

YFL7SWITCH

3/8" Flow Switch



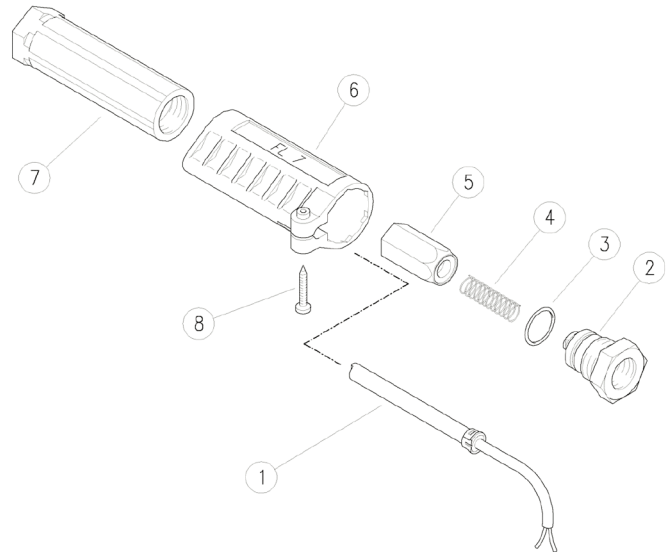
SPECIFICATIONS

Operating Pressure	5100 PSI
Maximum Pressure	5650 PSI
Maximum Flow	8.0 GPM
Activation Flow Rate: Horizontal	1.5 GPM
Vertical:	2.1 GPM
Maximum Volts	250 V
Maximum Amps	3 Amp
Maximum Temperature	180° F
Port Sizes: Inlet	3/8" NPT-M
Outlet	3/8" NPT-M
Dimensions	4.4" x 3.3"
Weight.....	0.86 lbs.
Material	Brass, Stainless Steel, Buna-N Plastic

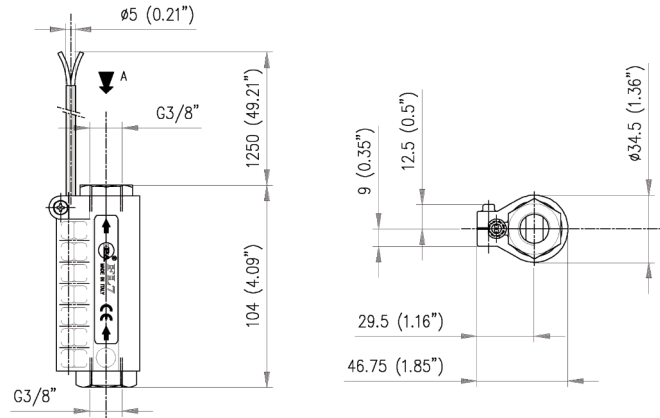
*May not be used for starting motors,

PARTS LIST

Item	Part #	Description	Qty.
1	Y28051823	Probe with 48" Cord	1
2	Y28040431	Coupling, M22Mx15.6	1
3	Y10306601	O-ring, 1.78x15.6	1
4	Y28040651	Spring, 0.4x8.4x33, SST	1
5	Y28041023	Magnetic Shuttle	1
6	Y28040884	Cover	1
7	Y28040131	3/8 F BSP Body	1
8	Y16302118	Self-tapping screw, 2.6x16	1



DIMENSIONAL DRAWING



INSTALLATION

The flow switch detects the presence of water flow on the inside of the system by means of a piston which is shifted by the water itself. When the piston is moved by the water flow, the magnets contained internally stimulate a reed switch that closes the electric circuit. Can be installed horizontally or vertically. The water flow has to be directed as per the direction of the arrows inscribed on the plastic casing of the flow switch.

ELECTRICAL

For the connection of the electric circuit, see **Fig. 1**. In order to prevent damage it is necessary to install adequate protections for the system. There are many circuits to choose from, one of the most effective is seen in **Fig. 2**.

<p>N.A.</p> <p>fig 1</p>	<p>$I = (A=Ampere) \quad V = (V=Volt)$</p> <p>Inductive Load $C = I^2 / 10 \ (\mu F)$ $R = V / (10 \times I^2) \ (\Omega)$ $\alpha = 1 + (50 / V)$</p> <p>fig 2</p>	<p>Example of Inductive Load Working Data 230V-0.5A</p> <p>$C = I^2 / 10 \ (\mu F) = 0,5^2 / 10 = 0,025 \ \mu F$ $\alpha = 1 + (50 / V) = 1 + (50 / 230) = 1,2$ $R = V / (10 \times I^2) \ (\Omega) = 230 / (10 \times 0,5^{1,2}) = 53 \ \Omega$</p>
	<p>Resistive Load $R = V / I \ (\Omega)$</p>	<p>Example of Resistive Load Working Data 230V-0.5A</p> <p>$R = V / I \ (\Omega) = 230 / 0,5 = 460 \ \Omega$</p>

PROBLEMS & SOLUTIONS

PROBLEMS	PROBABLE CAUSES	SOLUTIONS
The piston does not move	Unsufficient flow Faulty assembly Foreign material on the piston	Check for supply and restriction to flow Re-assemble considering the flow direction Clean and install a filter
Electric signal missing	Reed Damaged Disconnected wires Electric probes out of phase or displaced	Replace and install a protection circuit Check and re-set connections Check and re-set probe

MAINTENANCE

Every 400 working hours or 10,000 cycles, check the magnetic pin (item number 5 in the exploded view) and clean.