# **Vibrating Level Switch**

for Bulk Media



measuring

monitoring

analyzing

NVI



Max. Pressure: 360 PSIMax. Temperature: 320 °F

Connection: 1½" NPT or G 1½
Wetted Material: Stainless Steel

• For Media Densities > 3.1 lb/ft (0.05 kg/dm<sup>3</sup>)

Self-Cleaning



Order from: **C A Briggs Company** 622 Mary Street; Suite 101; Warminster, PA 18974

622 Mary Street; Suite 101; Warminster, PA 18974 Phone: 267-673-8117 - Fax: 267-673-8118 Sales@cabriggs.com - www.cabriggs.com KOBOLD Instruments, Inc. 1801 Parkway View Drive Pittsburgh, PA 15205





#### **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/ft<sup>3</sup> (0.05 kg/dm<sup>3</sup>)

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	Torque	Force
Force	500 N	-	45 kN
Torque	100 Nm	100 Nm	-

**Switching Delay** 

Covered Rod: $< 1.8 \text{ s or } 5 \pm 1.5 \text{ s (Selectable)}$ Rod Swings Freely: $< 2 \text{ s or } 5 \pm 1.5 \text{ s (Selectable)}$ Output:SPDT Contact, 250 VAC/8A

Power Supply:20...255 VAC/VDCPower Consumption: $\leq 2.5 \text{ VA/2W}$ Electrical Connection: $2 \times M20 \times 1.5$ 

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



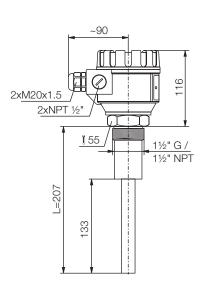
## Order Details (Example: NVI-1305N)

Model	Version	Power Supply	Connection
	1 = Standard Probe		
	2 = Standard Probe, High Temperature		<b>N</b> = 1½" NPT
NVI-	3* = Extended Pipe	305 = 20255 VDC/VAC	
	4* = Extended Pipe, High Temperature		<b>R</b> = G 1½
	5* = Extended Cable		

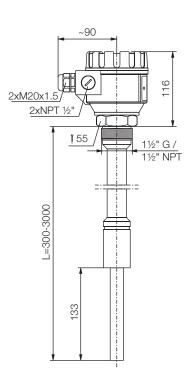
<sup>\*</sup> Please specify desired length L on your order

# **Dimensions (mm)**

# Standard Probe



# **Extended Pipe Probe**



## **Extended Cable Probe**

