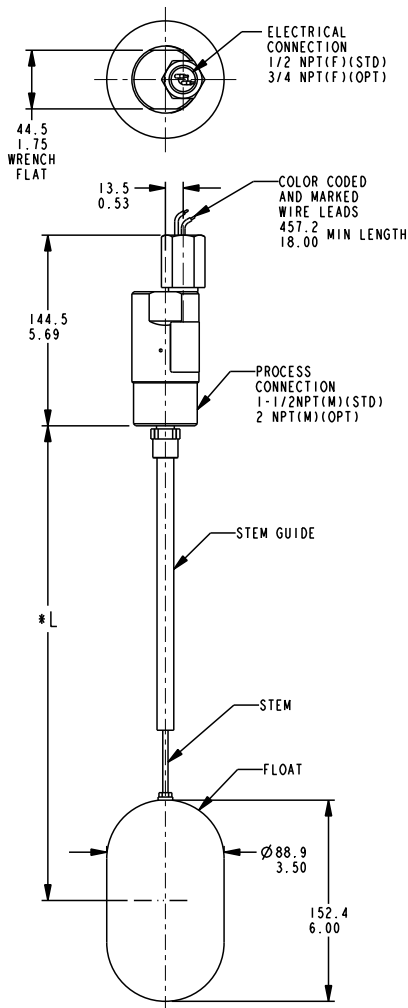




Type 1550 Top-Mount Electric Level Switch

Form 850

Type 1550 is a vertically mounted, float-operated level switch suitable for plant and OEM applications where open or closed contacts are required to signal presence or absence of liquid at a discrete level. The float stem moves a magnet that actuates (deactuates) a hermetically sealed reed switch.



Linear = mm/in.
Drawing 0390428

Product Specifications

Mounting

Orientation	Vertical mount only
Connection Size	1-1/2" through 6"
Connection Type	NPT(M) or Flanged
Maximum Process Pressure	up to 473 psi (32.6 bar) @ 400°F (204°C)

Process Temperature Range -40 to 400°F (-40 to 204°C)

Electrical

Switch Type	Hermetically sealed reed switch with 18" 20 AWG wire leads
Housing	Class I, Groups A, B, C & D; Divisions 1 & 2 with CS option
Relay Housing	Class I, Groups C & D; Divisions 1 & 2 with CS option

Connection Size 1/2" NPT(F)

Minimum Specific Gravity 0.60
(based on 14" insertion depth L in the figure at left)

Minimum Insertion Depth L 5" (13 cm)

Full Coupling 7" (17.8 cm)

Half Coupling 5.25" (13.3 cm)

Maximum Insertion Depth L 48" (122 cm)

Minimum Specific Gravity @ 48" (122 cm) 0.71

Design Code ANSI B31.3

Weight Approximately 5 lbs. (2.2 kg)

Agency Listing CSA Certified (US & Canada) and
ANSI/ISA 12.27.01 or ATEX and
IEC approved (optional). See page 2.
GOST-R Certified (Standard)

Safety Certified to IEC 61508 (SIL)

SOR products are certified to IEC 61508
for non-redundant use in SIL1 and SIL2 Safety
Instrumented Systems for most models.
For more details or values applicable to a
specific product, see the Safety Integrity
Level Quick Guide (Form 1528).

Design and specifications are subject to change without notice.
For latest revision, see www.sorinc.com.

Type 1550 Top-Mount Vertical Electric Level Switch

How to Order

Model Number System

1550 - B - F - 5A - C - W9 - ES - MC

Switch Mechanisms **4**

Amperages based on resistive loads

General Purpose	SPST	0.9A @ 110 VAC Max 3A @ 28 VDC Max 3 Watt Minimum	W9
General Purpose	SPDT	0.9A @ 110 VAC Max 3A @ 28 VDC Max 3 Watt Minimum	W1
Low Power	SPST	25 Watts Max	L9
Low Power	SPDT	25 Watts Max	L1

Float Material **3**

316SS (Standard)	473 psig (32.6 bar)	C
Monel	284 psig (19.6 bar)	M

Process Connections **2**

Threaded:	1 1/2" NPT(M)	5A
	2" NPT(M)	2A
Flanged: (Available with 316SS body only) May affect process pressure rating.	2 1/2" 150#	7C
	300#	7D
	600#	7E
	3" 150#	3C
	300#	3D
	600#	3E
	4" 150#	4C
	300#	4D
	6" 150#	6C
	300#	6D

Body Material **1**

303SS (Standard)	B
316 Stainless Steel	C

5 Optional Accessories

- Insert accessory designator(s) as needed
- BB** Wetted parts are cleaned for industrial oxygen service
- CL*** ATEX and IECEx approved. Ex ia IIC T3 (-40°C < Ta < +125 °C)
- CR** 3/4" NPT(F) conduit connection
- CS*** CSA Certified. Class 1, Group A, B, C, D; Divisions 1 & 2. For relay option; Class 1, Group C & D, Divisions 1 & 2. Single seal ambient & process temperatures -40°C to +125°C
- CV** Canadian Registration Number (CRN). Consult the factory for applicable pressure and additional information.
- HT** Explosion proof 316SS terminal box CSA Certified Class I, Groups A, B, C & D; Class II, Groups E, F & G; Class III, Division I (NEMA 4X)
- NC** NACE construction - MR 01-75 / ISO 15156 2003. Available only with 316SS materials of construction
- PP** Tag, fiber. Attached with plastic wire to housing. Stamped with customer specified tagging information.
- RB**** 24 VDC powered DPDT relay in explosion proof terminal box. Contact rating: 10 amps @ 115 VAC. Class I, Group C, D; Divisions 1 & 2.
- RC**** 120 VAC powered DPDT relay in explosion proof terminal box. Contact rating: 10 amps @ 115 VAC. Class I, Group C, D; Divisions 1 & 2
- RR** Tag, stainless steel. (Attached with stainless steel wire to housing. Stamped with customer specified tagging information. 2 lines, 18 characters and spaces per line.)
- TT** Stainless steel nameplate permanently attached to housing. Stamped with customer specified tagging information.
- VV** Fungicidal varnish. Covers exterior except working parts.

*CS or CL option is required on all flange mounted units.
**Not available with L9 or L1 switch options.



1550 **B** **F** **5A** **C** **W9** **ES** **MC**

← **Model Number**

Type 1550 Top-Mount Vertical Electric Level Switch

Customer to specify insertion depth L for each switch. See drawing on page 1. Stem guides are not installed on units with insertion depth L less than 7" (177.8 mm). The 1550 Series level switch has a 3.5" (90 mm) diameter float. It will not fit through many process connections. Be sure there is access to attach the float from inside the vessel after instrument installation if necessary.

Test Certificates

	Certificate Designator	C1	C3	C4	C5	C6	C7	B5	B6	B7
1550 Vertical Electric Level Switch	Calibration	◆						◆	◆	◆
	Inspection Report		◆					◆	◆	◆
	Compliance / Conformance			◆						◆
	Dielectric Test				◆			◆		
	Insulation Resistance					◆		◆	◆	
	QA Test Report						◆			

Replacement Parts

Part Number	Designator
3130-106	W9 - SPST Hermetically Sealed Switch Capsule
3130-245	W1 - SPDT Hermetically Sealed Switch Capsule
3130-107	L9 - SPST Hermetically Sealed Switch Capsule
3130-244	L1 - SPDT Hermetically Sealed Switch Capsule
3101-122	316SS Float. (Consult the factory for other materials.)
3130-396	Actuator Replacement Kit

Limited Warranty

SOR® agrees to repair or replace any switch found to be defective in material or workmanship within five years from date of shipment. The limited warranty is valid only if the switch was installed in accordance with published factory installation instructions, operated within the design limitations stated on the nameplate, and returned to the factory for inspection, freight prepaid, within the warranty period. Contact the factory for return authorization. No claim for labor or consequential damages will be allowed.

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Switches**



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Temperature Pressure

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