

# SERIES: IFR

**INTERCHANGE: ISO 5676** 

# MAIN APPLICATIONS

- Agricultural equipment
- Forestry equipment

"IFR" is a coupling series with a special sealing mechanism that minimizes the loss of oil during the disconnection. This coupling is made of high strength steel with Cr III zinc plating and NBR sealing. These products are particularly well suited for braking circuit on machinery for agricultural and forestry according to ISO 5676. They are available in sizes 3/8" with metric threads (DIN 3852), BSP (DIN 3852) or other on request.



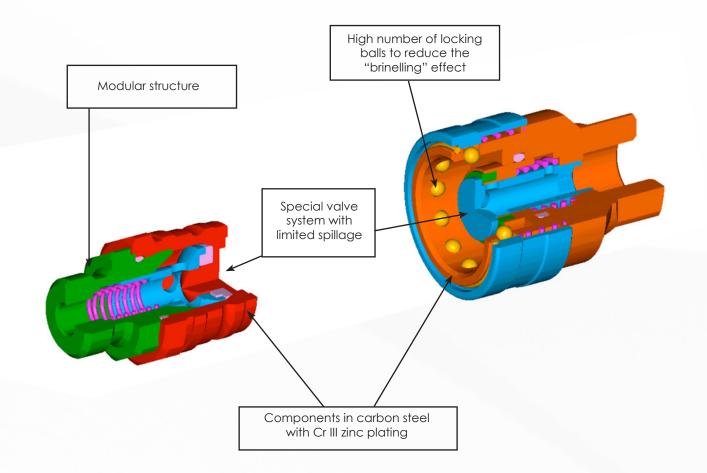


A CONSTANT FLOW OF SOLUTIONS

### **TECHNICAL FEATURES AND OPTIONS**

- Interchangeability: ISO 5676
- Valve system: Special valve system with limited spillage.
- Mechanical connection: Locking balls
- Connection system: Pulling back the sleeve and pushing one half towards the other
- Disconnection system: Pulling back the sleeve
- Connection with residual pressure: Not allowed
- Disconnection with residual pressure: Not allowed
- Threads available: BSP (DIN 3852), Metric(DIN 3852)

- Construction material: Carbon steel
- Surface treatment: Cr III zinc plating
- Springs: C72 steel
- Balls: Hard steel 100 C6
- Seals: standard in NBR (Nitrile)



#### **BENEFITS**

- Minimal fluid loss during disconnection, reducing fluid loss to the environment.
- Minimal air inclusion during connection, enhancing correct function of the circuit.
- The modular design allows flexibility with the range of port configurations.
- Compact slim design.
- Simple to use.
- Metallic plug for female and plastic cap for male are included with the couplings.



# SERIES: IFR

## HOW TO USE

- Before connecting clean the mating parts of the couplings to avoid contamination in the circuit.
- To couple pull back the sleeve of the female coupling, align the female with the male coupling and push one into the other until both halves are fully connected and release the sleeve.
- To uncouple pull back the sleeve of the female coupling, pull out the mating half.

### WARNING!

- Please read carefully General instructions for selection and use of the products in our master catalogues
- Do not couple-uncouple with flow and/or pressure in the circuit.
- Do not couple-uncouple when the temperature inside of the circuit is higher than 80 °C (176 °F).
- When the couplings are disconnected, it is suggested to use the protection caps included with the coupling.

• Check the maximum allowable working pressure of the port in use (DIN L or S type (DIN 2353 / ISO 8434-1) etc. ).

#### PERFORMANCE

Description	Size	Rate	d Flow	Conn	ect force	Disc	connect force	Spillage*	
	Inch	l/min	GPM	Ν	lbf	Ν	lbf	ml	
IFR8	3/8	23	6.1	170	38.2	27	6.07	0,06	

Description	Max. operating pressure						Burst pressure						
	Coupled Male		Female		Coupled		Male		Female				
	MPa	psi	MPa	psi	MPa	psi	MPa	psi	MPa	psi	MPa	psi	
IFR8	15	2175	15	2175	15	2175	100	14500	80	11600	30	4350	

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

• Temperature range:

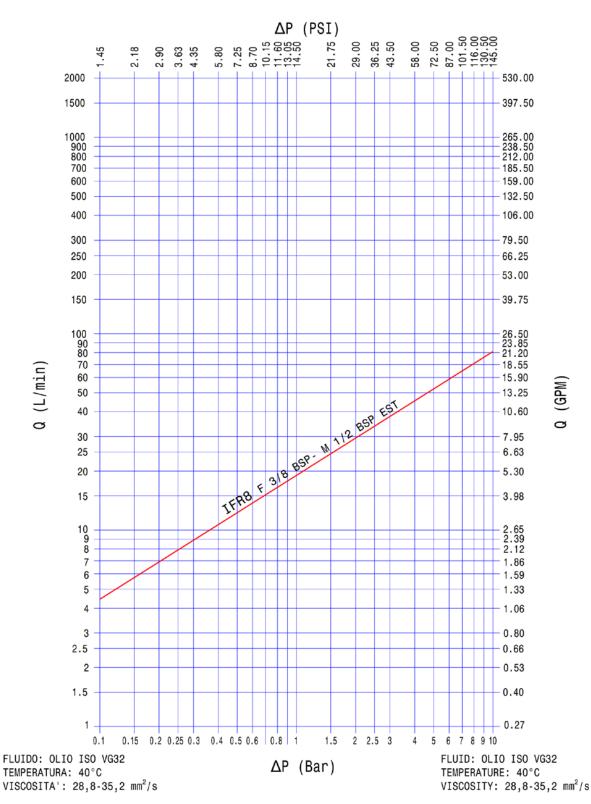
- Standard seals NBR (Nitrile): from -20 °C to +100 °C (from -4 °F to +212 °F).

Tests performed:

The couplings have been tested at maximum operating pressure for 100,000 impulses according to ISO 7241-2 test method



### PRESSURE DROP

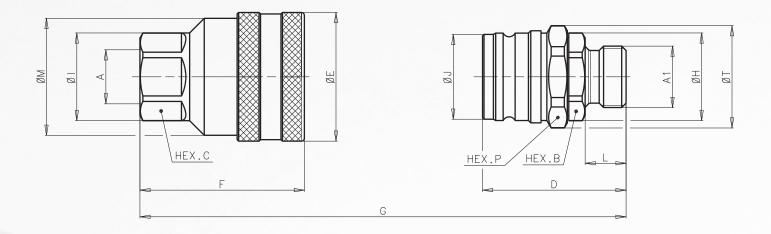


TEST ESEGUITI IN CONFORMITA' A ISO 7241-2 TEST IN ACCORDANCE WITH ISO 7241-2



# SERIES: IFR

### **OVERALL DIMENSIONS**



# FEMALE THREAD BSPP (DIN 3852-2 FORM X) or FEMALE THREAD METRIC (DIN 3852-1 FORM Y) for the FEMALE SIDE. MALE THREAD BSPP (DIN 3852-2 – FORM A) for the MALE SIDE.

Description	BODY SIZE	А	A1	UNIT	HEX B	HEX C	D	E	F	G	н
F IFR8 3/8 BSP	3/8"	G 3/8"	G 1/2"	mm	27	27	49.1	44	56.2	90	30
M IFR8 1/2 BSP EXT				inch	1.06	1.06	1.93	1.73	2.21	3.54	1.18
F IFR8 M18X1.5	2 /0"	M18X1.5 G	G 1/2"	mm	27	27	49.1	44	54.2	90	30
M IFR8 1/2 BSP EST	3/8"		01/2	inch	1.06	1.06	1.93	1.73	2.13	3.54	1.18

Description	BODY SIZE	I	J	L	М	HEX P	т	Part Number	
F IFR8 3/8 BSP	3/8"	30	29	14	40	32	35	Female	800200048
M IFR8 1/2 BSP EXT		1.18	1.14	0.55	1.57	1.26	1.38	Male	800200051
F IFR8 M18X1.5	2 /0"	30	29	14	40	32	35	Female	800212000
M IFR8 1/2 BSP EST	3/8"	1.18	1.14	0.55	1.57	1.26	1.38	Male	800200051



# **PROTECTION CAPS FOR IFR SERIES**

Protective caps are always recommended to protect the couplings from damage, dirt inclusion, and will increase the product life. This is particularly important in agricultural applications where exposure to weather and aggregate materials are common.

Metallic plug for female and plastic cap for male are included with the couplings.

- The plug for female coupling is in carbon steel Cr III zinc plated.

- The standard color of plastic cap for male coupling is Yellow.

- Temperature range: from -20°C to +100°C.

SIZE	Part Number to order as spare parts							
	Metallic plug for Female	Plastic cap for Male						
IFR8	525000275	814901027						

The texts, data and illustrations indicated in this catalogue, may be changed by Stucchi S.p.A at any time without notice. (CAT. IFR-EN REV.0).

