.	TUBE O.D.	A1 THREAD	A2 THREAD	GG LGTH	B HEX
FS2700-04-04	1/4	9/16-18	9/16-18	1.900	0.812
FS2700-06-06	3/8	11/16-16	11/16-16	2.09	1.000
FS2700-06-08	3/8 1/2	11/16-16	13/16-16	2.240	1.125
FS2700-08-08	1/2	13/16-16	13/16-16	2.30	1.125
FS2700-10-08	5/8	1-14	13/16-16	2.460	1.312
FS2700-10-10	5/8	1-14	1-14	2.62	1.312
FS2700-12-12	3/4	1-3/16-12	1-3/16-12	2.720	1.500
FS2700-16-16	1	1-7/16-12	1-7/16-12	2.76	1.750
FS2700-20-20	1-1/4	1-11/16-12	1-11/16-12	2.76	2.000
FS2700-24-24	1-1/2	2-12	2-12	2.760	2.375

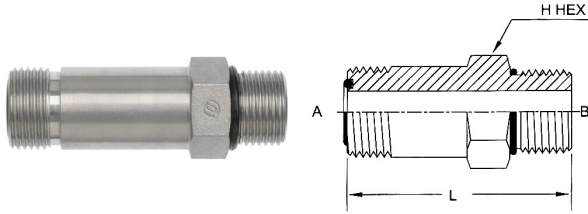
## FS2764 MFS BULKHEAD-MORB STRAIGHT



PART NO.	TUBE O.D.	A THREAD	B MORB	LLGTH	H HEX
FS2764-04-04-0	1/4	9/16-18	7/16-20	2.14	.812
FS2764-04-06-0	3/8	9/16-18	9/16-18	2.18	.812
FS2764-06-06-0	3/8	11/16-16	9/16-18	2.31	1.00
FS2764-08-08-0	1/2	13/16-16	3/4-16	2.600	1.125
FS2764-10-10-0	5/8	1-14	7/8-14	2.91	1.312
FS2764-12-12-0	3/4	1-3/16-12	1-1/16-12	3.110	1.500
FS2764-16-16-0	1	1-7/16-12	1-5/16-12	3.220	1.750
FS2764-20-20-0	1-1/4	1-11/16-12	1-5/8-12	3.300	2.000
FS2764-24-24-0	1-1/2	2-12	1-7/8-12	3.30	2.375

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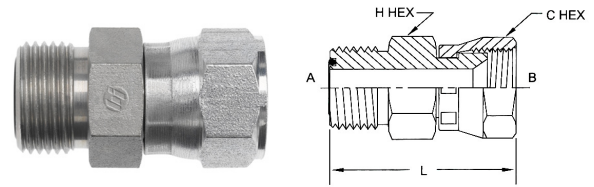
# FS6400-L-O MFS-MORB STRAIGHT LONG



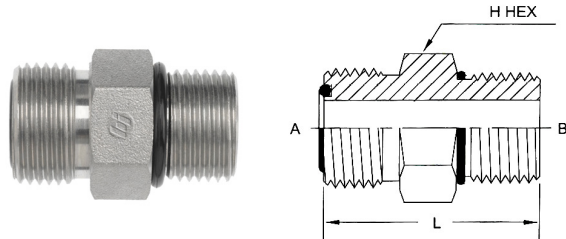
PART NO.	TUBE O.D.	A THREAD	B THREAD	LLGTH	H HEX
FS6400-L-04-04-O	1/4	9/16-18	7/16-20	2.070	0.625
FS6400-L-06-06-O	3/8	11/16-16	9/16-18	2.272	0.750
FS6400-L-06-08-O	3/8	11/16-16	3/4-16	2.611	0.875
FS6400-L-08-08-O	1/2	13/16-16	3/4-16	2.671	0.875
FS6400-L-10-10-O	5/8	1-14	7/8-14	3.130	1.062
FS6400-L-12-10-O	3/4	1-3/16-12	7/8-14	3.660	1.250
FS6400-L-12-12-O	3/4	1-3/16-12	1-1/16-12	3.758	1.250
FS6400-L-16-12-O	1	1-7/16-12	1-1/16-12	4.138	1.500
FS6400-L-16-16-O	1	1-7/16-12	1-5/16-12	4.138	1.500
FS6400-L-20-20-O	1-1/4	1-11/16-12	1-5/8-12	4.760	1.875
FS6400-L-24-24-O	1-1/2	2-12	1-7/8-12	5.258	2.125

PART NO.	TUBE O.D.	A THREAD	B THREAD	LLGTH	H HEX
FS6400-10-12-O	5/8	1-14	1-1/16-12	1.858	1.250
FS6400-10-16-O	5/8	1-14	1-5/16-12	1.900	1.500
FS6400-12-06-O	3/4	1-3/16-12	9/16-18	1.772	1.250
FS6400-12-08-O	3/4	1-3/16-12	3/4-16	1.911	1.250
FS6400-12-10-O	3/4	1-3/16-12	7/8-14	1.990	1.250
FS6400-12-12-O	3/4	1-3/16-12	1-1/16-12	1.918	1.250
FS6400-12-16-O	3/4	1-3/16-12	1-5/16-12	1.958	1.500
FS6400-12-20-O	3/4	1-3/16-12	1-5/8-12	2.038	1.875
FS6400-16-08-O	1	1-7/16-12	3/4-16	1.961	1.500
FS6400-16-10-O	1	1-7/16-12	7/8-14	2.040	1.500
FS6400-16-12-O	1	1-7/16-12	1-1/16-12	2.138	1.500
FS6400-16-14-O	1	1-7/16-12	1-3/16-12	1.978	1.500
FS6400-16-16-O	1	1-7/16-12	1-5/16-12	1.978	1.500
FS6400-16-20-O	1	1-7/16-12	1-5/8-12	2.058	1.875
FS6400-16-24-O	1	1-7/16-12	1-7/8-12	2.130	2.125
FS6400-20-16-O	1-1/4	1-11/16-12	1-5/16-12	2.278	1.875
FS6400-20-20-O	1-1/4	1-11/16-12	1-5/8-12	2.058	1.875
FS6400-20-24-O	1-1/4	1-11/16-12	1-7/8-12	2.128	2.125
FS6400-24-20-O	1-1/2	2-12	1-5/8-12	2.348	2.125
FS6400-24-24-O	1-1/2	2-12	1-7/8-12	2.128	2.125
FS6400-32-32-O	2	2-1/2-12	2-1/2-12	2.313	2.750

# FS6402 MFS-FJS STRAIGHT



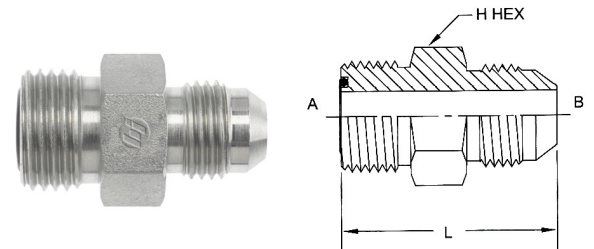
# FS6400-O MFS-MORB STRAIGHT



PART NO.	TUBE O.D.	A THREAD	B THREAD	LLGTH	H HEX
FS6400-04-03-O	1/4	9/16-18	3/8-24	1.170	0.625
FS6400-04-04-O	1/4	9/16-18	7/16-20	1.133	0.625
FS6400-04-05-O	1/4	9/16-18	1/2-20	1.130	0.625
FS6400-04-06-O	1/4	9/16-18	9/16-18	1.202	0.750
FS6400-04-08-O	1/4	9/16-18	3/4-16	1.321	0.875
FS6400-04-10-O	1/4	9/16-18	7/8-14	1.480	1.000
FS6400-04-12-O	1/4	9/16-18	1-1/16-12	1.638	1.250
FS6400-06-03-O	3/8	11/16-16	3/8-24	1.284	0.750
FS6400-06-04-O	3/8	11/16-16	7/16-20	1.343	0.750
FS6400-06-05-O	3/8	11/16-16	1/2-20	1.213	0.750
FS6400-06-06-O	3/8	11/16-16	9/16-18	1.260	0.750
FS6400-06-08-O	3/8	11/16-16	3/4-16	1.381	0.875
FS6400-06-10-O	3/8	11/16-16	7/8-14	1.530	1.062
FS6400-06-12-O	3/8	11/16-16	1-1/16-12	1.688	1.250
FS6400-06-16-O	3/8	11/16-16	1-5/16-12	1.728	1.500
FS6400-08-04-O	1/2	13/16-16	7/16-20	1.433	0.875
FS6400-08-06-O	1/2	13/16-16	9/16-18	1.472	0.875
FS6400-08-08-O	1/2	13/16-16	3/4-16	1.441	0.875
FS6400-08-10-O	1/2	13/16-16	7/8-14	1.590	1.062
FS6400-08-12-O	1/2	13/16-16	1-1/16-12	1.748	1.250
FS6400-08-16-O	1/2	13/16-16	1-5/16-12	1.788	1.500
FS6400-10-06-O	5/8	1-14	9/16-18	1.642	1.062
FS6400-10-08-O	5/8	1-14	3/4-16	1.781	1.062
FS6400-10-10-O	5/8	1-14	7/8-14	1.700	1.062

PART NO.	TUBE O.D.	A THREAD	B THREAD	LLGTH	C HEX	H HEX
FS6402-04-04	1/4	9/16-18	7/16-20	1.344	0.562	0.625
FS6402-06-06	3/8	11/16-16	9/16-18	1.565	0.688	0.750
FS6402-08-08	1/2	13/16-16	3/4-16	1.770	0.875	0.875
FS6402-10-10	5/8	1-14	7/8-14	2.060	1.000	1.062
FS6402-12-12	3/4	1-3/16-12	1-1/16-12	0.609	1.250	1.250
FS6402-16-16	1	1-7/16-12	1-5/16-12	2.460	1.500	1.500
FS6402-20-20	1-1/4	1-11/16-12	1-5/8-12	2.615	2.000	1.750

# FS6403 MFS-MJ STRAIGHT



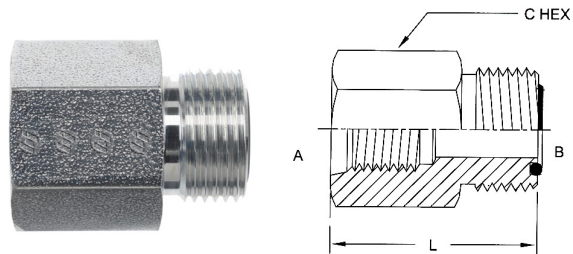
PART NO.	TUBE O.D.	A THREAD	B THREAD	LLGTH	H HEX
FS6403-04-04	1/4	9/16-18	7/16-20	1.250	0.625
FS6403-06-06	3/8	11/16-16	9/16-18	1.350	0.750
FS6403-08-08	1/2	13/16-16	3/4-16	1.540	0.875

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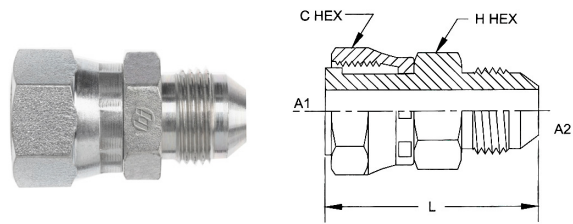
PART NO.	TUBE O.D.	A THREAD	B THREAD	LLGTH	H HEX
FS6403-10-10	5/8	1-14	7/8-14	1.820	1.062
FS6403-12-12	3/4	1-3/16-12	1-1/16-12	2.050	1.250
FS6403-16-16	1	1-7/16-12	1-5/16-12	2.161	1.500
FS6403-20-20	1-1/4	1-11/16-12	1-5/8-12	2.290	1.750

## FS6410 FORB-MFS STRAIGHT



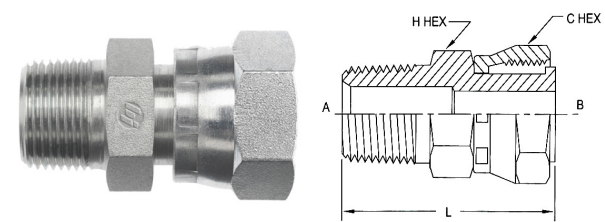
PART NO.	TUBE O.D.	A FORB	B THREAD	LLGTH	C HEX
FS6410-04-04-0	1/4	7/16-20	9/16-18	1.220	0.625
FS6410-08-08-0	1/2	3/4-16	13/16-16	1.390	1.000
FS6410-16-12-0	1	1-5/16-12	1-3/16-12	1.79	1.625
FS6410-16-16-0	1	1-5/16-12	1-7/16-12	1.80	1.625
FS6410-20-20-0	1-1/4	1-5/8-12	1-11/16-12	1.86	2.125
FS6410-24-24-0	1-1/2	1-7/8-12	2-12	1.87	2.500

## FS6504 FFSS-MJ STRAIGHT



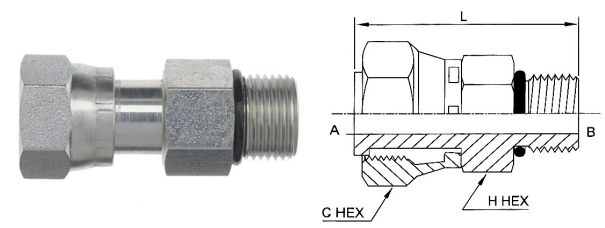
PART NO.	A1 TUBE O.D.	A2 TUBE O.D.	A1 THREAD	A2 THREAD	LLGTH	C HEX	H HEX
FS6504-04-04	1/4	1/4	9/16-18	7/16-20	1.580	0.687	0.625
FS6504-04-12	1/4	3/4	9/16-18	1-1/16-12	1.994	0.687	1.125
FS6504-06-04	3/8	1/4	11/16-16	7/16-20	1.660	0.812	0.750
FS6504-06-06	3/8	3/8	11/16-16	9/16-18	1.610	0.812	0.750
FS6504-08-04	1/2	1/4	13/16-16	7/16-20	1.940	0.938	0.875
FS6504-08-08	1/2	1/2	13/16-16	3/4-16	1.900	0.938	0.875
FS6504-08-12	1/2	3/4	13/16-16	1-1/16-12	2.194	0.938	1.125
FS6504-10-04	5/8	1/4	1-14	7/16-20	2.040	1.125	1.062
FS6504-10-10	5/8	5/8	1-14	7/8-14	2.248	1.125	1.062
FS6504-10-12	5/8	3/4	1-14	1-1/16-12	2.354	1.125	1.125
FS6504-12-04	3/4	1/4	1-3/16-12	7/16-20	2.170	1.375	1.250
FS6504-12-12	3/4	3/4	1-3/16-12	1-1/16-12	2.500	1.375	1.250
FS6504-16-04	1	1/4	1-7/16-12	7/16-20	2.480	1.625	1.500
FS6504-16-16	1	1	1-7/16-12	1-5/16-12	2.650	1.625	1.500
FS6504-20-20	1-1/4	1-1/4	1-11/16-12	1-5/8-12	2.888	1.875	1.875
FS6504-24-24	1-1/2	1-1/2	2-12	1-7/8-12	2.840	2.250	2.000

## FS6505 MP-FFSS STRAIGHT



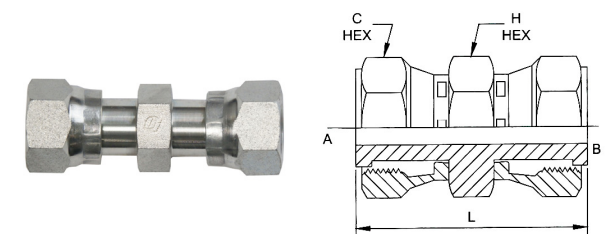
PART NO.	TUBE O.D.	A THREAD	B THREAD	A HOLE	B HOLE	LLGTH	C HEX	H HEX
FS6505-04-04	1/4	1/4-18	9/16-18	0.281	0.165	1.520	0.688	0.625
FS6505-04-06	3/8	1/4-18	11/16-16	0.281	0.264	1.650	0.812	0.750
FS6505-08-08	1/2	1/2-14	13/16-16	0.531	0.358	2.150	0.937	0.875
FS6505-12-12	3/4	3/4-14	1-3/16-12	0.719	0.547	2.370	1.375	1.250
FS6505-16-16	1	1-11-1/2	1-7/16-12	0.938	0.783	2.880	1.625	1.500
FS6505-20-20	1-1/4	1-1/4-11-1/2	1-11/16-12	1.250	1.024	2.900	1.875	1.750

## FS6540-0 FFSS-MORB STRAIGHT



PART NO.	TUBE O.D.	A THREAD	B MORB	LLGTH	C HEX	H HEX
FS6540-04-04-0	1/4	9/16-18	7/16-20	1.460	0.687	0.625
FS6540-06-06-0	3/8	11/16-16	9/16-18	1.580	0.812	0.750
FS6540-08-06-0	1/2	13/16-16	9/16-18	1.862	0.938	0.875
FS6540-08-08-0	1/2	13/16-16	3/4-16	1.941	0.938	0.875
FS6540-10-12-0	5/8	1-14	1-1/16-12	2.218	1.125	1.250
FS6540-12-12-0	3/4	1-3/16-12	1-1/16-12	2.348	1.375	1.250
FS6540-16-16-0	1	1-7/16-12	1-5/16-12	2.658	1.625	1.500
FS6540-20-20-0	1-1/4	1-11/16-12	1-5/8-12	2.658	1.875	1.875
FS6540-24-24-0	1-1/2	2-12	1-7/8-12	2.658	2.250	2.125

## FS6565 FFSS-FFSS STRAIGHT



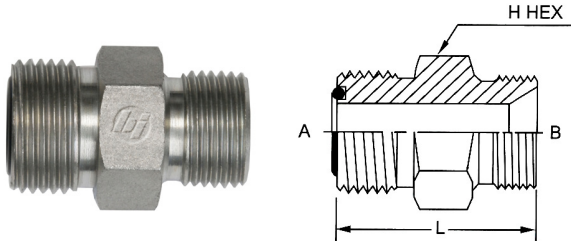
PART NO.	TUBE O.D.	A THREAD	B THREAD	LLGTH	C HEX	H HEX
FS6565-04-04	1/4	9/16-18	9/16-18	1.590	0.687	0.625
FS6565-06-06	3/8	11/16-16	11/16-16	1.77	0.812	0.750

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PART NO.	TUBE O.D.	A THREAD	B THREAD	LLGTH	C HEX	H HEX
FS6565-08-08	1/2	13/16-16	13/16-16	2.120	0.938	0.875
FS6565-10-10	5/8	1-14	1-14	2.420	1.125	1.062
FS6565-12-12	3/4	1-3/16-12	1-3/16-12	2.74	1.375	1.250
FS6565-16-16	1	1-7/16-12	1-7/16-12	2.95	1.625	1.500
FS6565-20-20	1-1/4	1-11/16-12	1-11/16-12	2.990	1.875	1.750
FS6565-24-24	1-1/2	2-12	2-12	3.040	2.250	2.125

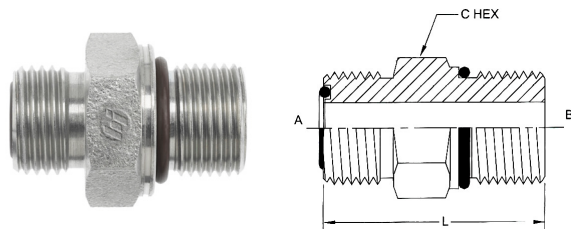
PART NO.	TUBE O.D.	A THREAD	B MM THREAD	LLGTH	C HEX
FS7640-10-22-0	5/8	1-14	M22 x 1.5	42.0	27.0
FS7640-10-26-0	7/8	1-14	M26x1.5	45.5	32.0
FS7640-10-27-0	5/8	1-14	M27 x 2.0	48.5	32.0
FS7640-10-33-0	5/8	1-14	M33 x 2.0	50.0	41.0
FS7640-12-22-0	3/4	1-3/16-12	M22 x 1.5	47.5	32.0
FS7640-12-27-0	3/4	1-3/16-12	M27 x 2.0	48.5	32.0
FS7640-12-33-0	3/4	1-3/16-12	M33 x 2.0	51.5	41.0
FS7640-16-33-0	1	1-7/16-12	M33 x 2.0	52.0	41.0
FS7640-20-38-0	1-1/4	1-11/16-12	M38 x 2.0	54.5	50.0
FS7640-20-42-0	1-1/4	1-11/16-12	M42 x 2.0	54.5	50.0

## FS7005 MFS-MM STRAIGHT



PART NO.	TUBE O.D.	A THREAD	B THREAD	LLGTH	C HEX
FS7005-04-12	1/4	9/16-18	M12x1.5	32.3	17.0
FS7005-06-14	3/8	11/16-16	M14x1.5	33.50	19.05
FS7005-06-16	3/8	11/16-16	M16x1.5	32.30	19.05
FS7005-06-22	3/8	11/16-16	M22x1.5	34.50	27.00
FS7005-08-14	1/2	13/16-16	M14x1.5	35.10	22.22
FS7005-08-18	1/2	13/16-16	M18x1.5	35.60	22.00
FS7005-08-22	1/2	13/16-16	M22x1.5	36.00	27.00
FS7005-12-24	3/4	1-3/16-12	M24x1.5	43.70	32.00
FS7005-12-26	3/4	1-3/16-12	M26x1.5	45.00	32.00

## FS7640-0 MFS-MMORB ISO6149-2 STRAIGHT

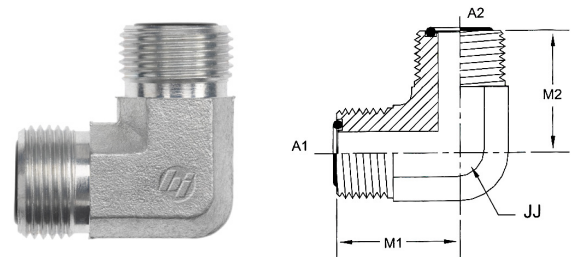


PART NO.	TUBE O.D.	A THREAD	B MM THREAD	LLGTH	C HEX
FS7640-04-10-0	1/4	9/16-18	M10 x 1	27.0	17.0
FS7640-04-12-0	1/4	9/16-18	M12 x 1.5	28.5	17.0
FS7640-04-14-0	1/4	9/16-18	M14 x 1.5	29.50	19.00
FS7640-06-12-0	3/8	11/16-16	M12 x 1.5	32.0	19.00
FS7640-06-14-0	3/8	11/16-16	M14 x 1.5	32.0	19.0
FS7640-06-16-0	3/8	11/16-16	M16 x 1.5	33.5	22.0
FS7640-06-18-0	3/8	11/16-16	M18 x 1.5	36.0	24.0
FS7640-06-22-0	3/8	11/16-16	M22 x 1.5	37.5	27.0
FS7640-08-14-0	1/2	13/16-16	M14 x 1.5	35.00	22.00
FS7640-08-16-0	1/2	13/16-16	M16 x 1.5	36.5	22.0
FS7640-08-18-0	1/2	13/16-16	M18 x 1.5	38.0	24.0
FS7640-08-22-0	1/2	13/16-16	M22 x 1.5	39.5	27.0
FS7640-08-26-0	1/2	13/16-16	M26 x 1.5	42.3	32.0
FS7640-08-27-0	1/2	13/16-16	M27 x 2.0	44.5	32.0
FS7640-08-33-0	1/2	13/16-16	M33 x 2.0	47.5	41.0
FS7640-10-18-0	5/8	1-14	M18 x 1.5	41.0	27.0

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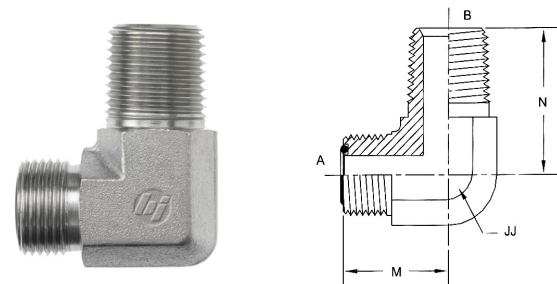
## ELBOWS

### FS2500-FG MFS-MFS 90 DEG ELBOW



PART NO.	A1 TUBE O.D.	A2 TUBE O.D.	A1 THREAD	A2 THREAD	M1 LGTH	M2 LGTH	JJ FLATS
FS2500-04-04-FG	1/4	1/4	9/16-18	9/16-18	0.85	0.85	0.562
FS2500-06-06-FG	3/8	3/8	11/16-16	11/16-16	0.98	0.98	0.750
FS2500-08-08-FG	1/2	1/2	13/16-16	13/16-16	1.10	1.10	0.750
FS2500-10-10-FG	5/8	5/8	1-14	1-14	1.31	1.31	1.062
FS2500-12-08-FG	3/4	1/2	1-3/16-12	13/16-16	1.47	1.32	1.188
FS2500-12-12-FG	3/4	3/4	1-3/16-12	1-3/16-12	1.47	1.47	1.188
FS2500-16-12-FG	1	3/4	1-7/16-12	1-3/16-12	1.64	1.62	1.438
FS2500-16-16-FG	1	1	1-7/16-12	1-7/16-12	1.64	1.64	1.438
FS2500-20-16-FG	1-1/4	1	1-11/16-12	1-7/16-12	1.76	1.76	1.625
FS2500-20-20-FG	1-1/4	1-1/4	1-11/16-12	1-11/16-12	1.76	1.76	1.625
FS2500-24-20-FG	1-1/2	1-1/4	2-12	1-11/16-12	1.92	1.92	1.875
FS2500-24-24-FG	1-1/2	1-1/2	2-12	2-12	1.92	1.92	1.875

### FS2501-FG MFS-MP 90 DEG ELBOW

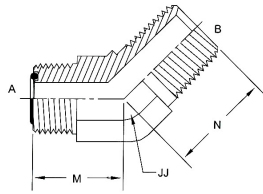
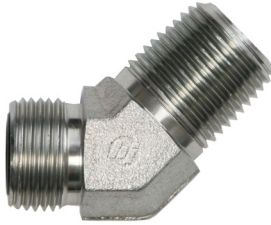


PART NO.	TUBE O.D.	A THREAD	B THREAD	M LGTH	N LGTH	JJ FLATS
FS2501-04-02-FG	1/4	9/16-18	1/8-27	0.85	0.80	0.562
FS2501-04-04-FG	1/4	9/16-18	1/4-18	0.85	1.12	0.562
FS2501-04-06-FG	1/4	9/16-18	3/8-18	0.970	1.220	0.750

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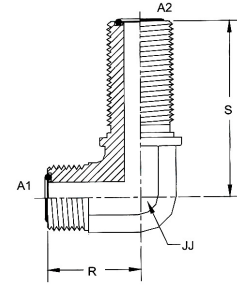
PART NO.	TUBE O.D.	A THREAD	B THREAD	MLGTH	N LGTH	JJ FLATS
FS2501-06-02-FG	3/8	11/16-16	1/8-27	0.98	0.90	0.750
FS2501-06-04-FG	3/8	11/16-16	1/4-18	0.98	1.09	0.750
FS2501-06-06-FG	3/8	11/16-16	3/8-18	0.980	1.220	0.750
FS2501-06-08-FG	3/8	11/16-16	1/2-14	1.150	1.470	0.875
FS2501-08-04-FG	1/2	13/16-16	1/4-18	1.10	1.22	0.750
FS2501-08-06-FG	1/2	13/16-16	3/8-18	1.10	1.22	0.750
FS2501-08-08-FG	1/2	13/16-16	1/2-14	1.10	1.47	0.875
FS2501-08-12-FG	1/2	13/16-16	3/4-14	1.320	1.590	1.062
FS2501-10-06-FG	5/8	1-14	3/8-18	1.310	1.400	1.062
FS2501-10-08-FG	5/8	1-14	1/2-14	1.310	1.470	1.062
FS2501-10-12-FG	5/8	1-14	3/4-14	1.31	1.59	1.062
FS2501-12-08-FG	3/4	1-3/16-12	1/2-14	1.470	1.590	1.188
FS2501-12-12-FG	3/4	1-3/16-12	3/4-14	1.470	1.590	1.188
FS2501-12-16-FG	3/4	1-3/16-12	1-11/2	1.620	1.970	1.312
FS2501-16-12-FG	1	1-7/16-12	3/4-14	1.64	1.78	1.438
FS2501-16-16-FG	1	1-7/16-12	1-11/2	1.64	1.97	1.438
FS2501-16-20-FG	1	1-7/16-12	1-1/4-11-1/2	1.760	2.380	1.625
FS2501-20-16-FG	1-1/4	1-11/16-12	1-11/2	1.760	2.350	1.625
FS2501-20-20-FG	1-1/4	1-11/16-12	1-1/4-11-1/2	1.76	2.38	1.625
FS2501-24-24-FG	1-1/2	2-12	1-1/2-11-1/2	1.920	2.640	1.875

## FS2503-FG MFS-MP 45 DEG ELBOW



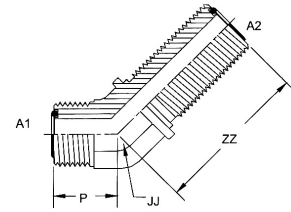
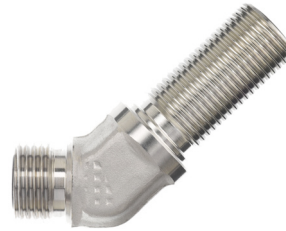
PART NO.	TUBE O.D.	A THREAD	B THREAD	MLGTH	N LGTH	JJ FLATS
FS2503-04-02-FG	1/4	9/16-18	1/8-27	0.63	0.67	0.562
FS2503-04-04-FG	1/4	9/16-18	1/4-18	0.63	0.86	0.562
FS2503-06-04-FG	3/8	11/16-16	1/4-18	0.74	0.87	0.750
FS2503-06-06-FG	3/8	11/16-16	3/8-18	0.740	0.950	0.750
FS2503-06-08-FG	3/8	11/16-16	1/2-14	0.79	1.17	0.875
FS2503-08-06-FG	1/2	13/16-16	3/8-18	0.80	0.95	0.750
FS2503-08-08-FG	1/2	13/16-16	1/2-14	0.80	1.17	0.875
FS2503-08-12-FG	1/2	13/16-16	3/4-14	0.82	1.20	1.062
FS2503-10-08-FG	5/8	1-14	1/2-14	0.92	1.20	1.062
FS2503-12-08-FG	3/4	1-3/16-12	1/2-14	1.020	1.300	1.188
FS2503-12-12-FG	3/4	1-3/16-12	3/4-14	1.020	1.180	1.188
FS2503-16-16-FG	1	1-7/16-12	1-11/2	1.180	1.560	1.438
FS2503-20-20-FG	1-1/4	1-11/16-12	1-1/4-11-1/2	1.26	1.67	1.625

## FS2701-FG MFS-MFS BULKHEAD 90 DEG ELBOW



PART NO.	TUBE O.D.	A1 THREAD	A2 THREAD	R LGTH	S LGTH	JJ FLATS
FS2701-04-04-FG	1/4	9/16-18	9/16-18	0.89	1.85	0.562
FS2701-06-06-FG	3/8	11/16-16	11/16-16	1.02	2.05	0.750
FS2701-06-08-FG	3/8 1/2	11/16-16	13/16-16	1.08	2.18	0.750
FS2701-08-08	1/2	13/16-16	13/16-16	1.14	2.18	0.750
FS2701-08-08-FG	1/2	13/16-16	13/16-16	1.14	2.18	0.750
FS2701-08-10-FG	1/2 5/8	13/16-16	1-14	1.260	2.480	1.062
FS2701-10-10-FG	5/8	1-14	1-14	1.36	2.48	1.062
FS2701-12-12-FG	3/4	1-3/16-12	1-3/16-12	1.520	2.650	1.188
FS2701-16-16-FG	1	1-7/16-12	1-7/16-12	1.67	2.80	1.438
FS2701-20-20-FG	1-1/4	1-11/16-12	1-11/16-12	1.79	2.97	1.625
FS2701-24-24-FG	1-1/2	2-12	2-12	1.950	3.130	1.875

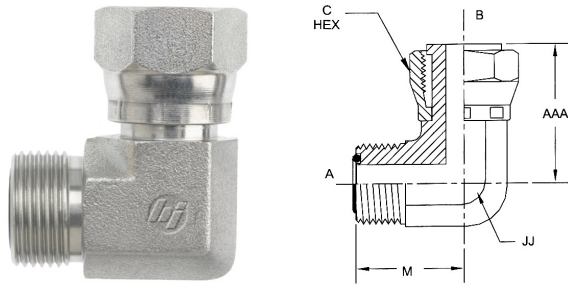
## FS2702-FG MFS-MFS BULKHEAD 45 DEG ELBOW



PART NO.	TUBE O.D.	A1 THREAD	A2 THREAD	PLGTH	ZZ LGTH	JJ FLATS
FS2702-04-04-FG	1/4	9/16-18	9/16-18	0.63	1.73	0.562
FS2702-06-06-FG	3/8	11/16-16	11/16-16	0.74	1.91	0.750
FS2702-08-08-FG	1/2	13/16-16	13/16-16	0.80	2.01	0.750
FS2702-10-08-FG	5/8 1/2	1-14	13/16-16	0.92	2.13	1.062
FS2702-10-10-FG	5/8	1-14	1-14	0.920	2.230	1.062
FS2702-12-12-FG	3/4	1-3/16-12	1-3/16-12	1.020	2.390	1.188
FS2702-16-16-FG	1	1-7/16-12	1-7/16-12	1.18	2.57	1.438
FS2702-20-20-FG	1-1/4	1-11/16-12	1-11/16-12	1.26	2.64	1.625
FS2702-24-24-FG	1-1/2	2-12	2-12	1.460	2.640	1.875

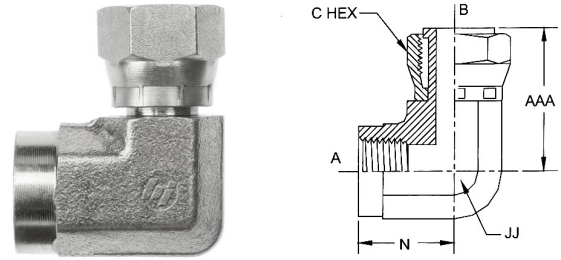


## FS6500-FG MFS-FFSS 90 DEG ELBOW



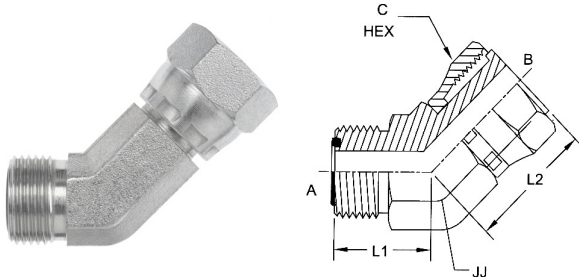
PART NO.	TUBE O.D.	A THREAD	B THREAD	M LGTH	AAA LGTH	C HEX	JJ FLATS
FS6500-04-04-FG	1/4	9/16-18	9/16-18	0.85	1.04	0.687	0.562
FS6500-04-06-FG	1/4	9/16-18	11/16-16	0.920	1.150	0.812	0.750
FS6500-06-06-FG	3/8	11/16-16	11/16-16	0.98	1.15	0.812	0.750
FS6500-08-06-FG	1/2	13/16-16	11/16-16	1.10	1.33	0.812	0.750
FS6500-08-08-FG	1/2	13/16-16	13/16-16	1.10	1.49	0.938	0.750
FS6500-10-10-FG	5/8	1-14	1-14	1.31	1.62	1.125	1.062
FS6500-12-12-FG	3/4	1-3/16-12	1-3/16-12	1.47	1.82	1.375	1.188
FS6500-16-16-FG	1	1-7/16-12	1-7/16-12	1.64	2.10	1.625	1.438
FS6500-20-20-FG	1-1/4	1-11/16-12	1-11/16-12	1.76	2.29	1.875	1.625
FS6500-24-24-FG	1-1/2	2-12	2-12	1.920	2.410	2.250	1.875

## FS6503-FG FP-FFSS 90 DEG ELBOW



PART NO.	TUBE O.D.	A THREAD	B THREAD	N LGTH	AAA LGTH	C HEX	JJ FLATS
FS6503-06-06-FG	3/8	3/8-18	11/16-16	1.020	1.320	0.812	0.875

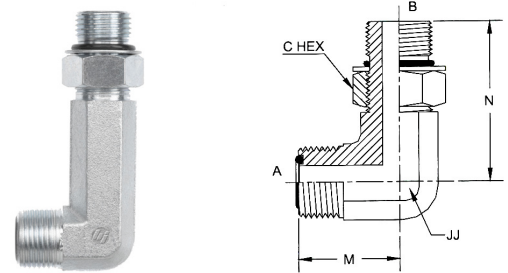
## FS6502-FG MFS-FFSS 45 DEG ELBOW



PART NO.	TUBE O.D.	A THREAD	B THREAD	L1 LGTH	L2 LGTH	C HEX	JJ FLATS
FS6502-04-04-FG	1/4	9/16-18	9/16-18	0.63	0.94	0.687	0.562
FS6502-06-06-FG	3/8	11/16-16	11/16-16	0.74	1.06	0.812	0.75
FS6502-08-08-FG	1/2	13/16-16	13/16-16	0.80	1.32	0.938	0.75
FS6502-10-10-FG	5/8	1-14	1-14	0.92	1.44	1.125	1.062
FS6502-12-12-FG	3/4	1-3/16-12	1-3/16-12	1.02	1.48	1.375	1.188
FS6502-16-16-FG	1	1-7/16-12	1-7/16-12	1.180	1.520	1.625	1.438
FS6502-20-20-FG	1-1/4	1-11/16-12	1-11/16-12	1.26	1.72	1.875	1.625
FS6502-24-24-FG	1-1/2	2-12	2-12	1.450	2.060	2.250	1.875

## FS6801-L-NWO-FG

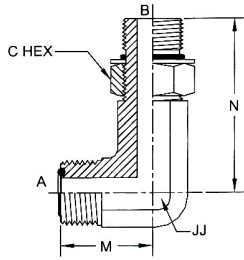
MFS-MORB 90 DEG ELBOW LONG



PART NO.	TUBE O.D.	A THREAD	B THREAD	M LGTH	N LGTH	C HEX	JJ FLATS
FS6801-L-04-04-NWO-FG	1/4	9/16-18	7/16-20	0.850	2.230	0.625	0.562
FS6801-L-06-06-NWO-FG	3/8	11/16-16	9/16-18	0.98	2.61	0.750	0.750
FS6801-L-08-08-NWO-FG	1/2	13/16-16	3/4-16	1.10	2.95	0.938	0.750
FS6801-L-08-12-NWO-FG	1/2	13/16-16	1-1/16-12	1.320	3.970	1.375	1.188
FS6801-L-10-10-NWO-FG	5/8	1-14	7/8-14	1.31	3.51	1.062	1.062
FS6801-L-10-12-NWO-FG	5/8	1-14	1-1/16-12	1.402	3.980	1.375	1.1875
FS6801-L-12-12-NWO-FG	3/4	1-3/16-12	1-1/16-12	1.47	4.00	1.375	1.188
FS6801-L-16-16-NWO-FG	1	1-7/16-12	1-5/16-12	1.64	4.51	1.625	1.438
FS6801-L-20-20-NWO-FG	1-1/4	1-11/16-12	1-5/8-12	1.760	4.980	1.875	1.625

# FS6801-LL-NWO-FG

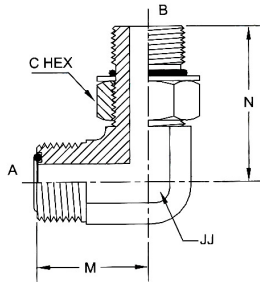
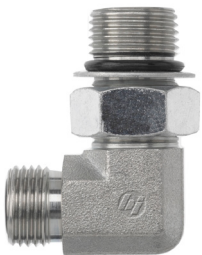
MFS-MAORB 90 DEG ELBOW EXTRA LONG



PART NO.	TUBE O.D.	A THREAD	B THREAD	M LGTH	N LGTH	C HEX	JJ FLATS
FS6801-LL-06-06-NWO-FG	3/8	11/16-16	9/16-18	0.980	3.000	0.750	0.750
FS6801-LL-08-08-NWO-FG	1/2	13/16-16	3/4-16	1.10	3.50	0.938	0.750
FS6801-LL-12-12-NWO-FG	3/4	1-3/16-12	1-1/16-12	1.470	4.500	1.375	1.188
FS6801-LL-16-16-NWO-FG	1	1-7/16-12	1-5/16-12	1.64	5.00	1.625	1.438

# FS6801-NWO-FG

MFS-MAORB 90 DEG ELBOW



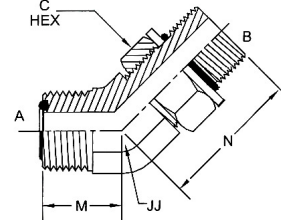
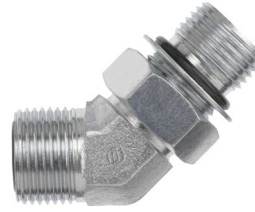
PART NO.	TUBE O.D.	A THREAD	B THREAD	M LGTH	N LGTH	C HEX	JJ FLATS
FS6801-04-04-NWO-FG	1/4	9/16-18	7/16-20	0.85	1.29	0.625	0.562
FS6801-04-05-NWO-FG	1/4	9/16-18	1/2-20	0.85	1.29	0.687	0.562
FS6801-04-06-NWO-FG	1/4	9/16-18	9/16-18	0.92	1.45	0.750	0.750
FS6801-04-08-NWO-FG	1/4	9/16-18	3/4-16	0.970	1.600	0.938	0.750
FS6801-06-04-NWO-FG	3/8	11/16-16	7/16-20	0.980	1.370	0.625	0.750
FS6801-06-05-NWO-FG	3/8	11/16-16	1/2-20	0.98	1.45	0.687	0.750
FS6801-06-06-NWO-FG	3/8	11/16-16	9/16-18	0.980	1.450	0.750	0.750
FS6801-06-08-NWO-FG	3/8	11/16-16	3/4-16	1.04	1.60	0.938	0.750
FS6801-06-10-NWO-FG	3/8	11/16-16	7/8-14	1.150	1.970	1.062	1.062
FS6801-06-12-NWO-FG	3/8	11/16-16	1-1/16-12	1.250	2.170	1.375	1.188
FS6801-08-04-NWO-FG	1/2	13/16-16	7/16-20	1.100	1.360	0.625	0.750
FS6801-08-06-NWO-FG	1/2	13/16-16	9/16-18	1.10	1.44	0.750	0.750
FS6801-08-08-NWO-FG	1/2	13/16-16	3/4-16	1.10	1.60	0.938	0.750
FS6801-08-10-NWO-FG	1/2	13/16-16	7/8-14	1.21	1.97	1.062	1.062
FS6801-08-12-NWO-FG	1/2	13/16-16	1-1/16-12	1.320	2.170	1.375	1.188
FS6801-10-08-NWO-FG	5/8	1-14	3/4-16	1.31	1.80	0.938	1.062
FS6801-10-10-NWO-FG	5/8	1-14	7/8-14	1.31	1.97	1.062	1.062
FS6801-10-12-NWO-FG	5/8	1-14	1-1/16-12	1.410	2.170	1.375	1.188
FS6801-12-08-NWO-FG	3/4	1-3/16-12	3/4-16	1.470	1.840	0.938	1.188
FS6801-12-10-NWO-FG	3/4	1-3/16-12	7/8-14	1.47	2.01	1.062	1.188
FS6801-12-12-NWO-FG	3/4	1-3/16-12	1-1/16-12	1.47	2.17	1.375	1.188
FS6801-12-16-NWO-FG	3/4	1-3/16-12	1-5/16-12	1.62	2.35	1.625	1.438
FS6801-16-12-NWO-FG	1	1-7/16-12	1-1/16-12	1.640	2.320	1.375	1.438
FS6801-16-16-NWO-FG	1	1-7/16-12	1-5/16-12	1.64	2.35	1.625	1.438
FS6801-16-20-NWO-FG	1	1-7/16-12	1-5/8-12	1.760	2.450	1.875	1.625
FS6801-16-24-NWO-FG	1	1-7/16-12	1-7/8-12	1.920	2.590	2.125	1.875
FS6801-20-12-NWO-FG	1-1/4	1-11/16-12	1-1/16-12	1.760	2.420	1.375	1.625

Continued..

PART NO.	TUBE O.D.	A THREAD	B THREAD	M LGTH	N LGTH	C HEX	JJ FLATS
FS6801-20-16-NWO-FG	1-1/4	1-11/16-12	1-5/16-12	1.76			
FS6801-20-20-NWO-FG	1-1/4	1-11/16-12	1-5/8-12	1.760	2.45	1.625	1.625
FS6801-20-24-NWO-FG	1-1/4	1-11/16-12	1-7/8-12	1.92	2.59	2.125	1.875
FS6801-24-20-NWO-FG	1-1/2	2-12	1-5/8-12	1.920	2.590	1.875	1.875
FS6801-24-24-NWO-FG	1-1/2	2-12	1-7/8-12	1.920	2.590	2.125	1.875

# FS6802-NWO-FG

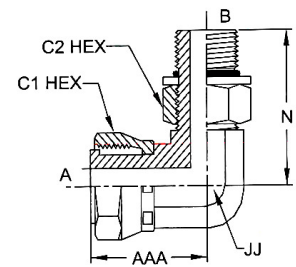
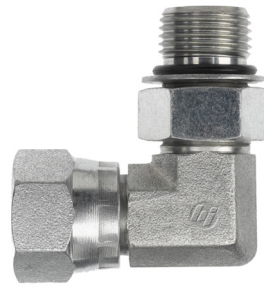
MFS-MAORB 45 DEG ELBOW



PART NO.	TUBE O.D.	A THREAD	B THREAD	M LGTH	N LGTH	C HEX	JJ FLATS
FS6802-04-04-NWO-FG	1/4	9/16-18	7/16-20	0.630	1.180	0.625	0.562
FS6802-04-06-NWO-FG	1/4	9/16-18	9/16-18	0.68	1.30	0.750	0.750
FS6802-04-08-NWO-FG	1/4	9/16-18	3/4-16	0.67	1.43	0.938	0.750
FS6802-06-04-NWO-FG	3/8	11/16-16	7/16-20	0.740	1.220	0.625	0.750
FS6802-06-06-NWO-FG	3/8	11/16-16	9/16-18	0.74	1.30	0.750	0.750
FS6802-06-08-NWO-FG	3/8	11/16-16	3/4-16	0.740	1.430	0.938	0.750
FS6802-06-10-NWO-FG	3/8	11/16-16	7/8-14	0.760	1.760	1.062	1.062
FS6802-08-06-NWO-FG	1/2	13/16-16	9/16-18	0.80	1.27	0.750	0.750
FS6802-08-08-NWO-FG	1/2	13/16-16	3/4-16	0.800	1.430	0.938	0.750
FS6802-08-10-NWO-FG	1/2	13/16-16	7/8-14	0.82	1.76	1.062	1.062
FS6802-08-12-NWO-FG	1/2	13/16-16	1-1/16-12	0.87	1.97	1.375	1.188
FS6802-08-16-NWO-FG	1/2	13/16-16	1-5/16-12	1.03	2.11	1.625	1.438
FS6802-10-08-NWO-FG	5/8	1-14	3/4-16	0.920	1.590	0.938	1.062
FS6802-10-10-NWO-FG	5/8	1-14	7/8-14	0.92	1.76	1.062	1.062
FS6802-10-12-NWO-FG	5/8	1-14	1-1/16-12	0.960	1.970	1.375	1.188
FS6802-12-08-NWO-FG	3/4	1-3/16-12	3/4-16	1.020	1.640	0.938	1.188
FS6802-12-10-NWO-FG	3/4	1-3/16-12	7/8-14	1.020	1.810	1.062	1.188
FS6802-12-12-NWO-FG	3/4	1-3/16-12	1-1/16-12	1.02	1.97	1.375	1.188
FS6802-12-16-NWO-FG	3/4	1-3/16-12	1-5/16-12	1.160	2.060	1.625	1.438
FS6802-16-12-NWO-FG	1	1-7/16-12	1-1/16-12	1.180	2.030	1.375	1.438
FS6802-16-16-NWO-FG	1	1-7/16-12	1-5/16-12	1.180	2.060	1.625	1.438
FS6802-16-20-NWO-FG	1	1-7/16-12	1-5/8-12	1.26	2.11	1.875	1.625
FS6802-20-16-NWO-FG	1-1/4	1-11/16-12	1-5/16-12	1.260	2.110	1.625	1.625
FS6802-20-20-NWO-FG	1-1/4	1-11/16-12	1-5/8-12	1.260	2.110	1.875	1.625
FS6802-24-24-NWO-FG	1-1/2	2-12	1-7/8-12	1.45	2.11	2.125	1.875

# FS6809-NWO-FG

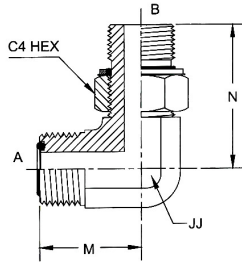
FFSS-MAORB 90 DEG ELBOW



PART NO.	TUBE O.D.	A THREAD	B THREAD	A HOLE	B HOLE	AAA LGTH	N LGTH	C1 HEX	C2 HEX	JJ FLATS
FS6809-04-04-NWO-FG	1/4	9/16-18	7/16-20	0.165	0.172	1.04	1.29	0.687	0.625	0.562
FS6809-06-06-NWO-FG	3/8	11/16-16	9/16-18	0.264	0.264	1.15	1.450	0.812	0.750	0.750
FS6809-08-08-NWO-FG	1/2	13/16-16	3/4-16	0.358	0.378	1.49	1.60	0.938	0.938	0.750
FS6809-10-10-NWO-FG	5/8	1-14	7/8-14	0.453	0.484	1.62	1.97	1.125	1.062	1.062
FS6809-12-12-NWO-FG	3/4	1-3/16-12	1-1/16-12	0.547	0.609	1.82	2.17	1.375	1.375	1.188
FS6809-16-16-NWO-FG	1	1-7/16-12	1-5/16-12	0.783	0.811	2.10	2.35	1.625	1.625	1.438
FS6809-20-20-NWO-FG	1 1/2	1-11/16-12	1-5/8-12	1.024	1.024	2.29	2.45	1.875	1.875	1.625

# FS7202-NWO-FG

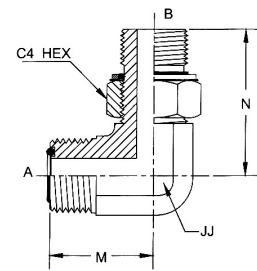
MFS-MBSPP 90 DEG ELBOW



PART NO.	TUBE O.D.	A THREAD	B THREAD	M LGTH	N LGTH	C4 HEX	JJ HEX
FS7202-04-02-NWO-FG	1/4	9/16-18	1/8-28	21.5	30.0	14	14
FS7202-04-04-NWO-FG	1/4	9/16-18	1/4-19	23.5	36.0	19	19
FS7202-04-06-NWO-FG	1/4	9/16-18	3/8-19	24.7	38.0	22	19
FS7202-06-04-NWO-FG	3/8	11/16-16	1/4-19	25.0	36.0	19	19
FS7202-06-06-NWO-FG	3/8	11/16-16	3/8-19	26.5	38.0	22	19
FS7202-08-04-NWO-FG	1/2	13/16-16	1/4-19	27.93	36.07	19.00	19.00
FS7202-08-06-NWO-FG	1/2	13/16-16	3/8-19	28.0	38.0	22	19
FS7202-08-08-NWO-FG	1/2	13/16-16	1/2-14	30.8	48.5	27	27
FS7202-08-12-NWO-FG	1/2	13/16-16	3/4-14	33.5	51.5	36	30
FS7202-10-06-NWO-FG	5/8	1-14	3/8-19	33.3	41.9	22	24
FS7202-10-08-NWO-FG	5/8	1-14	1/2-14	33.3	48.5	27	27
FS7202-10-12-NWO-FG	5/8	1-14	3/4-14	35.8	51.5	36	30
FS7202-12-08-NWO-FG	3/4	1-3/16-12	1/2-14	37.3	48.5	27	27
FS7202-12-12-NWO-FG	3/4	1-3/16-12	3/4-14	37.50	51.50	36.00	30.00
FS7202-12-16-NWO-FG	3/4	1-3/16-12	1-11	41.2	58.5	41	36
FS7202-16-12-NWO-FG	1	1-7/16-12	3/4-14	41.7	55.2	36	36
FS7202-16-16-NWO-FG	1	1-7/16-12	1-11	41.7	58.5	41	36
FS7202-16-20-NWO-FG	1	1-7/16-12	1-1/4-11	44.5	61.0	50	41
FS7202-20-16-NWO-FG	1-1/4	1-11/16-12	1-11	44.70	62.00	41.30	41.30
FS7202-20-20-NWO-FG	1 1/4	1-11/16-12	1-1/4-11	44.7	62.2	50	41
FS7202-20-24-NWO-FG	1 1/4	1-11/16-12	1-1/2-11	48.8	65.8	55	50
FS7202-24-24-NWO-FG	1 1/2	2-12	1-1/2-11	48.8	65.8	55	50

# FS7205-NWO-FG

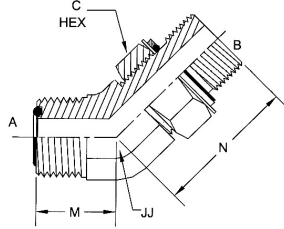
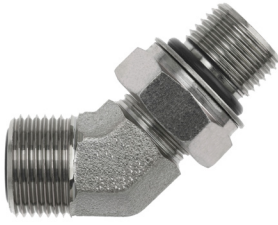
MFS-MMAORB 90 DEG ELBOW



PART NO.	TUBE O.D.	A THREAD	B THREAD	M LGTH	N LGTH	C4 HEX	JJ FLATS
FS7205-04-12-NWO-FG	1/4	9/16-18	M12 x 1.5	21.5	33.0	17	14
FS7205-04-14-NWO-FG	1/4	9/16-18	M14 x 1.5	23.5	35.5	19	17
FS7205-06-10-NWO-FG	3/8	11/16-16	M10 x 1	25.00	32.00	14.00	17.00
FS7205-06-12-NWO-FG	3/8	11/16-16	M12 x 1.5	25.0	35.5	17	17
FS7205-06-14-NWO-FG	3/8	11/16-16	M14 x 1.5	25.0	35.5	19	17
FS7205-06-16-NWO-FG	3/8	11/16-16	M16 x 1.5	25.0	37.0	22.0	19.0
FS7205-06-18-NWO-FG	3/8	11/16-16	M18 x 1.5	26.4	40.6	24	19
FS7205-08-14-NWO-FG	1/2	13/16-16	M14 x 1.5	28.0	36.0	19	19
FS7205-08-16-NWO-FG	1/2	13/16-16	M16 x 1.5	28.0	38.0	22	19
FS7205-08-18-NWO-FG	1/2	13/16-16	M18 x 1.5	28.00	41.00	24.00	19.00
FS7205-10-18-NWO-FG	5/8	1-14	M18 x 1.5	33.3	47.5	24	24
FS7205-10-22-NWO-FG	5/8	1-14	M22x1.5	33.30	49.00	27.00	27.00
FS7205-10-27-NWO-FG	5/8	1-14	M27 x 2.0	35.8	55.5	32	27
FS7205-12-22-NWO-FG	3/4	1-3/16-12	M22 x 1.5	37.3	49.0	27	27
FS7205-12-27-NWO-FG	3/4	1-3/16-12	M27 x 2.0	37.5	55.5	32.0	30.0
FS7205-16-33-NWO-FG	1	1-7/16-12	M33 x 2.0	41.7	59.5	41	36
FS7205-20-42-NWO-FG	1 1/4	1-11/16-12	M42 x 2.0	44.7	63.0	50	41
FS7205-24-48-NWO-FG	1 1/2	2-12	M48 x 2.0	48.8	71.5	55	50

# FS7300-NWO-FG

MFS-MMAORB 45 DEG ELBOW

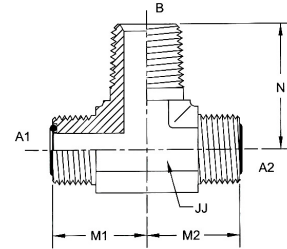
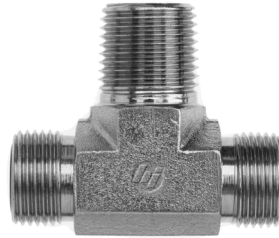


PART NO.	TUBE O.D.	A THREAD	B THREAD	M LGTH	N LGTH	C HEX	JJ FLATS
FS7300-04-12-NWO-FG	1/4	9/16-18	M12 x 1.5	16.0	30.0	17	14
FS7300-04-14-NWO-FG	1/4	9/16-18	M14 x 1.5	17.5	31.5	19	17
FS7300-06-16-NWO-FG	3/8	11/16-16	M16 x 1.5	19.0	33.5	22	17
FS7300-08-14-NWO-FG	1/2	13/16-16	M14 x 1.5	20.5	32.0	19	19
FS7300-08-18-NWO-FG	1/2	13/16-16	M18 x 1.5	20.5	37.0	24	19
FS7300-10-22-NWO-FG	5/8	1-14	M22 x 1.5	23.5	44.0	27	24
FS7300-12-27-NWO-FG	3/4	1 3/16-12	M27 x 2.0	26.0	50.5	32	27
FS7300-16-33-NWO-FG	1	1 7/16-12	M33 x 2.0	30.0	52.5	41	36
FS7300-24-48-NWO-FG	1 1/2	2-12	M47 x 2.0	37.0	56.5	55	50

# TEES

## FS2601-FG

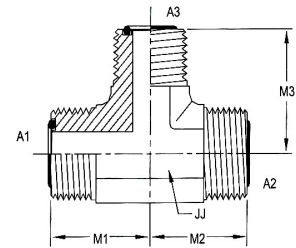
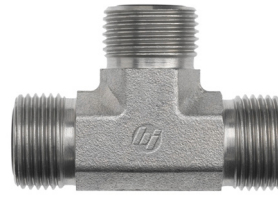
MFS-MFS-MP TEE



PART NO.	TUBE O.D.	A1 THREAD	A2 THREAD	B THREAD	M1 LGTH	M2 LGTH	N LGTH	JJ FLATS
FS2601-04-04-04-FG	1/4	9/16-18	9/16-18	1/4-18	0.85	0.85	1.12	0.562
FS2601-06-06-04-FG	3/8	11/16-16	11/16-16	1/4-18	0.98	0.98	1.09	0.750
FS2601-06-06-06-FG	3/8	11/16-16	11/16-16	3/8-18	0.98	0.98	1.22	0.750
FS2601-08-08-08-FG	1/2	13/16-16	13/16-16	1/2-14	1.10	1.10	1.47	0.875
FS2601-10-10-08-FG	5/8	1-14	1-14	1/2-14	1.31	1.31	1.59	1.062
FS2601-12-12-12-FG	3/4	1-3/16-12	1-3/16-12	3/4-14	1.47	1.47	1.59	1.188
FS2601-16-16-16-FG	1	1-7/16-12	1-7/16-12	1-11-1/2	1.640	1.640	1.970	1.438
FS2601-20-20-20-FG	1-1/4	1-11/16-12	1-11/16-12	1-1/4-11-1/2	1.760	1.760	2.380	1.625

# FS2603-FG

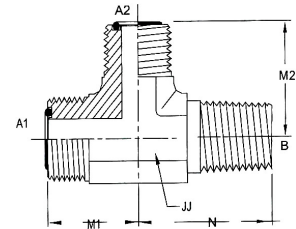
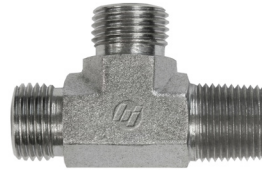
MFS-MFS-MFS TEE



PART NO.	TUBE O.D.	A1 THREAD	A2 THREAD	A3 THREAD	M1 LGTH	M2 LGTH	M3 LGTH	JJ FLATS
FS2603-04-04-04-FG	1/4	9/16-18	9/16-18	9/16-18	0.85	0.85	0.85	0.562
FS2603-06-06-06-FG	3/8	11/16-16	11/16-16	11/16-16	0.980	0.980	0.980	0.750
FS2603-06-06-08-FG	3/8 1/2	11/16-16	11/16-16	13/16-16	1.040	1.040	1.100	0.750
FS2603-06-08-08-FG	3/8 1/2	11/16-16	13/16-16	13/16-16	1.04	1.10	1.10	0.750
FS2603-08-08-06-FG	1/2	13/16-16	13/16-16	11/16-16	1.10	1.10	1.04	.750
FS2603-08-08-08-FG	1/2	13/16-16	13/16-16	13/16-16	1.10	1.10	1.10	0.750
FS2603-08-08-10-FG	1/2 5/8	13/16-16	13/16-16	1-14	1.21	1.21	1.31	1.062
FS2603-10-10-10-FG	5/8	1-14	1-14	1-14	1.31	1.31	1.31	1.062
FS2603-12-12-08-FG	3/4	1-3/16-12	1-3/16-12	13/16-16	1.469	1.469	1.350	1.188
FS2603-12-12-12-FG	3/4	1-3/16-12	1-3/16-12	1-3/16-12	1.47	1.47	1.47	1.188
FS2603-16-16-12-FG	1	1-7/16-12	1-7/16-12	1-3/16-12	1.64	1.64	1.62	1.438
FS2603-16-16-16-FG	1	1-7/16-12	1-7/16-12	1-7/16-12	1.64	1.64	1.64	1.438
FS2603-20-20-20-FG	1-1/4	1-11/16-12	1-11/16-12	1-11/16-12	1.76	1.76	1.76	1.625
FS2603-24-24-24-FG	1-1/2	2-12	2-12	2-12	1.92	1.92	1.92	1.875
FS2603-32-32-32-FG	2	2-1/2-12	2-1/2-12	2-1/2-12	2.52	2.52	2.52	2.562

# FS2605-FG

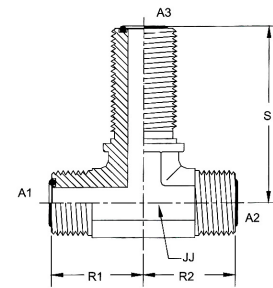
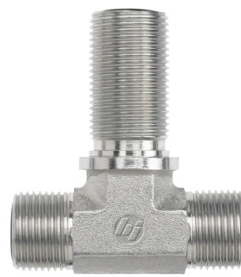
MFS-MP-MFS TEE



PART NO.	TUBE O.D.	A1 THREAD	A2 THREAD	A3 THREAD	M LENGTH	M1 LENGTH	L LENGTH	A/F
FS2605-04-04-04-FG	1/4	9/16-18	1/4-18	9/16-18	0.850	0.850	1.120	0.562
FS2605-06-06-06-FG	3/8	11/16-16	3/8-18	11/16-16	0.980	0.980	1.220	0.750
FS2605-08-08-08-FG	1/2	13/16-16	1/2-14	13/16-16	1.100	1.100	1.470	0.875
FS2605-12-12-12-FG	3/4	1-3/16-12	3/4-14	1-3/16-12	1.470	1.470	1.590	1.188
FS2605-16-16-16-FG	1	1-7/16-12	1-11-1/2	1-7/16-12	1.640	1.640	1.970	1.438

# FS2703-FG

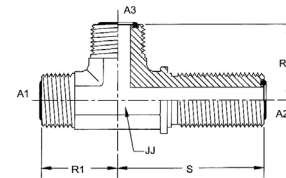
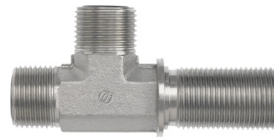
MFS-MFS-MFS BULKHEAD TEE



PART NO.	TUBE O.D.	A1 THREAD	A2 THREAD	A3 THREAD	R1 LGTH	R2 LGTH	SLGTH	JJ FLATS
FS2703-04-04-04-FG	1/4	9/16-18	9/16-18	9/16-18	0.890	0.890	1.850	0.562
FS2703-06-06-06-FG	3/8	11/16-16	11/16-16	11/16-16	1.020	1.020	2.050	0.750
FS2703-06-06-08-FG	3/8	11/16-16	11/16-16	13/16-16	1.08	1.08	2.18	0.75
FS2703-08-08-08-FG	1/2	13/16-16	13/16-16	13/16-16	1.14	1.14	2.18	0.750
FS2703-08-08-12-FG	1/2	13/16-16	13/16-16	1-3/16-16	1.341	1.341	2.66	1.188
FS2703-10-10-10-FG	5/8	1-14	1-14	1-14	1.36	1.36	2.48	1.062
FS2703-12-12-12-FG	3/4	1-3/16-12	1-3/16-12	1-3/16-12	1.52	1.52	2.65	1.188
FS2703-16-16-16-FG	1	1-7/16-12	1-7/16-12	1-7/16-12	1.670	1.670	2.800	1.438
FS2703-20-20-20-FG	1-1/4	1-11/16-12	1-11/16-12	1-11/16-12	1.790	1.790	2.970	1.625

# FS2704-FG

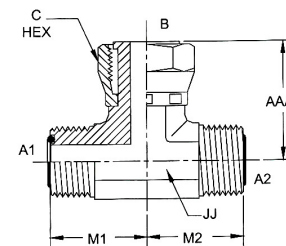
MFS-MFS-MFS BULKHEAD RUN TEE



PART NO.	TUBE O.D.	A1 THREAD	A2 THREAD	A3 THREAD	R1 LGTH	SLGTH	R2 LGTH	JJ FLATS
FS2704-04-04-04-FG	1/4	9/16-18	9/16-18	9/16-18	0.890	1.850	0.890	0.562
FS2704-06-06-06-FG	3/8	11/16-16	11/16-16	11/16-16	1.02	2.05	1.02	0.750
FS2704-08-08-08-FG	1/2	13/16-16	13/16-16	13/16-16	1.14	2.18	1.14	0.750
FS2704-10-10-10-FG	5/8	1-14	1-14	1-14	1.36	2.48	1.36	1.062
FS2704-12-12-12-FG	3/4	1-3/16-12	1-3/16-12	1-3/16-12	1.52	2.65	1.52	1.188
FS2704-16-16-16-FG	1	1-7/16-12	1-7/16-12	1-7/16-12	1.67	2.80	1.67	1.438
FS2704-20-20-20-FG	1-1/4	1-11/16-12	1-11/16-12	1-11/16-12	1.79	2.97	1.79	1.625

# FS6600-FG

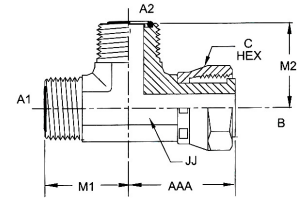
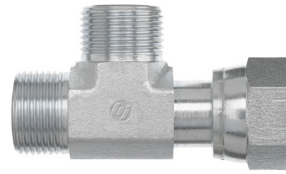
MFS-MFS-FFSS BRANCH TEE



PART NO.	TUBE O.D.	A1 THREAD	A2 THREAD	B THREAD	M1 LGTH	M2 LGTH	AAA LGTH	C HEX	JJ FLATS
FS6600-04-04-04-FG	1/4	9/16-18	9/16-18	9/16-18	0.85	0.85	1.04	0.687	0.562
FS6600-04-04-06-FG	1/4	9/16-18	9/16-18	11/16-16	0.92	0.92	1.15	0.812	0.750
FS6600-06-06-06-FG	3/8	11/16-16	11/16-16	11/16-16	0.98	0.98	1.15	0.812	0.750
FS6600-08-08-08-FG	1/2	13/16-16	13/16-16	13/16-16	1.10	1.10	1.49	0.938	0.750
FS6600-10-10-10-FG	5/8	1-14	1-14	1-14	1.31	1.31	1.62	1.125	1.062
FS6600-12-12-12-FG	3/4	1-3/16-12	1-3/16-12	1-3/16-12	1.47	1.47	1.82	1.375	1.188
FS6600-16-16-16-FG	1	1-7/16-12	1-7/16-12	1-7/16-12	1.64	1.64	2.10	1.625	1.438
FS6600-20-20-20-FG	1 1/4	1-11/16-12	1-11/16-12	1-11/16-12	1.76	1.76	2.29	1.875	1.625
FS6600-24-24-24-FG	1-1/2	2-12	2-12	2-12	1.920	1.920	2.410	2.250	1.875

# FS6602-FG

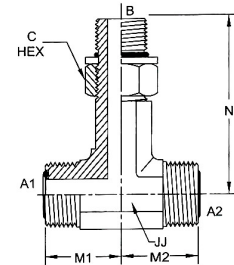
MFS-FFSS-MFS RUN TEE



PART NO.	TUBE O.D.	A1 THREAD	B THREAD	A2 THREAD	M1 LGTH	AAA LGTH	M2 LGTH	C HEX	JJ FLATS
FS6602-04-04-04-FG	1/4	9/16-18	9/16-18	9/16-18	0.85	1.04	0.85	0.687	0.562
FS6602-06-06-04-FG	3/8	11/16-16	11/16-16	9/16-18	0.98	1.15	0.92	0.812	0.750
FS6602-06-06-06-FG	3/8	11/16-16	11/16-16	11/16-16	0.98	1.15	0.98	0.812	0.750
FS6602-06-08-06-FG	1/2	11/16-16	13/16-16	11/16-16	1.04	1.49	1.04	0.938	0.750
FS6602-06-08-08-FG	1/2	11/16-16	13/16-16	13/16-16	1.040	1.490	1.100	0.938	0.750
FS6602-08-08-06-FG	1/2	13/16-16	13/16-16	11/16-16	1.10	1.49	1.04	0.938	0.750
FS6602-08-08-08-FG	1/2	13/16-16	13/16-16	13/16-16	1.10	1.49	1.10	0.938	0.750
FS6602-10-10-10-FG	5/8	1-14	1-14	1/14	1.31	1.62	1.31	1.125	1.062
FS6602-12-12-12-FG	3/4	1-3/16-12	1-3/16-12	1-3/16-12	1.47	1.82	1.47	1.375	1.188
FS6602-16-16-16-FG	1	1-7/16-12	1-7/16-12	1-7/16-12	1.64	2.10	1.64	1.625	1.438
FS6602-20-20-20-FG	1 1/4	1-11/16-12	1-11/16-12	1-11/16-12	1.76	2.29	1.76	1.875	1.625
FS6602-24-24-24-FG	1 1/2	2-12	2-12	2-12	1.92	2.41	1.92	2.250	1.875

# FS6803-L-NWO-FG

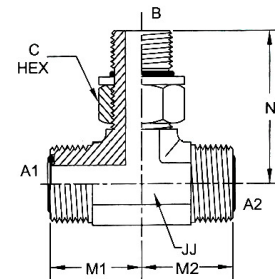
MFS-MFS-MAORB TEE LONG



PART NO.	TUBE O.D.	A1 THREAD	A2 THREAD	B THREAD	M1 LGTH	M2 LGTH	N LGTH	C HEX	JJ FLATS
FS6803-L-12-12-12-NWO-FG	3/4	1-3/16-12	1-3/16-12	1-1/16-12	1.47	1.47	2.67	1.375	1.188

# FS6803-NWO-FG

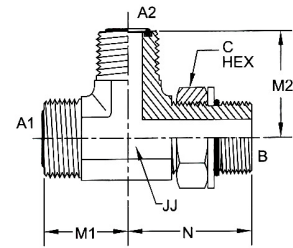
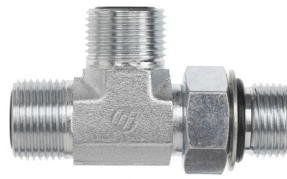
MFS-MFS-MAORB TEE



PART NO.	TUBE O.D.	A1 THREAD	A2 THREAD	B THREAD	M1 LGTH	M2 LGTH	N LGTH	C HEX	JJ FLATS
FS6803-04-04-04-NWO-FG	1/4	9/16-18	9/16-18	7/16-20	0.85	0.85	1.29	0.625	0.562
FS6803-04-04-06-NWO-FG	1/4	9/16-18	9/16-18	9/16-18	0.920	0.920	1.450	0.750	0.750
FS6803-06-06-04-NWO-FG	3/8	11/16-16	11/16-16	7/16-20	0.980	0.980	1.370	0.750	0.750
FS6803-06-06-06-NWO-FG	3/8	11/16-16	11/16-16	9/16-18	0.98	0.98	1.45	0.750	0.750
FS6803-06-06-08-NWO-FG	3/8	11/16-16	11/16-16	3/4-16	1.040	1.040	1.600	0.750	0.750
FS6803-06-08-10-NWO-FG	3/8 / 1/2 / 5/8	11/16-16	13/16-16	7/8-14	1.190	1.202	1.980	1.0625	0.875
FS6803-08-08-08-NWO-FG	1/2	13/16-16	13/16-16	3/4-16	1.10	1.10	1.60	0.937	0.750
FS6803-10-10-10-NWO-FG	5/8	1-14	1-14	7/8-14	1.31	1.31	1.97	1.062	1.062
FS6803-12-12-12-NWO-FG	3/4	1-3/16-12	1-3/16-12	1-1/16-12	1.47	1.47	2.17	1.375	1.188
FS6803-16-16-16-NWO-FG	1	1-7/16-12	1-7/16-12	1-5/16-12	1.64	1.64	2.35	1.625	1.438
FS6803-20-20-20-NWO-FG	1 1/4	1-11/16-12	1-11/16-12	1-5/8-12	1.760	1.760	2.450	1.875	1.625

# FS6804-NWO-FG

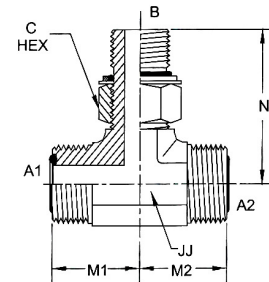
MFS-MAORB-MFS TEE



PART NO.	TUBE O.D.	A1 THREAD	B THREAD	A2 THREAD	M1 LGTH	N LGTH	M2 LGTH	C HEX	JJ FLATS
FS6804-04-04-04-NWO-FG	1/4	9/16-18	7/16-20	9/16-18	0.85	1.29	0.85	0.625	0.562
FS6804-04-06-04-NWO-FG	1/4	9/16-18	9/16-18	9/16-18	0.92	1.45	0.92	0.750	0.750
FS6804-04-08-04-NWO-FG	1/4	9/16-18	3/4-16	9/16-18	0.980	1.600	0.980	0.750	0.938
FS6804-06-04-06-NWO-FG	3/8	11/16-16	7/16-20	11/16-16	0.980	1.370	0.980	0.625	0.750
FS6804-06-06-06-NWO-FG	3/8	11/16-16	9/16-18	11/16-16	0.980	1.450	0.980	0.750	0.750
FS6804-06-08-06-NWO-FG	3/8	11/16-16	3/4-16	11/16-16	1.040	1.600	1.040	0.938	0.750
FS6804-08-06-08-NWO-FG	1/2	13/16-16	9/16-18	13/16-16	1.100	1.440	1.100	0.750	0.750
FS6804-08-08-04-NWO-FG	1/2	13/16-16	3/4-16	9/16-18	1.10	1.60	0.97	0.938	0.750
FS6804-08-08-08-NWO-FG	1/2	13/16-16	3/4-16	13/16-16	1.100	1.600	1.100	0.938	0.750
FS6804-08-10-08-NWO-FG	1/2	13/16-16	7/8-14	13/16-16	1.210	1.970	1.210	1.062	1.062
FS6804-08-12-04-NWO-FG	1/2	13/16-16	1-1/16-12	9/16-18	1.32	2.17	1.19	1.375	1.188
FS6804-08-12-08-NWO-FG	1/2	13/16-16	1-1/16-12	13/16-16	1.320	2.170	1.320	1.375	1.188
FS6804-10-10-06-NWO-FG	5/8	1-14	7/8-14	11/16-16	1.310	1.970	1.150	1.062	1.062
FS6804-10-10-10-NWO-FG	5/8	1-14	7/8-14	1-14	1.310	1.970	1.310	1.062	1.062
FS6804-10-12-10-NWO-FG	5/8	1-14	1-1/16-12	1-14	1.41	2.17	1.41	1.375	1.188
FS6804-12-08-12-NWO-FG	3/4	1-3/16-12	3/4-16	1-3/16-12	1.47	1.84	1.47	0.938	1.188
FS6804-12-12-08-NWO-FG	3/4	1-3/16-12	1-1/16-12	13/16-16	1.470	2.170	1.320	1.375	1.188
FS6804-12-12-12-NWO-FG	3/4	1-3/16-12	1-1/16-12	1-3/16-12	1.47	2.17	1.47	1.375	1.188
FS6804-12-12-16-NWO-FG	3/4	1-3/16-12	1-1/16-12	1-7/16-12	1.62	2.32	1.64	1.375	1.438
FS6804-12-16-12-NWO-FG	3/4	1-3/16-12	1-5/16-12	1-3/16-12	1.620	2.350	1.620	1.625	1.438
FS6804-16-12-12-NWO-FG	1	1-7/16-12	1-1/16-12	1-3/16-12	1.64	2.32	1.62	1.375	1.438
FS6804-16-12-16-NWO-FG	1	1-7/16-12	1-1/16-12	1-7/16-12	1.640	2.320	1.640	1.375	1.438
FS6804-16-16-16-NWO-FG	1	1-7/16-12	1-5/16-12	1-7/16-12	1.640	2.350	1.640	1.625	1.438
FS6804-16-24-16-NWO-FG	1	1-7/16-12	1-7/8-12	1-7/16-12	1.92	2.59	1.92	2.125	1.875
FS6804-20-20-20-NWO-FG	1-1/4	1-11/16-12	1-5/8-12	1-11/16-12	1.760	2.450	1.760	1.875	1.625
FS6804-24-24-24-NWO-FG	1 1/2	2-12	1-7/8-12	2-12	1.920	2.590	1.920	2.125	1.875

# FS7210-NWO-FG

MFS-MFS-MMAORB TEE

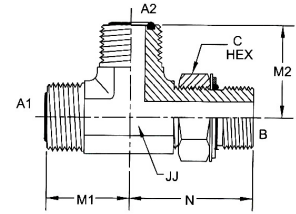


PART NO.	TUBE O.D.	A1 THREAD	A2 THREAD	B THREAD	M1 LGTH	M2 LGTH	N LGTH	C HEX	JJ FLATS
FS7210-04-04-12-NWO-FG	1/4	9/16-18	9/16-18	M12 x 1.5	21.5	21.5	33.0	17	14
FS7210-04-04-14-NWO-FG	1/4	9/16-18	9/16-18	M14 x 1.5	23.5	23.5	35.5	19	17
FS7210-06-06-14-NWO-FG	3/8	11/16-16	11/16-16	M14 x 1.5	25.0	25.0	35.5	19	17
FS7210-06-06-16-NWO-FG	3/8	11/16-16	11/16-16	M16 x 1.5	25.0	25.0	37.5	12	17
FS7210-08-08-14-NWO-FG	1/2	13/16-16	13/16-16	M14 x 1.5	28.0	28.0	36.0	19	19
FS7210-08-08-18-NWO-FG	1/2	13/16-16	13/16-16	M18 x 1.5	28.0	28.0	41.0	24	19
FS7210-08-08-22-NWO-FG	1/2	13/16-16	13/16-16	M22 x 1.5	31.0	31.0	49.0	27	24
FS7210-10-10-22-NWO-FG	5/8	1-14	1-14	M22 x 1.5	33.5	33.5	49.0	27	24
FS7210-12-12-27-NWO-FG	3/4	1 3/16-12	1 3/16-12	M27 x 2.0	37.5	37.5	55.5	32	27
FS7210-16-16-33-NWO-FG	1	1 7/8-12	1 7/8-12	M33 x 2.0	41.5	41.5	59.5	41	36
FS7210-20-20-42-NWO-FG	1 1/4	1 11/16-12	1 11/16-12	M42 x 2.0	44.5	44.5	63.0	50	41
FS7210-24-24-48-NWO-FG	1 1/2	2-12	2-12	M48 x 2.0	49.0	49.0	71.5	55	50



# FS7215-NWO-FG

MFS-MMAORB-MFS TEE

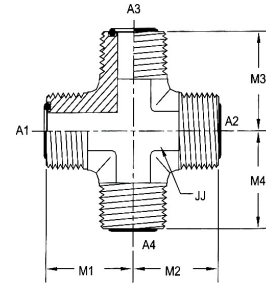


PART NO.	TUBE O.D.	A1 THREAD	B THREAD	A2 THREAD	M1 LGTH	N LGTH	M2 LGTH	C HEX	JJ FLATS
FS7215-04-12-04-NWO-FG	1/4	9/16-18	M12 x 1.5	9/16-18	21.5	33.0	21.5	17	14
FS7215-04-14-04-NWO-FG	1/4	9/16-18	M14 x 1.5	9/16-18	23.5	35.5	23.5	19	17
FS7215-06-14-06-NWO-FG	3/8	11/16-16	M14 x 1.5	11/16-16	25.0	35.5	25.0	19	17
FS7215-06-16-06-NWO-FG	3/8	11/16-16	M16 x 1.5	11/16-16	25.0	37.5	25.0	22	17
FS7215-08-14-08-NWO-FG	1/2	13/16-16	M14 x 1.5	13/16-16	28.0	36.0	28.0	19	19
FS7215-08-18-08-NWO-FG	1/2	13/16-16	M18 x 1.5	13/16-16	28.0	41.0	28.0	24	19
FS7215-08-22-08-NWO-FG	1/2	13/16-16	M22 x 1.5	13/16-16	31.0	49.0	31.0	27	24
FS7215-10-18-10-NWO-FG	5/8	1-14	M18 x 1.5	1-14	33.5	47.5	33.5	24	24
FS7215-10-22-10-NWO-FG	5/8	1-14	M22 x 1.5	1-14	33.5	49.0	33.5	27	24
FS7215-12-27-12-NWO-FG	3/4	1 3/16-12	M27 x 2.0	1 3/16-12	37.5	55.5	37.5	32	27
FS7215-16-33-16-NWO-FG	1	1 7/16-12	M33 x 2.0	1 7/16-12	41.5	59.5	41.5	41	36
FS7215-20-42-20-NWO-FG	1 1/4	1 11/16-12	M42 x 2.0	1 11/16-12	44.5	63.0	44.5	50	41
FS7215-24-48-24-NWO-FG	1 1/2	2-12	M48 x 2.0	2-12	49.0	71.5	49.0	55	50

# CROSSES

## FS2650-FG

MFS-MFS-MFS-MFS-CROSS

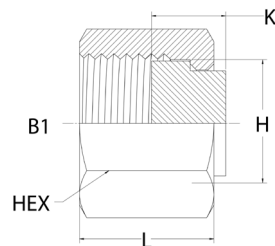


PART NO.	TUBE O.D.	A1 THREAD	A2 THREAD	A3 THREAD	A4 THREAD	M1 LGTH	M2 LGTH	M3 LGTH	M4 LGTH	JJ FLATS
FS2650-04-04-04-04-FG	1/4	9/16-18	9/16-18	9/16-18	9/16-18	0.85	0.85	0.85	0.85	0.562
FS2650-06-06-06-06-FG	3/8	11/16-16	11/16-16	11/16-16	11/16-16	0.98	0.98	0.98	0.98	0.750
FS2650-08-08-08-08-FG	1/2	13/16-16	13/16-16	13/16-16	13/16-16	1.100	1.100	1.100	1.100	0.750
FS2650-10-10-10-10-FG	5/8	1-14	1-14	1-14	1-14	1.31	1.31	1.31	1.31	1.062
FS2650-12-12-12-12-FG	3/4	1-3/16-12	1-3/16-12	1-3/16-12	1-3/16-12	1.47	1.47	1.47	1.47	1.188
FS2650-16-16-16-16-FG	1	1-7/16-12	1-7/16-12	1-7/16-12	1-7/16-12	1.64	1.64	1.64	1.64	1.438
FS2650-20-20-20-20-FG	1-1/4	1-11/16-12	1-11/16-12	1-11/16-12	1-11/16-12	1.76	1.76	1.76	1.76	1.625
FS2650-24-24-24-24-FG	1-1/2	2-12	2-12	2-12	2-12	1.92	1.92	1.92	1.92	1.875

# NUTS & ACCESSORIES

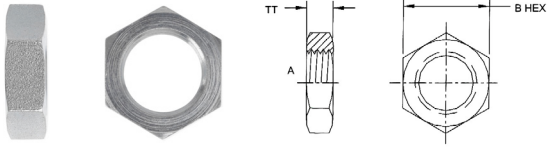
## FS0304-C

CAP ASSEMBLY INSERT



PART NO.	TUBE O.D.	H.O.D.	K LGTH	B1	HEX	L
FS0304-C-04	1/4	0.502	0.340	9/16-18	0.688	0.580
FS0304-C-06	3/8	0.620	0.37	11/16-16	0.812	0.670
FS0304-C-08	1/2	0.745	0.47	13/16-16	0.938	0.830
FS0304-C-10	5/8	0.923	0.470	1-14	1.125	0.930
FS0304-C-12	3/4	1.097	0.530	1-3/16-12	1.375	1.020
FS0304-C-16	1	1.347	0.590	1-7/16-12	1.625	1.090
FS0304-C-20	1-1/4	1.597	0.59	1-11/16-12	1.875	1.090
FS0304-C-24	1-1/2	1.910	0.590	2-12	2.250	1.090

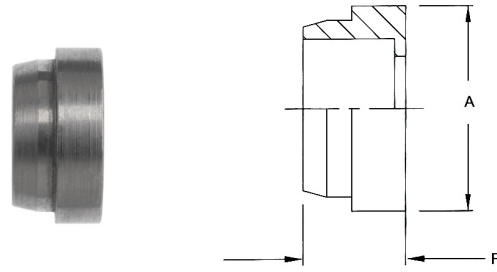
## FS0306 BULKHEAD LOCK NUT



**PART NO.**    **TUBE O.D.**    **A THREAD**    **B HEX**    **TT WIDTH**

FS0306-04	1/4	9/16-18	0.812	0.270
FS0306-06	3/8	11/16-16	1.000	0.31
FS0306-08	1/2	13/16-16	1.125	0.35
FS0306-10	5/8	1-14	1.312	0.41
FS0306-12	3/4	1-3/16-12	1.500	0.410
FS0306-16	1	1-7/16-12	1.750	0.41
FS0306-20	1-1/4	1-11/16-12	2.000	0.41
FS0306-24	1-1/2	2-12	2.375	0.41

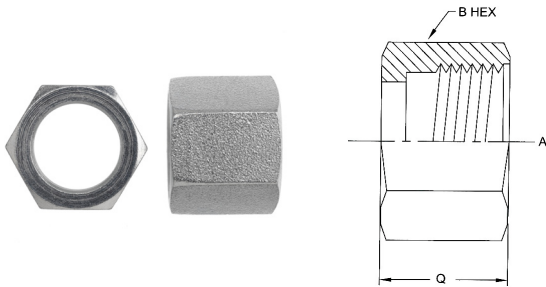
## FS0319 BRAZE SLEEVE



**PART NO.**    **TUBE O.D.**    **A O.D.**    **FLGTH**

FS0319-04	1/4	0.502	0.374
FS0319-06	3/8	0.620	0.374
FS0319-08	1/2	0.745	0.374
FS0319-10	5/8	0.923	0.413
FS0319-12	3/4	1.097	0.551
FS0319-16	1	1.347	0.610
FS0319-20	1-1/4	1.597	0.610
FS0319-24	1-1/2	1.910	0.610

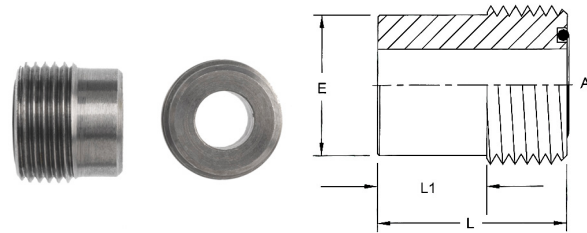
## FS0318 NUT



**PART NO.**    **TUBE O.D.**    **A THREAD**    **B HEX**    **Q WIDTH**

FS0318-04	1/4	9/16-18	0.687	0.580
FS0318-06	3/8	11/16-16	0.812	0.670
FS0318-08	1/2	13/16-16	0.938	0.827
FS0318-10	5/8	1-14	1.125	0.925
FS0318-12	3/4	1-3/16-12	1.375	1.024
FS0318-16	1	1-7/16-12	1.625	1.095
FS0318-20	1-1/4	1-11/16-12	1.875	1.095
FS0318-24	1-1/2	2-12	2.250	1.095

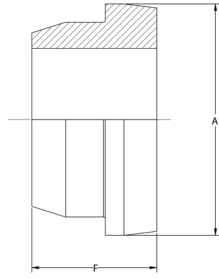
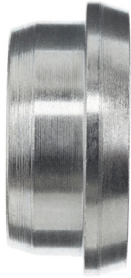
## FS0403-TS MFS TUBE SPUD



**PART NO.**    **E\* DIA**    **A THREAD**    **L1 LGTH**    **L LGTH**

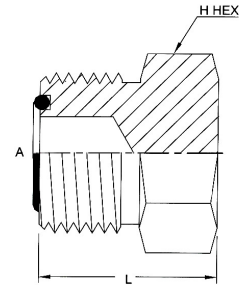
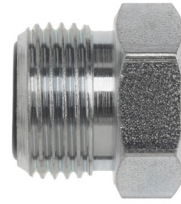
FS0403-TS-04-04	0.468	9/16-18	0.454	0.735
FS0403-TS-06-06	0.594	11/16-16	0.340	0.751
FS0403-TS-08-08	0.719	13/16-16	0.292	0.694
FS0403-TS-10-10	0.891	1-14	0.570	1.070
FS0403-TS-12-12	1.069	1-3/16-12	0.408	0.945
FS0403-TS-16-16	1.319	1-7/16-12	0.473	1.029

## FS1319 MECHANICALLY FORMED FLANGE SLEEVE



PART NO.	TUBE O.D.	A O.D.	FLGTH
FS1319-04	1/4	0.50	0.30
FS1319-06	3/8	0.62	0.34
FS1319-08	1/2	0.74	0.42
FS1319-10	5/8	0.92	0.42
FS1319-12	3/4	1.10	0.47
FS1319-16	1	1.34	0.53
FS1319-20	1 1/4	1.59	0.52
FS1319-24	1 1/2	1.91	0.49

## FS2408 MFS PLUG



PART NO.	A THREAD	L LGTH	H HEX
FS2408-04	9/16-18	0.660	0.625
FS2408-06	11/16-16	0.750	0.750
FS2408-08	13/16-16	0.850	0.875
FS2408-10	1-14	1.020	1.062
FS2408-12	1-3/16-12	1.080	1.250
FS2408-16	1-7/16-12	1.099	1.500
FS2408-20	1-11/16-12	1.099	1.750
FS2408-24	2-12	1.090	2.125
FS2408-32	2-1/2-12	1.398	2.750

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FS2404	MFS-MP STRAIGHT	PAGE: 3		
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