

Applications

Furon Q-Valves are 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, and chemical processing Furon Q-Valves are also proven to be highly reliable in abrasive slurry applications.

ensures reliable fluid delivery to critical process applications. Compatible with most common installations, the Furon Q-valve offers "drop-in" replacement

as a valve upgrade in new or existing applications. The Q-valve designed and

replacement for low cost of ownership and superior system uptime.

engineered to allow easy field maintenance with simple actuator and diaphragm

Features and Benefits

- 100% HP PFA and virgin PTFE wetted flow path
- Integrated visual position indication
- Bi-directional flow
- Leak detection port (1/4-28 UNF)
- Features integrated "place & turn" mounting base and may be delivered upon request with an additional snap base for optimum installation experience
- Assembled, tested and doublebagged in a cleanroom
- Metal-free construction
- Easy preventive maintenance
- Q-Valves have been tested for more than 3 million cycles.* **
- * <u>Please contact us or review our performance reports for more details.</u>
- **Please contact us for additional testing information performed on the component.



ASK AN ENGINEER

Furon Q-Valve - Manual Actuated, Multi-Turn 2-Way Valve

| Part Number | End Connection Type | Orifice | | End Connection Size | | А | | В | | С | | D | | Е | | F | | Panel Cutout | | Max. Panel Thickness | |
|-----------------|-----------------------------|---------|-------|---------------------------|-------|------|-----------------------------|--------------------------|------|-------|--------------|--------------------------------|--------------------------------------|------|------|------|-----|-----------------|------|----------------------------|------|
| | | in | mm | in | mm | in | mm | in | mm | in | mm | in | mm | in | mm | in | mm | in | mm | in | mm |
| QV2-F44-MT | FlareGrip® II | | | 1/4 | 6.35 | 3.59 | 91.2 | | | | | | | | | | | | | | |
| QV2-SS0044-MT | Nippon Pillar Super 300* | 1/4 | 6.35 | 1/4 | 6.35 | | ase act us | | | 5 161 | 40.9 | | 111.2 d Closed | 2.3 | FO 4 | | | | | | |
| QV2-F46-MT | FlareGrip® II | | | 3/8 | 9.52 | 4.13 | 3 105 Please ntact us | 0.50 | 14.5 | | | | | | | | | | | | |
| QV2-S30046-MT | Nippon Pillar Super 300* | | | 3/8 | 9.52 | | | 14.5 | 1.61 | 40.9 | 4.63 Open | 117.5 Open | 2.5 | 58.4 | | | | | | | |
| QV2-744-MT | FuseBond™ | | | 1/4 | 6.35 | 4.00 | 101.6 | | | | | | | | | 2.94 | 75 | 1.44 | 36.6 | 0.45 | 11.4 |
| QV2-144-MT | FNPT | | | 1/4 | 6.35 | 2.35 | 59.7 | | | | | | | | | | | | | | |
| QV2-F88-MT | FlareGrip* II | 1/2 | 12.7 | 1/2 | 12.7 | 4.48 | 113.8 | 99.2 4.0 9 us 0.73 | 18.5 | 1.85 | 47.0 | 5.03 Closed 5.44 Open | d Closed 138.2 | 2.9 | 73.7 | | | | | | |
| QV2-S30088-MT | Nippon Pillar Super 300* | | | 1/2 | 12.7 | 4.30 | 109.2 | | | | | | | | | | | | | | |
| QV2-F812-MT | FlareGrip® II | | | 3/4 | 19.05 | 5.28 | 134.0 | | | | | | | | | | | | | | |
| QV2-S300812-MT | Nippon Pillar Super 300* | | | 3/4 | 19.05 | | ase act us | | | | | | | | | | | | | | |
| QV2-788-MT | FuseBond™ | | | 1/2 | 12.7 | 4.61 | 117.0 | | | | | | | | | | | | | | |
| QV2-7812-MT | FuseBond™ | | | 3/4 | 19.05 | 5.28 | 134.0 | | | | | | | | | | | | | | |
| QV2-186-MT | FNPT | | | 3/8 | 9.52 | 2.60 | 60 66.0 | | | | | | | | | | | | | | |
| QV2-188-MT | FNPT | | | 1/2 | 12.7 | 2.60 | | | | | | | | | | | | | | | |
| QV2-F1212-MT | FlareGrip® II | 3/4 | 19.05 | 3/4 | 19.05 | 6.09 | 154.8 | s .0 | 24.6 | 2.74 | 69.5 | Closed 7.16 | 169.4 d Closed 181.9 n Open | 4.2 | 107 | 4.08 | 103 | | | | |
| QV2-S3001212-MT | Nippon Pillar Super 300* | | | 3/4 | 19.05 | | ase act us | | | | | | | | | | | | | | |
| QV2-F1216-MT | FlareGrip* II | | | 1 | 25.4 | 5.71 | 145.0 | | | | | | | | | | | | | | |
| QV2-S3001216-MT | Nippon Pillar Super 300* | | | 1 | 25.4 | | Please ontact us | 0.97 | 24.6 | | | | | | | | | N | /A | N, | /A |
| QV2-71212-MT | FuseBond™ | | | 3/4 | 19.05 | F 7F | 146.0 | | | | | | | | | | | | | | |
| QV2-71216-MT | FuseBond™ | | | 1 | 25.4 | 5.75 | 146.0 | | | | | | | | | | | | | | |

Ordering & Technical Specifications

| | 1/4" Orifice | 1/2" Orifice | 3/4" Orifice | | | | | |
|-------------------------------------|--|--------------------|--------------------|--|--|--|--|--|
| Operating Pressure | 80 psig (5.5 bar) | | | | | | | |
| Back Pressure | 80 psig (5.5 bar) | | | | | | | |
| Flow | C _V 0.8 | C _V 3.5 | C _V 9.4 | | | | | |
| Base Plate | 1115349 | 1115706 | 1115708 | | | | | |
| Tool Kit | 1112226 | 1112227 | 1112228 | | | | | |
| Actuator Repair Kit-MT | 1113965 | 1113969 | 1113973 | | | | | |
| Diaphragm Repair Kit | 1113974 | 1113975 | 1113976 | | | | | |
| Operating Temperature | Ambient: 0°C to 60°C (32°F to 140°F) Media: 0°C to 95°C (32°F to 203°F) | | | | | | | |
| Body | High-Purity PFA | | | | | | | |
| Diaphragm | Modified PTFE | | | | | | | |
| Actuator Components & Mounting Base | Engineered Plastics | | | | | | | |
| Sample of Performance Test* ** | HCl for more than 2.1 million cycles; HF for more than 2.1 million cycles; Slurry for more than 1.2 million cycles | | | | | | | |

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.

Options

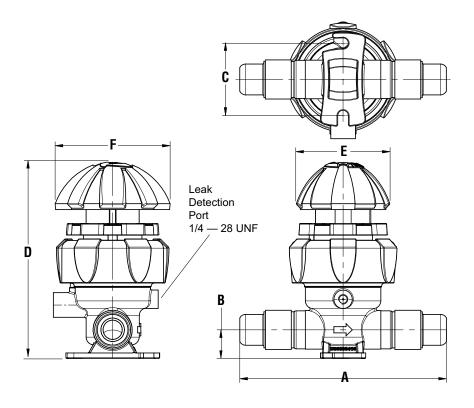
- PFA Flare nuts (add -3)
 Valve directly equipped with base plate (add -100)
 Other connection types (tube ends, Nippon Pillar Super 300°).

Please consult our engineers for details.

^{*} Please contact us or review our performance reports for more details.
**Please contact us for additional testing information performed on the component.

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Drawings





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