## 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 +H 2 T 6 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 and gas (both on-shore and off-shore) and petrochemical industries.

## Features

- Twin shaft design, ensuring a complete sealed device: the shaft is split in two parts, each fitted and sealed into the body and cover for the best weather insulation even during opening operation
- Enhanced flexibility of electrical feedbacks options
- Up to three cable entries available in different sizes
- Easy wiring through the terminal PCB board
- NOVA V3 ${ }^{\text {TM }}$ switch option ensures extreme durability and high power switching capabilities
- 4-20 mA position transmitter options
- Captive bolts on the screwed lid



## Product Specification

## Technical Data:

Materials

- Die-cast aluminum 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 ${ }^{\circ} \mathrm{C}$ Db
Ta: $-20^{\circ} \mathrm{C} \leq \mathrm{Ta} \leq 105^{\circ} \mathrm{C} / 75^{\circ} \mathrm{C} / 60^{\circ} \mathrm{C}$
UL:
Class I Division 1 Groups 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:
$-20^{\circ} \mathrm{C}+80^{\circ} \mathrm{C}$ as standard temperature range (depending on switch selection)
$-40^{\circ} \mathrm{C}+105^{\circ} \mathrm{C}$ available on request

## Twin shaft design features

- The shaft is split into two parts; both parts fitted and sealed respectively on body and cover
- During opening and closing the grease remains in place ensuring a safe and smooth operation
- Self lubricant bushing on both sides aligning shafts and hedging in o-rings
- The indicator is hardly connected to the upper shaft, avoiding any matching and aligning issue
- The interior electrical components are completely protected against atmosphere environments


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## Soldo switch and sensors options:

NOVA V3 ${ }^{\text {TM }}{ }^{\text {N1 }}$

- Proximity hermetically sealed snap acting SPDT switch
- High power loop: rating up to
 5A @ 250 VAC - 5A @ 28 VDC
- Temperature range $-50^{\circ} \mathrm{C},+95^{\circ} \mathrm{C}$


## NOVA V3 ${ }^{\text {TM }}{ }^{\text {N3 }}$

- Proximity hermetically sealed snap acting SPDT switch
- High power loop: rating up to
 1A @ 250 VAC - 1A @ 30 VDC
- Temperature range $-50^{\circ} \mathrm{C},+95^{\circ} \mathrm{C}$


## NOVA V3 ${ }^{\text {TM }} \mathbf{N 4}$

- Proximity hermetically sealed snap acting DPDT switch
- High power loop: rating up to 5A @ 250 VAC - 5A @ 28 VDC
- Temperature range $-50^{\circ} \mathrm{C},+95^{\circ} \mathrm{C}$


## REED C4

- Proximity hermetically sealed reed SPDT switch
- Inert gas contact chamber

- Rating up to 1 A @ 24 VDC
- Temperature range $-60^{\circ} \mathrm{C},+100^{\circ} \mathrm{C}$


## REED C8

- Proximity hermetically sealed reed DPDT switch
- Inert gas contact chamber
- Rating up to $1 \mathrm{~A} @ 24$ VDC
- Temperature range $-60^{\circ} \mathrm{C},+100^{\circ} \mathrm{C}$

More options available on request.


Lower shaft

## Product Ordering Matrix



## Dimensional Data



Cable entry dimensions

| Code | Entry A+A | Entry B |
| :---: | :---: | :---: |
| $\mathbf{1}$ | $\mathrm{n} .2^{1 / 22^{\prime \prime}}$ NPT | - |
| $\mathbf{2}$ | $\mathrm{n} .2^{\mathrm{M} 20 \times 1,5}$ | - |
| X | $\mathrm{n} .2^{1 / 22^{\prime \prime}}$ NPT | $\mathrm{n} .1^{1 / 2^{\prime \prime}} \mathrm{NPT}$ |
| L | $\mathrm{n} .2 \mathrm{M} 20 \times 1,5$ | $\mathrm{n} .1^{\mathrm{M} 20 \times 1,5}$ |

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[^0]:    Upper shaft

