

FLT93[®] B FlexSwitch[™]

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

Ordering Information

FLT93 B -
1 2 3 4

Ordering Procedure: To order a complete Model FLT93 B, please fill in each numbered box above with the appropriate code from the categories below.²

[Block 1] Agency Approval ¹	Code
FM, FMc	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
Stainless steel metal tag ²	0
[Block 4] Input Power	Code
Field selectable ¹	0

FLT93 B Specifications (continued)

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] or 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: Universal AC/DC supply; input terminals and jumpers on circuit board select specific power

AC	108-132 V ¹	13 W, 100 mA maximum
AC	207-253 V ¹	14 W, 50 mA maximum
AC	18-28 V	7 W, 230 mA maximum
DC	21-30 V	7 W, 230 mA maximum

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

Other Specifications

Enclosure: Polyester powder coated aluminum rated for NEMA Type 4X/IP67; 1 inch female NPT conduit port

Agency Approvals

FM, FMc

Explosion-Proof for Class I, Division 1, Groups B, C and D;
Dust-Ignition-Proof for Class II, Division 1, Groups E, F and G; Class III, Division 1;
Nonincendive for Class I, II and III, Division 2, Groups A, B, C, D, E, F and G,
T4 Ta=+60°C, T3A Ta=+60°C; hazardous (classified) locations;
Type 4X.

ATEX II 2 G Ex db IIC T4...T2 Gb
II 2 D Ex tb IIIC T135 °C...T300 °C Db

IECEx Ex db IIC T4...T2 Gb
Ex tb IIIC T135 °C...T300 °C Db

Other Compliances: SIL-2 rated, CRN, probe complies with NEC & CEC Code requirements of ANSI/ISA 12.27.01-2011 as a single seal device, CE marking, RoHS compliant, EAC/TR CU, Inmetro, EMSA EQM-Ex

MTBF: 190 years

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

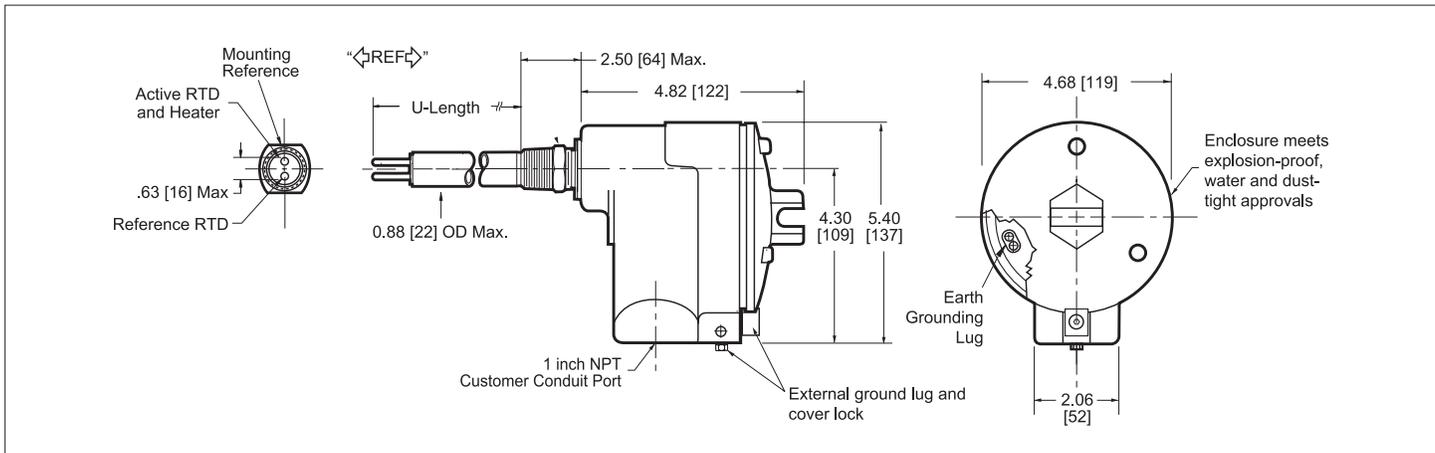
Warranty: 3 years

¹ FM/FMc unit preset by factory as 108-132 Vac; ATEX/IEC unit preset by factory as 207-253 Vac

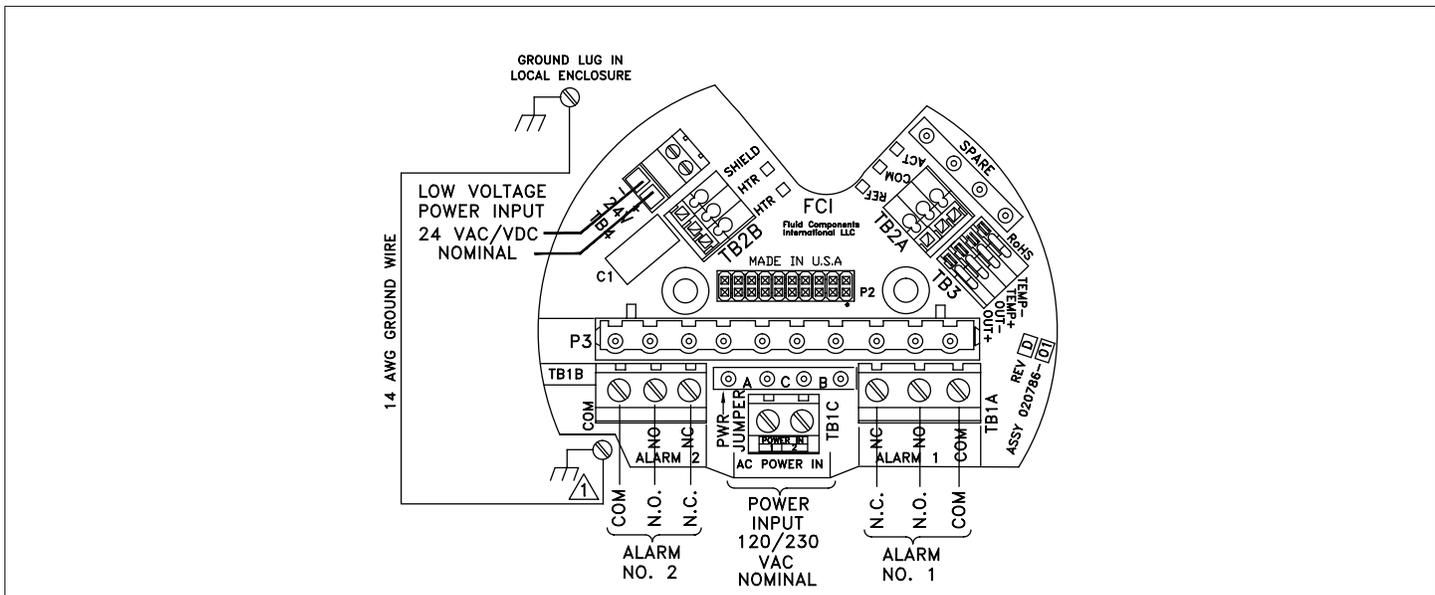
² For any other requirements – such as custom user tag information, specific certifications or test documentation, alternative agency approvals, longer insertion U-lengths or a different process connection – please refer to and order Model FLT93S.

FLT93 B Specifications *(continued)*

FLT93 B, Insertion



FLT93 B Wiring Diagram



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1223

Doc. No. 02MK011467K Page 2 of 2