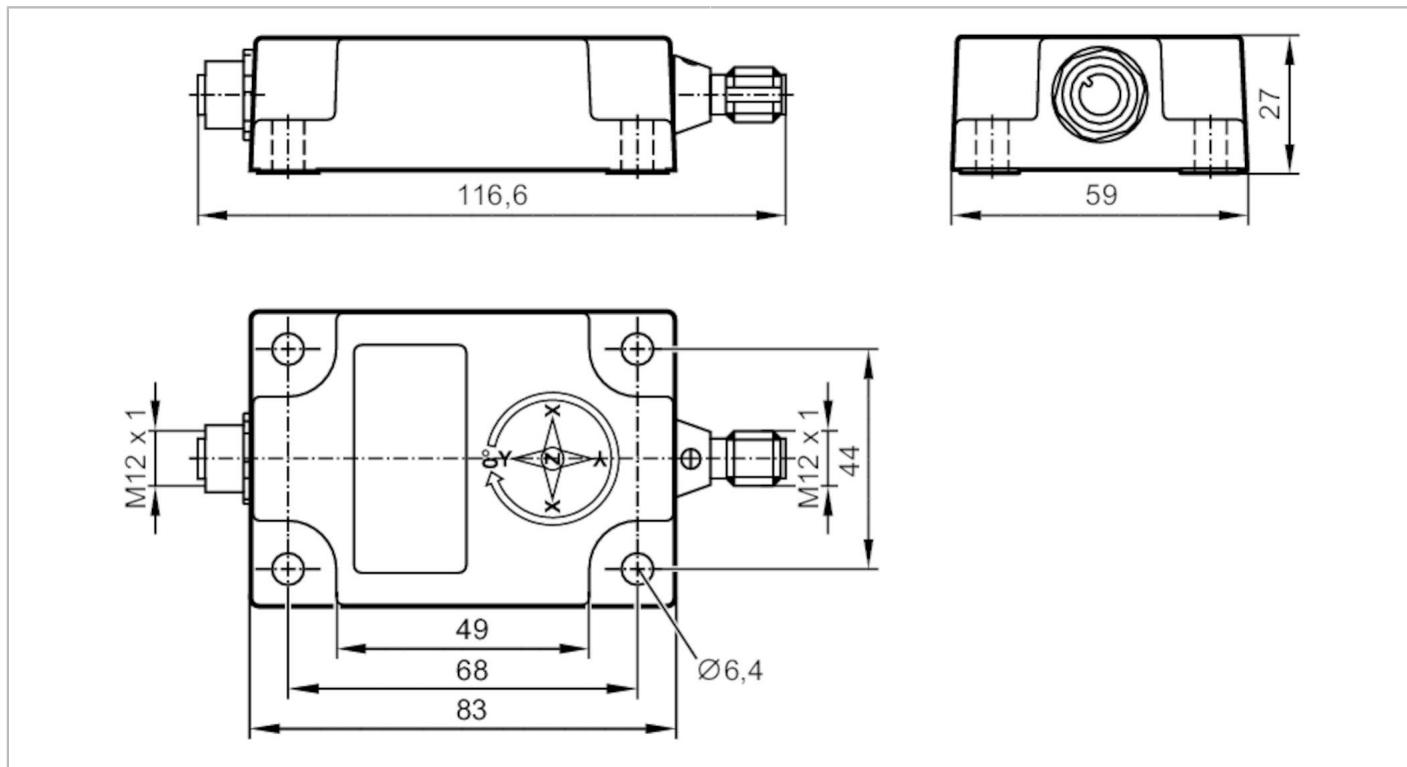


# JD2120



## Inclination sensor

INC-M2M180C-2-KG/US-H



### Product characteristics

Measuring principle	MEMS capacitive; (Accelerometer ; gyroscope)	
Number of measurement axes	2; (X/Y)	
Communication interface	CAN	
Inclination measurement		
Angular range [°]	± 90	

### Application

Function principle	dynamic
Application	High-precision inclination measurement in dynamic applications

### Electrical data

Operating voltage [V]	9...30 DC
Current consumption [mA]	< 65; (9 ... 30 V DC)
Min. insulation resistance [MΩ]	100; (500 V DC)
Protection class	III
Reverse polarity protection	yes
Reverse polarity protection	yes

### Measuring/setting range

Measuring principle	MEMS capacitive; (Accelerometer ; gyroscope)	
Number of measurement axes	2; (X/Y)	
Inclination measurement		
Angular range [°]	± 90	

# JD2120



## Inclination sensor

INC-M2M180C-2-KG/US-H

Measuring range acceleration	[g]	± 4
Measuring range vehicle yaw rate	[°/s]	± 500
<b>Accuracy / deviations</b>		
Hysteresis	[°]	≤ ± 0,05
Repeatability	[°]	± 0,05
Resolution	[°]	0.01; (configurable)
Temperature coefficient	[1/K]	≤ ± 0,008°
Dynamic measurement		
Accuracy	[°]	± 0,5
Static measurement		
Accuracy	[°]	± 0,3
<b>Interfaces</b>		
Communication interface		CAN
Number of CAN interfaces		1
Terminating resistor		yes; (internal ; configurable)
CAN		
Protocol		CANopen
Factory settings		Baud rate: 125 kBit/s node ID: 10
Version		CiA DS301 V4.2.0; DSP-410 V2.0.0; CiA 306 V1.3.0
<b>Operating conditions</b>		
Ambient temperature	[°C]	-40...85
Storage temperature	[°C]	-40...85
Protection		IP 67; IP 68; IP 69K
<b>Tests / approvals</b>		
EMC		DIN EN 61000-6-2
		DIN EN 61000-6-4
Shock resistance		DIN EN 60068-2-27
Vibration resistance		DIN EN 60068-2-6
MTTF	[years]	260
<b>Mechanical data</b>		
Weight	[g]	210
Dimensions	[mm]	27 x 59 x 118.5
Material		housing: diecast aluminium black; potting compound: polyurethane resin
Mounting orientation		Horizontal
<b>Displays / operating elements</b>		
Display	preoperational mode	1 x LED, green
	operational mode	1 x LED, green flashing
	fault	1 x LED, red
<b>Accessories</b>		
Items supplied		Protective cover: 2
<b>Remarks</b>		
Pack quantity		1 pcs.

# JD2120

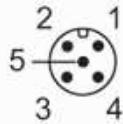


## Inclination sensor

INC-M2M180C-2-KG/US-H

### Electrical connection - CAN-In

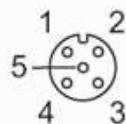
Connector: 1 x M12; coding: A



1	CAN screen
2	+ UB
3	CAN_GND
4	CAN_H
5	CAN_L

### Electrical connection - CAN-Out

Connector: 1 x M12; coding: A



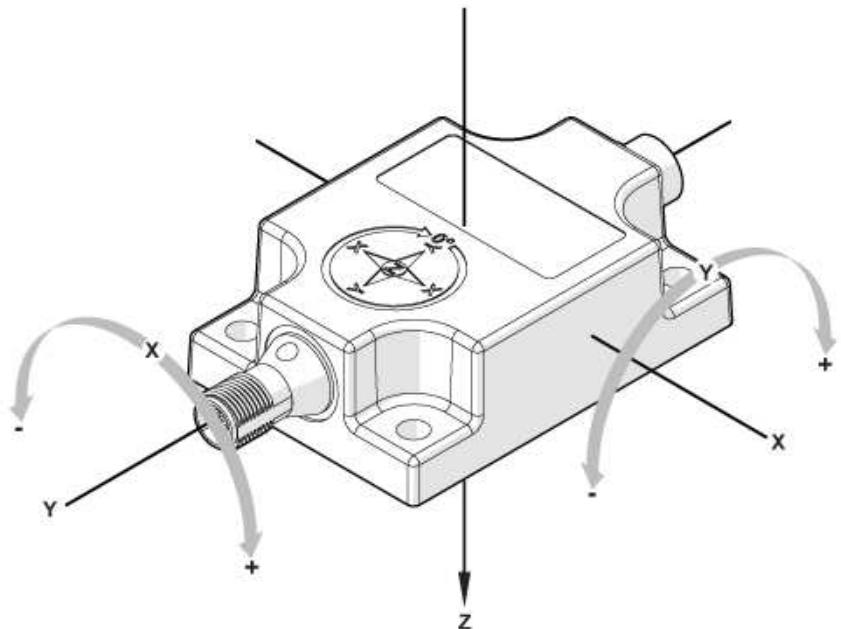
1	CAN screen
2	+ UB
3	CAN_GND
4	CAN_H
5	CAN_L

## Inclination sensor

INC-M2M180C-2-KG/US-H

### Diagrams and graphs

Mess- und Montagerichtung



horizontale Einbaulage / Rotation um X- und Y-Achse