



Series: **IRBX**



INTERCHANGE: ISO 7241-1 series "B"

MAIN APPLICATIONS

- Industrial equipment
- Chemical - Pharmaceutical
- Offshore - Marine
- Food industry

"IRBX" is a poppet valve quick couplings series interchangeable with international standard ISO 7241-1 "B", manufactured in stainless steel 316. "IRBX" is intended for applications subject to corrosive environments or mediums.

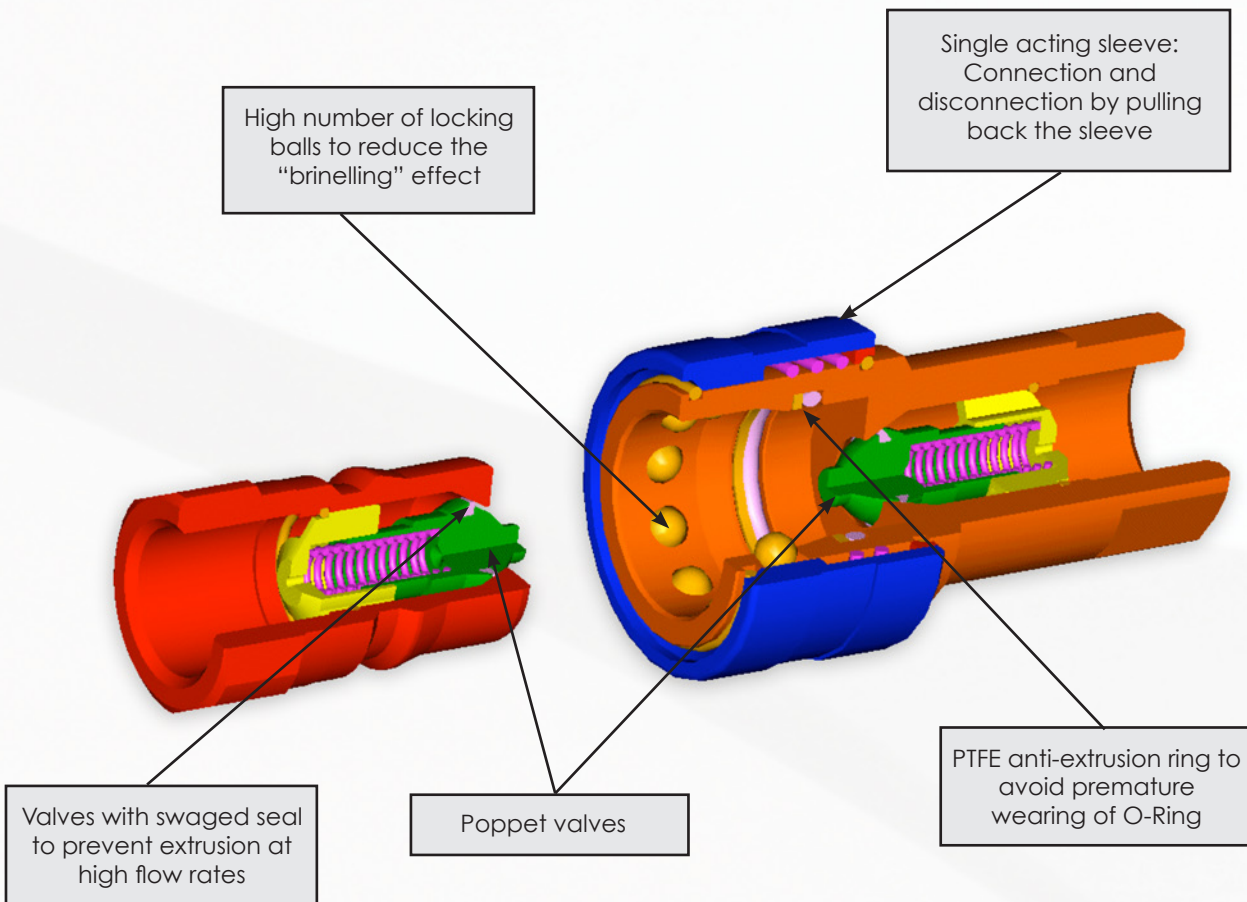


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A CONSTANT FLOW OF SOLUTIONS

TECHNICAL FEATURES AND OPTIONS

- Interchangeability: ISO 7241-1 series "B"
- 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: Stainless steel AISI 316
- Internal retainer in brass
- Springs: AISI 302
- Balls: AISI 316
- Seals: standard in VITON
- Seals on request: NBR, EPDM
- Anti-extrusion rings: PTFE
- On request: Internal retainer in AISI 316



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.
- Optimal resistance to the corrosion.
- 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).

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	
IRBX18	1/8	5,0	3	0,80	6	1,59	75	16,88	35	7,88	0,18
IRBX14	1/4	6,3	12	3,18	24	6,36	60	13,50	30	6,75	0,33
IRBX38	3/8	10,0	23	6,10	46	12,19	90	20,25	35	7,88	2,20
IRBX12	1/2	12,5	45	11,93	90	23,85	125	28,13	45	10,13	3,00
IRBX34	3/4	20,0	74	19,61	148	39,22	135	30,38	55	12,38	9,40
IRBX100	1	25,0	100	26,50	200	53,00	140	31,50	40	9,00	14,00

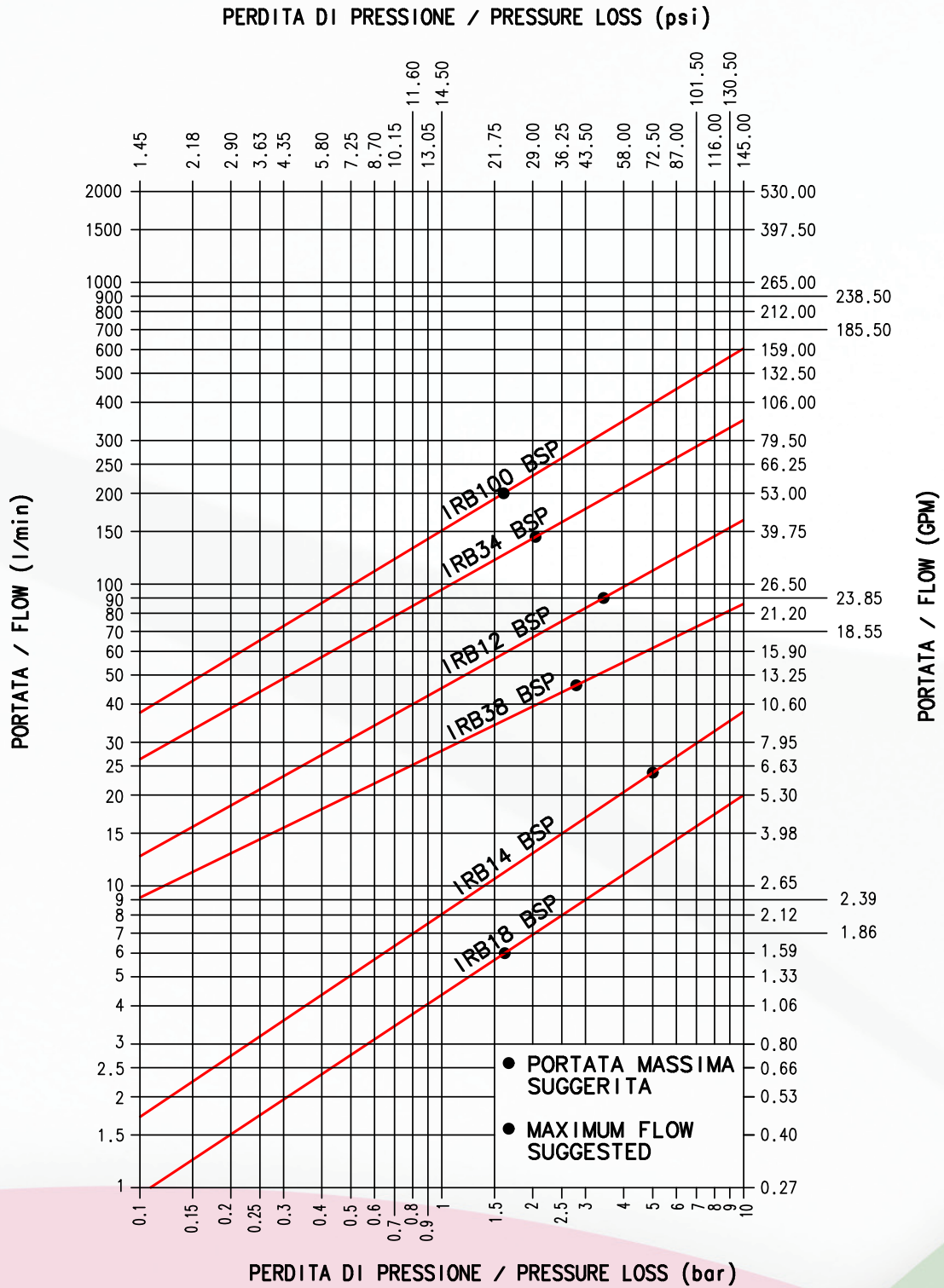
Description	Max. operating pressure						Burst pressure					
	Coupled		Male		Female		Coupled		Male		Female	
	MPa	psi	MPa	psi	MPa	psi	MPa	psi	MPa	psi	MPa	psi
IRBX18	25	3625	25	3625	25	3625	140	20300	140	20300	140	20300
IRBX14	25	3625	25	3625	25	3625	140	20300	140	20300	140	20300
IRBX38	20	2900	20	2900	20	2900	100	14500	100	14500	100	14500
IRBX12	20	2900	20	2900	20	2900	100	14500	100	14500	100	14500
IRBX34	16	2320	16	2320	16	2320	80	11600	80	11600	80	11600
IRBX100	12,5	1813	12,5	1813	12,5	1813	60	8700	60	8700	60	8700

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

- Temperature range:
 - Standard seals VITON: from -15°C to +180°C (from +5 °F to +356 °F).
 - NBR (Nitrile) seals: from -20 °C to +100 °C (from -4 °F to +212 °F).
 - EPDM (Ethylene Propylene) seals: from -40°C to +150°C (from -40 °F to +302 °F).

PRESSURE DROP

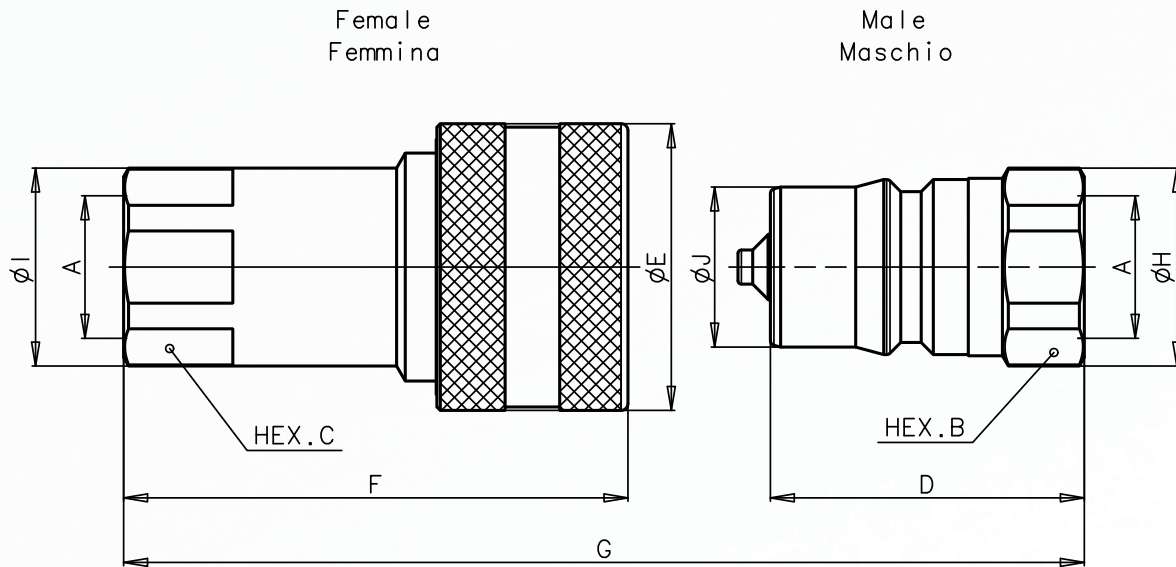
TESTS ESEGUITI IN CONFORMITA' A ISO 7241-2
 TESTS IN ACCORDANCE WITH ISO 7241-2



FLUIDO: OLIO ISO VG32
 TEMPERATURA: 40°C
 VISCOSITA': 28.8-35.2 mm²/s

FLUID: OIL ISO VG32
 TEMPERATURE: 40°C
 VISCOSITY: 28.8-35.2 mm²/s

OVERALL DIMENSIONS



FEMALE BSP THREAD (DIN 3852)

Description	A	Unit	B	C	D	E	F	G	H	I	J	Unit	Weight	
													Male	Female
IRBX18 BSP	1/8	mm	14	14	30	23	48,8	60,5	15,8	15,8	10,8	Kg	0,018	0,069
		Inch	0,55	0,55	1,18	0,91	1,92	2,38	0,62	0,62	0,43	lb	0,04	0,15
IRBX14 BSP	1/4	mm	19	19	35	27	57	70,7	20,8	21,2	14,2	Kg	0,036	0,123
		Inch	0,75	0,75	1,38	1,06	2,24	2,78	0,82	0,83	0,56	lb	0,08	0,27
IRBX38 BSP	3/8	mm	24	24	41	34	66	82,7	26	27	19,1	Kg	0,069	0,225
		Inch	0,94	0,94	1,61	1,34	2,60	3,26	1,02	1,06	0,75	lb	0,15	0,50
IRBX12 BSP	1/2	mm	27	27	46	42	73,9	92,6	29	29	23,5	Kg	0,104	0,326
		Inch	1,06	1,06	1,81	1,65	2,91	3,65	1,14	1,14	0,93	lb	0,23	0,72
IRBX34 BSP	3/4	mm	36	36	55	50	90,1	111,1	38,5	38,5	31,4	Kg	0,205	0,575
		Inch	1,42	1,42	2,17	1,97	3,55	4,37	1,52	1,52	1,24	lb	0,45	1,27
IRBX100 BSP	1	mm	41	41	66	60	106,2	133,2	44,8	44,8	37,7	Kg	0,336	0,880
		Inch	1,61	1,61	2,60	2,36	4,18	5,24	1,76	1,76	1,48	lb	0,74	1,94

FEMALE NPT THREAD (ANSI B.1.20.3)

Description	A	Unit	B	C	D	E	F	G	H	I	J	Unit	Weight	
													Male	Female
IRBX18 NPT	1/8	mm	14	14	30	23	48,8	60,5	15,8	15,8	10,8	Kg	0,018	0,068
		Inch	0,55	0,55	1,18	0,91	1,92	2,38	0,62	0,62	0,43	lb	0,04	0,15
IRBX14 NPT	1/4	mm	19	19	35	27	57	70,7	20,8	21,2	14,2	Kg	0,037	0,123
		Inch	0,75	0,75	1,38	1,06	2,24	2,78	0,82	0,83	0,56	lb	0,08	0,27
IRBX38 NPT	3/8	mm	24	24	41	34	66	82,7	26	27	19,1	Kg	0,069	0,225
		Inch	0,94	0,94	1,61	1,34	2,60	3,26	1,02	1,06	0,75	lb	0,15	0,50
IRBX12 NPT	1/2	mm	27	27	46	42	73,9	92,6	29	29	23,5	Kg	0,107	0,328
		Inch	1,06	1,06	1,81	1,65	2,91	3,65	1,14	1,14	0,93	lb	0,24	0,72
IRBX34 NPT	3/4	mm	36	36	55	50	90,1	111,1	38,5	38,5	31,4	Kg	0,210	0,581
		Inch	1,42	1,42	2,17	1,97	3,55	4,37	1,52	1,52	1,24	lb	0,46	1,28
IRBX100 NPT	1	mm	41	41	66	60	106,2	133,2	44,8	44,8	37,7	Kg	0,336	0,887
		Inch	1,61	1,61	2,60	2,36	4,18	5,24	1,76	1,76	1,48	lb	0,74	1,96

