

IRS-VA series | Poppet version



Technical specifications and options

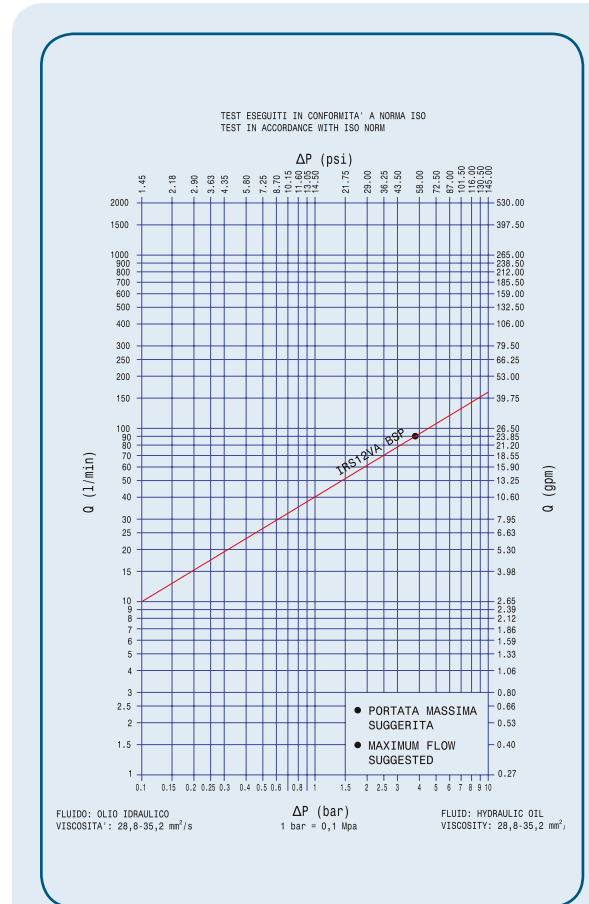
Interchange ISO 7241 A	Sealing description Nitrile NBR	Connection system Push - pull
Available sizes 1/2"	Material /treatment Carbon steel / Cr3	Available threads BSP - NPT - METRIC
Operating pressure Up to 250 bar	Locking mechanism Locking ball system	Flow rate Up to 90 l/min
Temperature -20°C / +100°C	Valving style Poppet	Connection under pressure Only PC version Connection: one side Disconnection: not allowed

Benefits

- Female coupling with breakaway function to avoid breakage of the hydraulic connections in case of strong axial force during unintended disconnection
- IRS VA series differs from IP series for the female body made in one piece
- Available also with retain valve made with a hard steel ball for an improved robustness and to provide a good wearing resistance (IRS A ball version - see dedicated leaflet)
- PC version (pressure connectable) available: connection under residual pressure is allowed in the female IRS. Please notice that the counterpart side (male) should be drained and should use a standard ISO A poppet
- The PC version is available also in modular design (I12VAPC) allowing a broad range of configuration
- Shape of internal parts is designed to reduce turbulence and pressure drop
- Compact design
- Simple to use

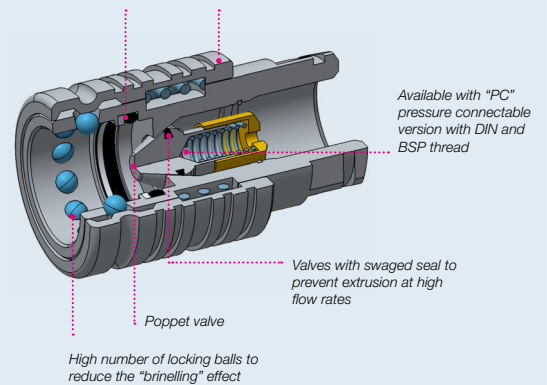
How to use

- For the breakaway function, the female coupling must be mounted in a panel locking the sleeve using seeger/snap rings
- Provide the IRS female coupling with a flexible hose in order to permit the movements of the internal body during connection and disconnection of the couplings.
- Before to connect, clean the mating surface of the couplings to avoid dirt inclusion in the circuit
- To connect push the male coupling into the female coupling
- To uncouple pull back the male coupling

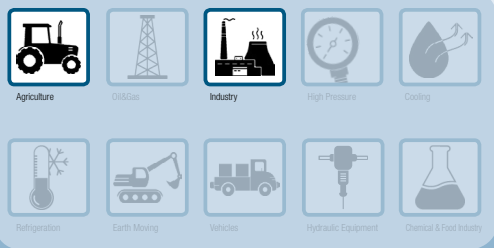


PTFE anti-extrusion ring to avoid premature wearing of O-Ring

Panel mounting double acting sleeve that allows connection and disconnection operation with a push-pull action



MAIN APPLICATIONS



Performances

Size		Series	Max. flow suggested		Spillage*	Connect force		Disconnect force		Max. operating pressure						Burst pressure					
										Coupled**		Male		Female		Coupled**		Male		Female	
Inch	mm (ISO)		l/min	GPM	ml	N	Ibf	N	Ibf	MPa	psi	MPa	psi	MPa	psi	MPa	psi	MPa	psi	MPa	psi
1/2	12,5	IRS12VA	90	23,85	2,10	120	27,00	95	21,38	25	3625	-	-	25	3625	80	11600	-	-	100	14500

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

** Tested with male coupling BIR12.

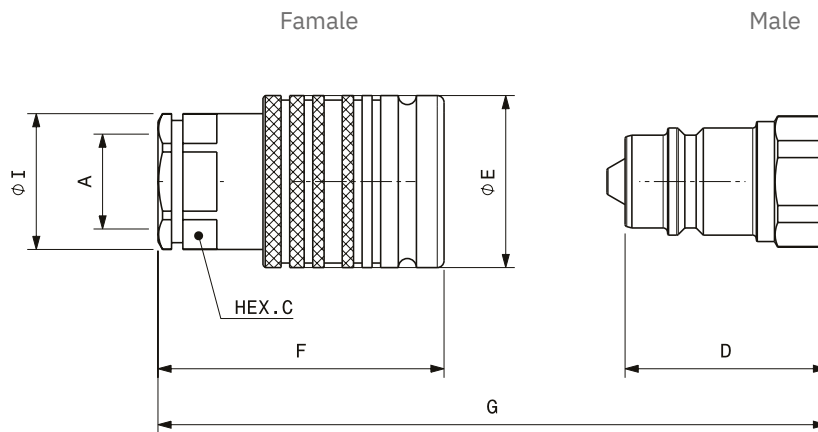
Temperature range:

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

Tests:

The couplings have been tested at max. operating pressure for 100.000 impulses according to ISO norm.

Overall dimensions



Port description: FEMALE NPT THREAD (ANSI B.1.20.1) - female coupling with poppet valve

Size	Descriptive code	Item code	ISO	Port(A)	Overall length		Length		Hex		Diameter		Diameter		Weight						
			DN		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	Kg	Ibs					
1/2	F IRS12VA NPT	800401002	12,5	1/2"	G	F+D-21,5	F+D-0,85	F	63,2	2,49	C	27	1,06	I	30	1,18	E	38	1,50	0,265	0,584

Port description: FEMALE BSPB THREAD (DIN 3852) - female coupling with poppet valve

Size	Descriptive code	Item code	ISO	Port(A)	Overall length		Length		Hex		Diameter		Diameter		Weight						
			DN		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	Kg	Ibs					
1/2	F IRS12VA BSP	800400002	12,5	1/2"	G	F+D-21,5	F+D-0,85	F	63,2	2,49	C	27	1,06	I	30	1,18	E	38	1,18	0,271	0,597

Port description: FEMALE BSPB THREAD (DIN 3852) - female coupling with poppet valve PC version

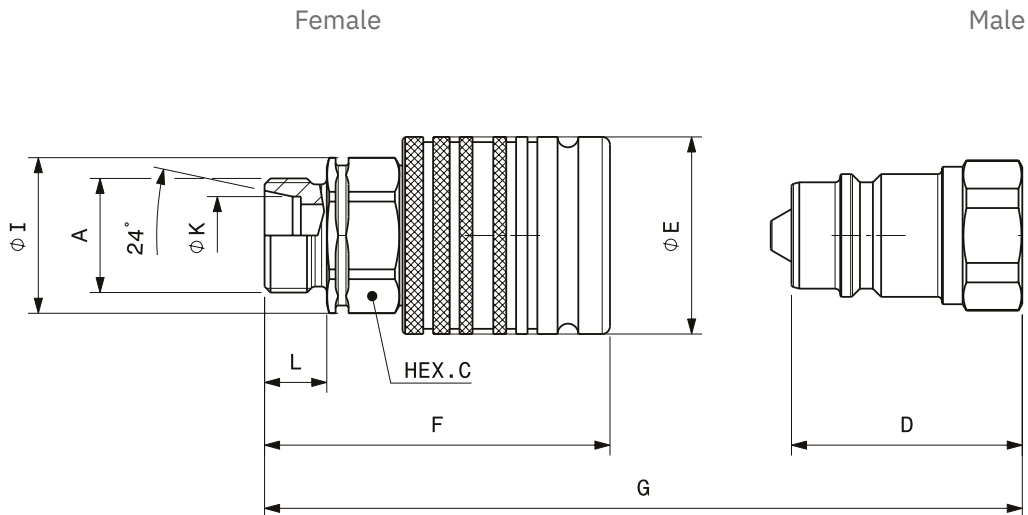
Size	Descriptive code	Item code	ISO	Port(A)	Overall length		Length		Hex		Diameter		Diameter		Weight						
			DN		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	Kg	Ibs					
1/2	F IRS12VAPC BSP	800400004	12,5	1/2"	G	F+D-21,5	F+D-0,85	F	63,2	2,49	C	27	1,06	I	30	1,18	E	38	1,50	0,271	0,597

Port description: FEMALE NPT THREAD (ANSI B.1.20.1) - female coupling with poppet valve PC version

Size	Descriptive code	Item code	ISO	Port(A)	Overall length		Length		Hex		Diameter		Diameter		Weight						
			DN		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	Kg	Ibs					
1/2	F IRS12VAPC NPT	800401004	12,5	1/2"	G	F+D-21,5	F+D-0,85	F	63,2	2,49	C	27	1,06	I	30	1,18	E	38	1,50	0,276	0,608

Port description: FEMALE SAE THREAD (ISO11926-1 & SAE J1926-1) - female coupling with poppet valve PC version

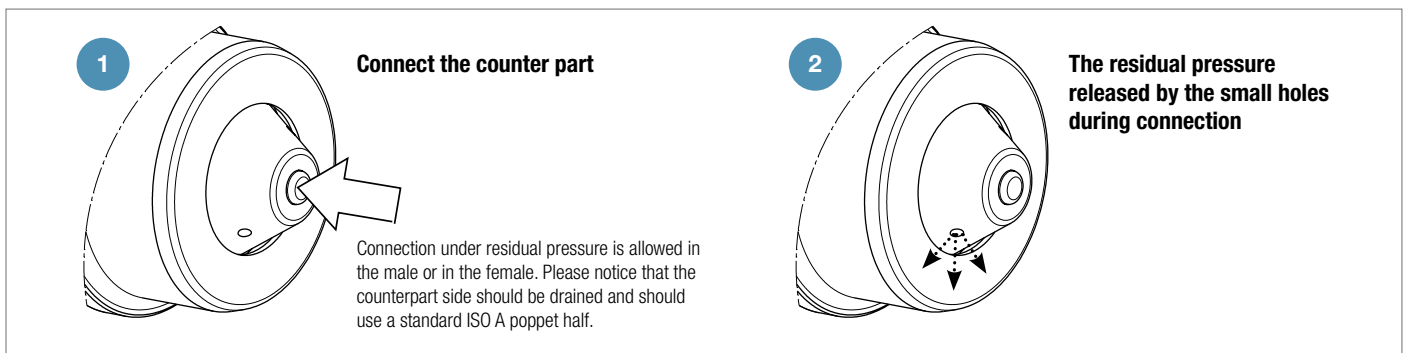
Size	Descriptive code	Item code	ISO		Overall length		Length		Hex		Diameter		Diameter		Weight						
			DN	Port(A)	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	Kg	Ibs					
1/2	F I12VAPC 1/2 SAE	804304002	12,5	1/2"	G	F+D-21,5	F+D-0,85	F	68,3	2,69	C	27	1,06	I	30	1,18	E	38	1,50	0,270	0,595



Port description: MALE THREAD METRIC L SERIE - 24° CONE (ISO 8434-1 & DIN 2353) - female coupling with poppet valve PC version

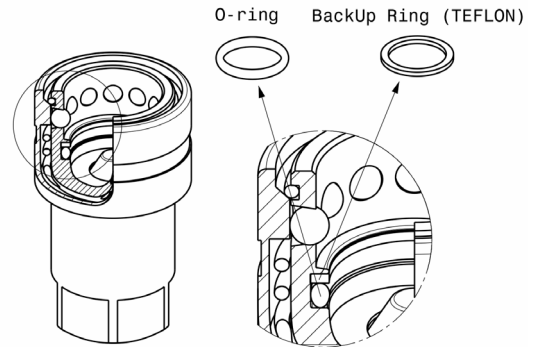
Size	Descriptive code	Item code	ISO		Overall length		Length		Hex		Diameter		Diameter		Weight						
			DN	Port(A)	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	Kg	Ibs					
1/2	F I12VAPC L12	804308008	12,5	1/2"	G	F+D-21,5	F+D-0,85	F	65,6	2,58	C	27	1,06	I	30	1,18	E	38	1,50	0,250	0,551
1/2	F I12VAPC L15	804308006	12,5	1/2"	G	F+D-21,5	F+D-0,85	F	66,6	2,62	C	27	1,06	I	30	1,18	E	38	1,50	0,240	0,530

PC Version



Spare parts

Item code	Descriptive code
815700174	SPARE KIT OR NBR+BK F BIR12



⚠ 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.