

BIR SERIES

POPPET INTERCHANGE COUPLERS ISO A Interchange

The BIR Series ISO A Interchange Couplers

are one of the most popular designs worldwide, due to their durability and use of a poppet style valve for the sealing mechanism. The BIR series features a zinc plated steel coupler and zinc plated hardened steel nipple with nitrile seals. They are available from 1/4 to 2 inches in size, to cover the various fields of hydraulic applications.

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FEATURES

Size range: 1/4" thru 2"

Port options: NPT, SAE, BSP

Interchanges with ISO A

Working pressure: 13-35 MPa/1885-5075 psi range

- Positive-stop valving prevents flow checking
- Large diameter hardened steel sleeves resist deformation for maximum life
- Suitable for open or closed center hydraulic system

APPLICATIONS

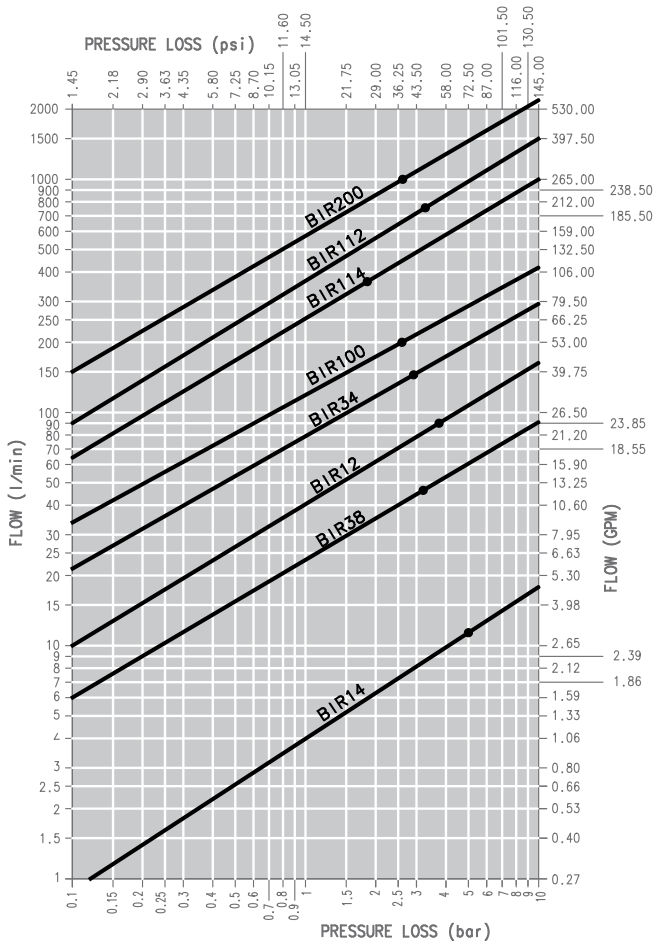
Various fields of hydraulic applications

- Agricultural and mobile equipment
- Industrial plants

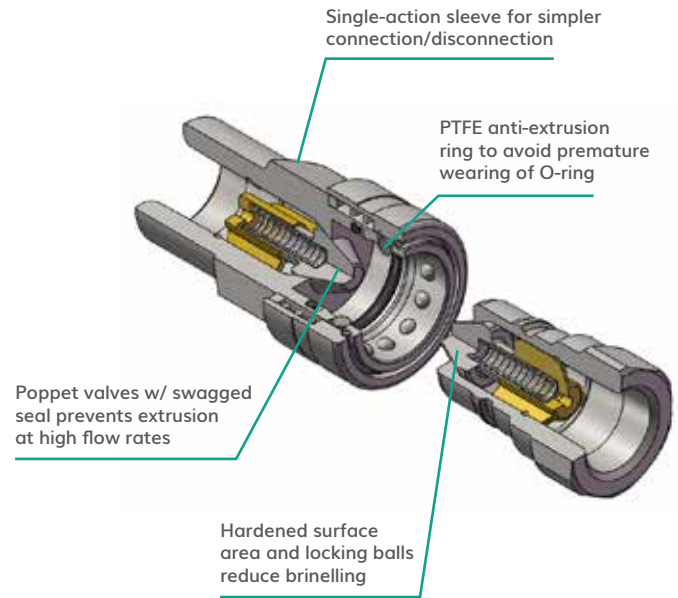




PRESSURE DROP



OIL = ISO VG32, TEMP = 40C, VISCOSITY = 28.8-35.2 MM²/S



POPPET INTERCHANGE COUPLERS

PERFORMANCE

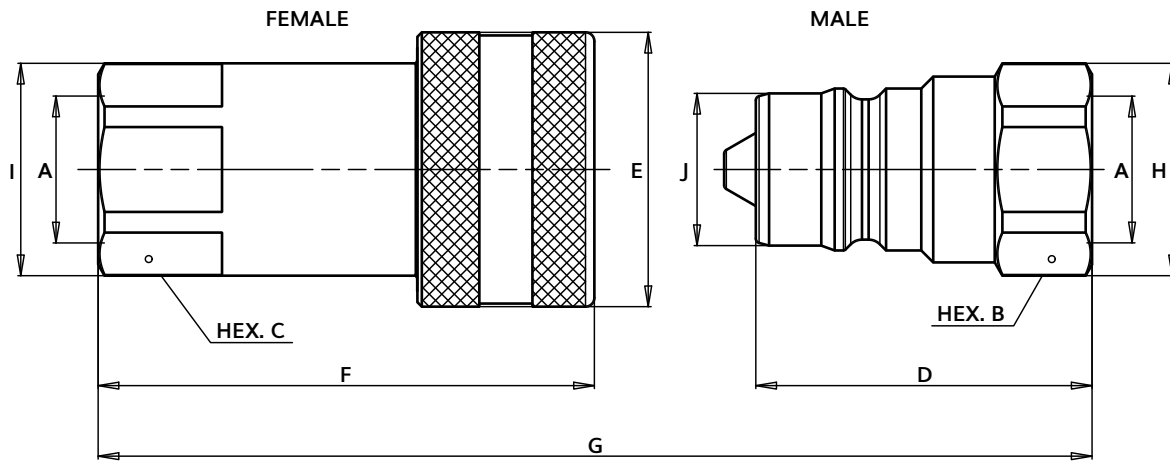
DESCRIPTION	SIZE	ISO SIZE	MAX. OPERATING PRESSURE COUPLED		COUPLED		BURST PRESSURE		SPILLAGE*		
			MPa	psi	MPa	psi	MALE	FEMALE			
					MPa	psi	MPa	psi	MPa	psi	ml
BIR14	1/4	6.3	35	5075	126	18270	126	18270	126	18270	0.70
BIR38	3/8	10.0	30	4350	100	14500	100	14500	100	14500	1.20
BIR12	1/2	12.5	25	3625	80	11600	80	11600	100	14500	2.10
BIR34	3/4	20.0	25	3625	100	14500	100	14500	100	14500	5.20
BIR100	1	25.0	23	3335	80	11600	80	11600	80	11600	9.00
BIR114	1 1/4	31.5	23	3335	80	11600	80	11600	80	11600	27.00
BIR112	1 1/2	40	18	2610	64	9280	64	9280	64	9280	49.00
BIR200	2	50	13	1885	40	5800	40	5800	40	5800	75.00

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

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SIZE DIAGRAM



DESCRIPTION	BODY SIZE	A	UNIT	B	C	D	E	F	G	H	I	J	UNIT	WEIGHT	
														MALE	FEMALE
BIR14	1/4	1/4	mm	19.0	19.0	32.0	26.0	47.1	64.8	20.8	22.0	11.8	kg	0.033	0.094
			inch	0.75	0.75	1.26	1.02	1.85	2.55	0.82	0.87	0.46	lb	0.07	0.21
BIR38	3/8	3/8	mm	22.0	22.0	38.0	31.0	56.1	76.8	24.0	24.0	17.3	kg	0.053	0.145
			inch	0.87	0.87	1.50	1.22	2.21	3.02	0.94	0.94	0.68	lb	0.12	0.32
BIR12	1/2	1/2	mm	27.0	27.0	44.5	38.0	63.3	86.3	29.0	30.0	20.5	kg	0.084	0.245
			inch	1.06	1.06	1.75	1.50	2.49	3.40	1.14	1.18	0.81	lb	0.19	0.54
BIR34	3/4	3/4	mm	36.0	38.0	55.0	48.0	82.2	111.1	38.5	44.0	29.1	kg	0.210	0.502
			inch	1.42	1.50	2.17	1.89	3.24	4.37	1.52	1.73	1.15	lb	0.46	1.11
BIR100	1	1	mm	41.0	45.0	63.1	54.0	97.1	127.3	44.8	52.0	34.3	kg	0.284	0.772
			inch	1.61	1.77	2.48	2.13	3.82	5.01	1.76	2.05	1.35	lb	0.63	1.70
BIR114	1 1/4	1 1/4	mm	55.0	50.0	75.0	65.0	117.2	151.2	60.0	55.5	45.0	kg	0.615	1.244
			inch	2.17	1.97	2.95	2.56	4.61	5.95	2.36	2.19	1.77	lb	1.36	2.74
BIR112	1 1/2	1 1/2	mm	60.0	60.0	85.0	80.0	135.3	171.3	65.5	65.5	55.0	kg	0.878	2.130
			inch	2.36	2.36	3.35	3.15	5.33	6.74	2.58	2.58	2.17	lb	1.94	4.70
BIR200	2	2	mm	75.0	75.0	100.0	100.0	160.2	201.2	82.5	83.7	65.0	kg	1.440	4.130
			inch	2.95	2.95	3.94	3.94	6.31	7.92	3.25	3.30	2.56	lb	3.17	9.10

Repair Kits

ORDER CODE	DESCRIPTION
BIR SERIES	
815700170	KIT F. BIR14
815700172	KIT F. BIR38
815700174	KIT F. BIR12
815700176	KIT F. BIR34
815700178	KIT F. BIR100
815700180	KIT F. BIR114
815700182	KIT F. BIR112
815700184	KIT F. BIR200
815700177	KIT M./F. BIR34
815700179	KIT M./F. BIR100
815700181	KIT M./F. BIR114
815700183	KIT M./F. BIR112
815700185	KIT M./F. BIR200





ISO A BIR NPT Thread Poppet Style Interchange Coupling

PART	BODY SIZE	PORT SIZE	THREAD TYPE	ORDER CODE	DESCRIPTION
BIR NPT THREAD					
COUPLER	1/4	1/4	NPT	800501000	F. BIR 14 NPT
NIPPLE	1/4	1/4	NPT	800501001	M. BIR 14 NPT
COUPLER	3/8	3/8	NPT	800501002	F. BIR 38 NPT
NIPPLE	3/8	3/8	NPT	800501003	M. BIR 38 NPT
COUPLER	1/2	1/2	NPT	800501004	F. BIR 12 NPT
NIPPLE	1/2	1/2	NPT	800501005	M. BIR 12 NPT
COUPLER	3/4	3/4	NPT	800501006	F. BIR 34 NPT
NIPPLE	3/4	3/4	NPT	800501007	M. BIR 34 NPT
COUPLER	1	1	NPT	800501008	F. BIR 100 NPT
NIPPLE	1	1	NPT	800501009	M. BIR 100 NPT
COUPLER	1 1/4	1 1/4	NPT	800501010	F. BIR 1 1/4 NPT
NIPPLE	1 1/4	1 1/4	NPT	800501011	M. BIR 1 1/4 NPT
COUPLER	1 1/2	1 1/2	NPT	800501012	F. BIR 1 1/2 NPT
NIPPLE	1 1/2	1 1/2	NPT	800501013	M. BIR 1 1/2 NPT
COUPLER	2	2	NPT	800501014	F. BIR 200 NPT
NIPPLE	2	2	NPT	800501015	M. BIR 200 NPT
BIR SAE THREAD					
COUPLER	1/2	1/2	SAE	800504004	F. BIR 12 SAE
NIPPLE	1/2	1/2	SAE	800504005	M. BIR 12 SAE
COUPLER	3/4	3/4	SAE	800504006	F. BIR 34 SAE
NIPPLE	3/4	3/4	SAE	800504007	M. BIR 34 SAE
COUPLER	1	1	SAE	800504008	F. BIR 100 SAE
NIPPLE	1	1	SAE	800504009	M. BIR 100 SAE
BIR NPT THREAD - 12 PC					
COUPLER	1/2	1/2	NPT	805601000	F. BIR 12 PC NPT*
NIPPLE	1/2	1/2	NPT	805601001	M. BIR 12 PC NPT*
BIR SAE THREAD - 12 PC					
COUPLER	1/2	1/2	SAE	805604000	F. BIR 12 PC SAE*
NIPPLE	1/2	1/2	SAE	805604001	M. BIR 12 PC SAE*



Coupler



Nipple



*Connect Under Residual Pressure Poppet Valve

POPPET INTERCHANGE COUPLERS

ISO A BIR Series Accessories Coupler Dust Plug | Nipple Dust Cap

PART	ORDER CODE	DESCRIPTION	ORDER CODE	DESCRIPTION
ISO A BIR COUPLER DUST PLUGS		ISO A BIR COUPLER DUST CAPS		
1/4	815000012	CAP F. BIR14	815000013	CAP M. BIR14
3/8	815000014	CAP F. BIR38	815000015	CAP M. BIR38
1/2	815000004	CAP F. BIR12	815000005	CAP M. BIR12
3/4	815000016	CAP F. BIR34	815000017	CAP M. BIR34
1	815000018	CAP F. BIR100	815000019	CAP M. BIR100



Plug



Cap