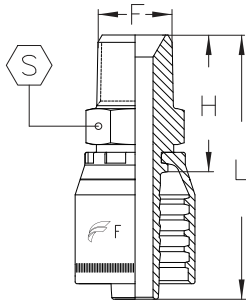


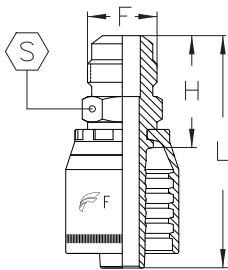




## MP NPT Male



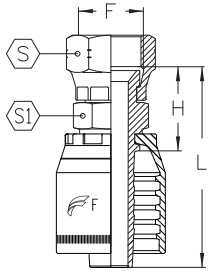
Part Number		F	H		L			
	in		mm	in	mm	in	mm	in
F04-02MP	3/16	1/8 - 27	20.6	0.81	45.6	1.79	12	1/2
F04-04MP	3/16	1/4 - 18	26.5	1.04	51.5	2.02	14	9/16
F05-04MP	1/4	1/4 - 18	27.0	1.06	55.0	2.16	14	9/16
F05-06MP	1/4	3/8 - 18	28.6	1.12	56.6	2.23	19	3/4
F06-04MP	5/16	1/4 - 18	27.0	1.06	55.0	2.16	14	9/16
F06-06MP	5/16	3/8 - 18	28.6	1.12	56.6	2.22	19	3/4
F08-06MP	13/32	3/8 - 18	33.1	1.30	57.5	2.26	19	3/4
F08-08MP	13/32	1/2 - 14	39.1	1.53	63.5	2.50	22	7/8
F10-08MP	1/2	1/2 - 14	35.0	1.37	68.0	2.67	22	7/8
F10-12MP	1/2	3/4 - 12	36.9	1.45	69.9	2.75	27	1 1/16
F12-12MP	5/8	3/4 - 12	37.1	1.46	72.9	2.87	27	1 1/16
F16-16MP	7/8	3/4 - 12	49.0	1.92	82.9	3.26	36	1 7/16
F20-20MP	1 1/8	1 1/4 - 11 1/2	50.3	1.98	103.6	4.08	43	1 3/4
F24-24MP	1 3/16	3/4 - 12	58.0	2.28	110.0	4.33	50	2
F32-32MP	1 13/16	2 - 11 1/2	63.0	2.50	123.0	4.84	65	2 9/16




## MJ JIC 37° Male



Part Number		F	H		L			
	in		mm	in	mm	in	mm	in
F04-04MJ	3/16	7/16 - 20	25.0	0.98	50.0	1.96	12	1/2
F05-05MJ	1/4	1/2 - 20	25.5	1.00	53.5	2.10	14	9/16
F05-06MJ	1/4	9/16 - 18	26.6	1.04	54.6	2.14	15	5/8
F06-06MJ	5/16	9/16 - 18	26.6	1.04	54.6	2.14	15	5/8
F06-08MJ	5/16	3/4 - 16	29.7	1.17	57.7	2.24	19	3/4
F08-08MJ	13/32	3/4 - 16	36.6	1.44	61.0	2.40	22	7/8
F10-08MJ	1/2	3/4 - 16	30.7	1.20	63.7	2.50	19	3/4
F10-10MJ	1/2	7/8 - 14	35.3	1.38	68.3	2.68	24	1
F12-12MJ	5/8	1 1/16 - 12	39.1	1.53	74.9	2.94	27	1 1/16

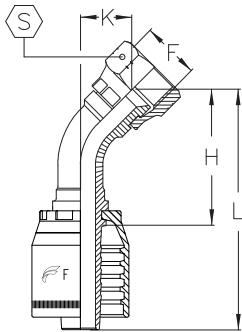
### FJ JIC 37° Female Swivel





Part Number		F	H		L					
	in		mm	in	mm	in	mm	in	mm	in
F04-04FJ	3/16	7/16 - 20	19.0	0.74	44.0	1.73	14	9/16	12	1/2
F05-04FJ	1/4	7/16 - 20	20.5	0.80	48.5	1.90	14	9/16	14	9/16
F05-05FJ	1/4	1/2 - 20	21.0	0.82	49.0	1.92	17	11/16	14	9/16
F05-06FJ	1/4	9/16 - 18	22.0	0.86	50.0	1.96	19	3/4	14	9/16
F06-06FJ	5/16	9/16 - 18	22.5	0.88	50.5	1.98	19	3/4	16	5/8
F06-08FJ*	5/16	3/4 - 16	17.5	0.68	45.5	1.79	22	7/8	-	-
F08-08FJ	13/32	3/4 - 16	31.1	1.22	64.6	2.54	24	15/16	19	3/4
F08-10FJ	13/32	7/8 - 14	27.5	1.07	54.5	2.12	27	11/16	22	7/8
F10-08FJ	1/2	3/4 - 16	25.5	1.00	58.5	2.30	22	7/8	19	3/4
F10-10FJ	1/2	7/8 - 14	27.5	1.08	60.5	2.38	27	11/16	22	7/8
F10-12FJ	1/2	11/16 - 12	30.3	1.19	63.3	2.49	32	11/4	25	1
F12-12FJ	5/8	11/16 - 12	30.5	1.20	66.3	2.61	32	11/4	25	1
F16-16FJ	7/8	15/16 - 12	35.5	1.39	76.0	2.99	38	11/2	32	11/4
F20-20FJ	11/8	15/8 - 12	53.4	2.10	105.0	4.13	50	2	41	15/8
F24-24FJ	13/8	17/8 - 12	60.0	2.36	120.0	4.72	57	21/4	50	2
F32-32FJ	113/16	21/2 - 12	51.5	2.03	111.5	4.39	70	23/4	60	23/8

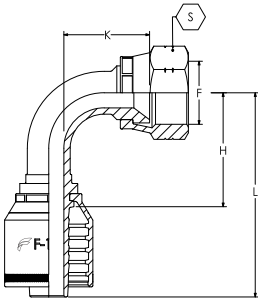
\* Single hexagon coupling.

### FJ45 JIC 37° Female Swivel - 45° Elbow



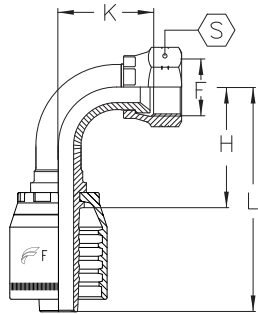
Part Number		F	H		L		K			
	in		mm	in	mm	in	mm	in	mm	in
F04-04FJ45	3/16	7/16 - 20	29.0	1.14	54.0	2.12	10.0	0.39	14	9/16
F05-05FJ45	1/4	1/2 - 20	32.0	1.25	60.0	2.36	11.0	0.43	17	11/16
F06-06FJ45	5/16	9/16 - 18	34.0	1.33	62.0	2.44	12.0	0.47	19	3/4
F08-08FJ45	13/32	3/4 - 16	45.0	1.77	78.0	3.07	20.0	0.78	24	15/16
F10-10FJ45	1/2	7/8 - 14	43.0	1.69	76.0	2.99	16.0	0.62	27	11/16
F12-12FJ45	5/8	11/16 - 12	50.0	1.96	86.0	3.38	19.0	0.74	32	11/4
F16-16FJ45	7/8	15/16 - 12	71.0	2.80	110.0	4.43	24.0	0.94	38	11/2
F20-20FJ45	11/8	15/8 - 12	90.0	3.54	143.0	5.63	36.0	1.43	50	2

## FJ90S JIC 37° Female Swivel - 90° Elbow Short Drop



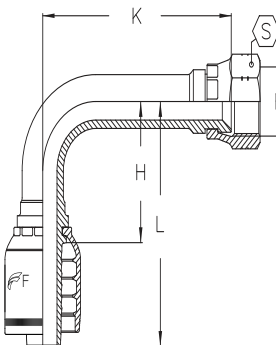
Part Number		F	H		L		K			
	in		mm	in	mm	in	mm	in	mm	in
F10-10FJ90S	1/2	7/8 - 14	38.0	1.50	71.0	2.79	33.0	1.30	27	1 1/16
F12-12FJ90S	5/8	1 1/4 - 12	45.0	1.77	81.0	3.19	40.0	1.57	32	1 1/4

## FJ90M JIC 37° Female Swivel - 90° Elbow Medium Drop



Part Number		F	H		L		K			
	in		mm	in	mm	in	mm	in	mm	in
F04-04FJ90M	3/16	7/16 - 20	21.0	0.82	46	1.81	21.0	0.82	14	9/16
F05-05FJ90M	1/4	7/16 - 20	25.5	1.00	53.5	2.10	26.0	1.02	14	9/16
F05-06FJ90M	1/4	9/16 - 18	25.5	1.00	53.5	2.10	27.0	1.06	19	3/4
F06-06FJ90M	5/16	9/16 - 18	28.0	1.10	56	2.20	29.0	1.14	19	3/4
F08-08FJ90M	13/32	3/4 - 16	31.6	1.24	69.5	2.73	39.0	1.53	24	15/16
F10-10FJ90M	1/2	7/8 - 14	37.0	1.45	70	2.75	40.0	1.57	27	1 1/16
F10-12FJ90M	1/2	1 1/16 - 12	40.0	1.57	73	2.87	40.0	1.57	32	1 1/4
F12-12FJ90M	5/8	1 1/16 - 12	45.0	1.77	81	3.18	47.0	1.85	32	1 1/4
F16-16FJ90M	7/8	1 5/16 - 12	74.0	2.91	129	5.07	72.0	2.83	38	1 1/2
F20-20FJ90M	1 1/16	1 5/8 - 12	89.1	3.50	147	5.78	88.4	3.48	50	2

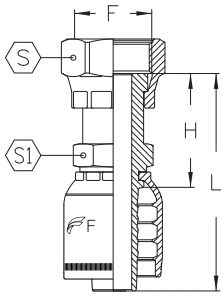
## FJ90L JIC 37° Female Swivel - 90° Elbow Long Drop






Part Number		F	H		L		K			
	in		mm	in	mm	in	mm	in	mm	in
F10-10FJ90L	1/2	7/8 - 14	45.0	1.79	81	3.19	70.0	2.75	27	1 1/16
F16-16FJ90L	7/8	1 5/16 - 12	74.0	2.91	115	4.52	116.0	4.56	38	1 1/2
F20-20FJ90L	1 1/16	1 5/8 - 12	89.1	3.50	147	5.78	145.0	5.70	50	2

BECAUSE WE CONTINUALLY EXAMINE WAYS TO IMPROVE OUR PRODUCTS, WE RESERVE THE RIGHT TO ALTER SPECIFICATIONS WITHOUT NOTICE.

**FF Female Swivel**

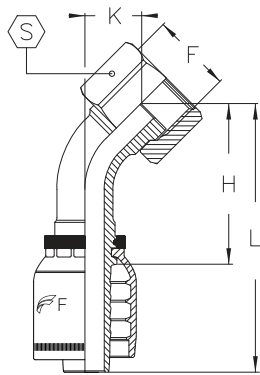




Part Number		F	H		L					
	in		mm	in	mm	in	mm	in	mm	in
F06-06FF	5/16	1 1/16 - 16	28.5	1.22	1.12	56.5	22	7/8	16	5/8
F10-08FF	1/2	1 3/16 - 16	33.5	1.32	1.32	66.5	24	1	19	3/4
F10-10FF	1/2	1 3/16 - 16	39.5	1.56	1.56	72.5	30	1 3/16	24	1
F12-12FF	5/8	1 - 14	45.7	1.80	1.72	79.5	36	1 7/16	27	1 1/16

2

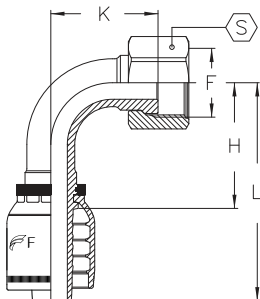
F Series - SAE100R5



**FF45 Female Swivel - 45° Elbow**



Part Number		F	H		L		K			
	in		mm	in	mm	in	mm	in	mm	in
F06-06FF45	5/16	1 1/16 - 16	32.5	1.28	63.0	2.48	12.5	0.49	22	7/8
F10-08FF45	1/2	1 3/16 - 16	42.5	1.67	75.5	2.97	15.5	0.61	24	1
F10-10FF45	1/2	1 3/16 - 16	38.0	1.50	78.0	3.08	17.5	0.69	30	1 3/16
F12-12FF45	5/8	1 - 14	41.0	1.61	87.5	3.44	20.5	0.80	36	1 7/16

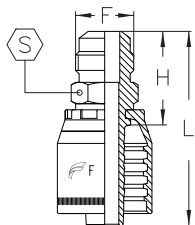
**FF90S Female Swivel - 90° Elbow Short Drop**



Part Number		F	H		L		K			
	in		mm	in	mm	in	mm	in	mm	in
F06-06FF90S	5/16	1 1/16 - 16	29.0	1.14	57.0	2.24	25.0	0.98	22	7/8
F10-08FF90S	1/2	1 3/16 - 16	39.0	1.54	72.0	2.83	31.0	1.20	24	1
F10-10FF90S	1/2	1 - 14	39.0	1.54	72.0	2.83	34.0	1.34	30	1 3/16
F12-12FF90S	5/8	1 - 14	45.0	1.77	81.0	3.19	42.0	1.65	36	1 7/16

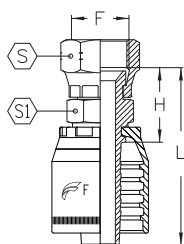
BECAUSE WE CONTINUALLY EXAMINE WAYS TO IMPROVE OUR PRODUCTS, WE RESERVE THE RIGHT TO ALTER SPECIFICATIONS WITHOUT NOTICE.

## MA SAE 45° Male



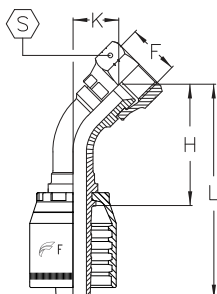
Part Number		F	H		L			
	in		mm	in	mm	in	mm	in
F06-06MA	5/16	5/8 - 18	28.2	1.11	56.2	2.21	16	5/8

## FA SAE 45° Female



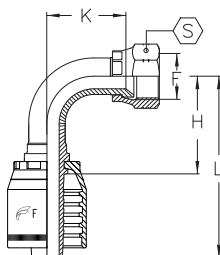
Part Number		F	H		L					
	in		mm	in	mm	in	mm	in	mm	in
F06-06FA	5/16	5/8 - 18	23.5	0.92	51.5	2.02	22	7/8	16	5/8
F12-12FA	5/8	1 1/16 - 14	31.8	1.25	72.3	2.84	32	1 1/4	27	1 1/16

## FA45 SAE 45° Female Swivel - 45° Elbow



Part Number		F	H		L		K			
	in		mm	in	mm	in	in	mm	in	
F06-06FA45	5/16	5/8 - 18	38.0	1.49	66.0	2.59	16.0	0.62	22	7/8

## FA90 SAE 45° Female Swivel - 90° Elbow



Part Number		F	H		L		K			
	in		mm	in	mm	in	in	mm	in	
F06-06FA90	5/16	5/8 - 18	28.0	1.10	56.0	2.20	29.0	1.14	22	7/8

BECAUSE WE CONTINUALLY EXAMINE WAYS TO IMPROVE OUR PRODUCTS, WE RESERVE THE RIGHT TO ALTER SPECIFICATIONS WITHOUT NOTICE.