

FIRG SERIES

FLAT FACE COUPLERS ISO 16028 Interchange

The **FIRG Flat Face Series**, the original ISO 16028 interchangeable coupling, continues to offer good performance, long life and competitive pricing. The integrated sealing mechanism greatly reduces premature wear caused by movement between coupler and nipple parts affected by impulse pressure and the weight of the hoses and tubing when the coupling is in the horizontal position.

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FEATURES

Size range: 1/4" thru 2"

Port options: NPT, SAE, BSP

Interchanges with ISO 16028

Working pressure: 20-30 MPa/2900-4350 psi range

- Non-spill design avoids fluid loss during connection/disconnection
- Minimal air inclusion during connection
- Tight tolerances ensure equal loading of couplers

APPLICATIONS

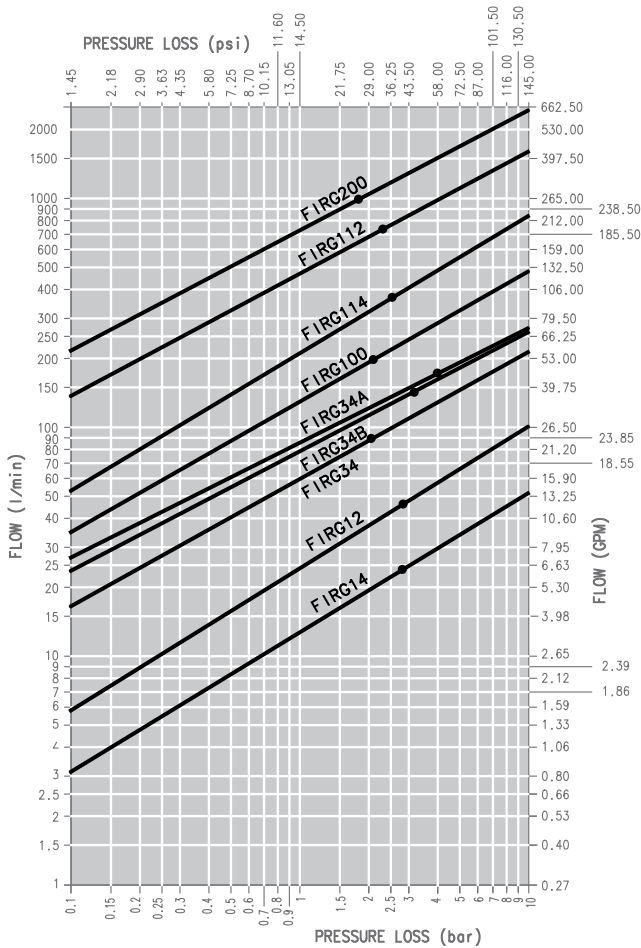
Anywhere fluid loss and hydraulic circuit contamination need to be reduced or eliminated

- Mobile construction, agriculture, and mining operations
- General industrial plants



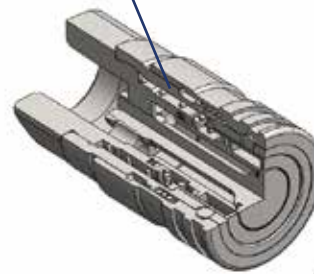


PRESSURE DROP

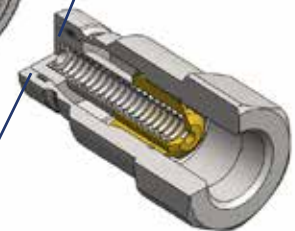


OIL = ISO VG32, TEMP = 40C, VISCOSITY = 28.8-35.2 MM²/S

Flat face valves w/ safety lock to prevent accidental disconnection



Swaged and PTFE U seals for high resistance against extrusion



Hardened surface area and locking balls reduce brinelling

PERFORMANCE

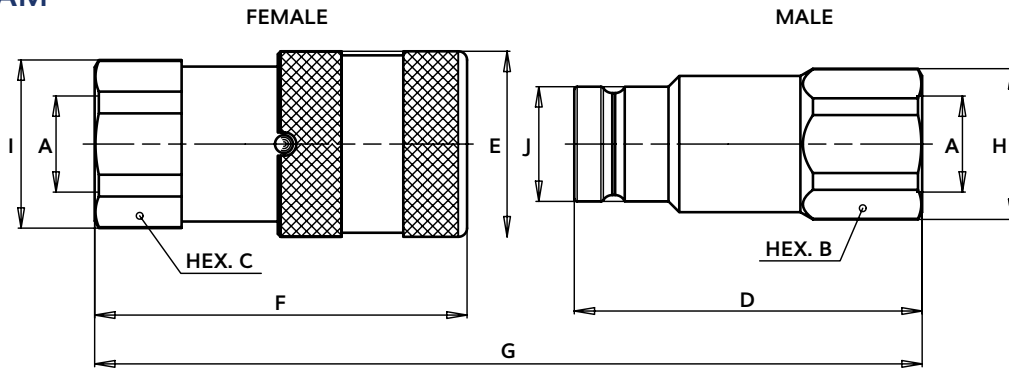
DESCRIPTION	SIZE	ISO SIZE	MAX. OPERATING PRESSURE COUPLED		COUPLED		BURST PRESSURE		SPILLAGE*		
			MPa	psi	MPa	psi	MALE	FEMALE	MPa	psi	ml
FIRG14	1/4	6.3	30	4350	120	17400	126	18270	48	6960	0.006
FIRG38-12	3/8	10.0	30	4350	120	17400	120	17400	48	6960	0.012
FIRG12A-34	1/2	12.5	25	3625	100	14500	100	14500	40	5800	0.020
FIRG34B	5/8	16.0	25	3625	100	14500	88	12760	40	5800	0.026
FIRG34A	3/4	19.0	33	4785	100	14500	100	14500	100	14500	0.032
FIRG100	3/4	19.0	25	3625	100	14500	80	11600	40	5800	0.032
FIRG114	1	25.0	25	3625	100	14500	80	11600	40	5800	0.035
FIRG112	1 1/2	-	20	2900	80	11600	80	11600	32	4640	0.050
FIRG200	2	-	20	2900	80	11600	64	9280	32	4640	0.100

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

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SIZE DIAGRAM



DESCRIPTION	BODY SIZE	A	UNIT											WEIGHT	
				B	C	D	E	F	G	H	I	J	UNIT	MALE	FEMALE
FIRG14	1/4	1/4	mm	22.0	22.0	47.9	28.0	48.1	85.2	23.8	23.8	16.1	kg	0.086	0.140
			inch	0.87	0.87	1.89	1.10	1.89	3.35	0.94	0.94	0.63	lb	0.19	0.31
FIRG38	3/8	3/8	mm	24.0	27.0	60.0	32.0	64.2	108.7	26.0	29.0	19.7	kg	0.121	0.235
			inch	0.94	1.06	2.36	1.26	2.53	4.28	1.02	1.14	0.78	lb	0.27	0.52
FIRG12	3/8	1/2	mm	27.0	27.0	62.5	32.0	69.2	116.2	29.0	29.0	19.7	kg	0.128	0.237
			inch	1.06	1.06	2.46	1.26	2.72	4.57	1.14	1.14	0.78	lb	0.28	0.52
FIRG12A	1/2	1/2	mm	32.0	32.0	68.0	38.0	73.8	124.5	33.8	33.8	24.5	kg	0.233	0.375
			inch	1.26	1.26	2.68	1.50	2.91	4.90	1.33	1.33	0.96	lb	0.51	0.83
FIRG34	1/2	3/4	mm	36.0	36.0	70.5	38.0	80.8	134.0	38.5	38.5	24.5	kg	0.227	0.413
			inch	1.42	1.42	2.78	1.50	3.18	5.28	1.52	1.52	0.96	lb	0.50	0.91
FIRG34B	5/8	3/4	mm	36.0	36.0	70.5	42.0	78.5	131.4	38.5	38.5	27.0	kg	0.268	0.479
			inch	1.42	1.42	2.78	1.65	3.09	5.17	1.52	1.52	1.06	lb	0.59	1.06
FIRG34A	3/4	3/4	mm	41.0	41.0	82.3	48.0	88.7	149.0	44.8	44.8	30.0	kg	0.445	0.750
			inch	1.61	1.61	3.24	1.89	3.49	5.87	1.76	1.76	1.18	lb	0.98	1.65
FIRG100	3/4	1	mm	45.0	45.0	82.3	48.0	93.2	153.5	47.8	47.8	30.0	kg	0.394	0.767
			inch	1.77	1.77	3.24	1.89	3.67	6.04	1.88	1.88	1.18	lb	0.87	1.69
FIRG114	1	1 1/4	mm	55.0	55.0	89.8	55.0	106.0	172.8	59.8	59.8	36.0	kg	0.641	1.215
			inch	2.17	2.17	3.54	2.17	4.17	6.80	2.35	2.35	1.42	lb	1.41	2.68
FIRG112	1 1/2	1 1/2	mm	65.0	65.0	111.1	80.0	132.4	214.9	69.8	72.0	57.0	kg	1.665	2.820
			inch	2.56	2.56	4.37	3.15	5.21	8.46	2.75	2.83	2.24	lb	3.67	6.22
FIRG200	2	2	mm	75.0	80.0	123.8	100.0	156.6	241.5	83.5	88.5	73.0	kg	2.259	5.100
			inch	2.95	3.15	4.87	3.94	6.17	9.51	3.29	3.48	2.87	lb	4.98	11.24

FIRG Series Accessories Coupler Dust Cap | Nipple Dust Cap

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



Additional colors available upon request



FIRG NPT and SAE Thread ISO 16028

PART	BODY SIZE	PORT SIZE	THREAD TYPE	ORDER CODE	PART DESCRIPTION
FIRG NPT THREAD					
COUPLER	1/4	1/4	NPT	800801000	F. FIRG 14 NPT
NIPPLE	1/4	1/4	NPT	800801001	M. FIRG 14 NPT
COUPLER	3/8	1/2	NPT	800801002	F. FIRG 12 NPT
NIPPLE	3/8	1/2	NPT	800801003	M. FIRG 12 NPT
COUPLER	3/8	3/8	NPT	800801004	F. FIRG 38 NPT
NIPPLE	3/8	3/8	NPT	800801005	M. FIRG 38 NPT
COUPLER	1/2	1/2	NPT	800801006	F. FIRG 12AD NPT
NIPPLE	1/2	1/2	NPT	800801007	M. FIRG 12A NPT
COUPLER	1/2	3/4	NPT	800801008	F. FIRG 34D NPT
NIPPLE	1/2	3/4	NPT	800801009	M. FIRG 34 NPT
COUPLER	5/8	3/4	NPT	800801010	F. FIRG 34BD NPT
NIPPLE	5/8	3/4	NPT	800801011	M. FIRG 34B NPT
COUPLER	3/4	3/4	NPT	800801020	F. FIRG 34A NPT
NIPPLE	3/4	3/4	NPT	800801021	M. FIRG 34A NPT
COUPLER	3/4	1	NPT	800801012	F. FIRG 100 NPT
NIPPLE	3/4	1	NPT	800801013	M. FIRG 100 NPT
COUPLER	1	1 1/4	NPT	800801014	F. FIRG 1 1/4 NPT
NIPPLE	1	1 1/4	NPT	800801015	M. FIRG 1 1/4 NPT
COUPLER	1 1/2	1 1/2	NPT	800801016	F. FIRG 1 1/2 NPT
NIPPLE	1 1/2	1 1/2	NPT	800801017	M. FIRG 1 1/2 NPT
COUPLER	2	2	NPT	800801018	F. FIRG 200 NPT
NIPPLE	2	2	NPT	800801019	M. FIRG 200 NPT
FIRG SAE THREAD					
COUPLER	1/4	3/8	SAE	800804000	F. FIRG 14 3/8 SAE
NIPPLE	1/4	3/8	SAE	800804001	M. FIRG 14 3/8 SAE
COUPLER	3/8	1/2	SAE	800804002	F. FIRG 38 1/2 SAE
NIPPLE	3/8	1/2	SAE	800804003	M. FIRG 38 1/2 SAE
COUPLER	3/8	5/8	SAE	800804004	F. FIRG 12 5/8 SAE
NIPPLE	3/8	5/8	SAE	800804005	M. FIRG 12 5/8 SAE
COUPLER	1/2	5/8	SAE	800804006	F. FIRG 12A 5/8 SAE
NIPPLE	1/2	5/8	SAE	800804007	M. FIRG 12A 5/8 SAE
COUPLER	1/2	3/4	SAE	800804008	F. FIRG 34D SAE
NIPPLE	1/2	3/4	SAE	800804009	M. FIRG 34 SAE
COUPLER	5/8	3/4	SAE	800804010	F. FIRG 34BD SAE
NIPPLE	5/8	3/4	SAE	800804011	M. FIRG 34B SAE
COUPLER	3/4	3/4	SAE	800804020	F. FIRG 34A SAE
NIPPLE	3/4	3/4	SAE	800804021	M. FIRG 34A SAE
COUPLER	3/4	1	SAE	800804012	F. FIRG 100 SAE
NIPPLE	3/4	1	SAE	800804013	M. FIRG 100 SAE
COUPLER	1	1 1/4	SAE	800804014	F. FIRG 1 1/4 SAE
NIPPLE	1	1 1/4	SAE	800804015	M. FIRG 1 1/4 SAE
COUPLER	1 1/2	1 1/2	SAE	800804016	F. FIRG 1 1/2 SAE
NIPPLE	1 1/2	1 1/2	SAE	800804017	M. FIRG 1 1/2 SAE
COUPLER	2	2	SAE	800804018	F. FIRG 200 SAE
NIPPLE	2	2	SAE	800804019	M. FIRG 200 SAE



Coupler



Nipple

Repair Kits

ORDER CODE	DESCRIPTION
FIRG SERIES	
815700001	KIT M. FIRG 14
815700003	KIT M. FIRG 38/12
815700005	KIT M. FIRG 12A/34
815700007	KIT M. FIRG 34B
815700009	KIT M. FIRG 100
815700011	KIT M. FIRG 114
815700013	KIT M. FIRG 112
815700015	KIT M. FIRG 200

