



The FL Series Flat Face Couplings are designed with high corrosion resistance and excellent fatigue life. The FL couplings are manufactured in stainless steel 316 to eliminate leakage during connection / disconnection, reduce contamination in the circuit, and offer optimal resistance to corrosion. Standard seals are Viton / Fluorocarbon; other materials are available for various fluids and operating temperatures.



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FEATURES

Size range: 1/8" thru 2"
Port options: NPT, SAE, BSP
Interchanges with ISO 16028
Working pressure: 15-35 MPa/2175-5075 psi range

- Minimal pressure drop design
- Minimal air inclusion during connection
- Non-spill design eliminates leaks and contamination

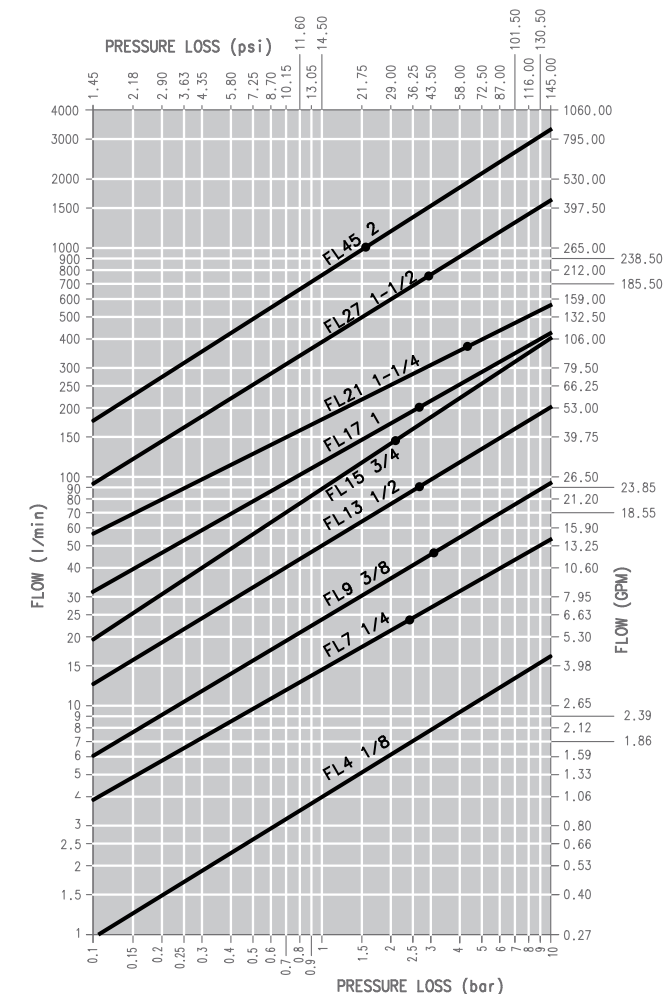
APPLICATIONS

Highly corrosive environments or transmission of corrosive fluids

- Ideal for offshore, marine, industrial equipment, as well as chemical, pharmaceutical and food processing

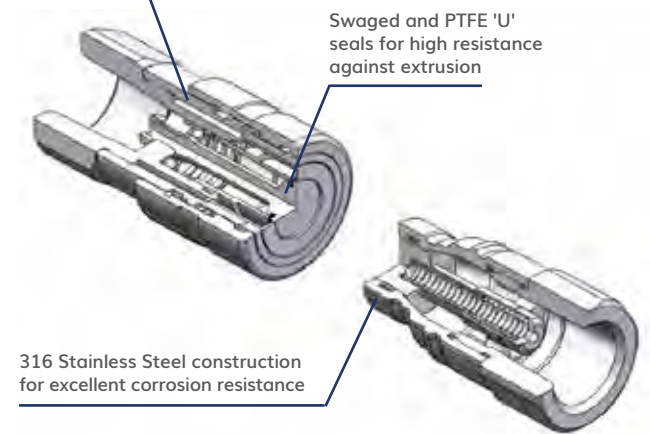


PRESSURE DROP



OIL = ISO VG32, TEMP = 40C, VISCOSITY = 28.8-35.2 MM²/S

Flat face valves w/ safety lock to prevent accidental disconnection



Swaged and PTFE 'U' seals for high resistance against extrusion

316 Stainless Steel construction for excellent corrosion resistance

PERFORMANCE

DESCRIPTION	SIZE	ISO SIZE	MAX. OPERATING PRESSURE COUPLED		COUPLED		BURST PRESSURE			SPILLAGE*	
			MPa	psi	MPa	psi	MALE MPa	psi	FEMALE MPa		psi
FL4	1/8	-	35	5075	140	20300	140	20300	120	17400	0.005
FL7	1/4	6.3	35	5075	140	20300	120	17400	48	6960	0.006
FL9	3/8	10.0	35	5075	140	20300	120	17400	60	8700	0.012
FL13	1/2	12.5	35	5075	120	17400	110	15950	60	8700	0.020
FL15	5/8	16.0	35	5075	120	17400	100	14500	48	6960	0.026
FL17	3/4	19.0	33	4785	100	14500	80	11600	48	6960	0.032
FL21	1	25.0	28	4060	90	13050	80	11600	48	6960	0.035
FL27	1 1/2	-	23	3335	80	11600	70	10150	32	4640	0.050
FL45	2	-	15	2175	60	8700	60	8700	28	4060	0.100

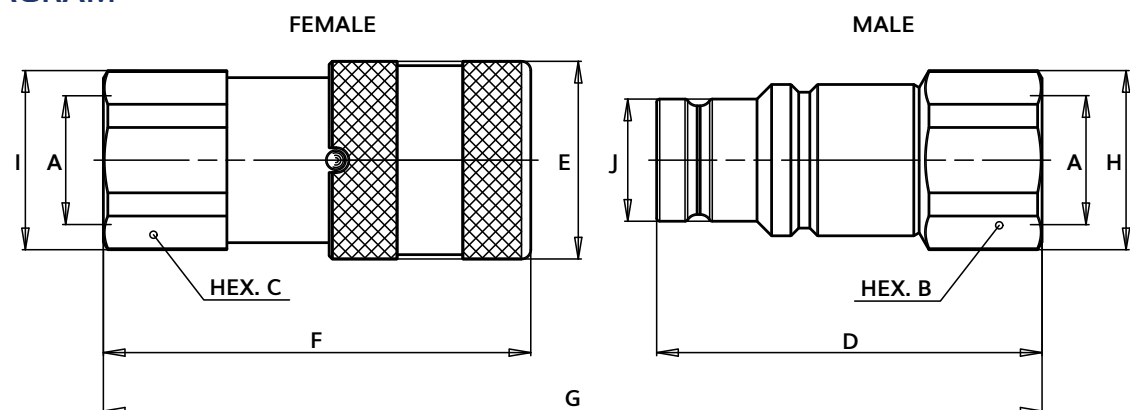
* Spillage is an indicative value of the fluid loss per couple-uncouple cycle

FL SERIES

FLAT FACE COUPLERS ISO 16028 Interchange



SIZE DIAGRAM



DESCRIPTION	BODY SIZE	A	UNIT	B	C	D	E	F	G	H	I	J	UNIT	WEIGHT	
														MALE	FEMALE
FL4 1/8	1/8	1/8	mm	17.0	19.0	36.3	20.0	40.0	68.4	18.5	20.5	11.6	kg	0.037	0.074
			inch	0.67	0.75	1.43	0.79	1.57	2.69	0.73	0.81	0.46	lb	0.08	0.16
FL7 1/4	1/4	1/4	mm	22.0	22.0	49.4	28.0	48.3	86.7	23.8	23.8	16.1	kg	0.098	0.142
			inch	0.87	0.87	1.94	1.10	1.90	3.41	0.94	0.94	0.63	lb	0.22	0.31
FL9 3/8	3/8	3/8	mm	24.0	27.0	59.9	32.0	64.2	108.6	26.0	29.0	19.7	kg	0.124	0.245
			inch	0.94	1.06	2.36	1.26	2.53	4.28	1.02	1.14	0.78	lb	0.27	0.54
FL9 1/2	3/8	1/2	mm	27.0	27.0	62.4	32.0	69.2	116.1	29.0	29.0	19.7	kg	0.120	0.242
			inch	1.06	1.06	2.46	1.26	2.72	4.57	1.14	1.14	0.78	lb	0.26	0.53
FL13 1/2	1/2	1/2	mm	32.0	32.0	70.5	38.0	73.8	127.0	33.8	33.8	24.5	kg	0.259	0.378
			inch	1.26	1.26	2.78	1.50	2.91	5.00	1.33	1.33	0.96	lb	0.57	0.83
FL13 3/4	1/2	3/4	mm	36.0	36.0	70.5	38.0	80.8	134.0	38.5	38.5	24.5	kg	0.255	0.375
			inch	1.42	1.42	2.78	1.50	3.18	5.28	1.52	1.52	0.96	lb	0.56	0.83
FL15 3/4	5/8	3/4	mm	36.0	36.0	70.5	42.0	80.9	133.8	38.5	38.5	27.0	kg	0.282	0.492
			inch	1.42	1.42	2.78	1.65	3.19	5.27	1.52	1.52	1.06	lb	0.62	1.08
FL17 1	3/4	1	mm	46.0	46.0	82.2	48.0	92.9	153.3	49.5	49.5	30.0	kg	0.432	0.795
			inch	1.81	1.81	3.24	1.89	3.66	6.04	1.95	1.95	1.18	lb	0.95	1.75
FL21 1 1/4	1	1 1/4	mm	55.0	55.0	90.0	55.0	106.2	173.0	59.8	59.8	36.0	kg	0.672	1.226
			inch	2.17	2.17	3.54	2.17	4.18	6.81	2.35	2.35	1.42	lb	1.48	2.70
FL27 1 1/2	1 1/2	1 1/2	mm	70.0	65.0	111.0	80.0	132.4	214.8	76.0	72.0	57.0	kg	1.890	2.908
			inch	2.76	2.56	4.37	3.15	5.21	8.46	2.99	2.83	2.24	lb	4.17	6.41
FL45 2	2	2	mm	75.0	80.0	123.8	100.0	156.6	241.5	83.5	88.5	73.0	kg	2.290	5.230
			inch	2.95	3.15	4.87	3.94	6.17	9.51	3.29	3.48	2.87	lb	5.05	11.53

FL Series Accessories Coupler Dust Cap | Nipple Dust Cap

BODY SIZE	PORT SIZE	ORDER CODE	DESCRIPTION	ORDER CODE	DESCRIPTION
COUPLER / FEMALE DUST CAP			NIPPLE / MALE DUST CAP		
1/4	1/4	815100000	CAP F. FIRG14/A7	815100001	CAP M. FIRG14/A7
3/8	3/8	-	-	815100003	CAP M. FIRG38/A9
3/8	3/8 & 1/2	815100002	CAP F. FIRG38/A9/FIRG12	815100005	CAP M. FIRG12/A9
1/2	1/2	815100004	CAP F. FIRG12A/A13	815100007	CAP M. FIRG12A/A13
1/2	1/2 & 3/4	815100006	CAP F. FIRG34/A13	815100009	CAP M. FIRG34/A13
5/8	3/4	815100008	CAP F. FIRG34B/A15	815100011	CAP M. FIRG34B/A15
3/4	3/4	815100010	CAP F. FIRG100/A17	815100013	CAP M. FIRG100/A17
1	1	815100012	CAP F. FIRG114/A21	815100015	CAP M. FIRG114/A21
1 1/4	1 1/4	815205020	CAP F. A25	815205021	CAP M. A25
1 1/2	1 1/2	815100014	CAP F. FIRG112/A30	815100017	CAP M. FIRG 112/A30
2	2	815100016	CAP F. FIRG 200	815100019	CAP M. FIRG 200



Additional colors available upon request

FL 316 NPT and SAE Thread Stainless Steel | ISO 16028

PART	BODY SIZE	PORT SIZE	THREAD TYPE	ORDER CODE	DESCRIPTION
FL NPT THREAD					
COUPLER	1/8	1/8	NPT	802401118	F. FL 4 1/8 NPT
NIPPLE	1/8	1/8	NPT	802401119	M. FL 4 1/8 NPT
COUPLER	1/4	1/4	NPT	802401100	F. FL 7 1/4 NPT
NIPPLE	1/4	1/4	NPT	802401101	M. FL 7 1/4 NPT
COUPLER	3/8	3/8	NPT	802401102	F. FL 9 3/8 NPT
NIPPLE	3/8	3/8	NPT	802401103	M. FL 9 3/8 NPT
COUPLER	3/8	1/2	NPT	802401104	F. FL 9 1/2 NPT
NIPPLE	3/8	1/2	NPT	802401105	M. FL 9 1/2 NPT
COUPLER	1/2	1/2	NPT	802401106	F. FL 13 1/2 NPT
NIPPLE	1/2	1/2	NPT	802401107	M. FL 13 1/2 NPT
COUPLER	1/2	3/4	NPT	802401108	F. FL 13 3/4 NPT
NIPPLE	1/2	3/4	NPT	802401109	M. FL 13 3/4 NPT
COUPLER	5/8	3/4	NPT	802401110	F. FL 15 3/4 NPT
NIPPLE	5/8	3/4	NPT	802401111	M. FL 15 3/4 NPT
COUPLER	3/4	1	NPT	802401112	F. FL 17 1 NPT
NIPPLE	3/4	1	NPT	802401113	M. FL 17 1 NPT
COUPLER	1	1 1/4	NPT	802401114	F. FL 21 1 1/4 NPT
NIPPLE	1	1 1/4	NPT	802401115	M. FL 21 1 1/4 NPT
COUPLER	1 1/2	1 1/2	NPT	802401116	F. FL 27 1 1/2 NPT
NIPPLE	1 1/2	1 1/2	NPT	802401117	M. FL 27 1 1/2 NPT
COUPLER	2	2	NPT	802401120	F. FL 45 2 NPT
NIPPLE	2	2	NPT	802401121	M. FL 45 2 NPT
FL SAE THREAD					
COUPLER	1/8	3/16	SAE	802404100	F. FL 4 3/16 SAE
NIPPLE	1/8	3/16	SAE	802404101	M. FL 4 3/16 SAE
COUPLER	1/4	3/8	SAE	802404102	F. FL 7 3/8 SAE
NIPPLE	1/4	3/8	SAE	802404103	M. FL 7 3/8 SAE
COUPLER	3/8	1/2	SAE	802404104	F. FL 9 1/2 SAE
NIPPLE	3/8	1/2	SAE	802404105	M. FL 9 1/2 SAE
COUPLER	3/8	5/8	SAE	802404106	F. FL 9 5/8 SAE
NIPPLE	3/8	5/8	SAE	802404107	M. FL 9 5/8 SAE
COUPLER	1/2	5/8	SAE	802404108	F. FL 13 5/8 SAE
NIPPLE	1/2	5/8	SAE	802404109	M. FL 13 5/8 SAE
COUPLER	1/2	1/2	SAE	802404110	F. FL 13 1/2 SAE
NIPPLE	1/2	1/2	SAE	802404111	M. FL 13 1/2 SAE
COUPLER	1/2	3/4	SAE	802404112	F. FL 13 3/4 SAE
NIPPLE	1/2	3/4	SAE	802404113	M. FL 13 3/4 SAE
COUPLER	5/8	3/4	SAE	802404114	F. FL 15 3/4 SAE
NIPPLE	5/8	3/4	SAE	802404115	M. FL 15 3/4 SAE
COUPLER	3/4	1	SAE	802404116	F. FL 17 1 SAE
NIPPLE	3/4	1	SAE	802404117	M. FL 17 1 SAE
COUPLER	1	1 1/4	SAE	802404118	F. FL 21 1 1/4 SAE
NIPPLE	1	1 1/4	SAE	802404119	M. FL 21 1 1/4 SAE
COUPLER	1 1/2	1 1/2	SAE	802404120	F. FL 27 1 1/2 SAE
NIPPLE	1 1/2	1 1/2	SAE	802404121	M. FL 27 1 1/2 SAE
COUPLER	2	2	SAE	802404122	F. FL 45 2 SAE
NIPPLE	2	2	SAE	802404123	M. FL 45 2 SAE



Coupler



Nipple