

**Properties:**

- ✓ 1-dimensional 2-wire tilt switch<sup>\*)</sup>
- ✓ Low resolution and accuracy
- ✓ Plastic 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

<sup>\*)</sup> Patent-protected by EP3564980

**Function:** The tilt switch HNSC-A-15-GR-AC-0.5A monitors tilt deviations from the horizontal (X-axis). If a tilt deviation greater than approx. 10° 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. 10° and is less than 15°.

**Mechanical data:**

Housing material: Plastic  
 Size: Ø14.3 x 47 mm  
 Mounting: see section Installation

**Installation:** For optimum function, the switch should be aligned so that the "TOP" marking on the housing base points upwards during installation.

If the position is changed by more than max. 10° around the X-axis, the tilt switch opens (see figure Installation dimensions). If required, the switching angle of the tilt switch can also be shifted by an offset angle to the horizontal plane by mounting it in a clamp. Please note that the measuring range of the switch changes according to the selected offset angle. (e. g. offset angle = 30° inclination → Measuring range -120°...60° inclination).

**Measuring range:**

Measuring range: -90°...+90° inclination  
 Switching angle □s: max. 10° inclination deviation from the horizontal

**Accuracy:**

Accuracy: +/- 5°  
 Hysteresis: <15°  
 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<sup>\*\*)</sup>

<sup>\*\*)</sup> **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: white strands 0.15 m  
 Wire connection  
 assignment: WH: L or N  
 WH: Switching output

**Ambient conditions:**

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

**Functional safety:**

MTTFd: 9,357 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.

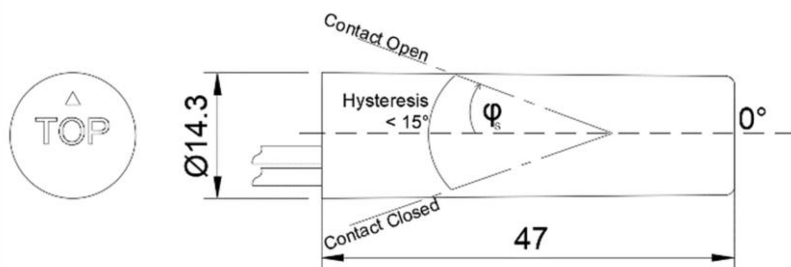
Power

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

