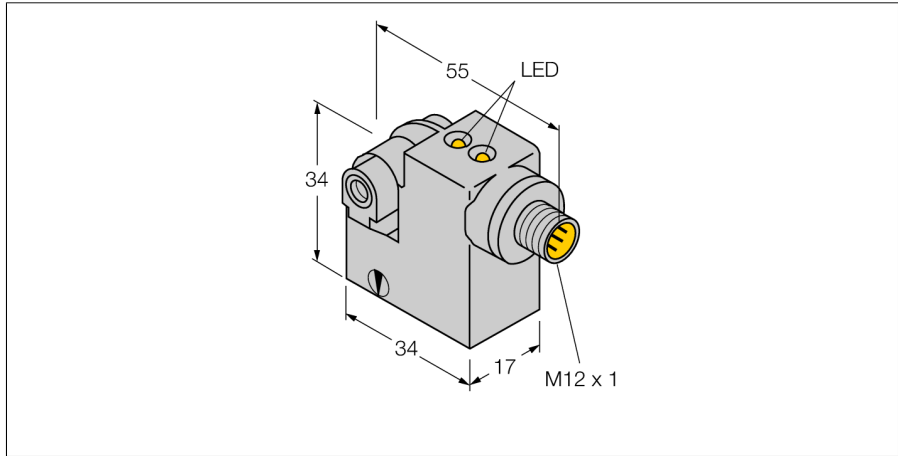
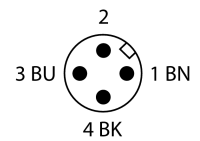
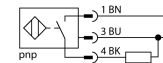


**Magnetic field sensor
for pneumatic cylinders (magnetic-field immune)
BIM-IKM-AP6X2-H1141/S34**



- 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, PNP output
- Male connector, M12 x 1

Wiring Diagram



Type designation	BIM-IKM-AP6X2-H1141/S34
Ident no.	46272

Pass speed	≤ 1 m/s
Repeatability	≥ ± 0.1 mm
Temperature drift	≤ 0.1 mm
Hysteresis	≤ 1 mm
Ambient temperature	-25...+70 °C

Operating voltage	10...30 VDC
Residual ripple	≤ 10 % U _{ss}
DC rated operational current	≤ 200 mA
No-load current I ₀	≤ 15 mA
Residual current	≤ 0.1 mA
Isolation test voltage	≤ 0.5 kV
Short-circuit protection	yes/ Cyclic
Voltage drop at I ₀	≤ 1.8 V
Wire breakage/Reverse polarity protection	yes/ Complete
Output function	3-wire, NO contact, PNP
Reverse polarity protection	Complete
Switching frequency	0.02 kHz

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 x 1
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

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.

**Magnetic field sensor
for pneumatic cylinders (magnetic-field immune)
BIM-IKM-AP6X2-H1141/S34**


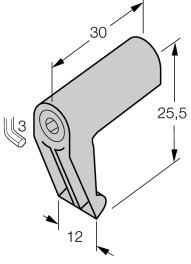

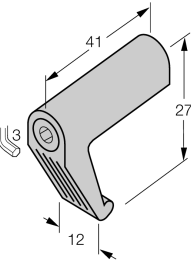

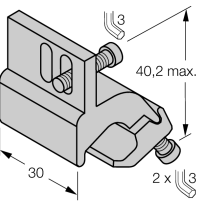

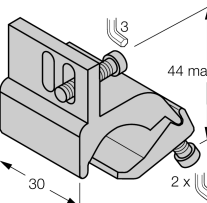

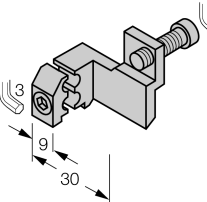
Mounting instructions/Description

Active face in front




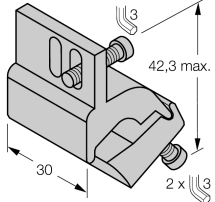

**Magnetic field sensor
for pneumatic cylinders (magnetic-field immune)
BIM-IKM-AP6X2-H1141/S34**

Accessories

Type code	Ident no.	Description	
KL11	69710	Mounting on  tie-rod cylinders; cylinder diameter 32...100 mm; material: Die-cast zinc	
KL13	69712	Mounting on  tie-rod cylinders; cylinder diameter 63...160 mm; material: Die-cast zinc	
KL15	6971802	Mounting on  profile cylinder; cylinder diameter 32...50 mm; material: Aluminium	
KL16	6971805	Mounting on  profile cylinder; cylinder diameter 50...100 mm; material: Aluminium	
KL17	6971810	Mounting on  profile cylinder with external dovetail grooves; diameter 32...200 mm; material: Aluminium	

**Magnetic field sensor
for pneumatic cylinders (magnetic-field immune)
BIM-IKM-AP6X2-H1141/S34**

Accessories

Type code	Ident no.	Description	
KLI5Z	6971803	Mounting on  tie-rod cylinders; cylinder diameter 32...63 mm; material: Aluminum	
KLI6Z	6971806	Mounting on  tie-rod cylinders; cylinder diameter 50...125 mm; material: Aluminum	