

Inclinationsensor EWS01

Output signals: 4...20 mA, 3-wire



Description

Depending on its design, the inclination sensor EWS01 can measure inclinations in the X or Y or X and Y directions (2-dimensional). Different pre-defined measuring ranges can be chosen to suit the application. Because of the measuring method a very compact design can be supplied at an attractive price/performance ratio.

The following signal outputs can be chosen: analogue standard output signals (4...20 mA, 0-10V).

Features

- corrosion-resistand construction
- integrated amplifier
- small temperature drift
- high long term stability
- big shock and vibration resistance
- for dynamic or static measurements
- good repeatability
- easy assembly

Measuring ranges

+/- 10°, +/- 45°, +/- 60°

Applications

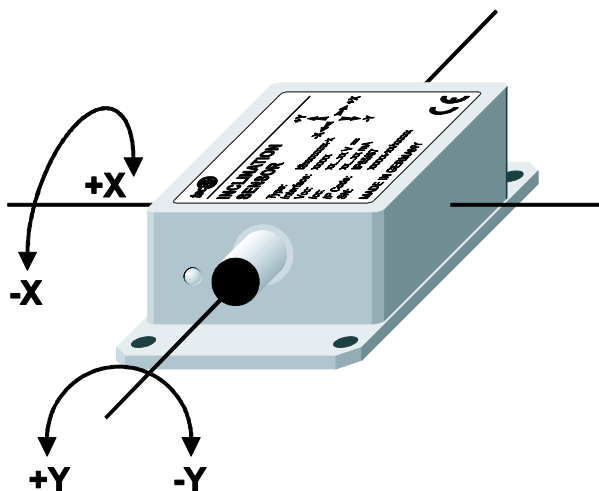
- cranes
- lifting platforms
- hoists
- agricultural and forestry engines

Model: EWS01

Technical data

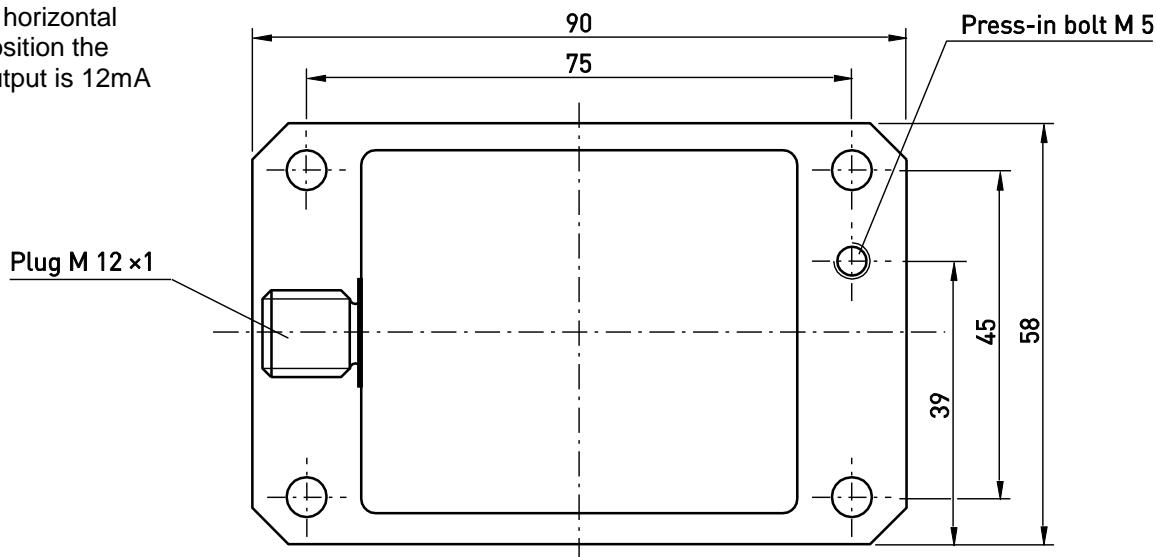
Model	EWS01	Option
Measuring ranges	$\pm 10^\circ / \pm 45^\circ / \pm 60^\circ$	2-dimensional
Accuracy (at 25° C)	$\pm 0.3^\circ / \pm 0.5^\circ / \pm 0.5^\circ$	
Limit frequency	typ.18Hz	
Nominal temperature range	-40 ... +80 °C	
Storage temperature range	-40 ... +80 °C	
Temperature effect – zero signal	max. $\pm 0.009^\circ/\text{K} / \pm 0.009^\circ/\text{K} / \pm 0.009^\circ/\text{K}$	
Impact load	max. 3.500g	
Protection type (acc. to EN 60 529/IEC 529)	IP 65/ IP 67	
Radio interference test	EN/ISO 14982 , EN13309	
Radio interference voltage	EN 55025	
Emitted interference industry	EN 61000-6-4	
Security	EN 60950-1	
Analogue output		
Output signal	4 ... 20 mA - 3-wire	0...10V (only 1-dimensional)
Current consumption	Current output ≤ 25 mA	
Power requirement	10 ... 30 VDC	
Burden	250 Ω for output 4...20 mA	
Electrical connection	Circular connector M 12x1, 4-pin	

Installation



Dimension

In horizontal position the output is 12mA



Electrical connection

Analogue output


Circular connector M 12x1, 4-pin



Pin	Assignment
1	+Ub 10...30V
2	Signal Y-axis
3	GND
4	Signal x-axis
5	Reference grounds ensor signal

Pin configuration of connector M 12x1 (4-pin) /

Open cable outlet of the tecsis standard connection cable (STL 288, black)

	4...20 mA (3 – wire)	
	pin	cable outlet
Supply: UB+	1	brown
Supply: 0V	3	blue
Signal: 4...20mA (signal y-axis, 2-dimensional)	2	white
Signal: 4...20mA (signal x-axis, 1-dimensional)	4	black
	thread M12x1	screen

Subject to technical changes