

Properties:

- ✓ 1-dimensional 2-wire tilt switch^{*)}
- ✓ High resolution and accuracy
- ✓ Metal housing with moulded measuring tube
- ✓ Suitable for industrial use
 - Protection class: IP67 (cable connection)

Areas of application:

- ✓ Lifting platforms and access equipment
- ✓ Agricultural and forestry machinery
- ✓ Commercial vehicles, tail lifts
- ✓ Crane and lifting technology

^{*)} Patent-protected by EP3564980



Function: The tilt switch HNSC-A-03-HS-AC monitors tilt deviations from the horizontal (X-axis). If a tilt deviation greater than approx. 3° occurs on the X-axis (see "Installation dimensions" diagram), the switch opens (NC contact).

The tilt switch only returns to its original operating state when the tilt deviation has been eliminated. The hysteresis is approx. 2°.

Mechanical data:

Housing material:	Metal
Size:	38 x 92.5 x 31 mm
Mounting:	Long holes for M4 screws, see section Installation
Tightening torque:	2.5 Nm

Installation: The tilt switch must be installed with the horizontal orientation of the base plate. If the position changes by more than approximately 3°, the tilt switch will open (see image for installation dimensions).

Measuring range:

Measuring range:	-45°...+45° inclination
Switching angle φ _s :	3° inclination deviation from the horizontal

Accuracy:

Accuracy:	+/- 2°
Hysteresis:	2° +/- 1°
Measuring principle:	Mechatronic inclination element

Electrical data:

Power supply:	42-250 VAC
Output current:	500 mA (continuous operation, RMS), 8 A (Peak, 10 ms)
Minimum switching current:	10 mA ^{**)}

^{**) Attention:} The switch may only be operated on symmetrical A voltages! Switching current < 10 mA can lead to a reduction in the service life of the switch.

Output/ Interface:

Switch type:	NC contact (NC)
--------------	-----------------

Connections:

Connections:	cable, 2-wire 0.5 m
BN:	L or N
BU:	Switching output

Ambient conditions:

Temperature range:	-20 °C to 70 °C
Protection class:	DIN IP67

Functional safety:

MTTFd:	9357 years
Service life:	20 years/ 1,000,000 switching cycles

The MTTFd/service life values do not constitute binding quality and/or service life commitments; they are merely empirical values without binding character.

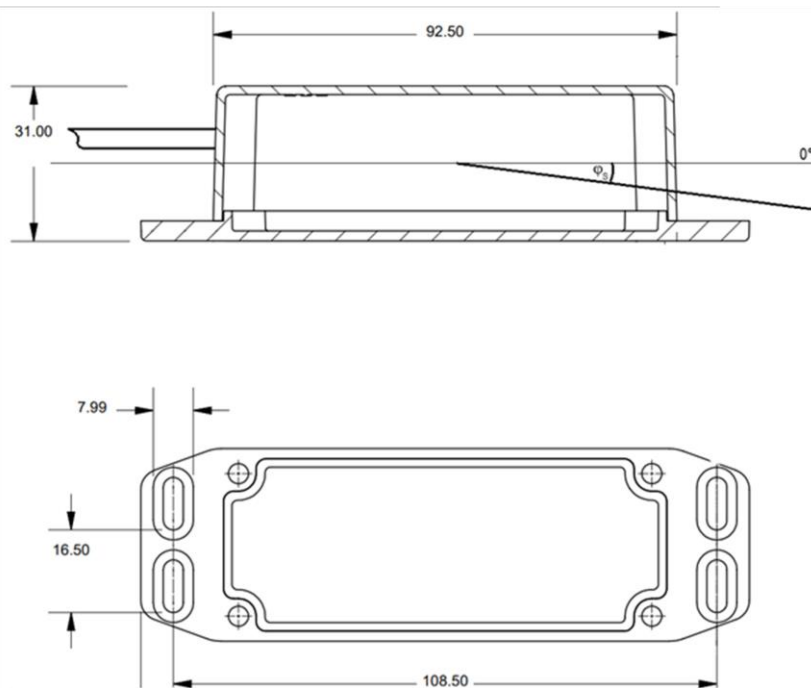
Power

These values do not extend the limitation period for claims for defects or otherwise affect them in any way.

EMC:

EU Directives:	2014/30/EU EMC Directive, 2011/65/EU RoHS Directive 2014/35/EU Low Voltage Directive
Applicable standards:	EN IEC 60947-5-1:2018 EN IEC 63000:2018

Installation dimensions



Connection diagram

