

Simply reliable

Cost effective level switches



million
in one

SITRANS LPS200 and LVS200 set the standard for reliable point level detection in bulk solid applications for material densities as low as 20 g/l (1.3 lb/ft³). They are easy to set up - no calibration required - and can be connected to any alarm or control system.

Unique and robust design is based on the experience of over 250,000 applications. The unique friction clutch of SITRANS LPS200 assures continuous operation in the harshest conditions. SITRANS LVS200's advanced vibrating fork technology prevents tunneling, providing reliability at all times.

SITRANS LPS200

- High or low level alarm for dry bulk solids such as cement, grain, feed, plastic granules and wood chips
- Bulk solids with densities as low as 35 g/l (2.19 lb/ft³)
- Unique friction clutch mechanism prevents gear failure and replacement
- Adjustable paddle sensitivity
- Rotatable enclosure with captivated screws for ease of installation in difficult locations
- Installation through 1 1/4" threaded opening
- High temperature (up to 220 °C, 428 °F) version and high pressure (up to 10 bar) versions
- Available in compact, cable (up to 10000 mm) and extended versions up to 1500 mm
- Hazardous approvals

SITRANS LVS200

- High or low level alarm for dry bulk solids and light dusty powders such as cement, styrofoam, lime, flour and plastic granules
- Bulk densities as low as 20 g/l (1.3 lb/ft³)
- Advanced vibrating fork technology prevents tunneling
- High-low sensitivity switch
- Standard aluminum rotatable enclosure with captivated screws
- Compact and extended models up to 4000 mm (157")
- Hazardous approvals

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Technical specifications

	SITRANS LPS200	SITRANS LVS200
Power	<ul style="list-style-type: none"> jumper selectable 115 V AC, ±15%, 50 to 60 Hz, 4 VA or 230 V AC, ±15%, 50 Hz, 6 VA or 24 V DC, ±15%, 2.5 W 	<ul style="list-style-type: none"> 19 to 230 V AC, +10%, 50 to 60Hz, 8VA 19 to 55 V DC, +10%, 1.5 W
Performance		
Minimum material density	Standard measuring vane <ul style="list-style-type: none"> 100 g/l (6.25 lb/ft³) when paddle is covered by 10 cm (4") of material 200 g/l (12.4 lb/ft³) when paddle is completely covered Hinged measuring vane <ul style="list-style-type: none"> 35 g/l (2.19 lb/ft³) when paddle is covered by 10 cm (4") of material 70 g/l (4.69 lb/ft³) when paddle is completely covered 	Standard version <ul style="list-style-type: none"> Approx. 20 g/l (1.2 lb/ft³) Liquid/solid interface version <ul style="list-style-type: none"> Approx. 50 g/l (3 lb/ft³)
Interface		
Alarm Output	<ul style="list-style-type: none"> Microswitch 5A at 250 V AC, non-inductive Microswitch SPDT contact 4A at 30 V DC, non-inductive 	<ul style="list-style-type: none"> Relay 8A at 250 V AC, non-inductive Relay 5A at 30 V DC, non-inductive
Delays	Pickup <ul style="list-style-type: none"> Standard (1 rpm model): approx 1.3 sec Optional process applications (5 rpm model): approx 0.26 sec 	Relay <ul style="list-style-type: none"> Approx. 1 sec from loss of vibration 1 to 2 sec from resumption of vibration Signal <ul style="list-style-type: none"> Probe uncovered to covered approx. 1 sec, covered to uncovered approx. 1 to 2 sec
Sensitivity	<ul style="list-style-type: none"> Adjustable via reset force of spring or geometry of measuring vane 	High/low selection switch
Mechanical		
Enclosure	Epoxy coated aluminum, IP65/Type 4/NEMA 4	Epoxy coated aluminum, IP65/Type 4/NEMA 4
Process connection	<ul style="list-style-type: none"> Stainless steel 303 (1.4305) Thread 1 1/4" NPT, 1 1/2" BSP 	<ul style="list-style-type: none"> Thread 1 1/2" NPT, R 1 1/2" DIN 2999 (tapered); stainless steel 303 (1.4305) Optional: sliding bushing with 2" NPT or BSP
Sensor	Measuring shaft and vane: stainless steel	Tines: stainless steel 316Ti (1.4571), PTFE-coated are available upon request
Process Conditions		
Temperature	<ul style="list-style-type: none"> Standard: -20 to 80 °C (-4 to 176 °F) Optional: -20 to 220 °C (-4 to 428 °F) 	Process temperature <ul style="list-style-type: none"> All except CSA Class II, Group G: -40 to 150 °C (-40 to 302 °F) CSA Class II, Group G: -40 to 140 °C (-40 to 284 °F), CSA temperature code T3B Max. threaded bushing: 80 °C (176 °F) Max. enclosure surface (category 2D): 90 °C (194 °F) Max. extension surface (category 1D): 150 °C (302 °F)
Pressure (vessel)	<ul style="list-style-type: none"> Standard: max. 0.5 bar (7 psi) Optional: max. 10 bar (140 psi) Slide coupling version: ambient pressure 	Maximum 10 bar (145 psi) European Pressure Directive 97/23/EC: Category 1
Approvals		
	CSA/FM Class II, Div. 2, Group E, F, G ATEX II 1/2 D, CE	CSA/FM Class II, Div. 2, Group E, F, G ATEX II 1/2 D, CE

Specifications are subject to change without notice.
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Million in one

Signal processing with field experience

Siemens level measurement instruments come with extensive field experience. Siemens Milltronics developed the signal processing technology for level instruments based on the experience of a million instruments in industrial applications.

With this experience we understand the importance of reliability, and we know what it takes to make a trusted and accurate level instrument for demanding applications. That's why our engineers invented the advanced vibrating fork technology and the unique friction clutch mechanism. With Siemens Milltronics you get the experience of a million applications in one instrument.

