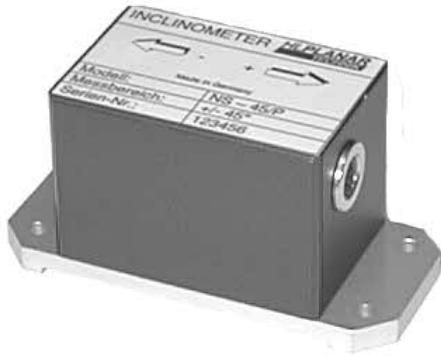


NS-45/P Single Axis Inclinometer



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 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.

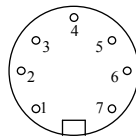
Applications

- 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
5	GNDx	Ground for analog voltage signal Ux
6	Input	digital RS232
7	Output	digital RS232

Specifications

Range:	$\pm 45^\circ$
Accuracy:	
Analogue:	
to $\pm 25^\circ$	$\pm 0.2^\circ$
to $\pm 45^\circ$	$\pm 0.6^\circ$
Digital:	
to $\pm 25^\circ$	$\pm 0.1^\circ$
to $\pm 45^\circ$	$\pm 0.5^\circ$
Resolution:	0.003°
Temperature stability:	
Zero point:	$< 2 \cdot 10^{-3} \text{ }^\circ/\text{K}$
Sensitivity: (to $\pm 30^\circ$)	$< 0.2\%/\text{K}$
Analogue Output:	$\pm 1.5\text{V}$ around GNDx
Digital Output:	RS-232 in degrees
Transmission rate:	2400 or 9600 Baud
Format:	ASCII
Operating temp. Range:	$-25^\circ\text{C} \dots +85^\circ\text{C}$
Storage temp. Range:	$-40^\circ\text{C} \dots +85^\circ\text{C}$
Supply voltage:	+ 7 ... + 24VDC
Current consumption:	ca. 35 mA
Protection class:	IP 65
Connection:	Connector or Pigtail

Dimensions (mm)

