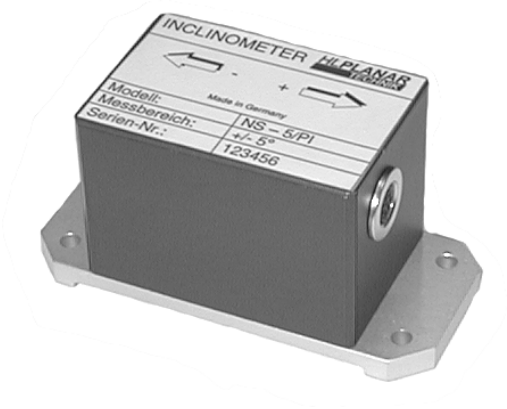
NS-5/PI Inclinometer



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.

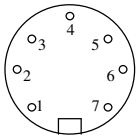
Applications

- *Zero point detection*
- *Aligning and level control*
- *Angle*

Advantages

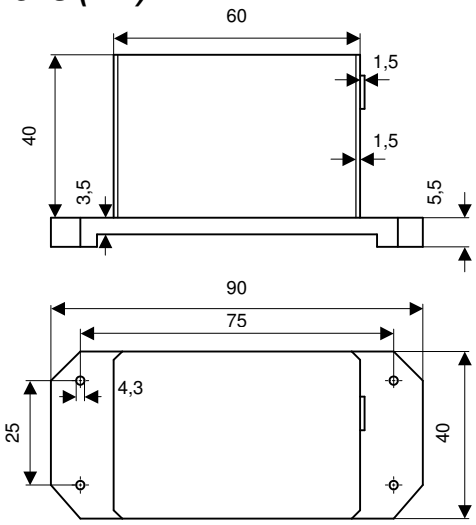
- *Wide range of application*
- *Low vibration sensitivity*
- *Higher Precision*

Pinout



1	+Ub	Supply Voltage
2	GND	Ground
3	Earth	Earth
4	GNDx	Ground for analogue current output signal Ix
5	Output Analogue Ix	≈ 20 mA (-5°) to ≈ 4 mA (+5°)
6	Input digital RS232	RxD
7	Output digital RS232	TxD

Dimensions (mm)



Specifications

Range:	± 5°
Percision: analogue: digital:	 +/- 0.05° +/- 0.01°
Resolution:	0.0005°
Temperature stability: Zero point: Sensitivity:	 < $5*10^{-4}$ %/K < $1*10^{-3}$ %/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: Storage temp. Range:	-25°C ...+85°C -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_A<150 Ohm, Order-no.. 200054102100

Type NS-5/PI-260
Special version Z_A< 260 Ohm, Order-no. 200054108100

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Stand: 06.06.05
Design: Zn