

MODEL VF

FLAT FACE VIBRATION LEVEL SENSOR



Features

- Suitable for low level detection of middle or large hopper
- Wide range of sensitivity setting
- Fail safe switch is provided
- Accepts a wide range of input voltage

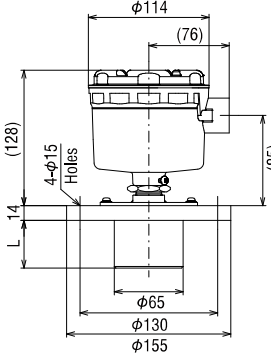
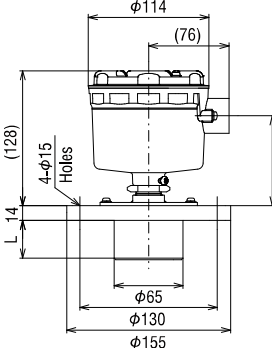
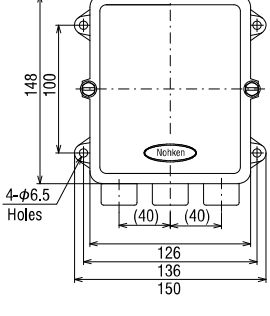
General Description

Vibration level sensor VF is to detect presence of powder and granular material at a desired level to send signals utilized for alarm output or control of electromagnetic switches. The vibration plate at the tip of sensor is inserted in the tank to detect the presence of measuring object. With minimum inserted length and no mechanical moving parts, VF can achieve high durability.

Operational Description

The vibration plate has a magnet inside it, and when the pulse magnetic field produced by the electromagnet is applied, the magnet starts vibrating, causing the plate itself to vibrate. The vibration frequency changes when the plate is covered by medium or exposed, and causes the change in voltage at the electromagnet. The voltage change is detected and converted to electric signals to indicate the medium presence at the detection point.

Specifications

Model	VF10-65	VF10-80	VFS10-65	VFS10-80	VFS1000
Description	Integral		Separation		
Drawing					
Measuring Object	Powder, Granular Material				
Mounting	JIS5K65A	JIS5K80A	JIS5K65A	JIS5K80A	
Supply Power	100 to 240V AC ±10% 50/60Hz				
Power Consumption	Approx. 4VA (100V AC)		Approx. 2.5VA (100V AC)		
Relay Output	Non-voltage relay contact (SPDT) 250V 3A AC / 30V 3A DC				
Detection Time Delay	Approx. 2 second for turn on Approx. 2 seconds for turn off				
Operating Temperature	Housing	-20 to 60°C			
	Vibration rod	-20 to 100°C			
Maximum Pressure	100 kPa (Static pressure)				
Maximum Humidity	95% RH Max.				
Sensitivity	Bulk density of 0.2g/cm ³ Min.				
Material	Housing	ADC12			
	Detection part	304SS, Silicone			
Cable Entry	G3/4			3×G1/2	
Protection	Housing	IP65			IP54
	Detection part	IP68			
Fail safe	High or Low by switch				
Indication	Green LED for Power status Red LED for Relay status				

Ordering Information

VF10	Integral
VFS10	Separation
	65 Flange mounting, JIS5K65A
	80 Flange mounting, JIS5K80A
VF10	65 = VF10-65