

# Furon® Q-Valve

## Manual Quarter-Turn Actuated, 2-Way Valve (1/4", 1/2" & 3/4" Orifice)



### Operation

The Furon® Q-Valve provides a high performance, low cost solution that ensures reliable fluid delivery to critical process applications. Compatible with most common installations, the Q-valve offers "Drop-in" replacement as a valve upgrade in new or existing applications. Designed and engineered to allow easy field maintenance with simple actuator and diaphragm replacement for low cost of ownership and superior system uptime.

- Multi-Turn Manually actuated on/off control for ultra high-purity, corrosive and aggressive chemicals

### Applications

The Furon® Q-Valve is ideal for applications that demand ultra high-purity media handling along with the high quality and performance standards that you expect from Furon valves. Primary applications include ultra high-purity chemical delivery for semiconductor, photovoltaic, chemical processing, and life sciences.

### Features/Benefits

- 100% HP PFA and Virgin PTFE wetted flow path
- Integrated Visual Position Indication
- Transparent actuation components
- Bi-directional flow
- Optional electronic position sensing
- Leak detection port (1/4-28 UNF)
- "Place and turn" integrated mounting base
- Common mounting pattern and port dimensions are interchangeable with many existing installations
- Assembled, tested and double-bagged in a Class 100 clean room
- Metal free construction

# Furon® Q-Valve

## Manual Quarter-Turn Actuated, 2-Way Valve (1/4", 1/2" & 3/4" Orifice)

### Ordering Information

PART NO.	END CONNECTION	ORIFICE	PORT SIZE	A	B	C	D	E	F	PANEL CUTOUT Ø	MAX. PANEL THICKNESS
QV2-F44-M-I	FLAREGRIP® II	1/4"	1/4"	3.59 (91.2mm)	0.57 (10.2mm)	1.61 (44.0mm)	4.38 (111.2mm)	2.94 (75mm)	2.3 (59.9mm)	1.44 (36.6mm)	0.45 (11.4mm)
QV2-F46-M-I	FLAREGRIP II	1/4"	3/8"	4.13 (105mm)							
QV2-744-M	FUSEBOND™	1/4"	1/4"	4.00 (101.6mm)							
QV2-144-M	FNPT	1/4"	1/4"	2.35 (59.8mm)							
QV2-F88-M-I	FLAREGRIP II	1/2"	1/2"	4.48 (113.8mm)	0.73 (18.5mm)	1.85 (47.0mm)	5.01 (127.2mm)	2.94 (75mm)	2.9 (73.7mm)	1.44 (36.6mm)	0.45 (11.4mm)
QV2-F812-M-I	FLAREGRIP II	1/2"	3/4"	5.28 (134.0mm)							
QV2-788-M	FUSEBOND	1/2"	1/2"	4.61 (117.0mm)							
QV2-7812-M	FUSEBOND	1/2"	3/4"	5.28 (134.0mm)							
QV2-186-M	FNPT	1/2"	3/8"	2.60 (66.0mm)							
QV2-188-M	FNPT	1/2"	1/2"	2.60 (66.0mm)	0.97 (24.6mm)	2.74 (69.5mm)	6.63 (168.4mm)	4.08 (103mm)	4.2 (107mm)	N/A	N/A
QV2-F1212-M-I	FLAREGRIP II	3/4"	3/4"	6.09 (154.8mm)							
QV2-F1216-M-I	FLAREGRIP II	3/4"	1"	5.71 (145.0mm)							
QV2-71212-M	FUSEBOND	3/4"	3/4"	5.75 (146.0mm)							
QV2-71216-M	FUSEBOND	3/4"	1"	5.71 (145.0mm)							

### Operating Specifications

	1/4" ORIFICE	1/2" ORIFICE	3/4" ORIFICE
OPERATING PRESSURE	100 PSIG (6.8 BAR)	100 PSIG (6.8 BAR)	80 PSIG (5.5 BAR)
BACK PRESSURE	100 PSIG (6.8 BAR)	100 PSIG (6.8 BAR)	80 PSIG (5.5 BAR)
FLOW	C <sub>v</sub> 0.8	C <sub>v</sub> 3.5	C <sub>v</sub> 9.4
TOOL KIT	1112226	1112227	1112228
ACTUATOR REPAIR KIT-M	1113964	1113968	1113972
DIAPHRAGM REPAIR KIT	1113974	1113975	1113976

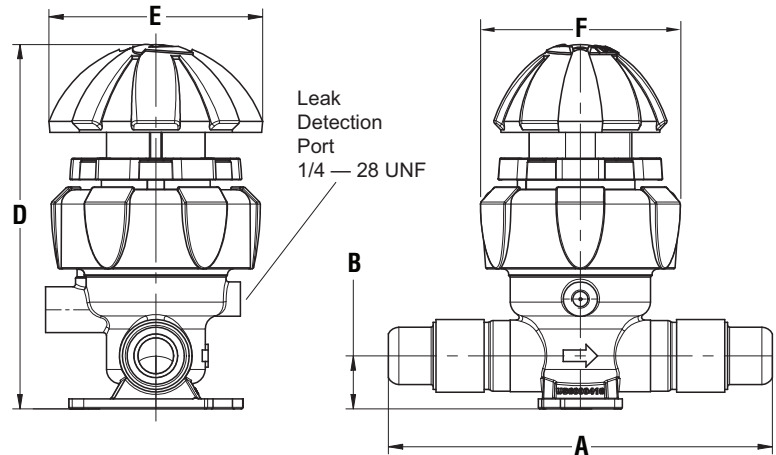
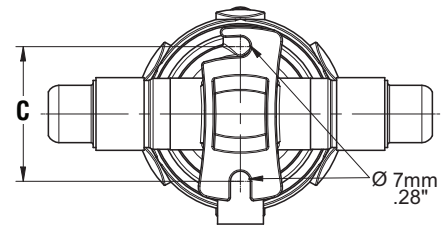
Flow is calculated using QV2-F46-NC, QV2-F812NC, and QV2-F1216. When using smaller orifice connections flow will be reduced accordingly.

Pneumatic and Quarter Turn Versions are also available.

- Pilot pressure: 60 PSIG (4.1 BAR) Minimum  
100 PSIG (6.8 BAR) Maximum
- Pilot supply port: 1/8" FNPT
- Operating temperature: 15° C to 82° C (59° F to 180° F)
- Body: High-Purity PFA
- Diaphragm: Modified PTFE
- Actuator components: Polypropylene

### Standard Options

- PFA Flare Nuts



Saint-Gobain Performance Plastics-USA  
High Purity Systems  
7301 Orangewood Avenue  
Garden Grove, CA 92841-1411  
Phone: (714) 630-5818  
Fax: (714) 688-2614  
USA Toll Free: (800) 833-5661

Saint-Gobain Performance Plastics-France  
High Purity Systems  
EADAC des Berthilliers  
71850 Charnay les Macons  
France  
Phone: +33(0)3 85 20 27 00  
Fax: +33 (0)3 85 29 18 48



Made in the U.S.A.

\*Rating at ambient temperature  
US Patents 6,000,416 & 6,086,039  
Furon® is a registered trademark.  
FlareGrip® is a registered trademark.  
FuseBond™ is a trademark.

**12-month Limited Warranty:** For a period of 12 months from the date of first sale, Saint-Gobain Performance Plastics Corporation warrants this product to be free from defects in manufacturing. This company's only obligation will be to provide replacement product for any material proven to have such a defect, or at SGPPL's option, to refund the purchase price thereof. User assumes all other risks, if any, including the risk of injury, loss or damage, whether direct, consequential or incidental, arising out of the use, misuse, or inability to use this product. SAINT-GOBAIN PERFORMANCE PLASTICS DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Saint-Gobain Performance Plastics reserves the right to change product specifications without prior notice.

NOTE: Saint-Gobain Performance Plastics Corporation does not assume any responsibility or liability for any advice furnished by it, or for the performance or results of any installation or use of the product or of any final product into which the product may be incorporated by the purchaser and/or user.