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.





Working Temp	32°–180°F (0°–82°C)	
Working Pressure	300 psig (2,068 kPa)	
Process Connection	1" NPT	
Electrical Switch	SPDT 15A or Dry Circuit	

TYPICAL USES

KEY FEATURES

Flow Range

Monitoring flow of coolants and fluids supplied to:

Air Conditioning Systems Cooling in Data Centers Diodes, SCRs, Triacs, etc. Fluid Blending Systems High Power Transistors Other Uses:

Monitor Filter Clogging

Plastic Molding Equipment Scrubbers Spot Welders Transformers Vacuum Systems

Starting Back-up Pumps Fire Sprinkler Flow Alarms

pprox TYPICAL WORKING FLUIDS

Glycols Hydrocarbons

Potable Water

Oils



PRODUCT DIAGRAM

MODEL SELECTION CHART

Flow Range (Water calibrated at 70°F / 21°C)

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.





MODEL Q-4E

HYSTERESIS (A 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

WORKING LINE PRESSURE WORKING TEMPERATURE

300 psig max. @ 180°F max (Proof tested to 1,200 psi @ 70°F)

180°F max. (May be extended to 200°F for short periods.)

WETTED MATERIALS

Body: Red brass Hardware: Noryl (PPO) (10% glass bronze, and EPDM Elastomer Seal fibers), 316 stainless steel, Plastic Working fluid "sees" red brass,

316 stainless steel, phosphor Gasket: Cork/Nitrile blend Optional Seal: Hypalon, Viton

ELECTRICAL SWITCH CHARACTERISTICS

SPDT

15A, ½ hp @ 125 or 250VAC 1/2A @ 125VDC, 1/4A @ 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.

A INSTALLATION DIMENSIONS

TOP VIEW

SIDE VIEW

FRONT VIEW

