Stucchi USA

stucchiusa.com/products/poppet-interchange-couplers/bir-series-iso-a-interchange/



BIR SERIES

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 size 1/4 to 2 inches in size, to cover the various fields of hydraulic applications.

Category: Poppet Interchange Couplers Tags: Industry: Agricultural, Industry: Industrial, Industry: Mobile, Industry: Oil & Gas

- <u>Description</u>
- Quick Specs

DESCRIPTION

FEATURES

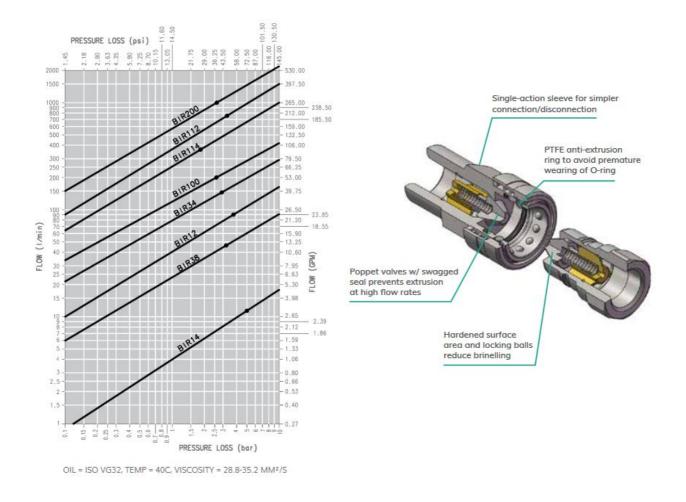
- Size range: 1/4" thru 2"
- · Port options: NPT, SAE, BSP
- Interchanges with ISO A
- Working pressure: 13-35 MPa/1885-5075 psi range
- Positive-stop valving prevents flow checking
- Large diameter hardened steel sleeves resist deformation for maximum life
- Suitable for open or closed center hydraulic system

APPLICATIONS

- · Various fields of hydraulic applications
- Agricultural and mobile equipment
- Industrial plants



Pressure Drop



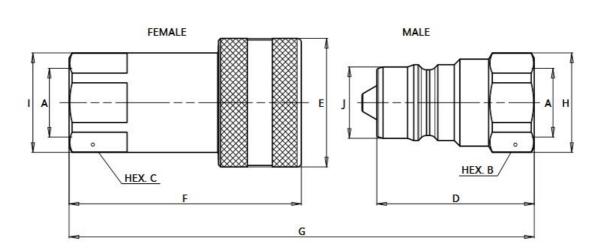
Performance

			MA OPER	AX. ATING		В	URST P	RESSU	IRE	
			PRESSURE COUPLED		COU	PLED	MA	LE	FEN	IAL
DESCRIPTION	SIZE	ISO SIZE	MPa	psi	MPa	psi	MPa	psi	MPa	p

BIR14	1/4	6.3	35	5075	126	18270	126	18270	126	18
BIR38	3/8	10.0	30	4350	100	14500	100	14500	100	14
BIR12	1/2	12.5	25	3625	80	11600	80	11600	100	14
BIR34	3/4	20.0	25	3625	100	14500	100	14500	100	14
BIR100	1	25.0	23	3335	80	11600	80	11600	80	11
BIR114	1 1/4	31.5	23	3335	80	11600	80	11600	80	11
BIR112	1 1/2	40	18	2610	64	9280	64	9280	64	92
BIR200	2	50	13	1885	40	5800	40	5800	40	58

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

Size Diagram



DESC.	BODY SIZE	A	UNIT	В	С	D	E	F	G	н	ı
BIR14	1/4	1/4	mm	19.0	19.0	32.0	26.0	47.1	64.8	20.8	22.0
			inch	0.75	0.75	1.26	1.02	1.85	2.55	0.82	0.87
BIR38	3/8	3/8	mm	22.0	22.0	38.0	31.0	56.1	76.8	24.0	24.0
			inch	0.87	0.87	1.50	1.22	2.21	3.02	0.94	0.94
BIR12	1/2	1/2	mm	27.0	27.0	44.5	38.0	63.3	86.3	29.0	30.0
			inch	1.06	1.06	1.75	1.50	2.49	3.40	1.14	1.18

BIR34	3/4	3/4	mm	36.0	38.0	55.0	48.0	82.2	111.1	38.5	44.0
			inch	1.42	1.50	2.17	1.89	3.24	4.37	1.52	1.73
BIR100	1	1	mm	41.0	45.0	63.1	54.0	97.1	127.3	44.8	52.0
			inch	1.61	1.77	2.48	2.13	3.82	5.01	1.76	2.05
BIR114	1 1/4	1 1/4	mm	55.0	50.0	75.0	65.0	117.2	151.2	60.0	55.5
		1/4	inch	2.17	1.97	2.95	2.56	4.61	5.95	2.36	2.19
BIR112	1 1/2	1 1/2	mm	60.0	60.0	85.0	80.0	135.3	171.3	65.5	65.5
		1/2	inch	2.36	2.36	3.35	3.15	5.33	6.74	2.58	2.58
BIR200	2	2	mm	75.0	75.0	100.0	100.0	160.2	201.2	82.5	83.7
			inch	2.95	2.95	3.94	3.94	6.31	7.92	3.25	3.30

Repair Kits

ORDER CODE	DESCRIPTION
BIR S	ERIES
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			
		BIF	R 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 NP	T THREAD – 1	2 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 SA	E THREAD -	12 PC	
COUPLER	1/2	1/2	SAE	805604000	F. BIR 12 PC
					SAE*

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

PART	ORDER CODE	DESCRIPTION	ORDER CODE	DESCRIPTION
	ISO A BIR COUPL	ER DUST PLUGS	ISO A BIR COUP	LER 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

ADDITIONAL INFORMATION

Body Size	<u>1/4"</u> , <u>3/8"</u> , <u>1/2"</u> , <u>3/4"</u> , <u>1"</u> , <u>1 1/4"</u> , <u>1 1/2"</u> , <u>2"</u>
Material	<u>Carbon</u>
Port Options	BSP, NPT, SAE
Port Size	<u>1/4", 3/8", 1/2", 3/4", 1", 1 1/4", 1 1/2", 2"</u>
Valve Style	<u>Poppet</u>
Working Pressure	<u>Up to 5000</u>

Related products



A-PREMIER SERIES

The A Premier Series Flat Face ISO 16028 Interchange Couplings offer higher pressure ratings, superior flow characteristics, and lower pressure drops compared to FIRG Series or competitors' products. Specifically designed for applications needing noleak performance and the ideal solution for limiting contamination in hydraulic circuits, the non-spill design avoids fluid loss during connection and disconnection. The A Premier is also available in an international version, with British BSP or German DIN port options.



Dust Caps & Repair Kits

Protective caps and plugs are useful accessories that prevent damaging dust, water or mud from entering the quick couplings, thus lengthening their working lives. Repair kits are available upon request.



VEPHD SERIES

The VEPHD (Heavy Duty) Series offers the same features of the VEP series, with upgraded material, a yellow o-ring visual ID, and larger mating areas. Like the VEP, the VEPHD is a popular solution for hydraulic circuit applications subject to high pressure impulses and circuits which experience high residual or trapped pressure in a line, offered in a more durable, higher grade of steel and all QPQ plating for increased longevity.



ONE POSITION PLATE SERIES

The One Position Series of Multi-Coupling Plates allows the simultaneous couple and uncouple of single large diameter hydraulic lines with a single, simple movement requiring very little force. The system reduces connection time and insures couplers are fully connected. The autolocking system insures that lines are connected safely and provides secondary retention of the connection.