

IRSERIES

INTERCHANGE > With similar couplings, ISO 7241 A (size 1/2" only)



Stucchi®



TECHNICAL FEATURES AND OPTIONS



Interchange
With similar couplings, ISO 7241 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



Operating pressure
Up to 300 bar



Locking mechanism
Locking Ball system



Flow rate
Up to 150 l/min



Temperature (°C)
-20°C / +100°C



Valving style
Ball



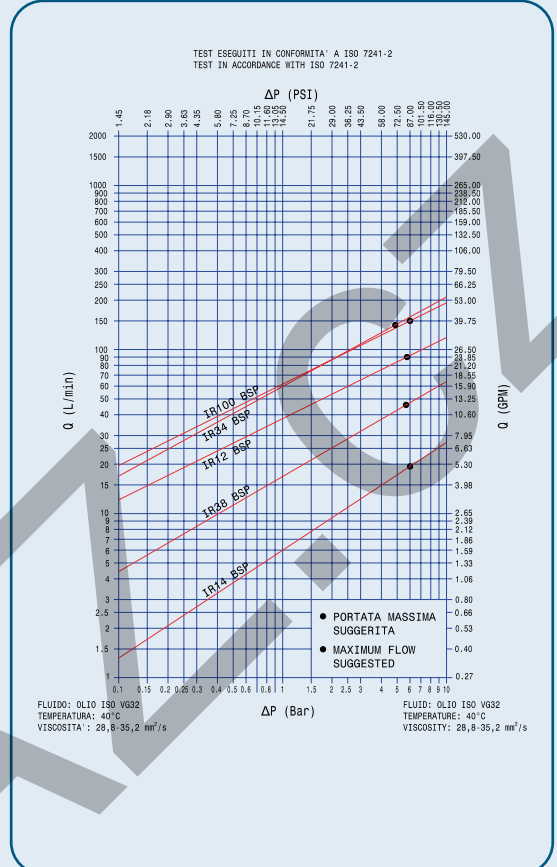
Connection under pressure
Connection: not allowed
Disconnection: not allowed

BENEFITS

- Ball valves in hardened steel provide a good wearing resistance.
- Compact slim design.
- Simple to use.

HOW TO USE

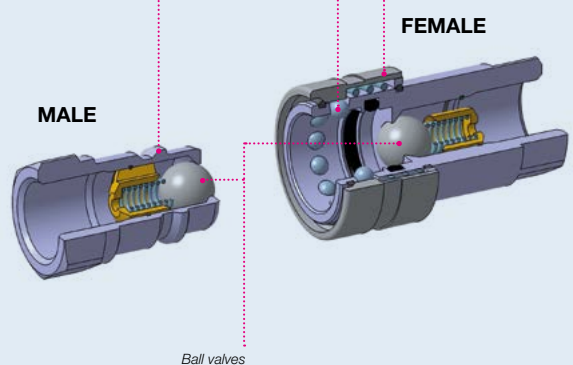
- Before to connect, clean the mating surface of the couplings to avoid dirt inclusion in the circuit.
- To connect pull back the sleeve of the female coupling, align the female with the male coupling and push one into the other until both halves are fully connected and release the sleeve.
- To disconnect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



Hardened surface area to reduce the "brinelling" effect

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

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



MAIN APPLICATIONS



Agriculture



Oil/Gas



Industry



High Pressure



Cooling



Refrigeration



Earth Moving



Vehicles



Hydraulic Equipment



Chemical & Food Industry

POPPET

PERFORMANCES

Size		Series/Size	Max. flow suggested		Connect force		Disconnect force		Spillage*
in	mm (ISO)		l/min	gpm	N	lbf	N	lbf	ml
1/4		IR14	20	5,30	50	11,25	45	10,13	0,13
3/8		IR38	46	12,19	125	28,13	45	10,13	0,45
1/2	12,5	IR12**	90	23,85	80	18,00	50	11,25	2,30
3/4		IR34	148	39,22	190	42,75	45	10,13	4,50
1		IR100	150	39,75	100	22,50	45	10,13	6,00

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	MPa	psi	
1/4	IR14	30	4350	30	4350	30	4350	100	14500	100	14500	100	14500	100	14500
3/8	IR38	30	4350	30	4350	30	4350	100	14500	100	14500	90	13050	90	13050
1/2	IR12**	25	3625	20	2900	20	2900	80	11600	55	7975	55	7975	55	7975
3/4	IR34	25	3625	20	2900	25	3625	100	14500	60	8700	90	13050	90	13050
1	IR100	20	2900	20	2900	20	2900	80	11600	60	8700	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:

TIC version, shielded poppet to eliminate flow-checking when used with connect-under-pressure competitor couplers.

Temperature range:

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

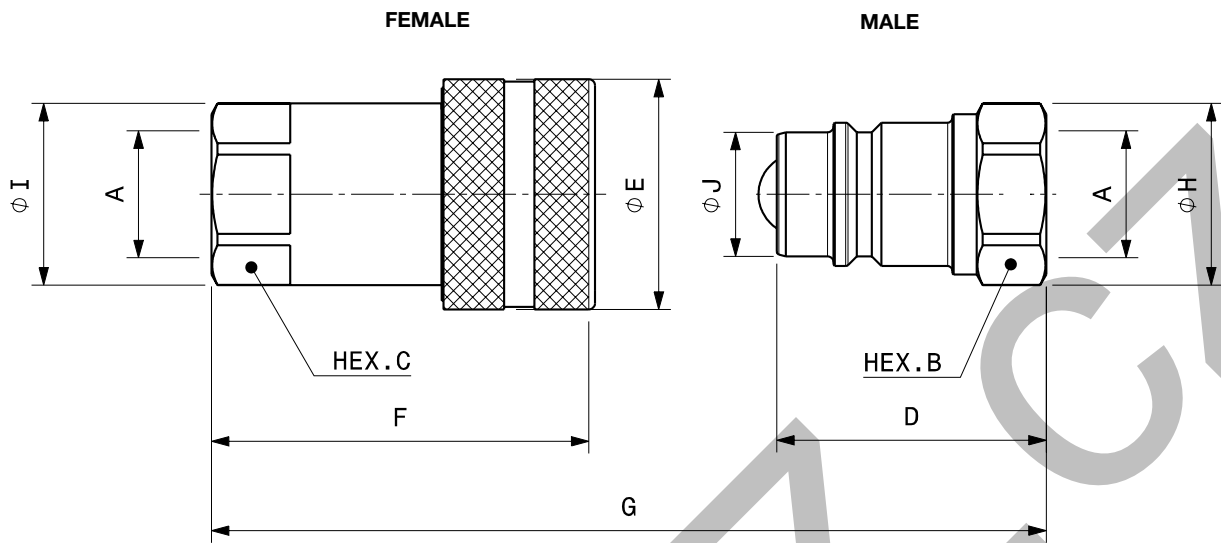
Make sure that the medium used is compatible with seal and material as indicated for each series.

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 read and closely follow the instructions. Last updated version always apply at time of installation, see latest written Instructions on Stucchi website (stucchigroup.com) before selecting or using Stucchi products.

OVERALL DIMENSIONS



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

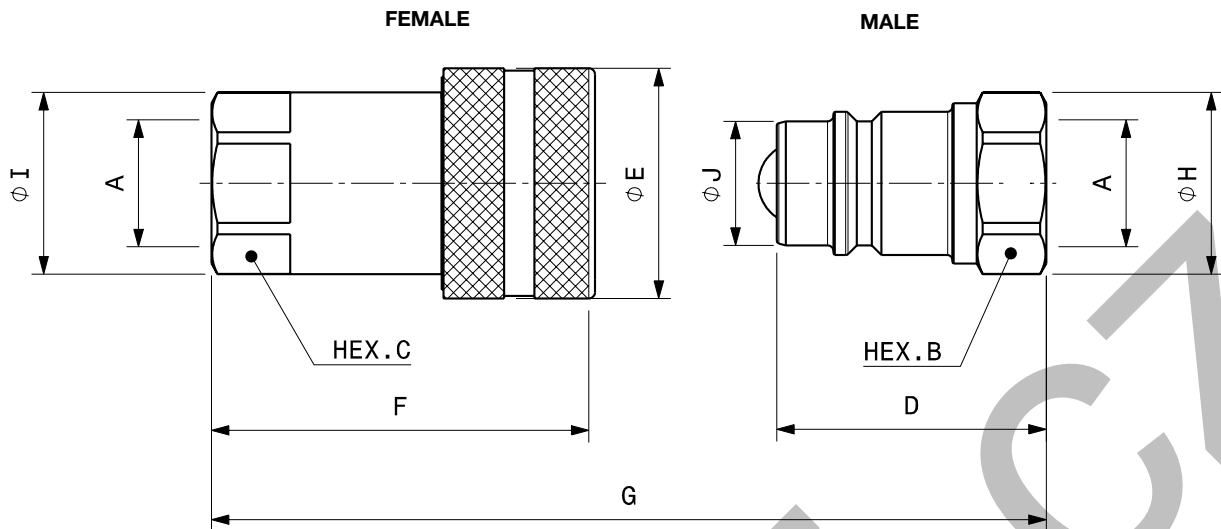
BODY SIZE	Descriptive Code	Item Code	ISO DN	PORT (A)	Overall Length	Length		Hex		Overall Diameter		Body Diameter		Weight						
						mm	in	mm	in	mm	in	mm	in	mm	in	kg	lb			
1/4"	F IR14 BSP	Female 80000000	-	1/4"	G 64,4	2,54	F	48,9	1,93	C	19,0	0,75	I	21,0	0,83	E	27,0	1,06	0,11	0,25
	M IR14 BSP	Male 80000001					D	32,5	1,28	B	19,0	0,75	H	22,0	0,87	J	14,2	0,56	0,04	0,08
3/8"	F IR38 BSP	Female 80000002	-	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 IR38 BSP	Male 80000003					D	38,0	1,50	B	24,0	0,94	H	27,7	1,09	J	19,0	0,75	0,08	0,17
1/2"	F IR12 BSP	Female 80000004	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	0,24	0,54
	M IR12 BSP	Male 80000005					D	44,5	1,75	B	27,0	1,06	H	30,0	1,18	J	20,5	0,81	0,10	0,21
3/4"	F IR34 BSP	Female 80000006	-	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 IR34 BSP	Male 80000007					D	59,0	2,32	B	36,0	1,42	H	38,5	1,52	J	26,9	1,06	0,19	0,43
3/4"	F IR34FA BSP	Female 82000020 *	-	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	0,50	1,10
	M IR34FA BSP	Male 82000021 *					D	53,0	2,09	B	34,0	1,34	H	39,1	1,54	J	28,0	1,10	0,19	0,41
1"	F IR100 BSP	Female 80000008	-	1"	G 132,8	5,23	F	99,6	3,92	C	45,0	1,77	I	52,0	2,05	E	54,0	2,13	0,87	1,92
	M IR100 BSP	Male 80000009					D	66,1	2,60	B	41,0	1,61	H	44,8	1,76	J	31,4	1,24	0,30	0,66

* alternative interchange

IR-TIC Version designed for high backflow

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	kg	lb					
1/2"	M IR12TIC BSP	Male 80000011	12,5	1/2"	G 86,3	3,40	D	47,0	1,85	B	27	1,06	H	30,0	1,18	J	20,5	0,81	0,10	0,21

TIC VERSION: shielded valving to prevent flow-checking when used with connect-under-pressure competitor couplers.



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 IR14 NPT	Female 800001000	-	1/4"	G 64,4	2,54	F	48,9	1,93	C	19,0	0,75	I	21,0	0,83	E	27,0	1,06	0,13	0,28
	M IR14 NPT	Male 800001001					D	32,5	1,28	B	19,0	0,75	H	22,0	0,87	J	14,2	0,56	0,04	0,09
3/8"	F IR38 NPT	Female 800001002	-	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 IR38 NPT	Male 800001003					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 IR12 NPT	Female 800001004	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	0,28	0,61
	M IR12 NPT	Male 800001005					D	44,5	1,75	B	27,0	1,06	H	30,0	1,18	J	20,5	0,81	0,09	0,20
3/4"	F IR34 NPT	Female 800001006	-	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	0,70	1,54
	M IR34 NPT	Male 800001007					D	59,0	2,32	B	36,0	1,42	H	38,5	1,52	J	26,9	1,06	0,21	0,47
1"	F IR100 NPT	Female 800001008	-	1"	G 132,8	5,23	F	99,6	3,92	C	45,0	1,77	I	52,0	2,05	E	54,0	2,13	0,89	1,97
	M IR100 NPT	Male 800001009					D	66,1	2,60	B	41,0	1,61	H	44,8	1,76	J	31,4	1,24	0,30	0,66

IR-TIC Version designed for high backflow

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	kg	lb					
1/2"	M IR12TIC NPT	Male 800001011	12,5	1/2"	G 86,3	3,40	D	47,0	1,85	B	27,0	1,06	H	30,0	1,18	J	20,5	0,81	0,10	0,21

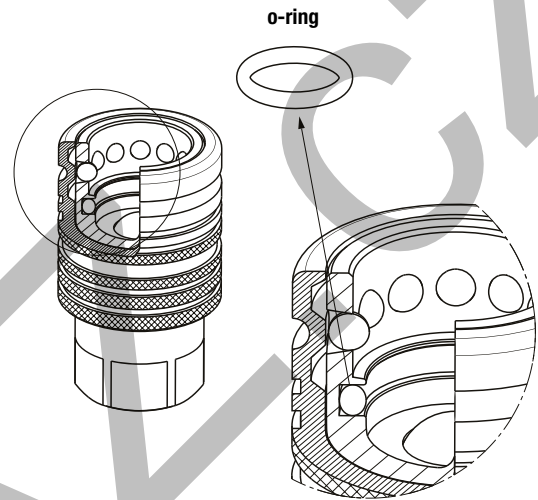
TIC VERSION: shielded valving to prevent flow-checking when used with connect-under-pressure competitor couplers.



SPARE KIT SEAL FOR FEMALE

Repair kit / OR		
Body Size	Description	Part Number
1/4"	F IR14	815700348
3/8"	F IR38	815700350
1/2"	F IR12	815700352
3/4"	F IR34	815700354
3/4"	F IR34 FA	815700734
1"	F IR100	815700356

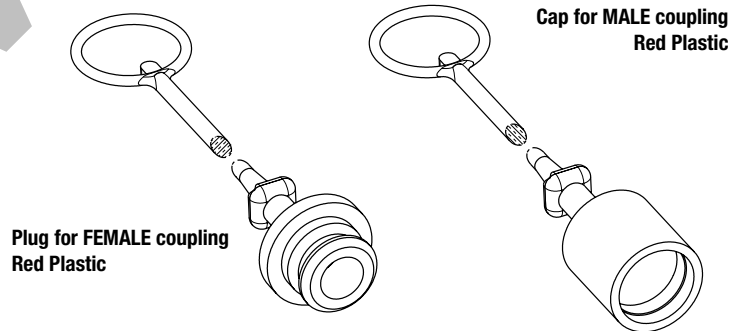
O-Ring in NBR



PROTECTIVE CAPS FOR IR 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 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" IR14	815000000	815000001	Plastic/Red
3/8" IR38	815000002	815000003	Plastic/Red
1/2" IR12	815000004	815000005	Plastic/Red
3/4" IR34	815000006	815000007	Plastic/Red
1" IR100	815000008	815000009	Plastic/Red