

Level switch / Level transmitter



General description

level sensors are designed to meet demanding customer requirements for reliable operation. Models are available in lengths up to 3900mm with a variety of mounting configurations. The wide selection of materials includes 304SS, 316SS, PVC, CPVC, Polypropylene, and PTFE.

Operational Description

The level sensor consists of the reed switch and resistor on the internal circuit inside the stem and permanent magnet inside the float. The float is the only moving part which travels vertically on the stem. A permanent magnet inside the float acts on a series of closely set reed switches and resistors on the internal circuit inside the stem. The total resistance value is converted into voltage and current signals in proportion to the level of the liquid.

Features

- Continuous level indication / on-off
- 4~20mA output / Reed switch
- Very reliable
- Wide choice of materials
- Durable float
- Shock resistive and anti-stick float design

LBS ,LBPV	STANDARD
LSS, LSPV	COMPACT
0	THREAD (PT , PF , NPT ,G)
1	JIS FLANGE (FF / RF , 5 K , 10 K , 15K)
2	ANSI FLANGE (FF / RF , 150LB , 300LB)
3	DIN FLANGE (FF / RF , PN15 ,PN40)
	FLOAT POINTS (MAX TO 5 FLOATS)
0	OUTPUT : SPST OR SPDT
1	CONTINUOUS (OUTPUT : 4 ~ 20 m A)
A	Ø 49*50H , SUS316
B	Ø 98*150H , PVC
C	Ø 28*30H , SUS316
D	Ø 65*80H , PVC
(L) mm	INSERTION LENGTH (mm) max length to 3900 mm

Specifications

Sensor

Model	LBS	LBPV	LSS	LSPV
Description	Standard		Compact	
Drawing				
Mounting	JIS5K100A	JIS5K100A	JIS5K50A	JIS5K80A
Operating Temperature	-10°C to 100°C	0°C to 50°C	-10°C to 100°C	0°C to 50°C
Maximum Pressure	500kPa / 5bar	200kPa / 2bar	500kPa / 5bar	200kPa / 2bar
Minimum Specific Gravity	0.7	0.8	0.8	0.7
Material				
Housing	ADC12	PVC	ADC12	PVC
Flange Stem*	304SS	PVC	304SS	PVC
Float*	316SS	PVC	316SS	PVC
Maximum Length of Stem	3900mm		3000mm	
Minimum Length of S1	80mm	90mm	50mm	80mm
Minimum Length of S2	80mm	135mm	50mm	80mm
Resolution	10mm (5mm is option)			
Cable Entry	JIS F 20a (G3/4)			
Protection	IP55	IP43	IP65	IP43

*Other materials are available.

Model	FIH-L	FIH-1	FIH-2	FIH-3	FIH-4
Drawing					
Stem	304SS	316SS	304SS		PP
Float	316LSS	316LSS	316SS		PP
Retainer	304SS	316SS	304SS		PP
Operating Temp	-10°C to 100°C	-10°C to 100°C	-10°C to 120°C	-10°C to 200°C	-10°C to 90°C
Operating Pressure	2MPa / 20bar		2MPa / 20bar		1MPa/10bar
Mounting	Vertical				Vertical
Switching Rating	50VA AC	50VA AC	15VA AC	110VA AC	50V AC
Lead Wires	#22AWG		Silicon		#22AWG
Minimum SG	0.8	0.8	0.55	0.7	0.8