

LRN Series

Reed float switch



Features

- High or low level sensing
- Normally open, normally closed or change over contact action
- Ratings up to 100 W
- Operates in liquid down to S.G. of 0.65
- Internal or external fitting
- Easy to install
- Cost effective

Description

The Honeywell range of horizontal, vertical and right angled float switches offers the design engineer a combination of versatility and reed switch reliability. A magnet located in the float is used to activate the reed switch either on a rising or falling liquid level and the design allows for high or low level sensing simply by rotating the switch through 180°. A range of internal or external mounting options is available and a universal mounting kit allows both internal and external mounting. Available in Nylon 6.6 and Glass Filled Polypropylene materials and a range of switching options. LRN float switches are suitable for use in the automotive, chemical, petroleum and food processing industries in signalling and control applications.

Typical applications

- Low coolant level sensing
- Fuel or oil level sensing
- Boiler level warning
- Solution monitoring
- Flood control
- Catering and vending machine
- Domestic appliance
- Medical equipment

Technical information

Mechanical						
Minimum operate angle (horizontal models)	5° from mounting angle					
Maximum release angle (horizontal models)	40° from mounting angle					
Shock *	50 g for 11 milliseconds duration					
Vibration *	35 up to 500 Hz					
Nominal cable length	0.5 m					
Environmental						
	Nylon 6.6	Diecast metal** body	Glassfilled**** polypropylene			
Operating Temperature Range	-30 °C to +130 °C	-30 °C to +130 °C	-30 °C to +110 °C			
Minimum SG of liquid	0.85	0.85	0.65			
Minimum Viscosity of Liquid (centipoise)	100	100	100			
Plastic Housing Water absorption of equilibrium at 20 °C and 100 % RH	1.3 %	5.6 %	0.03 %			
	1.6 %	5.6 %	<0.5 %			
Heat distortion temperature 4.5 kg/cm ² (67.6 psig)	180 °C	245 °C	105 °C			
Electrical						
Switching options	0	1	2	3	4	5
Switch action	SPST	SPST	SPDT	SPST	TRIAC	TRIAC
Maximum Switching Voltage (Vdc)	100	100	100	100	-	-
	(VRMS)	120	250	70	120	250
Maximum Switching Current (A)	1.0	1.0	0.50	3.0	3.0	1.0
dc Contact Rating (W)	15 ***	15 ***	3 ***	100 ***	750	250
Minimum Breakdown Voltage (Vdc)	300	800	200	400	-	-
Initial Contact Resistance (Ω)	0.25	0.25	0.25	0.75	-	-

* Reed Switch Only

** Diecast metal model is fitted with Nylon 6.6 float as standard

*** The switching performance can be drastically affected if switch ratings are exceeded. For inductive, capacitive and tungsten filament lamp loads, derate by 50%. All switch ratings are at dc resistive loads.

**** For boiling water applications the maximum operating temperature limits are:-
Continuous boiling water 80 °C
Non continuous boiling water 100 °C

