



RF- Capacitance Level Switch



LFS6

**Level & Flow Industrial
Automation (OPC) Pvt. Ltd.**

Email: info@levelinflow.com
Website: www.levelinflow.com
Contact No. : +91-8448557369

Bhavya Gold Plaza
207, S/F, Gali no. 6-7, Beadonpura
Karol Bagh, New Delhi - 110005

DESCRIPTION

RF level sensors are the Capacitance level detectors which are sometimes called as admittance level sensors. These sensors make use of radio frequency balanced impedance bridge circuit to find out whether the probe is in touch with the process material whose level is going to be detected.

RF-Capacitance level switch is appropriate for application in liquid and solid mediums. Design and sensing electric unit makes it suitable for sticky media, large hoppers and storage bins. The switch is easily thread mounted on the tank and is highly reliable in operation.

RF-Capacitance level switch consists of a guard section, upper insulation, main probe and grounding. It consists of a conductive probe which serves as one of the capacitor plate, and the vessel wall which forms the other plate of capacitor since it is also prepared from a conductive material. The isolation between these two plates of capacitor is provided via an insulating process material having low dielectric constant. Now, for measurement purpose, an RF signal is applied between the two capacitor plates which cause a little flow of current from the conductive probe to the vessel wall via process material. The probe works as an antenna to sense the frequency.

“When the level in the tank drops and the probe is exposed to the even less conductive vapours, the dielectric constant drops. This causes a drop in the capacitance reading and a minute drop in current flow. This change is detected by the level switch's internal circuitry and translated into a change in the relay state of the level switch”.

Application: Liquids, syrups, solids, powder, cement, sugar, flour, power milk, rice, granules, chemical, etc

FEATURE

Time delay function from 0-30 seconds.

IP 65 Protection.

Easy installation, durable, rugged

Suitable for sticky application, solids, powder

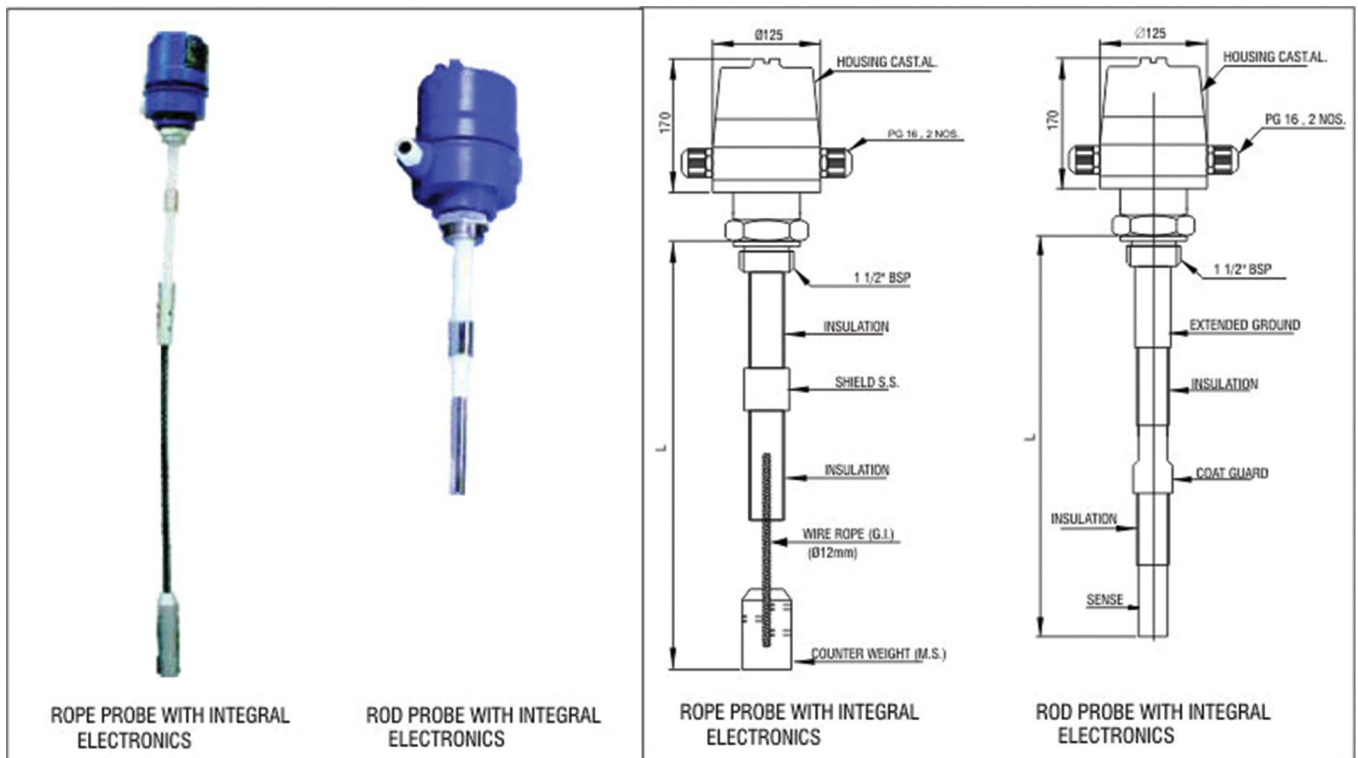
No moving parts



TECHNICAL SPECIFICATION

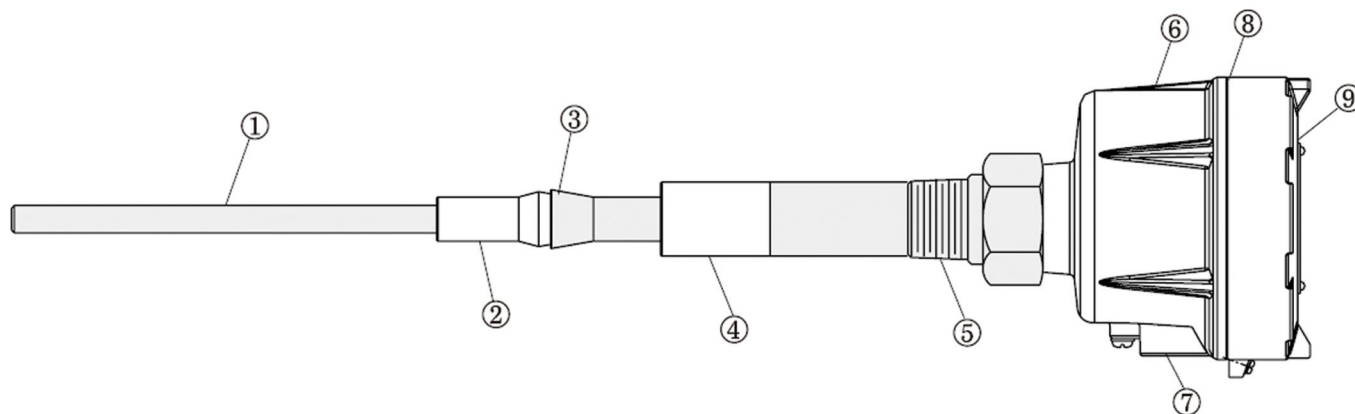
Model	LFS6
Probe	SS, PTFE Insulated
Housing	Aluminium, Weather Proof
Operating Temperature	70 ^o deg. C / above 60 (different model)
Supply	230 VAC
Protection	IP 65
Safety	FSL/FSH, switching points
Contact Rating	2 _{C/O} SPDT, 5Amp.
Connection	1 1/2" BSP SS Male Thread
Cable Entry	1 Nos. Standard
Mounting	Screwed BSP Standard or Flanged
Insulated Material	PTFE

STANDARD CONSTRUCTION FOR BOTH ITEMS

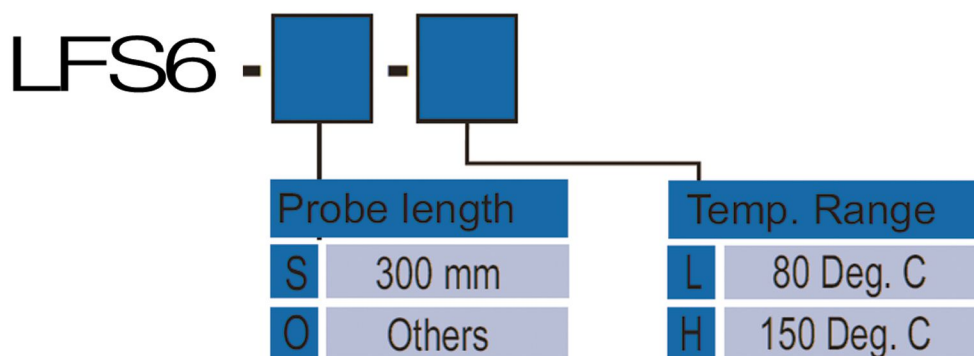


CONSTRUCTION

1. Probe: SS 304, SS 316.
2. Upper Insulation: The upper insulated part of the main probe.
3. Guard Section: The conductive metal probe helps to dissipate any possible presence of a false signal.
4. Lower Insulation: Due to the low k die-electric constant nature of the main probe, it is comprised of PTFE.
5. Connection: 3/4"NPT (Standard model)
6. Housing: Aluminium, weather proof IP 67, powder coated.
7. Cable: Standard.
8. Circuitry: FSH and FSL, Time Delay Adjustable Function.



MODEL SELECTION



* (All models may differ in looks & all specification may not be part of every version)
 * (Specification may vary as per different model selected. Some feature may not be there in model selected.)