# KELCO

# L SERIES SIDE ENTRY LEVEL SWITCH

#### FEATURES

- Stainless steel or thermoplastic
- Built in manual override
- 15 Amp 500 volt S.P.D.T switch
- Unique seal-less coupling
- Weatherproof IP67 housing
- Simple to install
- Fully serviceable

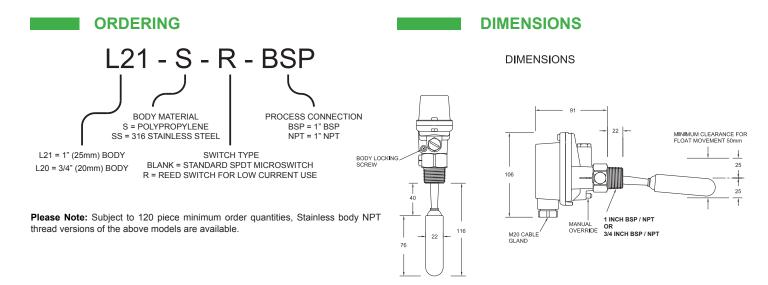
## **APPLICATIONS**

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



#### INTRODUCTION

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. The level switch can be supplied with a 500 Volt rated single pole double throw microswitch for general control circuit use or with a S.P.D.T reed switch 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.





#### **ELECTRICAL DATA REED SWITCH MODELS**

All reed switch models are supplied set up to operate as single pole double throw break before make switch. It is suitable for all low wetting current and low voltage applications such as PLC control, signalling in telemetry systems and relay logic circuits. The reed switch model not suitable for switching electric motors.

SWITCH TYPE	CONTACT	SWITCHED POWER	SWITCHED VOLTAGE MAXIMUM	SWITCHED CURRENT (RESISTIVE)	CARRY CURRENT	BREAKDOWN VOLTAGE	TYPICAL APPLICATIONS
DRY CONTACT REED SWITCH	S.P.D.T BREAK BEFORE MAKE	20W / VA MAXIMUM	140V AC 150V DC	1 AMP MAXIMUM	2 AMP MAXIMUM	200V MINIMUM	PLC, TELEMETRY & GENERAL LOW VOLTAGE CONTROL APPLICATIONS

#### **MICROSWITCH MODELS**

The L Series level switch is suitable for all general control circuit applications from low voltage signalling up to 500V AC. It is ideal for the control of pump starters, relay logic circuits, and for the direct control of contactors and electronic timers.

RATED	NO	N IND	JCTIVE L	OADS	INDUCTIVE LOADS			
VOLIAGE	RESISTIVE LOAD		LAMP LOAD		INDUCTIVE LOAD		MOTOR LOAD	
	NO	NC	NO	NC	NO	NC	NO	NC
125 VAC	15A		3A	1.5A	15A		5A	2.5A
250 VAC	15A		2.5A	1.25A	15A		3A	1.5A
500 VAC	10A		1.5A	0.75A	6A		1.5A	0.75
8 VDC	15A		3A	1.5A	15A		5A	2.5A
14 VDC	15A		3A	1.5A	10A		5A	2.5A
30 VDC	6A		3A	1.5A	5A		5A	2.5A
125 VDC	0.5A		0.5A	0.25A	0.05A		0.05A	0.05A
250 VDC	0.5A		0.5A	0.25A	0.03A		0.03A	0.03A

#### **APPROVED STANDARDS**

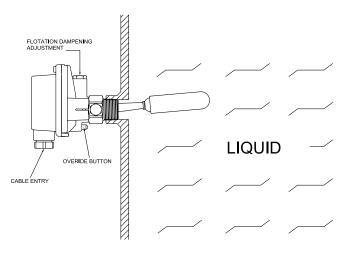
The high compliance single pole double throw switch used in the L Series level switch is approved to the following international standards: UL (File No. E32667), CSA (File No. LR21642) SEV (File No. S20/163), CE.

#### **OPERATING LIMITATIONS**

Model	L20 / L21-S (All Poly)	L20 / L21-SS (Stainless)	L20 / L21-D (Diesel)
Maximum operating pressure (Static or Dynamic) at ambient temperature	10 Bars (145 PSI)	10 Bars (145 PSI)	10 Bars (145 PSI)
Minimum burst pressure at ambient temperature (Switch body only)	45 Bars (652 PSI)	500 Bars (7251 PSI)	500 Bars (7251 PSI)
Maximum operating temperature	60°C See note below	80°C	80°C
Minimum operating temperature	0°C	0°C	0°C
Minimum liquid S.G.	0.8	0.8	0.8
Ingress protection rating	IP67	IP67	IP67

Please note: Maximum operating pressure of the Polypropylene L21-S must be linearly de-rated as operating temperature is increased so that at 60°C the maximum permissible operating pressure for the switch does not exceed one Bar absolute.

> TYPICAL TANK APPLICATION WITH THE FLOAT SWITCH SCREWED INTO A 25mm (1") SOCKET FIXED TO THE SIDE OF THE TANK.



## **KELCO** Engineering Pty Ltd

ABN 20 002 834 844 Head office and factory: 9/9 Powells Road Brookvale NSW 2100 Australia. Postal Address: PO Box 7485 Warringah Mall Post Shop Brookvale NSW 2100 Australia. Phone: +61 2 9905 6425 Fax: +61 2 9905 6420 Email: Sales@kelco.com.au Web: www.Kelco.com.au

PLEASE NOTE: Kelco Engineering Pty Ltd reserves the right to change the specification of this product without notice. Kelco Engineering Pty Ltd accepts no liability for personal injury or economic loss as a consequence of the use of this product. All rights reserved copyright Kelco Engineering Pty Ltd © 2014 The Kelco L Series is protected by a 12 month return to base warranty. Full details of our warranty can be downloaded from: http://www.kelco.com.au/warranty