

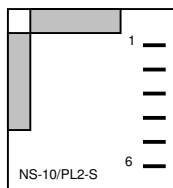
The NS-10/PL2-S is a dual axis, OEM Inclinometer utilizing two single axis, tilt sensors which work on the conductivity principle. The electronics measure the electrical stray field that is formed by applying AC voltage to planar electrode structures that are immersed in electrolytic fluid. When the 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.

All PL type inclinometers are microprocessor controlled transducers capable of producing a linearized and temperature compensated RS-232 digital output.

Applications

- Zero point detection
- Alignment and level control
- Angle measurement
- Wheel Alignment
- Load cell compensation

Pin out



Connector:

- 1 Vcc +6,5 VDC ... +24 VDC
- 2 RxD RS 232
- 3 GND
- 4 N.C.
- 5 N.C.
- 6 TxD RS 232

Advantages

- Single and dual axis models
- Microprocessor controlled inclinometer
- Integrated linearisation and temperature compensation
- Digital output at RS 232 interface
- Small construction kit

Specification

	Conditions	Min	Typ	Max	Units
Measurement range		-10		+10	°
Resolution			0,001		°
Precision (absolute)	$T_1=0...+55\text{ }^\circ\text{C}$	-0,15		+0,15	° of ³ FS, T_1
Precision (absolute)	$T_2=-25...+85\text{ }^\circ\text{C}$	-0,3		+0,3	° of ³ FS, T_2
Noise (RMS)	RT^1		0,03		°
Rise time	$0\text{ }^\circ \rightarrow 10\text{ }^\circ; t=90\%$		2,5		s
RS 232 interface	$\pm 10V$	3	5	7	kΩ
Baud rate ²			9600		Bits/s
Transmission rate		3,5	4	4,5	Hz
Supply voltage		+6,5		+24	VDC
Current consumption		20	25	30	mA
Operating temperature		-25		+85	°C
Storage temperature		-40		+85	°C
Weight			21		g
Dimensions			45 x 45 x 17		mm

¹RT = by room temperature 20°C

²Baud rate = fixed

³FS= Full scale

Conector:

Compeny Molex
Picoflex PF-50 1,27mm

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