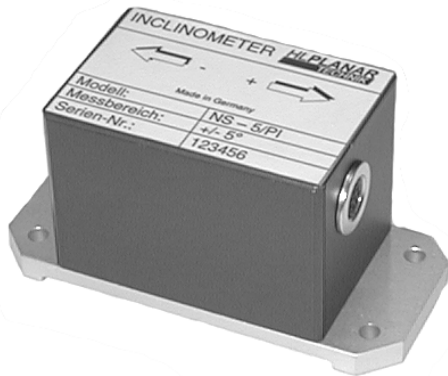


## NS-5/PI Inclinometer



The NS-5/PI single-axis inclinometer is a member of a family of high performance, competitively priced, single and dual-axis inclinometers. The heart of every HL Planartechnik inclinometer is a small, state-of-the-art, inclination sensor. The sensor, which is comprised of a molded, ceramic case bonded, via a glass sealing process, to a ceramic substrate. Thin film, platinum electrodes are deposited on the substrate. Then the chamber is partially filled with electrolytic fluid and hermetically sealed.

The molded, ceramic, sensor housing combined with a precise, planar electrode geometry yields excellent performance and consistent part-to-part uniformity.

All PI-type inclinometers are microprocessor controlled transducers capable of producing a linearized RS-232 digital or 4-20 mA current output. With their machined, aluminum baseplate and IP 65 housing, they are an ideal choice for a variety of industrial, automotive and aerospace applications.

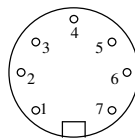
### Applications

- Zero point detection
- Aligning and level control
- Angle

### Advantages

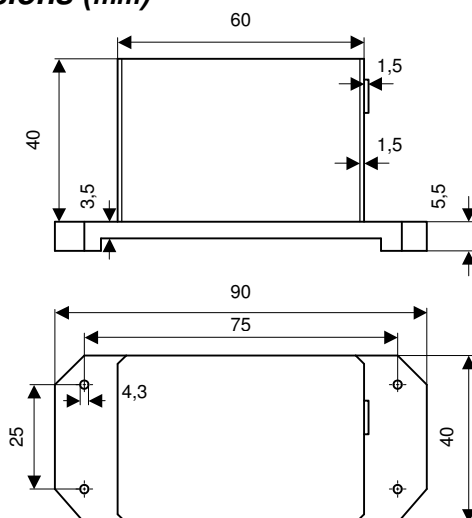
- Wide range of application
- Low vibration sensitivity
- Higher Precision

### Pinout



1	+Ub	Supply Voltage
2	GND	Ground
3	Earth	Earth
4	GNDx	Ground for analogue current output signal Ix
5	Output	≈ 20 mA (-5°) to ≈ 4 mA (+5°)
6	Input	RxD
7	Output	TxD

### Dimensions (mm)



### Specifications

Range:	± 5°
Precision:	
analogue:	+/- 0.05°
digital:	+/- 0.01°
Resolution:	0.0005°
Temperature stability:	
Zero point:	< 5*10 <sup>-4</sup> %K
Sensitivity:	< 1*10 <sup>-3</sup> %K
Analog Output:	≈ 20 mA (-5°) to
(*)	≈ 4 mA (+5°)
Digital Output:	In degrees
Transmission rate:	2400 or 9600 Baud
Format:	ASCII
Operating temp. Range:	-25 °C ... +85 °C
Storage temp. Range:	-40 °C ... +85 °C
Supply voltage	+7 ... + 24VDC
Current consumption	ca. 35 mA
Protection class	IP 65
Connection:	Connector or Pigtail

(\*) Impedance:

Type NS-5/PI  
Standard version Z<sub>A</sub> < 150 Ohm, Order-no.. 200054102100

Type NS-5/PI-260  
Special version Z<sub>A</sub> < 260 Ohm, Order-no. 200054108100

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