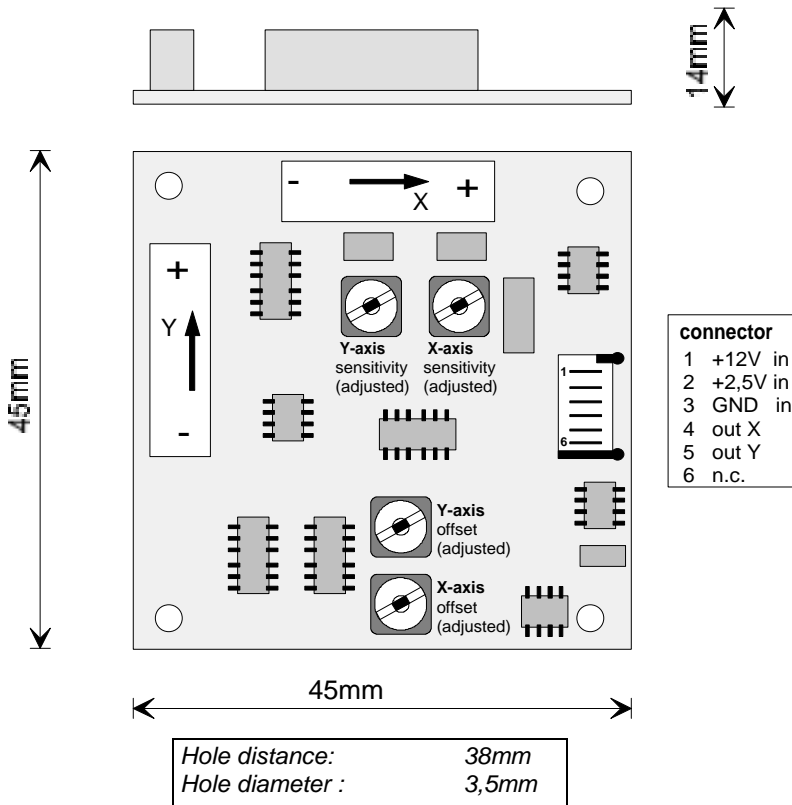


NS-10/E2 Dual Axis Inclinometer

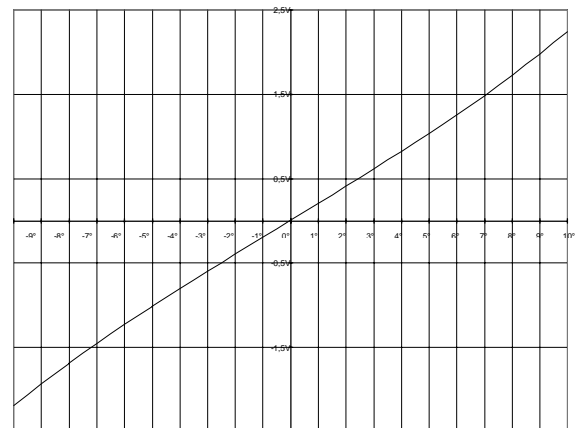


This dual axis Inclinometer uses two single axis, tilt sensors. The sensor works on the conductivity principle. The electronics measure the electrical stray field that is formed by applying AC voltage to planar electrode structures that are immersed in electrolytic fluid. When the sensor is tilted, the fluid level changes over the measuring electrodes; and, as a result, the conductivity with respect to the stray field changes. Using a differential measurement principle, the tilt angle and the tilt direction can be measured.

Applications

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

Diagram (angle vs. output signal)



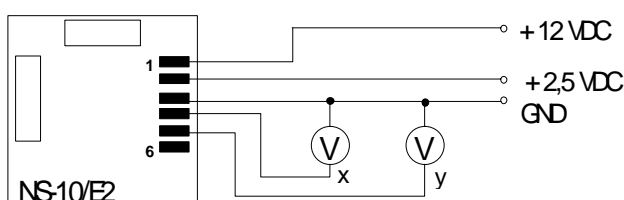
Advantages

- Small size
- Low weight
- Wide range of applications
- Small TC
- Easy to integrate
- Low vibration sensitivity

Specifications

Measuring Range:	-10°.. +10°
Precision:	0.03° for -3°.. +3° 0.08° for -10°.. +10°
Resolution:	0.001°
Temperature stability:	
Zero point:	0.1° for 0°C.. 50°C
Sensitivity:	0.3° for 0°C..50°C
Output signals:	0.3V (-10°) to 4.7V (+10°)
Operating temp. Range:	0°C ...+70°C
Storage temp. Range:	-40°C ...+85°C
Supply voltage:	+12 ... +24 VDC
Current consumption:	ca. 9 mA

Application



Pinout

- | | |
|---|-----------------------------|
| 1 | Vcc (+12V..24V in) |
| 2 | U _{ref} (+2,5V in) |
| 3 | GND |
| 4 | U _{out} X-Axis |
| 5 | U _{out} Y-Axis |
| 6 | N.C. |

Compatible connector:
Company Molex
Picoflex PF-50 1,27mm