

# Quick Connectors for Q-series

**Hy-Lok**



#### APPLICATIONS

- Gauge Calibration
- Sampling System
- Portable Test Equipment
- Laboratory Equipment
- Gas Distribution
- Biopharmaceutical

#### DESIGN AND ENGINEERING

- End Connection Size from 1/4" ~ 1/2" - Q Series

WORKING PRESSURE  
up to 3,000psig (206bar)

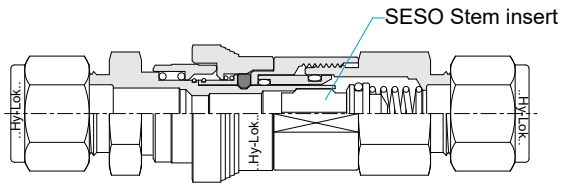
TEMPERATURE RATING  
-10 °F ~ 400 °F (-23 °C ~ 204 °C)  
with FKM O-Ring

- Long Life cycle

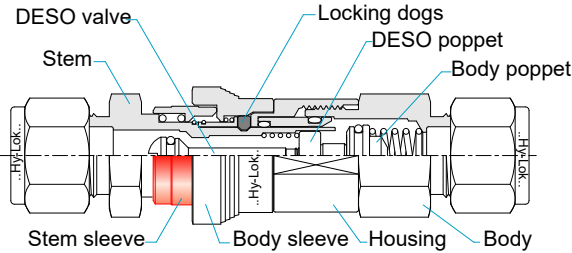
**FLOWTEKNIK**  
SCANDINAVIA APS



## Q Series



← Flow Direction  
Single-End Shut-Off (SESO)



Double-End Shut-Off (DESO) - Red Stem Sleeve

## Technical Data

### Materials of Construction

Description	Material	
	316 SS	Brass
Locking dogs	PTFE -coated 316SS powdered metal	
SESO stem sleeve	316 SS	Brass
DESO stem sleeve	Polyurethane enamel coated 316	Polyurethane enamel coated brass
Body sleeve	316 SS	Brass
Snap rings	Stainless Steel	
Springs*	Stainless Steel	
O-rings*	FKM	
SESO stem insert*	316 SS	Brass
Body poppet, Body insert*	316 SS	Brass
DESO valve, DESO poppet*	316 SS	Q1:316 SS Q2,Q3:Brass
Body, housing, stem*	316 SS	Brass

Note : "\*" marked are wetted parts, Lubricant is silicone based.

### CAUTION

Single-end quick connectors MUST be depressurized prior to disconnection.

### Operational Recommendations of Hy-Lok Quick Connectors

- Use filters in front of quick connectors.
- Protect uncoupled body and stem with body and stem protectors or dust caps.
- Keep body and stem aligned when coupling and uncoupling.
- Couple and uncouple the quick connectors at room temperature.
- Couple and uncouple the quick connectors during system cleaning operation.
- Support hanging hoses or other equipments to prevent side load.
- Re-lubricate stem seal o-ring periodically.

## Features & Benefits

- Easy to use
- Minimum equipment shutdown.
- No tools required to make or break a connection.
- No probability of cross threading, galling, under or over-tightening.
- Interchangeable with same type of Swagelok, Parker, Hoke and TOMCO components.
- Single End Shut Off (SESO) - This Quick Connector style features Body Only Shut off. Stem is open to atmosphere when disconnected.
- Double End Shut Off (DESO) - This Quick Connector style features both body and stem shut off at disconnection with a minimal amount of spillage and air inclusion.

## Pressure-Temperature Ratings

Temperature °F (°C)	316 SS			Brass		
	Q1	Q2	Q3	Q1	Q2	Q3
Pressure Rating, psig(bar)						
Coupled						
70(20)	3000 (206)	1500 (103)	750 (52)	2000 (137)	1000 (69)	500 (34)
400 (204)	250 (17)					
Uncoupled and When Coupling and Uncoupling						
70 (20)	250 (17)					

## Option of O-Ring Materials

Various O-ring materials, available temperature ratings are shown below.

Material	Temperature Rating
NBR	-10°F to 250°F (-23°C to 121°C)
FFKM	-10°F to 500°F (-23°C to 260°C)
Neoprene	-40°F to 250°F (-40°C to 121°C)
Ethylene Propylene	-50°F to 300°F (-46°C to 149°C)

## Spillage and Air Inclusion

Series	Spillage cm <sup>3</sup>	Air Inclusion cm <sup>3</sup>
Q1	0.3	0.3
Q2	1.0	1.0
Q3	3.0	3.0

Spillage - Spillage is the amount of system fluid that is emitted when a quick connector is uncoupled (DESO only)

Air Inclusion - Air inclusion is the amount of air trapped between the body and stem that enters the system when a quick connector is coupled (DESO only)

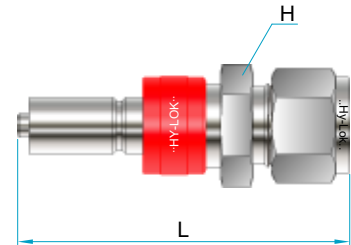
## Maximum Flow Cv Rate at 70 °F (20 °C)

Series	Water Flow u.s. gal/min (L/min)
Q1	4 (15.1)
Q2	6 (22.7)
Q3	10 (37.8)

## Stems

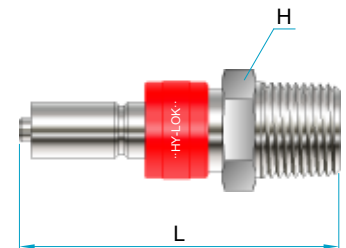
### Hy-Lok Tube Fitting

Part No.		Tube O.D	Series	Flow Coefficient(Cv)		Dimensions					
SESO	DESO			SESO	DESO	L				H	
						mm		in.		Width across flat	
Q1SSH- 2T	Q1DSH- 2T	1/8"	Q1	0.08	0.08	58.9	2.32	60.4	2.77	15.8	5/8
Q1SSH- 4T	Q1DSH- 4T	1/4"	Q1	0.30	0.20	59.9	2.36	61.5	2.42	15.8	5/8
Q2SSH- 6T	Q2DSH- 6T	3/8"	Q2	1.00	0.50	64.0	2.52	67.1	2.64	19.1	3/4
Q3SSH- 8T	Q3DSH- 8T	1/2"	Q3	2.40	1.50	75.2	2.96	80.3	3.16	23.8	15/16
Q1SSH- 6M	Q1DSH- 6M	6mm	Q1	0.30	0.20	59.9	2.36	61.5	2.42	15.8	5/8
Q2SSH-10M	Q2DSH-10M	10mm	Q2	1.00	0.50	67.3	2.65	70.4	2.79	19.1	3/4
Q3SSH-12M	Q3DSH-12M	12mm	Q3	2.40	1.50	75.2	2.96	80.3	3.16	23.8	15/16



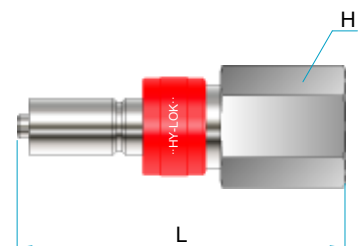
### Male Pipe Threads

Part No.		Pipe Size	Series	Flow Coefficient(Cv)		Dimensions					
SESO	DESO			SESO	DESO	L				H	
						mm		in.		Width across flat	
Q1SSM-2N	Q1DSM-2N	1/8-27 NPT	Q1	0.3	0.2	52.6	2.07	54.1	2.13	15.8	5/8
Q1SSM-4N	Q1DSM-4N	1/4-18 NPT	Q1	0.3	0.2	56.4	2.22	57.9	2.28	15.8	5/8
Q2SSM-4N	Q2DSM-4N	1/4-18 NPT	Q2	0.9	0.5	58.9	2.32	61.9	2.44	19.1	3/4
Q2SSM-6N	Q2DSM-6N	3/8-18 NPT	Q2	0.8	0.5	59.7	2.35	62.7	2.47	19.1	3/4
Q3SSM-8N	Q3DSM-8N	1/2-14 NPT	Q3	2.0	1.3	72.1	2.84	77.2	3.04	23.8	15/16
Q1SSM-4R	Q1DSM-4R	R 1/4	Q1	0.3	0.2	56.4	2.22	57.9	2.28	15.8	5/8
Q2SSM-6R	Q2DSM-6R	R 3/8	Q2	0.8	0.5	59.7	2.35	62.7	2.47	19.1	3/4
Q3SSM-8R	Q3DSM-8R	R 1/2	Q3	2.0	1.3	72.1	2.84	77.2	3.04	23.8	15/16



### Female Pipe Threads

Part No.		Pipe Size	Series	Flow Coefficient(Cv)		Dimensions					
SESO	DESO			SESO	DESO	L				H	
						mm		in.		Width across flat	
Q1SSF-2N	Q1DSF-2N	1/8-27 NPT	Q1	0.3	0.2	51.1	2.01	52.6	2.07	15.8	5/8
Q1SSF-4N	Q1DSF-4N	1/4-18 NPT	Q1	0.3	0.2	57.4	2.26	58.9	2.32	19.1	3/4
Q2SSF-4N	Q2DSF-4N	1/4-18 NPT	Q2	0.9	0.5	59.7	2.35	62.7	2.47	19.1	3/4
Q2SSF-6N	Q2DSF-6N	3/8-18 NPT	Q2	0.8	0.5	59.7	2.35	62.7	2.47	22.2	7/8
Q3SSF-8N	Q3DSF-8N	1/2-14 NPT	Q3	2.0	1.3	71.6	2.82	76.7	3.02	26.9	1 1/16
Q1SSF-4R	Q1DSF-4R	Rc 1/4	Q1	0.3	0.2	57.4	2.26	58.9	2.32	19.1	3/4
Q2SSF-6R	Q2DSF-6R	Rc 3/8	Q2	0.8	0.5	59.7	2.35	62.7	2.47	22.2	7/8
Q3SSF-8R	Q3DSF-8R	Rc 1/2	Q3	2.0	1.3	71.6	2.82	76.7	3.02	26.9	1 1/16



Red colored stem sleeve : DESO type

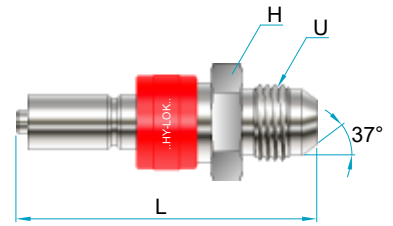
Dimensions shown with Hy-Lok nuts in finger-tight position, where applicable.

All dimensions are in millimeters unless otherwise specified. Dimensions are for reference only, subject to change.

# Instrumentation Quick Connectors

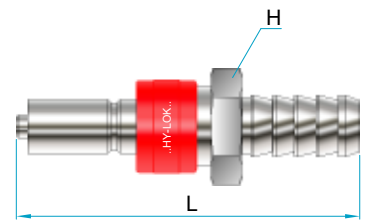
## 37° Flared Tube Fitting

Part No.		Tube O.D	Series	U (UNF)	Flow Coefficient (Cv)		Dimensions					
SESO	DESO				SESO	DESO	L				H	
							mm		in.		Width across flat	
Q1SS3F-4T	Q1DS3F-4T	1/4"	Q1	7/16-20	0.3	0.2	56.1	2.21	57.7	2.27	15.8	5/8
Q2SS3F-6T	Q2DS3F-6T	3/8"	Q2	9/16-18	1.0	0.5	58.8	2.31	61.9	2.44	19.1	3/4
Q3SS3F-8T	Q3DS3F-8T	1/2"	Q3	3/4 -16	2.4	1.5	70.1	2.76	75.2	2.96	23.8	15/16



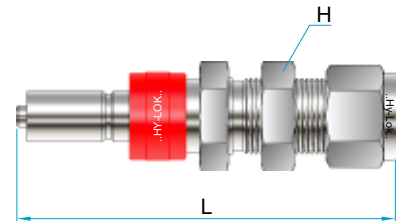
## Hose Barb Fitting

Part No.		Hose I.D	Series	Flow Coefficient (Cv)		Dimensions					
SESO	DESO			SESO	DESO	L				H	
						mm		in.		Width across flat	
Q1SSHB-4T	Q1DSHB-4T	1/4"	Q1	0.3	0.2	62.2	2.45	63.8	2.51	15.8	5/8
Q2SSHB-6T	Q2DSHB-6T	3/8"	Q2	1.0	0.5	66.8	2.63	69.9	2.75	19.1	3/4
Q3SSHB-8T	Q3DSHB-8T	1/2"	Q3	2.0	1.3	77.3	3.04	82.4	3.24	23.8	15/16



## Hy-Lok Bulkhead Tube Fitting

Part No.		Tube O.D	Series	Dimensions									
SESO	DESO			L				Min Panel Hole Dia		Max Panel Thickness		H	
				mm		in.		mm		in.		Width across flat	
Q1SSBH- 4T	Q1DSBH- 4T	1/4"	Q1	69.6	2.74	71.1	2.80	11.9	15/32	6.4	0.25	15.8	5/8
Q2SSBH- 6T	Q2DSBH- 6T	3/8"	Q2	74.2	2.92	78.0	3.27	15.1	19/32	6.9	0.27	19.1	3/4
Q3SSBH- 8T	Q3DSBH- 8T	1/2"	Q3	87.1	3.43	92.2	3.63	19.8	25/32	6.6	0.26	23.8	15/16
Q1SSBH- 6M	Q1DSBH- 6M	6mm	Q1	69.6	2.74	71.1	2.80	11.9	29/64	6.4	0.25	15.8	5/8
Q2SSBH-10M	Q2DSBH-10M	10mm	Q2	77.7	3.06	78.7	3.10	16.7	21/32	6.9	0.27	22.0	-
Q3SSBH-12M	Q3DSBH-12M	12mm	Q3	87.1	3.43	92.2	3.63	19.6	49/64	6.6	0.26	23.8	15/16



## Insertion Depth

Series	Depth			
	SESO		DESO	
	mm	in.	mm	in.
Q1	27.7	1.09	29.2	1.15
Q2	30.0	1.18	33.0	1.30
Q3	37.6	1.48	42.7	1.68

To calculate overall length in the coupled position, subtract the insertion depth from any overall stem and body combination length.

Red colored stem sleeve : DESO type

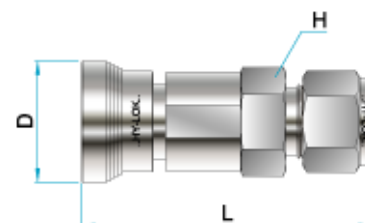
Dimensions shown with Hy-Lok nuts in finger-tight position, where applicable.

All dimensions are in millimeters unless otherwise specified. Dimensions are for reference only, subject to change.

## Bodies

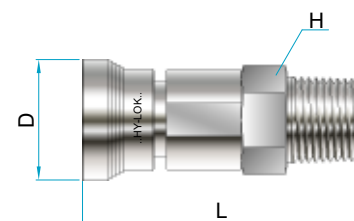
### Hy-Lok Tube Fitting

Part No.	Tube O.D	Series	L		D		H Width across flat	
			mm	in.	mm	in.	mm	in.
Q1BH - 2T	1/8"	Q1	57.4	2.26	23.1	0.91	15.8	5/8
Q1BH - 4T	1/4"	Q1	58.4	2.30	23.1	0.91	15.8	5/8
Q2BH - 6T	3/8"	Q2	65.5	2.58	26.2	1.03	19.1	3/4
Q3BH - 8T	1/2"	Q3	78.5	3.09	30.7	1.21	23.8	15/16
Q1BH - 6M	6mm	Q1	58.4	2.30	23.1	0.91	15.8	5/8
Q2BH - 10M	10mm	Q2	68.1	2.68	26.2	1.03	19.1	3/4
Q3BH - 12M	12mm	Q3	78.5	3.09	30.7	1.21	23.8	15/16



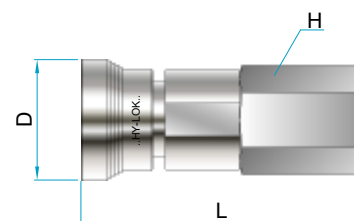
### Male Pipe Threads

Part No.	Pipe Size	Series	L		D		H Width across flat	
			mm	in.	mm	in.	mm	in.
Q1BM - 2N	1/8-27 NPT	Q1	51.1	2.01	23.1	0.91	15.8	5/8
Q1BM - 4N	1/4-18 NPT	Q1	54.9	2.16	23.1	0.91	15.8	5/8
Q2BM - 4N	1/4-18 NPT	Q2	60.5	2.38	26.2	1.03	19.1	3/4
Q2BM - 6N	3/8-18 NPT	Q2	60.5	2.38	26.2	1.03	19.1	3/4
Q3BM - 8N	1/2-14 NPT	Q3	75.4	2.97	30.7	1.21	23.8	15/16
Q1BM - 4R	R 1/4	Q1	54.9	2.16	23.1	0.91	15.8	5/8
Q2BM - 6R	R 3/8	Q2	60.5	2.38	26.2	1.03	19.1	3/4
Q3BM - 8R	R 1/2	Q3	75.4	2.97	30.7	1.21	23.8	15/16



### Female Pipe Threads

Part No.	Pipe Size	Series	L		D		H Width across flat	
			mm	in.	mm	in.	mm	in.
Q1BF - 2N	1/8-27 NPT	Q1	54.9	2.16	23.1	0.91	15.8	5/8
Q1BF - 4N	1/4-18 NPT	Q1	61.5	2.42	23.1	0.91	19.1	3/4
Q2BF - 4N	1/4-18 NPT	Q2	64.5	2.54	26.2	1.03	19.1	3/4
Q2BF - 6N	3/8-18 NPT	Q2	65.3	2.57	26.2	1.03	22.2	7/8
Q3BF - 8N	1/2-14 NPT	Q3	81.8	3.22	30.7	1.21	26.9	1 1/16
Q1BF - 4R	Rc 1/4	Q1	61.5	2.42	23.1	0.91	19.1	3/4
Q2BF - 6R	Rc 3/8	Q2	65.3	2.57	26.2	1.03	22.2	7/8
Q3BF - 8R	Rc 1/2	Q3	81.8	3.22	30.7	1.21	26.9	1 1/16



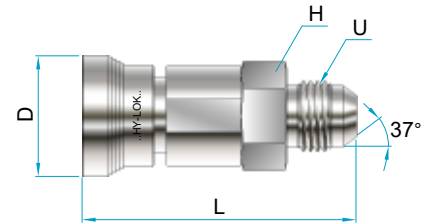
Dimensions shown with Hy-Lok nuts in finger-tight position, where applicable.

All dimensions are in millimeters unless otherwise specified. Dimensions are for reference only, subject to change.

# Instrumentation Quick Connectors

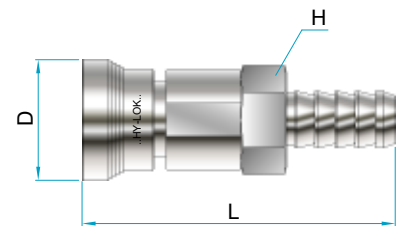
## 37° Flared Tube Fitting

Part No.	Tube O.D	Series	U (UNF)	L		D		H Width across flat	
				mm	in.	mm	in.	mm	in.
Q1B3F-4T	1/4"	Q1	7/16-20	56.6	2.15	23.1	0.91	15.8	5/8
Q2B3F-6T	3/8"	Q2	9/16-18	60.3	2.37	26.2	1.03	19.1	3/4
Q3B3F-8T	1/2"	Q3	3/4 -16	73.4	2.89	30.7	1.21	23.8	15/16



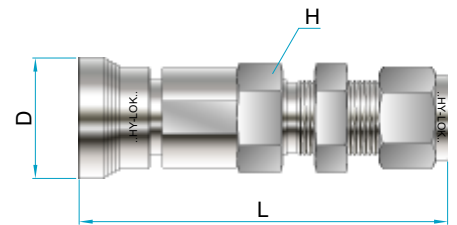
## Hose Barb Fitting

Part No.	Hose I.D	Series	L		D		H Width across flat	
			mm	in.	mm	in.	mm	in.
Q1BHB-4T	1/4"	Q1	60.7	2.39	23.1	0.91	15.8	5/8
Q2BHB-6T	3/8"	Q2	68.3	2.69	26.2	1.03	19.1	3/4
Q3BHB-8T	1/2"	Q3	80.6	3.17	30.7	1.21	23.8	15/16



## Hy-Lok Bulkhead Tube Fitting

Part No.	Tube O.D	Series	L		D		Min Panel Hole Dia		Max Panel Thickness		H Width across flat	
			mm	in.	mm	in.	mm	in.	mm	in.	mm	in.
Q1BBH- 4T	1/4"	Q1	67.8	2.67	23.1	0.91	11.9	15/32	6.4	0.25	15.8	5/8
Q2BBH- 6T	3/8"	Q2	75.7	2.98	26.2	1.03	15.1	19/32	6.9	0.27	19.1	3/4
Q3BBH- 8T	1/2"	Q3	90.4	3.56	30.7	1.21	19.8	25/32	6.6	0.26	23.8	15/16
Q1BBH- 6M	6mm	Q1	67.8	2.67	23.1	0.91	11.9	29/64	6.4	0.25	15.8	5/8
Q2BBH-10M	10mm	Q2	75.9	2.99	26.2	1.03	16.7	21/32	6.9	0.27	22.0	-
Q3BBH-12M	12mm	Q3	90.4	3.56	30.7	1.21	19.6	49/64	6.6	0.26	23.8	15/16



Dimensions shown with Hy-Lok nuts in finger-tight position, where applicable.  
All dimensions are in millimeters unless otherwise specified. Dimensions are for reference only, subject to change.

## Accessory



### Stem Protectors

Part No.	Series	D		H Width across flat	
		mm	in.	mm	in.
Q1SP	Q1	23.1	0.91	15.8	5/8
Q2SP	Q2	26.2	1.03	19.1	3/4
Q3SP	Q3	30.7	1.21	23.8	15/16

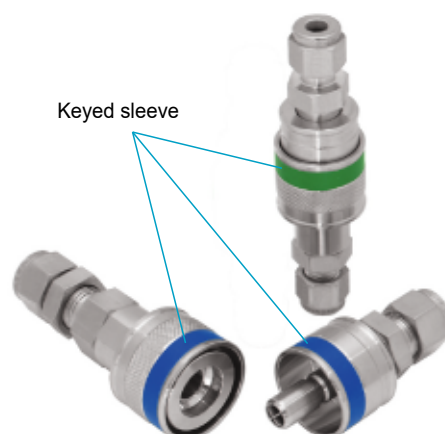
### Body Protectors

Part No.	Series
Q1BP	Q1
Q2BP	Q2
Q3BP	Q3

## Keyed Q Series

### Features

- Keyed quick connectors can prevent accidents caused by intermixing non compatible fluids and gases.
- In addition to being color coded, keyed quick connectors feature a mechanical step making intermixing quick connectors and media virtually impossible.

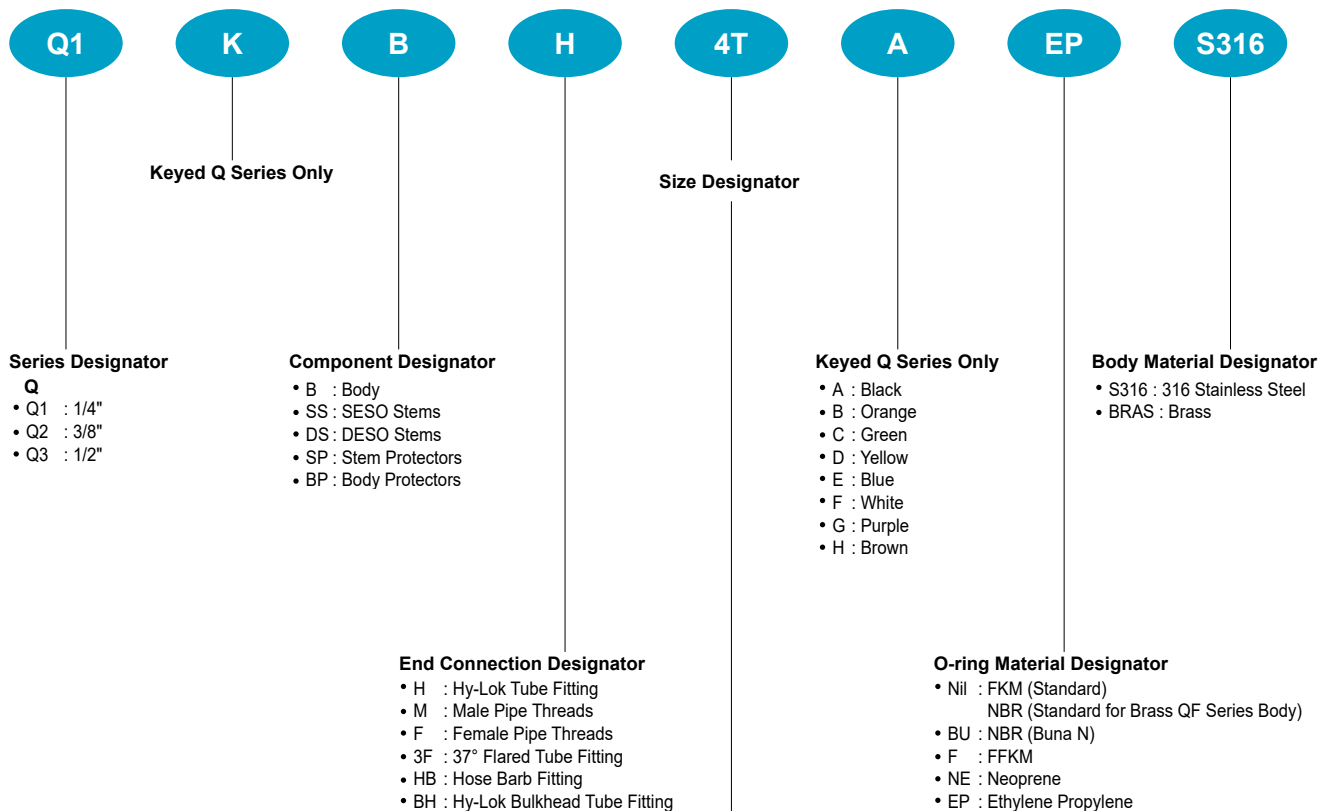


### Q Series Key Numbers and Sleeve Outside Diameter

Key Number	Key Color	Q1				Q2				Q3			
		Body		Stem		Body		Stem		Body		Stem	
		mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
A	Black	24.4	0.96	20.8	0.82	28.7	1.13	25.2	0.99	32.0	1.26	27.9	1.10
B	Orange	25.1	0.99	21.6	0.85	29.5	1.16	25.9	1.02	32.8	1.29	29.0	1.14
C	Green	25.9	1.02	22.4	0.88	30.2	1.19	26.7	1.05	33.5	1.32	29.7	1.17
D	Yellow	26.7	1.05	23.1	0.91	31.0	1.22	27.4	1.08	34.3	1.35	30.5	1.20
E	Blue	27.4	1.08	23.9	0.94	31.5	1.24	28.2	1.11	35.1	1.38	31.2	1.23
F	White	28.2	1.11	24.6	0.97	32.5	1.28	29.0	1.14	35.8	1.41	32.0	1.26
G	Purple	29.0	1.14	25.4	1.00	33.3	1.31	29.7	1.17	36.6	1.44	32.8	1.29
H	Brown	29.7	1.17	26.2	1.03	34.0	1.34	30.5	1.20	37.3	1.47	33.5	1.32

All dimensions are in millimeters unless otherwise specified. Dimensions are for reference only, subject to change.

## Quick Connector Ordering Information



• Tube

Fractional Tube	O.D.	1/4	3/8	1/2
	Designator	4T	6T	8T
Metric Tube	O.D.	8mm	10mm	12mm
	Designator	8M	10M	12M

• Thread

Thread	1/4-18 NPT	3/8-18 NPT	1/2-14 NPT
Designator	4N	6N	8N
Thread	R 1/4	R 3/8	R 1/2
Designator	4R	6R	8R
Thread	G 1/4	G 3/8	G 1/2
Designator	4G	6G	8G



DANMARK  
Metalgangen 13  
DK-2690 Karlslunde  
Danmark  
+(45) 73 84 12 30  
info@pgflowteknik.dk  
www.pgflowteknik.dk

The logo for Indutrade features a stylized 'I' composed of three vertical bars of varying heights, followed by the word 'Indutrade' in a bold, black sans-serif font.

**Indutrade**

PG FLOWTEKNIK SCANDINAVIA - EN DEL AF INDUTRADE