

FF Series (Steel) ISO 16028 Interchange



Eaton's FF Series flat face is specifically designed for those applications where quick and easy connections and no-spill performance are essential. The FF Series is ideal for use when global interchangeability with other manufacturers is important and is available in sizes from 1/4" through 2" to best meet your specific size requirements.

Product Features

- Meets or exceeds the ISO 16028 standard
- Push-to-connect
- Standard sleeve lock prevents accidental disconnection
- Color identification rings available to help prevent crossing of lines
- Standard Material: High resistant carbon steel with zinc trivalent plating and QPQ finish, ROHS compliant
- Standard Seal Material: NBR+AU
- Available seal options: NBR+AU, FKM, EPDM, HNBR (upon request)

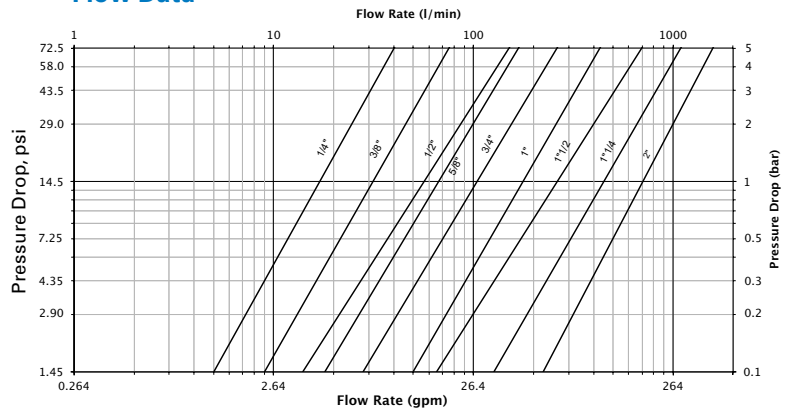
Physical Characteristics

ISO Size* (mm)	Coupling Size (in)	Maximum Operating Pressure				Minimum Burst Pressure				Socket/Female Half		Rated Flow**		Fluid Loss	Air Inclusion	Force to Connect			
		Connected (bar)	(psi)	Plug/ Male Half (bar)	(psi)	Socket/ Female Half (bar)	(psi)	Connected (bar)	(psi)	Plug/ Male Half (bar)	(psi)	(bar)	(psi)	(lpm)	(gpm)	ml-cc.	ml-cc.	N	Lbs
6.3	1/4	350	5,075	350	5,075	350	5,075	1,400	20,300	1,400	20,300	1,400	20,300	17	4.5	0.004	0.007	80	18.0
10.0	3/8	350	5,075	350	5,075	350	5,075	1,400	20,300	1,400	20,300	1,400	20,300	29	7.7	0.006	0.010	140	31.5
12.5	1/2	350	5,075	350	5,075	350	5,075	1,400	20,300	1,400	20,300	1,400	20,300	55	14.5	0.012	0.013	195	43.8
16.0	5/8	350	5,075	350	5,075	350	5,075	1,400	20,300	1,400	20,300	1,400	20,300	67	17.7	0.016	0.030	205	46.1
19.0	3/4	350	5,075	350	5,075	350	5,075	1,300	18,850	1,300	18,850	1,400	20,300	105	27.7	0.034	0.015	215	48.3
25.0	1	350	5,075	350	5,075	350	5,075	1,260	18,270	1,260	18,270	1,260	18,270	177	46.8	0.032	0.033	260	58.5
-	1 1/4	300	4,350	300	4,350	300	4,350	800	11,600	800	11,600	800	11,600	260	68.7	0.170	-	350	78.7
-	1 1/2	270	3,915	270	3,915	270	3,915	800	11,600	800	11,600	700	10,150	450	118.9	0.050	-	390	87.7
-	2	200	2,900	160	2,320	80	1,160	800	11,600	640	9,280	320	4,640	700	184.9	0.100	-	470	105.7

* The ISO size corresponds to the internal diameter of the hose or the external diameter of the rigid tube (as defined in ISO 4397 Standard)

** Indicated values refer to a 1 bar/14.5 psi pressure drop

Flow Data



Applications & Markets

- Hydraulic and Fluid Transfer
- Construction equipment
- Agricultural equipment
- Utility vehicles
- On-Highway vehicles
- Stationary in-plant hydraulics and fluid transfer
- Interchangeable with HTMA couplings in the 3/8" size

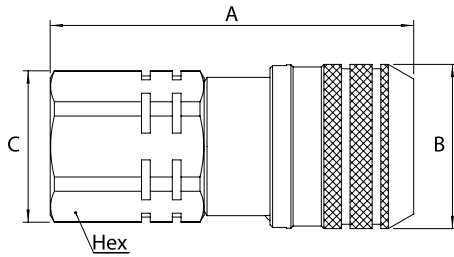
Seal Elastomer Data*

Seal Elastomer	P/N Code	ISO Size (6FF, 10FF, 12FF, 16FF, 19FF and 25FF) Maximum Operation Temperature Range	Non-ISO Size (32FF, 50FF and 50FF) Maximum Operation Temperature Range
NBR (Nitrile) + AU (Polyurethane)	-	-25°C +100°C/-13°F +212°F	-20°C +100°C/-4°F +212°F
FKM	-143	-20°C +200°C/-4°F +392°F	-15°C +180°C/+5°F +356°F
EPDM (Ethylene-Propylene)	-192	-40°C +150°C/-40°F +302°F	on request
HNBR	-507	-32°C +150°C/-25°F +302°F	on request
Kalrez® 6375	-242	-20°C +275°C/-4°F +527°F	on request
Generic FFKM (Perfluorocarbon)	-503	-15°C +275°C/+5°F +527°F	on request

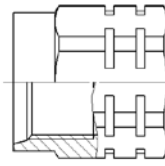
* For reference only, based on Eaton recommended temperatures.

Contact Eaton technical support for further information on fluid compatibility

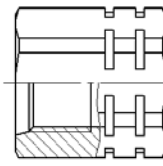
FF Series (Steel) ISO 16028 Interchange



ISO 6149-1
15° + metric thread



SAE J 1926-1
15° + UN/UNF thread



EATON S013A
15° + BSPP thread

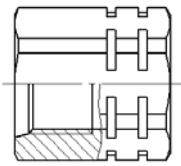


Figure 1

Sockets(Female)

Part Number		Body Size	ISO Size	Nominal Flow Diameter	Thread Size* (Female)	Dimensions				Weight										
NBR+AU	FKM	EPDM	(in)	(mm)	NPT	BSPP	ISO 6149-1	SAE J 1926-1	Eaton S013A	Fig.	A (in)	B (in)	C (in)	Hex (in)	A (mm)	B (mm)	C (mm)	Hex (mm)	lbs	grams
6FFS25	6FFS25143	6FFS25192	¼	6.3	6	¼ 18f				1	2.13	1.06	0.94	0.87	54	27	24	22	-	-
6FFS25BS	6FFS25BS143	6FFS25BS192	¼	6.3	6	¼-19				1	2.13	1.06	0.94	0.87	54	27	24	22	-	-
6FFS25FG	6FFS25FG143	6FFS25FG192	¼	6.3	6				G ¼	1	2.13	1.06	0.94	0.87	54	27	24	22	0.30	135
6FFS56UN	6FFS56UN143	6FFS56UN192	¼	6.3	6			¾ 18f UNF		1	2.17	1.06	0.94	0.87	55	27	24	22	-	-
10FFS16FMET	10FFS16FMET143	10FFS16FMET192	¾	10	8.6		M16x1.5			1	2.67	1.26	1.16	1.06	67.8	32	29.5	27	-	-
10FFS37	10FFS37143	10FFS37192	¾	10	8.6	¾ 18f				1	2.67	1.26	1.16	1.06	67.8	32	29.5	27	-	-
10FFS37BS	10FFS37BS143	10FFS37BS192	¾	10	8.6	¾-19				1	2.67	1.26	1.16	1.06	67.8	32	29.5	27	-	-
10FFS37FG	10FFS37FG143	10FFS37FG192	¾	10	8.6				G ¾	1	2.67	1.26	1.16	1.06	67.8	32	29.5	27	0.54	244
10FFS50	10FFS50143	10FFS50192	¾	10	8.6	½ 14f				1	2.79	1.26	1.16	1.06	70.8	32	29.5	27	-	-
10FFS50BS	10FFS50BS143	10FFS50BS192	¾	10	8.6	½-14				1	2.79	1.26	1.16	1.06	70.8	32	29.5	27	-	-
10FFS50FG	10FFS50FG143	10FFS50FG192	¾	10	8.6				G ½	1	2.79	1.26	1.16	1.06	70.8	32	29.5	27	0.52	237
10FFS56UN	10FFS56UN143	10FFS56UN192	¾	10	8.6			¾ 18f UNF		1	2.79	1.26	1.16	1.06	70.8	32	29.5	27	-	-
10FFS75UN	10FFS75UN143	10FFS75UN192	¾	10	8.6			¾ 16f UNF		1	2.79	1.26	1.16	1.06	70.8	32	29.5	27	-	-
10FFS87UN	10FFS87UN143	10FFS87UN192	¾	10	8.6			¾ 14f UNF		1	2.91	1.26	1.30	1.18	73.8	32	33	30	-	-
12FFS106UN	12FFS106UN143	12FFS106UN192	½	12.5	11			1 ½ 12f UN		1	3.50	1.50	1.56	1.42	89	38.2	39.5	36	-	-
12FFS50	12FFS50143	12FFS50192	½	12.5	11	½ 14f				1	3.27	1.50	1.56	1.42	83	38.2	39.5	36	-	-
12FFS50BS	12FFS50BS143	12FFS50BS192	½	12.5	11	½-14				1	3.27	1.50	1.56	1.42	83	38.2	39.5	36	-	-
12FFS50FG	12FFS50FG143	12FFS50FG192	½	12.5	11				G ½	1	3.27	1.50	1.56	1.42	83	38.2	39.5	36	1.04	472
12FFS75	12FFS75143	12FFS75192	½	12.5	11	¾ 14f				1	3.39	1.50	1.56	1.42	86	38.2	39.5	36	-	-
12FFS75BS	12FFS75BS143	12FFS75BS192	½	12.5	11			¾-14		1	3.39	1.50	1.56	1.42	86	38.2	39.5	36	-	-
12FFS75FG	12FFS75FG143	12FFS75FG192	½	12.5	11				G ¾	1	3.39	1.50	1.56	1.42	86	38.2	39.5	36	1.01	460
12FFS75UN	12FFS75UN143	12FFS75UN192	½	12.5	11			¾ 16f UNF		1	3.27	1.50	1.56	1.42	83	38.2	39.5	36	-	-
12FFS87UN	12FFS87UN143	12FFS87UN192	½	12.5	11			¾ 14f UNF		1	3.39	1.50	1.56	1.42	86	38.2	39.5	36	-	-
16FFS106UN	16FFS106UN143	16FFS106UN192	¾	16	13			1 ½ 12f UN		1	3.50	1.66	1.56	1.42	89	42.2	39.5	36	-	-
16FFS50	16FFS50143	16FFS50192	¾	16	13	½ 14f				1	3.27	1.66	1.56	1.42	83	42.2	39.5	36	-	-
16FFS50BS	16FFS50BS143	16FFS50BS192	¾	16	13	½-14				1	3.27	1.66	1.56	1.42	83	42.2	39.5	36	-	-
16FFS75	16FFS75143	16FFS75192	¾	16	13	¾ 14f				1	3.39	1.66	1.56	1.42	86	42.2	39.5	36	-	-
16FFS75BS	16FFS75BS143	16FFS75BS192	¾	16	13			¾-14		1	3.39	1.66	1.56	1.42	86	42.2	39.5	36	-	-
16FFS75FG	16FFS75FG143	16FFS75FG192	¾	16	13				G ¾	1	3.39	1.66	1.56	1.42	86	42.2	39.5	36	1.20	548
16FFS75UN	16FFS75UN143	16FFS75UN192	¾	16	13			¾ 16f UNF		1	3.27	1.66	1.56	1.42	83	42.2	39.5	36	-	-
16FFS87UN	16FFS87UN143	16FFS87UN192	¾	16	13			¾ 14f UNF		1	3.39	1.66	1.56	1.42	86	42.2	39.5	36	-	-
19FFS100	19FFS100143	19FFS100192	¾	19	15	1 11,5f				1	3.80	1.82	1.81	1.65	96.6	46.2	46	42	-	-
19FFS100BS	19FFS100BS143	19FFS100BS192	¾	19	15			1-11		1	3.80	1.82	1.81	1.65	96.6	46.2	46	42	-	-
19FFS100FG	19FFS100FG143	19FFS100FG192	¾	19	15				G 1	1	3.80	1.82	1.81	1.65	96.6	46.2	46	42	1.62	737
19FFS106UN	19FFS106UN143	19FFS106UN192	¾	19	15			1 ½ 12f UN		1	3.80	1.82	1.81	1.65	96.6	46.2	46	42	-	-
19FFS131UN	19FFS131UN143	19FFS131UN192	¾	19	15			1 ½ 12f UN		1	3.80	1.82	1.81	1.65	96.6	46.2	46	42	-	-
19FFS75	19FFS75143	19FFS75192	¾	19	15	¾ 14f				1	3.80	1.82	1.81	1.65	96.6	46.2	46	42	-	-
19FFS75BS	19FFS75BS143	19FFS75BS192	¾	19	15			¾-14		1	3.80	1.82	1.81	1.65	96.6	46.2	46	42	-	-
25FFS100	25FFS100143	25FFS100192	1	25	18	1 11,5f				1	4.07	2.17	2.36	2.17	103.5	55.2	60	55	-	-
25FFS100BS	25FFS100BS143	25FFS100BS192	1	25	18			1-11		1	4.07	2.17	2.36	2.17	103.5	55.2	60	55	-	-
25FFS125	25FFS125143	25FFS125192	1	25	18	1 ¼ 11,5f			1	4.07	2.17	2.36	2.17	103.5	55.2	60	55	-	-	
25FFS125BS	25FFS125BS143	25FFS125BS192	1	25	18			1 ¼-11		1	4.07	2.17	2.36	2.17	103.5	55.2	60	55	-	-
25FFS125FG	25FFS125FG143	25FFS125FG192	1	25	18				G 1 ¼	1	4.07	2.17	2.36	2.17	103.5	55.2	60	55	2.74	1246
25FFS131UN	25FFS131UN143	25FFS131UN192	1	25	18			1 ½ 12f UN		1	4.07	2.17	2.36	2.17	103.5	55.2	60	55	2.77	1260
25FFS162UN	25FFS162UN143	25FFS162UN192	1	25	18			1 ½ 12f UN		1	4.07	2.17	2.36	2.17	103.5	55.2	60	55	-	-
32FFS125	32FFS125143	-	1 ¼	-	-	1 ¼ 11,5f			1	4.93	2.56	2.56	2.17	125.1	65	65	55	4.62	2100	
32FFS162UN	32FFS162UN143	-	1 ¼	-	-			1 ½ 12f UN		1	4.93	2.56	2.56	2.17	125.1	65	65	55	4.62	2100
40FFS150	40FFS150143	-	1 ½	-	-	1 ½ 11,5f			1	5.21	3.15	3.23	2.56	132.4	80	82	65	6.90	3140	
40FFS150BS	40FFS150BS143	-	1 ½	-	-			1 ½-11		1	5.21	3.15	3.23	2.56	132.4	80	82	65	6.90	3140
40FFS150FG**	40FFS150FG143**	-	1 ½	-	-				G 1 ½	1	5.21	3.15	3.23	2.56	132.4	80	82	65	6.90	3140
40FFS187UN	40FFS187UN143	-	1 ½	-	-			1 ½ 12f UN		1	5.21	3.15	3.23	2.56	132.4	80	82	65	6.90	3140
50FFS200	50FFS200143	-	2	-	-	2 11,5f				1	6.17	3.94	3.48	3.15	156.6	100	88.5	80	11.21	5100
50FFS200BS	50FFS200BS143	-	2	-	-			2-11		1	6.17	3.94	3.48	3.15	156.6	100	88.5	80	11.21	5100
50FFS250UN	50FFS250UN143	-	2	-	-			2 ½ 12f UN		1	6.17	3.94	3.48	3.15	156.6	100	88.5	80	11.21	5100

*Alternative end connections available upon request.

**Not an integrated ORB thread design. O-Rings and retaining rings will be provided separately for easy assembly.

To obtain connected length of coupling, add dimensions A (Fig. 1 or Fig. 2) and G (Fig. 3 or 4) together.

FF Series (Steel) ISO 16028 Interchange

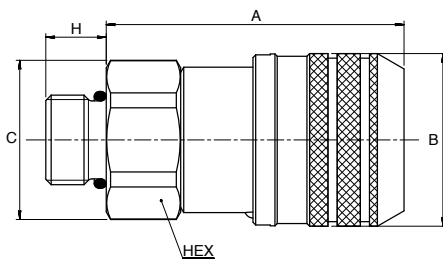
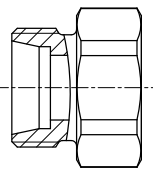
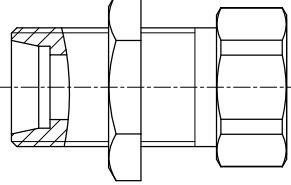


Figure 2

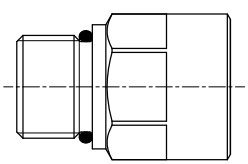
ISO 8434-1
Metric thread



ISO 8434-1 + Bulkhead
Metric thread



SAE J 1926-2
UN/UNF thread



Sockets(Female)

Part Number	NBR+AU	FKM	EPDM	Body Size (in)	ISO Size (mm)	Nominal Flow Diameter (mm)	Thread Size*(Male)	Fig.	Dimensions										Weight	
									A (in)	B (in)	C (in)	H (in.)	Hex (in)	A (mm)	B (mm)	C (mm)	H (mm)	Hex (mm)	lbs	grams
6FFS10LBH	6FFS10LBH143	6FFS10LBH192	3/8	6.3	6	10L - M16x1,5 + bulkhead	2	1.65	1.06	0.94	1.38	0.87	42	27	24	35	22	-	-	
10FFS8L	10FFS8L143	10FFS8L192	3/8	10	6	8L - M14x1,5	2	2.18	1.26	1.16	0.39	1.06	55.3	32	29.5	10	27	0.44	200	
10FFS10L	10FFS10L143	10FFS10L192	3/8	10	8	10L - M16x1,5	2	2.18	1.26	1.16	0.43	1.06	55.3	32	29.5	11	27	0.45	204	
10FFS12L	10FFS12L143	10FFS12L192	3/8	10	10	12L - M18x1,5	2	2.12	1.26	1.16	0.43	1.06	53.8	32	29.5	11	27	-	-	
10FFS15L	10FFS15L143	10FFS15L192	3/8	10	8,6	15L - M22x1,5	2	2.08	1.26	1.16	0.47	1.06	52.8	32	29.5	12	27	-	-	
10FFS15LBH	10FFS15LBH143	10FFS15LBH192	3/8	10	8,6	15L - M22x1,5	2	3.24	1.26	1.16	1.50	1.06	82.3	32	29.5	38	27	0.49	225	
10FFS16S	10FFS16S143	10FFS16S192	3/8	10	8,6	16S - M24x1,5 + bulkhead	2	2.26	1.26	1.16	0.55	1.06	57.3	32	29.5	14	27	0.46	211	
10FFS56ORM	10FFS56ORM143	10FFS56ORM192	3/8	10	8,6	1/8 18f UNF	2	2.61	1.26	1.06	0.47	0.94	66.4	32	27	12	23.8	-	-	
10FFS75ORM	10FFS75ORM143	10FFS75ORM192	3/8	10	8,6	3/4 16f UNF	2	2.61	1.26	1.06	0.55	0.94	66.4	32	27	14	23.8	-	-	
12FFS15LBH	12FFS15LBH143	12FFS15LBH192	1/2	12	11	15L - M22x1,5 + bulkhead	2	3.66	1.50	1.56	1.50	1.42	93	38.2	39.5	38	36	1.05	478	
12FFS16S	12FFS16S143	12FFS16S192	1/2	12	11	16S - M24x1,5	2	2.75	1.50	1.56	0.55	1.42	70	38.2	39.5	14	36	1.01	460	
12FFS18LBH	12FFS18LBH143	12FFS18LBH192	1/2	12	11	18L - M26x1,5 + bulkhead	2	3.74	1.50	1.56	1.57	1.42	95	38.2	39.5	40.	36	1.17	534	
16FFS15LBH	16FFS15LBH143	16FFS15LBH192	3/4	16	12	15L - M22x1,5 + bulkhead	2	2.68	1.66	1.56	1.50	1.42	68	42.2	39.5	38	36	-	-	
16FFS16S	16FFS16S143	16FFS16S192	3/4	16	12	16S - M24x1,5	2	2.75	1.66	1.56	0.55	1.42	70	42.2	39.5	14	36	1.11	505	
16FFS18LBH	16FFS18LBH143	16FFS18LBH192	3/4	16	13	18L - M26x1,5 + bulkhead	2	2.68	1.66	1.56	1.57	1.42	68	42.2	39.5	40	36	-	-	

* Alternative end connections available upon request.

To obtain connected length of coupling, add dimensions A (Fig. 1 or Fig. 2) and G (Fig. 3 or 4) together.

Note that ISO 8434-1 will restrict usage of coupling to 250 bar for end connection 8L, 10L, 12L and 15L, and to 160 bar for end connection 18L.

FF Series (Steel) ISO 16028 Interchange

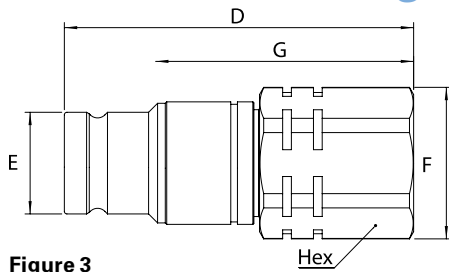
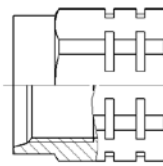
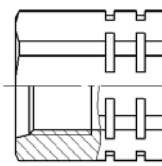


Figure 3

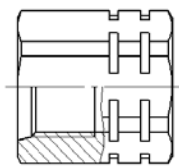
ISO 6149-1
15° + Metric thread



SAE J 1926-1
15° + UN/UNF thread



EATON S013A
15° + BSPP Thread



Plugs(Male)

Part Number			Body Size	ISO Size	Nominal Flow Diameter	Thread Size*(Female)		Dimensions						Weight									
NBR+AU	FKM	EPDM	(in)	(mm)	(mm)	NPT	BSPP	ISO 6149-1	SAE J 1926-1	Eaton S013A	Fig.	D (in)	E (in)	F (in)	G (in)	Hex (in)	D (mm)	E (mm)	F (mm)	G (mm)	Hex (mm)	lbs	grams
6FFP25	6FFP25143	6FFP25192	¼	6.3	6	¼ 18f					3	2.01	0.64	0.94	1.58	0.87	51	16.2	24	40.1	22	-	-
6FFP25BS	6FFP25BS143	6FFP25BS192	¼	6.3	6		¼-19				3	2.01	0.64	0.94	1.58	0.87	51	16.2	24	40.1	22	-	-
6FFP25FG	6FFP25FG143	6FFP25FG192	¼	6.3	6					G ¼	3	2.01	0.64	0.94	1.58	0.87	51	16.2	24	40.1	22	0.20	90
6FFP56UN	6FFP56UN143	6FFP56UN192	¼	6.3	6				¾ 18f UNF		3	2.05	0.64	0.94	1.62	0.87	52	16.2	24	41.1	22	-	-
10FFP16FMET	10FFP16FMET143	10FFP16FMET192	¾	10	8.6			M16x1,5			3	2.56	0.78	1.16	1.96	1.06	65	19.7	29.5	49.7	27	-	-
10FFP37	10FFP37143	10FFP37192	¾	10	8.6	¾ 18f					3	2.56	0.78	1.16	1.96	1.06	65	19.7	29.5	49.7	27	-	-
10FFP37BS	10FFP37BS143	10FFP37BS192	¾	10	8.6		¾-19				3	2.56	0.78	1.16	1.96	1.06	65	19.7	29.5	49.7	27	-	-
10FFP37FG	10FFP37FG143	10FFP37FG192	¾	10	8.6				G ¾		3	2.56	0.78	1.16	1.96	1.06	65	19.7	29.5	49.7	27	0.33	152
10FFP50	10FFP50143	10FFP50192	¾	10	8.6	¾ 14f					3	2.68	0.78	1.16	2.08	1.06	68	19.7	29.5	52.7	27	-	-
10FFP50BS	10FFP50BS143	10FFP50BS192	¾	10	8.6		½-14				3	2.68	0.78	1.16	2.08	1.06	68	19.7	29.5	52.7	27	-	-
10FFP50FG	10FFP50FG143	10FFP50FG192	¾	10	8.6					G ½	3	2.68	0.78	1.16	2.08	1.06	68	19.7	29.5	52.7	27	0.32	144
10FFP56UN	10FFP56UN143	10FFP56UN192	¾	10	8.6				¾ 18f UNF		3	2.68	0.78	1.16	2.08	1.06	68	19.7	29.5	52.7	27	-	-
10FFP75UN	10FFP75UN143	10FFP75UN192	¾	10	8.6				¾ 16f UNF		3	2.68	0.78	1.16	2.08	1.06	68	19.7	29.5	52.7	27	-	-
10FFP87UN	10FFP87UN143	10FFP87UN192	¾	10	8.6				¾ 14f UNF		3	2.80	0.78	1.30	2.19	1.18	71	19.7	33	55.7	30	-	-
12FFP106UN	12FFP106UN143	12FFP106UN192	½	12.5	11				1 ½ 12f UN		3	2.95	0.96	1.56	2.28	1.42	75	24.5	39.5	58	36	-	-
12FFP50	12FFP50143	12FFP50192	½	12.5	11	½ 14f					3	2.71	0.96	1.56	2.05	1.42	69	24.5	39.5	52	36	-	-
12FFP50BS	12FFP50BS143	12FFP50BS192	½	12.5	11		½-14				3	2.71	0.96	1.56	2.05	1.42	69	24.5	39.5	52	36	-	-
12FFP50FG	12FFP50FG143	12FFP50FG192	½	12.5	11					G ½	3	2.71	0.96	1.56	2.05	1.42	69	24.5	39.5	52	36	0.64	290
12FFP75	12FFP75143	12FFP75192	½	12.5	11	¾ 14f					3	2.83	0.96	1.56	2.16	1.42	72	24.5	39.5	55	36	-	-
12FFP75BS	12FFP75BS143	12FFP75BS192	½	12.5	11		¾-14				3	2.83	0.96	1.56	2.16	1.42	72	24.5	39.5	55	36	-	-
12FFP75FG	12FFP75FG143	12FFP75FG192	½	12.5	11					G ¾	3	2.83	0.96	1.56	2.16	1.42	72	24.5	39.5	55	36	0.61	279
12FFP75UN	12FFP75UN143	12FFP75UN192	½	12.5	11				¾ 16f UNF		3	2.71	0.96	1.56	2.05	1.42	69	24.5	39.5	52	36	-	-
12FFP87UN	12FFP87UN143	12FFP87UN192	½	12.5	11				¾ 14f UNF		3	2.83	0.96	1.56	2.16	1.42	72	24.5	39.5	55	36	-	-
16FFP106UN	16FFP106UN143	16FFP106UN192	¾	16	13				1 ½ 12f UN		3	2.95	1.06	1.56	2.28	1.42	75	27	39.5	58	36	-	-
16FFP50	16FFP50143	16FFP50192	¾	16	13	¾ 14f					3	2.71	1.06	1.56	2.05	1.42	69	27	39.5	52	36	-	-
16FFP50BS	16FFP50BS143	16FFP50BS192	¾	16	13		½-14				3	2.71	1.06	1.56	2.05	1.42	69	27	39.5	52	36	-	-
16FFP75	16FFP75143	16FFP75192	¾	16	13	¾ 14f					3	2.83	1.06	1.56	2.16	1.42	72	27	39.5	55	36	-	-
16FFP75BS	16FFP75BS143	16FFP75BS192	¾	16	13		¾-14				3	2.83	1.06	1.56	2.16	1.42	72	27	39.5	55	36	-	-
16FFP75FG	16FFP75FG143	16FFP75FG192	¾	16	13					G ¾	3	2.83	1.06	1.56	2.16	1.42	72	27	39.5	55	36	0.7	317
16FFP75UN	16FFP75UN143	16FFP75UN192	¾	16	13				¾ 16f UNF		3	2.71	1.06	1.56	2.05	1.42	69	27	39.5	52	36	-	-
16FFP87UN	16FFP87UN143	16FFP87UN192	¾	16	13				¾ 14f UNF		3	2.83	1.06	1.56	2.16	1.42	72	27	39.5	55	36	-	-
19FFP100	19FFP100143	19FFP100192	¾	19	15	1 11,5f					3	3.69	1.18	1.81	2.84	1.65	93.8	29.9	46	72	42	-	-
19FFP100BS	19FFP100BS143	19FFP100BS192	¾	19	15		1-11				3	3.69	1.18	1.81	2.84	1.65	93.8	29.9	46	72	42	-	-
19FFP100FG	19FFP100FG143	19FFP100FG192	¾	19	15					G 1	3	3.69	1.18	1.81	2.84	1.65	93.8	29.9	46	72	42	1.14	518
19FFP106UN	19FFP106UN143	19FFP106UN192	¾	19	15				1 ½ 12f UN		3	3.69	1.18	1.81	2.84	1.65	93.8	29.9	46	72	42	-	-
19FFP131UN	19FFP131UN143	19FFP131UN192	¾	19	15				1 ½ 12f UN		3	3.69	1.18	1.81	2.84	1.65	93.8	29.9	46	72	42	-	-
19FFP75	19FFP75143	19FFP75192	¾	19	15	¾ 14f					3	3.69	1.18	1.81	2.84	1.65	93.8	29.9	46	72	42	-	-
19FFP75BS	19FFP75BS143	19FFP75BS192	¾	19	15		¾-14				3	3.69	1.18	1.81	2.84	1.65	93.8	29.9	46	72	42	-	-
25FFP100	25FFP100143	25FFP100192	1	25	18	1 11,5f					3	4.12	1.42	2.36	3.22	2.17	104.6	36	60	81.7	55	-	-
25FFP100BS	25FFP100BS143	25FFP100BS192	1	25	18		1-11				3	4.12	1.42	2.36	3.22	2.17	104.6	36	60	81.7	55	-	-
25FFP125	25FFP125143	25FFP125192	1	25	18	1 ¾ 11,5f					3	4.12	1.42	2.36	3.22	2.17	104.6	36	60	81.7	55	-	-
25FFP125BS	25FFP125BS143	25FFP125BS192	1	25	18		1¼-11				3	4.12	1.42	2.36	3.22	2.17	104.6	36	60	81.7	55	-	-
25FFP125FG	25FFP125FG143	25FFP125FG192	1	25	18					G 1¼	3	4.12	1.42	2.36	3.22	2.17	104.6	36	60	81.7	55	2.08	948
25FFP131UN	25FFP131UN143	25FFP131UN192	1	25	18				1 ½ 12f UN		3	4.12	1.42	2.36	3.22	2.17	104.6	36	60	81.7	55	2.09	952
25FFP162UN	25FFP162UN143	25FFP162UN192	1	25	18				1 ½ 12f UN		3	4.12	1.42	2.36	3.22	2.17	104.6	36	60	81.7	55	-	-
32FFP125	32FFP125143	-	1 ¼	-	-	1 ¾ 11,5f					3	4.13	1.73	2.35	3.22	2.17	105	44	59.8	81.7	55	2.43	1105
32FFP162UN	32FFP162UN143	-	1 ¼	-	-				1 ½ 12f UN		3	4.13	1.73	2.35	3.22	2.17	105	44	59.8	81.7	55	2.43	1105
40FFP150	40FFP150143	-	1 ½	-	-	1 ½ 11,5f					3	4.37	2.25	2.75	3.25	2.56	111.1	57.1	69.8	82.5	65	3.66	1665
40FFP150BS	40FFP150BS143	-	1 ½	-	-		1 ½-11				3	4.37	2.25	2.75	3.25	2.56	111.1	57.1	69.8	82.5	65	3.66	1665
40FFP150FG**	40FFP150FG143**	-	1 ½	-	-					G 1 ½	3	4.37	2.25	2.75	3.25	2.56	111.1	57.1	69.8	82.5	65	3.66	1665
40FFP187UN	40FFP187UN143	-	1 ½	-	-				1 ½ 12f UN		3	4.37	2.25	2.75	3.25	2.56	111.1	57.1	69.8	82.5	65	3.66	1665
50FFP200	50FFP200143	-	2	-	-	2 11,5f					3	4.87	2.87	3.29	3.34	2.95	123.8	72.9	83.5	84.9	75	4.96	2259
50FFP200BS	50FFP200BS143	-	2	-	-		2-11				3	4.87	2.87	3.29	3.34	2.95	123.8	72.9	83.5	84.9	75	4.96	2259
50FFP250UN	50FFP250UN143	-	2	-	-				2 ½ 12f UN		3	4.87	2.87	3.29	3.34	2.95	123.8	72.9	83.5	84.9	75	4.96	2259

*Alternative end connections available upon request.

**Not an integrated ORB thread design. O-Rings and retaining rings will be provided separately for easy assembly.

To obtain connected length of coupling, add dimensions A (Fig. 1 or Fig. 2) and G (Fig. 3 or 4) together.

FF Series (Steel) ISO 16028 Interchange

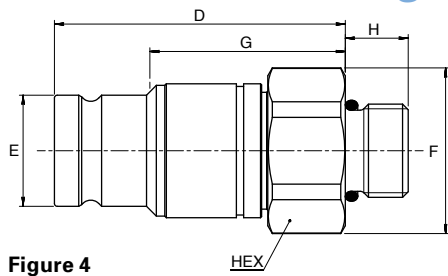
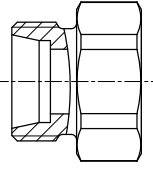
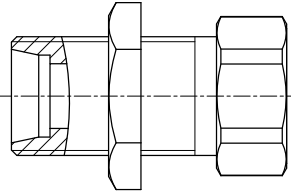


Figure 4

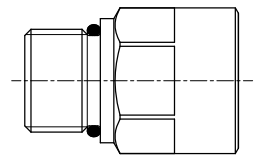
ISO 8434-1
Metric thread



ISO 8434-1 + Bulkhead
Metric thread



SAE J 1926-2
UN/UNF thread



Plugs(Male)

Part Number	NBR:AU	FKM	EPDM	Body Size (in)	ISO Size (mm)	Nominal Flow Diameter (mm)	Thread Size*(Male)		Dimensions								Weight						
							ISO 8434-1	SAE J 1926-2	Fig.	D (in)	E (in)	F (in)	G (in.)	H (in)	Hex (in)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	Hex (mm)	lbs	grams
6FFP10LBH	6FFP10LBH143	6FFP10LBH192	3/8	6.3	6	M10L - M16x1,5 + bulkhead			4	1.54	0.64	0.94	1.11	1.38	0.87	39	16.2	24	28.1	35	22	0.27	123
10FFP8L	10FFP8L143	10FFP8L192	3/8	10	6	8L - M14x1,5			4	2.44	0.78	1.16	1.84	0.39	1.06	62	19.7	29.5	46.7	10	27	0.25	112
10FFP10L	10FFP10L143	10FFP10L192	3/8	10	8	10L - M16x1,5			4	2.44	0.78	1.16	1.84	0.43	1.06	62	19.7	29.5	46.7	11	27	0.25	116
10FFP12L	10FFP12L143	10FFP12L192	3/8	10	10	12L - M18x1,5			4	2.01	0.78	1.16	1.41	0.43	1.06	51	19.7	29.5	35.7	11	27	0.26	117
10FFP15L	10FFP15L143	10FFP15L192	3/8	10	8,6	5L - M22x1,5			4	2.44	0.78	1.16	1.84	0.47	1.06	62	19.7	29.5	46.7	12	27	0.27	123
10FFP15LBH	10FFP15LBH143	10FFP15LBH192	3/8	10	8,6	15L - M22x1,5 + bulkhead			4	3.5	0.78	1.16	2.9	1.50	1.06	89	19.7	29.5	73.7	38	27	0.30	137
10FFP16S	10FFP16S143	10FFP16S192	3/8	10	8,6	16S - M24x1,5			4	2.52	0.78	1.16	1.92	0.55	1.06	64	19.7	29.5	48.7	14	27	0.27	123
10FFP56ORM	10FFP56ORM143	10FFP56ORM192	3/8	10	8,6		3/16 18f UNF		4	2.5	0.78	1.06	1.9	0.47	0.94	63.6	19.7	27	48.3	12	23.8	0.33	150
10FFP75ORM	10FFP75ORM143	10FFP75ORM192	3/8	10	8,6		1/4 16f UNF		4	2.	0.78	1.06	1.	0.55	0.94	63.6	19.7	27	48.3	14	23.8	0.34	156
12FFP15LBH	12FFP15LBH143	12FFP15LBH192	1/2	12	11	15L - M22x1,5 + bulkhead			4	3.62	0.96	1.56	2.95	1.	1.42	92	24.5	39.5	75	38	36	0.65	297
12FFP16S	12FFP16S143	12FFP16S192	1/2	12	11	16S - M24x1,5			4	2.71	0.96	1.56	2.05	0.55	1.42	69	24.5	39.5	52	14	36	0.61	279
12FFP18LBH	12FFP18LBH143	12FFP18LBH192	1/2	12	11	18L - M26x1,5 + bulkhead			4	3.70	0.96	1.56	3.03	1.57	1.42	94	24.5	39.5	77	40	36	0.78	353
16FFP15LBH	16FFP15LBH143	16FFP15LBH192	3/4	16	12	15L - M22x1,5 + bulkhead			4	2.12	1.06	1.56	1.45	1.5	1.42	54	27	39.5	37	38	36	0.65	298
16FFP16S	16FFP16S143	16FFP16S192	3/4	16	12	16S - M24x1,5			4	2.71	1.06	1.56	2.05	0.55	1.42	69	27	39.5	52	14	36	0.62	280
16FFP18LBH	16FFP18LBH143	16FFP18LBH192	3/4	16	13	18L - M26x1,5 + bulkhead			4	2.12	1.06	1.56	1.45	1.57	1.42	54	27	39.5	37	40	36	0.78	353

*Alternative end connections available upon request.

To obtain connected length of coupling, add dimensions A (Fig. 1 or Fig. 2) and G (Fig. 3 or 4) together.

Note that ISO 8434-1 will restrict usage of coupling to 250 bar for end connection 8L, 10L, 12L and 15L, and to 160 bar for end connection 18L.

Socket (Female) Dust Plug

Body Size (in)	Part Number	Coupling Type	Dust Plug Material
1/4	SDC6FF	Socket/Female	PVC
3/8*	SDC10FF	Socket/Female	PVC
1/2	SDC12FF	Socket/Female	PVC
3/4	SDC16FF	Socket/Female	PVC
3/4	SDC19FF	Socket/Female	PVC
1	SDC25FF	Socket/Female	PVC

*Dust caps and dust plugs are offered in black.

Plug (Male) Dust Cap

Body Size (in)	Part Number	Coupling Type	Dust Plug Material
1/4	PDC6FF	Plug/Male	PVC
3/8*	PDC10FF	Plug/Male	PVC
1/2	PDC12FF	Plug/Male	PVC
3/4	PDC16FF	Plug/Male	PVC
3/4	PDC19FF	Plug/Male	PVC
1	PDC25FF	Plug/Male	PVC



Color Coding Ring Option*

Body Size (in)	ISO Size (mm)	Size	Socket/Female Ring Part Number**				Plug/Male Ring Part Number**				Tool Part Number	Tool & Rings Kit Part Number***
			Blue	Red	Yellow	Green	Blue	Red	Yellow	Green		
3/8	10	10FF	CR10FFSLB	CR10FFSRD	CR10FFSYL	CR10FFSDG	CR10FFPLB	CR10FFPRD	CR10FFPYL	CR10FFPDG	CR10FFSP93	CRKIT10FF
1/2	12.5	12FF	CR12FFSLB	CR12FFSRD	CR12FFSYL	CR12FFSDG	CR12FFPLB	CR12FFPRD	CR12FFPYL	CR12FFPDG	CR12FFSP93	CRKIT12FF
3/4	16	16FF	CR16FFSLB	CR16FFSRD	CR16FFSYL	CR16FFSDG	CR16FFPLB	CR16FFPRD	CR16FFPYL	CR16FFPDG	CR16FFSP93	CRKIT16FF
3/4	19	19FF	CR19FFSLB	CR19FFSRD	CR19FFSYL	CR19FFSDG	CR19FFPLB	CR19FFPRD	CR19FFPYL	CR19FFPDG	CR19FFSP93	CRKIT19FF

* For requests on alternative colors or installation instructions, please contact your Eaton sales representative.

** Orders must be in multiples of 10 pcs.

*** The kit consists of a tool plus 10 socket rings and 10 plug rings of each color.