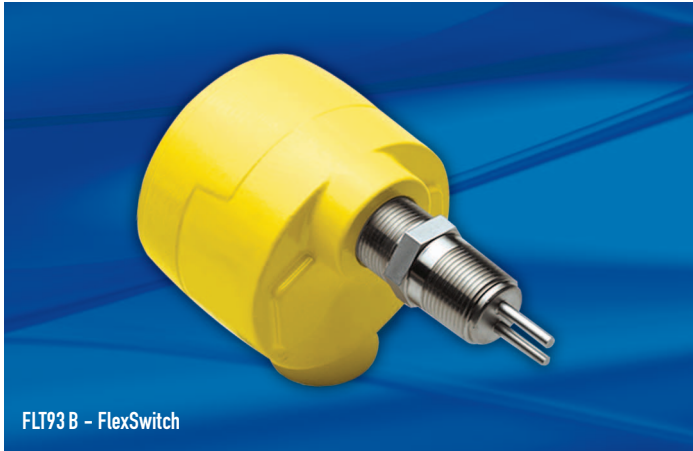


Premium Flow, Level and Temperature Monitor



FLT93 B - FlexSwitch

Model FLT93B is a preconfigured version of FCI's Model FLT93S in its most popular configuration for simplified ordering and off-the-shelf quick shipment. For additional application and installation requirements, consult FCI's complete FLT93 Series brochure and ordering guides.

FLT93 B Specifications

Flow Service – Setpoint Ranges

Water-based Liquids

0.01 FPS to 0.5 FPS [0,003 MPS to 0,15 MPS] -0.75 watt heater
 0.01 FPS to 3.0 FPS [0,003 MPS to 0,9 MPS] -3.0 watt heater

Hydrocarbon-based Liquids

0.01 FPS to 1.0 FPS [0,003 MPS to 0,3 MPS] -0.75 watt heater
 0.01 FPS to 5.0 FPS [0,003 MPS to 1,5 MPS] -3.0 watt heater

Air/Gas

0.25 SFPS to 120 SFPS [0,08 NMPS to 37 NMPS] -0.75 watt heater at standard conditions of 70 °F [21.1 °C] and 14.7 psia [1,013 bar(a)]

Accuracy (whichever reading is larger)

Liquids: ±0.5% reading or ±0.04 FPS [±0,012 MPS]
 Gases: ±0.5% reading or ±2 SFPS [±0,06 NMPS]

Repeatability: ±0.5% reading

Level/Interface Service

Accuracy: ±0.25" [±6,4 mm]

Repeatability: ±0.125" [±3,2 mm]

Temperature Service

Accuracy: ±2 °F [±1 °C]

Repeatability: ±1 °F [±0,6 °C]

Response Time: As low as 3 seconds

FLT93 B Specifications (continued)

Temperature Service

Accuracy: ±2 °F [±1 °C]

Repeatability: ±1 °F [±0,6 °C]

Response Time: As low as 3 seconds

Element

Construction: All-welded 316L stainless steel for all wetted surfaces

Process Connection: 3/4" male NPT

Insertion U-Length: 1.2" [30 mm], 2" [51 mm] and 4" [102 mm]

Operating Temperature: -40 °F to 350 °F [-40 °C to 177 °C]

Operating Pressure: 2350 psig [162 bar(g)]

Control Circuit

Operating Temperature: -40 °F to 140 °F [-40 °C to 60 °C]

Input Power: Field selectable 115 ±15 Vac, 230 ±30 Vac, 50/60 Hz, or 21 Vdc to 28 Vdc or 18 Vac to 26 Vac; 7 watts maximum consumption; FM/CSA agency approval units are factory preset at 115 Vac; ATEX/IECEx agency approval units are factory preset at 230 Vac

Alarm Application: Two alarms, independently field selected for flow, liquid level/interface, or temperature operation

Relay Rating: Field configurable dual SPDT or single DPDT 6 amp resistive at 115 Vac, 220 Vac or 24 Vdc

Output Signal: Analog DC voltage related to flow or level/interface signal and proportional to temperature

Electrical Connection: 1" female NPT

Other Specifications

Enclosure: Epoxy powder coated aluminum rated for NEMA Type 4X and hazardous locations Groups B, C, D, E, F and G; EEx d IIC (meets IP66)

Agency Approvals

FM, CSA XP, Class I, Division 1, Groups B, C, D
 DIP, Class II/III, Division 1, Groups E, F, G
 T4, Ta=60 °C; T3A, Ta=60 °C

ATEX II 2 G Ex d IIC T6...T1

II 2 D Ex tD A21 IP66 T85 °C...T355 °C

IECEx Ex d IIC T6 or T5

Tamb (Housing) = -40 °C to 40 °C, T6

Tamb (Housing) = -40 °C to 60 °C, T5

Tp (Sensing Element) = -40 °C to 177 °C

Other Certifications: SIL-2 rated, CE Marking

MTBF: 190 years

Shipping Weight (approximate): 8 lb [3,6 kg]

Warranty: 3 years

Ordering Information FLT93 B -

Ordering Procedure: To order a complete Model FLT93B, please fill in each numbered box above with the appropriate code from the categories below. Consult FCI on the cost of special data and documentation. Final acceptance of the part number is subject to FCI's approval.

[Block 1] Agency Approval *	Code
FM, CSA	A
ATEX, IECEx	B

[Block 2] Insertion U-Length	Code
1.2 inch [30 mm]	A
2.0 inch [51 mm]	B
4.0 inch [102 mm]	C

[Block 3] Identification Tag	Code
Adhesive Label**	0

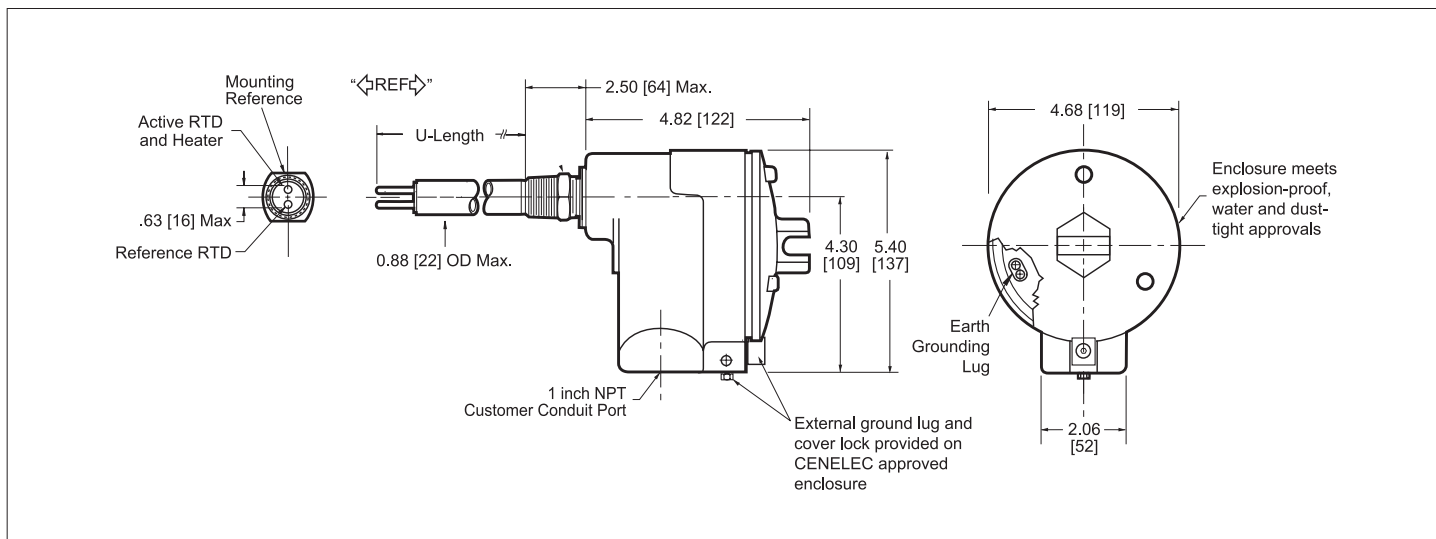
[Block 4] Input Power	Code
Field Selectable	0

* FM/CSA unit preset by factory as 108-132 Vac
 ATEX/IEC unit preset by factory as 216-240 Vac

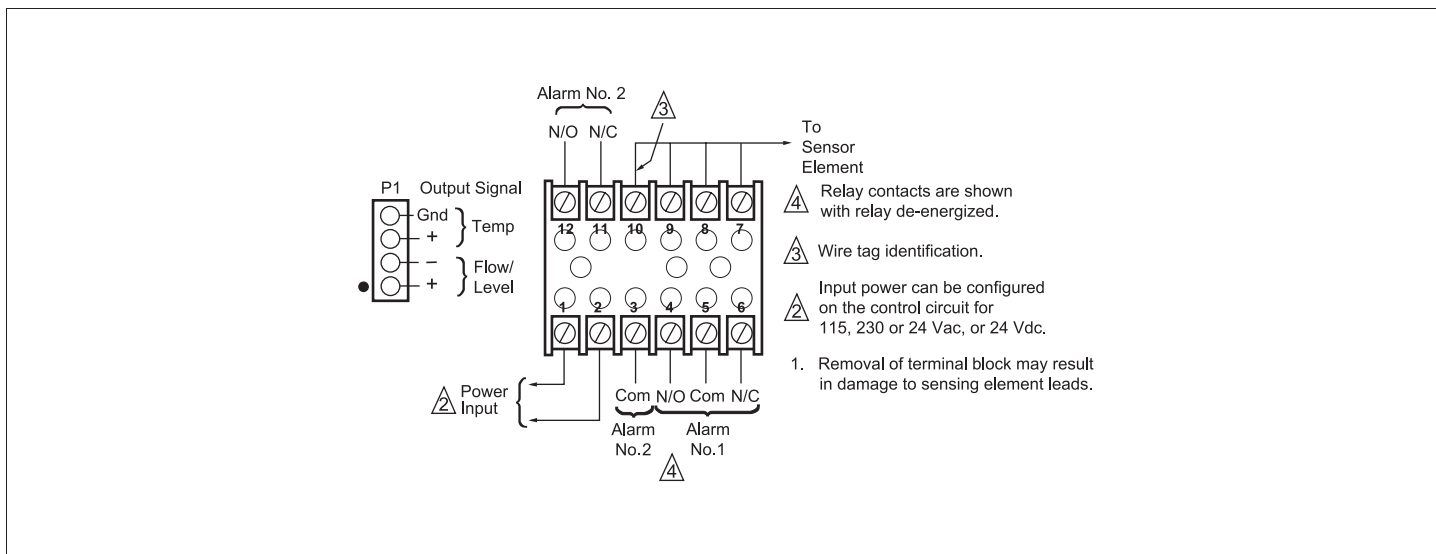
** Optional stainless steel tag available; required for customer tag information. Order "Identification Tag" as a separate line item; may specify up to three (3) lines of 20 characters per line.

Line 1: _____
 Line 2: _____
 Line 3: _____

FLT93 B, Insertion



FLT93 B Wiring Diagram



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