FLOW SWITCH

MODEL Q-15N Q-15CR

Model Q-15 is the most sensitive paddle type flow switch available. It utilizes Hall Effect technology and is programmed for the highest sensitivity.

Model Q-15 comes standard with 8 conductor modular cable and Cat 3 modular connector. Other cable/connector combinations available upon special order.

Max. flow may be five times normal flow.

Positive stop eliminates fatigue effects of turbulence, vibration and flow surge on flow detecting element.

Very low pressure drop - typically less than 1.0 psig at normal flow rate.

Small size and low profile provides easy mounting in crowded installations.

Switch employs magnetic coupling.

Send us your special requirements. We will quote a special unit to meet those requirements.

SIDE VIEW



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KEY FEATURES

Flow Range	0.7-590 GPM (2.6-2,233 L/m)	
Working Temp	180°F (82°C) Maximum	
Working Pressure	250 psi (1.724 kPa)	
Process Connection	34" NPT	
Electrical Contacts	SPNO .25A (250 mA)	
Enclosure	NEMA 4 / IP 66	

TYPICAL USES

Lasers

Monitoring flow of coolant supplied to:

Brakes and Clutches Emergency Wash-Down Showers
Computer Systems Marine and Stationary Engines
Diodes, SCRs, Triacs, etc. RF and Radar Transmitters
Electromagnets Spot welders
Fire Sprinkler Flow Alarms Transformers

Vacuum Systems

In Chemical Processing:

Fluid Blending Systems Liquid Transfer
Heat Transfer Fluids Monitor Filter Clogging
Liquid Scrubbers Starting back-up pumps
Monitoring pump output, valve position, systems flow status

In Water Treatment:

Irrigation Systems Salt and Fresh Water Systems

≋ TYPICAL WORKING FLUIDS

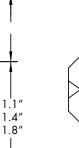
For use in a broad spectrum of industrial fluids, such as:

Cooling Tower Water Water (saltwater, pure, tap, etc.)

Glycol Solutions Lubricating Oils

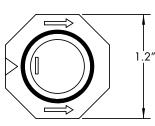
Mild Acids Gasoline
Plating Solutions JP-4

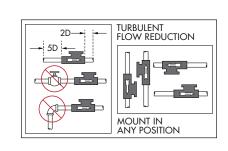
TOP VIEW



1 4'

0.3"







3/4" NPT

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



MODEL SELECTION CHART

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

PIPE SIZE NPT	NOMINAL ON/OFF SWITCH POINT RANGE (GPM)		PADDLE NUMBER	
	ON	OFF		
3/4"	0.9	0.8	3 (.7SM)*	
	3	2	3SM	
	11	10	6\$	
1"	1.1	1.0	3 (.7M)*	
	4	3	4\$	
	6	5	68	
11/2"	2.8	2.5	4 (.7L)*	
	13	12	4\$	
	16	15	6M	
	21	19	6S	
2"	4.9	4.4	4 (.7L)*	
	15	12	4M	
	23	18	4\$	
	27	22	6M	
3"	11.0	9.9	4 (.7L)*	
	33	25	4M	
	57	45	4\$	
	65	58	6M	
	82	78	6S	
4"	19.6	17.6	4 (.7L)*	
	56	43	4M	
	95	83	4\$	
	120	108	6M	
	150	140	6S	
5"	30.6	27.5	4 (.7L)*	
	92	69	4M	
	150	130	4\$	
	180	170	6M	
	230	220	6S	
	135	95	4M*	
6"	220	180	4\$	
	260	220	6M	
	340	310	68	

Call our customer support for a wider range of pipe sizes. (805) 988-6800 * = Requires ¾ NPT process connection

*** TECHNICAL SPECIFICATIONS**

ELECTRICAL CHARACTERISTICS

SPNO

Input Voltage 8 to 24 vdc

Contact Rating

Switching Voltage 28 vdc max

Switching Current 1.5 amp (250 mA) max

Contact Resistance .25 ohms

Q-15N (NORYL®)

WORKING PRESSURE: 200 psig max. @ 70°F

WORKING TEMPERATURE: 180°F @ ambient pressure

WETTED MATERIALS: Body: Noryl® (PPO)

(10% glass fibers) Paddle: 316 stainless steel Seal: Epoxy

Q-15CR (FORTRON®)

WORKING PRESSURE: 250 psig max. @ 70°F

WORKING TEMPERATURE: 200°F @ ambient pressure
WETTED MATERIALS: Body: Fortron® (PPS) (40% glass fibers)

Paddle: 316 HASTELLOY® C. Seal: Epoxy

SAMPLE PART NUMBER

OPTION 1: Q-15N	/ 3/4	/ SB	/ 4 S	/ 2FT	
BASE MODEL	1	1	1	1	
PROCESS CONNECTION 3/4" NPT					
PIPE SIZE: SB ¾" T	O 1"; L	.B 1½"+			
PADDLE NUMBER					
LENGTH OF CABLE (FT))					

Note: Tee and orifice options available when ordering.

NOTE: Model Q-15N employs magnetic coupling between bending blade and switch body. Magnetic particles can accumulate on and around magnetic housing which may affect proper operation. Please conduct appropriate fluid magnetic particle evaluation and operational tests prior to and during installation and use.

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

[•] Special one-day delivery is available.