

VIBRATJ

Specification Sheet

Vibrating Rod Level Switch for Solid VF(L), VR series



Technical Data of VF(L) / VR

Operating Voltage	Autoadaption 20-35V DC 30-250V AC
Power consumption	1.5W(Max.)
Isolation voltage	1500V(Min.)
Overvoltage protection	CAT III
Output	Realy DPDT
Output capacity	250VAC, 3A; 30VDC, 1A
Delay time	0-30s adjustable
Switching delay	< 1.0s
Electrical connections	M20X1.5
Ambient temperature	-40 to +70°C
Process temperature	-40°C...250°C (for VR series max. 150°C)
Process pressure	-0.1...1.6 MPa (For VR series 0.1...0.6 MPa)
Process fitting	Threaded 1 1/2" BSPT
Material of probe	SUS 304/316L
Measuring range	4 m (max.)
Insertion length	VF 175 mm VFL 200 ~ 4000 mm VR 1000 ~ 10 000 mm
Frequency	160 Hz
Density of liquid	0.01 g/cm3
Protection class	IP67

Description

VF(L) / VR are level switches for universal use in powders and fine-grained bulk solids. The level switch detects reliably and robust the min. or maxim level. The vibrating rod is ideal for use either in adhesive and abrasive products as well as in bulk solids with very low density.

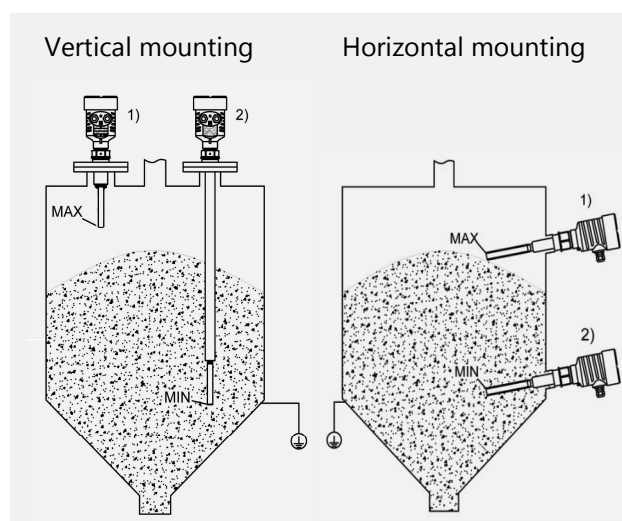
Features

- Various Process Connections
- No Calibration Required
- Mounting on the top or side of the storage vessel
- Low costs for maintenance through robust design
- Minimum time cost expenditure thanks to simple setup without medium
- Reliable function through product-independent switching point

Installation

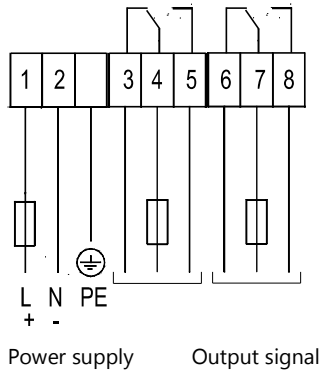
Vibrating Rod Level Switches are used to measure levels of dry, SOLID materials via an electrical switching action.

1): max. level 2): min. Level

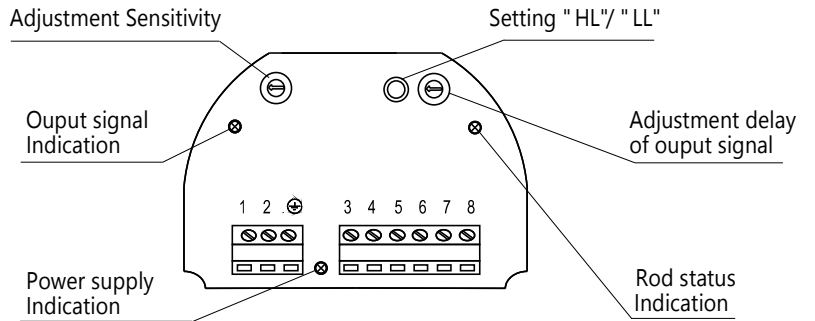


Wiring and Electrical connection

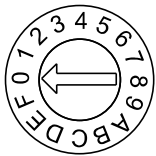
Electrical connection



Electrical panel



Electrical connection

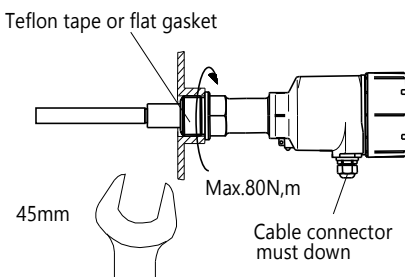


Setting sensitivity class A to F depending bulk density 100..200 g/l.

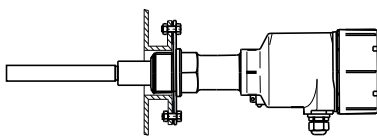
Output Signal Mode

Mode	Probe no covered in medium	Probe covered in medium
HL		
LL		

Sensor with thread process:



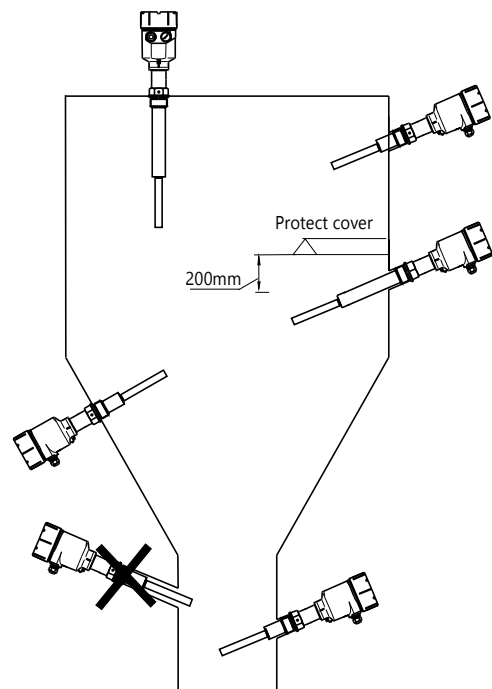
Sensor with flange process:



Using gasket to seal

Gasket NBR rubber available to use below 150 °C
Metal or graphite Gasket used more 150 °C process temperature.

Mounting guide



Specification Sheet

How to order

$\frac{VF(L) / VR}{01}$ - \square ₀₂ - \square ₀₃ - \square ₀₄ - \square ₀₅ - \square ₀₆ - \square ₀₇

01) Series of Level Switch

- VF Standard rod
- VFL Extended Rigid Rod
- VR Extended Cable version

02) Material of Housing

- P Aluminum, not singht hole
- PA Aluminum, singht hole
- S SUS304, not singht hole
- SA SUS304, with singht hole

03) Version of Level Switch

- Blank General industrial application
- EX Explosion-proof version

04) Process Temperature

- Blank General industrial -40...+80°C
- T High-Temperature -40...+150°C
- H Ultra High-Temperature -40...+250°C

05) Process Fitting

- B4 1 1/2" BSPT thread
- G4 1 1/2" G thread
- N Thread NPT
- F Flange
- TC Tri-clamp

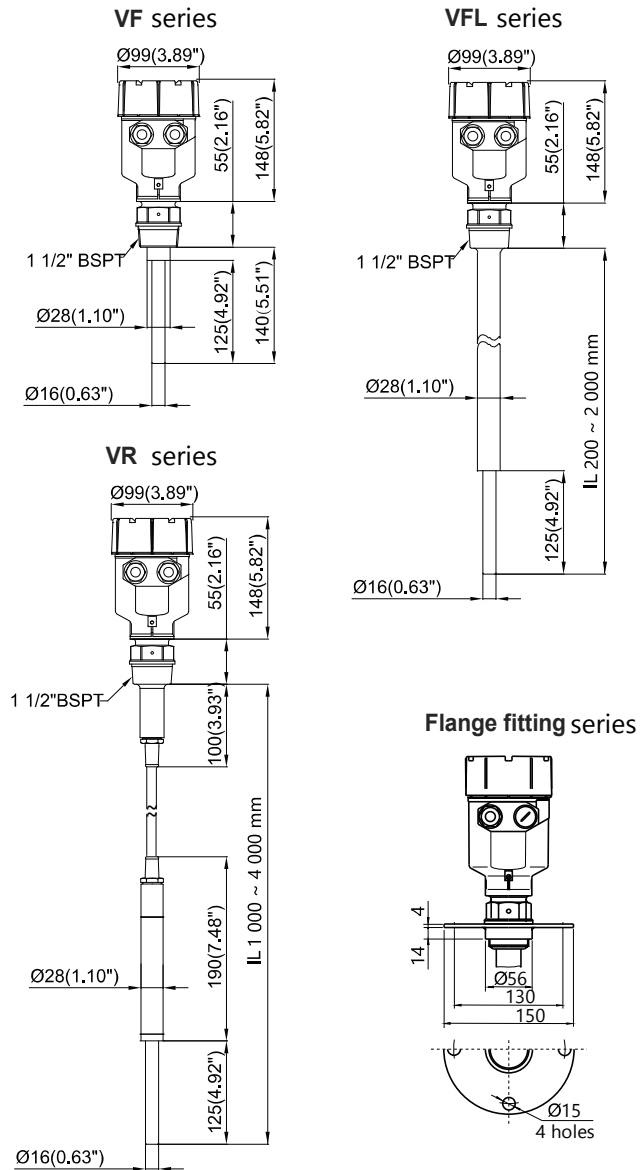
06) Material of Wetted Parts

- 01 SUS 304
- 02 SUS 316L

07) Insertion Length

- Blank Standard Length
- L500 500mm
- L750 750mm

Dimension, mm



Accessories of process adaptor

Process Adaptor

For the installation of VG extended type of sensors in tanks or pipes

- Pmax - 6 bar
- External thread - 1 1/2" G
- Material - SUS 304
- Code of adaptor - PAG-1 1/2G

