

FLOW SWITCH

MODEL Q-16



THE Q-16. MAXIMUM RELIABILITY, MINIMUM COST.

The Q-16 is the newest addition to Harwil's heavy-duty line of flow switches. The switch is used to signal, start, or stop electronically operated equipment when flow or no-flow conditions occur. The Q-16 benefits from 40 years of flow switch development experience for every conceivable application.

Harwil's patented elastomeric sealing system is superior to the metal bellows that are subject to metal fatigue and corrosion. This seal system has been field-proven for over a decade.

The Q-16 can be used in pipes 1 inch and larger, with set points as low as 4 GPM (15.2 LPM) to over 500 GPM (1,893 LPM) in larger pipe sizes. The Q-16 uses a 15A SPDT micro switch that can control a 1/2 horsepower motor.

- Multiple Quick-Change Paddles
- Patented EPDM Seal, Superior To Metal Bellows
- Field Adjustable Set Points
- Field Adjustable Paddles
- Direct Replacement For Most Paddle-Type Flow Switches
- Best Flow Sensitivity Among Paddle-Type Flow Switches
- Stainless Steel Paddles And Shaft
- NEMA 1 Enclosure
- Industry-Leading 3 Year Warranty**



KEY FEATURES

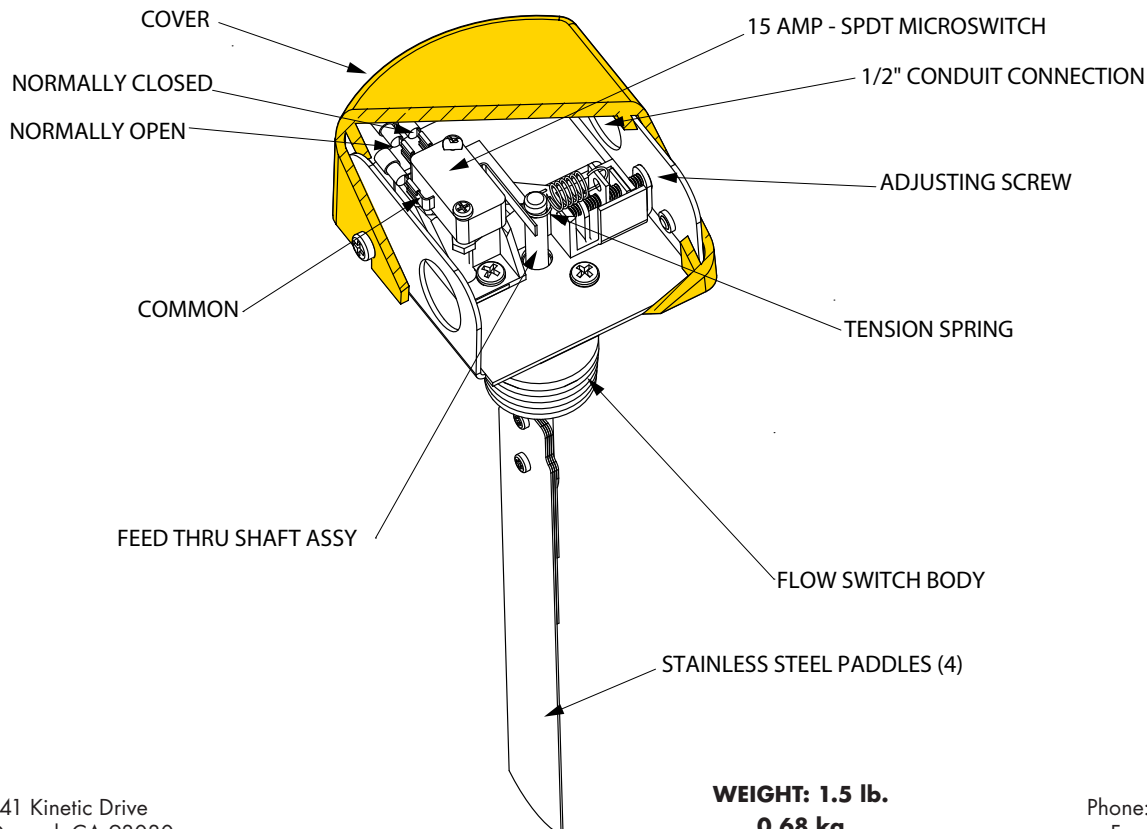
Flow Range	4-500 GPM (15-1,893 L/m)
Working Temp	250°F (121°C) Maximum
Working Pressure	200 psi (1.379 kPa)
Process Connection	1" NPT
Electrical Switch	SPDT 15A or Dry Circuit
Enclosure	NEMA 1 (Not for use in hazardous locations)
Approvals	UL 508 & UL 353
Enclosure	NEMA 1 / IP 10

TYPICAL USES

- For use in
- Boilers
 - Chillers
 - Irrigation
 - Cooling Towers
 - Water Treatment

For direct replacement of most 1" paddle style flow switches.

PRODUCT DIAGRAM



**WEIGHT: 1.5 lb.
0.68 kg**

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MODEL SELECTION CHART				
Flow Range (Water calibrated at 70°F / 21°C) Accuracy ±10%				
PIPE SIZE NPT	SWITCHPOINT RANGE (GPM)			
	MIN. ADJUST.		MAX. ADJUST.	
	ON	OFF	ON	OFF
1"	4	2	8	7
1½"	7	5	13	11
2"	12	7	27	26
2½"	18	12	35	32
3"	27	19	52	49
4"	63	50	123	120
5"	125	100	238	232
6"	190	158	350	338

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

* Special fittings required for use in PVC or CPVC pipe.

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

200 psig max.

WORKING TEMPERATURE

250°F max. continuous.

WETTED MATERIALS

Body: Brass
Shaft: 304 Stainless Steel

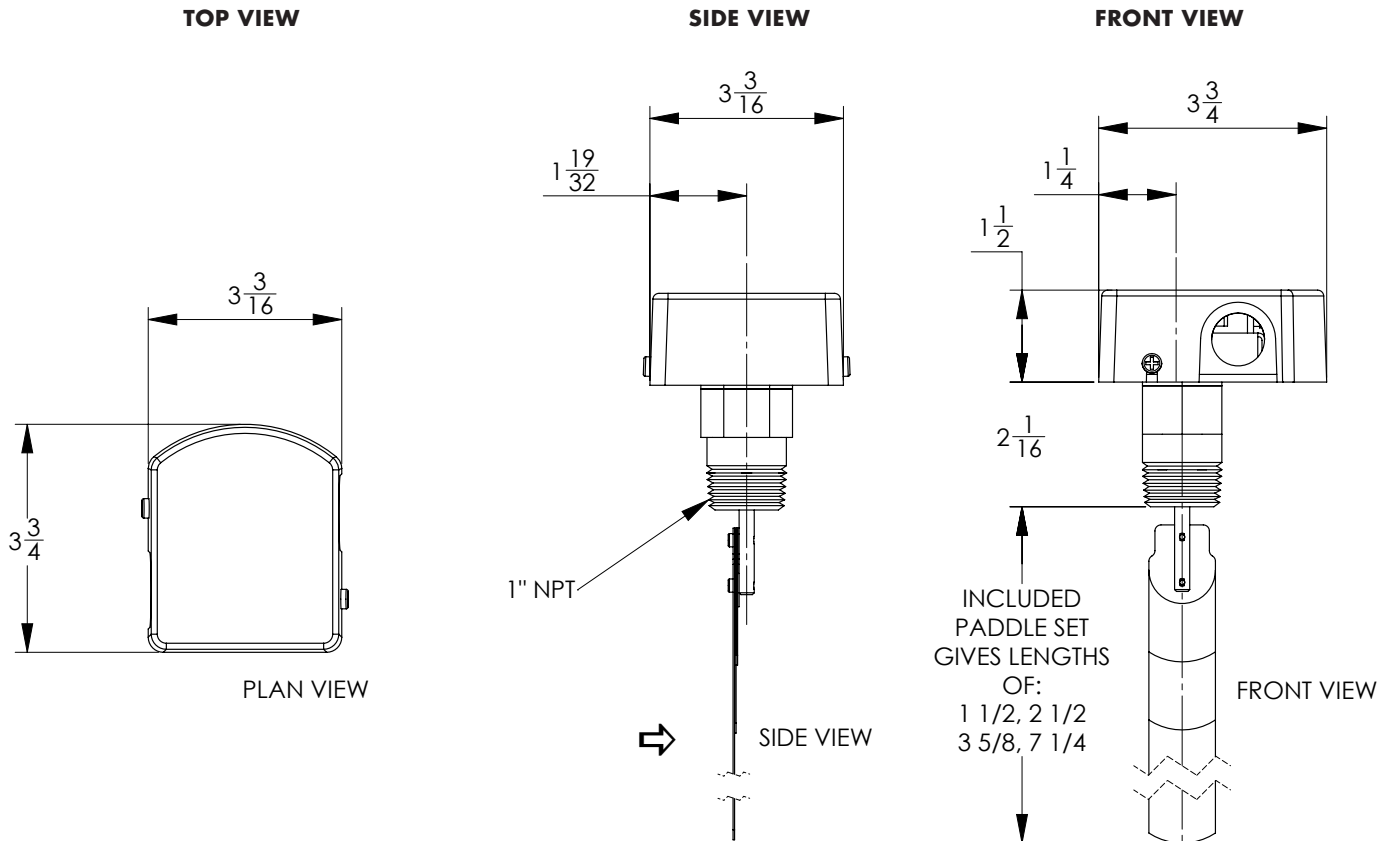
Paddle: 316 stainless steel
Seal: EPDM

ELECTRICAL SWITCH CHARACTERISTICS

SPDT ¼A @ 250VDC
15A, ½ hp @ 125 or 250VAC 10,000,000 Operations Median
½A @ 125VDC

Model Q-16 can also be fitted with a SPDT Gold Cross Bar Switch for computer/PLC interface.

INSTALLATION DIMENSIONS



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