

## FIRG SERIES PREMIER RANGE

### INTRODUCTION

Holmbury FIRG Series couplings were first introduced in 1982. Their early success was due to good performance, long life and competitive prices. As a result of their ongoing development programme, the couplings have over the years maintained a superb track record.

In 1992 a major upgrade was introduced and the name Premier Range added to reflect the dominant position of the FIRG Series couplings in the market. In terms of flow rate and pressure drop characteristics, the FIRG Series has now been eclipsed by the Holmbury 'A' Series Premier Plus Range. However, for many applications the FIRG Series still offers the optimum balance between price and performance.

These couplings comply with ISO 16028 connection sizes.

For connection under pressure please refer to either the APM Series of Quick Release Male Couplings on page 14 or the VP and VEP Series Screwed Couplings on pages 10 and 12 respectively.

### APPLICATIONS

Where clean connections are required despite dusty or dirty conditions. User industries include: agriculture, construction plant, mobile equipment, general industrial, nuclear and mining.

### OPERATION

To couple, wipe the mating faces clean and push the two halves together until they click shut. Twist the sleeve and the coupling is locked. To release, align the notched sleeve with the ball, pull back the sleeve and the coupling springs apart.

### ANTI-BRINELLING FEATURES

- ★ 12 ball locking mechanism in the 1/4", 3/8", 1/2", 1/2"A, 1" and 1 1/4" couplings.
- ★ 15 ball locking mechanism in 3/4" and 3/4" B couplings.
- ★ 18 and 20 balls in the 1 1/2" and 2" couplings respectively.
- ★ Close tolerance male and female mating diameters to ensure equal ball loading.



### ADVANTAGES

- ★ Flat mating faces are easily wiped clean to prevent the ingress of contaminants.
- ★ Streamlined internal flow path minimises the pressure drop.
- ★ Non-spill design avoids fluid loss during connection and disconnection.
- ★ No air intrusion during connection.
- ★ Locking sleeve prevents accidental disconnection.
- ★ Bi-directional flow.
- ★ Sizes 3/8" and 1/2" comply with HTMA interface requirements and are recommended by the BHTMA for use in equipment manufactured by its members.
- ★ Conforms to current ISO 16028 Standard sizes.

### PREMIER FEATURES

- ★ Robust construction. High working and burst pressure ratings. Excellent fatigue life.
- ★ Female coupling seal swaged-in to prevent extrusion under pressure.
- ★ Dynamic seal geometry in male couplings allows bi-directional flow.

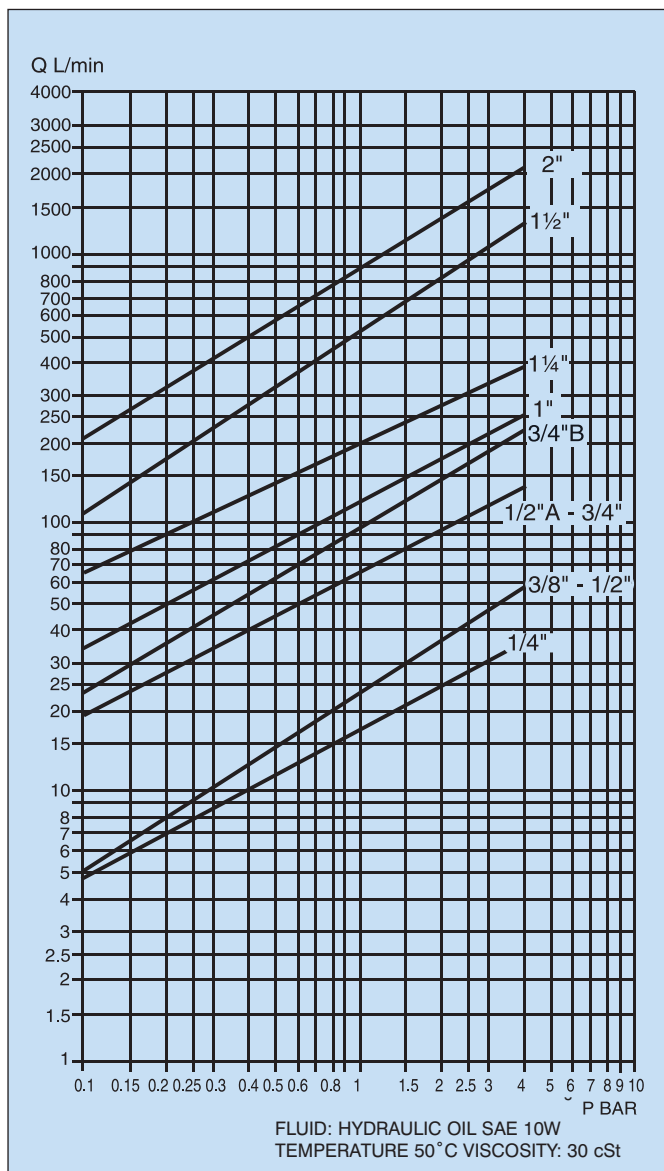
## PRESSURE RATINGS (BAR)

Coupling Size	1/4"	3/8"	1/2"	1/2"A	3/4"	3/4"B	1"	1¼"	1½"	2"
Max working pressure coupled	315	300	300	250	250	250	250	250	200	180
Burst pressure coupled	Over 1200	Over 1200	Over 1200	Over 1000	Over 1000	900	850	850	700	700
Burst Pressure male	Over 1200	Over 1200	Over 1200	Over 1000	Over 1000	900	920	920	700	700
Burst pressure female	600	600	600	400	400	400	400	400	300	300

### COUPLING ORDER CODE

*	FIRG **	*	*
M= Male Coupling F= Female Coupling	Coupling Size	Seal Material See table below	Thread: BSP, NPT, SAE, JIC and special requests

## PRESSURE DROP CHARACTERISTICS



## SEAL MATERIALS AND OPERATING TEMPERATURES

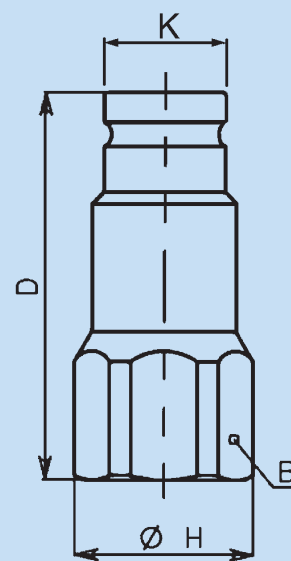
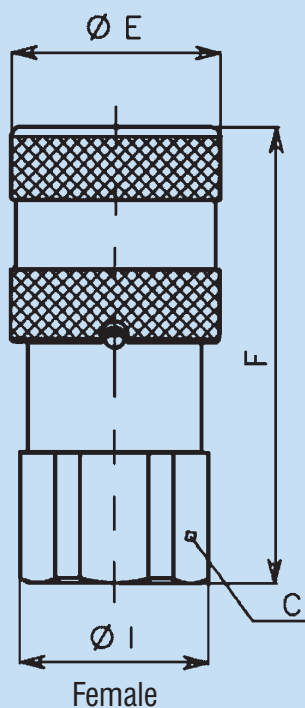
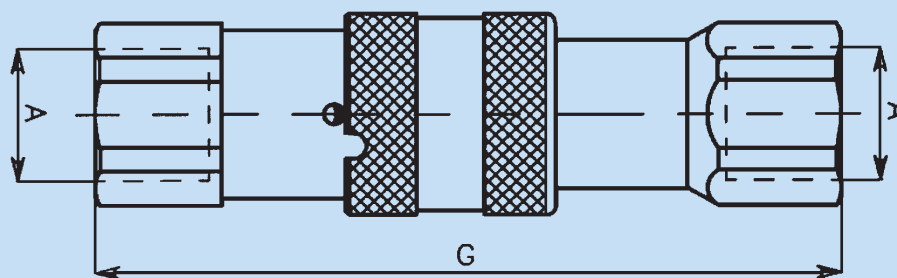
Seal Material Code	Seal Material	Maximum Temperature	Minimum Temperature
N	Nitrile	100°C	-20°C
NEO	Neoprene	90°C	-40°C
EP	EPDM	150°C	-40°C
V	Viton	180°C	-15°C
FS	Fluorosilicone	150°C	-50°C
K	Kalrez	300°C	-25°C

### DUST CAPS - SEE PAGE 52



# FLAT FACE COUPLINGS

## HOLMBURY PREMIER RANGE, FIRG SERIES



Male  
Dimensions in mm

### DIMENSIONS

Type and Size	Nominal Diameter	A	B	C	D	E	F	G	H	I	K nominal	Weight (kg)
FIRG 14	7	1/4"	22	22	48	28	48	85.5	25.5	24	16.2	0.25
FIRG 38	9	3/8"	24	27	60	32	64.5	108.5	26	29	19.8	0.4
FIRG 12	9	1/2"	27	27	62.5	32	69.5	116	29	29	19.8	0.4
FIRG 12A	13	1/2"	32	32	68	38	73.5	125	34	34	24.5	0.65
FIRG 34	13	3/4"	36	36	70.5	38	80.5	134.5	38.5	38.5	24.5	0.68
FIRG 34B	16	3/4"	36	36	70.5	42	80.5	134.5	38.5	38.5	27	0.8
FIRG 100	19	1"	45	45	82.5	48	82.5	154	48	48	30	1.22
FIRG 114	25	1 1/4"	55	55	90	55	105.5	173	60	60	36	1.92
FIRG 112	32	1 1/2"	70	65	111	80	132	215	76	72	57	4.5
FIRG 200	45	2"	75	80	125	100	165	250	83.5	88.5	73	7