

NS/PL2 Dual Axis Inclinometer

Dual Axis Inclinometer

Measurement Range +/- 10° and 15°

DESCRIPTION

NS/PL2 Dual Axis Inclinometer - This dual axis OEM Inclinometer utilizes two single axis, tilt sensors which work on the an electrical conductivity principle. The electronics measure the electrical stray field formed by applying AC voltage to planar electrode structures 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 V24 - Interface TTL level or RS-232 digital output.



FEATURES

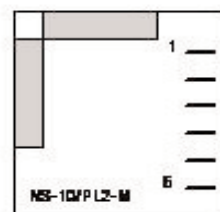
- ◆ Microprocessor Controlled
- ◆ Integrated Linearisation and Temperature Compensation
- ◆ Compact Size

APPLICATIONS

- ◆ Tip-Over Protection
- ◆ Satellite Dish Alignment
- ◆ Man-Lifts
- ◆ Wheel Alignment
- ◆ Portable Weighing Systems

Available Models	Input	Measurement Range	Output
NS-10/PL2-M	+5Vdc	+/-10 degrees	V24-interface TTL Level
NS-10/PL2-S	+6.5 to 24Vdc	+/-10 degrees	RS232
NS-15/PL2-M	+5Vdc	+/-15 degrees	V24-interface TTL Level
NS-15/PL2-S	+6.5 to 24Vdc	+/-15 degrees	RS232

Pin out



Connector:

1	Pwr +6.5Vdc to 24Vdc
2	RxD, RS232 or TTL
3	GND
4	N.C.
5	N.C.
6	TxD, Rs232 or TTL

Connector:

6-pin Molex Picoflex
p.n. PF-50 (1.27mm)

NS/PL2 Dual Axis Inclinometer

performance specifications

	Conditions	Min	Typ	Max	Units
Resolution			0,001		°
Precision (absolute)	T ₁ =0...+55°C	-0,15		+0,15	°of ³ FS,T ₁
Precision (absolute)	T ₂ =25...+85°C	-0,3		+0,3	°of ³ FS,T ₂
Noise (RMS)	RT ¹		0,03		°
Rise Time	0°-10°, t=90%		2,5		S
M-Type					
V24-interface TTL level ⁵			4.3		V
V24-interface load ⁵			3		mA
Supply voltage		+4.75	5.0	+5.25	VDC
S-Type					
RS232 interface	±10V	3	5	7	kΩ
Baud rate ²			9600		Bits/s
Supply voltage		+6,5		+24	VDC
Transmission rate		3,5	4	4,5	Hz
Current consumption		20	25	30	mA
Operating temperature		-25		+85	°C
Storage temperature		-40		+85	°C
Weight			21		g
Dimensions			45x45x17		mm

¹RT = by room temperature 20°C

²Baud rate = fixed

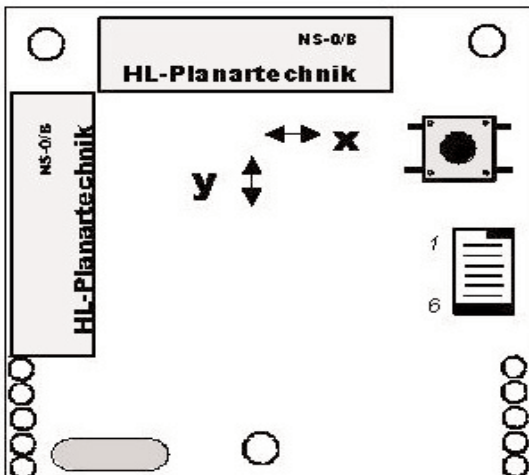
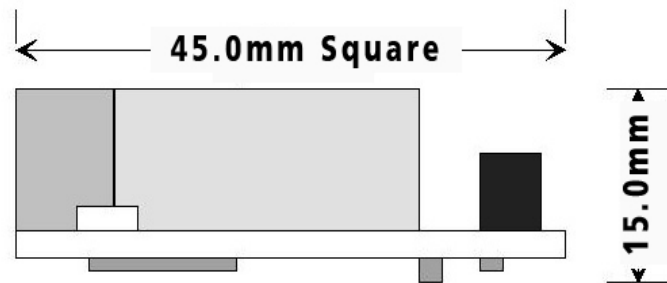
³FS= Full scale

⁴Stabilisation essential

⁵Note the port-load of microcontroller
Microchip Pic 14000

RxD, TxD are not protected

dimensions



Model Number

NS-10/PL2-S ROHS

NS-10/PL2-M ROHS

NS-15/PL2-S ROHS

NS-15/PL2-M ROHS

Part

G-NSPL2-001

G-NSPL2-002

G-NSPL2-004

G-NSPL2-005

Distribuidor

Brasil e América do Sul

CONTATO

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