

# INDUCTIVE SENSOR



## Series ISIP

### Key-Features:

- Measurement range 0...7 mm
- Analog Output: 4...20mA
- Linearity  $\pm 0.35$  mm
- Resolution of 0.005 mm
- Temperature range: -40...+70 °C
- Protection class up to IP69K
- Stainless steel housing
- Cylindrical housing with outer thread
- Measurement on metallic objects

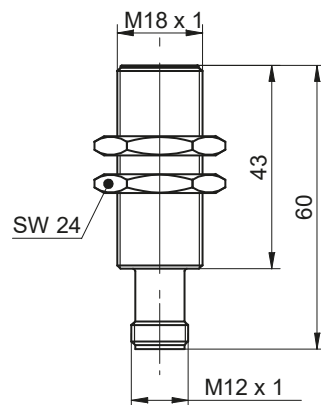
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## TECHNICAL DATA

Measurement range	[mm]	0...7
Linearity	[mm]	±0.35
Resolution	[mm]	static: < 0.005, dynamic: < 0.01
Repeatability	[mm]	< 0.015
Response time	[ms]	< 2
Output signal	[mA]	4...20
Power supply	[VDC]	15...30
Current consumption max. (without load)	[mA]	40
Load resistance	[Ω]	330...1000
Short circuit protection		yes
Reverse polarity protection		yes
Protection class		IP68 / IP69K
Operating temperature	[°C]	-40...+70
Cleaning temperature	[°C]	+70...+85 (30 min / day)
Temperature drift max.	[%]	±10
Vibration resistance		EN 61373:2010 (category 3), 5 h per axis (14.4 gRMS, 10...500 Hz, EN 60068-2-64)
Shock resistance		EN 61373:2010 (category 3), 10 bumps per axis (100 g, 6 ms, EN 60068-2-27)
Optimal mounting		quasi-flush
Material		housing: stainless steel 1.4404 (V4A), sensing face: LCP
Connection		connector M12, 4 pins
Tightening torque max.	[Nm]	55

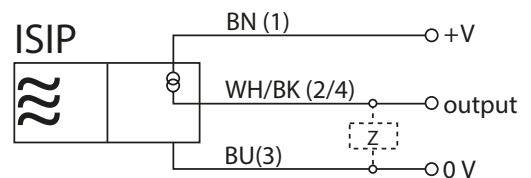
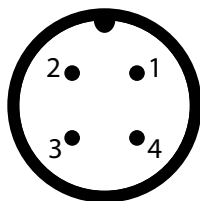
## TECHNICAL DRAWING



## ELECTRICAL CONNECTION

### Connector M12, male, 4 pins

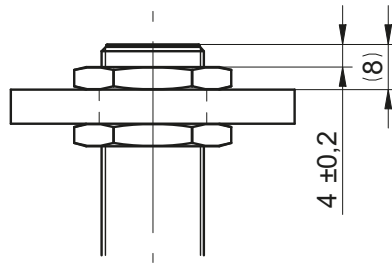
Pin	Signal
1	+V
2	Output
3	GND
4	Output



Disconnect power before connecting the sensor.

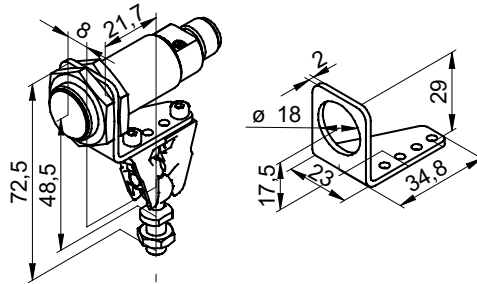
## MOUNTING OF THE SENSOR

### Recommended setup for optimal measurement results



An installation that deviates from this recommendation can considerably influence the measurement results.

### Mounting set ISMZ-M18



## MODELS

ISIP-7-M18-420A-SA12 range 0...7 mm, output 4...20 mA

## ACCESSORIES

### Cable with connector (female) M12, 4 poles, shielded

K4P2M-S-M12 2 m, straight connector

K4P5M-S-M12 5 m, straight connector

K4P10M-S-M12 10 m, straight connector

### Outdoor cable with connector (female) M12, 4 poles, shielded, IP65/IP67/IP68/IP69K

K4P10M-F-PEX-M12 10 m, straight connector

### Mounting set (clamps, ball pivot, mounting panel)

ISMZ-M18 Mounting set for sensors with M18 thread

### Cable with connector (female) M12, 4 poles, shielded

K4P2M-SW-M12 2 m, angular connector

K4P5M-SW-M12 5 m, angular connector

K4P10M-SW-M12 10 m, angular connector

### Digital displays

WAY-AX-S 2 channel, power supply 18...30 VDC

WAY-AX-S-AC 2 channel, power supply 115...230 VAC

For more information and options please refer to the [WAY-AX data sheet](#).

Subject to change without prior notice.

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