

NS-45/VI Single Axis Inclinometer

With current output



The NS-45/VI 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 VI-type inclinometers have an internal pre-processor and

produce a 4-20 mA current 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, 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

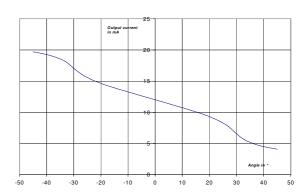
- Wide range of application
- Low vibration sensitivity
- Low price

Pinout

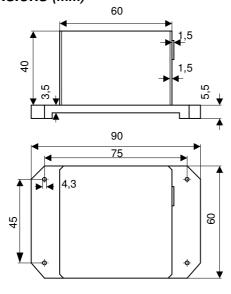


1	+Ub	Supply Voltage
2	GND	Ground
3	Erde	Earth
4	GNDx	Ground for analogue output Ix
5	n.c.	n.c.
6	lx	Current output Ix
7	n.c.	n.c.

Diagram (angle vs. output signal)



Dimensions (mm)



Specifications

Range:	<i>±</i> 45 °
Precision:	+/- 0.5°
Resolution:	0.001°
Temperature stability:	
Zero point:	0.1 ° for 0 ℃ 50 ℃
Sensitivity:	0.3° for 0 ℃ 50 ℃
Analog Output:	≈ 20mA (-45°) to
	≈ 4mA (+45°)
Operating temp. Range:	0℃ +70℃
Storage temp. Range:	-40 ℃+85 ℃
Supply voltage:	+12 +24 VDC
Current consumption:	ca. 30mA
Protection class:	IP 65
Connection:	Connector or Pigtail

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