

DESCRIPTION

SOLITEL, vibrating rod level switches are integral units, providing a low cost and reliable level detection of bulk solids in tanks or silos. The SOLITEL is ideally suited for level control on powders, granulars or lump materials up to a minimum density of 0,05 kg/dm³.

FEATURES

- 2 position density adjustment (media with SG < 0,1 and > 0,1)
- SG as low as 0,05 kg/dm³ – granular size 10 mm (0.39")
- Status LED – built into cover
- Electro polished 316 TI (1.4571) vibrating rod
- Self-cleaning sensor
- Output options:
8A SPDT relay (1A @ 24 V DC)
Solid state output 350 mA / 50V
- Process Temperature: -40 °C to 160 °C (-40 °F to 320 °F)
- Max Pressure: 25 bar abs. (360 psia)

APPLICATIONS

- Pulverised coal
- Cement
- Lime
- Cereals
- Synthetic granulates
- Perlite

PRINCIPLE OF OPERATION

An invasive rod vibrates at 350 Hz frequency. When in contact with the medium, the vibration will be dampened. The attenuation of the vibration will be detected by the integral mount electronics, thus changing the status of the output.

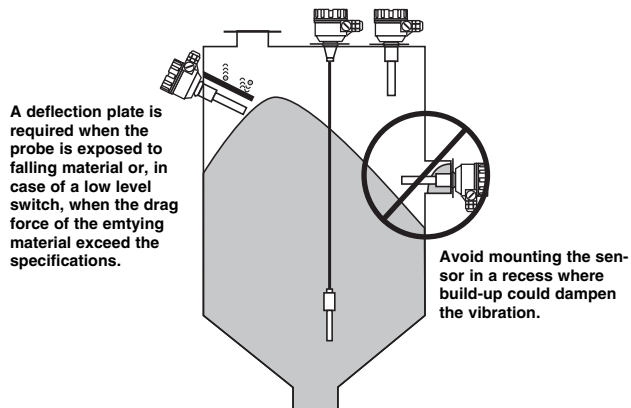
AGENCY APPROVAL

Agency	Approval
DMT	ATEX II 1/2 D IP 65 (Dust Ex)

From 235 mm up to 20 m insertion length (9.25" up to 65.62')



MOUNTING



PHYSICAL/FUNCTIONAL SPECIFICATIONS

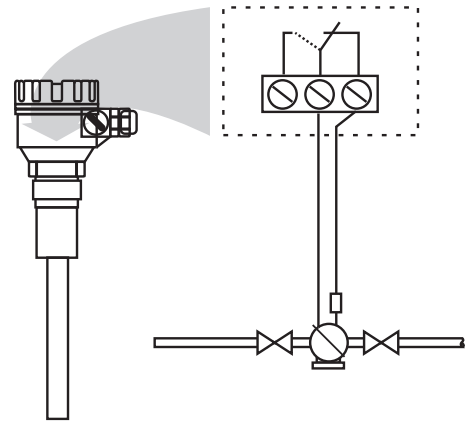
Description	Specification
Input voltage	85 ... 265 V AC / 120 ... 375 V DC or 19 ... 55 V DC / 16 ... 40 V AC
Power consumption	1.3 VA
Signal output	8 A SPDT relay @ 250 V AC (1A @ 24 V DC) Solid state output - 350 mA / 50 V peak
Indication	Output status LED (green/red) – visual indication on cover
Housing material	IP 67, Aluminium (2x M20 x 1,5 and 2 x 1/2" NPT - all plugged) 2 x M20 x 1,5 cable gland separately included
Approvals	ATEX II 1/2 D IP 65
Sensor material	All wetted parts of polished 316 Ti SST (1.4571) (except VSK) PE coated cable (VSK)
Mounting	Threaded: 1 1/2" BSP (G 1 1/2)
Actuation length	VSH/VHH: 235 mm (9.2") VSR/VHR: from 500 mm up to 3000 mm (19.7" up to 9.8') VSK: from 1 m up to 20 m (3.3' up to 65.6')
Max pressure	25 bar abs. (360 psia) Flexible version VSK: 6 bar abs. (87 psia)
Min density	0,05 kg/dm ³ - max granular size: 10 mm (0,39")
Max mechanical load on sensor	VSH/VHH: 85 Nm
Weight of unit	2,5 kg (VSH/VHH) + 1,4 kg/m for VSR/VHR + 0,6 kg/m for VSK

Description		Process temp.	Ambient temp.	temp. at process conn.
Max temperature	VSH/VSR	-30 °C to +110 °C (-20 °F to +230 °F)	-30 °C to +50 °C (-20 °F to +120 °F)	max +90 °C (+195 °F)
	VHH/VHR	-30 °C to +160 °C (-20 °F to +320 °F)	-30 °C to +35 °C (-20 °F to +95 °F)	max +135 °C (+275 °F)
	VSK	-35 °C to +95 °C (-30 °F to +200 °F)	-30 °C to +60 °C (-20 °F to +140 °F)	max +85 °C (+185 °F)

ELECTRICAL CONNECTION

SPDT Relay (8 A @ 250 V AC / 1 A @ 24 V DC)

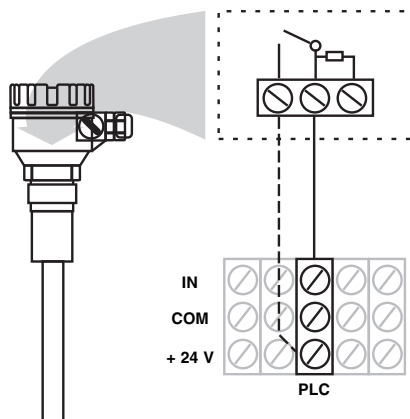
85 ... 265 V AC / 120 ... 375 V DC or 19 ... 55 V DC / 16 ... 40 V AC



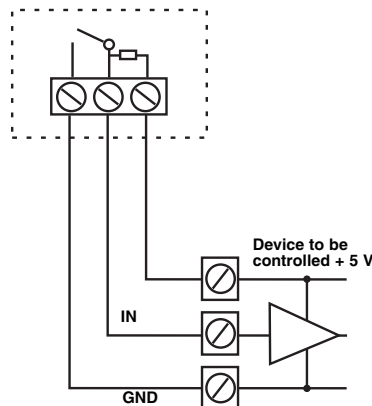
Solid State output

85 ... 265 V AC / 120 ... 375 V DC or 19 ... 55 V DC / 16 ... 40 V AC

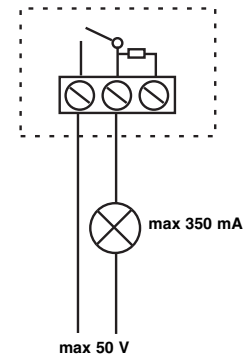
Connection to an opto-coupled input



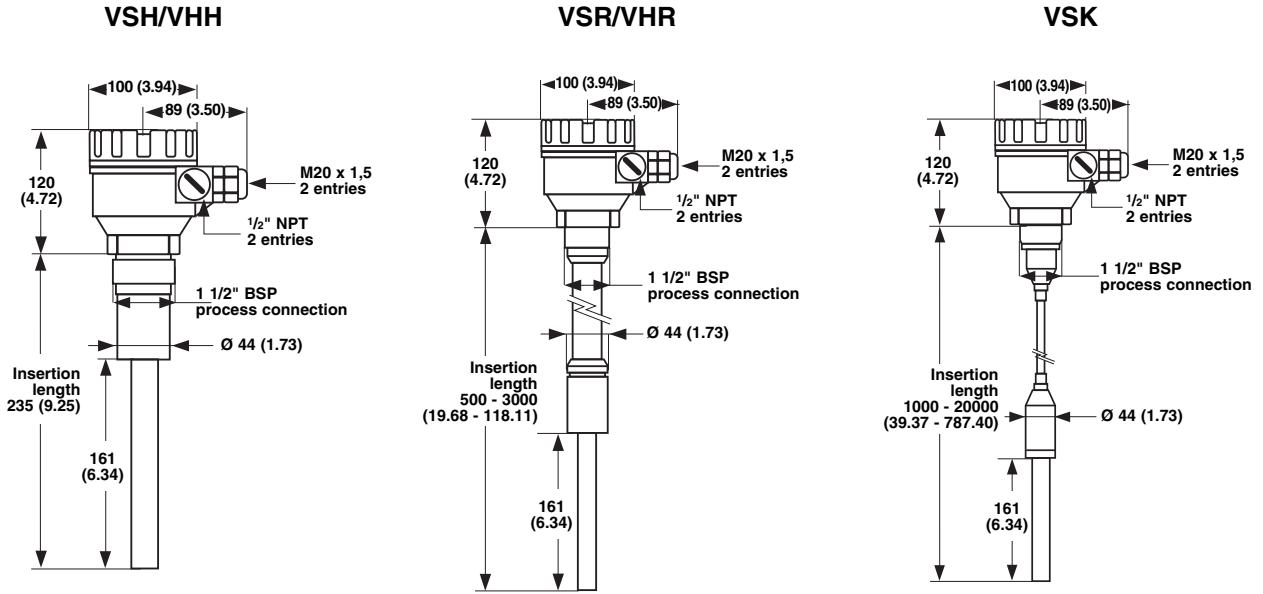
Connection to a logical voltage input



Connection to a load



DIMENSIONS in mm (inches)



QUALITY ASSURANCE - ISO 9001

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UNDER RESERVE OF MODIFICATIONS

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