

DPS-K3

Description

DPS-K series inclinometer is available with two measurement axes. The inclinometer working principle is based on a micromachined silicon capacitive transducer (developed with MEMS technology). The plastic housing is made in high grade PBT. Typical application are cranes, aerial platforms, drilling machines, excavators, robotics and mobile equipment. DPS-K3 features a double relay output that can be arranged in a redundant configuration over a single threshold. Relay switching points are factory set, yet can be changed by the customer using RS232 connection. Device manual with RS232 commands is available.



Features

- Cat 3 according UNI EN ISO 13849-1;
- MEMS sensing unit;
- one or two measuring axis;
- High grade plastic enclosure;
- Angle Range: $\pm 5^\circ$ to $\pm 20^\circ$;
- Input Voltage: 9VDC to 30VDC;
- Output: Double relay output;
- Zero function;
- Single switching threshold;
- Zero function;
- Operating Temperature: -20°C + 70°C ;
- IP67 protection;
- Weight 240g;
- Cable exit with cable gland for relay connection;
- AMP superseal 3-way connector for RS232 data connection.

Technical specifications

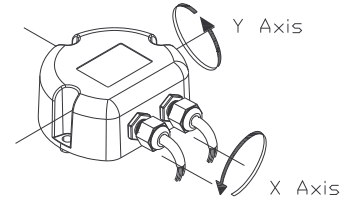
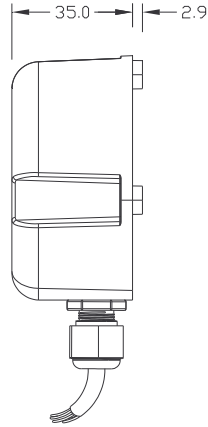
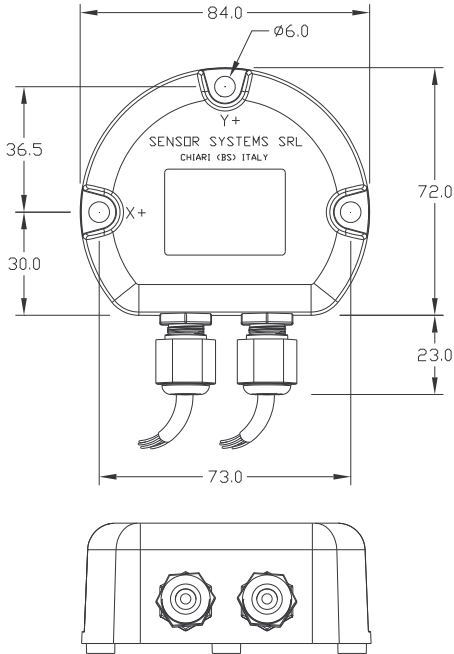
Measuring range (selectable)	°	± 5 to ± 20
measuring axes	-	single or double
Input voltage	V	9 to 30
Output	-	Double Relay
Current consumption	mA	200 + 200
Operating temperature range	°C	-40° + 70°
Stocking Temperature	°C	-40° + 80°
Alarm switch-on delay time	s	programmable via RS232
Alarm switch-off delay time	s	programmable via RS232
Thermal zero drift	° / °C	± 0.002



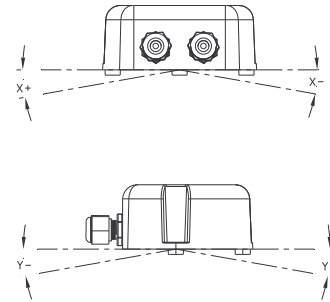


MOBILE AUTOMATION

Dimensions and mounting

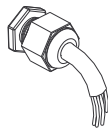
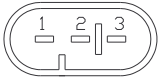


Mounting:
Horizontal
Tilt:
positive rotation
shown in figure

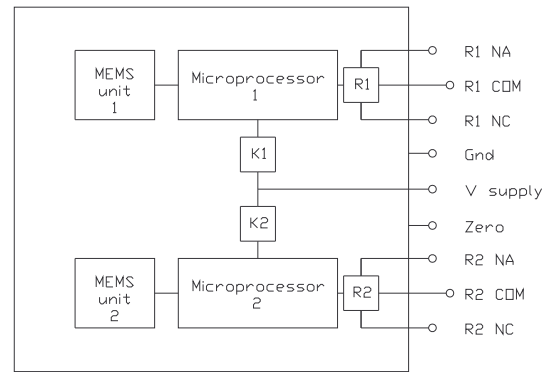


Connections

AMP
Supersal Connector
Model
282105-1



- | | | | |
|--------------|--------------------|-------------------|------------------|
| 1: Gnd RS232 | Brown: Zero | White: V+ | Yellow: V- |
| 2: Rx RS232 | Gray: Relay 1 NA | Green: Relay 1 NC | |
| 3: Tx RS232 | Blue: Relay 1 COM | Red: Relay 2 NA | Pink: Relay 2 NC |
| | Black: Relay 2 COM | | |



Relay Switching points

X+	5°	Y+	5°
X-	5°	Y-	5°

5° set as factory default.
Factory settings can be programmed by user by RS232

Ordering informations

Ordering Information	
DPS-K3-□P-XX	
□P	□P: for Horizontal mounting (progr version); □N: hor mount, non progr. verison)
XX	XX: Angle range
Refer to device manual for operating intructions and RS232 commands	

