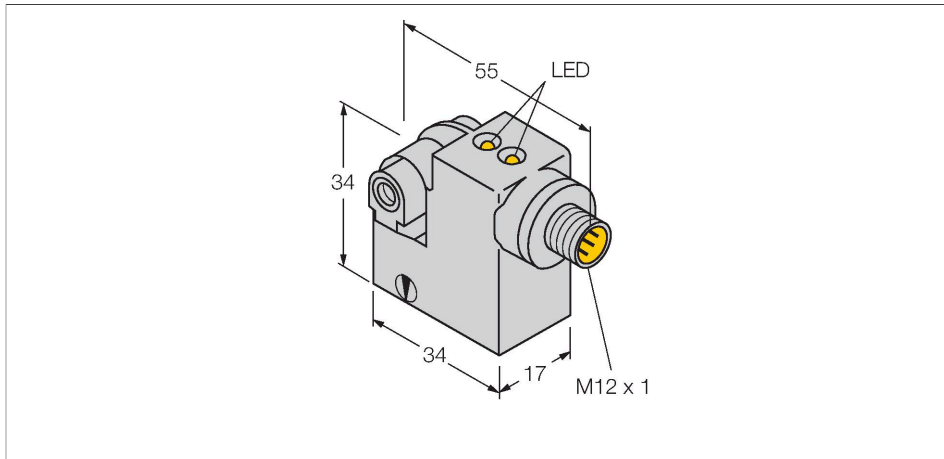


BIM-IKM-AP6X2-H1141/S34

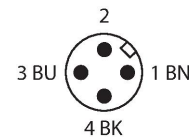
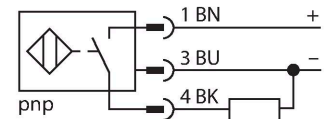
Magnetic Field Sensor – for pneumatic cylinders (magnetic-field immune)



Features

- 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, PNP output
- Male connector, M12 x 1

Wiring diagram



Technical data

Type	BIM-IKM-AP6X2-H1141/S34
ID	46272
Special version	S34 corresponds to: Weld-field immune proximity sensors
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
No-load current	15 mA
Residual current	≤ 0.1 mA
Isolation test voltage	≤ 0.5 kV
Short-circuit protection	yes / Cyclic
Voltage drop at I _o	≤ 1.8 V
Wire breakage/Reverse polarity protection	yes / Complete
Output function	3-wire, NO contact, PNP
Switching frequency	0.02 kHz
Mechanical data	
Design	Rectangular, IKM

Functional principle

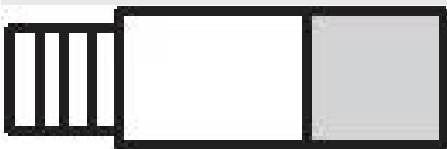
Magnetic field sensors are activated by magnetic fields and are used, in particular, for the detection of the piston position in pneumatic cylinders. As magnetic fields can permeate non-magnetizable metals, they detect a permanent magnet attached to the piston through the aluminium cylinder wall. Weld-field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

Technical data

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
Mounting on the following profiles	
Cylindrical design	○ ##
Power-on indication	LED, Green
Switching state	LED, Yellow

Mounting instructions

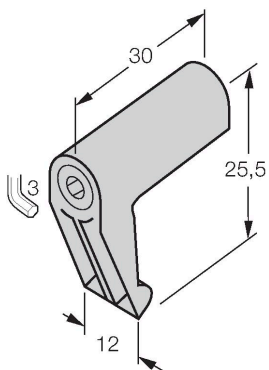
Mounting instructions/Description



Accessories

KL11

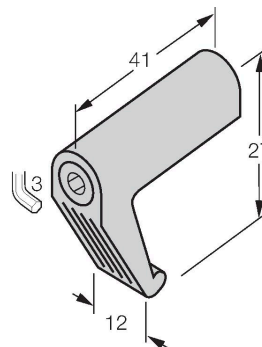
69710



Mounting bracket for mounting magnetic field sensors on tie-rod cylinders; cylinder diameter: 32...100 mm; material: Die-cast Zinc

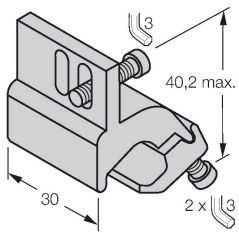
KL13

69712



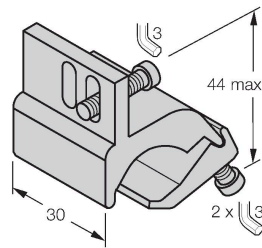
Mounting bracket for mounting magnetic field sensors on tie-rod cylinders; cylinder diameter: 63...160 mm; material: Die-cast Zinc

KL15 **6971802**



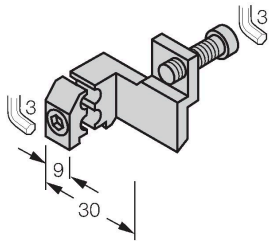
Mounting bracket for mounting magnetic field sensors on profile cylinders; cylinder diameter: 32...50 mm; material: Aluminum

KL16 **6971805**



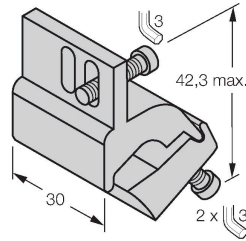
Mounting bracket for mounting magnetic field sensors on profile cylinders; cylinder diameter: 50...100 mm; material: Aluminum

KL17 **6971810**



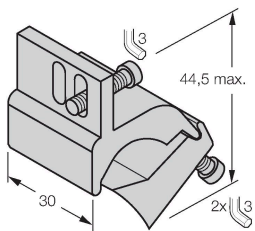
Mounting bracket for mounting magnetic field sensors on profile cylinders with external dovetail guide; cylinder diameter: 32...200 mm; material: Aluminum

KL15Z **6971803**



Mounting bracket for mounting magnetic field sensors on tie-rod cylinders; cylinder diameter: 32...63 mm; material: Aluminum

KL16Z **6971806**



Mounting bracket for mounting magnetic field sensors on tie-rod cylinders; cylinder diameter: 50...125 mm; material: Aluminum