

Inclinometer IK360

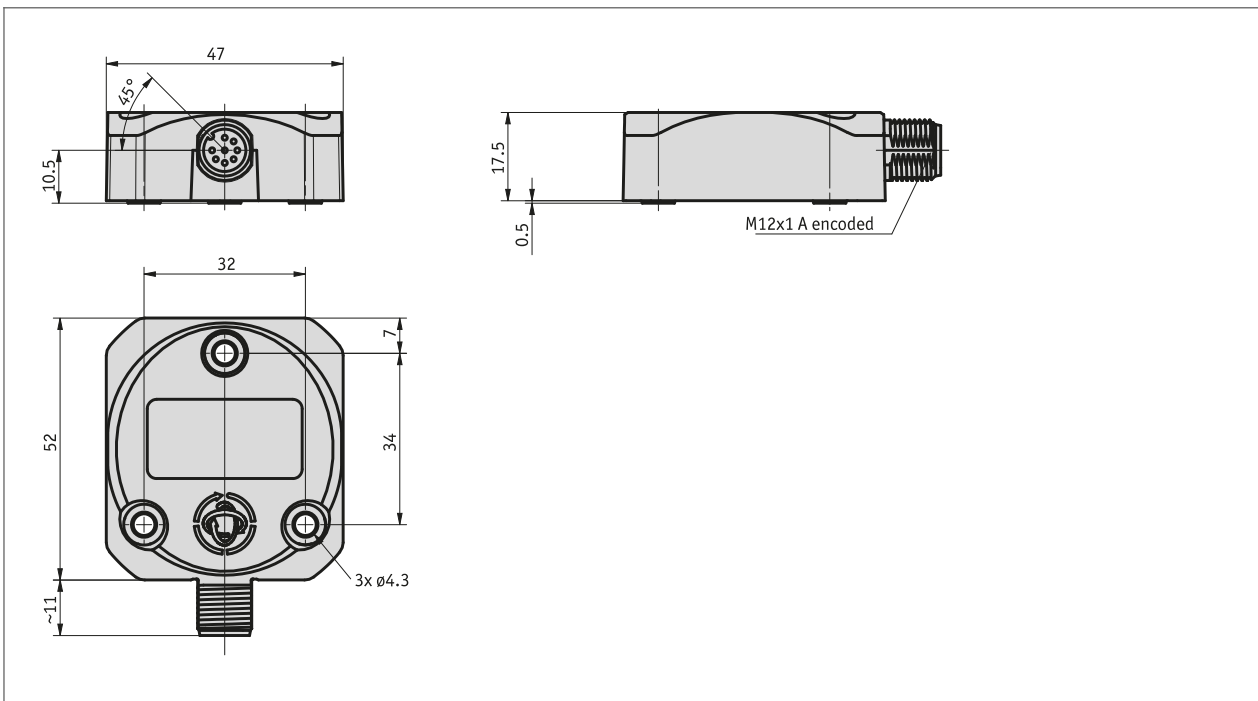
Absolute inclination sensor based on MEMS technology, accuracy $\pm 0.1^\circ$

Profile

- Single-axis or dual-axis variant
- 0 ... 10 V or 4 ... 20 mA interfaces
- CANopen interface
- IP66 and IP67 protection classes
- Easy three-point mounting



ANALOG CANopen



Mechanical data

Feature	Technical data	Additional information
Housing	PBT fiber-reinforced	
Mounting type	3-point mounting	
Weight	~0.1 kg	

Electrical data

Feature	Technical data	Additional information
Operating voltage	10 ... 30 V DC	reverse polarity protection
Power input	≤ 0.7 W	
Temperature drift	-0.004 °/K	
Interface	0 ... 10 V 4 ... 20 mA	load ≥ 5 k Ω load ≤ 270 Ω at 10 V DC
Type of connection	1x M12-plug connector (A-coded)	8-pole, 1x pin, E12E connection type

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■ CANopen interface

Feature	Technical data	Additional information
Operating voltage	-10 ... -30 V DC	
Power input	≤ 0.7 W	
Temperature drift	0.004 °/K	
Interface	according to ISO 11898-1, not electrically isolated	CANopen
Address	1 ... 127	
Baud rate	20 kbit/s 50 kbit/s 100 kbit/s 40 kbit/s 50 kbit/s 500 kbit/s 800 kbit/s 1000 kbit/s	
Parameter	according to CiA 410	CANopen
Type of connection	1x M12-plug connector (A-coded)	5-pole, 1x pin, E12E connection type

System data

Feature	Technical data	Additional information
Scanning	MEMS	
Resolution	0.01 °	
System accuracy	$\pm 0.1^\circ$	for 2-axis versions in working range $\pm 60^\circ$
Measuring range	0 ... 360 ° $\pm 80^\circ$ $\pm 90^\circ$	1 axis 2 axes, current and voltage output 2 axes, CANopen

Ambient conditions

Feature	Technical data	Additional information
Ambient temperature	-40 ... 85 °C	
EMC	EN 61000-6-2 EN 61000-6-4	interference resistance / immission emitted interference / emission
Protection category	IP66 IP67	EN 60529, fitted with suitable mating connector EN 60529, fitted with suitable mating connector
Shock resistance	$\leq 100g$, 6 ms	EN 60068-2-27, half sine
Vibration resistance	1.5 mm, 10 Hz ... 58 Hz $\leq 20g$, 58 ... 2000 Hz	EN 60068-2-6 EN 60068-2-6

pin assignment

■ Analog interface

Signal 1-axis	Signal 2-axis	Pin
+UB	+UB	1
nc	nc	2
nc	nc	3
GND	GND	4
Z-axis output U/I	X-axis output U/I	5
SET1	SET1	6
nc	Y-axis output U/I	7
nc	nc	8

■ CANopen

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

Order

■ Ordering table

Feature	Ordering data	Spezifikation	Additional information
number of axes	A 1 2	0 ... 360° X -80 ... +80°, Y -80 ... +80°	
Interface	B 0/10V	0 ... 10 V voltage output	

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Feature	Ordering data	Spezifikation	Additional information
	4/20mA CAN	4 ... 20 mA current output CANopen	

Order key

IK360- -
A B



Scope of delivery:

IK360, Fastening set



Accessories you can find:

Cable extension KV05S0	www.siko-global.com
Cable extension KV08S3	www.siko-global.com
Overview Mating connector	www.siko-global.com
Measurement display MA50	www.siko-global.com
Mating connector, 5-pole, angle socket	Order key 83006
Mating connector, 8-pole, socket	Order key 83525
Mating connector, 5-pole, socket	Order key 84109