

FLUID FLOW SWITCH

Model Q-5

5 to 85,000+ GPM

for pipes 1" - 48"+

Detects and Signals Flow Change

- Superior Long Term Performance
- Line Pressure to 300 Psig
- Continuous Adjustment While Operating
- Temperature 180°F Continuous
- Multiple quick change targets plus continuous spring adjustment provide very wide operating range
- For use in highly particle contaminated fluids
- SPDT 15 amp switching capacity model or Dry Circuit Computer/PLC Interface model
- Intrinsically Safe Relay Allows Model Q-5 to be used in Hazardous Areas.
- Maintains Calibration Limits When Subjected to Reasonable Line Hydraulic Hammer or Surge Pulses
- Calibrated Independent of Line Pressure and Temperature

Typical Working Fluids

- Alcohols
- Glycols
- Pure Water
- Sea Water
- Sewage Water
- Slurries
- Soap Solutions
- Tap Water

Typical Uses

Water Treatment

- Contaminated Groundwater
- Irrigation Systems
- Municipal Water Supply Systems
- Sewage Treatment Plants

In Chemical Processing

- Fluid Blending Systems
- Heat Transfer Fluids
- Liquid Scrubbers
- Liquid Transfer
- Monitor Filter Clogging
- Water Treatment

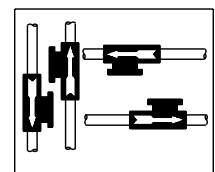
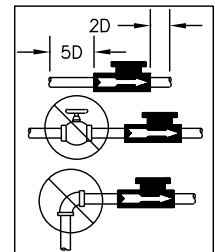
To Monitor Flow of Coolant Supplied to:

- Air Condition Systems
- Brakes & Clutches
- Computer Systems
- Diodes, SCR's, Triacs, etc.
- Electro Magnets
- High Power Transistors
- Plastic Molding Equipment
- RF and Radar Transmitter
- Spot welders
- Transformers
- Vacuum Diffusion Pumps

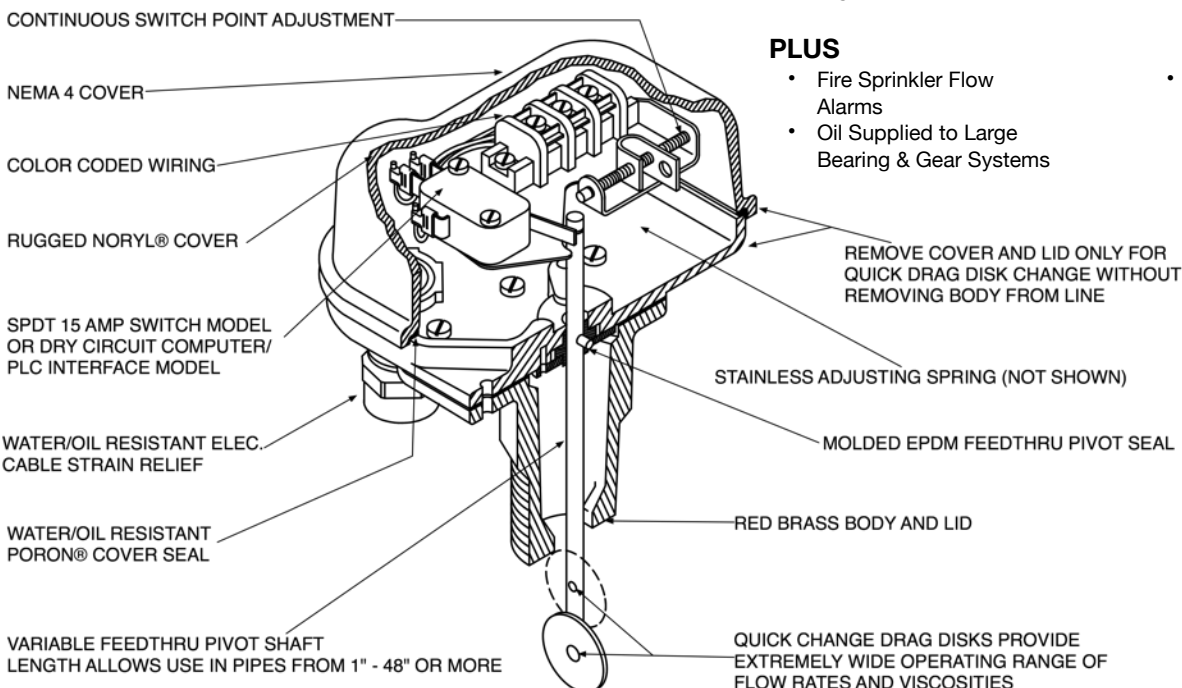
PLUS

- Fire Sprinkler Flow Alarms
- Oil Supplied to Large Bearing & Gear Systems
- Steam Boiler Feed Water

TURBULENCE FLOW REDUCTION



MOUNT IN ANY POSITION



Limited Warranty Page 7

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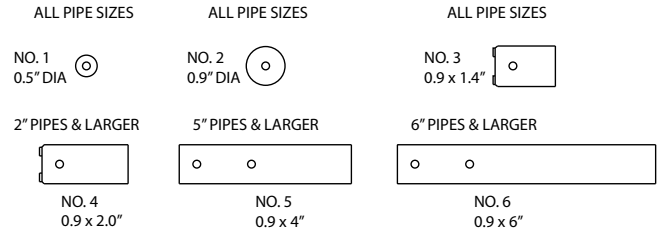
Model Selection Chart

| Pipe Size NPT | Flow Limits Between Which Switch Point May Be Set GPM | Part Number | | | |
|---------------|---|-------------|-----------------|------------|-----------------------|
| | | Model | Pivot Shaft No. | Target No. | Electric Cable 1 or 2 |
| 1 | 5-15 | Q-5 | 2 | 2 | --- |
| | 12-36 | Q-5 | 2 | 1 | --- |
| 1 1/2 | 7-21 | Q-5 | 3 | 3 | --- |
| | 10-30 | Q-5 | 3 | 2 | --- |
| 2 | 20-75 | Q-5 | 3 | 1 | --- |
| | 14-42 | Q-5 | 3 | 4 | --- |
| | 20-60 | Q-5 | 3 | 2 | --- |
| 2 1/2 | 50-150 | Q-5 | 3 | 1 | --- |
| | 21-63 | Q-5 | 3 | 4 | --- |
| | 30-90 | Q-5 | 3 | 2 | --- |
| 3 | 70-210 | Q-5 | 3 | 1 | --- |
| | 27-81 | Q-5 | 5 | 4 | --- |
| | 45-135 | Q-5 | 5 | 2 | --- |
| 3 1/2 | 110-330 | Q-5 | 5 | 1 | --- |
| | 36-108 | Q-5 | 5 | 4 | --- |
| | 60-180 | Q-5 | 5 | 2 | --- |
| 4 | 150-450 | Q-5 | 5 | 1 | --- |
| | 45-135 | Q-5 | 5 | 4 | --- |
| | 75-225 | Q-5 | 5 | 2 | --- |
| 5 | 200-600 | Q-5 | 5 | 1 | --- |
| | 51-153 | Q-5 | 5 | 5 | --- |
| | 120-360 | Q-5 | 5 | 2 | --- |
| 6 | 300-900 | Q-5 | 5 | 1 | --- |
| | 65-195 | Q-5 | 5 | 6 | --- |
| | 80-240 | Q-5 | 5 | 5 | --- |
| 8 | 190-570 | Q-5 | 5 | 2 | --- |
| | 450-1350 | Q-5 | 5 | 1 | --- |
| | 103-309 | Q-5 | 5 | 6 | --- |
| 10 | 126-378 | Q-5 | 5 | 5 | --- |
| | 300-900 | Q-5 | 5 | 2 | --- |
| | 800-2400 | Q-5 | 5 | 1 | --- |
| 10 | 172-516 | Q-5 | 5 | 6 | --- |
| | 211-633 | Q-5 | 5 | 5 | --- |
| | 500-1500 | Q-5 | 5 | 2 | --- |
| 10 | 1200-3600 | Q-5 | 5 | 1 | --- |

LARGE PIPE SIZE INFORMATION AVAILABLE BY REQUEST.

Model Q-5

Target (Drag Disk/Strip) Number



Hysteresis (% Flow Change to Activate / Deactivate Switch)

≈ 10% at upper end of flow range
 ≈ 30% at lower end of flow range

Differential Pressure Drops Across Unit (Normal Operating Conditions)

1" - 3" Pipe, less than 1 psi
 4" - 48" Pipe, Negligible

Working Line Pressure

300 psig max. @ 180°F Max
 (Proof tested to 1200 psig @ room temperature)

Materials

Brass body, Noryl® cover, 316 stainless steel hardware.

Fluid "sees" red brass, phosphor, bronze, EPDM elastomer seal. (Other seal material available.)

Electrical Switch Characteristics

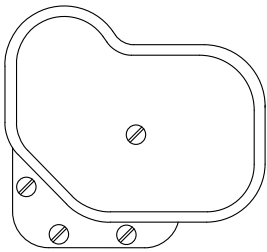
SPDT, 15 amp, 1/2 hp @ 125 or 250 VAC,
 1/2 amp @ 125 VDC, 1/4 amp @ 250 VDC,
 5 amp @ 125 VAC (tungsten lamp load)
 UL and CSA Listed
 10,000,000 Operations Median

Model Q-5 can also be fitted with a SPDT Gold Cross Bar Switch for computer/PLC interface.

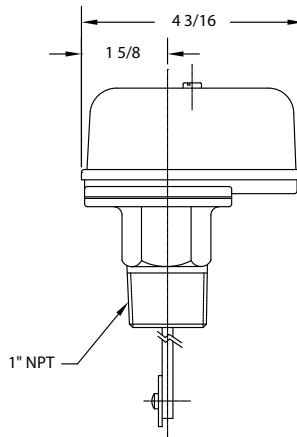
Weight: 3.5 lb.

Installation Dimensions

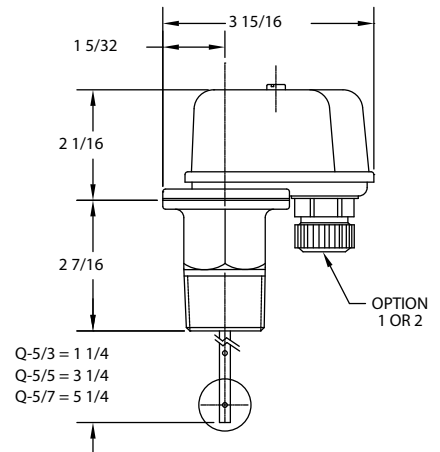
PLAN VIEW



SIDE VIEW



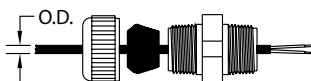
FRONT VIEW



Input Power Cable Interface Options

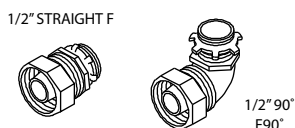
Option No. 1

Basic Model # → **Q - 5 / 3 / 2 / B**
 Sample Part # → **B**
 Grommet Size pg. 9 → **3**
 Drag Disk Feedthru Shaft Length → **2**
 Drag Disk Size → **3**



Option No. 2

Basic Model # → **Q - 5 / 3 / 2 / F**
 Sample Part # → **F**
 1/2" Flexible Conduit Fitting → **F**
 Drag Disk Feedthru Shaft Length → **2**
 Drag Disk Size → **3**



See grommet size chart on page 9.

- Installation drawing and a numbered parts list is supplied with each unit.
- Current Price Information is Listed on Separate Sheet.
- Special One Day Delivery Available.