



## E-SERIES INCLINOMETER

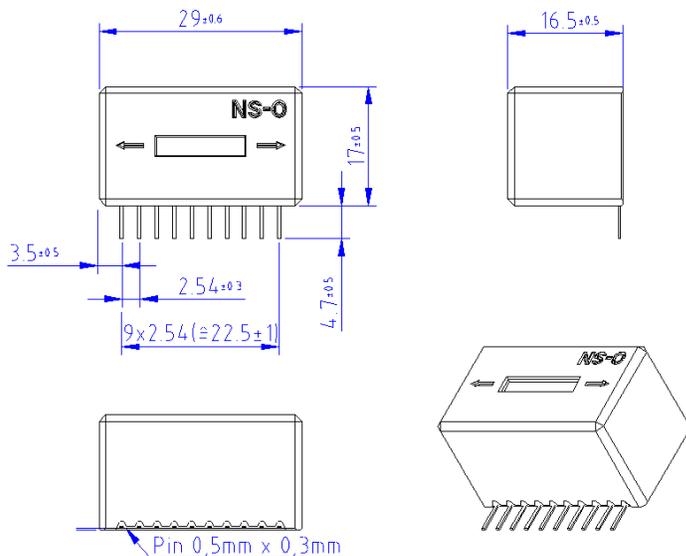
### SPECIFICATIONS

Single axis inclinometer

Measurement range  $\pm 5$  resp.  $\pm 15$  deg

Analog voltage output

### Dimensions [mm]



The **E-Series** is a fully signal conditioned single axis inclinometer ready for installation. Consisting of a tilt sensor, and hybrid electronics sealed within a ceramic housing, the E-Series provides a smooth VDC output over the  $\pm 5$  resp.  $\pm 15$  deg measurement range. Adjustments to zero, sensitivity and accuracy can be made by use of external passive components, allowing customization to individual applications. A precision reference surface assures measurement accuracy, while the 10 connection pins provide easy soldering onto a circuit board or other substrate.

### FEATURES

- +6.5 to +24 VDC unregulated input
- Lightweight / compact
- High resolution
- Wide  $-25\text{ }^{\circ}\text{C}$  –  $+85\text{ }^{\circ}\text{C}$  operating temp range
- Small dimension
- Easy installation

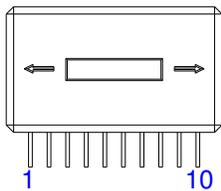
### APPLICATIONS

- Road construction machines
- Building control
- Weighing systems
- Mobile and stationary cranes
- Platform leveling

**PARAMETERS**

	Conditions	Min	Type	Max	Unit
Measurement range <sup>(1)</sup>		-5 , -15		+5, +15	deg
Repeatability			0.02		Deg
Linear error	NS-5/E		0.5		%
Linear error	NS-15/E		1.5		%
Symmetry error			0.5		deg
Zero point offset <sup>(2)</sup>			0.5		deg
Response time <sup>(3)</sup>	t90 G-NSE-001, G-NSE-013		1		s
Response time <sup>(3)</sup>	t90 G-NSE-007		4		s
TC zero point			0.5		m°/K
TC sensitivity			6.5		m°/K
Output signal, typical	NS-5/E	-3		+3	V
Output signal, typical	NS-15/E	-2		+2	V
Current consumption			5		mA
Power supply		+6.5		+24	VDC
Operating temperature range		-25		+85	°C
Storage temperature range		-40		+85	°C
Weight			20		g
Dimensions	W x D x H		29 x 17 x 16		mm

- (1) measurement ranges  $\pm 5^\circ$  and  $\pm 15^\circ$  are available
- (2) external adjustment with potentiometer possible
- (3) response time depends on the used electrolyte:
  - a. less viscose elektrolyte results in faster response time
  - b. more viscose elektrolyte results in higher output stability



For pinning please use the instruction manual of the E-series.

**ORDERING INFORMATION**

<b>PART NUMBERING</b>	<b>UNIT</b>	<b>SHORT DESCRIPTION</b>
G-NSE-001	NS-5/E	Range ±5 deg, Vcc +6.5 – 24 VDC,voltage output signal ±3 V
G-NSE-007	NS-15/E	Range ±15 deg, Vcc +6.5 – 24 VDC,voltage output signal ±2 V
G-NSE-013	NS-15/E	Range ±15 deg, Vcc +6.5 – 24 VDC,voltage output signal ±2 V

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