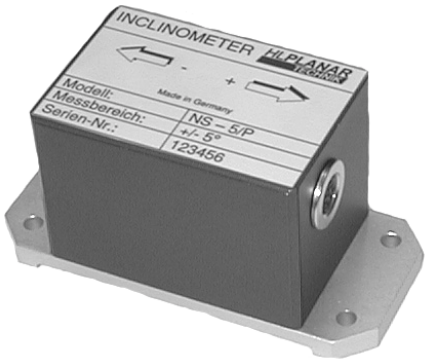
NS-5/P Single Axis Inclinometer



The NS-5/P 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 P-type inclinometers are microprocessor controlled transducers capable of producing a linearized RS-232 digital or analog voltage output. With their machined, aluminum baseplate and IP 65 housing, they are an ideal choice for a variety of industrial, automotive and aerospace applications.

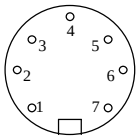
Applications

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

Advantages

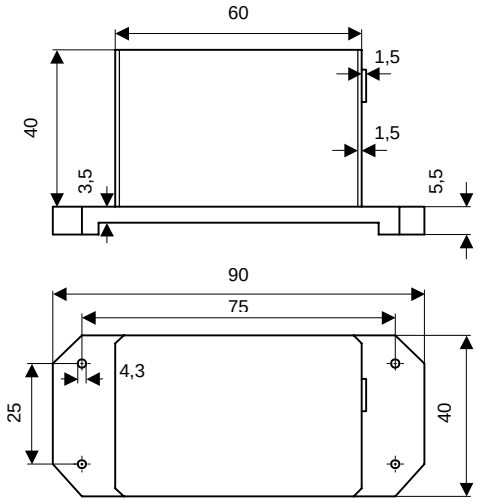
- *Wide range of application*
- *Low vibration sensitivity*
- *Higher Precision*

Pinout



1	*+Ub*	*Supply Voltage*
2	*GND*	*Ground*
3	*Earth*	*Earth*
4	*Output Analogue Ux*	*+/- 1.5V ratio metrically around about GNDx*
5	*GNDx*	*Ground for analog voltage signal Ux*
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}°/C* *< 1*10^{-3}°/C*
Analog Output:	*+/- 1.5V around GNDx*
Digital Output:	*RS-232 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:	*+5VDC ...+ 24VDC*
Current consumption:	*ca. 35 mA*
Protection class:	*IP 65*
Connection:	*Connector or Pigtail*

HL-Planartechnik GmbH
Hauert 13, D - 44 227 Dortmund, Tel.: +49 (0) 231/97400, Fax.: +49 (0) 231/974020
Internet: http://www.hlplanar.com E-Mail: service@hlplanar.de

Stand: 29.06.01
Design: Zn