IRBOSERIES

INTERCHANGE > **ISO 7241 B**



TECHNICAL FEATURES AND OPTIONS

Interchange
ISO 7241 B

Sealing description
FKM (VITON®)

Connection system
Single acting sleeve

Available sizes
From 1/8" to 1"

Material
Brass

Available threads
BSP - NPT

Operating pressure
Up to 200 bar

Locking mechanism
Locking Ball system

Flow rate
Up to 200 l/min

Temperature (°C)
-15°C / + 180°C

Valving style
Poppet

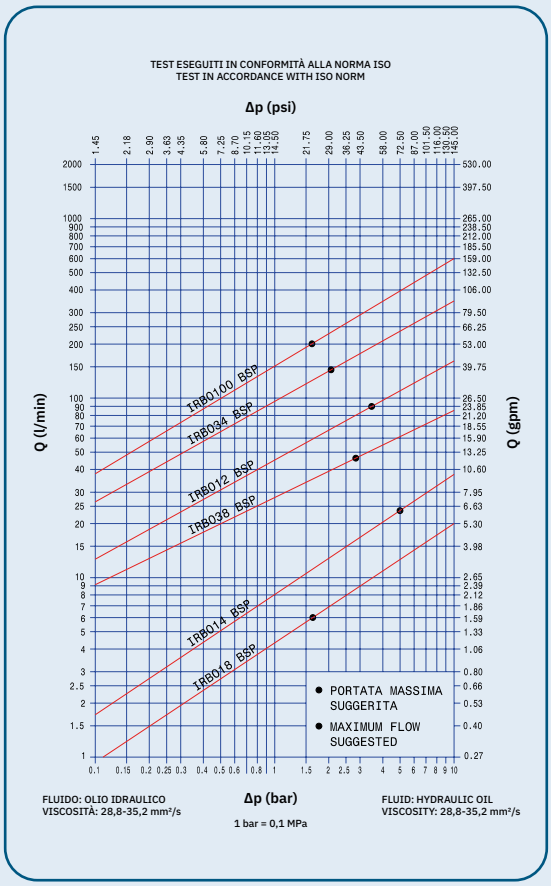
Connection under pressure
Connection: not allowed
Disconnection: not allowed

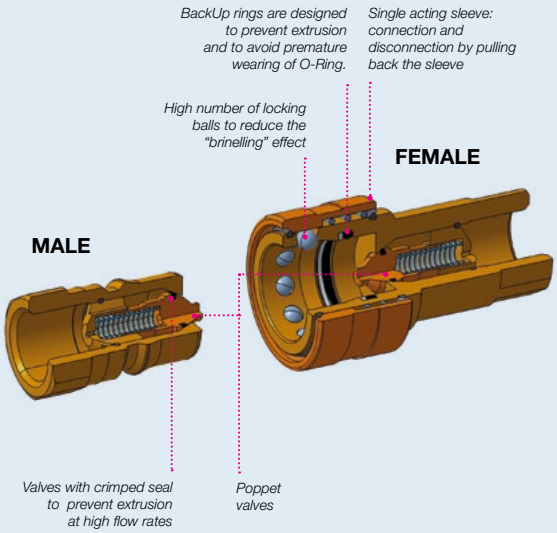
BENEFITS

- The poppet valve with elastomer seal provides maximum sealing of the couplings when disconnected.
- Shape of internal parts is designed to reduce turbulence and pressure drop.
- Superior corrosion resistance compared to Chrome 3.
- Compact slim design.
- Simple to use.

HOW TO USE

- Before to connect, clean the mating surface of the couplings to avoid dirt inclusion in the circuit.
- To connect 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 disconnect push back the sleeve of the female coupling, pull out the mating half.





MAIN APPLICATIONS



PERFORMANCES

Size		Series/Size	Max. flow suggested		Connect force		Disconnect force		Spillage*
in	mm (ISO)		l/min	gpm	N	lbf	N	lbf	ml
1/8	5,0	IRB018	6	1,59	75	16,88	35	7,88	0,18
1/4	6,3	IRB014	24	6,36	60	13,50	30	6,75	0,33
3/8	10,0	IRB038	46	12,19	95	21,38	35	7,88	2,20
1/2	12,5	IRB012	90	23,85	95	21,38	35	7,88	3,00
3/4	19,0	IRB034	148	39,22	125	28,13	40	9,00	9,40
1	25,0	IRB0100	200	53,00	140	31,50	40	9,00	14,00

Size	Series/Size	Max. operating pressure						Burst pressure					
		Coupled		Male		Female		Coupled		Male		Female	
in		MPa	psi	MPa	psi	MPa	psi	MPa	psi	MPa	psi	MPa	psi
1/8	IRB018	20	2900	20	2900	20	2900	80	11600	80	11600	80	11600
1/4	IRB014	20	2900	20	2900	20	2900	80	11600	80	11600	80	11600
3/8	IRB038	16	2320	16	2320	16	2320	64	9280	64	9280	64	9280
1/2	IRB012	16	2320	16	2320	16	2320	64	9280	64	9280	64	9280
3/4	IRB034	12,5	1813	12,5	1813	12,5	1813	50	7250	45	6525	50	7250
1	IRB0100	10	1450	10	1450	10	1450	40	5800	40	5800	40	5800

* Spillage is an indicative value of the fluid loss during disconnection (according to ISO norm test method).

Different possible configurations

PL version (free flow without valve) available upon request.
SAE thread available upon request.

Only when connected, suitable for vacuum applications, up to 0,15 bar.

Temperature range:

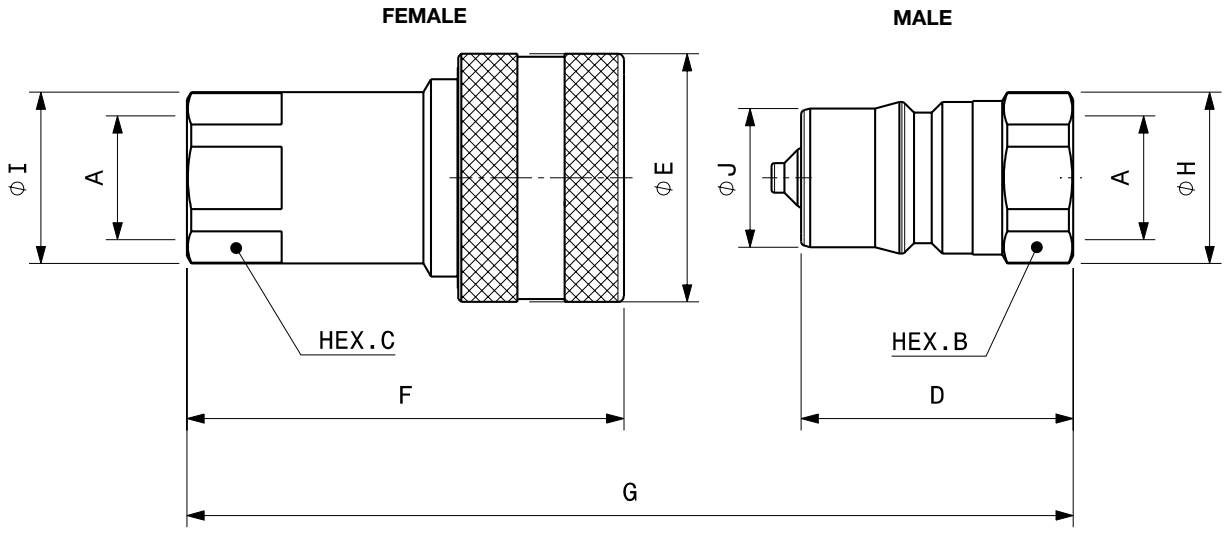
Standard seals in FKM (VITON®): from -15°C to +180°C (from +5 °F to +356 °F).
Upon request seals in NBR (Nitrile) from -20 °C to +100 °C (from -4 °F to +212 °F).
Seals in NBR (Nitrile) with water from +5°C to +60°C (from +41°F to +140°F).
Upon request seals in EPDM (Ethylene Propylene): from -40 °C to +150 °C (from -40 °F to +302 °F).
Please read carefully Instructions and warnings for proper selection of the products.

Tests performed:

Qualification tests have been performed with hydraulic oil using couplings with FKM (VITON®) seals.
The max. operating pressure have been verified for 100.000 impulses according to ISO norm test method.

⚠ WARNING

A defect, a wrong choice or an improper use of products, can cause injury to persons, animals and objects.
Never connect or disconnect with dynamic pressure (e.g. pump on).
Do not use the coupling disconnected with high impulse pressure.
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).
Do not use with fluids below the freezing point to avoid damages due to ice expansion and consequential extrusion of the valving.
Check the maximum allowable working pressure of the port in use.
Make sure that the medium used is compatible with seal and material as indicated for each series.
In case of doubt please contact Stucchi Technical Support.
The interchangeability is mentioned under the assumption that the manufacturer of the considered products has not changed any dimension.
It is mandatory to carefully read and closely follow the instructions before selecting or using any Stucchi products.
Always refer to the version uploaded in the Instructions and warning section of stucchigroup.com website for the latest release.
For specific, product-related, instructions, please contact Stucchi technical service.



Port description: FEMALE THREAD BSPP (ISO 1179-1)

Body Size	Descriptive Code	Item Code		ISO DN	PORT (A)	Overall Length			Length			Hex			Overall Diameter			Body Diameter			Weight	
							mm	in		mm	in		mm	in		mm	in		mm	in	kg	lb
1/8"	F IRB018V BSP	Female	804500100	5,0	1/8"	G	60,5	2,38	F	48,8	1,92	C	14,0	0,55	I	15,8	0,62	E	23,0	0,91	0,07	0,15
	M IRB018V BSP	Male	804500101						D	30,0	1,18	B	14,0	0,55	H	15,8	0,62	J	10,8	0,43	0,02	0,04
1/4"	F IRB014V BSP	Female	804500102	6,3	1/4"	G	70,7	2,78	F	57,0	2,24	C	19,0	0,75	I	21,2	0,83	E	27,0	1,06	0,13	0,29
	M IRB014V BSP	Male	804500103						D	35,0	1,38	B	19,0	0,75	H	20,8	0,82	J	14,2	0,56	0,04	0,08
3/8"	F IRB038V BSP	Female	804500104	10,0	3/8"	G	82,7	3,26	F	66,0	2,60	C	24,0	0,94	I	27,0	1,06	E	34,0	1,34	0,24	0,52
	M IRB038V BSP	Male	804500105						D	41,0	1,61	B	24,0	0,94	H	26,0	1,02	J	19,1	0,75	0,07	0,16
1/2"	F IRB012V BSP	Female	804500106	12,5	1/2"	G	92,6	3,65	F	73,9	2,91	C	27,0	1,06	I	29,0	1,14	E	42,0	1,65	0,34	0,76
	M IRB012V BSP	Male	804500107						D	46,0	1,81	B	27,0	1,06	H	29,0	1,14	J	23,5	0,93	0,11	0,24
3/4"	F IRB034V BSP	Female	804500108	20,0	3/4"	G	111,1	4,37	F	90,1	3,55	C	36,0	1,42	I	38,5	1,52	E	50,0	1,97	0,61	1,33
	M IRB034V BSP	Male	804500109						D	55,0	2,17	B	36,0	1,42	H	38,5	1,52	J	31,4	1,24	0,22	0,48
1"	F IRB0100V BSP	Female	804500110	25,0	1"	G	133,2	5,24	F	106,2	4,18	C	41,0	1,61	I	44,8	1,76	E	60,0	2,36	0,93	2,04
	M IRB0100V BSP	Male	804500111						D	66,0	2,60	B	41,0	1,61	H	44,8	1,76	J	37,7	1,48	0,35	0,78

Port description: FEMALE THREAD NPT (ANSI B.1.20.1)

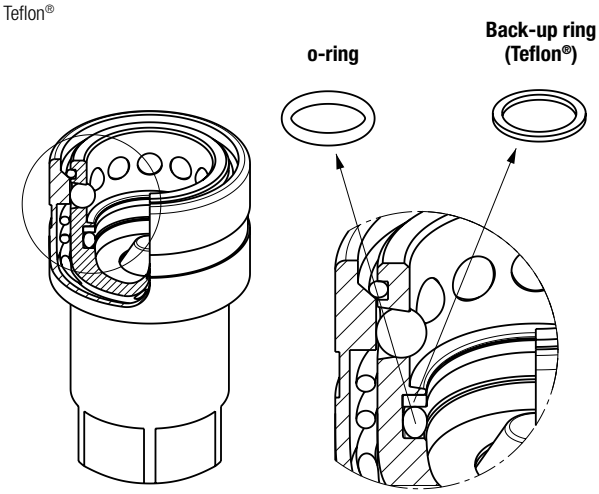
Body Size	Descriptive Code	Item Code		ISO DN	PORT (A)	Overall Length			Length			Hex			Overall Diameter			Body Diameter			Weight	
							mm	in		mm	in		mm	in		mm	in		mm	in	kg	lb
1/8"	F IRB018V NPT	Female	804501100	5,0	1/8"	G	60,5	2,38	F	48,8	1,92	C	14,0	0,55	I	15,8	0,62	E	23,0	0,91	0,08	0,17
	M IRB018V NPT	Male	804501101						D	30,0	1,18	B	14,0	0,55	H	15,8	0,62	J	10,8	0,43	0,02	0,04
1/4"	F IRB014V NPT	Female	804501102	6,3	1/4"	G	70,7	2,78	F	57,0	2,24	C	19,0	0,75	I	21,2	0,83	E	27,0	1,06	0,13	0,29
	M IRB014V NPT	Male	804501103						D	35,0	1,38	B	19,0	0,75	H	20,8	0,82	J	14,2	0,56	0,04	0,09
3/8"	F IRB038V NPT	Female	804501104	10,0	3/8"	G	82,7	3,26	F	66,0	2,60	C	24,0	0,94	I	27,0	1,06	E	34,0	1,34	0,23	0,51
	M IRB038V NPT	Male	804501105						D	41,0	1,61	B	24,0	0,94	H	26,0	1,02	J	19,1	0,75	0,08	0,17
1/2"	F IRB012V NPT	Female	804501106	12,5	1/2"	G	92,6	3,65	F	73,9	2,91	C	27,0	1,06	I	29,0	1,14	E	42,0	1,65	0,35	0,76
	M IRB012V NPT	Male	804501107						D	46,0	1,81	B	27,0	1,06	H	29,0	1,14	J	23,5	0,93	0,12	0,25
3/4"	F IRB034V NPT	Female	804501108	20,0	3/4"	G	111,1	4,37	F	90,1	3,55	C	36,0	1,42	I	38,5	1,52	E	50,0	1,97	0,61	1,33
	M IRB034V NPT	Male	804501109						D	55,0	2,17	B	36,0	1,42	H	38,5	1,52	J	31,4	1,24	0,22	0,49
1"	F IRB0100V NPT	Female	804501110	25,0	1"	G	133,2	5,24	F	106,2	4,18	C	41,0	1,61	I	44,8	1,76	E	60,0	2,36	0,94	2,07
	M IRB0100V NPT	Male	804501111						D	66,0	2,60	B	41,0	1,61	H	44,8	1,76	J	37,7	1,48	0,36	0,79



SPARE KIT SEAL FOR FEMALE

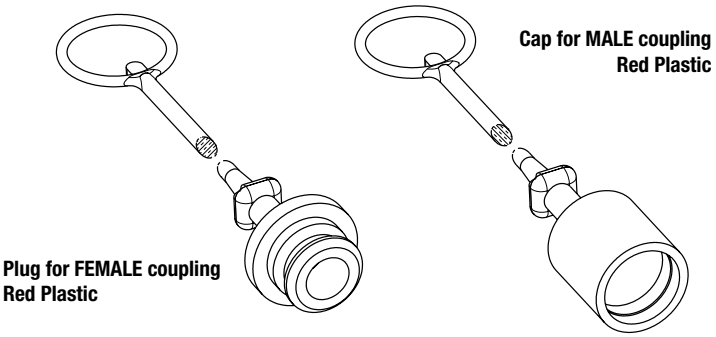
Repair kit / OR+BK		
Body Size	Description	Part Number
1/8”	F IRB018	815700214
1/4”	F IRB014	815700216
3/8”	F IRB038	815700218
1/2”	F IRB012	815700220
3/4”	F IRB034	815700222
1”	F IRB0100	815700224

O-Ring in FKM (VITON®)
BackUp in Teflon®



PROTECTIVE CAPS FOR IRBO SERIES

Protective caps are always recommended to protect the couplings from damage, dirt inclusion, and will increase the product life. The protective caps for IRBO series are manufactured in plastic with connection lanyard (standard color red, other colors available upon request).



Protective Cap				
Body Size/Description		Part Number		Material/Color
		Plug for Female	Cap for Male	
1/4”	IRB014	815000032	815000033	Plastic/Red
3/8”	IRB038	815000034	815000035	Plastic/Red
1/2”	IRB012	815000036	815000037	Plastic/Red
3/4”	IRB034	815000038	815000039	Plastic/Red
1”	IRB0100	815000040	815000041	Plastic/Red

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