

HK Series (Steel) ISO 7241-1 B Interchange



Eaton's HK Series coupling sets the industry standard for ISO B Couplings. The HK Series features a rugged ball latch mechanism with automatic self-sealing poppet valves in a wide array of port configurations and multiple valved and non-valved configurations.

Product Features

- Meets dimensional requirements to ISO standard 7241-1 Series B
- The coupling that sets the industry standard
- Self-sealing poppet valve design provides excellent high and low pressure sealing
- Standard seal material: Buna-N
- Seal options available in PTFE, Neoprene, FKM, EPDM, and Kalrez®
- Standard body material: Zinc trivalent plated steel with stainless steel springs, balls and retaining rings.
- PTFE back up rings in sockets (females)

Physical Characteristics

Series	Body Size	ISO Size	Nominal Flow Diameter	Max. Operating Pressure		Rated Flow*		Air Inclusion	Fluid Loss
	(in)	(mm)	(mm)	(bar)	(psi)	(lpm)	(gpm)	cc. max.	cc. max.
1HK	1/8	5	4.4	275	4,000	3	0.8	0.6	0.5
2HK	1/4	6.3	5.9	345	5,000	12	3	1.2	0.9
3HK	3/8	10	7.8	255	4,000	23	6	2.9	2.1
4HK	1/2	12.5	10	345	5,000	45	12	3.6	3.5
6HK	3/4	20	17	275	4,000	100	26	11.5	9.3
8HK	1	25	19.6	275	4,000	189	50	18.0	16.9
10HK	1 1/4**	—	26.7	118	1,700	288	76	48.0	48.0
12HK	1 1/2	40	35.1	152	2,200	375	99	91.3	91.3
20HK	2 1/2	50	46	104	1,500	757	200	209.9	209.9

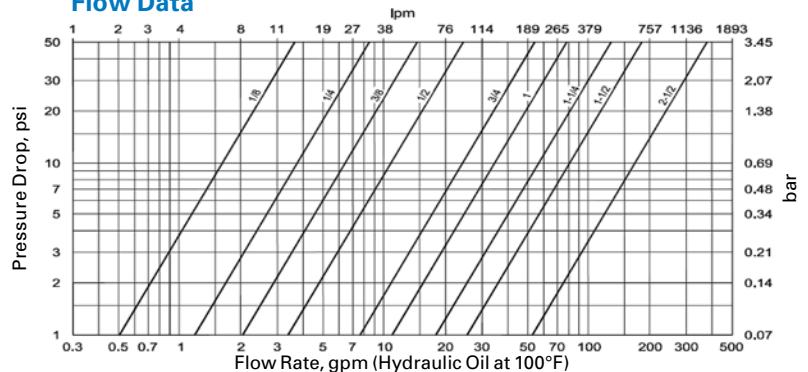
* For questions related to vacuum please contact Eaton.

** No ISO Standard available for the 10HK

Applications & Markets

- Agriculture
- Hydraulic Tool
- General Industry
- Construction
- Fluid Transfer
- Transportation
- Military
- Law Enforcement/Rescue
- Chemical
- Oil and Gas
- Consumer Products
- HVAC
- Food and Beverage
- Trucks
- Aerospace
- Medical

Flow Data



Seal Elastomer Data*

Seal Elastomer**	Max. Operation Temperature Range
Buna-N	-40°C to +121°C/40°F to +250°F
Neoprene	-54°C to +100°C/-65°F to +212°F
EPDM (Ethylene Propylene Rubber)	-54°C to +149°C/-65°F to +300°F
FKM	-29°C to +204°C/-15°F to +400°F

* For reference only, based on Eaton recommended temperatures.

** For seals not listed contact Eaton.

Contact Eaton technical support for further information on fluid compatibility.

HK Series (Steel) ISO 7241-1 B Interchange

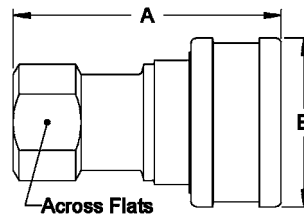


Figure 1

Sockets (Female)

Part Number HK1-8 Series	Body Size (in)	ISO Size (mm)	Thread Size (Female)			Fig.	Dimensions					
			NPTF	BSPP	SAE		A (in)	B (in)	Across Flats (in)	A (mm)	B (mm)	Across Flats (mm)
1H11	1/8	5	1/8-27	-	-	1	1.91	0.98	0.56	48.5	24.9	14.2
1H4	1/8	5	-	-	7/16-20	1	2.06	0.98	0.69	52.3	24.9	17.5
2H16	1/4	6.3	1/4-18	-	-	1	2.26	1.14	0.75	57.4	29.0	19.1
2H16BS	1/4	6.3	-	1/4-19	-	1	2.31	1.14	0.75	58.7	29.0	19.1
2H6	1/4	6.3	-	-	9/16-18	1	2.40	1.14	0.88	61.0	29.0	22.4
3H21	3/8	10	3/8-18	-	-	1	2.56	1.42	0.88	65.0	36.1	22.4
3H21BS	3/8	10	-	3/8-19	-	1	2.56	1.42	0.88	65.0	36.1	22.4
3H8	3/8	10	-	-	3/4-16	1	2.74	1.42	1.00	69.6	36.1	25.4
4HP26	1/2	12.5	1/2-14	-	-	1	2.96	1.86	1.13	75.2	47.2	28.7
4HP26BS	1/2	12.5	-	1/2-14	-	1	2.96	1.86	1.13	75.2	47.2	28.7
4HP10	1/2	12.5	-	-	7/8-14	1	3.05	1.86	1.25	77.5	47.2	31.8
6HP31	3/4	20	3/4-14	-	-	1	3.48	2.22	1.31	88.4	56.4	33.3
6HP31BS	3/4	20	-	3/4-14	-	1	3.48	2.22	1.31	88.4	56.4	33.3
6HP12	3/4	20	-	-	1 1/16-12	1	3.67	2.22	1.38	93.2	56.4	35.1
8HP36	1	25	1-11 1/2	-	-	1	4.13	2.61	1.75	104.9	66.3	44.5
8HP36BS	1	25	-	1-11	-	1	4.13	2.61	1.75	104.9	66.3	44.5
8HP16	1	25	-	-	1 1/16-12	1	4.13	2.61	1.88	104.9	66.3	47.8

A=Overall Length, B=Maximum Diameter

To obtain connected length of coupling, add dimensions A (Fig. 1) and E (Fig. 3) together.

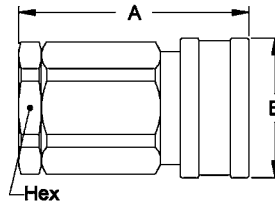


Figure 2

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)
10H41*	1 1/4	-	1 1/4-11 1/2	-	2	4.51	2.73	2.38	114.6	69.3	60.5
10H41BS*	1 1/4	-	-	1 1/4-11	2	4.51	2.73	2.38	114.6	69.3	60.5
12H41	1 1/2	40	1 1/4-11 1/2	-	2	4.82	3.23	2.38	122.4	82.0	60.5
12H41BS	1 1/2	40	-	1 1/4-11	2	4.82	3.23	2.38	122.4	82.0	60.5
12H46	1 1/2	40	1 1/2-11 1/2	-	2	4.82	3.23	2.38	122.4	82.0	60.5
12H46BS	1 1/2	40	-	1 1/2-11	2	4.82	3.23	2.38	122.4	82.0	60.5
20H51	2 1/2	50	2-11 1/2	-	2	5.55	4.11	3.75	141.0	104.4	95.3
20H51BS	2 1/2	50	-	2-11	2	5.55	4.11	3.75	141.0	104.4	95.3
20H56	2 1/2	50	2 1/2-8	-	2	6.14	4.11	3.75	156.0	104.4	95.3
20H56BS	2 1/2	50	-	2 1/2-11	2	6.14	4.11	3.75	156.0	104.4	95.3
20H61	2 1/2	50	3-8	-	2	7.00	4.11	4.00	177.8	104.4	101.6
20H61BS	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 (Fig. 2) and E (Fig. 4) together.

FLUID TRANSFER
AND HYDRAULIC

PNEUMATIC

SPECIAL APPLICATIONS

DIAGNOSTIC

AGRICULTURE

REFRIGERANT

HK Series (Steel) ISO 7241-1 B Interchange

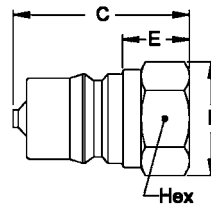


Figure 3

Plugs (Male)

Part Number HK1-8 Series	Body Size (in)	ISO Size (mm)	Thread Size (Female)			Fig.	Dimensions							
			NPTF	BSPB	SAE		C (in)	D (in)	E (in)	Hex (in)	C (mm)	D (mm)	E (mm)	Hex (mm)
1K11	1/8	5	1/8-27	-	-	3	1.26	0.65	0.44	0.56	32.0	16.5	11.2	14.2
1K4	1/8	5	-	-	7/16-20	3	1.41	0.79	0.59	0.69	35.8	20.1	15.0	17.5
2K16	1/4	6.3	1/4-18	-	-	3	1.52	0.87	0.56	0.75	38.6	22.1	14.2	19.1
2K16BS	1/4	6.3	-	1/4-19	-	3	1.52	0.87	0.56	0.75	38.6	22.1	14.2	19.1
2K6	1/4	6.3	-	-	9/16-18	3	1.66	1.01	0.70	0.88	42.2	25.7	17.8	22.4
3K21	3/8	10	3/8-18	-	-	3	1.76	1.01	0.61	0.88	44.7	25.7	15.5	22.4
3K21BS	3/8	10	-	3/8-19	-	3	1.76	1.01	0.61	0.88	44.7	25.7	15.5	22.4
3K8	3/8	10	-	-	3/4-16	3	1.94	1.15	0.79	1.00	49.3	29.2	20.1	25.4
4KP26	1/2	12.5	1/2-14	-	-	3	2.03	1.30	0.76	1.13	51.6	33.0	19.3	28.7
4KP26BS	1/2	12.5	-	1/2-14	-	3	2.03	1.30	0.76	1.13	51.6	33.0	19.3	28.7
4KP10	1/2	12.5	-	-	7/8-14	3	2.11	1.37	0.84	1.19	53.6	34.8	21.3	30.2
6KP31	3/4	20	3/4-14	-	-	3	2.36	1.52	0.71	1.31	59.9	38.6	18.0	33.3
6KP31BS	3/4	20	-	3/4-14	-	3	2.36	1.52	0.71	1.31	59.9	38.6	18.0	33.3
6KP12	3/4	20	-	-	1 1/16-12	3	2.54	1.59	0.89	1.38	64.5	40.4	22.6	35.1
8KP36	1	25	1-11 1/2	-	-	3	2.85	1.88	0.97	1.63	72.4	47.8	24.6	41.4
8KP36BS	1	25	-	1-11	-	3	2.85	1.88	0.97	1.63	72.4	47.8	24.6	41.4
8KP16	1	25	-	-	1 1/16-12	3	2.85	2.17	0.97	1.88	72.4	55.1	24.6	47.8

C=Overall Length, D=Maximum Diameter, E=Exposed Length when Connected
To obtain connected length of coupling, add dimensions A (Fig. 1) and E (Fig. 3) together.

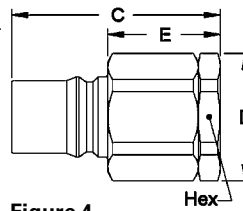


Figure 4

Plugs (Male)

Part Number HK10/12/20 Series	Body Size (in)	ISO Size (mm)	Thread Size (Female)		Fig.	Dimensions							
			NPTF	BSPB		C (in)	D (in)	E (in)	Hex (in)	C (mm)	D (mm)	E (mm)	Hex (mm)
10K41*	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
10K41BS*	1 1/4	-	-	1 1/4-11	4	4.25	2.74	2.33	2.38	108.0	69.6	59.2	60.5
12K41	1 1/2	40	1 1/4-11 1/2	-	4	4.76	2.74	2.67	2.38	120.9	69.6	67.8	60.5
12K41BS	1 1/2	40	-	1 1/4-11	4	4.76	2.74	2.67	2.38	120.9	69.6	67.8	60.5
12K46	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
12K46BS	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
20K51	2 1/2	60	2-11 1/2	-	4	5.49	4.33	2.97	3.75	139.4	110.0	75.4	95.3
20K51BS	2 1/2	60	-	2-11	4	5.49	4.33	2.97	3.75	139.4	110.0	75.4	95.3
20K56	2 1/2	60	2 1/2-8	-	4	6.08	4.33	3.56	3.75	154.4	110.0	90.4	95.3
20K56BS	2 1/2	60	-	2 1/2-11	4	6.08	4.33	3.56	3.75	154.4	110.0	90.4	95.3
20K61	2 1/2	60	3-8	-	4	6.94	4.62	4.42	4.00	176.3	117.3	112.3	101.6
20K61BS	2 1/2	60	-	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
* ISO 7241-1 Series B does not include 1-1/4 inch body size couplings; therefore, 1 1/4 10HK is not covered by this standard
To obtain connected length of coupling, add dimensions A (Fig. 2) and E (Fig. 4) together.

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(RD)***	SDC4HK**	PSDC4HK(RD)***
6HK	PDC6HK**	PPDC6HK(RD)***	SDC6HK**	PSDC6HK(RD)***
8HK	PDC8HK**	PPDC8HK(RD)***	SDC8HK**	PSDC8HK(RD)***
12HK	PDC12HK*		SDC12HK*	
20HK	PDC20HK*		SDC20HK*	

*Brass **Aluminum ***Offered in red by adding RD to end of part number



HK Series (Brass) ISO 7241-1 B Interchange



Eaton's 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. The HK Series 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, FKM, EPDM, and Kalrez®

Physical Characteristics

Series	Body Size	ISO Size	Nominal Flow Diameter	Max. Operating Pressure		Rated Flow		Air Inclusion	Fluid Loss
	(in)	(mm)	(mm)	(bar)	(psi)	(lpm)	(gpm)	cc. max.	cc. max.
1HK	1/8	5	4.4	207	3,000	3	0.8	0.6	0.5
2HK	1/4	6.3	5.9	186	2,700	12	3	1.2	0.9
3HK	3/8	10	7.8	152	2,200	23	6	2.9	2.1
4HK	1/2	12.5	10	155	2,250	45	12	3.6	3.5
6HK	3/4	20	17	138	2,000	100	26	11.5	9.3
8HK	1	25	19.6	103	1,500	189	50	18.0	16.9
10HK	1 1/4**	-	26.7	83	1,200	288	76	48.0	48.0
12HK	1 1/2	40	35.1	104	1,500	375	99	91.3	91.3
20HK	2 1/2	50	46	49	700	757	200	209.9	209.9

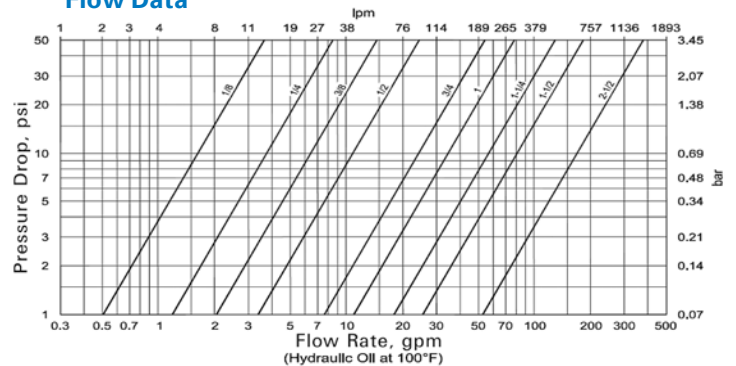
*For questions related to vacuum please contact Eaton.

** 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

Flow Data



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
EPDM (Ethylene Propylene Rubber)	none	-54°C to +149°C/-65°C to +300°F
FKM	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.

HK Series (Brass) ISO 7241-1 B Interchange

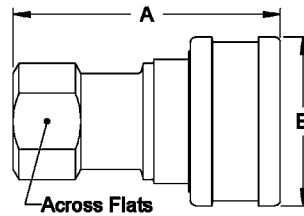


Figure 1

Sockets (Female)

Part Number HK1-8 Series	Body Size		Thread Size (Female)		Fig.	Dimensions					
	(in)	(mm)	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

To obtain connected length of coupling, add dimensions A (Fig. 1) and E (Fig. 3) together.

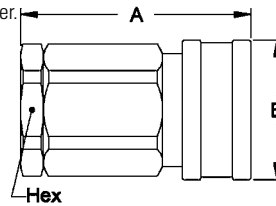


Figure 2

Sockets (Female)

Part Number HK10/12/20 Series	Body Size		Thread Size (Female)		Fig.	Dimensions					
	(in)	(mm)	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 (Fig. 2) and E (Fig. 4) together.



HK Series (Brass) ISO 7241-1 B Interchange

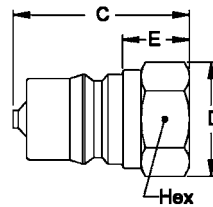


Figure 3

Plugs (Male)

Part Number HK1-8 Series	Body Size (in)	ISO Size (mm)	Thread Size (Female)		Fig.	Dimensions							
			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
To obtain connected length of coupling, add dimensions A (Fig. 1) and E (Fig. 3) together.

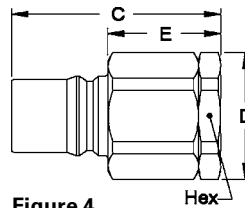


Figure 4

Plugs (Male)

Part Number HK10/12/20 Series	Body Size (in)	ISO Size (mm)	Thread Size (Female)		Fig.	Dimensions							
			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 1/4-11 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 1/4-11	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
* 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 (Fig. 2) and E (Fig. 4) together.

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(RD)***	SDC4HK**	PSDC4HK(RD)***
6HK	PDC6HK**	PPDC6HK(RD)***	SDC6HK**	PSDC6HK(RD)***
8HK	PDC8HK**	PPDC8HK(RD)***	SDC8HK**	PSDC8HK(RD)***
12HK	PDC12HK*		SDC12HK*	
20HK	PDC20HK*		SDC20HK*	

*Brass **Aluminum ***Offered in red by adding RD to end of part number



FLUID TRANSFER
AND HYDRAULIC

PNEUMATIC

SPECIAL APPLICATIONS

DIAGNOSTIC

AGRICULTURE

REFRIGERANT

HK Series Series (Stainless Steel) ISO 7241-1 B Interchange



Eaton's HK Series stainless steel is a general purpose industrial interchange coupling available in valved or non-valved designs, offered in 303/316 grades of stainless steel for excellent corrosion resistance in rugged applications. The HK Series features a ball latch mechanism with automatic self-sealing poppet valves.

Product Features

- Meets dimensional requirements to ISO standard 7241-1 Series B
- 303/316 Stainless steel construction for greater corrosion resistance and fluid compatibility
- Self-sealing poppet valves provide excellent high and low pressure sealing
- Standard body material: 303 or 316 Stainless Steel
- Standard seal material: Buna-N
- Seal options available in PTFE, Neoprene, FKM, EPDM, and Kalrez®

Physical Characteristics

Series	Body Size	ISO Size	Nominal Flow Diameter	Max. Operating Pressure	Rated Flow		Air Inclusion	Fluid Loss	
	(in)	(mm)	(mm)	(bar)	(psi)	(lpm)	(gpm)	cc. max.	cc. max.
1HK	1/8	5	4.4	344	5,000	3	0.8	0.6	0.5
2HK	1/4	6.3	5.9	255	3,700	12	3	1.2	0.9
3HK	3/8	10	7.8	255	3,700	23	6	2.9	2.1
4HK	1/2	12.5	10	293	4,250	45	12	3.6	3.5
6HK	3/4	20	17	242	3,500	100	26	11.5	9.3
8HK	1	25	19.6	207	3,000	189	50	18.0	16.9
10HK	1 1/4**	-	26.7	118	1,700	288	76	48.0	48.0
12HK	1 1/2	40	35.1	152	2,200	375	99	91.3	91.3
20HK	2 1/2	50	46	104	1,500	757	200	209.9	209.9

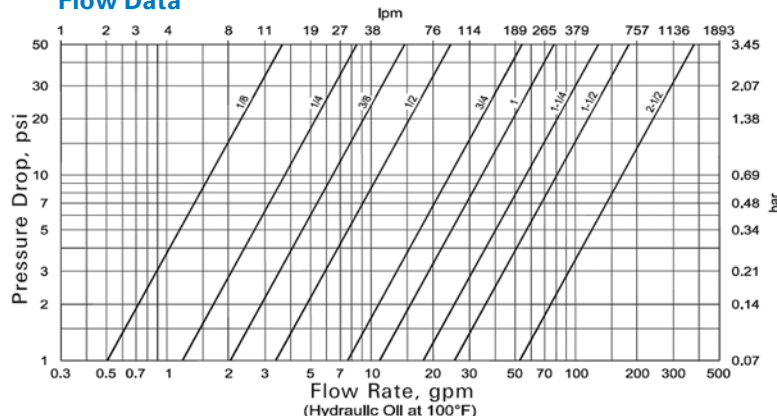
* For questions related to vacuum please contact Eaton.

** No ISO Standard available for the 10HK

Applications & Markets

- Agriculture
- Hydraulic Tool
- General Industry
- Construction
- Fluid Transfer
- Transportation
- Military
- Law Enforcement/Rescue
- Chemical
- Oil and Gas
- Consumer Products
- HVAC
- Food and Beverage
- Trucks
- Aerospace
- Medical

Flow Data



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
EPDM (Ethylene Propylene Rubber)	none	-54°C to +149°C/-65°C to +300°F
FKM	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.

HK Series Series (Stainless Steel) ISO 7241-1 B Interchange

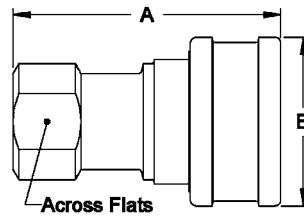


Figure 1

Sockets (Female)

Part Number HK 1-8 Series 303 Stainless Steel	316 Stainless Steel	Body Size	ISO Size	Thread Size (Female)			Fig.	Dimensions					
				NPTF	BSPF	SAE		A (in)	B (in)	Across Flats (in)	A (mm)	B (mm)	Across Flats (mm)
LL1H11	ML1H11	1/8	5	1/8-27	-	-	1	1.91	0.98	0.56	48.5	24.9	14.2
LL1H4	-	1/8	5	-	-	7/16-20	1	2.06	0.98	0.69	52.3	24.9	17.5
LL2H16	ML2H16	1/4	6.3	1/4-18	-	-	1	2.26	1.14	0.75	57.4	29.0	19.1
LL2H16BS	ML2H16BS	1/4	6.3	-	1/4-19	-	1	2.31	1.14	0.75	58.7	29.0	19.1
LL2H6	-	1/4	6.3	-	-	9/16-18	1	2.40	1.14	0.88	61.0	29.0	22.4
LL3H21	ML3H21	3/8	10	3/8-18	-	-	1	2.56	1.42	0.88	65.0	36.1	22.4
LL3H21BS	ML3H21BS	3/8	10	-	3/8-19	-	1	2.56	1.42	0.88	65.0	36.1	22.4
LL3H8	-	3/8	10	-	-	3/4-16	1	2.74	1.42	1.00	69.6	36.1	25.4
LL4HP26	ML4HP26	1/2	12.5	1/2-14	-	-	1	2.96	1.86	1.13	75.2	47.2	28.7
LL4HP26BS	ML4HP26BS	1/2	12.5	-	1/2-14	-	1	2.96	1.86	1.13	75.2	47.2	28.7
LL4HP10	-	1/2	12.5	-	-	7/8-14	1	3.05	1.86	1.25	77.5	47.2	31.8
LL6HP31	ML6HP31	3/4	20	3/4-14	-	-	1	3.48	2.22	1.31	88.4	56.4	33.3
LL6HP31BS	ML6HP31BS	3/4	20	-	3/4-14	-	1	3.48	2.22	1.31	88.4	56.4	33.3
LL6HP12	-	3/4	20	-	-	1 1/16-12	1	3.67	2.22	1.38	93.2	56.4	35.1
LL8HP36	ML8HP36	1	25	1-11 1/2	-	-	1	4.13	2.61	1.75	104.9	66.3	44.5
LL8HP36BS	ML8HP36BS	1	25	-	1-11	-	1	4.13	2.61	1.75	104.9	66.3	44.5
LL8HP16	-	1	25	-	-	1 1/16-12	1	4.13	2.61	1.88	104.9	66.3	47.8

A=Overall Length, B=Maximum Diameter

To obtain connected length of coupling, add dimensions A (Fig. 1) and E (Fig. 3) together.

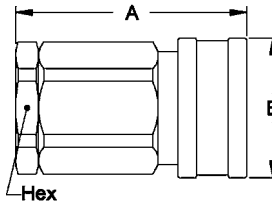


Figure 2

Sockets (Female)

Part Number HK 10/12/20 Series 303 Stainless Steel	Body Size	ISO Size	Thread Size (Female)		Fig.	Dimensions					
			NPTF	BSPF		A (in)	B (in)	Hex (in)	A (mm)	B (mm)	Hex (mm)
LL10H41*	1 1/4	-	1 1/4-11 1/2	-	2	4.51	2.73	2.38	114.6	69.3	60.5
LL10H41BS*	1 1/4	-	-	1 1/4-11	2	4.51	2.73	2.38	114.6	69.3	60.5
LL12H41	1 1/2	40	1 1/4-11 1/2	-	2	4.82	3.23	2.38	122.4	82.0	60.5
LL12H41BS	1 1/2	40	-	1 1/4-11	2	4.82	3.23	2.38	122.4	82.0	60.5
LL12H46	1 1/2	40	1 1/2-11 1/2	-	2	4.82	3.23	2.38	122.4	82.0	60.5
LL12H46BS	1 1/2	40	-	1 1/2-11	2	4.82	3.23	2.38	122.4	82.0	60.5
LL20H51	2 1/2	50	2-11 1/2	-	2	5.55	4.11	3.75	141.0	104.4	95.3
LL20H51BS	2 1/2	50	-	2-11	2	5.55	4.11	3.75	141.0	104.4	95.3
LL20H56	2 1/2	50	2 1/2-8	-	2	6.14	4.11	3.75	156.0	104.4	95.3
LL20H56BS	2 1/2	50	-	2 1/2-11	2	6.14	4.11	3.75	156.0	104.4	95.3
LL20H61	2 1/2	50	3-8	-	2	7.00	4.11	4.00	177.8	104.4	101.6
LL20H61BS	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 (Fig. 2) and E (Fig. 4) together.

HK Series (Stainless Steel) ISO 7241-1 B Interchange

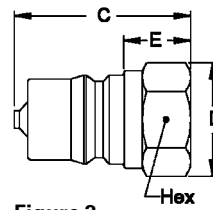


Figure 3

Plugs (Male)

Part Number

HK1-8 Series

303 Stainless Steel

316 Stainless Steel

Body Size

ISO Size

Thread Size (Female)

Fig.

Dimensions

		(in)	(mm)	NPTF	BSPP	SAE	C (in)	D (in)	E (in)	Hex (in)	C (mm)	D (mm)	E (mm)	Hex (mm)	
LL1K11	ML1K11	1/8	5	1/8-27	-	-	3	1.26	0.65	0.44	0.56	32.0	16.5	11.2	14.2
LL1K4	-	1/8	5	-	-	7/16-20	3	1.41	0.79	0.59	0.69	35.8	20.1	15.0	17.5
LL2K16	ML2K16C	1/4	6.3	1/4-18	-	-	3	1.52	0.87	0.56	0.75	38.6	22.1	14.2	19.1
LL2K16BS	ML2K16BS	1/4	6.3	-	1/4-19	-	3	1.52	0.87	0.56	0.75	38.6	22.1	14.2	19.1
LL2K6	-	1/4	6.3	-	-	9/16-18	3	1.66	1.01	0.70	0.88	42.2	25.7	17.8	22.4
LL3K21	ML3K21C	3/8	10	3/8-18	-	-	3	1.76	1.01	0.61	0.88	44.7	25.7	15.5	22.4
LL3K21BS	ML3K21BS	3/8	10	-	3/8-19	-	3	1.76	1.01	0.61	0.88	44.7	25.7	15.5	22.4
LL3K8	-	3/8	10	-	-	3/4-16	3	1.94	1.15	0.79	1.00	49.3	29.2	20.1	25.4
LL4K26	ML4K26	1/2	12.5	1/2-14	-	-	3	2.03	1.30	0.76	1.13	51.6	33.0	19.3	28.7
LL4K26BS	ML4K26BS	1/2	12.5	-	1/2-14	-	3	2.03	1.30	0.76	1.13	51.6	33.0	19.3	28.7
LL4K10	-	1/2	12.5	-	-	7/8-14	3	2.11	1.37	0.84	1.19	53.6	34.8	21.3	30.2
LL6K31	ML6K31	3/4	20	3/4-14	-	-	3	2.36	1.52	0.71	1.31	59.9	38.6	18.0	33.3
LL6K31BS	ML6K31BS	3/4	20	-	3/4-14	-	3	2.36	1.52	0.71	1.31	59.9	38.6	18.0	33.3
LL6K12	-	3/4	20	-	-	1 1/16-12	3	2.54	1.59	0.89	1.38	64.5	40.4	22.6	35.1
LL8K36	ML8K36	1	25	1-11 1/2	-	-	3	2.85	1.88	0.97	1.63	72.4	47.8	24.6	41.4
LL8K36BS	ML8K36BS	1	25	-	1-11	-	3	2.85	1.88	0.97	1.63	72.4	47.8	24.6	41.4
LL8K16	-	1	25	-	-	1 1/16-12	3	2.85	2.17	0.97	1.88	72.4	55.1	24.6	47.8

C=Overall Length, D=Maximum Diameter, E=Exposed Length when Connected
To obtain connected length of coupling, add dimensions A (Fig. 1) and E (Fig. 3) together.

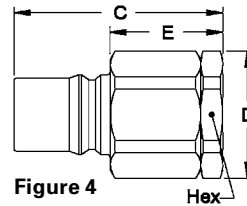


Figure 4

Plugs (Male)

Part Number

HK10/12/20 Series

303 Stainless Steel

Body Size

ISO 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)
LL10K41*	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
LL10K41BS*	1 1/4	-	-	1 1/4-11	4	4.25	2.74	2.33	2.38	108.0	69.6	59.2	60.5
LL12K41	1 1/2	40	1 1/4-11 1/2	-	4	4.76	2.74	2.67	2.38	120.9	69.6	67.8	60.5
LL12K41BS	1 1/2	40	-	1 1/4-11	4	4.76	2.74	2.67	2.38	120.9	69.6	67.8	60.5
LL12K46	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
LL12K46BS	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
LL20K51	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
LL20K51BS	2 1/2	50	-	2-11	4	5.49	4.33	2.97	3.75	139.4	110.0	75.4	95.3
LL20K56	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
LL20K56BS	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
LL20K61	2 1/2	50	3-8	-	4	6.94	4.62	4.42	4.00	176.3	117.3	112.3	101.6
LL20K61BS	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
* 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 (Fig. 2) and E (Fig. 4) together.

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(RD)***	SDC4HK**	PSDC4HK(RD)***
6HK	PDC6HK**	PPDC6HK(RD)***	SDC6HK**	PSDC6HK(RD)***
8HK	PDC8HK**	PPDC8HK(RD)***	SDC8HK**	PSDC8HK(RD)***
12HK	PDC12HK*	-	SDC12HK*	-
20HK	PDC20HK*	-	SDC20HK*	-

*Brass **Aluminum ***Offered in red by adding RD to end of part number

