

**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 <sup>30</sup>	3
FMc	4
FMc (T4 rated) <sup>1</sup>	5
IEC <sup>16,30</sup>	6
Inmetro <sup>30</sup>	7
EAC/TR CU <sup>30</sup>	8
Other	*

  

[Block 2] Identification Tag <sup>2</sup>	Code
Mylar	A
316L stainless steel <sup>30</sup>	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>3,4</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
Retractable Packing Gland with Graphite Packing Material <sup>26</sup>	
Low pressure to 50 psig [3.5 bar(g)]	
1 1/4" Male NPT	5
Flanged	6
Medium pressure to 500 psig [35 bar(g)]	
1 1/4" Male NPT	7
Flanged	8
(continued next column)	

[Block 5] Process Connection	Code
(continued from previous column)	
<b>Compression Fitting</b>	
Teflon ferrule <sup>23</sup> to 150 psig [10 bar(g)] and 200°F [93°C]	
3/4" Male NPT	C
Flanged	G
Metal ferrule <sup>23</sup> to 250 psig [17 bar(g)] and 500°F [260°C]	
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 Flange<sup>8</sup></b>	
#PN40, 316L stainless steel	4
<b>DIN DN50 Flange<sup>8</sup></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
<b>Aluminum</b>	
NPT: One (1) 1" NPT cable entry; agency approvals for hazardous location Groups B, C, D, E, F, G, and Eex d IIC	C
NPT: Two (2) 1/2" NPT cable entries; agency approvals for hazardous location Groups B, C, D, E, F, G, and Eex d IIC	H
Metric: Two (2) M20 cable entries; agency approvals for hazardous location Groups B, C, D, E, F, G, and Eex d IIC	J
<b>Stainless Steel</b>	
NPT: One (1) 1" NPT cable entry; agency approvals for hazardous location Groups B, C, D, E, F, G, and Eex d IIC	E
<b>Other</b>	
No enclosure; sensor element only with wire pigtails <sup>15</sup>	B
Other, agency approved, customer specified	W
Other, not agency approved	*

  

[Block 9] Configuration <sup>24</sup>	Code
Single channel dual alarms with standard epoxy sealed, gold plated contacts 6 amp at 115 Vac relays	4
Single channel dual alarms with hermetically-sealed, 0.5 amp at 115 Vac relays	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 two (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 two (2) alarm setpoints	8
Jumper selection, Water flow curve from 0 FPS to 3 FPS [0.91 MPS] and adjustment of two (2) alarm setpoints	9
Agency approved, customer specified <sup>18, 20</sup>	W

  

[Block 13] Remote Enclosure	Code
Not required	0
<b>Aluminum</b>	
NPT: Two (2) 1" NPT cable entry; agency approvals for hazardous location Groups B, C, D, E, F, G, and Eex d IIC	B
NPT: Two (2) 1/2" and one (1) 1" cable entries; agency approvals for hazardous location Groups B, C, D, E, F, G, and Eex d IIC	H
Metric: Two (2) M20 and one (1) 1" NPT cable entries; agency approvals for hazardous location Groups B, C, D, E, F, G, and Eex d IIC	J
<b>Stainless Steel</b>	
Two (2) 1" NPT cable entries; agency approvals for hazardous location Groups B, C, D, E, F, G, and Eex d IIC	C
<b>Other</b>	
No enclosure; panel mount CB	F
Other, agency approved, customer specified	W
Other, not agency approved	*

  

[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. Electronics' maximum temperature is 140°F [60°C]. If installation location will exceed this, insulation, extending the "U" length (Block 7) or remote enclosure (Block 13) is recommended.
  - 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.
  - 8. ASME/ANSI B16.5 2009 flanges with phonographic serrated raised face. DIN flanges per EN 1092-1 2007, Type B1 (serrated).
  - 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, H, J, or E. Remote enclosure, Block 13, must be Code 0, B, H, J, 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 FMc.
  - 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.
  - 28. Requires selection of stainless steel tag, Code B in Block 2.
  - 30. ATEX and IECEx based approvals require a stainless steel tag. If Block 1 is Code 3, 6, 7, or 8, then Block 2 must be Code B.

