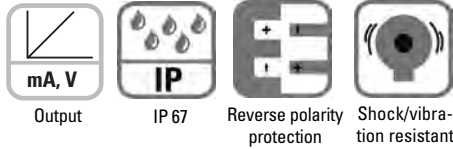


Inclinometer Type IS40



The inclinometer IS40 permits 2-dimensional inclinations to be measured. Versions are available for the measuring ranges $\pm 10^\circ$, $\pm 45^\circ$ or $\pm 60^\circ$. 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



Compact:

- Small design
- Minimal space requirement

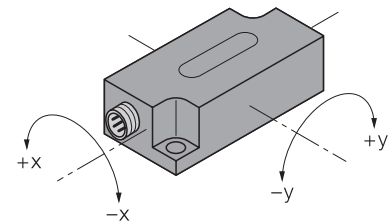
Many applications:

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

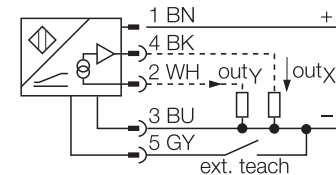
Technical Data Inclinometer:

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:	$\pm 10^\circ$, $\pm 45^\circ$ $\pm 60^\circ$ (depending on version)
Resolution:	$\leq 0,05^\circ < 0,1^\circ < 0,15^\circ$
Repeat accuracy:	$\leq 0,2\%$ of the measuring range $\leq 0,1\%$ after a warm-up period of 30 min.
Absolute accuracy:	0,3° at version $\pm 10^\circ$ 0,5° at version $\pm 45^\circ$ and $\pm 60^\circ$
Temperature drift:	$\leq 0,025\%/K$ $\pm 0,01^\circ/K$ (10°-version), $\pm 0,03^\circ/K$ (45° and 60°-version)
Cross sensitivity:	3 %
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
Output impedance:	99 ... 105 Ohm
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°)
Zero point adjustment	For version: $\pm 10^\circ \Rightarrow \pm 5^\circ$ $\pm 45^\circ \Rightarrow \pm 15^\circ$ $\pm 60^\circ \Rightarrow \pm 15^\circ$
Housing: Plastic	PBT-GF20-V0
Connection:	M12-plug connector
Vibration resistance:	55 Hz (1 mm)
Shock resistance:	30 g, 11 ms

Direction of Inclination:

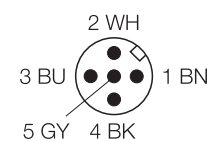


Connections:



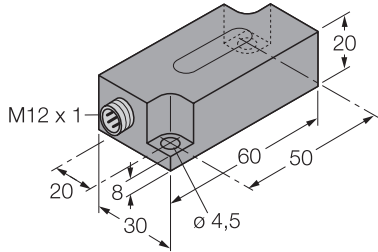
ext. teach: if this input is connected to 0 V, then the output of the inclinometer is reset to 0°.

PIN allocation:



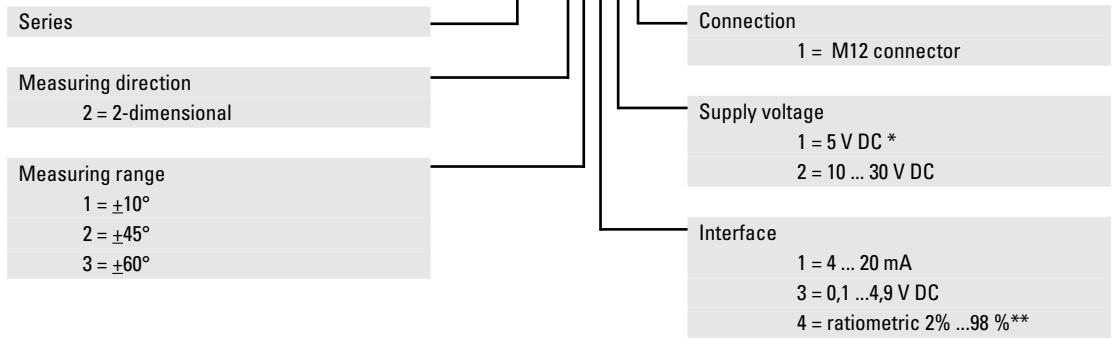
Inclinometer Type IS40

Dimensions:



Order Code Inclinometer:

8.IS40.2XXX1



*only in combination with interface 4
** according to the supply voltage 5 V DC

Accessories:
Corresponding mating
connector: 05.B-8151-0/9