

FLOW SWITCH

MODEL Q-5 Q-5SS



Designed for extreme, long-term reliability.

Detects and signals flow change.

Continuously adjustable while in operation.

For use in particle contaminated fluids.

Multiple quick change paddles (and continuous spring adjustment) provide an incredibly wide operating range of flow rates and viscosities.

Use with an 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.

DPDT model available per request.



KEY FEATURES

Flow Range	5-102,000+ GPM (18.9-386.1 kL/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
Boilers	Scrubbers
Cooling in Data Centers	Spot Welders
Diodes, SCRs, Triacs, etc.	Transformers
Fluid Blending Systems	Vacuum Systems
High Power Transistors	

Other Uses:

Fire Sprinkler Flow Alarms	Municipal Water Supply Systems
	Oil Supply to Bearing & Gear Systems

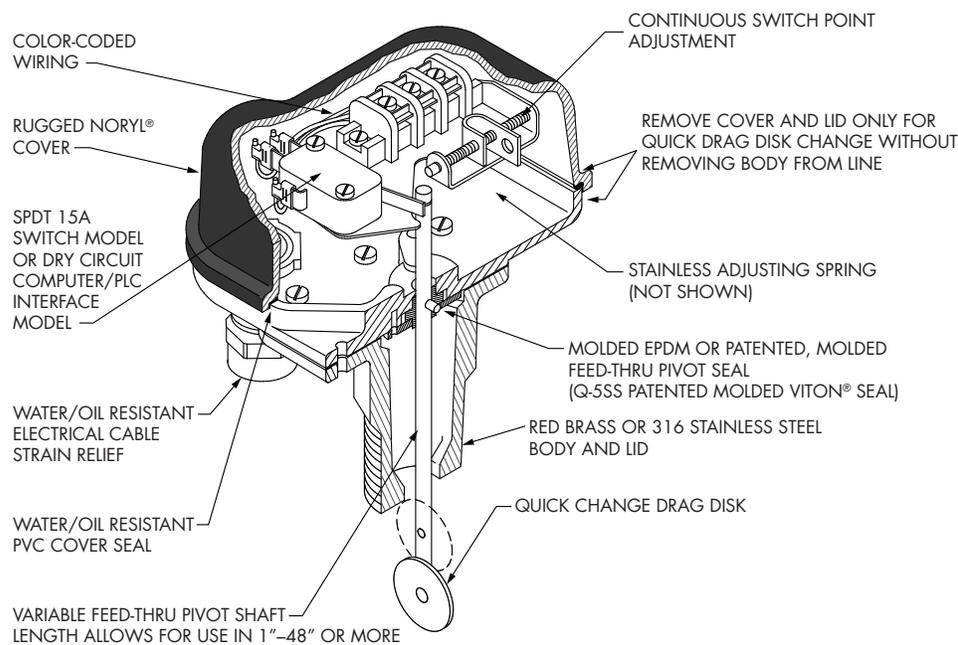
≈ TYPICAL WORKING FLUIDS

Filtered Sewage Water	Glycols
Hydrocarbons	Potable Water

SAMPLE PART NUMBERS

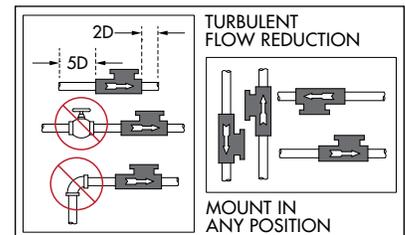
OPTION 1: Q-5 / 3 / 2 / B	OPTION 2: Q-5 / 3 / 2 / F
BASE MODEL	BASE MODEL
PIVOT SHAFT	PIVOT SHAFT
PADDLE #	PADDLE #
GROMMET SIZE	½" FLEXIBLE CONDUIT FITTING

PRODUCT DIAGRAM



PADDLE (PADDLE/STRIP) NUMBER

NO. 1: 0.5" DIA ALL PIPE SIZES	NO. 2: 0.9" DIA ALL PIPE SIZES
NO. 3: 0.94" x 1.4" 1½" PIPES AND LARGER	
NO. 4: 0.9" x 2.0" 2" PIPES AND LARGER	
NO. 5: 0.9" x 4.0" 5" PIPES AND LARGER	
NO. 6: 0.9" x 6.0" 6" PIPES AND LARGER	



**WEIGHT: 3.5 lb.
1.59 kg**

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MODEL Q-5 Q-5SS

MODEL SELECTION CHART

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

PIPE SIZE	CONTINUOUS SWITCH POINT ADJUSTMENT RANGE (GPM)		PIVOT SHAFT #	PADDLE #
	Red Brass	316 Stainless Steel		
1"	5 to 15	10 to 20	2	2
	12 to 36	20 to 60	2	1
1½"	7 to 21	14 to 42	3	3
	10 to 30	20 to 60	3	2
	20 to 75	30 to 90	3	1
2"	14 to 42	21 to 63	3	4
	20 to 60	30 to 90	3	2
	50 to 150	60 to 180	3	1
3"	27 to 81	45 to 135	5	4
	45 to 135	75 to 225	5	2
	110 to 330	130 to 390	5	1
6"	65 to 195	103 to 309	5	6
	80 to 240	125 to 375	5	5
	190 to 570	300 to 900	5	2
	450 to 1,350	550 to 1,650	5	1

Call our customer support for a wider range of pipe sizes. (805) 988-6800

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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TECHNICAL SPECIFICATIONS

HYSTERESIS (Δ FLOW RATE TO ACTIVATE/DEACTIVATE SWITCH)

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

DIFFERENTIAL PRESSURE DROPS ACROSS UNIT

Under 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 @ 70°F)

WORKING TEMPERATURE:

180°F max. continuous.

ELECTRICAL SWITCH CHARACTERISTICS

SPDT 10,000,000 Operations Median
 15A, ½ hp @ 125 or 250VAC Switch may be overloaded to 20A
 ½A @ 125VDC, ¼A @ 250VDC @ 125 or 250VAC (min 20,000
 5A @ 125VAC (W lamp load) operations.)

Q-5 MATERIALS:

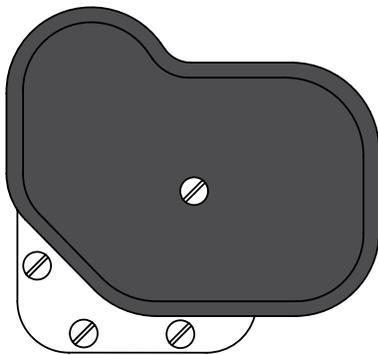
Body, shaft and drag disks/strips: Brass and 316 stainless steel
 Working fluid "sees" red brass (phosphor bronze) and EPDM elastomer seal
 Gasket: Cork/Buna blend
 Optional Seal: Viton®

Q-5SS MATERIALS:

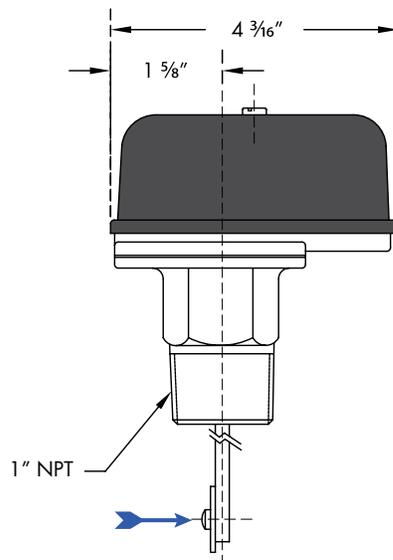
Body, shaft and drag disks/strips: 316 stainless steel
 Working fluid "sees" 316 stainless and Viton® seal.
 Gasket: Teflon®

INSTALLATION DIMENSIONS

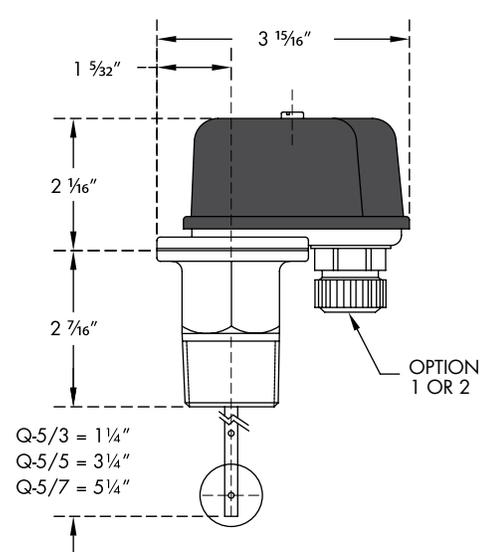
TOP VIEW



SIDE VIEW



FRONT VIEW



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

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