### MODEL Q-16 DATA SHEET

## **FLOW SWITCH**

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 (3.8 LPM) to over 500 GPM (1,893 LPM) in larger pipe sizes. The Q-16 uses a 15 amp SPDT micro switch that can control a  $\frac{1}{2}$  horsepower motor.

### **MULTIPLE QUICK-CHANGE PADDLES**

PATENTED EPDM SEAL, SUPERIOR TO METAL BELLOWS

### **INDUSTRY-LEADING 3 YEAR WARRANTY**

### FIELD ADJUSTABLE SET POINTS

FIELD ADJUSTABLE PADDLES

DIRECT REPLACEMENT FOR MOST PADDLE-TYPE FLOW SWITCHES

BEST FLOW SENSITIVITY AMONG PADDLE-TYPE FLOW SWITCHES

HIGH PRESSURE (200 PSI) AND TEMPERA-TURE (250°F)

STAINLESS STEEL PADDLES AND SHAFT

**NEMA 4 ENCLOSURE** 

### VITAL STATS.

Process Connection	1 " NPT
Working Temp (°F / °C)	32°–250°F (0°–121°C)
Pressure	200 psi
Enclosure	NEMA 4
Conduit Opening	1⁄2″ Conduit
Pipe Size	1″-6″
Warranty	3 year

### **TYPICAL USES.**

The Q-16 was designed for any fluid that is not corrosive to brass, stainless steel, or EPDM. Examples include:

- Cooling Tower Water
- Glycol Solutions
- Irrigation

FLUID FLOW SWITC

Q-16

- Process Water
- Wastewater
- Other Non-hazardous fluids

A low-voltage, low-current model is available for microprocessor or control signal applications.

### **INDUSTRY IDEAS**

Typical industries include:

BOILERS - Verify critical flow in tube-boilers or boiler feeds.

CHILLERS - Protect coils from freezing at low flow.

WATER TREATMENT - Verify flow for chemical feed, UV, ozone

IRRIGATION - Protect pumps and verify flow for fertilizer injection.



TURBULENT FLOW REDUCTION



MOUNT IN THREE POSITIONS

> Phone: (805) 988-6800 Fax: (805) 988-6804 Email: harwil@harwil.com

THE "Q" STANDS FOR VOLUMETRIC FLOW RATE

541 Kinetic Drive Oxnard, CA 93030 www.harwil.com

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### FLOW RANGE. Water calibrated at 70°F (21°C)

Pipe Size NPT	Switchpoint Range (GPM)				
	Min. Adjust.		Max. Adjust.		
	ON	OFF	ON	OFF	
1″	4	2	8	7	
1 1⁄2″	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	
Consult the factory for larger pipes and additional switch points.					

### **ELECTRICAL SWITCH CHARACTERISTICS**

### SINGLE-POLE, DOUBLE-THROW (SPDT)

15A, 1/2 HP @ 125/250 VAC 1/2A @ 125 VDC, 1/4A @ 250 VDC

### **DRY CIRCUIT OPTION**

Switch can interface with microprocessor based controllers and related computer circuits.

#### WETTED MATERIALS

Body: Brass Shaft: 304 Stainless Paddles: 316 Stainless Seal: EPDM

### **INSTALLATION DIMENSIONS**







Installation drawing and a numbered parts list is supplied with each unit.

Current pricing is listed on our web site.

• Special one-day delivery is available.

PLAN VIEW