

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 4X on request

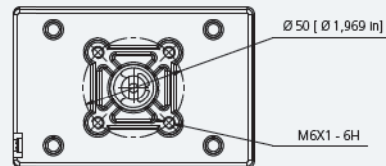
Temperature:

-20 to +80 °C (-4 to +176 °F) standard temperature range

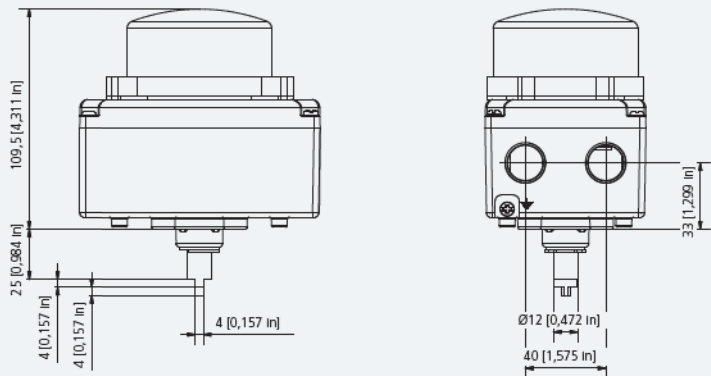
-60 to +105 °C (-76 to +221 °F) available on request



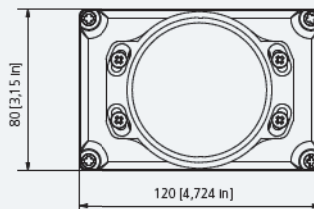
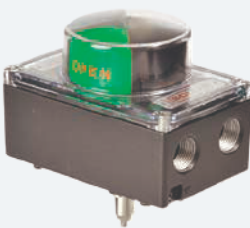
SF limit switch box



SS limit switch box



SB limit switch box



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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)