# QUICK CONNECTOR FITTINGS



# Western Valve & Fitting

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No tools required to couple and uncouple.

- Bi-directional flow design.
- Versatile options of both-end shutoff (DV), single-end shutoff (SV), and both end open (HF Series).
  - HQ Series Quick Connector
  - HQM Series Miniature Quick Connector
  - HDF Series Full Flow Quick Connector
  - HQPM PTFE Sealed Quick Connect

#### **HQ Series Quick Connectors**



#### **Features**

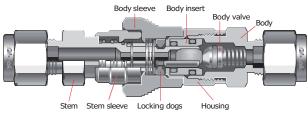
- Bi-directional flow design.
- · Simple to operate.
- SS316 construction with standard FKM O-ring.
- Brass construction with standard NBR O-ring.
- No tools required to couple and uncouple.
- · Compact and light-weight design.

#### Operation

- Coupling
  - 1. Align the stem with the body in the identical Series.
  - 2. Push the stem into the body until it clicks.
- Uncoupling
  - 1. Pull the body sleeve toward stem.
  - 2. Remove stem from body.
- Do not couple or uncouple at pressures exceeding 250 psig (17.2 bar).

Red

#### SV: Single valve coupled



Bi-Directional Flow
Stem has no valve

# Stem Valve Body sleeve Housing Body

Stem sleeve Locking dogs Body insert Body valve

Bi-Directional Flow Stem has valve

DV: Double valve coupled

#### Materials of Construction

Commonant	Material						
Component	SS316	Brass					
Body, Housing Body valve Body insert	SS316/ ASTM A276	JIS H3250 C3604					
Body sleeve							
Locking dogs	Xylan™-coated	SS316 powered					
Stem Stem sleeve Stem valve	SS316 / ASTM A276	JIS H3250 C3604					
O-rings	FKM	NBR					
Springs	SS302/ASTM A313						
Lubricants	Silicon and	TFE based					

Wetted parts indicated in blue.

#### Pressure-Temperature Ratings

HQ Stem and		SS FKM O-rings		Brass NBR O-rings					
Body	HQA	HQB	HQC	HQA	HQB	HQC			
ŕ	psi (bar) @ °F (°C)								
	3000 (206) @ 70	1500 (103) @ 70	750 (51.6) @ 70	2000 (137) @ 70	1000 (68.9) @ 70	500 (34.4) @			
Coupled	(21)	(21)	(21)	(21)	(21)	70 (21)			
	250 (17.2) @ 400 (204) 250 (17.2) @ 250 (121)								
Uncoupled	250 (17.2) @ 70 (21)								
When coupling and uncoupling	250 (17.2) @ 70 (21)								

#### Spillage and Air Inclusion

- Spillage is the volume of system fluid that escapes while a quick connector is uncoupled.
- Air inclusion is the volume of air trapped that comes in while a quick connector is coupled.

DQ Series	Spillage	Air Inclusion			
HQA	0.3	0.3			
HQB	1.0	1.0			
HQC	3.0	3.0			

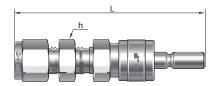
#### Ordering Information and Dimensions Stems



DV: Stem has a valve SV: Stem has no valve

		Basic Ordering Number			Cv		L m	h	
Series	End Connection	SV	DV	sv	DV	Full Flow	SV	DV	Hex. in.
	1/8 in. Compression	HQSA-C-1/8-	HQVSA-C-1/8-	0.08	0.08	0.08	58.9 (2.32)	70.4 (2.77)	5/8
	1/4 in. Compression	HQSA-C-1/4-	HQVSA-C-1/4-	0.3	0.2	0.4	59.9 (2.36)	61.5 (2.42)	5/8
	6 mm Compression	HQSA-C-6M-	HQVSA-C-6M-	0.3	0.2	0.4	59.9 (2.36)	61.5 (2.42)	5/8
	1/8 in. Male NPT	HQSA-M-1/8-	HQVSA-M-1/8-	0.3	0.2	0.4	52.6 (2.07)	54.1 (2.13)	5/8
HQA	1/4 in. Male NPT	HQSA-M-1/4-	HQVSA-M-1/4-	0.3	0.2	0.4	56.4 (2.22)	57.9 (2.28)	5/8
	1/8 in. Female NPT	HQSA-F-1/8-	HQVSA-F-1/8-	0.3	0.2	0.4	51.1 (2.01)	52.6 (2.07)	5/8
	1/4 in. Female NPT	HQSA-F-1/4-	HQVSA-F-1/4-	0.3	0.2	0.4	57.4 (2.26)	58.9 (2.32)	3/4
	3/8 in. Compression	HQSB-C-3/8-	HQVSB-C-3/8-	1.0	0.5	1.5	64.0 (2.52)	67.1 (2.64)	3/4
	10 mm Compression	HQSB-C-10M-	HQVSB-C-10M-	1.0	0.5	1.5	67.3 (2.65)	70.4 (2.77)	3/4
	1/4 in. Male NPT	HQSB-M-1/4-	HQVSB-M-1/4-	0.9	0.5	1.5	58.9 (2.32)	61.9 (2.44)	3/4
	3/8 in. Male NPT	HQSB-M-6N-	HQVSB-M-3/8-	0.8	0.5	1.6	59.7 (2.35)	62.7 (2.47)	3/4
HQB	1/4 in. Female NPT	HQSB-F-1/4	HQVSB-F-1/4-	0.9	0.5	1.5	59.7 (2.35)	62.7 (2.47)	3/4
	3/8 in. Female NPT	HQSB-F-3/8-	HQVSB-F-3/8-	0.8	0.5	1.6	59.7 (2.35)	62.7 (2.47)	7/8
	1/2 in. Compression HQSC-C-1/2- HQVSC-C-1/2-		HQVSC-C-1/2-	2.4	1.5	3.3	75.2 (2.96)	80.3 (3.16)	15/16
	12 mm Compression	HQSC-C-12M-	HQVSC-C-12M-	2.4	1.5	3.3	75.2 (2.96)	60.3 (3.16)	15/16
HQC	1/2 in. Male NPT	HQSC-M-1/2	HQVSC-M-1/2	2.0	1.3	3.1	72.1 (2.84)	77.2 (3.04)	15/16
	1/2 in Female NPT	HQSC-F-1/2	HQVSC-F-1/2	2.0	1.3	3.1	71.6 (2.82)	76.7 (3.02)	1 1/16

#### Stems-Bulkhead



DV: Stem has a valve SV: Stem has no valve

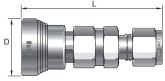
		Basic Orde	ring Number	Panel	Panel	L mr			
Series	End Connection	sv	DV	Thickness Max. mm (in.)	Hole Dia. Min. mm (in.)	sv	DV	h Hex. in.	
	1/4 in. Compression	HQSA-BH-C-1/4-	HQVSA-BH- C-1/4-	6.4 (0.25)	11.9 (15/32)	69.6 (2.74)	71.1 (2.80)	5/8	
HQA	6 mm Compression	HQSA-BH-C-6M -	HQVSA-BH-C-6M -	6.4 (0.25)	11.5 (29.64)	69.6 (2.74)	71.1 (2.80)	16 mm	
	3/8 in. Compression	HQSB-BH-C-3/8-	HQVSB-BH-C-3/8-	6.9 (0.27)	15.1 (19/32)	74.2 (2.92)	76.0 (3.07)	3/4	
HQB	10 mm Compression	HQSB-BH-C-10M-	HQVSB-BH-C-10M-	6.9 (0.27)	16.7 (21/32)	77.7 (3.06)	78.7 (3.10)	22 mm	
HQC	1/2 in. Compression	HQSC-BH-C-1/2-	HQVSC-BH-C-1/2-	6.6 (0.26)	19.8 (25/32)	87.1 (3.43)	92.2 (3/63)	15/16	
	12 mm Compression	HQSC-BH-C-12M-	HQVSC-BH-C-12M-	6.6 (0.26)	19.4 (49/64)	87.1 (3.43)	92.2 (3.63)	24 mm	

**Insertion depth and Overall length** To have an overall length in coupled position, subtract the insertion depth from the combination length of the stem and the body.

#### Insertion Depth

HQ	Depth mm (in.)							
Series	sv	DV						
HQA	27.7 (1.09)	29.2 (29.2)						
HQB	30.0 (1.18)	33.0 (1.30)						
HQC	37.6 (1.18)	42.7 (1.68)						

#### **Bodies**



Series	End Connection	Basic Ordering Number	L mm (in.)	D mm (in.)
	1/8 in. Compression	HQBA-C-1/8-	57.4 (2.26)	23.1 (0.91)
	1/4 in. Compression	HQBA-C-1/4-	56.4 (2.30)	23.1 (0.91)
	6 mm Compression	HQBA-C-6M-	58.4 (2.30)	23.1 (0.91)
	1/8 in. Male NPT	HQBA-M-1/8-	51.1 (2/01)	23.1 (0.91)
HQA	1/4 in. Male NPT	HQBA-M-1/4-	54.9 (2.16)	23.1 (0.91)
	1/4 in. Male ISO	HQBA-M-1/4R-	54.9 (2.16)	23.1 (0.91)
	1/8 in. Female NPT	HQBA-F-1/8-	54.9 (2.16)	23.1 (0.91)
	1/4 in. Female NPT	HQBA-F-1/8-	61.5 (2.42)	23.1 (0.91)
	1/4 in. Female ISO	HQBA-F-1/4R-	61.5 (2.42)	23.1 (0.91)
	3/8 in. Compression	HQBB-C-3/8-	65.5 (2.58)	26.2 (1.03)
	10 mm Compression	HQBB-C-10M-	68.1 (2.68)	26.2 (1.03)
	1/4 in. Male NPT	HQBB-M-1/8-	60.5 (2.38)	26.2 (1.03)
HQB -	3/8 in. Male NPT	HQBB-M-3/8-	60.5 (2.38)	26.2 (1.03)
FIQD	3/8 in. Male ISO	HQBB-M-3/8R-	60.5 (2.38)	26.2 (1.03))
	1/4 in. Female NPT	HQBB-F-1/8-	64.5 (2.54)	26.2 (1.03)
	3/8 in. Female NPT	HQBB-F-3/8-	65.3 (2.57)	26.2 (1.03)
	3/8 in. Female ISO	HQBB-F-3/8R-	65.3 (2.57)	26.2 (1.03)
	1/2 in Compression	HQBC-C-1/2-	78.5 (3.09)	30.7 (1.21)
	12 mm Compression	HQBC-C-12M-	78.5 (3.09)	30.7 (1.21)
HQC	1/2 in. Male NPT	HQBC-M-1/2-	75.4 (2.97)	30.7 (1.21)
1100	1/2 in. Male ISO	HQBC-M-1/2R-	75.4(2.97)	30.7 (1.21)
	1/2 in. Female NPT	HQBC-F-1/2-	81.8 (3.22)	30.7 (1.21)
	1/2 in. Female ISO	HQBC-F-1/2R-	81.8 (3.22)	30.7 (1.21)

#### **Bodies-Bulkhead**



Series	End Connection	Basic Ordering Number	Panel Thickness Max.	Panel Hole Dia. Min.	L	D				
	Connection	Number	mm (in.)							
	1/4 in. Compression	HQBA-BH- C-1/4-	6.4 (0.25)	11.9 (15/32)	67.8 (2.67)	23.1 (0.91)				
HQA	6 mm Compression	HQBA-BH- C-6M-	6.4 (0.25)	11.9 (15/32)	67.8 (2.67)	23.1 (0.91)				
	3/8 in. Compression	HQBB-BH- C-3/8-	6.9 (0.27)	15.1 (19/32)	75.7 (2.98)	26.2 (1.03)				
HQB	10 mm Compression	HQBB-BH-C-10M-	6.9 (0.27)	16.7 (21/32)	75.9 (2.99)	26.2 (1.03)				
HQC	1/2 in. Compression	HQBC-BH-C-1/2-	6.6 (0.26)	19.8 (25/32)	90.4 (3.56)	30.7 (1.21)				
	12 mm Compression	HQBC-BH-C-12M-	6.6 (0.26)	19.4 (49/64)	90.4 (3.56)	30.7 (1.21)				

How to Order

Add "SA" for SS316 or "BA" for Brass as a suffix to the Basic Ordering Number.

Examples: HQSA-C-1/4-SA, HQBA-C-1/4-BA.

#### O-ring Designators

#### How to Order a Full Flow DQ Series Connector

A full flow HQ series consists of a SV stem and a full flow body.

To order a full flow body, select an applicable Basic Ordering Number, add "FF" and a material designator.

Examples: HQBA-C-1/4-FF-SA, HQBB-C-3/8-FF-SA.

#### **Options**



#### HQ Protectors

Body and Stem Protector are available to protect body and stem from damage and contamination while they are uncoupled.

#### Field Assembly Protector Ordering Number

Stem Protector	Body Protector
HQSA-CP-	HQBA-PG-
HQSB-CP-	HQBB-PG-
HQSC-CP-	HQBC-PG-

To complete ordering number, add a material designator "SA" for SS316, "BA" for Brass as a suffix to the protector ordering number.

Examples: HQSA-CP-SA, HQBA-PG-BA

Note: Stem Protector is applicable to both SV stem and DV stem.

#### Pressure Retaining Protectors

DQ Protectors are not pressure retaining devices.

To order the pressure retaining protector, add " $P^{in}$  as a suffix to the protector ordering number. Examples: HQSA-CPP-, HQBA-PGP-.

#### How to order FACTORY ASSEMBLED PROTECTOR on to DQ stem and body.

 $Select\ an applicable\ STEM\ or\ BODY\ ordering\ number, and\ insert\ "CP"\ or\ "PG"\ in the\ ordering\ number.$ 

#### Materials of Construction

Protector: Stainless steel or Brass Lanyard: Stainless steel

number.

Examples: HQVSC-C-12M-CP-SA, HQBC-C-12M-PG-SA.

# HQ color coded "Keyed" quick connectors



#### **Features**

- HQ Keyed quick connectors prevent intermixing of different keys mechanically as well as allow visual identification by color coding.
- Eight (8) different keys on each HQ series are available with its own Key number.
- HQ keys are useful to control multi-fluid or multi-pressure systems.

#### Operation

- Select stem and body keyed in the same HQ series.
- Coupling: Align stem with body. Push stem into body until it clicks.
- Uncoupling: Pull body sleeve toward stem. Remove stem.

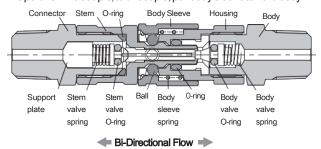
#### HQ Key Ordering Numbers and Sleeve Outside Diameter

	.,	HQA			НQВ				HQC					
-	Key Color	Body Sleeve		Stem Sleeve		Body	<b>Body Sleeve</b>		Stem Sleeve		<b>Body Sleeve</b>		Stem Sleeve	
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	
K1	Black	24.5	0.96	20.9	0.82	28.7	1.13	25.1	0.99	32.0	1.26	27.9	1.10	
K2	Orange	25.0	0.99	21.6	0.85	29.5	1.16	25.8	1.02	32.8	1.29	28.9	1.14	
K3	Green	26.0	1.02	22.4	0.88	30.2	1.19	26.6	1.05	33.6	1.32	29.7	1.17	
K4	Yellow	26.8	1.05	23.2	0.91	31.0	1.22	27.4	1.08	34.3	1.35	30.4	1.20	
K5	Blue	27.5	1.08	23.9	0.94	31.5	1.24	28.1	1.11	35.1	1.38	31.2	1.23	
K6	White	28.3	1.11	24.7	0.97	32.5	1.28	28.9	1.14	35.8	1.41	32.0	1.26	
K7	Purple	29.1	1.14	25.4	1.00	33.3	1.31	29.7	1.17	36.6	1.44	32.7	1.29	
K8	Brown	29.8	1.17	26.2	1.03	34.0	1.34	30.4	1.20	37.4	1.47	33.5	1.32	
Standard HQ Body Sleeve Dia.		23.1	0.91			26.2	1.03			30.7	1.21			

#### **HQM Series Miniature Quick Connectors**

#### **Features**

- · Bi-directional flow design.
- Miniature design for max. 4000 psi working pressure.
- Stainless steel and brass construction.
- Operation: To couple, to uncouple, pull body sleeve toward body.



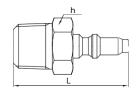
#### **Materials of Construction**

	Material		
Component	Stainless	Brass	
Body, Housing, Stem, Connector, Body sleeve	SS316/ ASTM A276	JIS H3250 C3604	
Support plate, Left & Right fin	Stainless Steel		
Body valve, Stem valve	SS316/ ASTM A276		
Springs	SS302/ASTM A313		
0-rings	FKM NBR		
Locking ball	SS316		
Lubricants	Silicon and TFE based		

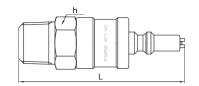
Wetted parts indicated in blue.

#### Ordering Information and Dimensions

#### Stems



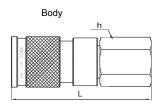
SV: Stem has no valve



DV: Stem has a valve



End Connection	Basic Ordering Number		Cv		L mm (in.)		h Hex.	
End Connection	SV	DV	SV	DV	Full Flow	SV	DV	in.
1/16 in. Compression	HQMS-C-1/16-	HQMVS-C-1/16-	0.06	0.05	0.06	30.0 (1.18)	44.7 (1.76)	7/16
1/16 in. Male NPT	HQMS-M-1/16-	HQMVS-M-1/16-	0.06	0.05	0.06	26.2 (1.03)	40.9 (1.61)	7/16
1/16 in. Female NPT	HQMS-F-1/16-	HQMVS-F-1/16-	0.06	0.05	0.06	26.2 (1.03)	40.9 (1.61)	7/16
1/8 in. Compression	HQMS-C-1/8-	HQMVS-C-1/8-	0.06	0.05	0.06	32.8 (1.29)	47.5 (1.87)	7/16
1/8 in. Male NPT	HQMS-M-1/8-	HQMVS-M-1/8-	0.06	0.05	0.06	26.2 (1.03)	40.9 (1.61)	7/16
1/8 in. Female NPT	HQMS-F-1/8-	HQMVS-F-1/8-	0.06	0.05	0.06	26.2 (1.03)	40.9 (1.61)	9/16



Basic Ordering Number	End Connection	L mm (in.)	h Hex. in.
HQMB-C-1/16-	1/16 in. Compression	38.1 (1.50)	7/16
HQMB-C-1/8-	1/8 in. Compression	43.2 (1.70)	7/16
HQMB-M-1/16-	1/16 in. Male NPT	36.1 (1.42)	7/16
HQMB-M-1/8-	1/8 in. Male NPT	36.6 (1.44)	7/16
HQMB-F-1/16-	1/16 in. Female NPT	36.3 (1.43)	7/16
HQMB-F-1/8-	1/8 in. Female NPT	41.1 (1.62)	9/16
HQMB-BH*-C-1/8-	1/8 in. Compression	53.1(2.09)	7/16

<sup>\*</sup> BH: Bulkhead

# How to Order a Full Flow HQM Quick Connector

Afull flow HQM series consists of a SV stem a full flow body.

To order a full flow body, select an applicable basic ordering number, add "FF" and a material designator.

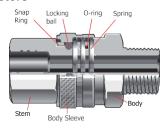
i.e., HQMB-C-1/8-FF-SA

#### Pressure-Temperature Ratings

HQM	SS FKM O-rings	Brass NBR O-rings		
Stem and Body	Pressure Rating psi (bar) @ °F (°C)			
	4000 (275) @ 70 (21)	2000 (137) @ 70 (21)		
Coupled	100 (6.8) @ 400 (204)	100 (6.8) @ 250 (121)		
Uncoupled	100 (6.8) @ 70 (21)			
When coupling & uncoupling	100 (6.8) @ 70 (21)			

#### HF Series Full Flow Quick Connectors





#### **Features**

- Bi-directional flow design.
- Applicable to maximum flow.
- · Lowest pressure drop.
- No tools required to connect & disconnect

#### **Materials of Construction**

Component	Materials			
Component	SS���	Brass		
Body, Stem	SS316/ASTM A276	JIS H3250 C3604		
Sleeve	30310/A31101 A210	313 113230 03004		
Snap Ring	SS316	SS316		
Spring, Locking Ball	Stainless Steel			
0-ring	FKM	NBR		
Lubricant	Silicon-based and PTFE-based lubricants			

Wetted parts and lubrication are indicated in blue.

#### Max. Pressure @ 70°F (21°C)

HF Series	SSOO	Brass	
nr Selles	psig (bar)	psig (bar)	
HFA	0000 (440)	4000 (275)	
HFB	6000 (413)	3000 (206)	
HFC	4000 (075)	4000 (075)	
HFD	4000 (275)	4000 (275)	

#### Cleaning and Packaging

Every connector is cleaned, and packed in a plastic sealing bag to keep them from dust, and then boxed for protection from damage during transportation and storage.

#### Max. Temperature Rating

HF Materials	O-ring Material	Max. Temp. Rating	Pressure Rating @ Max. Temp.
SS316	FKM	400 F (204°C)	100 psig (6.8 bar)
Brass	NBR	250 F (121°C)	100 psig (6.8 bar)

#### Operation

#### Coupling

- 1. Align stem with body.
- 2. Pull the body sleeve back.
- 3. Insert stem into body until it bottoms.
- 4. Return body sleeve to its original position.

#### Uncoupling

1. Pull the body sleeve back completely.

2. Remove stem from body.

Caution: Do not uncouple under pressure.

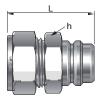
#### Note:

Couple the identical Series of stem and body.

**Example**: Any HFBA series body will fit any HFSA series stem.

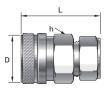
# Ordering Information and Dimensions

#### Stems



Pacia Orda	ring Number	End Connection	Cv	Orifice Min.	L	h
Dasic Orde	ing Number	End Connection	CV	mm	mm (in.)	
	C-1/4-	1/4 in. Compression	2.2	4.8 (0.19)	45.0 (1.77)	9/16
	C-3/8-	3/8 in. Compression	2.8	6.1 (0.24)	45.0 (1.77)	11/16
	C-6M-	6 mm Compression	2.2	4.8 (0.19)	45.0 (1.77)	9/16
HFSA-	M-1/4-	1/4 in. Male NPT	1.7	6.1 (0.24)	40.4 (1.59)	9/16
111 07 (	M-3/8 -	3/8 in. Male NPT	1.7	6.1 (0.24)	40.4 (1.59)	11/16
	F-1/4-	1/4 in. Female NPT	1.7	6.1 (0.24)	40.6 (1.60)	3/4
	F-3/8 -	3/8 in. Female NPT	1.7	6.1 (0.24)	42.4 (1.67)	7/8
	C-3/8-	3/8 in. Compression	2.9	7.1 (0.28)	47.8 (1.88)	7/8
	C-1/2-	1/2 in Compression	13.0	10.4 (0.41)	50.5 (1.99)	7/8
	M-3/8 -	3/8 in. Male NPT	7.1	10.4 (0.41)	40.4(1.59)	7/8
HFSB-	M-8N-	1/2 in. Male NPT	11.5	12.7 (0.50)	46.7 (1.84)	7/8
	F-3/8 -	3/8 in. Female NPT	7.1	11.9 (0.47)	40.4 (1.59)	1 1/16
	F-1/2-	1/2 in. Female NPT	11.5	12.7 (0/50)	46.2 (1.82)	1 1/16
	C-3/4-	3/4 in. Compression	26.0	15.7 (0.62)	54.6 (2.15)	1 1/16
HFSC-	M-3/4-	3/4 in. Male NPT	23.6	18.3 (0.72)	51.6 (2.03)	1 1/16
111 00	F-3/4-	3/4 in. Female NPT	23.6	18.3 (0.72)	52.8 (2.08)	1 5/16
	C-1.0-	1 in. Compression	45.0	22.4 (0.88)	62.2 (2.45)	1 3/8
HFSD-	M-1.0-	1 in. Male NPT	39.0	22.4 (0.88)	59.7 (2.35)	1 3/8
111 05	F-1.0-	1 in. Female NPT	39.0	22.4 (0.88)	63.2 (2.49)	1 5/8

#### **Bodies**



Basic C	Ordering	F I C I'	Orifice Min.	L	D	h
Number		End Connection		mm (in.)		in.
	C-1/4-	1/4 in. Compression	4.8 (0.19)	45.7 (1.80)	22.1 (0.87)	1 1/16
	C-3/8-	3/8 in. Compression	7.1 (0.28)	46.0 (1.81)	22.1 (0.87)	1 1/16
	C-6M-	6 mm Compression	4.8 (0.19)	45.7 (1.80)	22.1 (0.87)	11/16
	M-1/4-	1/4 in. Male NPT	6.4 (0.25)	39.9 (1.57)	22.1 (0.87)	11/16
HFBA-	M-3/8-	3/8 in. Male NPT	9.4 (0.37)	39.9 (1.57)	22.1 (0.87)	11/16
	F-1/4-	1/4 in. Female NPT	9.7 (0.38)	38.1 (1.50)	22.1 (0.87)	3/4
	F-3/8-	3/8 in. Female NPT	9.7 (0.38)	41.4 (1.63)	22.1 (0.87)	7/8
	C-3/8-	3/8 in. Compression	7.1 (0.28)	55.1 (2.17)	33.0 (1.30)	1 1/16
	C-1/2-	1/2 in. Compression	11.9 (0.47)	56.6 (2.23)	33.0 (1.30)	1 1/16
	M-3/8-	3/8 in. Male NPT	10.4 (0.41)	46.5 (1.83)	33.0 (1.30)	1 1/16
HFBB-	M-1/2-	1/2 in. Male NPT	12.7 (0.50)	52.8 (2.08)	33.0 (1.30)	1 1/16
	F-3/8-	3/8 in. Female NPT	15.0 (0.59)	43.9 (1.73)	33.0 (1.30)	1 1/16
	F-1/2-	1/2 in. Female NPT	16.0 (0.63)	43.9 (1.73)	33.0 (1.30)	1 1/16
	C-3/4-	3/4 in. Compression	15.7 (0.62)	62.2 (2.45)	42.2 (1.66)	1 1/2
HFBC-	M-3/4-	3/4 in. Male NPT	18.3 (0.72)	59.2 (2.33)	42.2 (1.66)	1 1/2
	F-3/4-	3/4 in. Female NPT	22.4 (0.88)	48.0 (1,89)	42.2 (1.66)	1 1/2
	C-1.0-	1 in. Compression	22.4 (0.88)	69.9 (2.75)	47.8 (1.88)	1 11/16
HFBD-	M-1.0-	1 in. Male NPT	22.4 (0.88)	67.3 (2.65)	47.8 (1.88)	1 11/16
	F-1.0-	1 in. Female NPT	26.9 (1.06)	53.8 (2.12)	47.8 (1.88)	1 11/16

#### **HF Protectors**

Body and Stem Protector are available to protect body and stem from damage and contamination while they are uncoupled.

#### Field Assembly Protector Ordering Number

Stem Protector	<b>Body Protector</b>
HFSA-CP-	HFBA-PG-
HFSB-CP-	HFBB-PG-
HFSC-CP-	HFBC-PG-
HFSD-CP-	HFBD-PG-

To complete ordering number, add a material designator "SA" for SS316, "BA" for Brass as a suffix to the protector ordering number.

Examples: HFSA-CP-SA, HFBA-PG-BA.

#### Insertion Depth

Unit: mm (in.)

DF Series	Depth
HFA	19.8 (0.78)
HFB	20.6 (0.81)
HFC	22.9 (0.90)
HFD	23.9 (0.94)

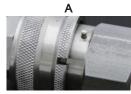
How to order FACTORY ASSEMBLED PROTECTOR on to HF stem and body.

Select an applicable STEM or BODY ordering number, and insert "CP" or "PG" in the ordering number.

Examples: HFSA-C-1/4-CP-SA, HFBA-C-1/4-PG-SA

#### Safety Pin Option on HF series







A. A safety pin on body with a holding groove on sleeve prevents accidental uncoupling.

 $\textbf{B.} \ \ \text{To Uncouple, rotate body sleeve for the pin to fit into the groove and pull the body sleeve back.}$ 

To order Safety Pin HFbody, insert "P" in the ordering number. Example: HFBC-C-3/4-P-SA

All dimensions shown are for reference only and subject to change. Dimensions with Compression Tube Fittings are finger-tight position. We reserve the right to change specification stated in this catalog for our continuing program of product improvement.

#### **HQPM Series PTFE Sealed Quick Connect**



#### **Features**

- Bi-directional flow design.
- · Simple to operate.
- No tools required to couple and uncouple.
- Keyed option is available.
- Max working pressure: 4,500psi.
- Stainless steel and Monel 400 construction.

#### Operation

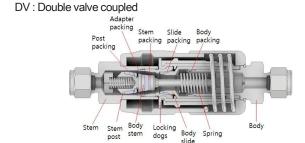
- Coupling
  - 1. Align the stem with the body in the identical Series.
  - 2. Push the stem into the body until it clicks.
- Uncoupling
  - 1. Pull the body sleeve toward stem.
  - 2. Remove stem from body.
- Do not couple or uncouple at pressures exceeding 250 psig (17.2 bar).

#### Note

Couple the identical Series of stem and body.

Any HQPM8 body will fit any HQPM8D(DV) or HQPM8S(SV) stem.

#### **Materials of Construction**



Bi-Directional Flow Stem has a valve

#### SV: Single valve coupled



◆ Directional Flow ◆ Stem has no valve

	Material		
Component	SS316	Alloy 400 / Monel	
Valve body	SS316 / Xylan Coated	Alloy 400 / Xylan Coated	
Stem body, Adapter			
Post, Post cap Body			
cap1, Body cap2 Body	SS316/	Alloy 400 /	
Insert Slide, Body	ASTM A276	ASTM B164	
stem Body stem cap			
Stem Spring guide1 Stem Spring guide2	SS316	Alloy 400	
Body Locking dogs Body Locking bracket Slide spring guide1 Slide spring guide2	SS304	Alloy 400	
Adapter packing Body packing Body backup packing Slide packing	TFM 1600		
Post packing Stem packing	PTFE		
Slide spring Stem spring Body cap spring	SS316 or Alloy X-750	Alloy X-750	

Wetted parts indicated in blue

#### **Pressure-Temperature Ratings**

HQPM		SS316		Alloy 400	
Stem and	HQPM2	HQPM4	HQPM8	HQPM2	
Body		psi (bar)	@°F (°C)		
Coupled	4500 (310) @ 0 ~ 194 (-17 ~ 90)	3200 (220) @ 0 ~ 194 (-17 ~ 90)	3200 (220) @ 0 ~ 194 (-17 ~ 90)	3200 (220) @ 0 ~ 120 (-17 ~ 48)	
Uncoupled	@	1000 (68.9) @0 ~ 194 (-17 ~ 90)			
When coupling and uncoupling	250 (17.2) @70(20)	100 (6.8) @70(20)	50 (3.4) @70(20)	250 (17.2) @70(20)	

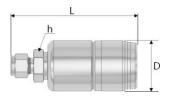
#### Spillage and Air Inclusion (DV Only)

		unit : cm³
Series	Spillage	Air Inclusion
HQPM2	0.1	0.1
HQPM4	0.2	0.4
HQPM8	1.0	2.0

# Ordering Information and Dimensions

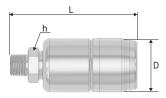
#### **Bodies**

# Compression Tube Fitting



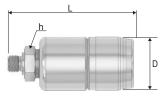
Series	End Connection Basic Ordering Number		D mm (in.)	L mm (in.)	h Hex. In
		Compression Tub	e e		
		Fitting			
	1/4 in. Compression	HQPM2-C-1/4	28.4 (1.12)	80.3 (3.16)	5/8
	3/8 in. Compression	HQPM2-C-3/8	28.4 (1.12)	82.6 (3.25)	11/16
НОРМ2	6 mm Compression	HQPM2-C-6M	28.4 (1.12)	80.3 (3.16)	15mm
11011112	8 mm Compression	HQPM2-C-8M	28.4 (1.12)	80.3 (3.16)	15mm
	1/4 in. Compression	HQPM4-C-1/4	44.0 (1.73)	104.0 (4.08)	15/16
	3/8 in. Compression	HQPM4-C-3/8	44.0 (1.73)	104.0 (4.08)	15/16
НОРМ4	6 mm Compression	HQPM4-C-6M	44.0 (1.73)	104.0 (4.08)	24mm
1100 1111	10 mm Compression	HQPM4-C-10M	44.0 (1.73)	104.0 (4.08)	24mm
	1/2 in. Compression	HQPM8-C-1/2	50.8 (4.30)	109.0 (4.30)	1-1/4
	3/4 in. Compression	HQPM8-C-3/4	50.8 (4.30)	109.0 (4.30)	1-1/4
HQPM8	1 in. Compression	HQPM8-C-1.0	50.8 (4.30)	116.0 (4.58)	1-3/8
	12 mm Compression	HQPM8-D12M	50.8 (4.30)	109.0 (4.30)	32mm

#### Male NPT / BSPT



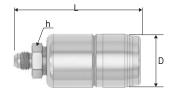
Series	End Connection	Basic Ordering Number	D mm (in.)	L mm (in.)	h Hex. In
		Male NPT			
	1/4 in. Male NPT	HQPM2-M-1/4	28.4 (1.12)	76.7 (3.02)	5/8
HQPM2	3/8 in. Male NPT	HQPM2-M-3/8	28.4 (1.12)	78.0 (3.07)	3/4
	1/4 in. Male NPT	HQPM4-M-1/4	44.0 (1.73)	98.9 (3.89)	15/16
HQPM4	3/8 in. Male NPT	HQPM4-M-3/8	44.0 (1.73)	98.9 (3.89)	15/16
	1/2 in. Male NPT	HQPM8-M-1/2	50.8 (4.30)	109.0 (4.30)	1-1/4
LIODMO	3/4 in. Male NPT	HQPM8-M-3/4	50.8 (4.30)	109.0 (4.30)	1-1/4
HQPM8	1 in. Male NPT	HQPM8-M-1.0	50.8 (4.30)	116.0 (4.58)	1-3/8
		ISO Tapered Male	BSPT		
	1/4 in. Male PT	HQPM2-IT-1/4	28.4 (1.12)	76.7 (3.02)	5/8
HQPM2	3/8 in. Male PT	HQPM2-IT-3/8	28.4 (1.12)	78.0 (3.07)	3/4
	1/4 in. Male PT	HQPM4-IT-1/4	44.0 (1.73)	98.9 (3.89)	15/16
HQPM4	3/8 in. Male PT	HQPM4-IT-3/8	44.0 (1.73)	98.9 (3.89)	15/16
	1/2 in. Male PT	HQPM8-IT-1/2	50.8 (4.30)	109.0 (4.30)	1-1/4
	3/4 in. Male PT	HQPM8-IT-3/4	50.8 (4.30)	109.0 (4.30)	1-1/4
HQPM8	1 in. Male PT	HQPM8-IT-1.0	50.8 (4.30)	116.0 (4.58)	1-3/8

#### Male BSPP



Series	End Connection	Basic Ordering Number	D mm (in.)	L mm (in.)	h Hex. In
		ISO Parallel Male B	SPP		
HQPM2	1/4 in. Male PF	HQPM2-IP-1/4	28.4 (1.12)	76.7 (3.02)	3/4
HQPM4	1/4 in. Male PF	HQPM4-IP-1/4	44.0 (1.73)	98.9 (3.89)	15/16
HQPM8	1/2 in. Male PF	HQPM8-IP-1/2	50.8 (4.30)	109.0 (4.30)	1-1/4

#### Male JIC 37°

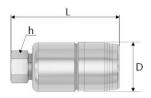


Series	Series End Connection Basic Ordering Number		D mm (in.)	L mm (in.)	h Hex. In				
JIC 37° Flare									
HQPM4	1/4 in. AN Flare	HQPM4-AN-1/4	44.0 (1.73)	98.9 (3.89)	15/16				
HQPM8	1/2 in. AN Flare	HQPM8-AN-1/2	50.8 (4.30)	109.0 (4.30)	1-1/4				

# Ordering Information and Dimensions Bodies

#### **Bodies**

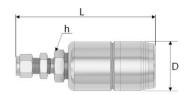
#### Female NPT / BSPT/ BSPP



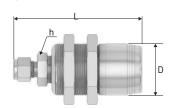
Series	End Connection	Basic Ordering Number	D mm (in.)	L mm (in.)	h Hex. In						
Female NPT											
	1/8 in. Female NPT	HQPM2-F-1/8	28.4 (1.12)	66.0 (2.60)	5/8						
	1/4 in. Female NPT	HQPM2-F-1/4	28.4 (1.12)	75.9 (2.99)	3/4						
HQPM2	3/8 in. Female NPT	HQPM2-F-3/8	28.4 (1.12)	77.2 (3.04)	3/4						
	1/4 in. Female NPT	HQPM4-F-1/4	44.0 (1.73)	85.1 (3.35)	15/16						
HQPM4	3/8 in. Female NPT	HQPM4-F-3/8	44.0 (1.73)	85.1 (3.35)	15/16						
	1/2 in. Female NPT	HQPM8-F-1/2	50.8 (4.30)	89.7 (3.53)	1-1/4						
	3/4 in. Female NPT	HQPM8-F-3/4	50.8 (4.30)	102.0 (4.02)	1-5/16						
HQPM8	1 in. Female NPT	HQPM8-F-1.0	50.8 (4.30)	112.0 (4.40)	1-5/8						
		ISO Tapered Female	BSPT								
HQPM2	1/4 in. Female PT	HQPM2-FIT-1/4	28.4 (1.12)	75.9 (2.99)	3/4						
HQPM4	1/4 in. Female PT	HQPM4-FIT-1/4	44.0 (1.73)	85.1 (3.35)	15/16						
HQPM8	1/2 in. Female PT	HQPM8-FIT-1/2	50.8 (4.30)	89.7 (3.53)	1-1/4						
		ISO Parallel Female	BSPP								
	1/8 in. Female PF	HQPM2-FIP-1/8	28.4 (1.12)	66.0 (2.60)	5/8						
HQPM2	1/4 in. Female PF	HQPM2-FIP-1/4	28.4 (1.12)	75.9 (2.99)	3/4						
HQPM4	1/4 in. Female PF	HQPM4-FIP-1/4	44.0 (1.73)	85.1 (3.35)	15/16						
HQPM8	1/2 in. Female PF	HQPM8-FIP-1/2	50.8 (4.30)	89.7 (3.53)	1-1/4						

#### **Bulkhead Bodies**

#### Compression Tube Fitting



#### Integral Bulkhead



Series	End Connection	Basic Ordering Number	D mm (in.)	L mm (in.)	h Hex. In	Panel Hole Drill size mm (in.)	Panel Max Thickness mm (in.)
			Compression	Tube Fitting			
	1/4 in. Compression	HQPM2-C-1/4-B	28.4 (1.12)	80.3 (3.16)	5/8	30.6 (1.20)	16.5 (0.65)
HQPM2	6 mm Compression	HQPM2-C-6M-B	28.4 (1.12)	80.3 (3.16)	15mm	30.6 (1.20)	16.5 (0.65)
	1/4 in. Compression	HQPM4-C-1/4-B	44.0 (1.73)	119.0 (4.68)	15/16	11.7 (0.46)	3.8 (0.15)
	3/8 in. Compression	HQPM4-C-3/8-B	44.0 (1.73)	122.0 (4.80)	15/16	14.7 (0.58)	3.8 (0.15)
HQPM4	6 mm Compression	HQPM4-C-6M-B	44.0 (1.73)	119.0 (4.68)	24mm	11.7 (0.46)	3.8 (0.15)
	10 mm Compression	HQPM4-C-10M-B	44.0 (1.73)	122.0 (4.80)	24mm	16.8 (0.66)	3.8 (0.15)
	1/2 in Compression	HQPM8-C-1/2-B	50.8 (4.30)	130.0 (5.11)	1-1/4	19.6 (0.77)	4.8 (0.19)
HQPM8	12 mm Compression	HQPM8-C-12M-B	50.8 (4.30)	130.0 (5.11)	32mm	19.6 (0.77)	4.8 (0.19)

# Insertion depth

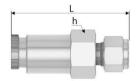
To have an overall length in coupled position, subtract the insertion depth from the combination length of the stem and the body.

Series	Depth mm (in.)
HQPM2	0.9(23.5)
HQPM4	1.1(27.2)
HQPM8	1.2(30.6)

# Ordering Information and Dimensions Stems

#### Stems

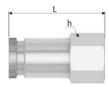
# Compression Tube Fitting



SV: Stem has no valve DV: Stem has a valve

Series	End Connection	Basic Orderi	ng Number	C	×	L	h Hex.
		SV	DV	SV	DV	mm (in.)	In
			Compression Tube	Fitting			
	1/4 in. Compression	HQPM2S-C-1/4	HQPM2D-C-1/4	0.7	0.6	51.1 (2.01)	5/8
	3/8 in. Compression	HQPM2S-C-3/8	HQPM2D-C-3/8	0.9	0.8	52.6 (2.07)	11/16
HQPM2	6 mm Compression	HQPM2S-C-6M	HQPM2D-C-6M	0.7	0.6	51.1 (2.01)	16mm
	8 mm Compression	HQPM2S-C-8M	HQPM2D-C-8M	0.9	0.8	53.1 (2.09)	16mm
	1/4 in. Compression	HQPM4S-C-1/4	HQPM4D-C-1/4	0.9	0.8	66.3 (2.61)	15/16
	3/8 in. Compression	HQPM4S-C-3/8	HQPM4D-C-3/8	1.7	1.6	67.8 (2.67)	15/16
HQPM4	6 mm Compression	HQPM4S-C-6M	HQPM4D-C-6M	0.9	0.8	66.3 (2.61)	5/8
I IQI IVI-	10 mm Compression	HQPM4S-C-10M	HQPM4D-C-10M	1.7	1.6	68.1 (2.68)	24mm
	1/2 in. Compression	HQPM8S-C-1/2	HQPM8D-C-1/2	4.2	3.1	77.7 (3.06)	1-5/16
	3/4 in. Compression	HQPM8S-C-3/4	HQPM8D-C-3/4	6.7	6.4	77.7 (3.06)	1-5/16
HQPM8	1 in. Compression	HQPM8S-C-1.0	HQPM8D-C-1.0	9.0	7.8	83.1 (3.27)	1-3/8
I IQI IVIO	12 mm Compression	HQPM8S-C-12M	HQPM8D-C-12M	4.2	3.1	77.7 (3.06)	35mm

#### Female NPT / BSPT / BSPP

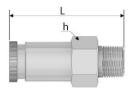


Series	End Connection	Basic Order	ing Number	(	CV .	L	h Hex.
		SV	DV	SV	DV	mm (in.)	ln
			Female NP	г			
	1/4 in. Female NPT	HQPM2S-F-1/4	HQPM2D-F-1/4	0.2	0.2	48.5 (1.91)	5/8
HQPM2	3/8 in. Female NPT	HQPM2S-F-3/8	HQPM2D-F-3/8	0.7	0.6	51.8 (2.04)	11/16
	1/4 in. Female NPT	HQPM4S-F-1/4	HQPM4D-F-1/4	1.4	1.4	62.5 (2.46)	15/16
HQPM4	3/8 in. Female NPT	HQPM4S-F-3/8	HQPM4D-F-3/8	1.8	1.7	62.5 (2.46)	15/16
	1/2 in. Female NPT	HQPM8S-F-1/2	HQPM8D-F-1/2	5.1	4.4	70.6 (2.78)	1-5/16
	3/4 in. Female NPT	HQPM8S-F-3/4	HQPM8D-F-3/4	8.5	7.8	70.6 (2.78)	1-5/16
HQPM8	1 in. Female NPT	HQPM8S-F-1.0	HQPM8D-F-1.0	-	-	77.0 (3.03)	1-5/8
			ISO Tapered Fema	le BSPT			
HQPM2	1/4 in. Female PT	HQPM2S-FIT-1/4	HQPM2D-FIT-1/4	0.2	0.2	48.5 (1.91)	5/8
HQPM4	1/4 in. Female PT	HQPM4S-FIT-1/4	HQPM4D-FIT-1/4	1.4	1.4	62.5 (2.46)	15/16
HQPM8	1/2 in. Female PT	HQPM8S-FIT-1/2	HQPM8D- FIT-1/2	5.1	4.4	70.6 (2.78)	1-5/16
			ISO Parallel Femal	e BSPP			
	1/8 in. Female PF	HQPM2S-FIP-1/8	HQPM2D-FIP-1/8	0.5	0.4	48.5 (1.91)	5/8
HQPM2	1/4 in. Female PF	HQPM2S-FIP-1/4	HQPM2D-FIP-1/4	0.6	0.6	48.5 (1.91)	3/4
HQPM4	1/4 in. Female PF	HQPM4S-FIP-1/4	HQPM4D-FIP-1/4	1.2	1.2	63.0 (2.48)	15/16
HQPM8	1/2 in. Female PF	HQPM8S-FIP-1/2	HQPM8D-FIP-1/2	4.8	3.9	70.6 (2.78)	1-5/16

# Ordering Information and Dimensions Stems

#### Stems

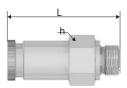
#### Male NPT / BSPT



SV: Stem has no valve DV: Stem has a valve

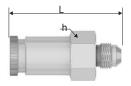
Series	End Connection	Basic Orderi	ng Number	(	Dv .	L	h Hex.
Conco		SV	DV	SV	DV	mm (in.)	ln In
			Male NPT				
HQPM2	1/4 in. Male NPT	HQPM2S-M-1/8	HQPM2D-M-1/8	0.2	0.2	48.5 (1.91)	5/8
	3/8 in. Male NPT	HQPM2S-M-3/8	HQPM2D-M-3/8	0.7	0.6	51.8 (2.04)	1 1/16
HQPM4	1/4 in. Male NPT	HQPM4S-M-1/4	HQPM4D-M-1/4	1.4	1.4	62.5 (2.46)	1 5/16
	3/8 in. Male NPT	HQPM4S-M-3/8	HQPM4D-M-3/8	1.8	1.7	62.5 (2.46)	1 5/16
	1/2 in. Male NPT	HQPM8S-M-1/2	HQPM8D-M-1/2	5.1	4.4	70.6 (2.78)	1 -5/16
HQPM8	3/4 in. Male NPT	HQPM8S-M-3/4	HQPM8D-M-3/4	8.5	7.8	70.6 (2.78)	1 -5/16
	1 in. Male NPT	HQPM8S-M-1.0	HQPM8D-M-1.0	-	-	77.0 (3.03)	1-5/8
			ISO Tapered Male	BSPT		,	
HQPM2	1/4 in. Male PT	HQPM2S-IT-1/4	HQPM2D-IT-1/4	0.2	0.2	48.5 (1.91)	5/8
HQPM4	1/4 in. Male PT	HQPM4S-IT-1/4	HQPM4D-IT-1/4	1.4	1.4	62.5 (2.46)	15/16
HQPM8	1/2 in. Male PT	HQPM8S-IT-1/2	HQPM8D-IT-1/2	5.1	4.4	70.6 (2.78)	1-5/16

#### Male BSPP



Series	End Connection	Basic Ordering Number		Cv		L	h Hex.
33		SV	DV	SV	DV	mm (in.)	In
ISO Parallel Male BSPP							
	1/8 in. Male PF	HQPM2S-IP-1/8	HQPM2D- IP-1/8	0.5	0.4	48.5 (1.91)	5/8
HQPM2	1/4 in. Male PF	HQPM2S-IP-1/4	HQPM2D- IP-1/4	0.6	0.6	48.5 (1.91)	3/4
HQPM4	1/4 in. Male PF	HQPM4S-IP-1/4	HQPM4D- IP-1/4	1.2	1.2	63.0 (2.48)	15/16
HQPM8	1/2 in. Male PF	HQPM8S-IP-1/2	HQPM8D-IP-1/2	4.8	3.9	70.6 (2.78)	1-5/16

#### Male JIC 37°



Series	End Connection	Basic Ordering Number		Cv		L	h Hex.
		SV	DV	SV	DV	mm (in.)	In In
Male JIC 37° Flare							
HQPM4	1/4 in. AN Flare	HQPM4S-AN-1/4	HQPM4D- AN-1/4		-	63.0 (2.48)	15/16
HQPM8	1/2 in. AN Flare	HQPM8S-AN-1/2	HQPM8D- AN-1/2	4.2	2.7	70.6 (2.78)	1-5/16

# How to Order

HQPM series consists of a DV or SV stem and body

Examples: HQPM-8D-D8T-S(DV) or HQPM-8S-D8T-S(SV) and HQP-M8-D8T-S(Body)

# HQPM color coded "Keyed" quick connect



Key Color	Key Number and Designator
Black	K1
Orange	K2
Green	K3
Yellow	K4
Blue	K5
White	K6
Purple	K7
Brown	K8

#### **Features**

- HQPM Keyed quick connect prevent intermixing of different keys mechanically as well as allow visual identification by color coding.
- Eight (8) different keys on each HQPM series are available with its own Key number.
- HQPM keys are useful to control multi-fluid or multi-pressure systems.
- If an attempt is made to couple unlike keys, the valve system will not open.

#### Operation

- · Select stem and body keyed in the same DQPM series.
- Coupling: Align stem with body. Push stem into body until it clicks.
- Uncoupling: Pull body sleeve toward stem. Remove stem.
- If an attempt is made to couple unlike keys, the valve system will not open.

#### How to Order

Add the key number as a suffix to the HQPM series Ordering Number.

Examples: HQP-M8-D8T-K1-S, HQPM-8D-D-8T-K1-S

HQPM2 and HQPM4 series quick connect are available in keys K1 through K8.

 $HQPM8\,series\,quick\,connects\,are\,available\,in\,keys\,K1\,through\,K4\,only.$