LEVEL SWITCH · FOR MAGNETIC LEVEL GAUGES

SUREPOINT™

Magnetic point-level switch

SurePoint™ is a leverless, latching SPDT switch for point-level detection on Lamont Controls magnetic level gauges. It clamps to the outside of the gauge chamber and is actuated by the magnetic field of the gauge float. Switches provide high, high-high, low and low-low level detection with no contact with the process fluid, no moving levers and no actuation power.

CONTACT	HAZARDOUS AREA	MOUNTING
SPDT	**Class I** Div 1	**External**
latching	UL 1203	non-wetted



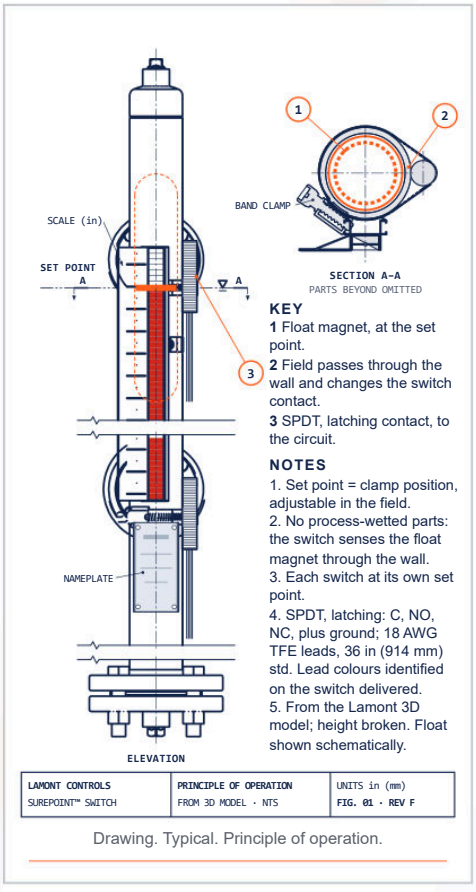
01 KEY HIGHLIGHTS

- Point-level switch for magnetic level gauges
- Mounts outside the gauge chamber; no process-wetted parts
- Actuated by the magnetic field of the gauge float
- Leverless: no levers and no external moving parts
- Latching contact: holds its state until the float passes back through the set point
- SPDT contact configuration
- 300-series stainless steel housing, factory sealed
- Hazardous-area service, depending on configuration
- Compatible with Magnamont™, Fortimag™ and Polysight™

02 KEY BENEFITS

- Isolation from the process: the switch senses the float magnet through the chamber wall and stays fully isolated from the process
- Leverless, sealed contact: no moving levers and no actuation power
- Field-adjustable set point: the set point is the clamp position, and no recalibration is required after it is moved
- Factory or field installation: external mounting requires no vessel penetration
- Range-wide accessory: supplied for Magnamont, Fortimag and Polysight magnetic level gauges

Supplied by Lamont Controls. Hazardous-area certifications are held by Lamont's component manufacturing partner and apply to the supplied product. Final certification, temperature class and marking depend on configuration and are confirmed at quotation.



Drawing. Typical. Principle of operation.

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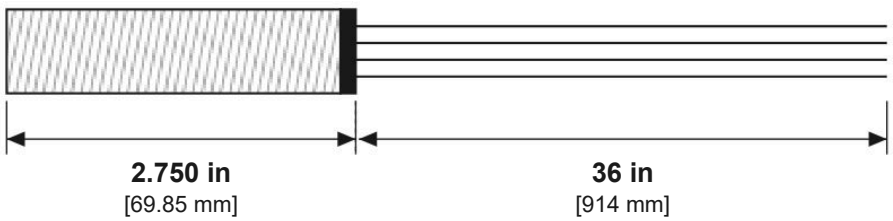
Technical specifications

SUREPOINT™ MAGNETIC POINT-LEVEL SWITCH

CATEGORY	SPECIFICATION
Operating principle	Magnetic actuation by the gauge float magnet · leverless, no-touch sensing · external mounting, non-wetted design · latching: the contact changes state as the float passes the set point and holds that state until the float passes back.
Contact configuration	SPDT, latching
Switching voltage (max)	150 VDC · 230 VAC
Switching current (max)	1 A at 24 VDC · 0.2 A at 130 VAC · 0.1 A at 230 VAC (resistive)
Power rating	Up to 25 W (resistive). Use an interposing relay or contact protection for inductive or high-inrush loads.
Contact resistance (max)	0.1 Ω (initial)
Insulation resistance (min)	1×10^9 Ω
Actuation method	Magnetic coupling to the float magnet, through the chamber wall.
Operate distance	Application-dependent, based on float magnet strength and chamber geometry.
Operating temperature	−50 to +105 °C (−58 to +221 °F).
Storage temperature	−50 to +105 °C (−58 to +221 °F).
Housing material	300-series stainless steel.
Mounting	External clamp-on mounting to the gauge chamber.
Mounting method	Adjustable band clamp (hose clamp), standard.
Process-wetted parts	None.
Lead wires	18 AWG TFE, 36 in (914 mm) standard; custom lengths on request.
Wiring	SPDT, latching: common (C), normally open (NO), normally closed (NC), plus ground. Lead colours are identified on the switch delivered.
Electrical connection	Flying leads.
Hazardous location rating	Class I, Division 1 (UL 1203) · Class II, Groups E, F, G (CSA C22.2 No. 25). Gas groups, temperature code and final marking are confirmed at quotation.
Temperature code	Confirmed at quotation.
Protection method	Explosionproof / dust-ignition proof (per UL 1203).
Construction	Factory sealed.
Certifications and compliance	UL 1203 · UL 508 / CSA C22.2 No. 14-13 · CSA C22.2 No. 25-1966 · CSA C22.2 No. 30-M1986 · ATEX 2014/34/EU · IECEx · Low Voltage Directive 2014/35/EU · RoHS2 Directive 2011/65/EU. Hazardous-area certifications are held by Lamont's component manufacturing partner and apply to the supplied product. Final certification, temperature class and marking depend on configuration and are confirmed at quotation.
Compatible with	Magnamont™ · Fortimag™ · Polysight™.

DIMENSIONAL DRAWING

SurePoint switch body and lead wires



The lead-wire length shown is standard, 36 in (914 mm). Custom lengths are available on request.

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