Level Measurement Point level measurement - Vibrating switches

SITRANS LVS100

Overview



SITRANS LVS100 is a vibrating point level switch for bulk solids.

Benefits

- · High resistance to mechanical forces
- · Strong resistance to external vibrations
- · Rotatable enclosure for ease of installation and wiring
- Suitable for point level detection of materials starting at a bulk density of 60 g/l (3.8 lb/ft³)
- Customer desired extensions up to 2000 mm (78.74")

Application

SITRANS LVS100 detects high, low or demand levels of dry bulk solids in bins, silos or hoppers.

SITRANS LVS100 has a compact design and can be top, side, or angle mounted. The vibrating fork design ensures the tines are kept clean. The unique design of the fork and crystal assembly eliminates false high level readings even if tines become damaged.

A signal from the electronic circuit excites a crystal in the probe causing the fork to vibrate. 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.

• Key Applications: dry bulk solids in bins, silos, hoppers



SITRANS LVS100 installation

Level Measurement Point level measurement - Vibrating switches

SITRANS LVS100

| Mode of Operation Vibrating point level switch Input High, low and demand Measuring frequency 200 Hz Output DPDT relay Relays DPDT relay Relay delay From loss of vibration: approximately 1 second From resumption of vibration: approximately 1 second From resumption of vibration: approximately 1 second Signal delay Probe covered to covered: approximately 1 second Probe uncovered to uncovered: approximately 1 second Probe covered to uncovered: approximately 1 second Alarm output Relay 5 A at 30 V DC, non-inductive Relay 5 A at 30 V DC, non-inductive Sensitivity High or low, switch selectable Rated operating conditions Installation conditions Indoor/outdoor Ambient conditions - Location Indoor/outdoor Ambient conditions - Process temperature -40 +150 °C (-40 +130 °F) Hax. threaded bushing temperature + Process temperature -40 +150 °C (-40 +302 °F) Hax. threaded bushing temperature + Process temperature +40 °C (+176 °F) Hax. threaded bushing temperature +90 °C (+130 °F) • Max. threaded bushing temperature | Technical specifications | |
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| Input High, low and demand Measuring frequency 200 Hz Output Poly Relays DPDT relay Relay delay From loss of vibration: approximately 1 second Signal delay Probe covered to covered: approximately 1 2 seconds Signal delay Probe covered to uncovered: approximately 1 2 seconds Relay fail-safe High or low, switch selectable Alarm output Relay 5 A at 30 V DC, non-inductive Sensitivity High or low, switch selectable Rated operating conditions Indoor/outdoor Ambient conditions Indoor/outdoor Ambient conditions -40 +60 °C (-40 +140 °F) Installation conditions -40 +150 °C (-40 +302 °F) Max. threaded bushing temperature +80 °C (+176 °F) Max. enclosure surface temperature +150 °C (+302 °F) Max. threaded bushing temperature +150 °C (+302 °F) Max. threaded bushing temperature +150 °C (+302 °F) Max. to bar g (145 psi g) European Pressure Directive 97/23/EC: Category 1 Max. 10 bar g (145 psi g) European Pressure Directive 97/23/EC: Category 1 Minimum material den | Mode of Operation | |
| Measured variable High, low and demand 200 Hz Output 200 Hz Relays DPDT relay Relays From loss of vibration: approxi- mately 1 second Signal delay From resumption of vibration: approximately 1 2 seconds Signal delay Probe uncovered to covered: approximately 1 second Relay fail-safe High or low, switch selectable Alarm output Relay 8 A at 250 V AC, non-induc- tive Sensitivity High or low, switch selectable Nambient conditions Indoor/outdoor • Location Indoor/outdoor Ambient conditions - • Location Indoor/outdoor Ambient conditions - • Process temperature -40 +60 °C (-40 +140 °F) • Installation catagory III • Pollution degree 2 • Max. threaded bushing temperature +80 °C (+176 °F) • Max. threaded bushing temperature +150 °C (-40 +302 °F) • Max. extension surface temperature +150 °C (+30 2°F) • Max. enclosure surface temperature +150 °C (+30 2°F) • Max. threaded bushing temperature +150 °C (+30 2°F) • Max. enclosure surface temperature +150 °C (+30 2°F) • Max. enclosure surface temperature +150 °C (+30 2°F) • Material | Measuring principle | Vibrating point level switch |
| Measuring frequency 20 Hz Output Polays Relays DPDT relay Relay delay From loss of vibration: approximately 1 second From resumption of vibration: approximately 1 second Probe uncovered to covered: approximately 1 second Signal delay Probe covered to uncovered: approximately 1 second Probe covered to uncovered: approximately 1 second Probe covered to uncovered: approximately 1 second Relay fail-safe High or low, switch selectable Alarm output Relay 8 A at 250 V AC, non-inductive Relay 5 A at 30 V DC, non-inductive Relay 5 A at 30 V DC, non-inductive Installation conditions Indoor/outdoor Ambient conditions Indoor/outdoor Ambient temperature -40 +60 °C (-40 +140 °F) Installation catagory III Pollution degree 2 Medium conditions - • Process temperature -40 +150 °C (-40 +302 °F) • Max. threaded bushing temperature +80 °C (+176 °F) • Max. enclosure surface temperature +90 °C (+130 °F) • Max. enclosure surface temperature +150 °C (-40 +302 °F) • Max. enclosure surface temperature +150 °C (-40 +302 °F) • Max. enclosure surface temperature +90 °C (+14 °F) • Max. enclosure surface temperature </td <td>Input</td> <td></td> | Input | |
| Output DPDT relay Relays DPDT relay Relay delay From loss of vibration: approximately 1 second Signal delay Probe uncovered to covered: approximately 1 second Signal delay Probe uncovered to covered: approximately 1 second Relay fail-safe High or low, switch selectable Alarm output Relay 5 A at 30 V DC, non-inductive Relay 5 A at 30 V DC, non-inductive Relay 5 A at 30 V DC, non-inductive Sensitivity High or low, switch selectable Rated operating conditions Indoor/outdoor Location Indoor/outdoor Ambient conditions -40 +60 °C (-40 +140 °F) Installation catagory III Probest themperature -40 +60 °C (-40 +302 °F) Max. threaded bushing temperature +80 °C (+176 °F) Max. enclosure surface temperature +90 °C (+130 °F) Proseure (vessel) Max. 10 bar g (145 psi g) Warriel (Category 1D) Pressure (vessel) Material Epoxy coated aluminum Process connection -Thread 1¼* NPT [(Taper), ANSI/ASME B1.20.1], sliding sleeve R 1½* [(BSPT), En 10226] | Measured variable | High, low and demand |
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| Relay delayFrom loss of vibration: approximately 1 secondSignal delayFrom resumption of vibration: approximately 1 2 secondsSignal delayProbe uncovered to covered: approximately 1 2 secondsRelay fail-safeHigh or low, switch selectableAlarm outputRelay 8 A at 250 V AC, non-inductiveRelay 5 A at 30 V DC, non-inductiveRelay 5 A at 30 V DC, non-inductiveSensitivityHigh or low, switch selectableRated operating conditionsIndoor/outdoorAmbient conditionsIndoor/outdoorAmbient conditionsIndoor/outdoorAmbient temperature-40 +60 °C (-40 +140 °F)Installation catagoryIIIPollution degree2Medium conditions+90 °C (+176 °F)• Max. threaded bushing temperature+80 °C (+176 °F)• Max. extension surface temperature+90 °C (+194 °F)• Category 2D)Max. 10 bar g (145 psi g)European Pressure Directive 97/23/EC: Category 1• Process connection• Thread 11/4" NPT [(Taper), ANSI/ASME B1.20.1], R 11/2" (IGSPT), EN 10226]• Thread R 11/4" NPT [(Taper), ANSI/ASME B1.20.1], B 11/22(B), 15/1NPT [(Taper), ANSI/ASME B1.20.1], Stainless steel 304 (1.4301) or 316T1 (1.4571) depending on configuration• Tine materialStainless steel 304 (1.4301) or 316T1 (1.4571) depending on configuration• Thread R 11/4" (1.4571) depending on configuration (1. | Output | |
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| tiveSensitivityHigh or low, switch selectableRated operating conditionsInstallation conditionsInstallation conditionsIndoor/outdoorAmbient conditionsIndoor/outdoorAmbient temperature-40 +60 °C (-40 +140 °F)Installation catagoryIIIPollution degree2Medium conditions-40 +150 °C (-40 +302 °F)• Max. threaded bushing temperature+80 °C (+176 °F)• Max. enclosure surface temperature+90 °C (+194 °F)(Category 2D)+150 °C (+302 °F)• Max. extension surface temperature+150 °C (+302 °F)• Pressure (vessel)Max. 10 bar g (145 psi g)European Pressure Directive 97/23/EC: Category 1Minimum material densityapprox. 60 g/l (3.8 lb/ft³)Design MaterialEpoxy coated aluminum• EnclosureEpoxy coated aluminumProcess connection-Thread T1½" NPT [(Taper), ANSI/ASME B1.20.1], R 1½" [(BSPT), EN 10226]• Thread R 1½" (ISPT), EN 10226]• Thread R 1½" (ISPT), PST 10226], * NPT ((Taper), ANSI/ASME B1.20.1], sliding sleeve [min. length 500 mm (19.69")]• Thread ratirial: stainless steel 304 (1.4301) or 316T1 (1.4571)104(1.4301) or 316T1 (1.4571)Degree of protectionIP66/Type 4/NEMA 4Conduit entry2 x M20x1.5 or 2 x ½" NPTWeightStandard version, no extensions: | Alarm output | |
| Rated operating conditionsInstallation conditionsLocationAmbient conditions• Ambient temperature-40 +60 °C (-40 +140 °F)• Installation catagoryIII• Pollution degree2Medium conditions• Process temperature-40 +150 °C (-40 +302 °F)• Max. threaded bushing temperature+80 °C (+176 °F)• Max. enclosure surface temperature(Category 2D)• Pressure (vessel)Max. 10 bar g (145 psi g) European Pressure Directive 97/23/EC: Category 1Minimum material densityapprox. 60 g/l (3.8 lb/ft ³)Design Material• EnclosureProcess connectionProcess connection• Thread 11/2" [(BSPT), EN 10226] EN 10226], ½" NPT [(Taper), ANSI/ASME B1.20.1], R 1½" [(BSPT), EN 10226], ½" NPT [(Taper), ANSI/ASME B1.20.1], sliding sleeve [min. length 500 mm (19.69')]• Thread raterial: stainless steel 316TI (1.4571)Degree of protectionTine materialStainless steel 316TI (1.4571)Degree of protectionIP66/Type 4/NEMA 4Conduit entry2 x M20x1.5 or 2 x ½" NPTWeight | | |
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| LocationIndoor/outdoorAmbient conditions-40 +60 °C (-40 +140 °F)Installation catagoryIIIPollution degree2Medium conditions-40 +150 °C (-40 +302 °F)• Max. threaded bushing temperature-40 +150 °C (-40 +302 °F)• Max. threaded bushing temperature+80 °C (+176 °F)• Max. exclosure surface temperature+90 °C (+194 °F)• Max. extension surface temperature+150 °C (+302 °F)• Max. extension surface temperature+150 °C (-40 +302 °F)• Max. extension surface temperature+150 °C (+302 °F)• Max. extension surface temperature+150 °C (-40 +302 °F)• Max. extension surface temperature+150 °C (-40 +302 °F)• Max. extension surface temperature+100 °C (+194 °F)• Category 1D)• Pressure (vessel)• Pressure (vessel)Max. 10 bar g (145 psi g)• European Pressure Directive97/23/EC: Category 1Minimum material densityapprox. 60 g/I (3.8 lb/ft ³) Design • Thread 11/4" NPT [(Taper), ANSI/ASME B1.20.1], R 11/2" [(BSPT), EN 10226]• Thread R 11/2" [(BSPT), EN 10226]• Thread R 11/2" [(BSPT), EN 10226], ½" NPT [(Taper), ANSI/ASME B1.20.1], sliding sleeve [min. length 500 mm (19.69")]• Thread materialStainless steel 304 (1.4301) or 316TI (1.4571) depending on configurationTine materialStainless steel 316TI (1.4571)Degree of protectionIP66/Type 4/NEMA 4Conduit entry2 x M20x1.5 or 2 x ½" NPTWeightStandard version, no extensions: <td>Rated operating conditions</td> <td></td> | Rated operating conditions | |
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| Installation catagoryIIIPollution degree2Medium conditions-40 + 150 °C (-40 + 302 °F)• Max. threaded bushing temperature+80 °C (+176 °F)• Max. threaded bushing temperature+90 °C (+194 °F)• Max. extension surface temperature (Category 2D)+150 °C (+302 °F)• Max. extension surface temperature (Category 1D)+150 °C (+302 °F)• Pressure (vessel)Max. 10 bar g (145 psi g) European Pressure Directive 97/23/EC: Category 1Minimum material densityapprox. 60 g/l (3.8 lb/tf³)Design MaterialEpoxy coated aluminum• EnclosureEpoxy coated aluminumProcess connection• Thread 1¼" NPT [(Taper), ANSI/ASME B1.20.1], R 1½" [(BSPT), EN 10226]• Thread R 1½" [(BSPT), EN 10226]• Thread R 1½" [(BSPT), EN 10226]• Thread material: stainless steel 304 (1.4301) or 316TI (1.4571) depending on configurationPine materialStainless steel 316TI (1.4571)Degree of protectionIP66/Type 4/NEMA 4Conduit entry2 x M20x1.5 or 2 x ½" NPTWeightStandard version, no extensions: | Ambient conditions | |
| Pollution degree Pollution degree Medium conditions Process temperature -40 + 150 °C (-40 + 302 °F) Max. threaded bushing temperature +80 °C (+176 °F) Max. enclosure surface temperature +90 °C (+194 °F) (Category 2D) Max. extension surface temperature +150 °C (+302 °F) Max. 10 bar g (145 psi g) European Pressure Directive 97/23/EC: Category 1 Minimum material density approx. 60 g/l (3.8 lb/ft³) Design Material Enclosure Process connection Thread 1¼" NPT [(Taper), ANSI/ASME B 1.20.1], R 1½" [(BSPT), EN 10226], ½" NPT [(Taper), ANSI/ASME B 1.20.1], sliding sleeve Imin. length 500 mm (19.69")] Thread material: stainless steel 304 (1.4301) or 316TI (1.4571) depending on configuration Tine material Stainless steel 316TI (1.4571) Degree of protection IP66/Type 4/NEMA 4 Conduit entry 2 × M20x1.5 or 2 x ½" NPT Weight | Ambient temperature | -40 +60 °C (-40 +140 °F) |
| Medium conditions• Process temperature-40 +150 °C (-40 +302 °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)• Max. extension surface temperature+150 °C (+302 °F)• Max. extension surface temperature+150 °C (+302 °F)• Pressure (vessel)Max. 10 bar g (145 psi g)• Pressure (vessel)Max. 10 bar g (145 psi g)• Enclosuregprox. 60 g/l (3.8 lb/ft ³) Design • Thread 1¼" NPT [(Taper), ANSI/ASME B1.20.1], R 1½" [(BSPT), EN 10226]• Thread R 1½" [(BSPT), EN 10226]• Thread R 1½" [(BSPT), EN 10226], ½" NPT [(Taper), ANSI/ASME B1.20.1], sliding sleeve [min. length 500 mm (19.69")]• Thread material: stainless steel 304 (1.4301) or 316T1 (1.4571) depending on configurationTine materialStainless steel 316TI (1.4571)Degree of protectionIP66/Type 4/NEMA 4Conduit entry2 x M20x1.5 or 2 x ½" NPTWeightStandard version, no extensions: | Installation catagory | III |
| Process temperature -40 +150 °C (-40 +302 °F) Max. threaded bushing temperature +80 °C (+176 °F) +90 °C (+194 °F) Max. extension surface temperature (Category 2D) Max. extension surface temperature (Category 1D) Pressure (vessel) Max. 10 bar g (145 psi g) European Pressure Directive 97/23/EC: Category 1 Minimum material density approx. 60 g/l (3.8 lb/ft³) Design Material Enclosure Process connection Thread 1¼" NPT [(Taper), ANSI/ASME B1.20.1], B 1½" [(BSPT), EN 10226] Thread R 1½" [(BSPT), EN 10226], ½" NPT [(Taper), ANSI/ASME B1.20.1], sliding sleeve [min. length 500 mm (19.69")] Thread material: stainless steel 304 (1.4301) or 316TI (1.4571) depending on configuration Tine material Stainless steel 316TI (1.4571) Degree of protection IP66/Type 4/NEMA 4 Conduit entry 2 x M20x1.5 or 2 x ½" NPT Weight Standard version, no extensions: | Pollution degree | 2 |
| Max. threaded bushing temperature Max. enclosure surface temperature (Category 2D) Max. extension surface temperature (Category 1D) Pressure (vessel) Max. 10 bar g (145 psi g) European Pressure Directive 97/23/EC: Category 1 Minimum material density approx. 60 g/l (3.8 lb/ft³) Design Material Enclosure Epoxy coated aluminum Process connection Thread 1¼" NPT [(Taper), ANSI/ASME B1.20.1], R 1½" [(BSPT), EN 10226] Thread R 1½" [(BSPT), EN 10226] Thread R 1½" [(BSPT), EN 10226] Thread material: stainless steel 304 (1.4301) or 316TI (1.4571) depending on configuration Tine material Stainless steel 316TI (1.4571) Degree of protection IP66/Type 4/NEMA 4 Conduit entry 2 x M20x1.5 or 2 x ½" NPT | Medium conditions | |
| Max. enclosure surface temperature (Category 2D) Max. extension surface temperature (Category 1D) Pressure (vessel) Max. 10 bar g (145 psi g) European Pressure Directive 97/23/EC: Category 1 Minimum material density approx. 60 g/l (3.8 lb/ft³) Design Material Enclosure Process connection Thread 1¼" NPT [(Taper), ANSI/ASME B1.20.1], R 1½" [(BSPT), EN 10226] Thread material: stainless steel 304 (1.4301) or 316T1 (1.4571) depending on configuration Tine material Stainless steel 316TI (1.4571) Degree of protection IP66/Type 4/NEMA 4 Conduit entry 2 x M20x1.5 or 2 x ½" NPT Weight Staindard version, no extensions: | Process temperature | -40 +150 °C (-40 +302 °F) |
| (Category 2D)+150 °C (+302 °F)• Max. extension surface temperature (Category 1D)+150 °C (+302 °F)• Pressure (vessel)Max. 10 bar g (145 psi g) European Pressure Directive 97/23/EC: Category 1Minimum material densityapprox. 60 g/l (3.8 lb/ft³) Design MaterialEpoxy coated aluminum• EnclosureEpoxy coated aluminumProcess connection• Thread 1¼" NPT [(Taper), ANSI/ASME B1.20.1], R 1½" [(BSPT), EN 10226] V= NPT [(Taper), ANSI/ASME B1.20.1], sliding sleeve [min. length 500 mm (19.69")]• Tine materialStainless steel 304 (1.4301) or 316T1 (1.4571) depending on configurationTine materialStainless steel 316TI (1.4571)Degree of protectionIP66/Type 4/NEMA 4Conduit entry2 x M20x1.5 or 2 x ½" NPTWeightStandard version, no extensions: | Max. threaded bushing temperature | +80 °C (+176 °F) |
| (Category 1D)Max. 10 bar g (145 psi g) European Pressure Directive 97/23/EC: Category 1Minimum material densityapprox. 60 g/l (3.8 lb/ft³)Design MaterialEpoxy coated aluminum• EnclosureEpoxy coated aluminumProcess connection• Thread 1¼" NPT [(Taper), ANSI/ASME B1.20.1], R 1½" [(BSPT), EN 10226] ½" NPT [(Taper), ANSI/ASME B1.20.1], sliding sleeve [min. length 500 mm (19.69")]• Tine materialStainless steel 304 (1.4301) or 316T1 (1.4571) depending on configurationTine materialStainless steel 316TI (1.4571)Degree of protectionIP66/Type 4/NEMA 4 2 x M20x1.5 or 2 x ½" NPT Weight | | +90 °C (+194 °F) |
| European Pressure Directive 97/23/EC: Category 1Minimum material densityapprox. 60 g/l (3.8 lb/ft³)Design MaterialEpoxy coated aluminum• EnclosureEpoxy coated aluminumProcess connection• Thread 1¼" NPT [(Taper), ANSI/ASME B1.20.1], R 1½" [(BSPT), EN 10226] V" NPT [(Taper), ANSI/ASME B1.20.1], sliding sleeve [min. length 500 mm (19.69")]• Thread material: stainless steel 304 (1.4301) or 316T1 (1.4571) depending on configurationTine materialStainless steel 316TI (1.4571)Degree of protectionIP66/Type 4/NEMA 4Conduit entry2 x M20x1.5 or 2 x ½" NPTWeightStandard version, no extensions: | | +150 °C (+302 °F) |
| DesignMaterial• EnclosureProcess connection• Thread 1¼" NPT [(Taper), ANSI/ASME B1.20.1], R 1½" [(BSPT), EN 10226]• Thread R 1½" [(BSPT), EN 10226]• Thread R 1½" [(BSPT), EN 10226], ½" NPT [(Taper), ANSI/ASME B1.20.1], sliding sleeve [min. length 500 mm (19.69")]• Thread material: stainless steel 304 (1.4301) or 316TI (1.4571) depending on configurationTine materialStainless steel 316TI (1.4571)Degree of protectionIP66/Type 4/NEMA 4Conduit entry2 x M20x1.5 or 2 x ½" NPTWeightStandard version, no extensions: | Pressure (vessel) | European Pressure Directive |
| MaterialEpoxy coated aluminum• EnclosureEpoxy coated aluminumProcess connection• Thread 1¼" NPT [(Taper), ANSI/ASME B1.20.1], R 1½" [(BSPT), EN 10226] • Thread R 1½" [(BSPT), EN 10226], ½" NPT [(Taper), ANSI/ASME B1.20.1], sliding sleeve [min. length 500 mm (19.69")]• Thread material: stainless steel 304 (1.4301) or 316T1 (1.4571) depending on configurationTine materialStainless steel 316TI (1.4571)Degree of protectionIP66/Type 4/NEMA 4Conduit entry2 x M20x1.5 or 2 x ½" NPTWeightStandard version, no extensions: | Minimum material density | approx. 60 g/l (3.8 lb/ft ³) |
| • EnclosureEpoxy coated aluminumProcess connection• Thread 1¼" NPT [(Taper), ANSI/ASME B1.20.1], R 1½" [(BSPT), EN 10226] • Thread R 1½" [(BSPT), EN 10226], ½" NPT [(Taper), ANSI/ASME B1.20.1], sliding sleeve [min. length 500 mm (19.69")]• Thread material: stainless steel 304 (1.4301) or 316T1 (1.4571) depending on configurationTine materialStainless steel 316TI (1.4571)Degree of protectionIP66/Type 4/NEMA 4Conduit entry2 x M20x1.5 or 2 x ½" NPTWeightStandard version, no extensions: | Design | |
| Process connection• Thread 1¼" NPT [(Taper), ANSI/ASME B1.20.1], R 1½" [(BSPT), EN 10226]• Thread R 1½" [(BSPT), EN 10226]• Thread R 1½" [(BSPT), EN 10226], ½" NPT [(Taper), ANSI/ASME B1.20.1], sliding sleeve [min. length 500 mm (19.69")]• Thread material: stainless steel 304 (1.4301) or 316TI (1.4571) depending on configurationTine materialStainless steel 316TI (1.4571)Degree of protectionIP66/Type 4/NEMA 4Conduit entry2 x M20x1.5 or 2 x ½" NPTWeightStandard version, no extensions: | Material | |
| ANSI/ASME B1.20.1], R 1½" [(BSPT), EN 10226]• Thread R 1½" [(BSPT), EN 10226], ½" NPT [(Taper), ANSI/ASME B1.20.1], sliding sleeve [min. length 500 mm (19.69")]• Thread material: stainless steel 304 (1.4301) or 316Tl (1.4571) depending on configurationTine materialStainless steel 316Tl (1.4571)Degree of protectionIP66/Type 4/NEMA 4Conduit entry2 x M20x1.5 or 2 x ½" NPTWeightStandard version, no extensions: | Enclosure | Epoxy coated aluminum |
| EN 10226], ½" NPT [(Taper), ANSI/ASME B1.20.1], sliding sleeve [min. length 500 mm (19.69")]• Thread material: stainless steel 304 (1.4301) or 316TI (1.4571) depending on configurationTine materialStainless steel 316TI (1.4571)Degree of protectionIP66/Type 4/NEMA 4Conduit entry2 x M20x1.5 or 2 x ½" NPTWeightStandard version, no extensions: | Process connection | ANSI/ASME B1.20.1], R 1½" [(BSPT), EN 10226] |
| Thread material: stainless steel 304 (1.4301) or 316TI (1.4571) depending on configuration Tine material Stainless steel 316TI (1.4571) Degree of protection IP66/Type 4/NEMA 4 Conduit entry 2 x M20x1.5 or 2 x ½" NPT Weight Standard version, no extensions: | | EN 10226], ½" NPT [(Taper), ANSI/ASME B1.20.1], sliding sleeve |
| Degree of protectionIP66/Type 4/NEMA 4Conduit entry2 x M20x1.5 or 2 x ½" NPTWeightStandard version, no extensions: | | • Thread material: stainless steel 304 (1.4301) or 316TI (1.4571) depending on |
| Conduit entry2 x M20x1.5 or 2 x ½" NPTWeightStandard version, no extensions: | Tine material | Stainless steel 316TI (1.4571) |
| Weight Standard version, no extensions: | Degree of protection | IP66/Type 4/NEMA 4 |
| | Conduit entry | 2 x M20x1.5 or 2 x 1/2" NPT |
| | Weight | |

| Power supply | 19 230 V AC, +10 %, 50 60 Hz, 8 VA 19 50 V DC, +10 %, 1.5 W |
|----------------------------|--|
| Certificates and approvals | CSA/FM General Purpose CE CSA/FM Dust Ignition Proof C-TICK ATEX II 1/2 D |
| | |

Level Measurement Point level measurement - Vibrating switches

SITRANS LVS100

| Selection and Ordering data | Order No. | |
|---|---------------|-----|
| SITRANS LVS100, standard | 7 M L 5 7 3 5 | - |
| Vibrating point level switch for high or low level detection of bulk solids Sensitivity > 60 g/l. | - 0 | A 0 |
| Input Voltage DPDT Relay - 19 230 V AC, 19 50 V DC | 1 | |
| Process temperature up to +150 °C (+302 °F) | A | |
| Process connection | - | |
| Threaded R 1½" [(BSPT), EN 10226] 1½" NPT [(Taper), ANSI/ASME B1.20.1] R 1½" [(BSPT), EN 10226] DIN 2999 thread, sliding | A B C | |
| sleeve - min. length 500 mm (19.69") | | |
| 1½" NPT [(Taper), ANSI/ASME B1.20.1], sliding sleeve [min. length 500 mm (19.69")] | D | |
| Extension length | | |
| <u>Stainless steel 316Tl (1.4571)</u> Standard length, 170 mm (6.69") | 11 | |
| Add order code Y01 and plain text: | | |
| "Insertion length mm" Stainless steel 304 (1.4301) | | |
| • 300 500 mm (11.81 19.69") | 1 2 | |
| • 501 1000 mm (19.72 39.37") | 13 | |
| | | |
| • 1001 1500 mm (39.41 59.06") | 14 | |
| • 1501 2000 mm (59.09 78.74") | 15 | |
| Approvals | | |
| CSA/FM General Purpose, CE, C-TICK | | A |
| CSA/FM Class II, Div. 1, Group E,F, G, Class III, | | в |
| ATEX II 1/2 D, C-TICK | | |
| | | _ |
| Selection and Ordering data | Order code | |
| Further Designs | | |
| Please add " -Z " to Order No. and specify Order code(s). | | |
| Total insertion length: Enter the total insertion length in plain text description, max. 2000 mm (78.74") | Y01 | |
| Signal bulb inserted in M20 cable gland | A20 | |
| Operating Instructions | Order No. | |
| Multi-language | 7ML1998-5F | TE2 |
| This device is shipped with the Siemens Milltronics | | 103 |
| manual CD containing the complete ATEX Quick Start | | |
| and Operating Instructions library. | | |
| Spare Parts | | |
| Replacement Electronics Module LVS100 DPDT | 7ML1830-1N | IS |
| Relay (19 to 253 V AC, 19 to 55 V DC) R 1½ " [(BSPT), EN 10226] DIN 2999 thread, sliding sleeve | 7ML1830-1N | іт |
| 1½" NPT [(Taper), ANSI/ASME B1.20.1] , | 7ML1830-1N | JU |
| sliding sleeve [min. length 500 mm (19.69")] | 7111210000 11 | |
| | | |

5

SITRANS LVS100 connections

19 to 50 V DC, +10%, 2 W

0

AC: Terminal 1: L Terminal 2: N

DC: Terminal 1: + Terminal 2: - 21

LED

19 to 230 V AC, +10%, 50 to 60 Hz, 8 VA





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A rotork Brand

Fine Controls have been supplying process controls & instrumentation equipment since 1994, & now serves an ever expanding customer base, both in the UK & globally.

We offer a full range of valve & instrumentation products & services, with our product rangerepresenting leading technologies & brands:

Flow: Flow Meters & Transmitters, Flow Switches, Flow Control Valves & Batch Control Systems

Temperature: Temperature Probes & Thermowells, Temperature ransmitters, Temperature Regulators & Temperature Displays

Level: Level Transmitters & Switches

Pressure: Pressure Gauges & Transmitters, Precision & High Pressure Regulators & I-P Converters, Volume boosters.

Precision Pneumatics: Pressure Regulators, I-P Converters, Volume Boosters, Vacuum Regulators

Valves: Solenoid & Pneumatic Valves, Control Valves & Positioners, Actuated Ball, Globe or Diaphragm Valves & Isolation Valves

Services: Repair, Calibration, Panel Build, System Design & Commissioning



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