

## SERIES **HK** 1-HK TO 8-HK



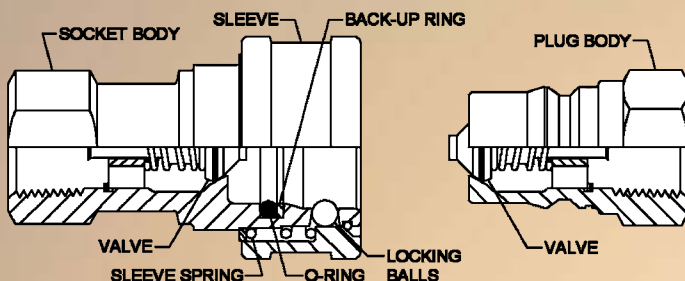
**Series HK Couplings** are the most versatile couplings available and are suitable for use with various liquids, chemicals, steam, gases and vacuum. Series HK couplings conform to the dimensional requirements of ISO 7241-1 Series B. Body sizes range from 1/8" to 1".

### FEATURES

- The coupling that set the industry standard
- Multiple options make the HK our most versatile coupling series available
- Brass, steel and stainless steel construction available in all sizes; 1/4" body size is also available in polypropylene
- End connections are female NPTF, BSPP and SAE o-ring boss
- Heavy duty steel couplings for use in high impulse service available in most sizes
- Steam coupling available in 3/8" body size

### APPLICATIONS & MARKETS

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



#### Interchangeability

- ISO 7241-1 Series B



#### Materials

- Brass, zinc-plated steel, stainless steel or polypropylene (1/4" only) construction
- Stainless steel springs, balls and retaining rings
- Buna-N (Nitrile) seals
- PTFE back-up rings in steel and stainless steel sockets



**1/8" to 1" nominal**  
(4.4 mm to 25.4 mm)



**-40° F to 250° F**  
**-40° C to 121° C**  
(with standard seal)

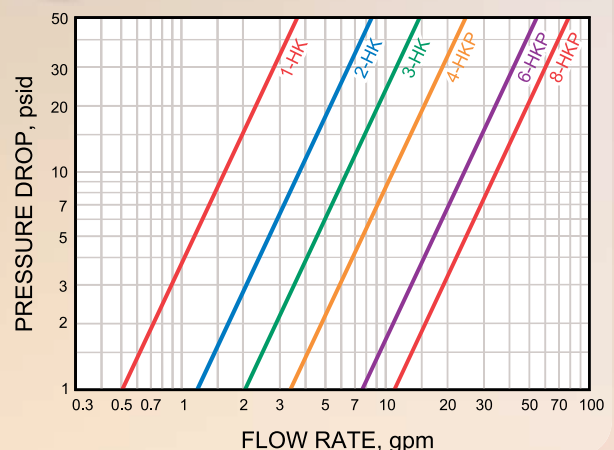


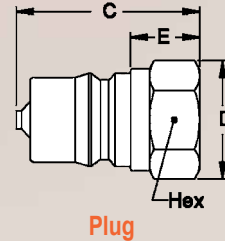
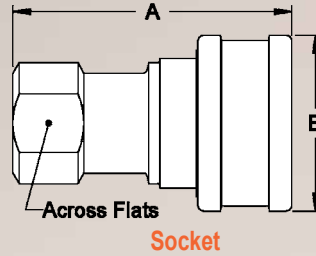
#### Rated Pressure Chart

Part Number	Body Size inches (mm)	Brass		Steel		Stainless Steel	
		PSI	BAR	PSI	BAR	PSI	BAR
1-HK	1/8 (4.4)	3,000	207	4,000	275	5,000	344
2-HK	1/4 (5.9)	2,700	186	5,000	345	3,700	255
3-HK	3/8 (7.8)	2,200	152	3,700	255	3,700	255
4-HKP	1/2 (10)	2,250	155	5,000	345	4,250	293
6-HKP	3/4 (17)	2,000	138	4,000	275	3,500	242
8-HKP	1 (19.6)	1,500	103	4,000	275	3,000	207
Part Number	Body Size inches (mm)	Polypropylene		Temperature Range			
P2-HK	1/4 (5.9)	50	4	+35° F to 150° F			



#### Flow Capacity





### SOCKETS

Body Size (inch)	Part Number					Thread Size (female)			Dimensions (inches)		
	Brass	Steel		Stainless Steel		NPTF	BSPP	SAE	A	B	Across Flats
		Standard	High Impulse	303	316						
1/8	B1-H11	1-H11	—	LL1-H11	ML1-H11	1/8-27	—	—	1.91	0.98	0.56
1/8	—	1-H4	—	LL1-H4	—	—	—	7/16-20	2.06	0.98	0.69
1/4	B2-H16	2-H16	2-H16	LL2-H16	ML2-H16	1/4-18	—	—	2.26	1.14	0.75
1/4	B2-H16BS	2-H16BS	2-H16BS	LL2-H16BS	ML2-H16BS	—	1/4-19	—	2.31	1.14	0.75
1/4	—	2-H6	2-H6	LL2-H6	—	—	—	9/16-18	2.40	1.14	0.88
3/8	B3-H21	3-H21	3-H21C	LL3-H21	ML3-H21	3/8-18	—	—	2.56	1.42	0.88
3/8	B3-H21BS	3-H21BS	—	LL3-H21BS	ML3-H21BS	—	3/8-19	—	2.56	1.42	0.88
3/8	—	3-H8	3-H8C	LL3-H8	—	—	—	3/4-16	2.74	1.42	1.00
1/2	B4-HP26	4-HP26	4-HP26	LL4-HP26	ML4-HP26	1/2-14	—	—	2.96	1.86	1.13
1/2	B4-HP26BS	4-HP26BS	4-HP26BS	LL4-HP26BS	ML4-HP26BS	—	1/2-14	—	2.96	1.86	1.13
1/2	—	4-HP10	4-HP10	LL4-HP10	—	—	—	7/8-14	3.05	1.86	1.25
3/4	B6-HP31	6-HP31	6-HP31	LL6-HP31	ML6-HP31	3/4-14	—	—	3.48	2.22	1.31
3/4	B6-HP31BS	6-HP31BS	6-HP31BS	LL6-HP31BS	ML6-HP31BS	—	3/4-14	—	3.48	2.22	1.31
3/4	—	6-HP12	6-HP12	LL6-HP12	—	—	—	1 1/16-12	3.67	2.22	1.38
1	B8-HP36	8-HP36	8-HP36	LL8-HP36	ML8-HP36	1-11 1/2	—	—	4.13	2.61	1.75
1	B8-HP36BS	8-HP36BS	8-HP36BS	LL8-HP36BS	ML8-HP36BS	—	1-11	—	4.13	2.61	1.75
1	—	8-HP16	8-HP16	LL8-HP16	—	—	—	1 5/16-12	4.13	2.61	1.88

A = Overall Length B = Maximum Diameter

### PLUGS

Body Size (inch)	Part Number					Thread Size (female)			Dimensions (inches)			
	Brass	Steel		Stainless Steel		NPTF	BSPP	SAE	C	D	E	HEX
		Standard	High Impulse	303	316							
1/8	B1-K11	1-K11	—	LL1-K11	ML1-K11	1/8-27	—	—	1.26	0.65	0.44	0.56
1/8	—	1-K4	—	LL1-K4	—	—	—	7/16-20	1.41	0.79	0.59	0.69
1/4	B2-K16	2-K16	2-K16C	LL2-K16	ML2-K16	1/4-18	—	—	1.52	0.87	0.56	0.75
1/4	B2-K16BS	2-K16BS	—	LL2-K16BS	ML2-K16BS	—	1/4-19	—	1.52	0.87	0.56	0.75
1/4	—	2-K6	2-K6C	LL2-K6	—	—	—	9/16-18	1.66	1.01	0.70	0.88
3/8	B3-K21	3-K21	3-K21C	LL3-K21	ML3-K21	3/8-18	—	—	1.76	1.01	0.61	0.88
3/8	B3-K21BS	3-K21BS	—	LL3-K21BS	ML3-K21BS	—	3/8-19	—	1.76	1.01	0.61	0.88
3/8	—	3-K8	3-K8C	LL3-K8	—	—	—	3/4-16	1.94	1.15	0.79	1.00
1/2	B4-KP26	4-KP26	4-KP26	LL4-KP26	ML4-KP26	1/2-14	—	—	2.03	1.30	0.76	1.13
1/2	B4-KP26BS	4-KP26BS	4-KP26BS	LL4-KP26BS	ML4-KP26BS	—	1/2-14	—	2.03	1.30	0.76	1.13
1/2	—	4-KP10	4-KP10	LL4-KP10	—	—	—	7/8-14	2.11	1.37	0.84	1.19
3/4	B6-KP31	6-KP31	6-KP31	LL6-KP31	ML6-KP31	3/4-14	—	—	2.36	1.52	0.71	1.31
3/4	B6-KP31BS	6-KP31BS	6-KP31BS	LL6-KP31BS	ML6-KP31BS	—	3/4-14	—	2.36	1.52	0.71	1.31
3/4	—	6-KP12	6-KP12	LL6-KP12	—	—	—	1 1/16-12	2.54	1.59	0.89	1.38
1	B8-KP36	8-KP36	8-KP36	LL8-KP36	ML8-KP36	1-11 1/2	—	—	2.85	1.88	0.97	1.63
1	B8-KP36BS	8-KP36BS	8-KP36BS	LL8-KP36BS	ML8-KP36BS	—	1-11	—	2.85	1.88	0.97	1.63
1	—	8-KP16	8-KP16	LL8-KP16	—	—	—	1 5/16-12	2.85	2.17	0.97	1.88

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

### Dust Caps and Dust Plugs Accessories:

Coupling Series	Plug Dust Cap Part No.		Socket Dust Plug Part No.	
	Metal	Vinyl	Metal	Vinyl
1-HK	PDC-1-HK*	P-PDC-1-HK	SDC-1-HK*	P-SDC-1-HK
2-HK	PDC-2-HK*	P-PDC-2-HK	SDC-2-HK*	P-SDC-2-HK
3-HK	PDC-3-HK*	P-PDC-3-HK	SDC-3-HK*	P-SDC-3-HK
4-HK	PDC-4-HK**	P-PDC-4-HK	SDC-4-HK**	P-SDC-4-HK
6-HK	PDC-6-HK**	P-PDC-6-HK	SDC-6-HK**	P-SDC-6-HK
8-HK	PDC-8-HK**	P-PDC-8-HK	SDC-8-HK**	P-SDC-8-HK

\* Brass \*\* Aluminum



## SERIES **HK** 1-HK TO 8-HK

### OPTIONS

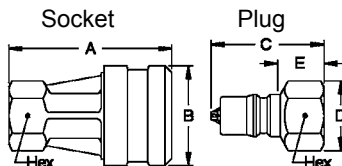
- Non-valved socket and plug
- Bleeder-style plug
- Seals: PTFE, Neoprene, Fluorocarbon, Buna-N, EPDM and Kalrez (see Elastomer Selection Guide, page 82)
- Valve actuator in socket or plug
- Sleeve lock

### Series P2-HK Plastic Coupling

The Series P2-HK coupling is intended for use with air, water and various chemicals at low pressure. It is designed for use where an economical, light weight, corrosion resistant coupling is desired. All components, except springs and seals, are molded from natural polypropylene with a UV inhibitor. Valve springs are 316 stainless steel. Fluorocarbon seals are standard. EPDM seals are optional.

Part No.	Thread Size NPTF	Dimensions			Part No.	Thread Size NPTF	Dimensions			
		A	B	HEX			C	D	E	HEX
PP2-H25F	1/4-18	2.38	1.45	0.88	PP2-K25F	1/4-18	1.65	1.01	0.67	0.88

E = Exposed length when connected

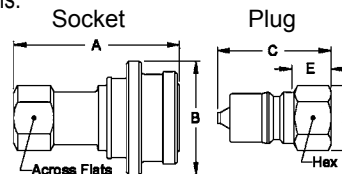


### Series 3-HK Steam Coupling

The steam coupling has a large diameter flange on the sleeve to aid gripping while the user wears heavy gloves. EPDM seals are standard, and can be used with steam at temperatures up to 350°F. Options are BSPP threads, sleeve lock, EPDM seals for use with steam at temperatures above 350°F and fluorocarbon seals.

Part No.	Thread Size NPTF	Dimensions			Part No.	Thread Size NPTF	Dimensions			
		A	B	Across Flats			C	D	E	HEX
B3-H21Y	3/8-18	2.56	1.75	0.88	B3-K21-192	3/8-18	1.76	1.01	0.61	0.88

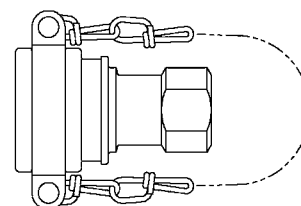
E = Exposed length when connected



### Release Clamp with Chain

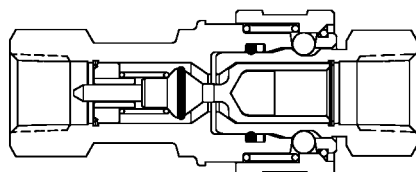
When fluid lines may be subjected to a damaging pull, couplings can be mounted to disconnect automatically, sealing both ends of a line against fluid loss. The socket sleeve can be anchored to a stationary bracket, either directly or with a chain. Excessive pull on the plug end of the line moves the socket body forward relative to the sleeve, and the plug is released without damage to the line. Release Clamp Assembly Kits are available for Series 1-HK through 8-HKP sockets.

Series	Kit Part No.
1-HK	1-HRC-K
2-HK	2-HRC-K
3-HK	3-HRC-K
4-HKP	4-HRC-K
6-HKP	6-HRC-K
8-HKP	8-HRC-K



### Bleeder-Style Plugs & One-Way Shut-Off Conversion Via (VAA)

Bleeder-style plugs can be used on air lines to prevent hose whip when disconnecting a line by reducing the exhaust velocity of air. Bleeder-style plugs can be used on hydraulic lines to prevent static pressure from building up in disconnected lines. Valves of these plugs are manufactured such that a small leak path exists when the plug is disconnected. Bleeder-style plugs are available in Series 1-HK through 6-HKP.

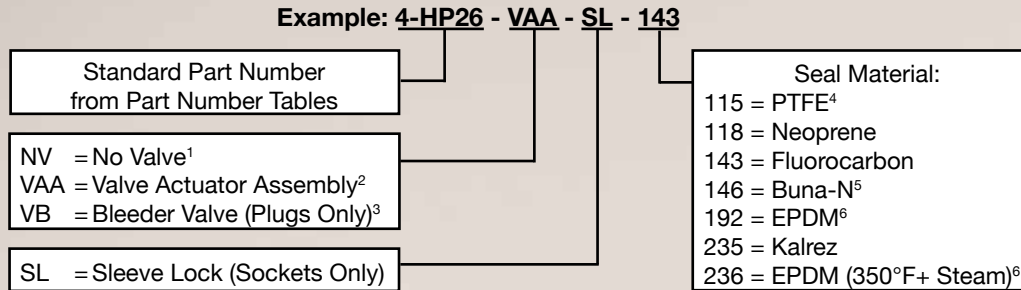


Typical use of VAA option with series HK

Series	Plug Part No.	Valve Actuator
1-HK	B1-K11-VB	B1-K11-VAA
2-HK	B2-K16-VB	B2-K16-VAA
2-HK	2-K16C-VB	2-K16C-VAA
3-HK	B3-K21-VB	B3-K21-VAA
3-HK	3-K21-VB	3-K21-VAA
3-HK	3-K21C-VB	3-K21C-VAA
4-HKP	4-KP26-VB	4-KP26-VAA
6-HKP	B6-KP31-VB	B6-KP31-VAA
6-HKP	6-KP31-VB	6-KP31-VAA

**SPECIAL ORDERING INSTRUCTIONS FOR HK SERIES**

How to build a socket or plug part number with options:



Notes:

- 1) The NV option should be specified for a socket and a plug when a non-valved coupling is desired. Non-valved Series 1-HK through 8-HKP plugs do not contain seals. Do not specify a seal material.
- 2) The VAA option should be specified for either a socket or a plug when a one-way coupling is desired. (Not available for series 10-HK)
- 3) The VB option can be ordered for Series 1-HK through 6-HKP plugs to prevent pressure build-up in disconnected hydraulic lines or to reduce hose whip when disconnecting pneumatic lines.
- 4) Series HK couplings are designed for use with elastomer seals. PTFE is not an elastomer. It is rigid and not resilient. Couplings with PTFE seals may leak and/or be difficult to connect. Force to connect may be reduced by heating connected couplings in hot water; then, cooling before disconnecting. PTFE seals are available for Series 1-HK through 8-HKP, except Series P2-HK.
- 5) The 146 seal option may be specified for fuels and hydraulic fluids that are known to cause standard Buna-N seals to swell excessively.
- 6) The 236 EPDM seal option should be ordered for use with steam at or above 350° F. The 192 EPDM seal option should be ordered for hot water above 180° F and steam below 350° F.
- 7) Some part numbers may be subject to minimum order quantities and/or available only by special quotation. Consult your local distributor.
- 8) High Impulse – The high strength steel and heat treatment used to give increased resistance to “brinelling” (indentations by locking balls in the plug groove).

**VISIT [WWW.TUTHILL.COM](http://WWW.TUTHILL.COM) FOR A COMPLETE LISTING OF PARTS, INFORMATION DOWNLOADS AND MORE!**

