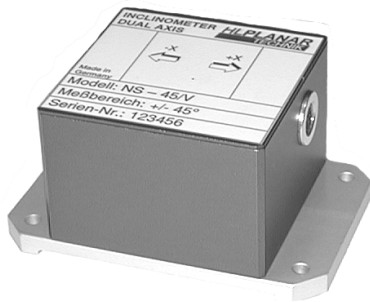


NS-45/V Single Axis Inclinator

With Analog Voltage Output



The NS-45/V 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.

Applications

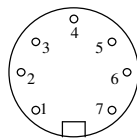
- Zero point detection
- Alignment and level control
- Angle

Advantages

- Wide range of application
- Low vibration sensitivity
- Low price

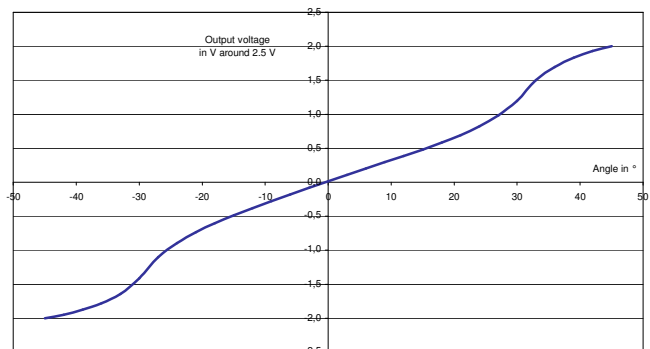
The V-type sensors have an internal pre-processor and produce a $\pm 2V$ analog output. They have a compact sturdy design and a whole range of uses are possible thanks to the possibility of many different external-switching combinations. With their machined, aluminium baseplate and IP 65 housing, they are an ideal choice for a variety of industrial, automotive and aerospace applications.

Pinout

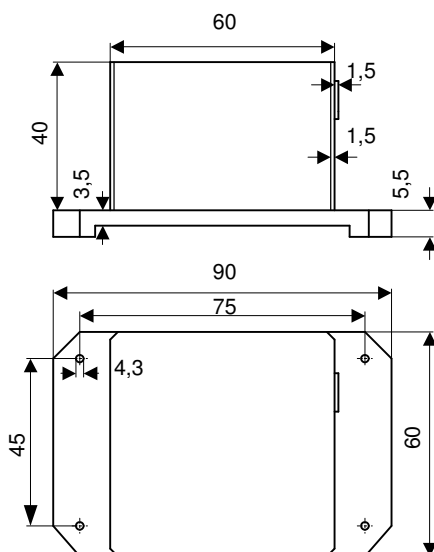


1	+Ub	Supply Voltage
2	GND	Ground
3	Erde	Earth
4	GNDx	Ground for analogue output Ux
5	n.c.	n.c.
6	Ux	Voltage output Ux
7	n.c.	n.c.

Diagram (angle vs. Output signal)



Dimensions (mm)



Specifications

Range:	$\pm 45^\circ$
Precision:	$\pm 0.5^\circ$
Resolution:	0.001°
Temperature stability:	
Zero point:	0.1° for $0^\circ\text{C} \dots +50^\circ\text{C}$
Sensitivity:	0.3° for $0^\circ\text{C} \dots +50^\circ\text{C}$
Analog Output:	$-2V (-45^\circ)$ to $+2V (+45^\circ)$
Operating temp. Range:	$0^\circ\text{C} \dots +70^\circ\text{C}$
Storage temp. Range:	$-40^\circ\text{C} \dots +85^\circ\text{C}$
Supply voltage:	$+12 \dots +24$ VDC
Current consumption:	$\sim 9\text{mA}$
Protection class:	IP 65
Connection:	Connector or Pigtail