

## Vibrating Level Switch for Bulk Goods



measuring  
•  
monitoring  
•  
analysing

NVI



- Pressure: max: max. 360 psi
- Temperature: max. 320°F
- Connection: 1½ NPT or G
- Material: stainless steel
- Easy to install
- Suited for universal use
- For density > 0,05 kg/dm<sup>3</sup>
- Self-cleaning



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**Description**

The KOBOLD NVI level switch is a mechanical system that is made to resonate by an electronic switching operation. When the probe is covered by a medium, the vibrations are damped. This change in the resonance frequency is converted to a switching signal by electronic means.

**Applications**

The combined vibrating switch can be used in powdery media and granular materials. The medium to be measured should have a density of at least 0.05 kg/dm<sup>3</sup>. The single rod design prevents deposit formation. The rod is self-cleaning, as the vibrations shake off the medium.

The combined vibrating switch is in successful service in the following applications:

- Plastics industry: powders and granular material
- Chemical industry: powders, pellets and crystals
- Foodstuffs: grain, maize, flour, animal feed
- Paper making: cellulose, wood chips
- Recycling: plastic granules, paper shavings
- Power stations: flue dust, lime, coal
- Stones and earth: coal, stone powder
- Building and construction industry: cement, sand, lime

**Selection criteria**

The system is set at the factory for a medium density of 0.3 kg/dm<sup>3</sup>. When the medium has a low density, the sensitivity can be set to this density with a DIP switch. The level switch is inserted in the medium to be monitored for this purpose.

**Technical Details**

- Probe length: 207 mm (standard)  
extended version on request
- Process connection: G 1½ or 1½ NPT
- Housing material: Aluminum, powder coated
- Material for wetted parts: 316Ti Stainless Steel
- Sensor surface: bright
- Medium temperature: -22°F ... +230°F standard  
-22°F ... +320°F high temperature
- Ambient temperature: -22°F ... +140°F
- Maximum pressure: 360 psi
- Minimum density of medium: 0.05 kg/dm<sup>3</sup>
- Max. grain size: 10 mm
- Max. load: Force: 500 N  
Torque: 100 Nm
- Switching delay (selectable): < 1.8 s or 5 ±1.5 s  
with covered rod  
< 2 s or 5 ±1.5 s  
rod swings freely
- Output: SPDT contact 250 V<sub>AC</sub> / 8A
- Power supply: 20...255 V<sub>AC/DC</sub>; ≤ 2.5 VA/2 W
- Electrical connection: 2 x M20 x1,5
- Protection: IP 67
- Weight: approx. 4.2 lbs

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

Model	Version	Power supply	Connection
NVI-	1 = standard 2 = high temperature	305 = 20...255 V <sub>AC/DC</sub>	R = G 1½ N = 1½ NPT

**Dimensions**

