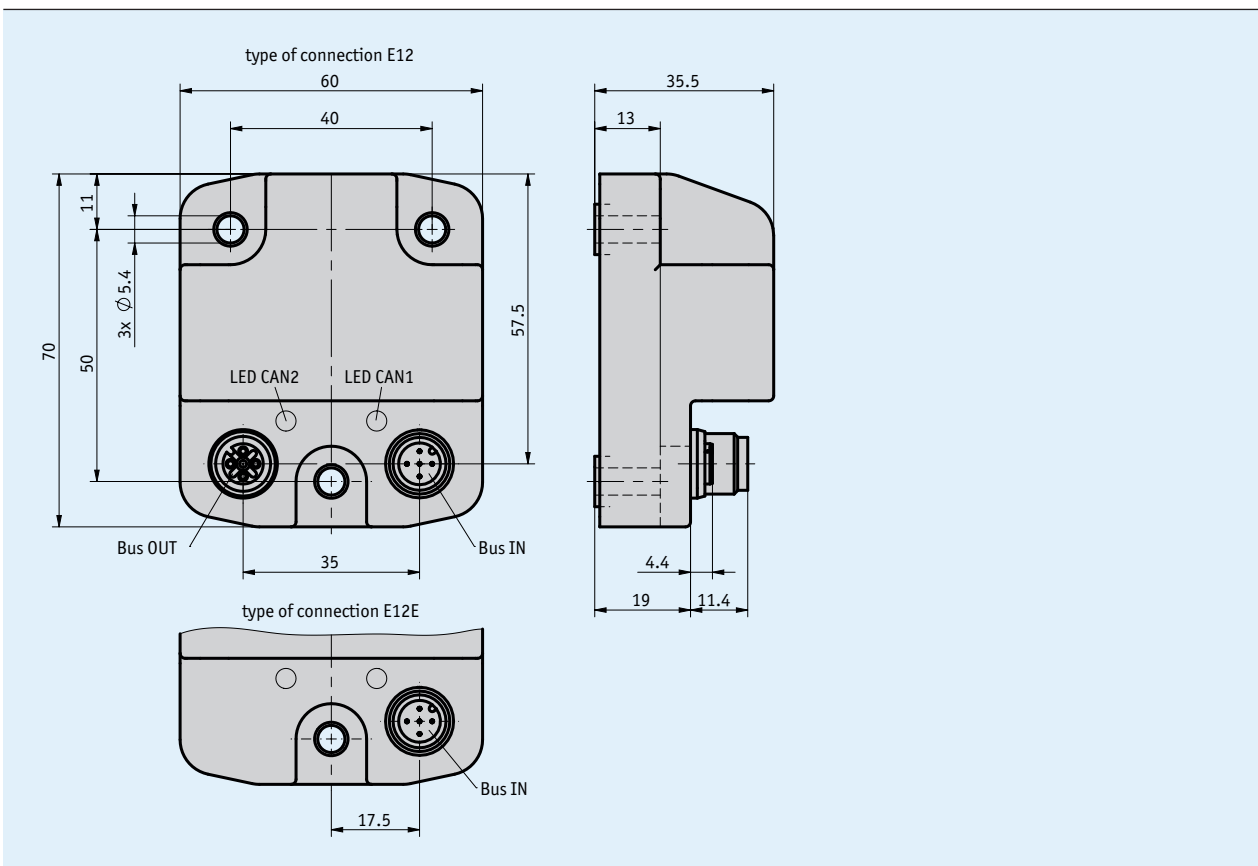


Profile

- Redundant one-axis or two-axis inclination sensor (0 ... 360° oder -80 ... +80°)
- Resolution of 0.001°
- Accuracy $\pm 0.8^\circ$, over the entire measuring and temperature ranges
- Suitable for applications up to Performance Level PLd
- IP6K9K, IP67 protection category
- temperature-compensated from -40°C ... $+85^\circ\text{C}$
- With PURE.MOBILE technology



Mechanical data

Feature	Technical data	Additional information
Housing	plastic/stainless steel	
Mounting type	3-point mounting	
Weight	~0.149 kg	

Electrical data

Feature	Technical data	Additional information
Operating voltage	8 ... 36 V DC	reverse-polarity protected
Current consumption	≤100 mA	without load
Status display	2x two-color LEDs (red/green)	Device status/CAN status
Power rating	±36 V	CAN interface
Temperature drift	≤ ±0.02 °/K typical 0.008 °/K	
Interface	according to ISO 11898-1/2, not electrically isolated	CANopen, CiA 301, CiA 303 Part 3, CiA 305, CiA 410
	according to ISO 11898-1/2, not electrically isolated	CANopen Safety, CiA 301, CiA 303 Part 3, CiA 305, CiA 410, EN 50325-5
Address	1 ... 127	Node ID, parameterizable via SDO or Layer Setting Service (LSS)
Baud rate	20 kBit/s	
	50 kBit/s	
	125 kBit/s	
	250 kBit/s	
	500 kBit/s	
	800 kBit/s	
Starting time	<150 ms	
Cut-off frequency	0.1 ... 20 Hz	freely parameterizable, default: 2 Hz
Parameter	according to CiA 301, CiA 303 Part 3, CiA 305, CiA 410	CANopen
	according to CiA 301, CiA 303 Part 3, CiA 305, CiA 410, EN 50325-5	CANopen Safety
Type of connection	1x M12 connector (A-coded)	5-pin, 1x pin (E12E connection type)
	2x M12 connector (A-coded)	5-pin, 1x pin, 1x socket (E12 connection type)

System data

Feature	Technical data	Additional information
Scanning	MEMS	
Resolution	0.001°	parameterizable
System accuracy	±0.2°	at 20 °C
	±0.8°	over the entire temperature and max. measuring range
Measuring range	0 ... 360°	1 axis, parameterizable
	±180°	1 axis, parameterizable
	X-axis, Y-axis ±80°	2 axes, parameterizable

■ Characteristics of functional safety

Feature	Technical data	Additional information
MTTFd	500 year(s)	at 60° C per channel
PFHd	228 FIT	at 60° C according to DIN/EN 61508 Part 6, Ed. 2, 1 FIT = 1.0 E-09 1/h
DCavg	79 %	at 60° C according to ISO 13849-1, Appendix E.2

Ambient conditions

Feature	Technical data	Additional information
Ambient temperature	-40 ... 85 °C	
Storage temperature	-40 ... 85 °C	
Relative humidity	100 %	condensation permitted
EMC	EN 61000-6-2	interference resistance / immission
	EN 61000-6-4	interference emission / emission
Protection category	IP67	EN 60529 installed with suitable mating connector
	IP6K9K	ISO 20653 installed with suitable mating connector
Shock resistance	500 m/s ² , 11 ms	EN 60068-2-27, half sine, 3 axes (+/-), each 3 shocks
Vibration resistance	100 m/s ² , 10 ... 2000 Hz	EN 60068-2-6, 3 axes, each 10 cycles

Pin assignment

E12, E12E

Signal	PIN
nc	1
+UB	2
GND	3
CAN_H	4
CAN_L	5

Order

Ordering table

Feature	Ordering data	Specification	Additional information
Interface/protocol	CAN	CANopen	
	CANs	CANopen Safety	
Number of axes	1	Z-axis	
	2	X-axis & Y-axis	
Measuring range	360	0 ... 360°	only with 1 axis
	-80/+80	X -80 ... +80°, Y -80 ... +80°	only with 2 axes
Type of connection	E12	Bus IN/Bus OUT	
	E12E	Bus IN	

Order key



Scope of delivery: IKM360R, Quick Start Guide

Accessories:

Cable extension KV0550

www.siko-global.com

Mating Connector Overview

www.siko-global.com

Mating connector, 5-pole, socket

Order key 84109

Mating connector, 5-pole, angle socket

Order key 83006

Bus terminating connector, 5-pole, pin

Order key 82815