


**FLT93S** - [ ] - [ ] - [ ] - [ ]

**Block No.** 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

**INSTRUCTIONS:** To order an **FLT93S**, please fill in each numbered block above with the appropriate code from the categories below. Once you have determined all the specifications, contact an FCI representative or FCI directly for price information or additional options not shown. 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
Not required	0
Factory Mutual (FM)	1
Factory Mutual (FM) (T4 rated) <sup>1</sup>	2
ATEX, CE Marking	3
FMc	4
FMc (T4 rated) <sup>1</sup>	5
IEC <sup>16</sup>	6
	*
Other	*
[Block 2] Identification Tag <sup>2</sup>	Code
Mylar	A
316L stainless steel	B
Agency approved, customer specified	W
Other	*
[Block 3] Process Temperature	Code
-40 °F to 350 °F [-40 °C to 177 °C]	1
-100 °F to 500 °F <sup>4</sup> [-73 °C to 260 °C]	2
-100 °F to 850 °F <sup>3, 4</sup> [-73 °C to 454 °C]	3
[Block 4] All Welded Material of Construction	Code
316L stainless steel	A
316L stainless steel Electro-polish	B
Hastelloy C	C
Monel 400 <sup>25</sup>	D
Titanium grade 2 <sup>25</sup>	E
Agency approved, customer specified	W
Other	*

[Block 5] Process Connection	Code
3/4" Male NPT <sup>5</sup>	1
1" Male NPT	2
1" Male BSPT <sup>6</sup>	3
Flanged	4
<b>Retractable Packing Gland with Graphite Packing Material<sup>26</sup></b>	
<i>Low pressure to 500 psig [3.5 bar(g)]</i>	
1 1/4" Male NPT	5
Flanged	6
<i>Medium pressure to 500 psig [35 bar(g)]</i>	
1 1/4" Male NPT	7
Flanged	8
<b>Compression Fitting</b>	
<i>Teflon ferrule<sup>23</sup> to 150 psig [10 bar(g)] and 200 °F [93 °C]</i>	
3/4" Male NPT	C
Flanged	G
<i>Metal ferrule<sup>23</sup> to 250 psig [17 bar(g)] and 500 °F [260 °C]</i>	
3/4" Male NPT	H
Flanged	J
Agency approved, customer specified	W
Other	*
[Block 6] Flange Size <sup>8</sup>	Code
Not required	0
<b>1-1/2" Flange<sup>9</sup></b>	
150 lb carbon steel <sup>10</sup>	A
150 lb per Block 4	B
300 lb carbon steel <sup>10</sup>	C
300 lb per Block 4	D
<b>2" Flange<sup>9</sup></b>	
150 lb carbon steel <sup>10</sup>	E
150 lb per Block 4	F
300 lb carbon steel <sup>10</sup>	G
300 lb per Block 4	H
<b>DIN DN40 Form C Flange</b>	
#PN40, 316L stainless steel	4
<b>DIN DN50 Form C Flange</b>	
#PN16, 316L stainless steel	5
#PN40, 316L stainless steel	6
Flat duct stainless steel flange with 3/4" FNPT	J
Agency approved, customer specified <sup>11</sup>	W
Other	*

[Block 7] Insertion Length	Code
1.2" [30 mm] <sup>12</sup>	1
2" [51 mm]	2
4" [102 mm]	3
6" [152 mm]	4
9" [229 mm]	5
12" [305 mm]	6
18" [457 mm]	7
Agency approved, customer specified <sup>13</sup>	W
[Block 8] Local Enclosure <sup>14</sup>	Code
Sensor element only with 6" [152 mm], Kapton wire pigtailed, no enclosure	A
Sensor element only with cable pigtail, no enclosure <sup>15</sup>	B
Note maximum cable temp: PVC: 190 °F [90 °C] Teflon: 300 °F [150 °C]	
Aluminum; NEMA Type 4X (IP66) and hazardous locations Groups B, C, D, E, F, G and EEx d IIC; 1 x 1" NPT entry	C
Aluminum; NEMA Type 4X (IP66) and hazardous locations Groups B, C, D, E, F, G and EEx d IIC; 2 x 3/4" NPT entries	D
316 stainless steel; NEMA Type 4X (IP66) and hazardous locations Groups B, C, D, E, F, G and EEx d IIC; 1 x 1" NPT entry	E
Agency approved, customer specified	W
Other	*
[Block 9] Configuration <sup>24, 28</sup>	Code
Socket mount, single channel, dual alarm with epoxy sealed 6 amp at 115 Vac relay contacts	4
Hermetically sealed 0.5 amp at 115 Vac relay gold contacts	5
Agency approved, customer specified	W
Other	*
[Block 10] Alarm No. 1: Application <sup>18</sup>	Code
<b>For Flow Service</b>	
Gas	A
Liquid	B
<b>For Level Service</b>	
Wet/Dry	C
Interface (wet/wet)	D
<b>For Temperature Service</b>	
Temperature	E

[Block 11] Alarm No. 2: Application <sup>18</sup>	Code
Not required	0
<b>For Flow Service</b>	
Gas	A
Liquid	B
<b>For Level Service</b>	
Wet/Dry	C
Interface (wet/wet)	D
<b>For Temperature Service</b>	
Temperature	E
[Block 12] Application-Specific Setup & Calibration <sup>19</sup>	Code
Not required	0
Jumper selection only	1
Jumper selection and adjustment of 1 alarm setpoint in Air or Water	3
Jumper selection and adjustment of 2 alarm setpoint in Air or Water	4
Jumper selection, Air flow curve from 0 SFPS to 120 SFPS [36.6 NMPS] and adjustment of 2 alarm setpoints	8
Jumper selection, Water flow curve from 0 FPS to 3 FPS [0.91 MPS] and adjustment of 2 alarm setpoints	9
Agency approved, customer specified <sup>18, 20</sup>	W
[Block 13] Remote Enclosure	Code
Not required	0
Aluminum; NEMA Type 4 (IP66) and hazardous locations Groups C, D, E, F, G with opposing 2 x 1" NPT entries	A
Aluminum; NEMA Type 4X (IP66) and hazardous locations Groups B, C, D, E, F, G and EEx d IIC; 2 x 1" NPT entries (not recommended for cable gland installation)	B
Aluminum; NEMA Type 4X (IP66) and hazardous locations Groups B, C, D, E, F, G and EEx d IIC; 3 x 3/4" entries	G
316 stainless steel; NEMA Type 4X (IP66) and hazardous locations Groups B, C, D, E, F, G and EEx d IIC; 2 x 1" NPT entries (not recommended for cable gland installation)	C
No enclosure; panel mounted control circuit <sup>21</sup>	F
Agency approved, customer specified	W
Other	*

[Block 14] Cable Jacket	Code
Not required	0
PVC 190 °F [90 °C] maximum temperature	1
Teflon 300 °F [150 °C] maximum temperature	2
Agency approved, customer specified	W
[Block 15] Cable Length	Code
Not required	0
10 ft [3 m]	1
25 ft [7.5 m]	2
50 ft [15 m]	3
Agency approved, customer specified <sup>22</sup>	W

- Notes**
- ◀ Shorter manufacturing lead times are available when this is selected in every option.
  - \* Voids Agency Approvals. Contact FCI.
  - 1. Field selectable heater power is disabled.
  - 2. Customer specified tag data field maximum 3 lines by 20 characters/line and must be supplied at time of order. All other require a "W" or "\*" in Block 2.
  - 3. Control circuit must be remote mounted.
  - 4. Not available with cable pigtail.
  - 5. 1.2" length is available for all materials of construction. 2" and longer lengths are only available in stainless steel. 1" male NPT must be selected for 2" or greater lengths and exotic materials of construction.
  - 6. Available in 316L stainless steel only.
  - 7. Not available with agency approvals.
  - 8. ANSI flanges are phonographic serrated, DIN are Form C per DIN 2526/Form B1 per EN DIN1092-01.
  - 9. Flanged material will be identical to that selected in Block 4, Codes B, D, F and H.
  - 10. Carbon steel flange available with 316L stainless steel sensor construction only.
  - 11. Customer specified flange shall be per ANSI or DIN specifications and must be 1 1/2" [DN40] or larger.
  - 12. For use only in a 3/4" tee.
  - 13. Maximum length is 120".
  - 14. Local enclosure required for agency approval. Metal enclosure required for CE.
  - 15. Select cable jacket/length in Blocks 14-15.
  - 16. IEC approval: 350 °F [177 °C] maximum, Block 3 must be Code 1. Local enclosure, Block 8, must be Code C, D or E. Remote enclosure, Block 13, must be Code 0, B, G or C.
  - 17. Without 19" rack or mating connector. Also available in dual channel version.
  - 18. Refer to application matrix on Application Data Sheet for valid alarm combinations.
  - 19. For all codes except "0" a completed FLT application data sheet must accompany the order.
  - 20. Customer specified calibration shall not exceed temperature and pressure limitations of the FLT93 specifications.
  - 21. Remote enclosure required for FM and CSA.
  - 22. Wire resistance must be less than 1.5 ohms.
  - 23. Material will match Codes A or C selected in Block 4. Metal ferrule permanently locks after tightening the compression fitting.
  - 24. Factory default setting for input power is 115 Vac for FM, and 230 Vac for all other agency approvals in Block 1.
  - 25. These materials of construction are not available with high temperature selection in Block 3, Code 3.
  - 26. Teflon packaging material must be ordered when process media is Ozone, Chlorine or Bromine.
  - 27. T4 rated at 140 °F [60 °C].
  - 28. In July 2012 FLT93 electronics are using a new surface-mount electronics design. Features and functions are identical, however Codes in Block 9 will change to signify the newer electronics. For repeat orders of identical configurations, replace prior Block 9 Codes with new ones as noted here:  
Old Code 1 – use new Code 4  
Old Code 2 – use new Code 5

