

HQC Series

Instrumentation Quick Couplings



quick couplings

For Your Safety

It is solely the responsibility of the system designer and user to select products suitable for their specific application requirements and to ensure proper installation, operation, and maintenance of these products. When selecting products, the total system design must be considered to ensure safe, trouble-free performance. Material compatibility, product ratings and application details should be considered in the selection. Improper selection or use of products described herein can cause personal injury or property damage.

Contact your authorized HOKE® sales and service representative for information about additional sizes and special alloys.

SAFETY WARNING:

HOKE® products are designed for installation only by professional suitably qualified licensed system installers experienced in the applications and environments for which the products are intended. These products are intended for integration into a system. Where these products are to be used with flammable or hazardous media, precautions must be taken by the system designer and installer to ensure the safety of persons and property. Flammable or hazardous media pose risks associated with fire or explosion, as well as burning, poisoning or other injury or death to persons and/or destruction of property. The system designer and installer must provide for the capture and control of such substances from any vents in the product(s). The system installer must not permit any leakage or uncontrolled escape of hazardous or flammable substances. The system operator must be trained to follow appropriate precautions and must inspect and maintain the system and its components including the product(s) and at regular intervals in accordance with timescales recommended by the supplier to prevent unacceptable wear or failure.



HQC Series

Instrumentation Quick Couplings



Typical Applications

- Laboratories
- University labs
- Gas distribution
- Biopharmaceutical

Technical Data

CONSTRUCTION	316 Stainless steel*
NOMINAL FLOW SIZES	1/4", 3/8", 1/2"
MAXIMUM OPERATING TEMPERATURE	3600 psi
C _V FACTORS	.31 - 1.86

^{*} Other Alloys available - consult factory.

Features & Benefits

- Leak tight sealing is achieved through multiple o-ring seals located in the couplers. Viton® is standard.
- Poppet valves with dependable, integral o-ring seals are standard in coupler and plug in doubleend-shutoff applications. In single-end-shutoff applications the poppet valve is installed in the body half.
- Valve guides align valves exactly to the coupler's valve seat preventing chance of leakage when in a disconnected mode.
- Locking mechanisms in bodies provide smooth positive sleeve engagement. A firm grip of the plug portion of the coupling assembly is assured with HOKE®'s Xylan®-coated stainless locking tabs.

 - 316 stainless steel springs
 GYROLOK® nut and ferrule system provides leaktight end connection.
 - Keyed sleeves for all sizes
 - HOKE® HQC Series quick couplers are interchangeable with Swagelok® and Parker®.
 - Special High Tolerance NPT Thread

Rated Working Pressure (psi)

	STAINLES	S STEEL P	RODUCTS
BODY SIZE	1/4"	¾″	1/2"
CONNECTED POSITION	3600	1500	750
DISCONNECTED POSITION	3600	1500	750
CONNECT UNDER PRESSURE	250	250	250

Spillage/Air Inclusion

	AIR INCLUSION	SPILLAGE
HQC4	0.3 cm ³	0.3 cm ³
HQC6	1.0 cm ³	1.0 cm ³
HQC8	3.0 cm ³	3.0 cm ³

Materials of Construction

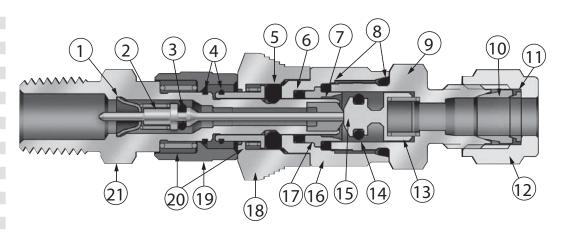
MACHINED PARTS	ľ
SPRING AND RETAINING RINGS	ı
SEALS	

STAINLESS STEEL PRODUCTS Stainless Steel AISI type 316 Stainless Steel AISI type 316 O-rings: Viton® is standard +20° F to +400° F

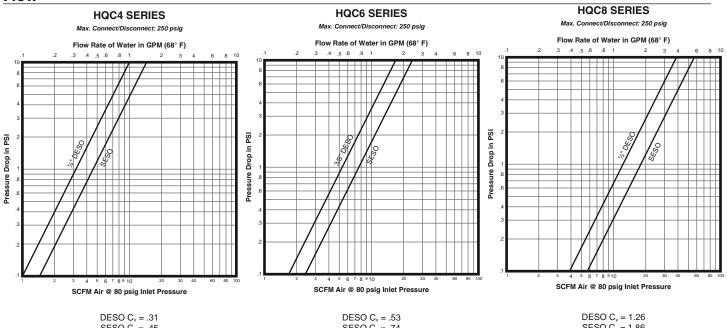
ADDI	ADDITIONAL SEAL OPTIONS						
OPTION	MATERIAL	TEMP LIMIT					
-203	KALREZ	+20°F to +500°F					
-204	EPDM	-50°F to +300°F					
-205	BUNA-N	0°F to +250°F					
-206	NEOPRENE	-20°F to +300°F					

Standard seal lubrication is Krytox®.

1	Spider
2	Poppet
3	
	O-ring
4	Retaining ring
5	Locking tabs
6	Plug seal
7	Poppet guide
8	O-rings
9	Body
10	GYROLOK® front ferrule
11	GYROLOK® rear ferrule
12	GYROLOK® nut
13	Spring
14	O-ring
15	Poppet
16	Body housing
17	Body seat
18	Body sleeve
19	Plug sleeve
20	Spring
21	Plug



Flow



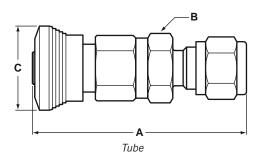
SESO $C_v = .45$ MAXIMUM FLOW RATE 4 GPM

SESO $C_v = .74$ MAXIMUM FLOW RATE 6 GPM $\begin{array}{c} \text{DESO } C_{\nu} = 1.26 \\ \text{SESO } C_{\nu} = 1.86 \\ \text{MAXIMUM FLOW RATE 10 GPM} \end{array}$

Dimensions: Body Assemblies with Valves

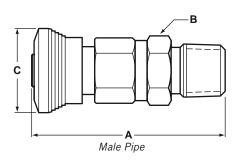
Tube

SERIES	BODY SIZE	TUBE SIZE	PART NO.	Α	B HEX	C
HQC4	1/4	⅓	HQC4-B-2-316	2.18	0.63	0.88
HQC4	1/4	1/4	HQC4-B-4-316	2.22	0.63	0.88
HQC4	1/4	6mm	HQC4-B-6M0-316	56.4mm	16.0mm	22.4mm
HQC6	¾	3/8	HQC6-B-6-316	2.70	0.75	1.00
HQC6	¾	10mm	HQC6-B-10M0-316	68.6mm	19.1mm	25.4mm
HQC8	1/2	1/2	HQC8-B-8-316	3.24	0.94	1.13
HQC8	1/2	12mm	HQC8-B-12MO-316	82.3mm	23.9mm	28.7mm



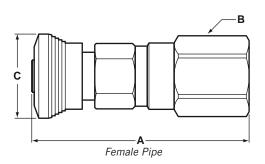
Male Pipe

SERIES	BODY SIZE	PIPE Thread	PART NO.	Α	B HEX	С
HQC4	1/4	⅓ NPT	HQC4-B-2M-316	1.83	0.63	0.88
HQC4	1/4	1/4 NPT	HQC4-B-4M-316	2.01	0.63	0.88
HQC4	1/4	1/4 BSPT	HQC4-B-4MT-316	2.01	0.63	0.88
HQC6	¾	1/4 NPT	HQC6-B-4M-316	2.43	0.75	1.00
HQC6	%	% NPT	HQC6-B-6M-316	2.43	0.75	1.00
HQC6	¾	% BSPT	HQC6-B-6MT-316	2.43	0.75	1.00
HQC8	1/2	½ NPT	HQC8-B-8M-316	2.83	0.94	1.13
HQC8	1/2	½ BSPT	HQC8-B-8MT-316	2.83	0.94	1.13
HQC6 HQC8	3/8 1/2	% BSPT ½ NPT	HQC6-B-6MT-316 HQC8-B-8M-316	2.43 2.83	0.75 0.94	1.0



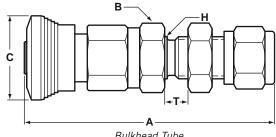
Female Pipe

SERIES	BODY SIZE	PIPE Thread	PART NO.	Α	B HEX	С
HQC4	1/4	⅓ NPT	HQC4-B-2F-316	2.10	0.63	0.88
HQC4	1/4	1/4 NPT	HQC4-B-4F-316	2.26	0.75	0.88
HQC4	1/4	1/4 BSPT	HQC4-B-4FT-316	2.26	0.75	0.88
HQC6	¾	1/4 NPT	HQC6-B-4F-316	2.60	0.75	1.00
HQC6	%	% NPT	HQC6-B-6F-316	2.63	0.88	1.00
HQC6	¾	% BSPT	HQC6-B-6FT-316	2.63	0.88	1.00
HQC8	1/2	½ NPT	HQC8-B-8F-316	3.25	1.06	1.13
HQC8	1/2	½ BSPT	HQC8-B-8FT-316	3.25	1.06	1.13



Bulkhead Tube

SERIES	BODY SIZE	TUBE SIZE	PART NO.	Α	B HEX	C
HQC4	1/4	1/4	HQC4-B1-4-316	2.59	0.63	0.88
HQC4	1/4	6mm	HQC4-B1-6M0-316	65.8mm	16.0mm	22.4mm
HQC6	¾	3/8	HQC6-B1-6-316	3.02	0.75	1.00
HQC6	3/8	10mm	HQC6-B1-10M0-316	76.7mm	19.1mm	25.4mm

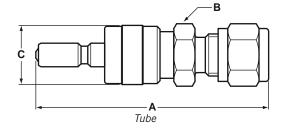


Bulkhead Tube For 'H' and 'T' dimensions, see page 5

Note: All dimensions in inches unless specified as 'mm' (millimeters).

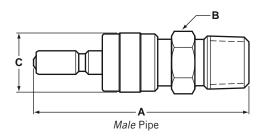
Dimensions: Plugs, Non-valved, Single End Shutoff (SESO)

Tube SERIES **TUBE SIZE BODY SIZE** PART NO. **B HEX** 0.62 HQC4 HQC4-S-2-316 2.95 0.56 HQC4 1/4 0.56 1/4 HQC4-S-4-316 2.42 0.62 HQC4 1/4 6mm HQC4-S-6MO-316 79.2mm 14.2mm 15.7mm HQC6 % HQC6-S-6-316 2.60 0.69 0.74 HQC6 10mm HQC6-S-10M0-316 67.1mm 19.1mm 18.8mm HQC8 1/2 1/2 HQC8-S-8-316 3.15 0.88 0.88 HQC8 1/2 12mm HQC8-S-12MO-316 100.1mm 22.4mm 22.4mm



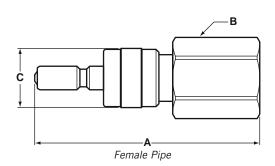
Male Pipe

		PIPE				
SERIES	BODY SIZE	THREAD	PART NO.	Α	B HEX	C
HQC4	1/4	⅓ NPT	HQC4-S-2M-316	2.06	0.56	0.62
HQC4	1/4	1/4 NPT	HQC4-S-4M-316	2.24	0.56	0.62
HQC4	1/4	1/4 BSPT	HQC4-S-4MT-316	2.24	0.56	0.62
HQC6	¾	1/4 NPT	HQC6-S-4M-316	2.33	0.75	0.74
HQC6	%	% NPT	HQC6-S-6M-316	2.33	0.75	0.74
HQC6	¾	% BSPT	HQC6-S-6MT-316	2.33	0.75	0.74
HQC8	1/2	½ NPT	HQC8-S-8M-316	2.87	0.88	0.88
HQC8	1/2	½ BSPT	HQC8-S-8MT-316	2.87	0.88	0.88



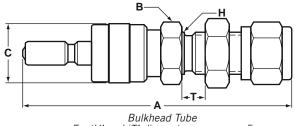
Female Pipe

SERIES	BODY SIZE	PIPE Thread	PART NO.	Α	B HEX	С
HQC4	1/4	⅓ NPT	HQC4-S-2F-316	2.21	0.56	0.62
HQC4	1/4	1/4 NPT	HQC4-S-4F-316	2.34	0.75	0.62
HQC4	1/4	1/4 BSPT	HQC4-S-4FT-316	2.34	0.75	0.62
HQC6	%	1/4 NPT	HQC6-S-4F-316	2.51	0.75	0.74
HQC6	3%	% NPT	HQC6-S-6F-316	2.53	0.88	0.74
HQC6	3%	% BSPT	HQC6-S-6FT-316	2.53	0.88	0.74
HQC8	1/2	½ NPT	HQC8-S-8F-316	3.12	1.06	0.88
HQC8	1/2	½ BSPT	HQC8-S-8FT-316	3.12	1.06	0.88



Bulkhead Tube

SERIES	BODY SIZE	TUBE SIZE	PART NO.	Α	B HEX	C
HQC4	1/4	1/4	HQC4-S1-4-316	2.80	0.56	0.62
HQC4	1/4	6mm	HQC4-S1-6M0-316	88.8mm	14.2mm	15.7mm
HQC6	¾	3/8	HQC6-S1-6-316	3.24	0.69	0.74
HQC6	¾	10mm	HQC6-S1-10M0-316	82.3mm	19.1mm	18.8mm

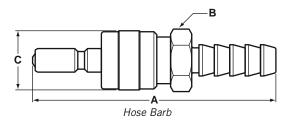


Bulkhead Tube For 'H' and 'T' dimensions, see page 5

Hose Barb

SERIES	BODY SIZE	HOSE	PART NO.	Α	B HEX	C	
HQC6	¾	¾	HQC6-S-6H-316	2.66	0.69	0.74	

Note: All dimensions in inches unless specified as 'mm' (millimeters).

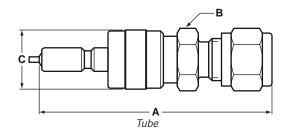




Dimensions: Plugs, Valved, Double End Shutoff (DESO)

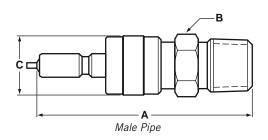
Tube

SERIES	BODY SIZE	TUBE SIZE	PART NO.	Α	B HEX	C
HQC4	1/4	⅓	HQC4-D-2-316	2.95	0.56	0.62
HQC4	1/4	1/4	HQC4-D-4-316	2.42	0.56	0.62
HQC4	1/4	6mm	HQC4-D-6M0-316	79.2mm	14.2mm	15.7mm
HQC6	¾	3/8	HQC6-D-6-316	2.60	0.69	0.74
HQC6	¾	10mm	HQC6-D-10M0-316	67.1mm	19.1mm	18.8mm
HQC8	1/2	1/2	HQC8-D-8-316	3.15	0.88	0.88
HQC8	1/2	12mm	HQC8-D-12M0-316	100.1mm	22.4mm	22.4mm



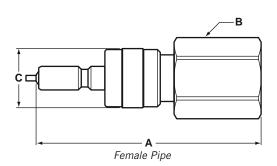
Male Pipe

SERIES	BODY SIZE	PIPE Thread	PART NO.	A	B HEX	С
HQC4	1/4	⅓ NPT	HQC4-D-2M-316	2.06	0.56	0.62
HQC4	1/4	1/4 NPT	HQC4-D-4M-316	2.24	0.56	0.62
HQC4	1/4	1/4 BSPT	HQC4-D-4MT-316	2.24	0.56	0.62
HQC6	%	1/4 NPT	HQC6-D-4M-316	2.34	0.75	0.74
HQC6	%	% NPT	HQC6-D-6M-316	2.34	0.75	0.74
HQC6	¾	% BSPT	HQC6-D-6MT-316	2.34	0.75	0.74
HQC8	1/2	½ NPT	HQC8-D-8M-316	2.87	0.88	0.88
HQC8	1/2	½ BSPT	HQC8-D-8MT-316	2.87	0.88	0.88



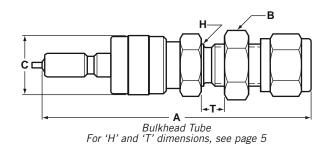
Female Pipe

SERIES	BODY SIZE	PIPE Thread	PART NO.	Α	B HEX	C
HQC4	1/4	⅓ NPT	HQC4-D-2F-316	2.21	0.56	0.62
HQC4	1/4	1/4 NPT	HQC4-D-4F-316	2.34	0.75	0.62
HQC4	1/4	1/4 BSPT	HQC4-D-4FT-316	2.34	0.75	0.62
HQC6	3∕8	1/4 NPT	HQC6-D-4F-316	2.51	0.75	0.74
HQC6	¾	% NPT	HQC6-D-6F-316	2.53	0.88	0.74
HQC6	3∕8	% BSPT	HQC6-D-6FT-316	2.53	0.88	0.74
HQC8	1/2	½ NPT	HQC8-D-8F-316	3.12	1.06	0.88
HQC8	1/2	½ BSPT	HQC8-D-8FT-316	3.12	1.06	0.88



Bulkhead Tube

SERIES	BODY SIZE	TUBE SIZE	PART NO.	Α	B HEX	C
HQC4	1/4	1/4	HQC4-D1-4-316	2.80	0.56	0.62
HQC4	1/4	6mm	HQC4-D1-6M0-316	88.8mm	14.2mm	15.7mm
HQC6	¾	3/8	HQC6-D1-6-316	3.24	0.69	0.74
HQC6	¾	10mm	HQC6-D1-10M0-316	82.3mm	19.1mm	18.8mm



Note: All dimensions in inches unless specified as 'mm' (millimeters).

HOKE Color-Coded Keyed Quick Couplers

HOKE® keyed quick couplers will fit only mating keyed components, preventing accidental mixing of fluid or pressure lines.

Body and plug assemblies are numbered and color-coded for positive identification.

HOKE® keyed HQC Series quick couplers are interchangeable with Swagelok® and Parker® components of the same style. For example, the HOKE® K1 body sleeve will fit a Swagelok® K1 plug sleeve of the same size.



KEY		HQC4		HG	106	HQ	108
NUMBER	COLOR	BODY SLEEVE O.D.	PLUG SLEEVE O.D.	BODY SLEEVE O.D.	PLUG SLEEVE O.D.	BODY SLEEVE O.D.	PLUG SLEEVE O.D.
K1	Black	0.96	0.82	1.13	0.99	1.26	1.10
K2	Orange	0.99	0.85	1.16	1.02	1.29	1.14
K3	Green	1.02	0.88	1.19	1.05	1.32	1.17
K4	Yellow	1.05	0.91	1.22	1.08	1.35	1.20
K5	Blue	1.08	0.94	1.24	1.11	1.38	1.23
K6	White	1.11	0.97	1.28	1.14	1.41	1.26
K7	Purple	1.14	1.00	1.31	1.17	1.44	1.29
K8	Brown	1.17	1.03	1.34	1.20	1.47	1.32

Keys K1–K5 are standard stock items. For keys K6–K8, consult the factory.

Color Coded "key" labels rated for use in temp -65°F to +160°F.

Panel Mount Dimensions

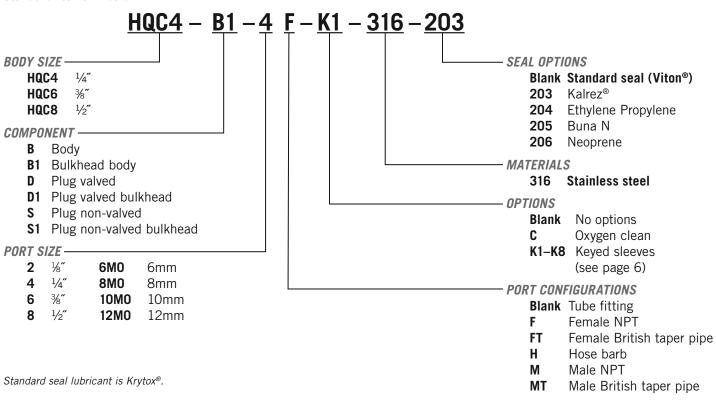
from Bulkhead drawings on pages 2, 3, and 4

	BULKHEAD SIZE	H Panel Hole	T Panel Thickness
	⅓″ GYROLOK®	0.328"	0.250" max.
HQC4	1/4" GYROLOK®	0.469"	0.250" max.
	6mm GYROLOK®	11.9mm	6.3mm max
	1/4" GYROLOK®	0.469"	0.250" max.
HQC6	%" GYROLOK®	0.594"	2.70" max.
	10mm GYROLOK®	15.1mm	6.9mm max.
HQC8	½" GYROLOK®	0.781"	0.260" max.



How to Order

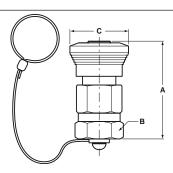
Standard items in bold.



Accessories

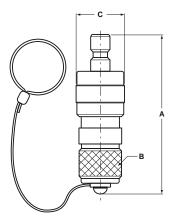
Dust Caps

	BODY				
SERIES	SIZE	PART NO.	Α	B HEX	C
HQC4	1/4	HQC4-C-316	1.45	0.63	0.88
HQC6	3/8	HQC6-C-316	1.45	0.75	1.00
HQC8	1/2	HQC8-C-316	1.65	0.94	1.13



Dust Plugs

SERIES	BODY SIZE	PART NO.	Α	в нех	С
HQC4	1/4	HQC4-P-316	1.88	0.57	0.62
HQC6	¾	HQC6-P-316	1.98	0.63	0.74
HQC8	1/2	HQC8-P-316	2.25	0.75	0.88



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Notes		



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