

SITRANS L Level instruments

Point level measurement

Pointek VLS 200

Overview



The Pointek VLS 200 is a vibrating level switch that detects the absence or presence of dry bulk solids in bins, silos or hoppers.

Benefits

- High resistance to mechanical forces
- Strong vibration resistant to high bulk material loads
- Rotatable enclosure
- Stainless steel 1½" threaded connection
- Suitable for light materials (20 g/l or 1.3 lb/ft³)
- Customer desired extensions up to 4000 mm (157")

Application

The Pointek VLS 200 is a vibrating level switch that detects the absence or presence of dry bulk solids in bins, silos or hoppers. The VLS 200 provides a contact output indicating a high or low level alarm. Products monitored include lime, styrofoam, flour, and plastic granules. The VLS 200 provides a strong reading in products with densities as low as 20 g/l (1.3 lb/ft³).

The VLS 200 has a compact design and can be top or side mounted. The fork design and the oscillating nature of the VLS 200 provide a constant self-cleaning to the tines.

The unique design of the fork and crystal assembly eliminates false high level readings.

A signal from the electronic circuit excites a crystal in the probe causing the fork to vibrate at a frequency of 125 Hz. If the fork is covered by material, the change in vibration is detected by the electronic circuitry which causes the relay to change state after a one second delay. When the fork is free from material pressure, full vibration resumes and the relay reverts to its normal condition.

Technical specifications

Mode of operation

Measuring principle Vibrating point level switch

Input

Measured variable High and low

Output

Output signal

- Relay delay
 - approx. 1 sec from loss of vibration
 - 1 to 2 sec from resumption of vibration
- Relay failsafe high or low, switch selectable
- Alarm output relay 8 A at 250 V AC, non-inductive

Sensitivity high or low, switch selectable

Sensitivity

Rated operating conditions

Installation conditions

• Location indoor/outdoor

Ambient conditions

• Ambient temperature -40 to 60 °C (-40 to 140 °F)

• Installation category III

Medium conditions

• Process temperature -40 to 80 °C (-40 to 176 °F)

• Max. threaded bushing temperature 80 °C (176 °F)

• Max. enclosure surface temperature 90 °C (194 °F)

• Max. extension surface temperature 150 °C (302 °F)

• Pressure (vessel) max. 10 bar (145 psi)
European Pressure Directive 97/23/EC: Category 1

• Minimum material density 20 g/l (1.3 lb/ft³)

• Measuring frequency approx. 125 Hz

Design

• Material

- Enclosure Epoxy coated aluminum
- Sensor Stainless steel

• Process connection thread 1¼" NPT, R 1½" DIN 2999 (tapered)

• Degree of protection IP65/Type 4/NEMA 4

• Conduit entry 2 x M20x1.5 or ½" NPT

• Weight approx. 1.9 kg, + 2.5 kg/m extension tube

Power supply

19 to 230 V AC, +10%, 50 to 60 Hz, 8 VA
19 to 55 V DC, +10%, 1.5 W

Certificates and approvals

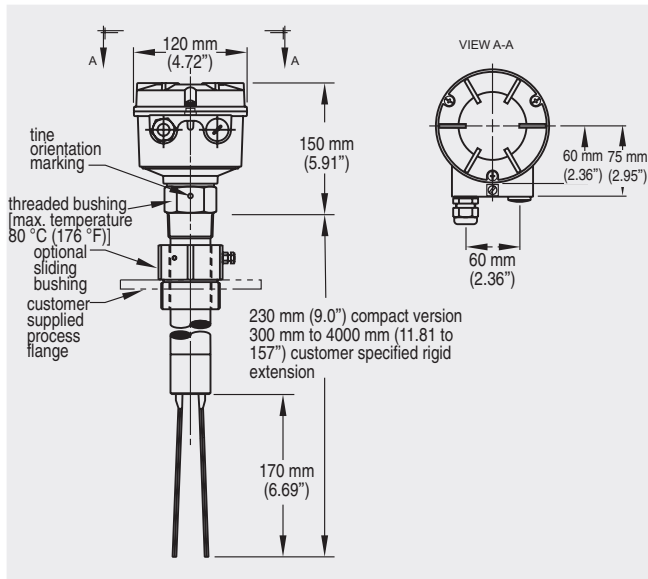
FM/CSA Class II, Div. 1, Group E, F, G, Class III
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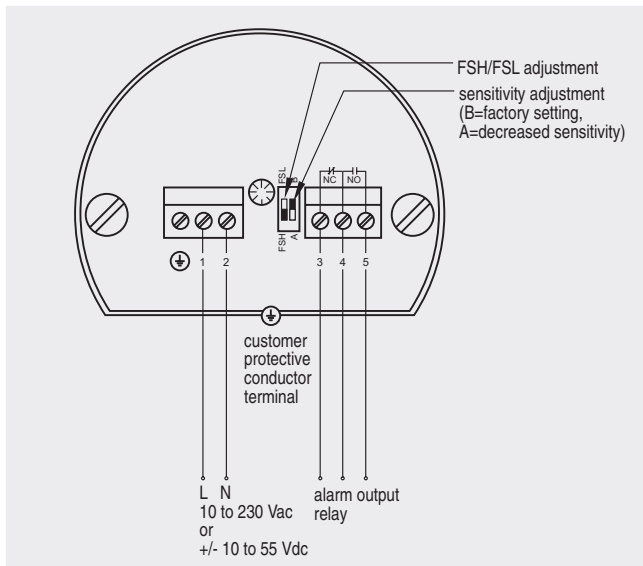
Pointek VLS 200

Dimensional drawings



Pointek VLS 200 dimensions

Schematics



Pointek VLS 200 connections

Ordering data

Pointek VLS 200, standard
Vibrating point level switch for high or low levels of bulk solids

Input Voltage

19 to 253 V AC, 19 to 55 V DC

Process temperature

up to 150 °C (302 °F)

Process Connection

1½" BSP thread
1½" NPT thread
2" BSP thread, sliding sleeve (min. length 500 mm)
2" NPT thread, sliding sleeve (min. length 500 mm)

Process connection material

up to 150 °C (302 °F)

Extension length

standard length, 230 mm
Customer Specified Extension length (max 4000 mm)
Add order code M1Y and plain text: "Insertion length mm"¹⁾

Approvals

CSA/FM Class II, Div. 2, Group E, F, G, Class III, ATEX II 1/2 D

Instruction Manual

Multi-language
Note: Due to ATEX regulations, one instruction manual is shipped with every product.

Spare Parts

Replacement Electronics Module
Tag, stainless steel, 12 x 45 mm, one text line, suitable for enclosures

C) Subject to export regulations AL: N, ECCN: EAR99.

Order No.

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