

# SM ( SERIES LIMIT SWITCH BOX )

The SOLDO SM series limit switch box provides a compact design and the most economical solution for both visual and remote electrical indication of rotary valve/actuator position. Integral NAMUR mounting legs provide additional cost saving by eliminating the need for a separate mounting bracket. The switch options available make the SM series suitable for use in IP65 weather proof applications and also intrinsically safe applications.

## ( WEATHER PROOF )

IP65 and Nema4 and 4X weather proof enclosure.

## ( COMPACT DESIGN )

SM switchboxes have been engineered in order to reduce overall dimensions. Total height from actuator pinion is 76 mm with a standard SM unit. It is ideal for use on all size actuators including very small units.

## ( VISUAL INDICATOR )

SM switchboxes mounts as standard a flat visual position indicator in order to see real valve position; on request we can also supply the SM limit switch box complete of 3D position indicator in order to see the real valve position both looking from top and from side.

## ( INTEGRAL MOUNTING BRACKET )

SM housing incorporates integral mounting legs and drive shaft that conform to NAMUR VDI/VDE3845 international dimension standards. Using a single adjustable sliding bracket it is possible to fit SM switchboxes onto any VDI/VDE3845 actuator. Both 30x80 and 30x130 top pattern and 20mm, 30mm, 40mm and 50 mm pinion height can be matched with a single bracket. This maximizes interchangeability plus reduces cost by eliminating need for bracket and coupler.

## ( SHOCK RESISTANT HOUSING )

Die cast aluminium body and nickel plated inside and outside and V0 and VU resistant polycarbonate cover, make this unit ideal for use in hostile environments. Housing has captive screws

## ( JUNCTION BOX )

SM series can be provide with extra terminal strip to accomodate external solenoid valve and has two M20x1.5 (1/2"npt/f as option) cable entries. This feature provides a significant cost saving by eliminating the need for a separate junction box and associated labour. Cable entries has a 15 mm thread thickness, this feature prevents housing damage due to very heavy cables or cable glands.

## ( HIGH RESOLUTION SPLINED CAMS )

Easy-set cams are splined and independently adjustable. This design offers tool free calibration and positive vibration resistant engagement.

## ( SWITCH OPTIONS )

Mechanical switches are available for general purpose applications. Gold plated mechanical switches or proximity PNP are available for low current applications. Inductive proximity NAMUR switch option provides on effective choice for intrinsically safe applications ATEX certificate (consult SIM bulletin).



FLAT INDICATOR



3D INDICATOR

## ( MATERIALS )

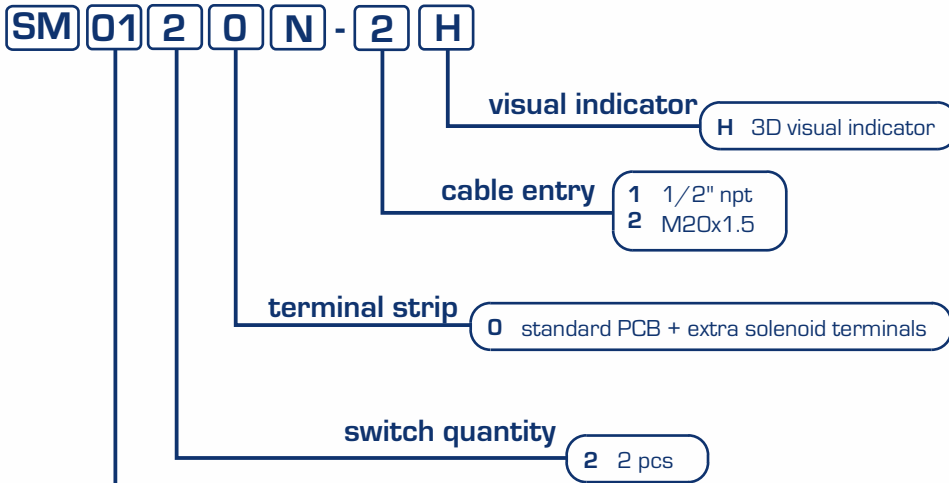
Body : die cast aluminium nickel plated  
Cover : UV resistant and V0 polycarbonate  
Shaft : reinforced techno polymer  
Fasteners : stainless steel

## ( RATINGS )

Temperature range: standard -15°C + 80°C  
Temp. range may vary due to switch range  
Electrical: according to switch option  
Consult "BO2003-E-SWITCH\_DATA" bulletin for switch rating

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( STANDARD OPTIONS AVAILABLE - Nomenclature )



**NOTES**

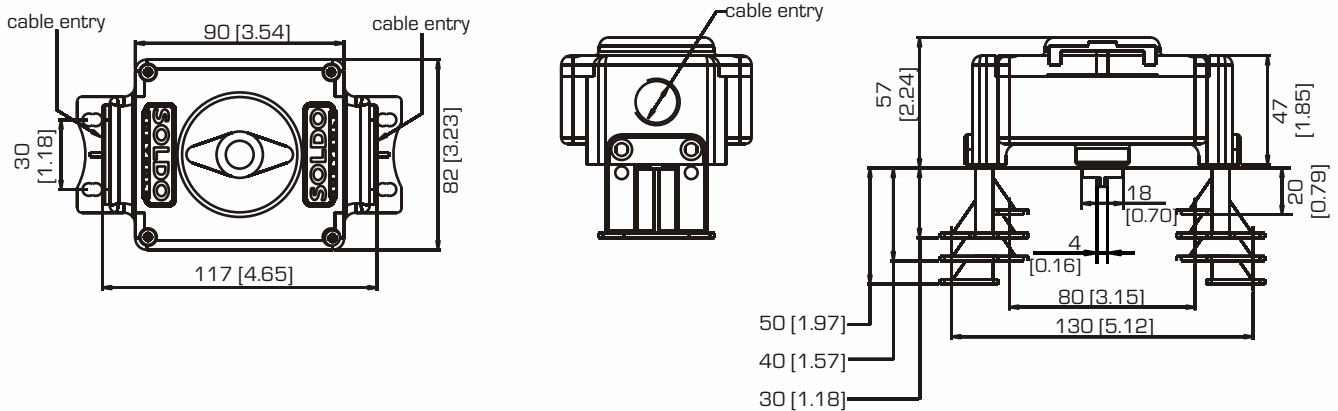
Terminal strip options depend on switch type.

\* Namur EEx ia proximity switches available on SIM series limit switch box ATEX certificate (consult SIM bulletin)

\*\* Resistive loads when not specified.

| switch type *   | rating **   | max q.ty installed |
|---|---|--------------------|
| <b>01</b> electromech SPDT silver plated contacts         | max 5A@250VAC - 3A@24VDC min 50mA@250VAC - 50mA@24VDC       | 2                  |
| <b>03</b> electromech SPDT gold plated contacts           | max 3A@250VAC - 1A@24VDC min 5mA@250VAC - 1mA@24VDC         | 2                  |
| <b>73</b> proximity PNP NO P+F NBB2 V3 E2                 | 3 wire amplified, 10-30VDC, 100mA                           | 2                  |
| <b>75</b> proximity NO / NC programmable IFM IS5026       | 2 wire amplified, 5-36VDC, 200mA                            | 2                  |
| <b>83</b> proximity NO P+F NBB3 V3 Z4                     | 2 wire amplified, 5-60VDC, 100mA                            | 2                  |
| <b>N1</b> SOLDO magnetic proximity SPDT silver plated     | max 250 VAC, 28 VDC, resistive load 5A, inductive load 4A   | 2                  |
| <b>N2</b> SOLDO magnetic proximity SPDT gold plated       | max 250 VAC, 30 VDC, resistive load 1A, inductive load 0.5A | 2                  |
| <b>N3</b> SOLDO magnetic proximity SPDT gold / bifurcated | max 250 VAC, 30 VDC, resistive load 1A, inductive load 0.5A | 2                  |
| <b>ASI</b> AS-i board interface                           | see AS-i LITE bulletin                                      |                    |

## ( DIMENSION WITH FLAT INDICATOR mm - inch )



## ( DIMENSION WITH 3D INDICATOR mm - inch )

