Inclinometer Type IS40

Output | IP 67 | Reverse polarity protection | Shock/vibration resistant

The inclinometer IS40 permits 2-dimensional inclinations to be measured.
Versions are available for the measuring ranges ±10°, ±45° or ±60°.
The rugged compact construction makes this sensor the ideal device for angle measurement in harsh environments.

Innovative:

- **Rugged construction**
- **High resolution and accuracy**
- **Current or voltage interface**
- **High shock resistance**
- **Zero point adjustment ±5° possible**

Compact:

- **Small design**
- **Minimal space requirement**

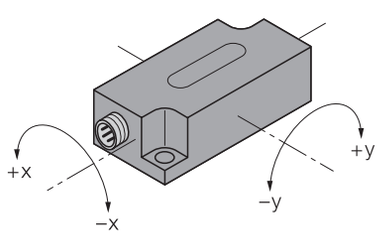
Many applications:

- **Vehicle technology**
- **Solar installations**
- **Cranes and hoists**
- **Commercial vehicles**

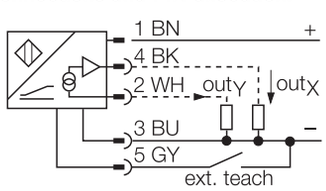
Technical Data Inclinometer:

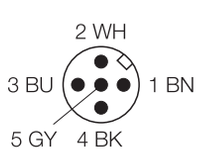
Supply voltage:	5 VDC +/- 0,25 V or 10 ... 30 V DC (depending on version)
No-load current:	≤ 20 mA
Reverse polarity protection	Yes
Measuring range:	±10°, ±45° ±60 ° (depending on version)
Resolution:	≤ 0,05° ≤ 0,1° ≤ 0,15°
Repeat accuracy:	≤ 0,2 % of the measuring range ≤ 0,1 % after a warm-up period of 30 min.
Temperature drift:	≤ 0,025%/K ±0,01 °/K (10°-version), ±0,03 °/K (45° and 60°-version)
Ambient temperature:	-30 ... +70 °C
Output:	Analogue output
Voltage output:	0,1 ... 4,9 V short-circuit protected to U_b
Current output:	4 ... 20 mA
Reaction time:	0,1 ... 0,5 s (Time that the output signal requires to reach 90 % full scale, if the angle is changed from -60° to +60°)
Housing:	Plastic PBT-GF20-VO
Connection:	M12-plug connector
Vibration resistance:	55 Hz (1 mm)
Shock resistance:	30 g, 11 ms
Protection rating:	IP67
Weight:	50 g
Standards:	EN 61362-2-3 (EMC requirements for transducers)

Direction of Inclination:



Connections and PIN allocation:





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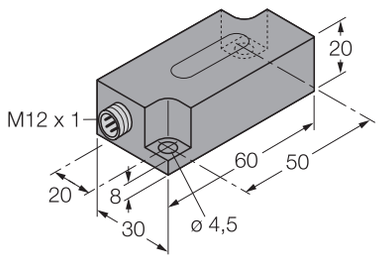
Dimensions:



Order Code Inclinometer:

8.IS40.2XXX1

Series

Measuring direction
2 = 2-dimensional

Measuring range
1 = ±10°
2 = ±45°
3 = ±60°

Connection
1 = M12 connector

Supply voltage
1 = 5 V DC
2 = 10 ... 30 V DC

Interface
1 = 4 ... 20 mA
3 = 0,1 ...4,9 V DC