

SPV505 series single rod vibrating level switch

APPLICATION

- Special for sandblasting machine;
- Material flow detection of conveying equipment;
- Solid liquid interface detection;
- Powder, particle and block solid level detection;
- Coal powder, cement and fly ash;
- Sand, gravel;
- Plastic particles, grains.



WORKING PRINCIPLE

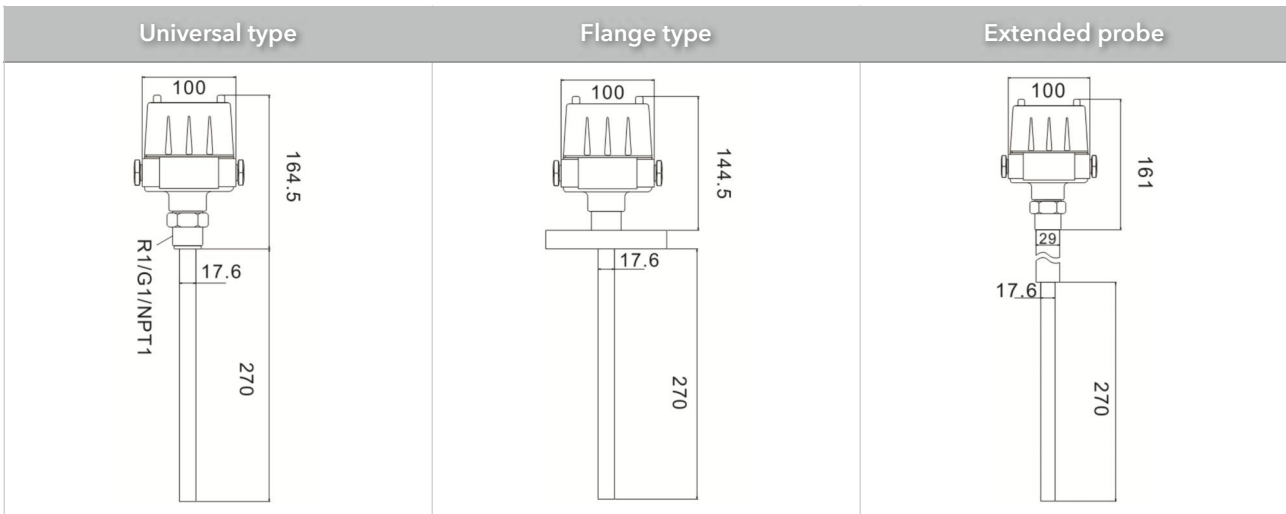
The vibration is generated by the magnet and electromagnet set in the inspection tube, and the difference of the current flowing through the electromagnet is checked when there is a powder object and there is no powder object, and the inspection signal of the powder object is output. In case that the inspection part is not covered by powdery objects, etc.:

If alternating current is applied to the electromagnet set on the sensor, it will vibrate according to the working frequency. According to the limit change of the magnet, the back EMF generated in the electromagnet becomes the maximum. Judge that the inspection part is not covered by powdery objects. If the inspection part is covered by powder objects, etc., even if alternating current is applied to the electromagnet set on the sensor, it cannot vibrate according to the working frequency. For an electromagnet, there is no back EMF because the magnet is stationary. Judge that the inspection part is covered by powdery objects.

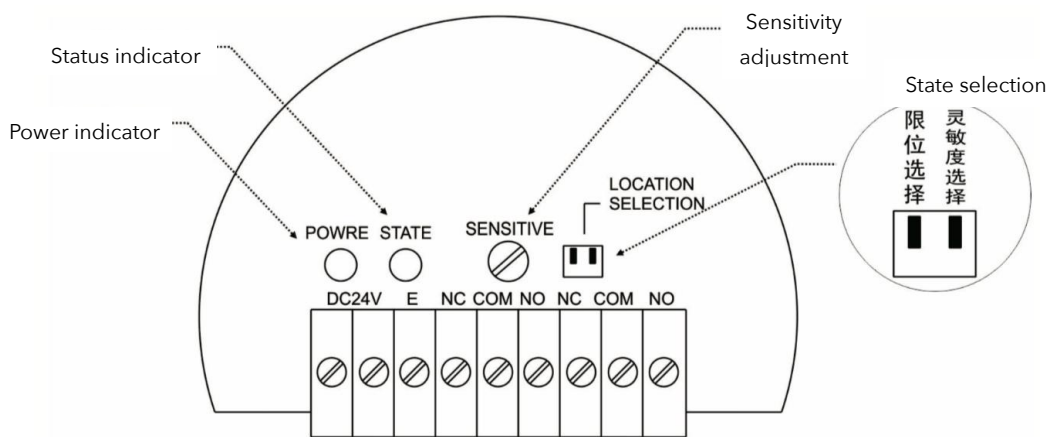
SPECIFICATION

ITEMS	PARAMETER
Measuring medium	Powdery matter, granular matter, small matter, accumulation in solution
Oscillating frequency	400Hz
Accuracy	±2mm
Measuring length	270~6000mm
Ambient temperature	-40 ° C ~ 80 ° C
Repeatability	±3mm
Dissipation power	5 VA
Instruction mode	LED
Voltage	DC 24V / AC 220V
Power	1 W
Output signal	Relay Dry Contact (DPDT) 250VAC/30VDC 3A
Pressure range	-98Kpa~2Mpa
Operating temperature	-20 ° C ~ 60 ° C
Protection level	IP67
Shell material	Aluminum alloy
Sensor material	Stainless steel 316
Connector material	Stainless steel 304
Connection method	M20*1.5 or customized
Weight	2KG

CONSTRUCTION



WIRING



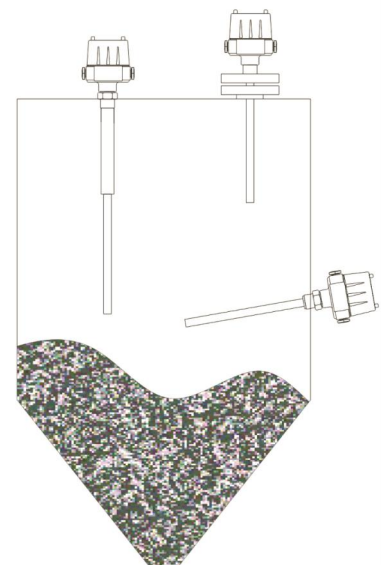
APPLICATION

Field application: measuring plastic particles

In the chemical industry, it produces a large number of products in the form of powder, granule and slice. Most of the plastic particles and powder are stored in very high and fine silos, which are fed by air.

Vibrating single rods have proved to be very suitable for measuring plastics. Even if the density of the medium is only 20g / L, the measurement is still very accurate when the medium is replaced.

In a multi chamber silo, cement or additive is stored. Strong dust will be produced during feeding. Due to the different consistency of different additives, the stacking angle of media is different. The form of the stacking angle of the medium also changes after each feeding. In order to prevent overflow, select single rod and flexible suspension cable to avoid mechanical load caused by medium feeding. The instrument can be tested empty. Because the single rod has no movable components, the wear is greatly reduced.



ORDER GUIDE

SPV505	single rod vibrating level switch						
	CODE	type					
	A	Ordinary type					
	B	High temperature type					
	C	Hygienic type					
	D	Anticorrosive type					
		CODE	Insertion depth				
		1	270mm (standard)				
		2	Pole type extension 270-6000mm optional				
		3	Cable type extended split 1-6m optional				
			CODE	Voltage			
			A	220V AC ±10%			
			D	24V DC ±10%			
			CODE	Material			
			1	304(standard)			
			2	316			
			3	Stainless steel + PTFE			
				CODE	Process connection		
				G	G1 "thread (standard)		
				T	1 "NPT thread		
				F	Flange installation (flange specification and standard shall be indicated)		
				C	R1" thread		
				CODE	Other parameters		
				A	Normal teperature_° C		
				B	Normal pressure_Kpa		
				C	Protection level IP66		
				D	Flameproof level ExdIICT6		
				E	Maximum temperature _° C		
				F	Maximum pressure Kpa or Mpa		
				G	Other requirements		
SPV505	A	1	A	1	G	AB	Order example