## Side Entry Level Switch

## Features

- 0 to 500V AC 15 Amp S.P.D.T switch or;
- Low voltage model also available ('RL' model)
- 316 Stainless or Polypropylene models
- Available with 1" BSP or NPT thread
- Manual override built in ('L-H' models only)
- Modular construction
- High pressure 400 Bar 5800 psi models available
- Seal-less magnetic drive
- Weatherproof IP67 housing
- Easily serviceable


## Applications

- Tank and liquid level control
- Low level protection for pumps
- Level control in water treatment
- Chemical tank level monitoring



## Outline

The L Series side entry level switch provides a reliable accurate and low cost solution to tank level control. The switch is available in all thermoplastic construction or in a combination of 316 Stainless Steel and Polypropylene or CPE for Diesel applications. The level switch can be supplied with a 500 Volt rated single pole double throw microswitch for general control circuit use or with a 30 volt rated single pole double throw microswitch for low voltage low current applications. The L Series level switch is built tough to give a long reliable service life in the most arduous applications.

## Ordering

The below shows the different switch models available in the L Series:


## Hazardous Applications

The L-RL models can be used in hazardous areas. These switches are classed as a 'simple device' and do not contain components capable of storing or producing an electric charge. As a simple device the L-RL switches can be used in hazardous applications provided it is isolated by an intrinsically safe barrier, a Zener barrier.

## Electrical Data for the 'H' Switch

The 'L-H' switches house a S.P.D.T (Single Pole Double Throw) microswitch. This standard switch is suitable for all general control circuit applications up to 500 V AC. It is ideal for the control of pump starters, relay logic circuits, and for the direct control of contactors and timers.

## IMPORTANT

The standard ' H ' switch can operate at ANY voltage from 5 to $500 V A C$. It can be used to directly control pump motors up to 375 Watts ( 0.5 HP ) at 240 VAC . For larger motors always use an interposing contactor or relay between the flow switch and the motor.

| RATED VOLTAGE | NON INDUCTIVE LOADS |  |  |  | INDUCTIVE LOADS |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | RESISITIVE <br> LOAD |  | LAMP LOAD |  | $\begin{aligned} & \text { INDUCTIVE } \\ & \text { LOAD } \end{aligned}$ |  | MOTOR LOAD |  |
|  | NO | NC | NO | NC | NO | NC | NO | NC |
| 125 VAC | 15A |  | 3 A | 1.5 A | 15A |  | 5A | 2.5 A |
| 250 VAC | 15A |  | 2.5A | 1.25A |  |  | 3A | 1.5A |
| 500 VAC | 10A |  | 1.5A | 0.75 A |  |  | 1.5A | 0.75A |
| 8 VDC | 15A |  | 3A | 1.5A |  |  | 5A | 2.5A |
| 14 VDC | 15A |  | 3 A | 1.5 A |  |  | 5A | 2.5 A |
| 30 VDC | 6 A |  | 3 A | 1.5A |  |  | 5A | 2.5A |
| 125 VDC | 0.5A |  | 0.5A | 0.25A |  |  | 0.05A | 0.05A |
| 250 VDC | 0.5 A |  | 0.5A | 0.25A |  |  | 0.03A | 0.03A |

## Electrical Data for the 'RL' Switch

The 'L-RL' reed switch models are supplied with a high compliance Single Pole Double Throw reed switch suitable for all low wetting current and low voltage applications. Such applications include PLC control, signaling in telemetry systems and relay logic circuits.
Please note: the reed switch models are not suitable for use with inductive loads such as contactors or high wattage relays.

| Switch Type: | Dry Contact Reed Switch |
| :--- | :--- |
| Contact Configuration: | S.P.D.T Break Before Make |
| Switched Power: | $20 \mathrm{~W} /$ VA Maximum |
| Switch Voltage Maximum: | 140 V AC 150V DC |
| Switched Current (Resistive): | 1 Amp Maximum |
| Carry Current: | 2 Amp Maximum |
| Breakdown Voltage: | 200 V Minimum |
| Typical Applications: | PLC, Telemetry \& General <br> Low Voltage Control |

## Approved Standards

The standard single pole double throw switch used in the L Series Level Switch is approved to the following international standards: UL (File No. E32667), CSA (File No. LR21642) SEV (File No. S20/163) and CE.

## Operating Limitations

Please note: Maximum operating pressure of the all Polypropylene L series switch must be linearly de-rated as operating temperature is increased so that at $60^{\circ} \mathrm{C}\left(140^{\circ} \mathrm{F}\right)$ the maximum permissible operating pressure for the switch does not exceed one Bar (15 psi) absolute.

| Parameter | L Series with Polypropylene <br> process connection | L Series with Stainless <br> process connection |
| :--- | :---: | :---: |
| Maximum operating <br> pressure (Static or <br> Dynamic) at ambient <br> temperature | 18 Bars <br> $(261 \mathrm{PSI})$ | 400 Bars <br> $(5800 \mathrm{PSI})$ |
| Minimum burst <br> pressure at ambient <br> temperature | 45 Bars <br> $(652 \mathrm{PSI})$ | 800 Bars <br> $(11800 \mathrm{PSI})$ |
| Maximum operating <br> temperature | $60^{\circ} \mathrm{C}$ <br> See note <br> below | $80^{\circ} \mathrm{C}\left(176^{\circ} \mathrm{F}\right)$ |
| Minimum operating <br> temperature | $-20^{\circ} \mathrm{C}\left(-4^{\circ} \mathrm{F}\right)$ | $-20^{\circ} \mathrm{C}\left(-4^{\circ} \mathrm{F}\right)$ |
| Ingress protection <br> rating | IP 67 | IP 67 |

## Dimensions



The switch requires a minimum of 25 mm of clearance above and below its centre line axis to facilitate the free movement of its float.


## Kelco Engincering Pty Ltd

Postal Address
PO Box 7485 Warringah Mall
Brookvale 2100 NSW Australia

Phone: +61 299056425
Fax: +61 299056420

Email: Sales@kelco.com.au Web: www.Kelco.com.au

