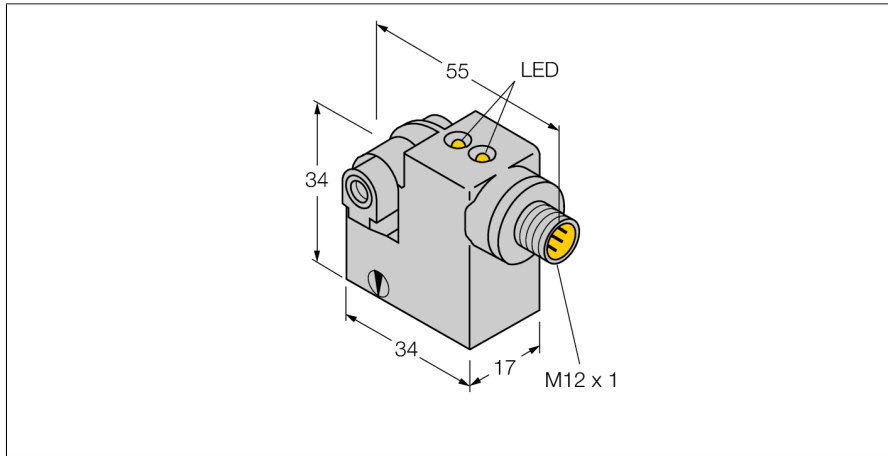
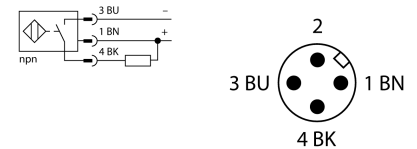


Magnetic Field Sensor for pneumatic cylinders (magnetic-field immune) BIM-IKM-AN6X2-H1141/S34



- Rectangular, height 34 mm
- Metal, GD-Zn
- Magnetic-inductive sensor
- Weld resistant to AC fields of 50...60 Hz
- DC 3-wire, 10...30 VDC
- NO contact, NPN output
- M12 x 1 connector

Wiring Diagram



Type	BIM-IKM-AN6X2-H1141/S34
ID	46273

Special version	S34 corresponds to: Resistant to magnetic fields
-----------------	---

General data	
Pass speed	≤ 1 m/s
Repeatability	≤ ± 0.1 mm
Temperature drift	≤ 0.1 mm
Hysteresis	≤ 1 mm

Electrical data	
Operating voltage	10...30 VDC
Residual ripple	≤ 10 % U _{ss}
DC rated operational current	≤ 200 mA
Residual current	≤ 0.1 mA
Isolation test voltage	≤ 0.5 kV
Short-circuit protection	yes/ Cyclic
Voltage drop at I _s	≤ 1.8 V
Wire breakage/Reverse polarity protection	yes/ Complete
Output function	3-wire, NO contact, NPN
Switching frequency	0.02 kHz

Mechanical data	
Design	Rectangular, IKM
Dimensions	34 x 17 x 34 mm
Housing material	Metal, GD-Zn
Active area material	Plastic, PA12-GF30
Electrical connection	Connector, M12 × 1

Environmental conditions	
Ambient temperature	-25...+70 °C
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
MTTF	2283 years acc. to SN 29500 (Ed. 99) 40 °C

Functional principle

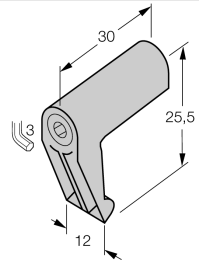
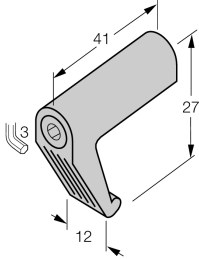
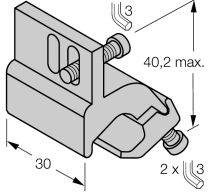
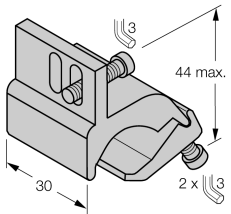
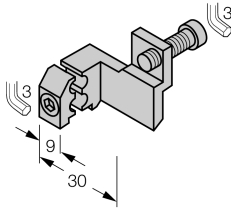
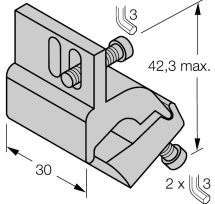
Magnetic field sensors are activated by magnetic fields and are used, in particular, for the detection of the piston position in pneumatic cylinders. As magnetic fields can permeate non-magnetizable metals, they detect a permanent magnet attached to the piston through the aluminium cylinder wall.

Weld-field immune permapprox sensors "freeze" the switching status when detecting a magnetic AC field (50...60 Hz). In this way, false switching operations are prevented during the welding process. When the AC field disappears, the sensors resume standard operation.

Mounting on the following profiles

Cylindrical design	
Power-on indication	LED, Green
Switching state	LED, Yellow

Accessories

Type code	Ident no.		Dimension drawing
KLI1	69710	Mounting bracket for mounting magnetic field sensors on tie-rod cylinders; cylinder diameter: 32...100 mm; material: Die-cast Zinc	
KLI3	69712	Mounting bracket for mounting magnetic field sensors on tie-rod cylinders; cylinder diameter: 63...160 mm; material: Die-cast Zinc	
KLI5	6971802	Mounting bracket for mounting magnetic field sensors on profile cylinders; cylinder diameter: 32...50 mm; material: Aluminum	
KLI6	6971805	Mounting bracket for mounting magnetic field sensors on profile cylinders; cylinder diameter: 50...100 mm; material: Aluminum	
KLI7	6971810	Mounting bracket for mounting magnetic field sensors on profile cylinders with external dovetail guide; cylinder diameter: 32...200 mm; material: Aluminum	
KLI5Z	6971803	Mounting bracket for mounting magnetic field sensors on tie-rod cylinders; cylinder diameter: 32...63 mm; material: Aluminum	

Accessories

Type code	Ident no.		Dimension drawing
KLI6Z	6971806	Mounting bracket for mounting magnetic field sensors on tie-rod cylinders; cylinder diameter: 50...125 mm; material: Aluminum	