

Vibrating Level Switch for Bulk Media



measuring
•
monitoring
•
analyzing

NVI



- Max. Pressure: 360 PSI
- Max. Temperature: 320 °F
- Connection: 1½" NPT or G 1½"
- Wetted Material: Stainless Steel
- For Media Densities > 3.1 lb/ft (0.05 kg/dm³)
- Self-Cleaning



KOBOLD companies worldwide:

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Description

The KOBOLD NVI vibrating level switch is designed for single-point level monitoring in powder and small diameter, granular media applications. The system consists of a vibrating probe and an electronic switch. When the probe vibration is damped by contact with rising media, the resulting change in resonant frequency is converted to a switching signal. The rod is self-cleaning as the media is easily shaken off by the probe vibrations. The media must have a density of 3.1 lb/ft³ (0.05 kg/dm³) or greater for proper operation. The sensitivity of the switch is factory set for use with a media density of 18.73 lb/ft³ (0.3 kg/dm³) or greater, but this is easily adjusted via a DIP switch.

Common Application Fields

- Plastics Industry: Powders and Granular Materials
- Chemical Industry: Powders, Pellets, and Crystals
- Food Industry: Grain, Corn, Flour, Animal Feed
- Paper Industry: Cellulose, Wood Chips
- Recycling: Plastic Granules, Paper Shavings
- Power Stations: Flue Dust, Lime, Coal
- Construction: Cement, Sand, Lime

Specifications

Probe Length

- Standard:** 207 mm
- Extended Pipe:** Up to 3 meters (118")
- Ext. Cable, PE Coated:** Up to 20 meters (65')

- Connection:** 1½" NPT or G 1½"
- Housing Material:** Powder-Coated Aluminum

Wetted Parts

- Probe:** 316-Ti Stainless Steel
- Cable Cover:** PE
- Sensor Surface:** Bright

Media Temperature

- Standard:** -22...230 °F
- High Temp. Models:** -22...320 °F
- NVI-5 Models:** -22...176 °F
- Ambient Temperature:** -22...140 °F

Maximum Pressure

- NVI-1/2/3/4:** 360 PSI
- NVI-5:** 87 PSI
- Min. Media Density:** 3.1 lb/ft³ (0.05 kg/dm³)
- Max. Granule Size:** ~0.4" (10 mm)



Max. Load:

Version	Standard	Extended Pipe	Extended Cable
High Limit Switch	Side Mount	Top Mount	Top Mount
Low Limit Switch	Side or Bottom Mount		
Load Limit			
Force	500 N	-	45 kN
Torque	100 Nm	100 Nm	-

Switching Delay

- Covered Rod:** < 1.8 s or 5 ± 1.5 s (Selectable)
- Rod Swings Freely:** < 2 s or 5 ± 1.5 s (Selectable)
- Output:** SPDT Contact, 250 VAC/8A
- Power Supply:** 20...255 VAC/VDC
- Power Consumption:** ≤ 2.5 VA/2W
- Electrical Connection:** 2 x M20 x 1.5
- Protection:** IP 67
- Weight**
 - NVI-1/2:** Approx. 4.2 lbs
 - NVI-3/4:** Approx. 4.2 lbs + 3 lbs/m
 - NVI-5:** Approx. 4.2 lbs + 1.3 lbs/m

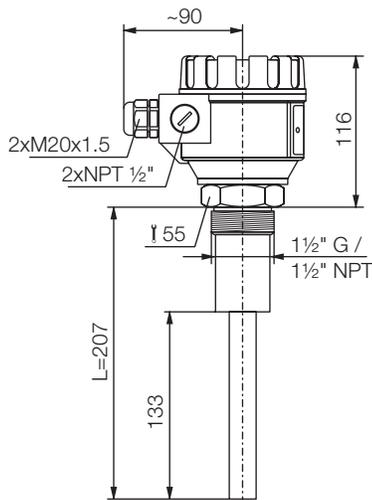
Order Details (Example: **NVI-1305N**)

Model	Version	Power Supply	Connection
NVI-	..1.. = Standard Probe	..305.. = 20...255 VDC/VAC	..N = 1½" NPT ..R = G 1½"
	..2.. = Standard Probe, High Temperature		
	..3*.. = Extended Pipe		
	..4*.. = Extended Pipe, High Temperature		
	..5*.. = Extended Cable		

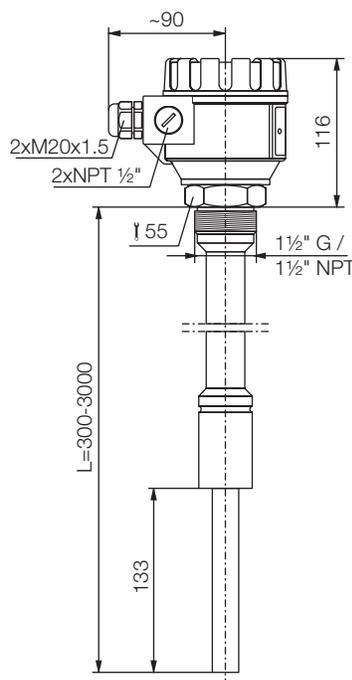
* Please specify desired length L on your order

Dimensions (mm)

Standard Probe



Extended Pipe Probe



Extended Cable Probe

