

## SF - SS - SB 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
- 2 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:

SF-SS series (ATEX & IECEx)  
Ex II 1GD Ex ia IIC T4...T6 Ga  
Ex ia IIIC T95°C...T120°C Da  
-60°C < Ta < +105°C

SB series (ATEX only)  
Ex II 2GD Ex ia IIC T6...T4 Gb  
Ex ia IIIB T44°C...T108°

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

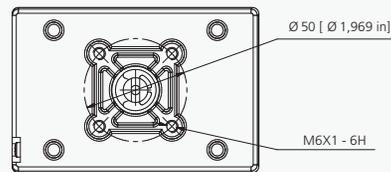
**SIL certificate:** Up to SIL 3 certified by TÜV

**Protection rating:** IP 66 / 67  
Nema 4 X on request

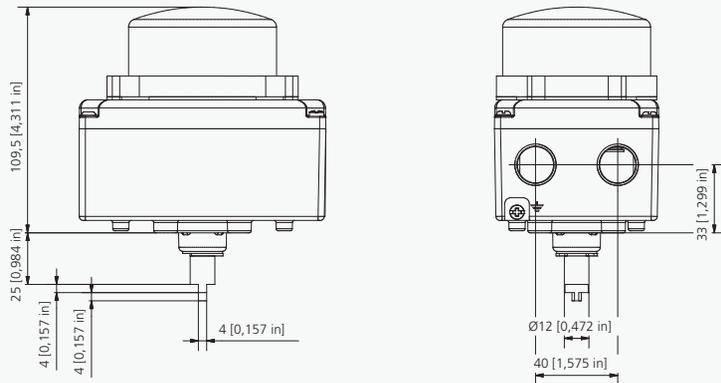
**Temperature:**  
-20 to +80 °C (-4 to +176 °F) standard temperature range  
-60 to +105 °C (-76 to +221 °F) available on request



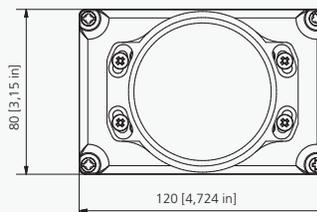
### SF limit switch box



### SS limit switch box



### SB limit switch box



# SF - SS - SB limit switch box series

## Nomenclature

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

### Box

- SB = Aluminium body with polycarbonate cover
- SF = Aluminium enclosure
- SS = 316 stainless steel enclosure

### Switch

- 01 = SPDT el.mech. switch silver plated contacts
- 03 = SPDT el.mech. switch gold plated contacts (for Ex'ia')
- 1F = DPDT el.mech. switch silver plated contacts
- C4 = SPDT magnetic hermetically sealed reed switch (for Ex'ia' low temperature)
- C8 = DPDT magnetic hermetically sealed reed switch (for Ex'ia' low temperature)
- N1 = SPDT magnetic hermetically sealed silver plated snap acting contacts
- N3 = SPDT magnetic hermetically sealed gold plated snap acting contacts
- N4 = DPDT magnetic hermetically sealed silver plated snap acting contacts
- 62 = Inductive proximity NAMUR sensor SJ3,5-SN 2 wire NC logic (for Ex'ia' low temperature safety function)
- 70 = Inductive proximity NAMUR sensor NJ2-V3-N 2 wire NC logic (for Ex'ia')
- 73 = Inductive proximity sensor model NBB2-V3-E2, 3 wire PNP NO, 10-30 VDC, 0-100 mA
- 86 = Inductive proximity NAMUR sensor model NJ4-12GK-SN 2 wire NC logic (for Ex'ia' safety function)
- T0 = 4-20 mA position transmitter
- H0 = 4-20 mA HART position transmitter Atex Ex ia IIC T6 / T4 certified

See additional information and options on pages 14-19

### Switch Quantity

- 2 = 2 switches
- 3 = 3 switches

### Terminals

- 0 = Screw terminals with extra poles for solenoid valve connection
- 2 = Blue screw type terminals with extra poles for sov connection (for Ex'ia')
- A = Screw terminal strip
- 8 = Blue cage clamp terminals (for low temperature and switch codes 62, 63, H0)
- E = Cage clamp terminals (for low temperature)

### Coating

- 0 = Black powder coating
- 1 = Blue 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
- A = ATEX certified box
- B = ATEX certified box and SIL2 approval
- C = ATEX certified box and SIL3 approval
- G = EAC certification for Russian market
- J = CCOE certification for Indian market
- U = UL certified box

\* SIL2 / SIL3 options available on request

See additional information and options on page 13

### Marking

- 0 = Standard location
- 1 = Intrinsically 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

- A = Ambient temperature range: -20 to +80 °C (-4 to +176 °F)
- L = Ambient temperature range: -40 to +80 °C (-40 to +176 °F)
- P = Ambient temperature range: -60 to +80 °C (-76 to +176 °F) for switch code C4
- U = Ambient temperature range: -20 to +40 °C (-4 to +104 °F)
- B = Ambient temperature range: -20 to +70 °C (-4 to +158 °F)

### Material

- 2 = Die-cast aluminium heavy duty body and polycarbonate cover (on SB series)
- 4 = Copper free aluminium (on SF series)
- 6 = 316 stainless steel heavy duty enclosure (on SS series)