

SP - SM limit switch box series

Compact limit switch box, designed not only for the industrial market, but for indoor applications in hazardous areas. Available in either glass reinforced resin or nickel plated aluminium, with flat lid or 3D indicator.

The SP is a corrosion resistant device, able to satisfy the needing in water treatment and desalination plants, both SP and SM, can also match the Ex ia IIC T6 standards with the integral intrinsically safe certification, covering enclosure and electrical components inside. With these devices, we are providing a ready to mount solution, thanks to the integrated NAMUR mounting kit.

Technical Data:

Materials

- Glass reinforced resin body with transparent polycarbonate cover (SP series)
- Nickel plated aluminium body with transparent polycarbonate cover (SM series)
- Stainless steel fasteners

Approvals

ATEX, EAC

Ex II 2GD Ex ia IIC T4/T5/T6

Ex ia IIIB T44°C.....T108°C Db IP6*

Ta: -15 °C ≤ Ta ≤ 80 °C



SIL certificate: Up to SIL 2 certified by TÜV



Protection rating: IP 65

Cable entries options:

One cable entry M20 or 1/2" NPT (SP standard)

Two cable entry M20 or 1/2" NPT (SM)

Temperature:

-15 to +80 °C (+5 to +176 °F) as standard temperature range (depending on switch selection)

SF - SS - SB limit switch box series

Limit switch box designed for safe and hazardous areas, provides a visual and electrical remote position feedback on automated valves.

Available in either die cast aluminium or 316 stainless steel, with different lid choices, from the same enclosure material, for a complete metallic device, to the transparent polycarbonate cover or to a flat lid without visual indication. Designed for weatherproof applications, it can also matches the Ex ia IIC T6 standards with the integral intrinsically safe certification, covering both enclosure and electrical components inside.

Technical Data:

Materials

- Die-cast aluminium body and cover with polyester powder coating (SF series)
- AISI 316 stainless steel body and cover with electro-polished finishing (SS series)
- Die-cast aluminium body with polyester powder coating, transparent polycarbonate cover (SB series)
- Stainless steel fasteners and shafts

Approvals

ATEX, IECEx, EAC, CCOE

Ex II 2GD Ex ia IIC T4/T5/T6

Ex ia IIIC T44°C.....T108°C Db IP6* (SF, SS series)

Ex ia IIIB T44°C.....T108°C Db IP6* (SB series)

Ta: -60 °C ≤ Ta ≤ 100 °C



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

Cable entries options:

Two cable entry M20 or 1/2" NPT

Temperature:

-20 to +80 °C (-4 to +176 °F) as standard temperature range (depending on switch selection)

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

HW limit switch box series

Control unit embedded into a limit switch box. The HW series provides, not only a visual and electrical remote position feedback, but, using a solenoid valve integrated into the housing, it can control an automated valve.

Available in polyester powder coated aluminium, with different lid choices, and with a wide selection of solenoid valves, from the standards 3/2 way to a 5/3 way with special pneumatic design.

The Soldo control unit, is covering from industrial automation to food and beverage, from chemical to naval industries.

It can also meet the requirements of a simple limit switch box, by removing the pneumatic control device, providing a large inner volume able to host up to 6 switches and spare pass through terminals.

Technical Data:

Materials

- Die-cast aluminium body and cover with polyester powder coating
- Stainless steel fasteners and shafts

Options:

Network Control

- Profibus network version available



Approvals

CE, UL

Ordinary location

SIL certificate: Up to SIL 3 certified by TÜV



Protection rating:

IP 66 / 67

Cable entries options:

Up to three cable entries M20, M25, 1/2" NPT or 3/4" NPT

Temperature:

-15 to +80 °C (+5 to +176 °F) as standard temperature range (depending on switch selection)

SX - SH limit switch box series

Heavy-duty limit switch boxes, designed for hazardous areas, provide a visual and electrical remote position feedback on automated valves.

The SX matches the Exd IIB T6 standards. The SH is our solution reaching Exd IIB + H2 T6 requirements. SX and SH, thanks to spare pass through terminals, the three cable entries either metric or imperial and different visual position indications, provide a highly customizable solution meeting a wide range of applications. These include, but are not limited to, oil & gas (both on-shore and off-shore) and petrochemical industries.

Technical Data:

Materials

- Die-cast aluminium body and cover with polyester powder coating
- Stainless steel fasteners and shafts

Approvals:

ATEX, IECEX, EAC, CCOE, INMETRO

Ex II 2GD Ex d IIB T4/T5/T6 Gb (SX series)

Ex II 2GD Ex d IIB + H2 T4/T5/T6 Gb (SH series)

Ex tb IIIC T135/T100/T85°C Db

Ta: -20 °C ≤ Ta ≤ 105 °C / 75 °C / 60 °C

UL:

Class I Division 1 Groups B, C, D Division 2 Groups A, B, C, D

Class II Division 1 Groups E, F, G Division 2 Groups F, G



SIL certificate:

Up to SIL 3 certified by TÜV



Protection rating:

IP 66 / 67

Cable entries options:

Up to three cable entries for metric and imperial sizes

Temperature:

-20 to +80 °C (-4 to +176 °F) as standard temperature range (depending on switch selection)

-40 to +105 °C (-40 to +221 °F) available on request

SK - SQ limit switch box series

Compact limit switch box, designed for hazardous areas, provides a visual and electrical remote position feedback on automated valves.

Available in either die cast aluminium or 316L stainless steel, the explosionproof enclosure matches the Exd IIC T6 standards. The SK - SQ switch box series offer a ready to mount solution thanks to the integrated NAMUR mounting kit.

The ideal compact solution for oil & gas (both on-shore and off-shore) and petrochemical industries.

Technical Data:

Materials

- Copper free aluminium body and cover with polyester powder coating
- AISI 316 stainless steel body and cover with electro-polished finishing
- Stainless steel fasteners and shafts

Approvals

ATEX, IECEx, EAC, CCOE, INMETRO

Ex II 2GD Ex d IIC T4/T5/T6 Gb

Ex tb IIIC T135/T100/T85°C Db

Ta: -55 °C ≤ Ta ≤ 105 °C / 80 °C / 60 °C



UL:

Class I Division 1 Groups B, C, D Division 2 Groups A, B, C, D
Class II Division 1 Groups E, F, G Division 2 Groups F, G

SIL certificate: Up to SIL 3 certified by TÜV



Protection rating: IP 66 / 67

IP 66 / 68 up to 15 meters for 100 hours

Cable entries options: Two cable entry M20 or 1/2" NPT

Temperature:

-20 to +80 °C (-4 to +176 °F) as standard temperature range (depending on switch selection)

-55 to +105 °C (67 to +221 °F) available on request

SY - SW limit switch box series

Heavy-duty limit switch boxes, designed for hazardous areas, provide a visual and electrical remote position feedback on automated valves.

Available in either copper free aluminium or 316 stainless steel, the explosionproof enclosure matches Exd IIC T6 standards. The SY - SW limit switch box series, thanks to its large inner volume, is able to host up to 6 switches and spare pass through terminals. The availability of four cable entries, either metric or imperial, provide a highly customizable solution meeting a wide range of applications. These include, but are not limited to, oil & gas (both on-shore and off-shore) and petrochemical industries.

Technical Data:

Materials

- Copper free aluminium body and cover with polyester powder coating
- AISI 316 stainless steel body and cover with electro-polished finishing
- Stainless steel fasteners and shafts

Approvals:

ATEX, IECEx, EAC, CCOE, INMETRO, NEPSI

Ex II 2GD Ex d IIC T4/T5/T6 Gb

Ex tb IIIC T140/T110/T110°C Db

Ta: -60 °C ≤ Ta ≤ 105 °C / 80 °C / 60 °C



UL:

Class I Division 1 Groups B,C,D Division 2 Groups A, B, C, D
Class II Division 1 Groups E,F,G Division 2 Groups F, G

SIL certificate: Up to SIL 3 certified by TÜV



Protection rating: IP 66 / 68 up to 10 meters for 48 hours

Cable entries options:

Up to four cable entries for metric and imperial sizes

Temperature:

-20 to +80 °C (-4 to +176 °F) as standard temperature range (depending on switch selection)

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

SE limit switch box series

Limit switch box designed to provide an electrical remote position feedback on automated linear valves.

Available in either die cast aluminium or 316 stainless steel is designed for weatherproof applications, it can also match hazardous areas requirements using Ex ia IIC T6 NAMUR inductive sensors.

The Soldo limit switch box solution for linear applications can integrate free spare terminal poles working as a junction box.

Flexibility, due to mounting pattern and sensors/switches choices, makes it suitable to cover from industrial automation to food and beverage, from chemical to naval, from oil & gas to petrochemical industries.

Technical Data:

Materials

- Die-cast aluminium body and cover with polyester powder coating
- AISI 316 stainless steel body and cover with electro-polished finishing
- Stainless steel fasteners

Approvals

CE, EAC

Ordinary location



SIL certificate: Up to SIL 3 certified by TÜV



Protection rating:

IP 65, IP 67 on request

Cable entries options:

Two cable entry M20 or 1/2" NPT

Temperature:

-20 to +80°C (-4 to +176 °F) as standard temperature range (depending on switch selection)

Low and high temperature executions available on request

ES - Easy switch box

Hazardous area limit switch box for manual valve applications. Explosionproof enclosure, in copper free aluminium or 316 stainless steel, handles the most demanding application in hostile environments. The Easy switch box uses two magnetic sensors to provide electronic feedback to the control room. An easy to mount magnetic target operates the switches.

Features:

- Compact position indication on all manual valves
- Adaptable mounting kit for all applications
- Easily links to the valve with the durable glass reinforced magnetic holder
- Wires through the terminal PCB for easy connection
- Easy to open threaded lid design for manual removal of the cover
- One or two cable entries for versatile use
- Polyester powder coated copper free aluminium housing
- 316 stainless steel housing version for harsh environments
- NOVA V3 switch option for high power rating use

Approvals

ATEX, IECEx, EAC, INMETRO

Ex II 2GD

Ex d IIC T6/T5/T4 Gb

Ex tb IIIC T85/T100/T120 °C Db

Ta = -65 °C ≤ Ta ≤ 105 °C



SIL rating: up to SIL 2 approval on request



UL: Class I, Division 1 and 2, Groups A, B, C and D
Class II, Division 1 Groups E, F and G
Class II Division 2, Groups F and G

Protection rating

IP66 / 67

IP66 / 68 (15 meters for 70 hours)

Cable entries options:

Standard – Single cable entry

Optional – Two cable entries for the following dimensions:

- M20 x 1,5
- 1/2" NPT