

PROCESS INSTRUMENTATION

Cost effective, accurate, reliable

Inverse frequency shift capacitance continuous level measurement

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SIEMENS



Cost effective, accurate, reliable level measurement

SITRANS LC300 is an inverse frequency shif capacitance continuous level transmitter for liquids and solids applications. SITRANS LC300 is cost effective, reliable, low maintenance, and easy to install. It is ideal for standard and industrial applications in chemical, hydrocarbon processing, food and beverage, mining, aggregate and cement industries. Patented Active-Shield technology protects the measurement from the effects of moisture, vapors, foam, temperature or pressure variations, and material buildup.

- Accurate and reliable PFA-lined probes
- 2-wire (4 to 20 mA) current loop design
- Current signaling according to NAMUR NE 43
- Patented Active-Shield technology protects the measurement from the effects of moisture, vapors, foam, temperature, or pressure variations, and material build-up
- Integrated local LCD display
- Push-button calibration and programming
- Fully adjustable range: level, damping, diagnostics
- Corrosion-resistant construction and wetted parts
- Rugged, shear, and abrasion-resistant probe
- 25 m (82 ft) maximum insertion length

Power 12 to 30 V DC any polarity, 2-wire current loop circuit Performance Range 1.66 to 3300 pF, minimum span 3.3 pF Accuracy < 0.5% of actual measurement value Temperature stability 0.25% of actual capacitance value Non-linearity and reproducibility Current signaling According to NAMUR NE 43, signal 3.8 to 20.5 mA, fa 3.6 or ≥21 mA (22 mA) Wiring connections max. 2.5 mm2 Interface Output: loop current 4 to 20 mA/20 to 4 mA 2 wire current loop Display (local) LCD, 4 digit, each 0 to 9 and limited alpha characters Mechanical Enclosure • Aluminum, epoxy-coated • Ingress protect: Type 4/NEMA 4/IP65, IP68 • Cable inlet 2 x '%' NPT, 2 x M20x15 Sensor Alsl 316L / PFA Process connection • Threaded: 'w",1",1\",1\",",1\"," NPT/BSPP/BSPT/JIS-P • Flanges: 1 to 4" ASME, DIN DN 25 to 100 Probe diameter • Rod version: 9 mm (0.75") with PFA jacket • Cable version: 9 mm (0.75") with PFA jacket, 6 mm (0.24") without PFA jacket • Cable version: min. 300 mm (12"), max. 5000 mm (9) • Cable version: min. 1000 mm (40"), max. 25000 mm (9) • Cable version: 105 mm (4.13") Process conditions Ambient temperature -40 to 85 °C (-40 to 185 °F) Process temperature -40 to 200 °C (-40 to 392 °F) Pressure	
Range 1.66 to 3300 pF, minimum span 3.3 pF Accuracy <0.5% of actual measurement value Temperature stability 0.25% of actual capacitance value Non-linearity and reproducibility <0.4% of full scale and actual measurement value Current signaling According to NAMUR NE 43, signal 3.8 to 20.5 mA, fa 3.6 or ≥21 mA (22 mA) Wiring connections max. 2.5 mm2 Interface Output: loop current 4 to 20 mA/20 to 4 mA 2 wire current loop Display (local) LCD, 4 digit, each 0 to 9 and limited alpha characters Mechanical Enclosure Aluminum, epoxy-coated Ingress protect: Type 4/NEMA 4/IP65, IP68 Cable inlet 2 x ½" NPT, 2 x M20x15 Sensor AISI 316L / PFA Process connection •Threaded: ¾",1",1¼",1½" NPT/BSPP/BSPT/JIS-P •Flanges: 1 to 4" ASME, DIN DN 25 to 100 Probe diameter •Rod version: 9 mm (0.75") with PFA jacket • Cable version: 9 mm (0.35") with PFA jacket • Cable version: min. 300 mm (12"), max. 5000 mm (90 Cable version: min. 300 mm (12"), max. 5000 mm (90 Cable version: 100 mm (3.94") • Cable version: 100 mm (3.94") • Cable version: 105 mm (4.13") Process conditions Ambient temperature -40 to 85 °C (-40 to 185 °F) Frocess temperature -40 to 200 °C (-40 to 392 °F)	
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Approvals	
General CE, CSA, FM,	
Hazardous CSA/FM, ATEX	
Marine Lloyd's Register of Shipping, categories ENV1, ENV2, E ENV5, and American Bureau of Shipping (ABS)	ENV3,
Pressure PED 97/23/ EC, CSA B51	
Other C-TICK (Australia), Pattern Approved (China	

^{*}Pressure rating of process seal is temperature dependent. Contact Siemens Milltronics for derating curves. SITRANS is a registered trademark of Siemens AG. Specifications subject to change without notice. Siemens Milltronics Process Instruments Inc. 2022

Legal Manufacturer

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