



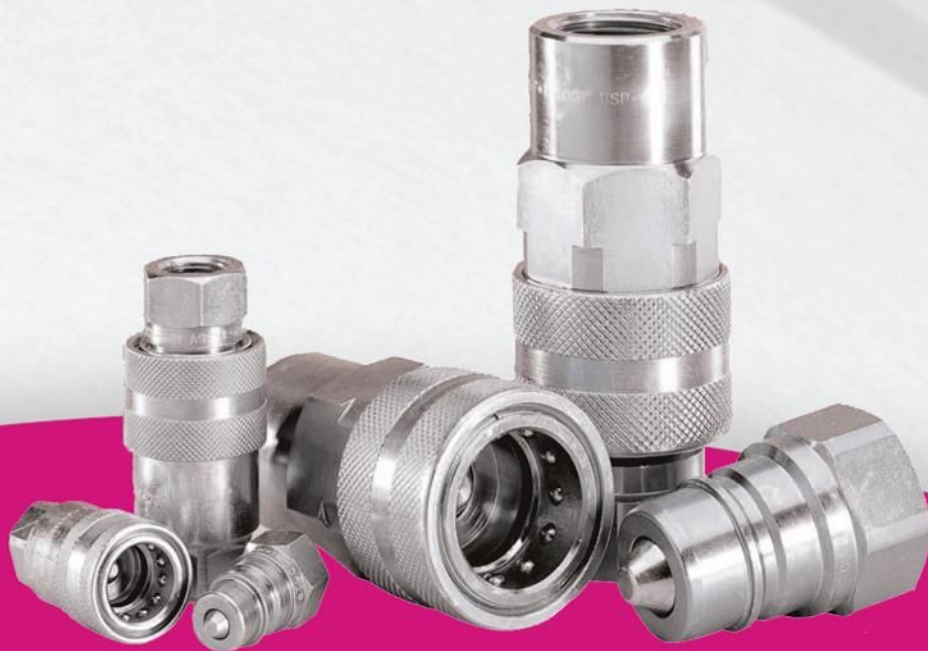
## Series: **IR-V**

**INTERCHANGE:** With similar couplings  
ISO 7241-1 series "A" (size 1/2 only)

### MAIN APPLICATIONS

- Agricultural equipment
- Industrial equipment

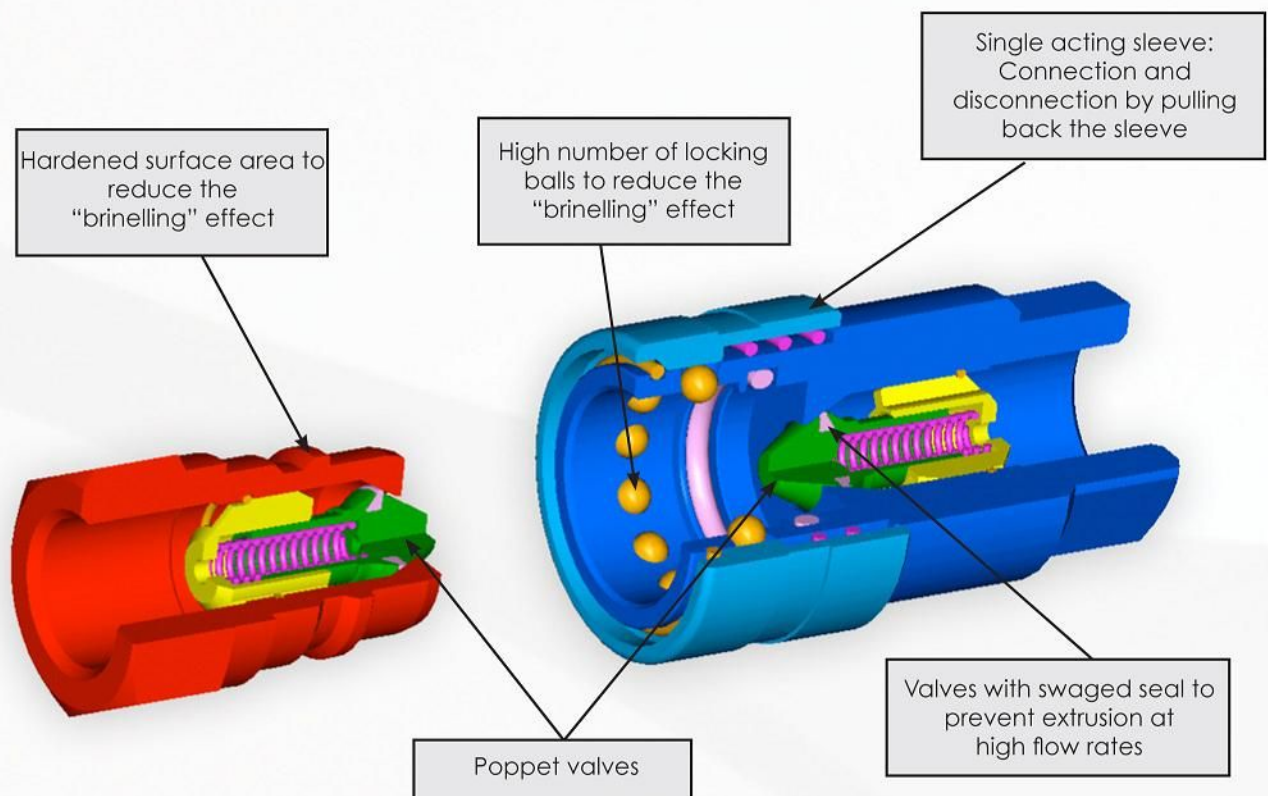
"IR-V" is a poppet valve quick couplings series, interchangeable with "IR" ball valve series manufactured in carbon steel with zinc plated surface treatment. The design is based on the better sealing of the poppet valve compared to the ball valve. The size 1/2 is a part of BIR series and it is interchangeable in according with international standard ISO 7241-1 series "A".



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## TECHNICAL FEATURES AND OPTIONS

- Interchangeability: ISO 7241-1 series "A" (size 1/2 only)
- Valve system: Poppet valve
- Mechanical connection: Locking balls
- Connection system: Pulling back the sleeve and pushing one half towards the other
- Disconnection system: Pulling back the sleeve
- Connection with residual pressure: Not allowed
- Disconnection with residual pressure: Not allowed
- Threads available: BSP, NPT
- On request: Free flow version (no valving)
- Construction material: Carbon steel
- Surface treatment: CrIII zinc plated
- Springs: C72 steel
- Balls: Hard steel 100 C6
- Seals: standard in NBR (Nitrile)



## 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 connecting clean the mating parts of the couplings to avoid contamination in the circuit.
- To couple 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 uncouple pull back the sleeve of the female coupling, pull out the mating half.

## WARNING!

- Do not couple-uncouple with flow and/or pressure in the circuit.
- Use protection whenever connecting or disconnecting with high temperature (max. allowed 80°C, 176 °F).
- When the couplings are disconnected, it is suggested to use the protection caps.

## PERFORMANCE

Description	Size	ISO Size	Rated flow		Max. flow suggested		Connect force		Disconnect force		Spillage *
			l/min	GPM	l/min	GPM	N	lbf	N	lbf	
IR14V	1/4	-	12	3,18	24	6,36	80	18,00	40	9,00	0,33
IR38V	3/8	-	23	6,10	46	12,19	120	27,00	35	7,88	1,30
BIR12	1/2	12,5	45	11,93	90	23,85	70	15,75	55	12,38	2,10
IR34V	3/4	-	74	19,61	148	39,22	175	39,38	45	10,13	4,20
IR100V	1	-	100	26,50	200	53,00	210	47,25	65	14,63	5,50

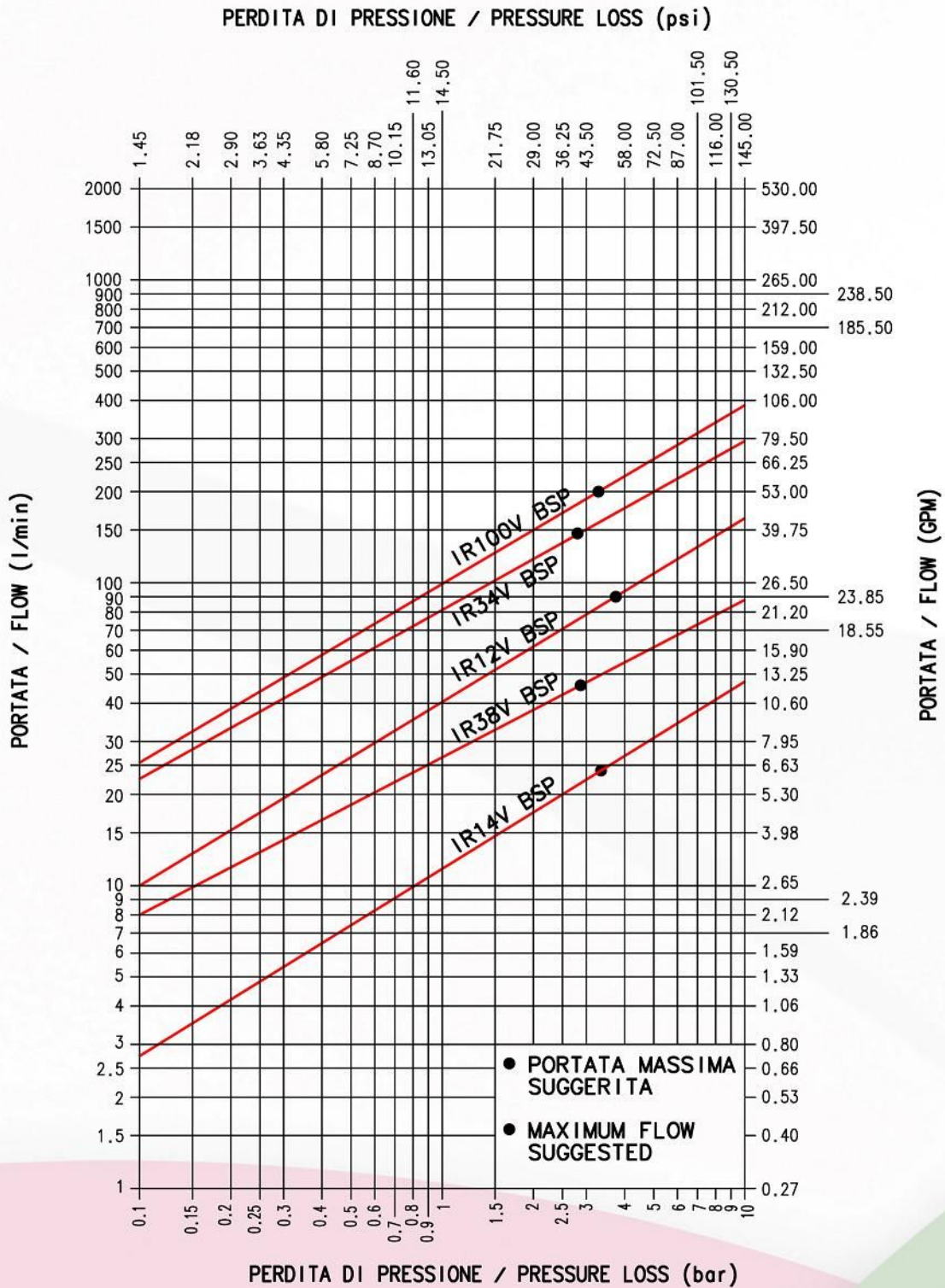
Description	Max. operating pressure						Burst pressure					
	Coupled		Male		Female		Coupled		Male		Female	
	MPa	psi	MPa	psi	MPa	psi	MPa	psi	MPa	psi	MPa	psi
IR14V	30	4350	30	4350	30	4350	100	14500	100	14500	100	14500
IR38V	30	4350	30	4350	30	4350	100	14500	100	14500	100	14500
BIR12	25	3625	25	3625	25	3625	80	11600	80	11600	100	14500
IR34V	25	3625	25	3625	25	3625	100	14500	90	13050	100	14500
IR100V	20	2900	20	2900	20	2900	80	11600	80	11600	80	11600

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

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

**PRESSURE DROP**

TESTS ESEGUITI IN CONFORMITA' A ISO 7241-2  
 TESTS IN ACCORDANCE WITH ISO 7241-2

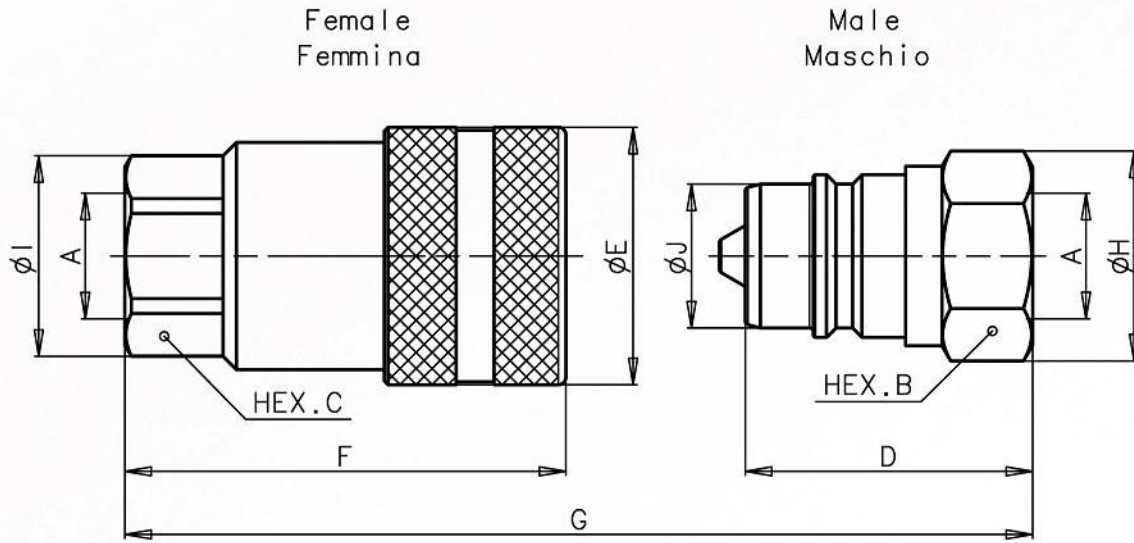


FLUIDO: OLIO ISO VG32  
 TEMPERATURA: 40°C  
 VISCOSITA': 28.8-35.2 mm<sup>2</sup>/s

FLUID: OIL ISO VG32  
 TEMPERATURE: 40°C  
 VISCOSITY: 28.8-35.2 mm<sup>2</sup>/s



**OVERALL DIMENSIONS**



**FEMALE BSPB THREAD (DIN 3852)**

Description	A	Unit	B	C	D	E	F	G	H	I	J	Unit	Weight	
													Male	Female
IR14V BSP	1/4	mm Inch	19 0,75	19 0,75	32,5 1,28	27 1,06	50,4 1,98	65,9 2,59	22 0,87	21 0,83	14,2 0,56	Kg lb	0,038 0,08	0,115 0,25
IR38V BSP	3/8	mm Inch	24 0,94	24 0,94	38 1,50	34 1,34	58,3 2,30	76,3 3,00	27,7 1,09	26,5 1,04	19 0,75	Kg lb	0,073 0,16	0,215 0,47
BIR12 BSP	1/2	mm Inch	27 1,06	27 1,06	44,5 1,75	38 1,50	63,3 2,49	86,3 3,40	29 1,14	30 1,18	20,5 0,81	Kg lb	0,084 0,19	0,245 0,54
IR34V BSP	3/4	mm Inch	36 1,42	38 1,50	59 2,32	48 1,89	90,3 3,56	118,3 4,66	38,5 1,52	43 1,69	26,9 1,06	Kg lb	0,188 0,41	0,679 1,50
IR100V BSP	1	mm Inch	41 1,61	45 1,77	64,1 2,52	54 2,13	97,6 3,84	128,8 5,07	44,8 1,76	52 2,05	31,4 1,24	Kg lb	0,262 0,58	0,828 1,83

**FEMALE NPT THREAD (ANSI B.1.20.3)**

Description	A	Unit	B	C	D	E	F	G	H	I	J	Unit	Weight	
													Male	Female
IR14V NPT	1/4	mm Inch	19 0,75	19 0,75	32,5 1,28	27 1,06	50,4 1,98	65,9 2,59	22 0,87	21 0,83	14,2 0,56	Kg lb	0,040 0,09	0,125 0,28
IR38V NPT	3/8	mm Inch	24 0,94	24 0,94	38 1,50	34 1,34	58,3 2,30	76,3 3,00	27,7 1,09	26,5 1,04	19 0,75	Kg lb	0,080 0,18	0,222 0,49
BIR12 NPT	1/2	mm Inch	27 1,06	27 1,06	44,5 1,75	38 1,50	63,3 2,49	86,3 3,40	29 1,14	30 1,18	20,5 0,81	Kg lb	0,084 0,19	0,245 0,54
IR34V NPT	3/4	mm Inch	36 1,42	38 1,50	59 2,32	48 1,89	90,3 3,56	118,3 4,66	38,5 1,52	43 1,69	26,9 1,06	Kg lb	0,187 0,41	0,663 1,46
IR100V NPT	1	mm Inch	41 1,61	45 1,77	64,1 2,52	54 2,13	97,6 3,84	128,8 5,07	44,8 1,76	52 2,05	31,4 1,24	Kg lb	0,276 0,61	0,860 1,90