

The NS-45/V2I dual-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

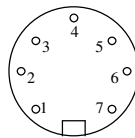
- Zero point detection
- Aligning and level control
- Angle

Advantages

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

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.

Pinout



1	+Ub	Supply Voltage
2	GND	Ground
3	Erde	Earth
4	GNDx	Ground for analogue output Ix
5	GNDy	Ground for analogue output Iy
6	Ix	Current output Ix
7	Iy	Current output Iy

Dimensions (mm)

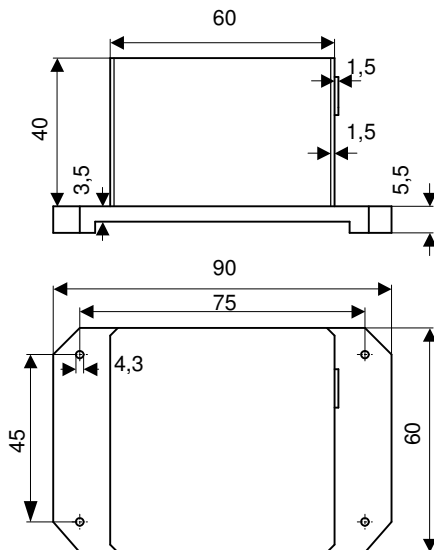
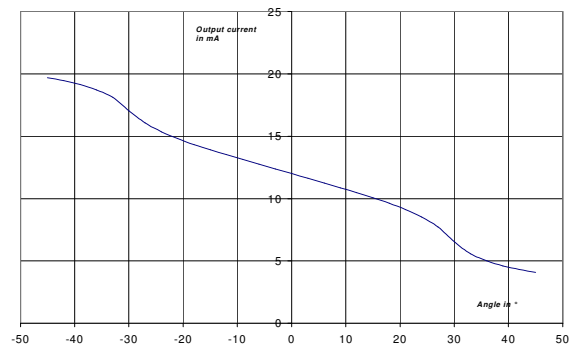


Diagram (angle vs. output signal)



Specifications

Range:	$\pm 45^\circ$
Precision:	$\pm 0.5^\circ$
Resolution:	0.001°
Temperature stability:	
Zero point:	0.1° for $0^\circ \dots 50^\circ$
Sensitivity:	0.3° for $0^\circ \dots 50^\circ$
Analog Output:	$\approx 20\text{mA} (-45^\circ)$ to $\approx 4\text{mA} (+45^\circ)$
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:	$+12 \dots +24 \text{VDC}$
Current consumption:	ca. 30 mA
Protection class:	IP 65
Connection:	Connector or Pigtail