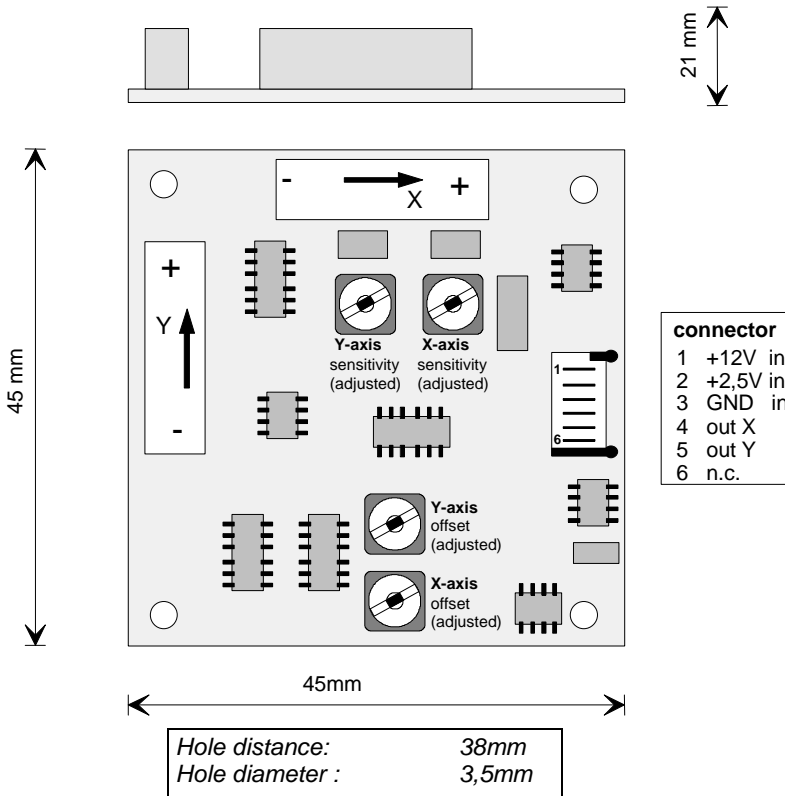


## NS-45/E2 Dual Axis Inclinator

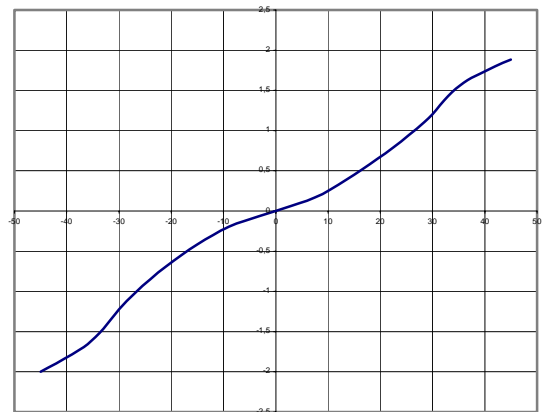


This dual axis, OEM Inclinator uses two single axis, tilt sensors. The sensor works on the conductivity principle. The electronics measure the electrical stray field that is formed by applying AC voltage to planar electrode structures that are immersed in electrolytic fluid. When the sensor is tilted, 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)



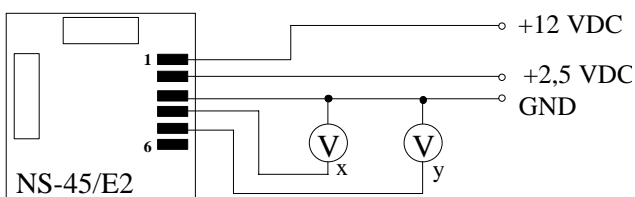
### Advantages

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

### Specifications

Measuring Range:	-45°.. +45°
Precision:	0.5° for -30°.. +30° 0.9° for -45°.. +45°
Resolution:	0.01°
Temperature stability:	
Zero point:	0.1° for 0°C.. 50°C
Sensitivity:	0.3° for 0°C..50°C
Analog Output:	+0.5V (-45°) to +4.5V (+45°)
Operating temp. Range:	0°C...+ 70°C
Storage temp. Range:	-40°C ...+85°C
Supply voltage:	+12 ... +24VDC
Current consumption:	ca. 9 mA

### Application



### Pinout

- |   |                                |
|---|--------------------------------|
| 1 | Vcc (+12 VDC.. 24 VDC in)      |
| 2 | U <sub>ref</sub> (+2,5 VDC in) |
| 3 | GND                            |
| 4 | U <sub>out</sub> X-Axis        |
| 5 | U <sub>out</sub> Y-Axis        |
| 6 | N.C.                           |

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