



Working Principle & Operation

Reed chain level transmitters are economical and reliable sensor for continuous liquid level monitoring. The simple design with only one moving part, the float, delivers reliability and provides a continuous 4-20 mA output signal proportional to liquid level. Using simple and reliable reed switches mounted to a printed circuit board, the unit provides level accuracy of 12mm.

Applications

- Water storage tanks.
- Generator fuel tanks
- HVAC refrigerant tanks
- Condensate water tanks
- Chemical storage tanks

Construction & Operations

It consists of a float & guide tube assembly in non-magnetic material to achieve undisturbed flux. A chain of closely spaced glass encapsulated reed switches & resistors are placed inside the guide tube. During rise and fall of liquid level, the float moves & actuates a reed switch in the chain, through a magnet system within it and develops a proportional voltage. The operation is similar to a sliding resistance potentiometer. The sensed voltage is fed to the transmitter located in the enclosure for conversion to a signal of 4-20 mA, for use with PLC / DCS.

Specifications

Standard Version :

Resolution	: Standard 12 mm
Installation	: Top mounted
Enclosure	: Cast Al weather proof to IP-66 or Ex proof to Gr IIA & IIB or IIC
Float material	: SS316
Measuring length	: upto 2000 mm
Process connection	: 2" 150# RF Flanged
Output	: 4-20 mA
Wiring system	: 2 wire
Min Specific gravity	: 0.8
Max temperature	: 125 °C
Max test pressure	: 10 Kg/cm ²

How To Order	Example
Basic Model	LR
Enclosure	
A Die Cast Aluminium, Weatherproof housing IP65 (Standard)	
B Die Cast Aluminium, flameproof suitable for Gas Group IIA/IIB	X
C Die Cast Aluminium, flameproof suitable for Gas Group IIC	
Wetted Parts (Process Connection & Probe)	
4 SS 304	
5 SS 316 (Standard)	X
Float X Flange Size	
45 Ø 52 X 2 1/2" NB (Standard)	
51 Ø 52 X 3" NB	XX
33 Ø 52 X 4" NB	
39 Ø 40 X 2" NB	
Flange Rating	
B ANSI 150# RF Flange (Standard)	X
Output	
A 4-20mA (Standard)	
B 1 to 5 VDC	X
Display Type	
N Not provided (Standard)	
R Remote Loop Powered Indicator	X
Accessories	
NA Without	
WC Still well	
LY External Cage	
MF Matching Flange with Nuts & Bolts & Gasket	XX
ML	
Measuring length in mm (Please specify in mm for example Write 800 for 800 mm)	800 mm
** material test certificates will be provided for wetted parts only with chemical composition testing. For others, please consult factory.	
Ordering Example: LR . X . X . XX . X . X . X . XX . 800mm	
Ordering Information : Specify model no., Liquid, Specific Gravity, Operating Pressure & Operating Temperature.	

Note : Specifications and dimensions given in this product catalogue represents the state of engineering at the time of printing .
 Modifications may take place and materials specified may be replaced by others without prior notice.