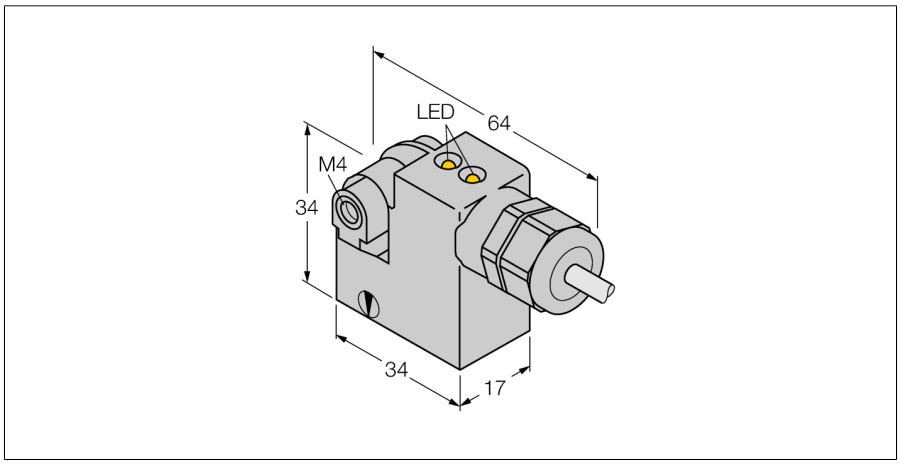
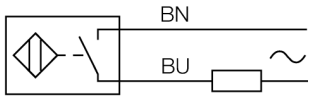
Magnetic Field Sensor
for pneumatic cylinders
BIM-IKM-AZ3X2



- **Rectangular, height 34 mm**
- **Metal, GD-Zn**
- **Magnetic-inductive sensor**
- **AC 2-wire, 20…250 VAC**
- **NO contact**
- **Cable connection**

Wiring Diagram



Type designation	BIM-IKM-AZ3X2
Ident no.	13472
Pass speed	≤ 1 m/s
Repeatability	≥ ± 0.1 mm
Temperature drift	≤ 0.1 mm
Hysteresis	≤ 1 mm
Ambient temperature	-25…+70 °C
Operating voltage	20…250VAC
AC rated operational current	≤ 500 mA
Frequency	≥ 50…≤ 60 Hz
Residual current	≤ 1.7 mA
Isolation test voltage	≤ 1.5 kV
Voltage drop at I_e	≤ 6 V
Output function	2-wire, NO contact
Smallest operating current I_m	≥ 5 mA
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	Cable
Cable quality	4 mm, Gray, LifYY, PVC, 2m
Cable cross section	3 x 0.25 mm²
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 red

Functional principle

Magnetic field sensors are activated by magnetic fields and are especially suited for piston position detection in pneumatic cylinders. Based on the fact that magnetic fields can permeate non-magnetizable metals, it is possible to detect a permanent magnet attached to the piston through the aluminium wall of the cylinder.

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Magnetic Field Sensor
for pneumatic cylinders
BIM-IKM-AZ3X2

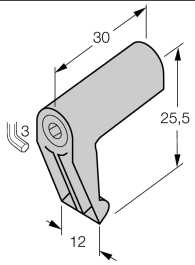
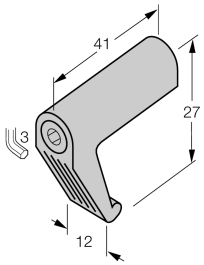
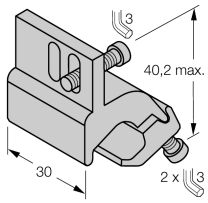
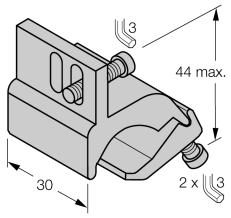
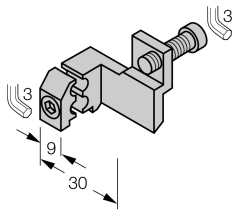
Mounting instructions/Description	Active face in front



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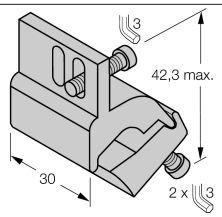
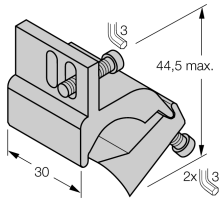
 Hans Turck GmbH & Co.KG ● D-45472 Mülheim an der Ruhr ● Witzlebenstraße 7 ● Tel. 0208 4952-0 ● Fax 0208 4952-264 ● more@turck.com ● www.turck.com

Accessories

Type code	Ident no.	Description	
KLI1	69710	Mounting on ◯ tie-rod cylinders; cylinder diameter 32…100 mm; material: Die-cast zinc	
KLI3	69712	Mounting on ◯ tie-rod cylinders; cylinder diameter 63…160 mm; material: Die-cast zinc	
KLI5	6971802	Mounting on ▢ profile cylinder; cylinder diameter 32…50 mm; material: Aluminium	
KLI6	6971805	Mounting on ▢ profile cylinder; cylinder diameter 50…100 mm; material: Aluminium	
KLI7	6971810	Mounting on ▢ profile cylinder with external dovetail grooves; diameter 32…200 mm; material: Aluminium	

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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	

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