

2D-inclination switch with 2 potential-free switching outputs (small plastic housing)

ISW2SP360

Characteristics:

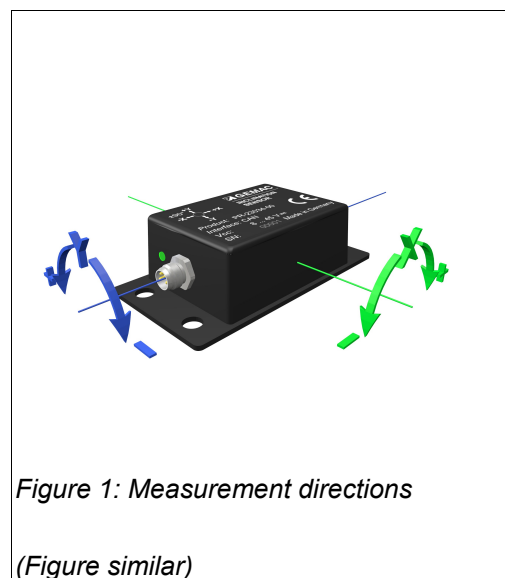
- 2- dimensional inclination switch with programmable switching thresholds between: $\pm 180^\circ$ or $0..360^\circ$
- 2 switching outputs, potential-free, 30 V, 500 mA, normally closed
- Supply voltage: 8 V ... 28 V
- Small, robust, simply mountable ABS-housing
- Suitable for industrial use:
 - Temperature range: $-40^\circ\text{C} \dots +75^\circ\text{C}$
 - Degree of protection: IP65/67



The inclination switch ISW2SP360 is used for the one- or two-dimensional monitoring of inclination angles in the range between $\pm 180^\circ$ or $0 \dots 360^\circ$. By using the optional available programming adapter the configuration of the switching thresholds can be realized directly. Additional functions like logical signal combinations, vibration filter and hysteresis can be set individually by the user using the PC software. Furthermore the switching thresholds are configurable arbitrarily on one but also on different axes.

Applications:

- Agricultural and forestry machinery
- Construction machinery
- Crane and hoisting technology
- Industrial applications



Preliminary

Inclination switch



GEMAC

Sensorik. Messtechnik. ASIC-Design.

Technical Data:

General Parameters: Ta = 25 °C	
Measurement axes	up to 2 axes
Measurement range	$\pm 180^\circ / 0 \dots 360^\circ$
Resolution	0.01°
Accuracy	$\pm 0.3^\circ$
Temperature coefficient (zero point)	tbd
Cut-off frequency	typ. 2 Hz (different values on request)
Operating temperature range	$-40^\circ\text{C} \dots +75^\circ\text{C}$
Characteristics	
Interface	2 switching outputs, 500 mA each, 30 V max., potential-free, normally closed
Electrical Parameters	
Supply voltage	8 V DC ... 28 V DC
Current consumption	3 mA ... 15 mA
Mechanical Parameters	
Connection	0.2 m PUR-cable 8x 0,25 mm ² with 8-pole M12-connector (male)
Degree of protection	IP65/67
Shock survival	max. 20 000 g
Dimensions	68 mm x 36.5 mm x 21 mm
Mass	about 55 g

Dimensioned drawing:

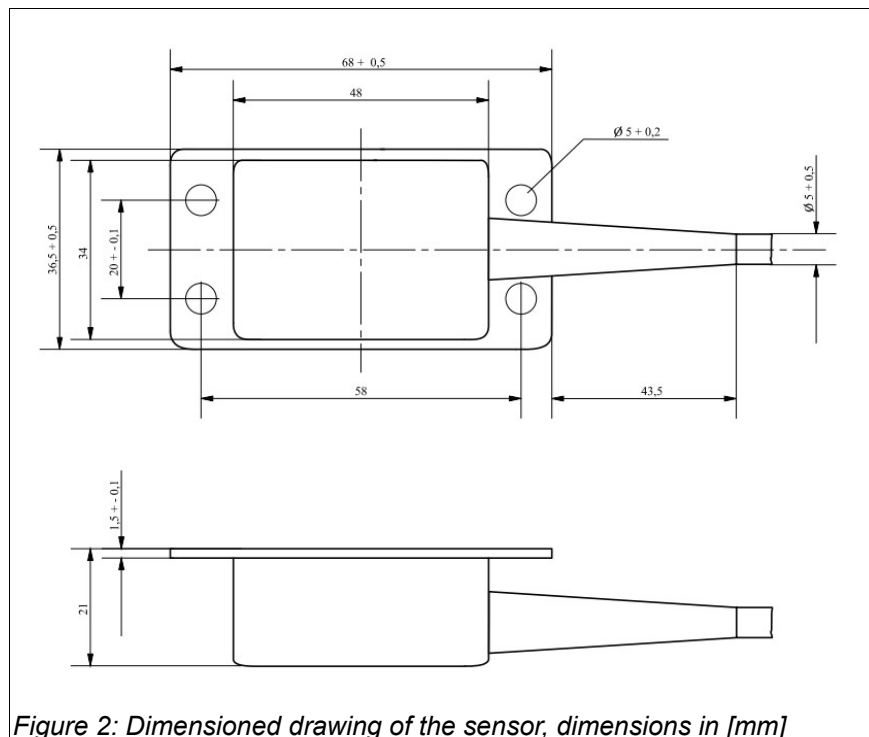


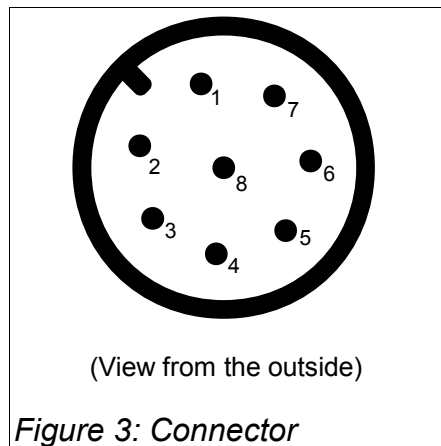
Figure 2: Dimensioned drawing of the sensor, dimensions in [mm]

Preliminary

Inclination switch

Plug connector allocation:

Pin	Wire color	Allocation
1	white	Supply voltage
2	brown	GND-supply (V- / GND)
3	green	Switching output 1 +
4	yellow	Switching output 1 -
5	grey	Switching output 2 +
6	pink	Switching output 2 -
7	blue	Teach, if unused leave floating
8	red	not connected



Ordering information:

Product type	Description / distinction	Article number
ISW2SP360	1- or 2-dimensional, inclination $\pm 180^\circ$ or 360°	PR-23666-00
ISWPA1	Inclination switch programming adapter	PR-23997-00