

IRBOSERIES

INTERCHANGE > ISO 7241 B



Stucchi®



TECHNICAL FEATURES AND OPTIONS

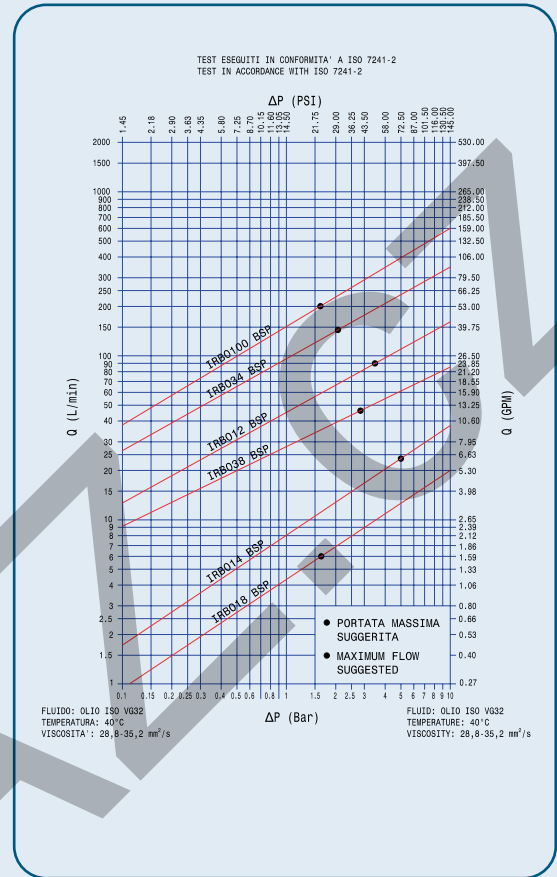
Interchange ISO 7241 B	Sealing description FKM (VITON®)	Connection system Single acting sleeve
Available sizes From 1/8" to 1"	Material Brass	Available threads BSP - NPT
Operating pressure Up to 200 bar	Locking mechanism Locking Ball system	Flow rate Up to 200 l/min
Temperature (°C) -15°C / + 180°C	Valving 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

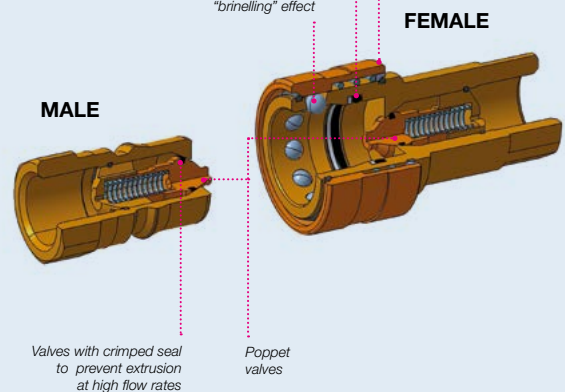
- Before to connect, clean the mating surface of the couplings to avoid dirt inclusion in the circuit.
- To connect pull back the sleeve of the female coupling, align the female with the male coupling and push one into the other until both halves are fully connected and release the sleeve.
- To disconnect push back the sleeve of the female coupling, pull out the mating half.



BackUp rings are designed to prevent extrusion and to avoid premature wearing of O-Ring.

Single acting sleeve: connection and disconnection by pulling back the sleeve

High number of locking balls to reduce the "brinelling" effect



MAIN APPLICATIONS



POPPET



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	20,0	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	100	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.

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.

! 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).

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.

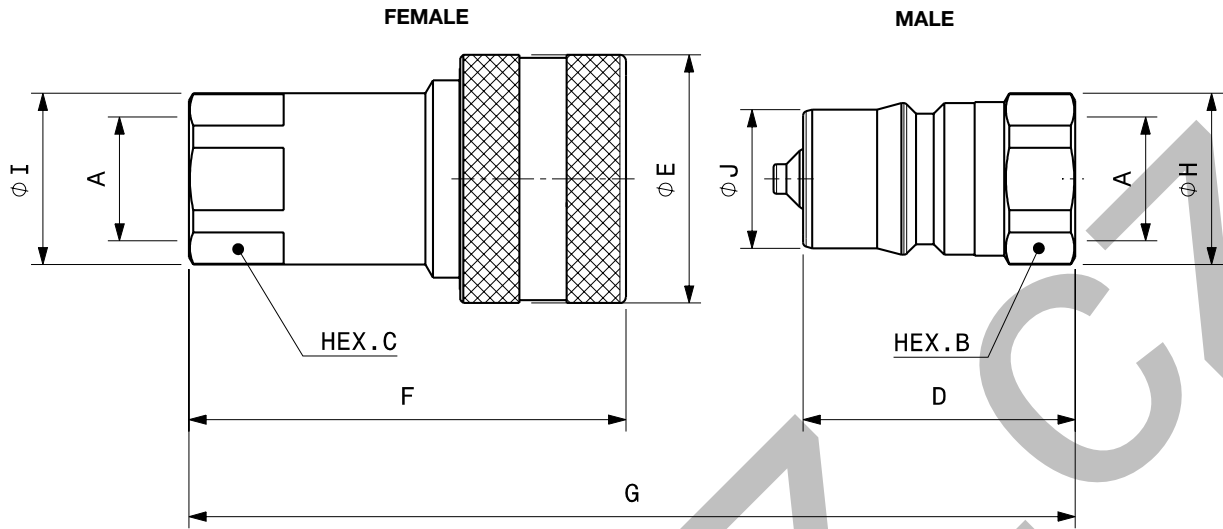
The interchangeability is mentioned under the assumption that the manufacturer of the considered products has not changed any dimension.

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.

OVERALL DIMENSIONS



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)

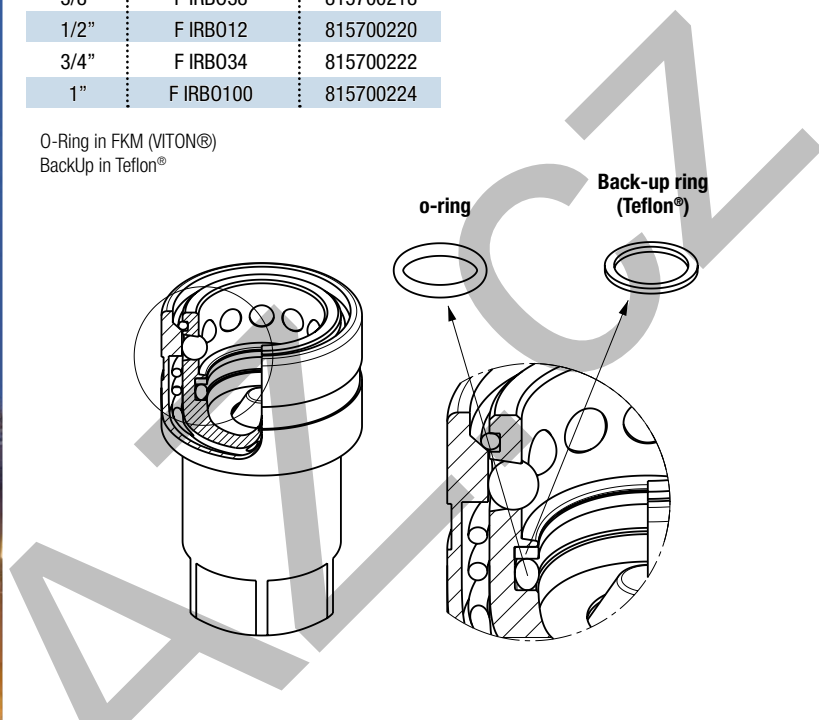
BODY SIZE	Descriptive Code	Item Code	ISO DN	PORT (A)	Overall Length		Length		Hex		Overall Diameter		Body Diameter		Weight						
					mm	in	mm	in	mm	in	mm	in	mm	in	kg	lb					
1/8"	F IRB018V NPT	Female 804501100	5,0	1/8"	G	60,5	2,38	F	48,8	1,92	C	14,0	0,55	I	15,8	0,62	E	23,0	0,91	0,08	0,17
	M IRB018V NPT	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

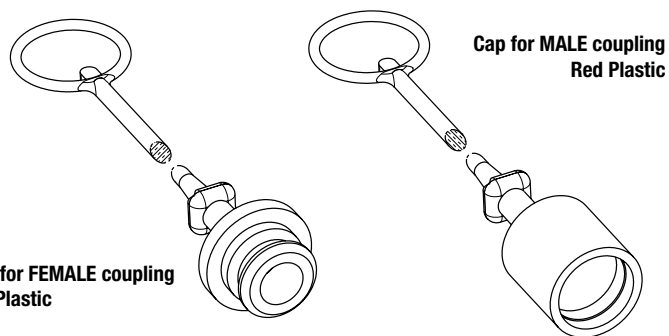
Repair kit / OR+BK		
Body Size	Description	Part Number
1/8"	F IRB018	815700214
1/4"	F IRB014	815700216
3/8"	F IRB038	815700218
1/2"	F IRB012	815700220
3/4"	F IRB034	815700222
1"	F IRB0100	815700224

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).



Body Size/Description		Protective Cap		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