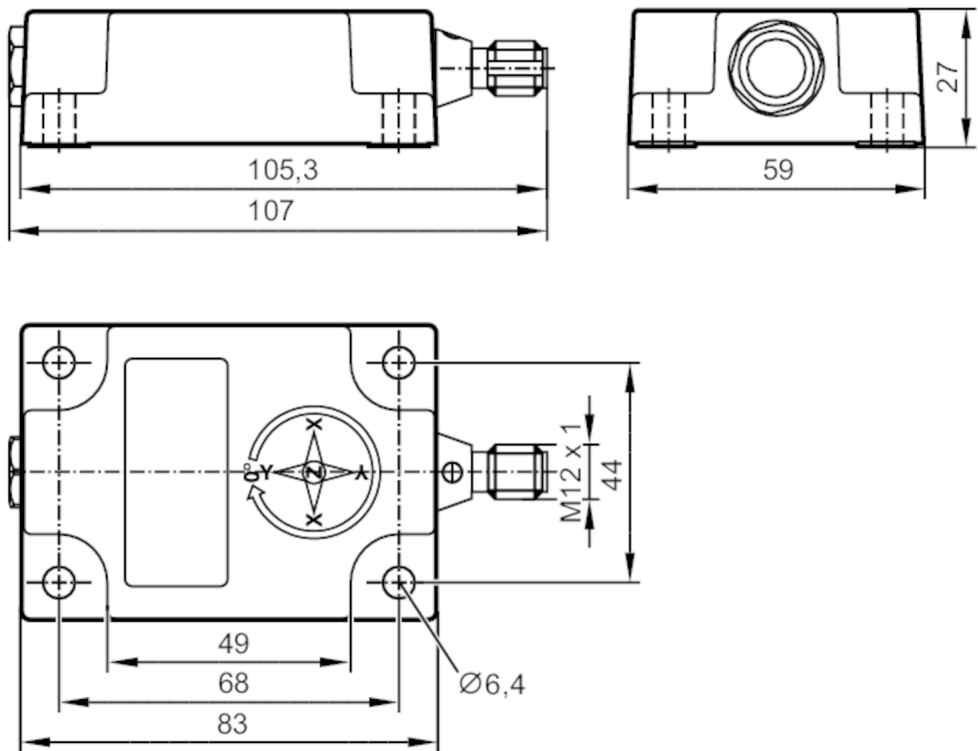


JD2310



Inclination sensor

INC-M2M180J-1-KG/US-H



Product characteristics

Measuring principle	MEMS capacitive; (Acceleration sensor ; 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; (Acceleration sensor ; gyroscope)
Number of measurement axes	2; (X/Y)



Inclination sensor

INC-M2M180J-1-KG/US-H

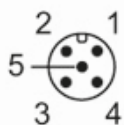
Inclination measurement		
Angular range	[°]	± 90
Measuring range acceleration	[g]	± 4
Measuring range vehicle yaw rate	[°/s]	± 500
Accuracy / deviations		
Hysteresis	[°]	≤ ± 0,05
Repeatability	[°]	± 0,05
Resolution	[°]	0.01
Temperature coefficient	[1/K]	≤ ± 0,008°
Dynamic measurement		
Accuracy	[°]	± 0,5
Static measurement		
Accuracy	[°]	± 0,3
Interfaces		
Communication interface	CAN	
Number of CAN interfaces	1	
Terminating resistor	yes; (internal ; parameterisable)	
CAN		
Protocol	SAE J1939	
Factory settings	Baud rate: 250 kBit/s	
	device address (ECU): 25	
Operating conditions		
Ambient temperature	[°C]	-40...85
Storage temperature	[°C]	-40...85
Protection	IP 67; IP 68; IP 69K	
Tests / approvals		
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
Mechanical data		
Weight	[g]	197.1
Dimensions	[mm]	27 x 59 x 105.3
Materials	housing: diecast aluminium black; potting compound: polyurethane resin	
Installation position	horizontal	
Displays / operating elements		
Display	operational mode	1 x LED, green
	fault	1 x LED, red
Accessories		
Items supplied	Protective cover: 1	
Remarks		
Pack quantity	1 pcs.	

Inclination sensor

INC-M2M180J-1-KG/US-H

Electrical connection - CAN-In

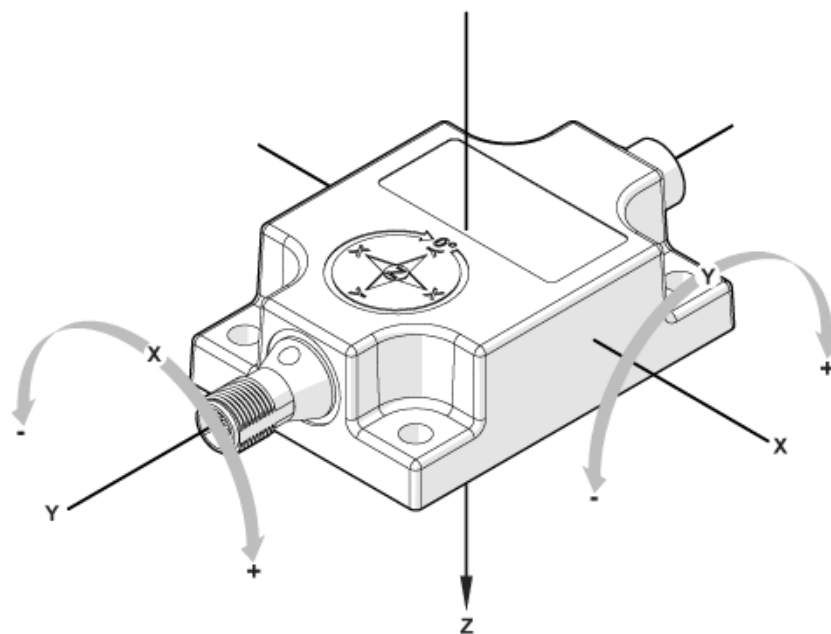
Connector: 1 x M12; coding: A



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

Diagrams and graphs

measuring and installation direction



horizontal installation position / rotation about x- and y-axis