

Rotating Paddle Level Switch (LFR-20 SERIES

PRINCIPAL

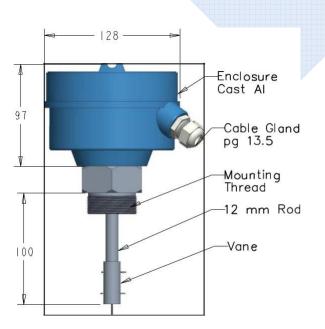
A stepper motor rotate the Paddle slowly an encoder coupled to the paddle shaft produces electrical pulses during its rotation. The pulses are monitored by a microcontroller to monitor its movement. Paddle rotation stops when the material covers it. The microcontroller gets signal from the encoder about the material presence and signal is processed to derive potential free contacts. The microprocessor continuously checks the material presence. The paddle shakes and vibrates to discard the built up material ensuring the material has receded and paddle is free. There after the output status is changed and motor starts rotating smoothly again waiting for the level to come.

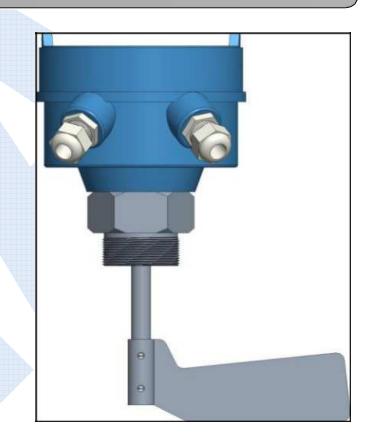
Features

- No Clutch, No Gear, No Spring.
- Flexible coupling (optional as per application)
- Robust, dust and watertight housing
- Extended Probe possible.
- Sealed bearings
- Interchangeable paddle assemblies
- Fail safe switch selectable.
- Time Delay Field Selected

Applications

- Dry sand & fly ash
- PET / PVC chips with under water detection
- · rice, wheat, other food grain, flour
- iron ore, sinters and pulverized coal
- Milk powder

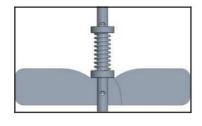




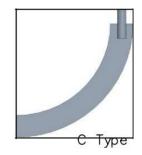
Types of Fans



L Type



Scissor Type





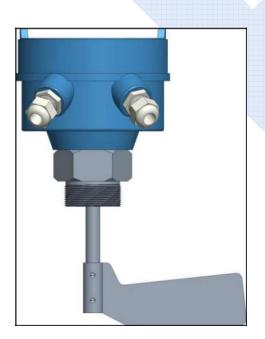
Star Type

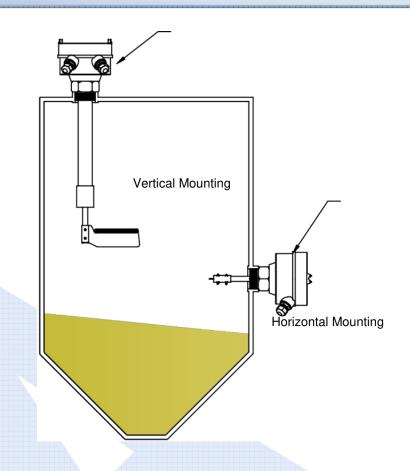


Rotating Paddle Level Switch (LFR-20 SERIES

Technical Specification

MODEL	LFR-20
Housing	Aluminum, Weather Proof, Powder Coated
Cable entry	2 nos.
Mains Voltage	Universal 65 to 260 V AC,50 Hz,
	or 24 V DC
Fail safe	Selectable for High or low
Output	2 sets of Potential Free c/o contacts rated
	at 5 amps, 230 V AC for non-inductive
	loads
Power consumption	8 VA
Mounting	Screwed 11/2" BSP (Standard)
	or Flanged and others (optional)
Sense Rod	Stainless steel, 12 MM DIA
Cable Gland	PG -13, 2 nos. (Polymer)
Insertion Length	100 mm standard
Extension	As per application
Revolution per Minute	8 / minute
Material of Wetted Parts	Stainless Steel
Number of vanes	Stainless steel, various types available as
	per application
Process Connection	1, 1-1/2" BSP (standard)others on request
Special Version	1 Detection of solids under 15 meter water
	column. 2 Angular probe for bulk material
	up to 50mm grains size.





Mounting Arrangement

Model Selection

LFR-20 Enclosure (E) 1 - Weatherproof IP-65 2 - Flameproof Temprature (T) 1 -Standard Temperature Up to 80°C 2 -High Temperature max Up to 220°C Probe Length (PI) 1 -Standard Probe Length 100 mm 2 -Extended Probe Length Upto 2000 mm 3 - Extension with protection pipe upto 2000mm 4 - Extended probe (rope type) **Mounting Arrangement (M)** 1 - Threaded BSP / NPT 2 -Flanged ANSI/DIN; 3 - Others Wetted Part (W) 1 -SS304 2 - SS316 3 -Others (consult factory) Output (O) 1 - SPDT Fan Type (F) 1 - L Type 2 - C Type (Crescent moon) 3 - Star Type 4 - Scissor Type Ы W Ο Τ 2 LFR-20