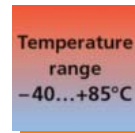
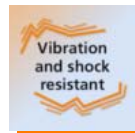


# Precision for all inclinations



## Sensor for precise measurement of angles of inclination on X and Y axes

- High precision across the total angular range in two axes
- Zero point, counting direction and limit frequency adjustable
- Extremely low temperature drift ( $\pm 0.002 \text{ }^\circ\text{K}$ )
- M12 connector, CAN in and CAN out
- Fully CAN-compatible



### Precise in all positions

The new ifm type JN inclination sensors provide high measurement accuracy across the whole angular range with angles of inclination in X and Y axes.

The 2-axis inclination sensors with CANopen interface and bus capability are designed for levelling of mobile machinery (2-axis position detection and zero-point levelling for mobile applications) or automatic adjustment of solar panels, for example.



### Flexible, precise, reliable

Since zero point, direction of counting ( $\pm 180^\circ$  or  $0 \dots 360^\circ$ ) and limit frequency can be set for a stable output signal (20, 10, 5, 1, 0.5 Hz), this innovative product can be adapted precisely to your application. Very low temperature drift across the whole temperature range ( $-40 \dots 85^\circ\text{C}$ ) provides unrivalled reliability.

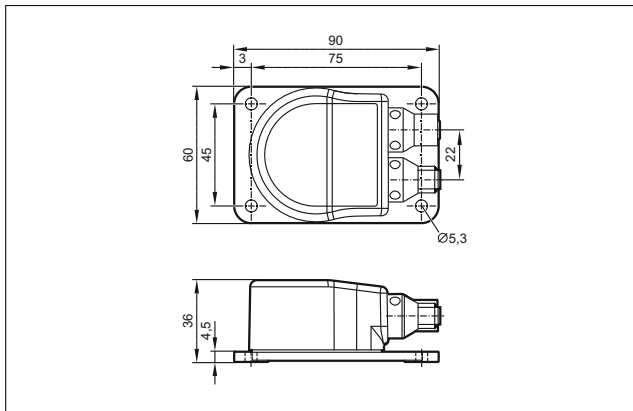
### Ideal for different applications

The sensors allow complete CAN integration according to the CANopen CiA DS-301 communication profiles and profile CiA DSP-410.







They are connected via an M12 connector. The terminating resistor can be enabled.

The sensors provide the signals as angle to the vertical or Euler angle.

### Dimensions




### Connection technology

Type	Description	Order no.
	Socket, M12, 2 m black, PUR cable	<b>EVM039</b>
	Socket, M12, 10 m black, PUR cable	<b>EVM041</b>
	Socket, M12, 2 m black, PUR cable	<b>EVM036</b>
	Socket, M12, 10 m black, PUR cable	<b>EVM038</b>
	Jumper, M12, 5 m, black, PUR cable	<b>EVC069</b>
	Jumper, M12, 5 m, black, PUR cable	<b>EVC059</b>

Technical data JN2100, JN2101		
Operating voltage	[V DC]	10...30 DC
Reverse polarity protection		•
Angular range		<b>JN2100</b> <b>JN2101</b>
Resolution		$\pm 180^\circ$ $\pm 45^\circ$
Accuracy		0.05°    0.01°
Repeatability		$\leq \pm 0.5^\circ$ $\pm 0.1^\circ$
		$\leq \pm 0.1^\circ$ $\leq \pm 0.05^\circ$
Temperature coefficient	[°/K]	$\leq \pm 0.002^\circ$
Ambient temperature	[°C]	-40...85
Protection		IP 65 / IP 68 / IP 69K
Interface		CANopen CiA DS 301 / device profile CiA DSP-410
Limit frequency	[Hz]	Adjustable: 20, 10, 5, 1, 0.5
Number of measurement axes		2
Housing material		Diecast zinc nickel-plated
Connection		2 x M12 connector

### Accessories

Type	Description	Order no.
	Adapter cable for CAN devices with M12 connector (5 pole)	<b>EC2062</b>