

# 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.



## KEY FEATURES

Flow Range	<b>0.7-590 GPM (2.6-2,233 L/m)</b>
Working Temp	<b>180°F (82°C) Maximum</b>
Working Pressure	<b>250 psi (1.724 kPa)</b>
Process Connection	<b>3/4" NPT</b>
Electrical Contacts	<b>SPNO .25A (250 mA)</b>
Enclosure	<b>NEMA 4 / IP 66</b>

## TYPICAL USES

### 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
Lasers	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	

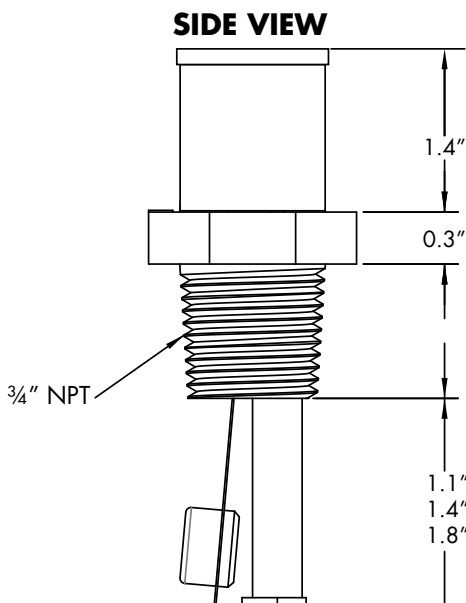
### In Water Treatment:

Irrigation Systems	Salt and Fresh Water Systems
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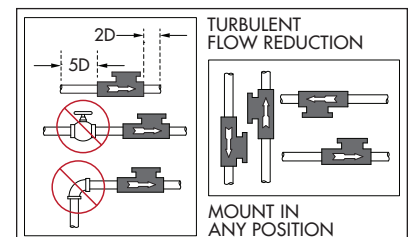
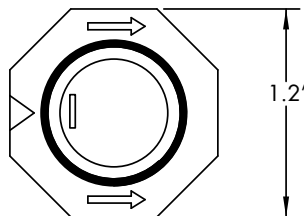
## ≈ TYPICAL WORKING FLUIDS

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



541 Kinetic Drive  
Oxnard, CA 93030  
www.harwil.com  
16.299

# Q-15N Q-15CR

## 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	
¾"	0.9	0.8	3 (.7SM)*
	3	2	3SM
	11	10	6S
1"	1.1	1.0	3 (.7M)*
	4	3	4S
	6	5	6S
1½"	2.8	2.5	4 (.7L)*
	13	12	4S
	16	15	6M
	21	19	6S
2"	4.9	4.4	4 (.7L)*
	15	12	4M
	23	18	4S
	27	22	6M
3"	11.0	9.9	4 (.7L)*
	33	25	4M
	57	45	4S
	65	58	6M
	82	78	6S
4"	19.6	17.6	4 (.7L)*
	56	43	4M
	95	83	4S
	120	108	6M
	150	140	6S
5"	30.6	27.5	4 (.7L)*
	92	69	4M
	150	130	4S
	180	170	6M
	230	220	6S
6"	135	95	4M*
	220	180	4S
	260	220	6M
	340	310	6S

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	/ ¾"	/ SB	/ 4S	/ 2FT
BASE MODEL	↑	↑	↑	↑
PROCESS CONNECTION ¾" NPT				
PIPE SIZE: SB ¾" TO 1"; LB 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.