SF - SS limit switch box series

Multi purpose limit switch box for safe area or Intrinsically Safe applications.

Features

- Twin shaft design
- Self lubricating bushings
- Copper free aluminium or 316 stainless steel housing option for maximum corrosion protection
- Two cable entries either metric or imperial
- Multiple indicator options
- Easy wiring through the terminal PCB board
- Position transmitter board optional
- Suitable for arctic environments

Approvals

ATEX, IECEx, EAC, CCOE, INMETRO:

For NAMUR sensors type:
II 1GD Ex ia IIC T4/T5/T6 Ga Ex ia IIIC T120°/T100°/T85°
II 2GD Ex ib IIC T4/T5/T6 Gb Ex ib T120°/T100°/T85°C Db

For SPDT, DPDT switches type:
II 1GD Ex ia IIC T4 Ga Ex ia IIIC T95°C/120°C Da

UL: Class I Division 2 Groups A, B, C, D
Class II Division 2 Groups F, G

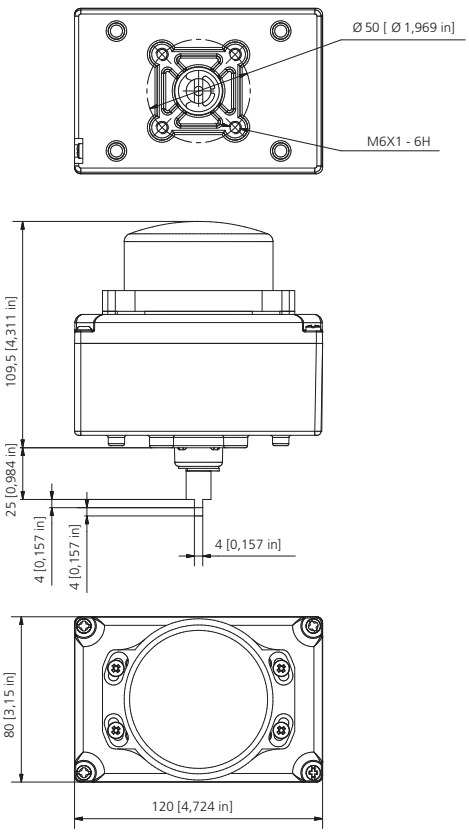
SIL certificate: Up to SIL 3 certified by TÜV

Protection rating: IP 66 / 67
NEMA 4 4X on request

Temperature:
-40 to +80 °C (-40 to +176 °F) standard temperature range
-60 to +105 °C (-76 to +221 °F) available on request

SF limit switch box

SS limit switch box



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Nomenclature

SB	N1	2	0	0	-	1	1	X	1	1	A	4

Box
SF = Aluminium enclosure
SS = 316 stainless steel enclosure

Switch
01 = Electro mec. switch, SPDT, silver contacts, up tp SIL3 (Switch qty: 2,3,4; Terminal digit: 0; temp digit: L)
03 = Electro mec. switch, SPDT, gold contacts, up tp SIL3, Exia ready, (Switch qty: 1,2,3,4; Terminal digit: 0; temp digit: L)
1F = Electro mec. switch, DPDT, silver contacts, up tp SIL3 (Switch qty: 1,2; Terminal digit: 0; temp digit: L)
06 = Electro mec. switch, SPDT, gold contacts, up tp SIL3, Exia ready, (Switch qty: 1,2; Terminal digit: 0; temp digit: L)
C4 = Magnetic reed SPDT, hermetically sealed, up to SIL3, Exia ready, (Switch qty: 1,2,3,4; Terminal digit: 0; temp digit: L, P)
C8 = Magnetic reed DPDT, hermetically sealed, up to SIL3, Exia ready, (Switch qty: 1,2; Terminal digit: 0; temp digit: L, P)
N1 = Mag. proximity SPDT silver hermetically sealed up to SIL3, (Switch qty: 1,2,3,4; Terminal digit: 0; temp digit: L, M)
N3 = Mag. proximity SPDT gold hermetically sealed up to SIL3, Exia ready, (Switch qty: 1,2,3,4; Terminal digit: 0; temp digit: L, M)
N4 = Mag. proximity DPDT silver hermetically sealed up to SIL3, (Switch qty: 1,2; Terminal digit: A; temp digit: L, M)
32 = Inductive proximity NBN4-12GM40-Z0 2 wires, (Switch qty: 1,2; Terminal digit: 0; temp digit: F)
73 = Inductive proximity NBB2-V3-E2, PNP NO, up to SIL3, (Switch qty: 1,2,3,4; Terminal digit: 0; temp digit: B)
75 = Inductive proximity IS5026, 2 wire, NO /NC, (Switch qty: 1,2,3,4; Terminal digit: 0; temp digit: E)
70 = Inductive NAMUR proximity NJ2-V3-N, 2 wire, up to SIL3, Exia ready, (Switch qty: 1,2,3,4; Terminal digit: 0; temp digit: E)
62 = Inductive NAMUR proximity SJ 3,5 SN, 2 wire, 8V DC, up to SIL3, Exia ready, (Switch qty: 1,2,3; Terminal digit: 0, A; temp digit: L, M)
T0 = 4-20mA analog position transmitter, (Switch qty:0; Terminal digit: A; temp digit: L)
T1 = 4-20mA analog position transmitter + electro mec. switch, SPDT, silver contacts, (Switch qty: 1,2; Terminal digit: A; temp digit: L)
H0 = 4-20mA HART position transmitter, Exia ready, (Switch qty: 0; Terminal digit: A; temp digit: L)
See additional information and options on pages 14-19

Switch Quantity
0 = no switches for digital feedback
1 = N° 1 switch (related to switch description)
2 = N° 2 switch (related to switch description)
3 = N° 3 switch (related to switch description)
4 = N° 4 switch (related to switch description)

Terminals
0 = Pre-wired terminal strip with additional extra poles for solenoid valve connection (for switches 01, 03, 1F, 06 C4, C8, N1, N3, 32, 70, 62, 73, 75)
A = Pre-wired terminals without solenoid valve connection (for switches N4, 62, T0, T1, H0)

Coating
0 = Black powder coating
E = Electro polished finishing (on SS series)

Cable Entries
1 = 2 cable entries 1/2" NPT
2 = 2 cable entries M20 x 1.5p

Visual Position Indicator
0 = 3D plastic visual position indicator red and green
1 = No visual position indicator
T = 3D stainless steel position indicator
See additional information and options on page 11

Approval
W = Weather proof
X = ATEX and IECEx certified box
G = EAC certification for Russian market
J = CCOE certification for Indian market
N = NEPSI certification for Chinese market
U = UL certified box (not available for switches 32, 75, 62, H0)
See additional information and options on page 13

Marking
0 = Standard location
1 = Instrinsically safe certification
9 = cULus Class 1/2 Div 2 (with switches code: C4, C8, N1, N3)
See additional information and options on page 13

IP Protection rating
1 = Weather proof IP66 / IP67
7 = NEMA 4 and 4X

Temperature
L = Ambient temperature range: -40 to +80 °C (-40 to +176 °F) (standard for all switch options, excluding: 32, 70, 73, 75)
P = Ambient temperature range: -60 to +80 °C (-76 to +176 °F) (extended temp range for switches C4, C8)
B = Ambient temperature range: -20 to +70 °C (-4 to +158 °F) (for switch 73)
E = Ambient temperature range: -25 to +80 °C (-13 to 176 °F) standard for switch 70, 75
F = Ambient temperature range: -25 to +70 °C (-13 to +158 °F) standard for switch 73.
2 = Ambient temperature range: -40 to +40 °C (-40 to 104 °F) only applicable to C4, C8 switches with UL approval.
4 = Ambient temperature range: -60 to +40 °C (-76 104 °F) extended temperature range applicable to C4, C8 switches with UL approval.

Material
4 = Copper free aluminium (on SF series)
6 = 316 stainless steel heavy duty enclosure (on SS series)