IR-VSERIES

INTERCHANGE > **With similar couplings IR series, ISO 7241 SERIES "A" (SIZE ½" only)**



TECHNICAL FEATURES AND OPTIONS

Interchange
With similar couplings IR series, ISO 7241 SERIES "A" (SIZE 1/2" only)

Sealing description
Nitrile NBR

Connection system
Single acting sleeve

Available sizes
from 1/4" to 1"

Material /treatment
Carbon steel /Cr3

Available threads
BSP - NPT - SAE

Operating pressure
Up to 300 bar

Locking mechanism
Ball Locking

Flow rate
Up to 200 l/min

Temperature (°C)
-20°C / +100°C

Valving style
Poppet

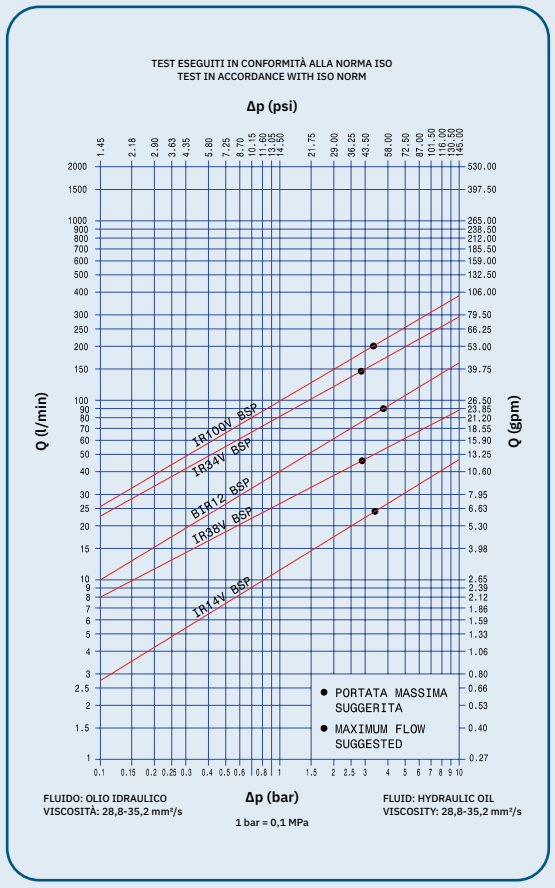
Connection under pressure
Connection: not allowed
Disconnection: not allowed

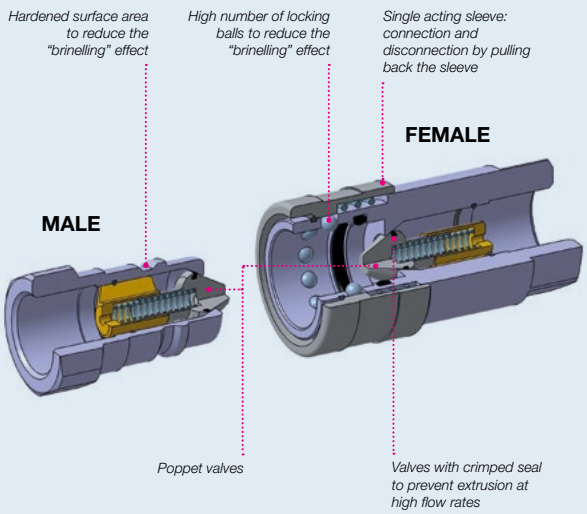
BENEFITS

- 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.
- 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
1/4		IR14V	24	6,36	80	18,00	40	9,00	0,33
3/8		IR38V	46	12,19	120	27,00	35	7,88	1,30
1/2	12,5	BIR12**	90	23,85	70	15,75	55	12,38	2,10
3/4		IR34V	148	39,22	175	39,38	45	10,13	4,20
1		IR100V	200	53,00	210	47,25	65	14,63	5,50

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
1/4	IR14V	30	4350	30	4350	30	4350	100	14500	100	14500	100	14500
3/8	IR38V	30	4350	30	4350	30	4350	100	14500	100	14500	100	14500
1/2	BIR12**	25	3625	25	3625	25	3625	80	11600	80	11600	100	14500
3/4	IR34V	25	3625	25	3625	25	3625	100	14500	90	13050	100	14500
1	IR100V	20	2900	20	2900	20	2900	80	11600	80	11600	80	11600

* Spillage is an indicative value of the fluid loss during disconnection (according to ISO norm test method).
** Size 1/2" is ISO7241-1/A interchangeable.

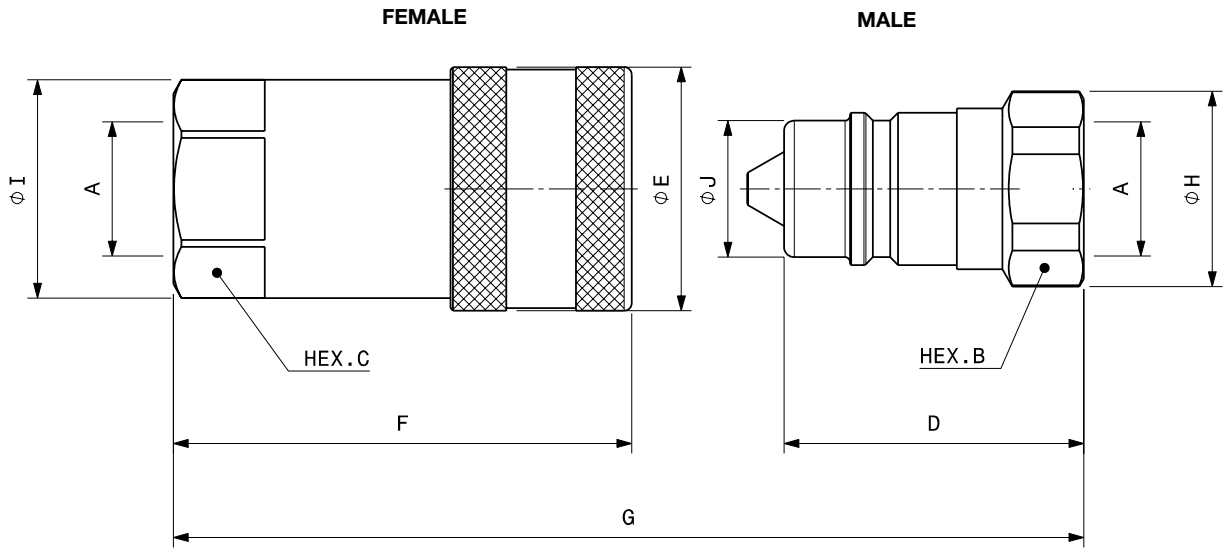
Different possible configurations:
PL version (free flow without valve): available upon request.
SAE thread upon request.

Temperature range:
Standard seals in NBR (Nitrile): from -20 °C to +100 °C (from -4 °F to +212 °F).
Upon request seals in FKM (VITON®): from -15°C to +180°C (from +5 °F to +356 °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 NBR (Nitrile) 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 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.



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
1/4"	F IR14V BSP	Female	800100000	-	1/4"	G	65,9	2,59	F	50,4	1,98	C	19,0	0,75	I	21,0	0,83	E	27,0	1,06	0,12	0,25
	M IR14V BSP	Male	800100001						D	32,5	1,28	B	19,0	0,75	H	20,8	0,82	J	14,2	0,56	0,04	0,08
3/8"	F IR38V BSP	Female	800100002	-	3/8"	G	76,3	3,00	F	58,3	2,30	C	24,0	0,94	I	26,5	1,04	E	34,0	1,34	0,22	0,47
	M IR38V BSP	Male	800100003						D	38,0	1,50	B	24,0	0,94	H	27,7	1,09	J	19,0	0,75	0,07	0,16
1/2"	F BIR12 BSP	Female	800500004	12,5	1/2"	G	86,3	3,40	F	63,3	2,49	C	27,0	1,06	I	30,0	1,18	E	38,0	1,50	0,25	0,54
	M BIR12 BSP	Male	800500005						D	44,5	1,75	B	27,0	1,06	H	29,0	1,14	J	20,5	0,81	0,08	0,19
3/4"	F IR34V BSP	Female	800100004	-	3/4"	G	118,3	4,66	F	90,3	3,56	C	38,0	1,50	I	43,0	1,69	E	48,0	1,89	0,68	1,50
	M IR34V BSP	Male	800100005						D	59,0	2,32	B	36,0	1,42	H	38,5	1,52	J	26,9	1,06	0,19	0,41
3/4"	F IR34VFA BSP	Female	820000022 *	-	3/4"	G	106,5	4,19	F	82,0	3,23	C	38,0	1,50	I	41,8	1,65	E	46,3	1,82	0,49	1,07
	M IR34VFA BSP	Male	820000023 *						D	53,0	2,09	B	34,0	1,34	H	39,1	1,54	J	28,0	1,10	0,18	0,40
1"	F IR100V BSP	Female	800100006	-	1"	G	128,8	5,07	F	97,6	3,84	C	45,0	1,77	I	52,0	2,05	E	54,0	2,13	0,83	1,83
	M IR100V BSP	Male	800100007						D	64,1	2,52	B	41,0	1,61	H	44,8	1,76	J	31,4	1,24	0,26	0,58

* alternative interchange

Port description: FEMALE THREAD NPT (ANSI B1.20.1)

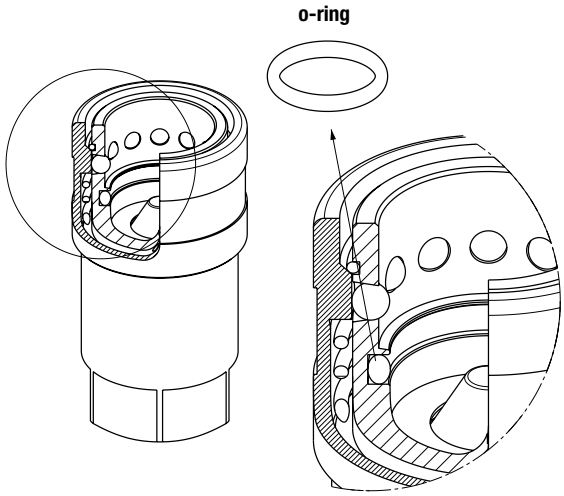
Body Size	Descriptive Code	Item Code		ISO DN	PORT (A)	Overall Length			Length			Hex			Overall Diameter			Body Diameter			Weight	
							mm	in		mm	in		mm	in		mm	in		mm	in	kg	lb
1/4"	F IR14V NPT	Female	800101000	-	1/4"	G	65,9	2,59	F	50,4	1,98	C	19,0	0,75	I	21,0	0,83	E	27,0	1,06	0,13	0,28
	M IR14V NPT	Male	800101001						D	32,5	1,28	B	19,0	0,75	H	20,8	0,82	J	14,2	0,56	0,04	0,09
3/8"	F IR38V NPT	Female	800101002	-	3/8"	G	76,3	3,00	F	58,3	2,30	C	24,0	0,94	I	26,5	1,04	E	34,0	1,34	0,22	0,49
	M IR38V NPT	Male	800101003						D	38,0	1,50	B	24,0	0,94	H	27,7	1,09	J	19,0	0,75	0,08	0,18
1/2"	F BIR12 NPT	Female	800501004	12,5	1/2"	G	86,3	3,40	F	63,3	2,49	C	27,0	1,06	I	30,0	1,18	E	38,0	1,50	0,25	0,54
	M BIR12 NPT	Male	800501005						D	44,5	1,75	B	27,0	1,06	H	29,0	1,14	J	20,5	0,81	0,08	0,19
3/4"	F IR34V NPT	Female	800101004	-	3/4"	G	118,3	4,66	F	90,3	3,56	C	38,0	1,50	I	43,0	1,69	E	48,0	1,89	0,66	1,46
	M IR34V NPT	Male	800101005						D	59,0	2,32	B	36,0	1,42	H	38,5	1,52	J	26,9	1,06	0,19	0,41
1"	F IR100V NPT	Female	800101006	-	1"	G	128,8	5,07	F	97,6	3,84	C	45,0	1,77	I	52,0	2,05	E	54,0	2,13	0,86	1,90
	M IR100V NPT	Male	800101007						D	64,1	2,52	B	41,0	1,61	H	44,8	1,76	J	31,4	1,24	0,28	0,61



SPARE KIT SEAL FOR FEMALE

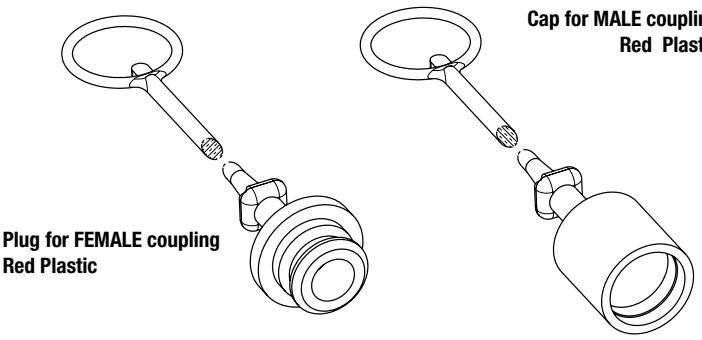
Repair kit / OR		
Body Size	Description	Part Number
1/4”	F IR-V14	815700348
3/8”	F IR-V38	815700350
1/2”	F IR-V12	815700352
3/4”	F IR-V34	815700354
3/4"	F IR34V FA	815700734
1”	F IR-V100	815700356

O-Ring in NBR



PROTECTIVE CAPS FOR IR-V 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 agriculture applications where exposure to weather and aggregate materials are common.
The protective caps for IR-V 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”	IR-V 14	815000000	815000001	Plastic/Red
3/8”	IR-V 38	815000002	815000003	Plastic/Red
1/2”	IR-V 12	815000004	815000005	Plastic/Red
3/4”	IR-V 34	815000006	815000007	Plastic/Red
1”	IR-V 100	815000008	815000009	Plastic/Red

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