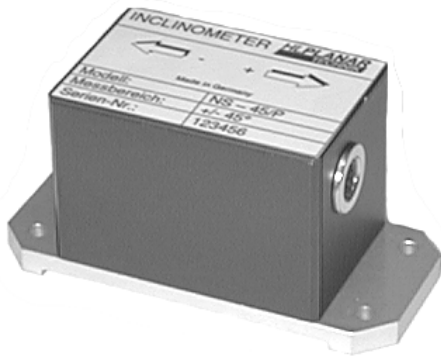


## NS-45/P Single Axis Inclinometer



The NS-45/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.

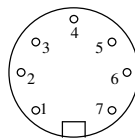
### Applications

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

### Advantages

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

### Pinout

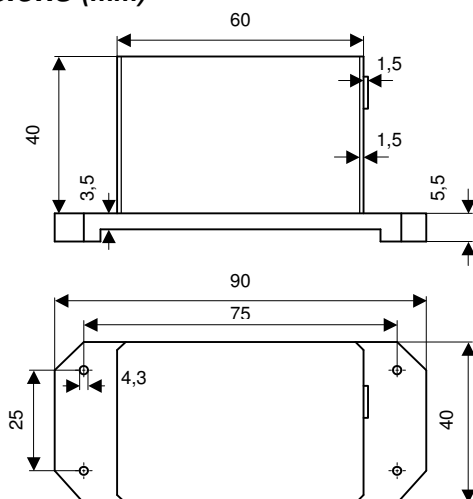


1	+Ub	Supply Voltage
2	GND	Ground
3	Earth	Earth
4	Output	+/- 1.5V ratio metrically around about GND Analogue Ux
5	GNDx	Ground for analog voltage signal Ux
6	Input	RxD
7	Output	TxD
		digital RS232
		digital RS232

### Specifications

Range:	$\pm 45^\circ$
Precision:	
analogue:	$\pm 0.05^\circ$
digital:	$\pm 0.05^\circ$
Resolution:	$0.003^\circ$
Temperature stability:	
Zero point:	$< 2 \cdot 10^{-3} \%K$
Sensitivity: (up to $\pm 30^\circ$ )	$< 5 \cdot 10^{-3} \%K$
Analog Output:	$\pm 1.5V$ around GNDx
Digital Output:	RS-232 in degrees
Transmission rate:	2400 or 9600 Baud
Format:	ASCII
Operating temp. Range:	$-25^\circ C \dots +85^\circ C$
Storage temp. Range:	$-40^\circ C \dots +85^\circ C$
Supply voltage:	$+ 7 \dots + 24VDC$
Current consumption:	ca. 35 mA
Protection class:	IP 65
Connection:	Connector or Pigtail

### Dimensions (mm)



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