

HK Series (Brass)

ISO 7241/1 B Interchange



The HK brass is a general purpose industrial interchange coupling available in valved or non-valved designs, offered in brass for excellent corrosion resistance in rugged applications where stainless steel is unacceptable. Features a ball latch mechanism with automatic self-sealing poppet valves.

Product Features

- Meets dimensional requirements to ISO standard 7241/1 Series B
- Brass construction with stainless steel springs for greater corrosion resistance and fluid compatibility
- Self-sealing poppet valves provide excellent high and low pressure sealing
- Standard seal material-Buna-N.
Seal options available in PTFE, Neoprene, Fluorocarbon, EPDM, and Kalrez®

European Pressure Equipment Directive

Couplings with nominal diameters up to and including 25 mm are designed and manufactured under Article 3.3 of the European Pressure Equipment Directive 97/23 EC. Couplings with nominal diameters greater than 25 mm are designed and manufactured in accordance with the stipulations of Module D1 of the European Pressure Equipment Directive 97/23 EC. They should not be used to convey unstable gases.

Physical Characteristics

Body Size (in)	ISO Size (mm)	Nominal Flow Diameter (mm)	Max. Operating Pressure (bar)	Max. Operating Pressure (psi)	Rated Flow L/min	Rated Flow (gpm)	Air Inclusion cc. max.	Fluid Loss cc. max.
1/8	5	4.4	207	3000	3	0.8	0.6	0.5
1/4	6.3	5.9	186	2700	12	3	1.2	0.9
3/8	10	7.8	152	2200	23	6	2.9	2.1
1/2	12.5	10	155	2250	45	12	3.6	3.5
3/4	20	17	138	2000	100	26	11.5	9.3
1	25	19.6	103	1500	189	50	18.0	16.9
1 1/4**	-	26.7	83	1200	288	76	48.0	48.0
1 1/2	40	35.1	104	1500	375	99	91.3	91.3
2 1/2	50	46	49	700	757	200	209.9	209.9

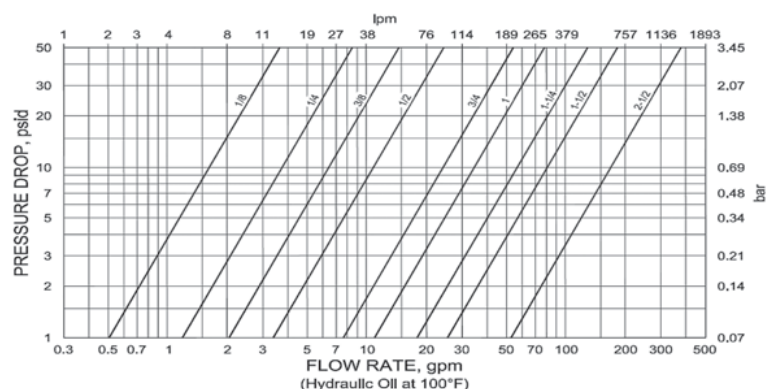
*For questions related to vacuum please contact Eaton.

** No ISO Standard available for the 10HK

Applications & Markets



- Agriculture
- Hydraulic Tool
- General Industry
- Construction
- Fluid Transfer
- Chemical
- Oil and Gas
- Transportation
- Food and Beverage
- Trucks
- Nuclear



Seal Elastomer Data*

Seal Elastomer	Application Specification	Max. Operation Temperature Range
Buna-N	none	-40°C to +121°C/40°F to +250°F
Neoprene	none	-54°C to +100°C/-65°F to +212°F
EPR (Ethylene Propylene Rubber)	none	-54°C to +149°C/-65°C to +300°F
Viton	MIL-R-25897	-29°C to +204°C/-15°F to +400°F

* For reference only, based on Eaton recommended temperatures.

Contact Eaton technical support for further information on fluid compatibility.

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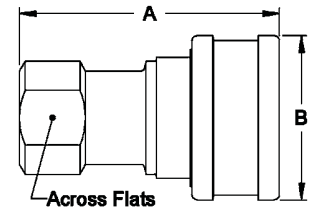


Fig. 1

Sockets (Female)

Part Number HK1-8 Series	Body Size (in)	ISO Size (mm)	Thread Size (Female)		Fig.	Dimensions					
			NPTF	BSPP		A (in)	B (in)	Across Flats (in)	A (mm)	B (mm)	Across Flats (mm)
B1H11	1/8	5	1/8-27	-	1	1.91	0.98	0.56	48.5	24.9	14.2
B2H16	1/4	6.3	1/4-18	-	1	2.26	1.14	0.75	57.4	29.0	19.1
B2H16BS	1/4	6.3	-	1/4-19	1	2.31	1.14	0.75	58.7	29.0	19.1
B3H21	3/8	10	3/8-18	-	1	2.56	1.42	0.88	65.0	36.1	22.4
B3H21BS	3/8	10	-	3/8-19	1	2.56	1.42	0.88	65.0	36.1	22.4
B4HP26	1/2	12.5	1/2-14	-	1	2.96	1.86	1.13	75.2	47.2	28.7
B4HP26BS	1/2	12.5	-	1/2-14	1	2.96	1.86	1.13	75.2	47.2	28.7
B6HP31	3/4	20	3/4-14	-	1	3.48	2.22	1.31	88.4	56.4	33.3
B6HP31BS	3/4	20	-	3/4-14	1	3.48	2.22	1.31	88.4	56.4	33.3
B8HP36	1	25	1-11 1/2	-	1	4.13	2.61	1.75	104.9	66.3	44.5
B8HP36BS	1	25	-	1-11	1	4.13	2.61	1.75	104.9	66.3	44.5

A=Overall Length, B=Maximum Diameter

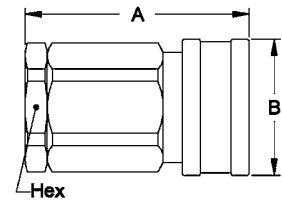


Fig. 2

Sockets (Female)

Part Number HK10/12/20 Series	Body Size (in)	ISO Size (mm)	Thread Size (Female)		Fig.	Dimensions					
			NPTF	BSPP		A (in)	B (in)	Hex (in)	A (mm)	B (mm)	Hex (mm)
B10H41*	1 1/4	-	1 1/4-11 1/2	-	2	4.51	2.73	2.38	114.6	69.3	60.5
B12H41	1 1/2	40	1 1/4-11 1/2	-	2	4.82	3.23	2.38	122.4	82.0	60.5
B12H41BS	1 1/2	40	-	1 1/4-11	2	4.82	3.23	2.38	122.4	82.0	60.5
B12H46	1 1/2	40	1 1/2-11	-	2	4.82	3.23	2.38	122.4	82.0	60.5
B12H46BS	1 1/2	40	-	1 1/2-11	2	4.82	3.23	2.38	122.4	82.0	60.5
B20H51	2 1/2	50	2-11 1/2	-	2	5.55	4.11	3.75	141.0	104.4	95.3
B20H51BS	2 1/2	50	-	2-11	2	5.55	4.11	3.75	141.0	104.4	95.3
B20H56	2 1/2	50	2 1/2-8	-	2	6.14	4.11	3.75	156.0	104.4	95.3
B20H56BS	2 1/2	50	-	2 1/2-11	2	6.14	4.11	3.75	156.0	104.4	95.3
B20H61	2 1/2	50	3-8	-	2	7.00	4.11	4.00	177.8	104.4	101.6
B20H61BS	2 1/2	50	-	3-11	2	7.00	4.11	4.00	177.8	104.4	101.6

A=Overall Length, B=Maximum Diameter

* ISO 7241-1 Series B does not include 1-1/4 inch body size couplings; therefore, Series 10HK is not covered by this standard
To obtain connected length of coupling add Dimensions A and E together.



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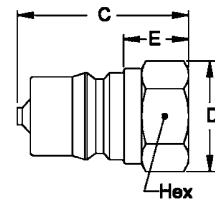


Fig. 3

Plugs (Male)

Part Number HK1-8 Series	Body Size		Thread Size (Female)		Fig.	Dimensions							
	(in)	(mm)	NPTF	BSPP		C (in)	D (in)	E (in)	Hex (in)	C (mm)	D (mm)	E (mm)	Hex (mm)
B1K11	1/8	5	1/8-27	-	3	1.26	0.65	0.44	0.56	32.0	16.5	11.2	14.2
B2K16	1/4	6.3	1/4-18	-	3	1.52	0.87	0.56	0.75	38.6	22.1	14.2	19.1
B2K16BS	1/4	6.3	-	1/4-19	3	1.52	0.87	0.56	0.75	38.6	22.1	14.2	19.1
B3K21	3/8	10	3/8-18	-	3	1.76	1.01	0.61	0.88	44.7	25.7	15.5	22.4
B3K21BS	3/8	10	-	3/8-19	3	1.76	1.01	0.61	0.88	44.7	25.7	15.5	22.4
B4KP26	1/2	12.5	1/2-14	-	3	2.03	1.30	0.76	1.13	51.6	33.0	19.3	28.7
B4KP26BS	1/2	12.5	-	1/2-14	3	2.03	1.30	0.76	1.13	51.6	33.0	19.3	28.7
B6KP31	3/4	20	3/4-14	-	3	2.36	1.52	0.71	1.31	59.9	38.6	18.0	33.3
B6KP31BS	3/4	20	-	3/4-14	3	2.36	1.52	0.71	1.31	59.9	38.6	18.0	33.3
B8KP36	1	25	1-11 1/2	-	3	2.85	1.88	0.97	1.63	72.4	47.8	24.6	41.4
B8KP36BS	1	25	-	1-11	3	2.85	1.88	0.97	1.63	72.4	47.8	24.6	41.4

C=Overall Length, D=Maximum Diameter, E=Exposed Length when Connected

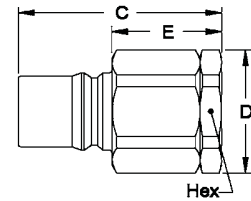


Fig. 4

Plugs (Male)

Part Number HK10/12/20 Series	Body Size		Thread Size (Female)		Fig.	Dimensions							
	(in)	(mm)	NPTF	BSPP		C (in)	D (in)	E (in)	Hex (in)	C (mm)	D (mm)	E (mm)	Hex (mm)
B10K41*	1 1/4	-	1 1/4-11 1/2	-	4	4.25	2.74	2.33	2.38	108.0	69.6	59.2	60.5
B12K41	1 1/2	40	1 1/2-11 1/2	-	4	4.76	2.74	2.67	2.38	120.9	69.6	67.8	60.5
B12K41BS	1 1/2	40	-	1 1/2-11	4	4.76	2.74	2.67	2.38	120.9	69.6	67.8	60.5
B12K46	1 1/2	40	1 1/2-11 1/2	-	4	4.76	2.74	2.67	2.38	120.9	69.6	67.8	60.5
B12K46BS	1 1/2	40	-	1 1/2-11	4	4.76	2.74	2.67	2.38	120.9	69.6	67.8	60.5
B20K51	2 1/2	50	2-11 1/2	-	4	5.49	4.33	2.97	3.75	139.4	110.0	75.4	95.3
B20K51BS	2 1/2	50	-	2-11	4	5.49	4.33	2.97	3.75	139.4	110.0	75.4	95.3
B20K56	2 1/2	50	2 1/2-8	-	4	6.08	4.33	3.56	3.75	154.4	110.0	90.4	95.3
B20K56BS	2 1/2	50	-	2 1/2-11	4	6.08	4.33	3.56	3.75	154.4	110.0	90.4	95.3
B20K61	2 1/2	50	3-8	-	4	6.94	4.62	4.42	4.00	176.3	117.3	112.3	101.6
B20K61BS	2 1/2	50	-	3-11	4	6.94	4.62	4.42	4.00	176.3	117.3	112.3	101.6

C=Overall Length, D=Maximum Diameter, E=Exposed Length when Connected

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Dust Plugs and Dust Caps Accessories

Coupling Series	Plug Dust Cap Part No.		Socket Dust Plug Part No.	
	Metal	Vinyl	Metal	Vinyl
1HK	PDC1HK*	PPDC1HK	SDC1HK*	PSDC1HK
2HK	PDC2HK*	PPDC2HK	SDC2HK*	PSDC2HK
3HK	PDC3HK*	PPDC3HK	SDC3HK*	PSDC3HK
4HK	PDC4HK**	PPDC4HK	SDC4HK**	PSDC4HK
6HK	PDC6HK**	PPDC6HK	SDC6HK**	PSDC6HK
8HK	PDC8HK**	PPDC8HK	SDC8HK**	PSDC8HK
12HK	PDC12HK*		SDC12HK*	
20HK	PDC20HK*		SDC20HK*	

* Brass ** Aluminum

