

FLOW SWITCH

MODEL Q-4E

Designed for extreme, long-term reliability.

Detects and signals flow change.

Continuously adjustable while in operation.

Four (4) individual Paddle options plus continuous adjustment provides wide operating range.

For use in particle contaminated fluids.

Maintains calibration limits when subjected to reasonable line hydraulic hammer or surge pulses.

Super-simple maintenance and checkout for personnel using a standard test meter.

DPDT model available per request.



KEY FEATURES

Flow Range	4-70 GPM (15.14-265 L/m)
Working Temp	180°F (82°C) Maximum
Working Pressure	300 psig (2,068 kPa)
Process Connection	1" NPT
Electrical Switch	SPDT 15A or Dry Circuit
Enclosure	NEMA 4 / IP 66

TYPICAL USES

Monitoring flow of coolants and fluids supplied to:

Air Conditioning Systems	Plastic Molding Equipment
Cooling in Data Centers	Scrubbers
Diodes, SCRs, Triacs, etc.	Spot Welders
Fluid Blending Systems	Transformers
High Power Transistors	Vacuum Systems

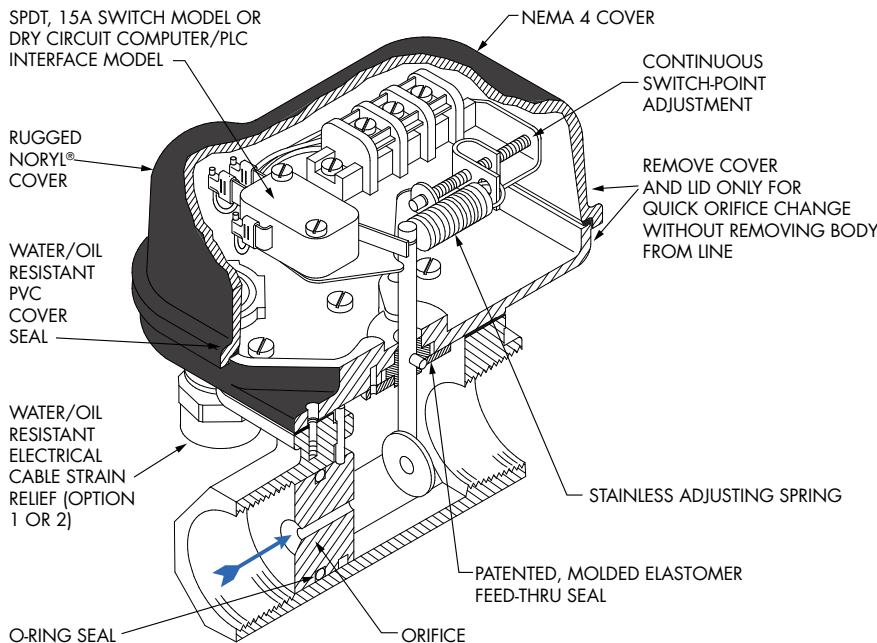
Other Uses:

Monitor Filter Clogging	Starting Back-up Pumps
	Fire Sprinkler Flow Alarms

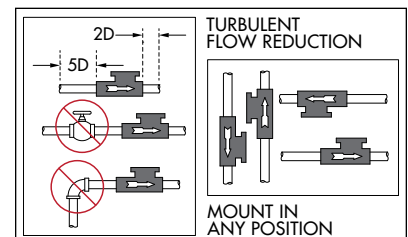
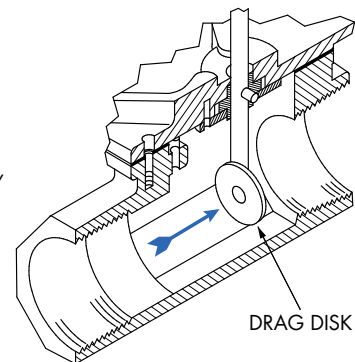
≈ TYPICAL WORKING FLUIDS

Glycols	Oils
Hydrocarbons	Potable Water

PRODUCT DIAGRAM



MODELS Q-4E/2, 3, AND 4 USE DRAG DISK ONLY



WEIGHT: 5 lb
2.27 kg



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MODEL Q-4E

MODEL SELECTION CHART

Flow Range (Water calibrated at 70°F / 21°C) Accuracy ±10%

ORIFICE/PADDLE #	CONTINUOUS SWITCH POINT ADJUSTMENT RANGE
1	4 to 8 GPM
2	6 to 20 GPM
3	15 to 35 GPM
4	25 to 70 GPM

Note: Model Q-4E/1 uses a #1 orifice and a #4 paddle. **Models Q-4E/2, 3, and 4 use paddle only.**

ELECTRICAL CONNECTION

GROMMET	CABLE O.D.	DIAGRAM
A	0.25"	
AA	0.30"	
B	0.37"	
C	0.50"	

CONDUIT FITTINGS

F(STR) - 0.5" straight		F90° - (0.5" 90°)	
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SAMPLE PART NUMBERS

OPTION 1: Q-4E / 1 / B	OPTION 2: Q-4E / 3 / F
BASE MODEL	BASE MODEL
ORIFICE/PADDLE #	ORIFICE/PADDLE #
GROMMET SIZE	½" FLEXIBLE CONDUIT FITTING

TECHNICAL SPECIFICATIONS

HYSTERESIS (Δ FLOW RATE TO ACTIVATE/DEACTIVATE SWITCH)

≈ 5% at upper end of flow range
 ≈ 25% at lower end of flow range

DIFFERENTIAL PRESSURE DROPS ACROSS UNIT

Under normal operating conditions:

≈ 1.0 psig at upper end of flow range
 ≈ 5.0 psig at lower end of flow range

Q-4E MATERIALS:

Body: Brass (working fluid "sees" red brass, 316 stainless steel, phosphor bronze and EPDM elastomer seal)
 Gasket: Cork/Buna blend
 Optional Seal: Viton®

ELECTRICAL SWITCH CHARACTERISTICS

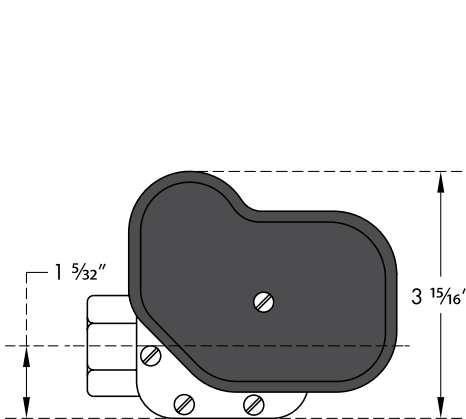
SPDT
 15A, ½ hp @ 125 or 250VAC
 ½A @ 125VDC, ¼A @ 250VDC
 5A @ 125VAC (tungsten lamp load)

10,000,000 Operations Median
 Switch may be overloaded to 20A @ 125 or 250VAC for a minimum of 20,000 operations.

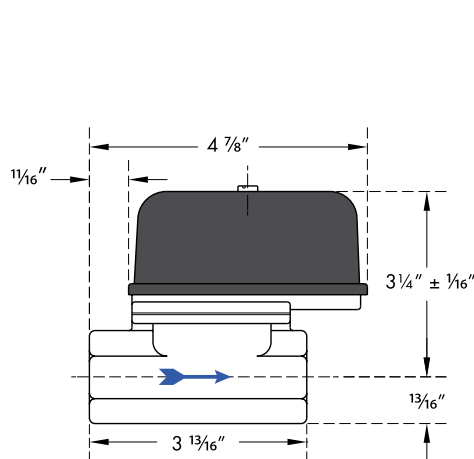
Model Q-4E can also be fitted with a SPDT Gold Cross Bar Switch for computer/PLC interface.

INSTALLATION DIMENSIONS

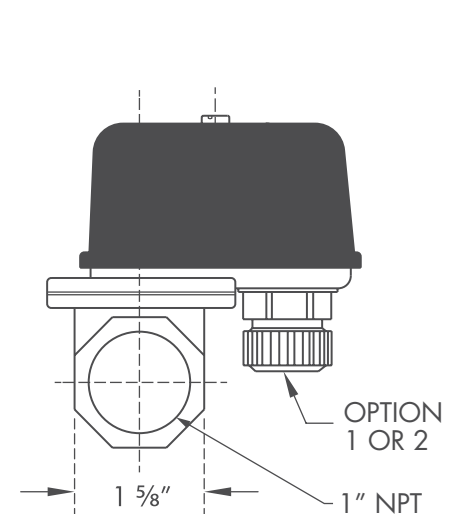
TOP VIEW



SIDE VIEW



FRONT VIEW



- Installation drawing and a numbered parts list is supplied with each unit.
- Special one-day delivery is available.