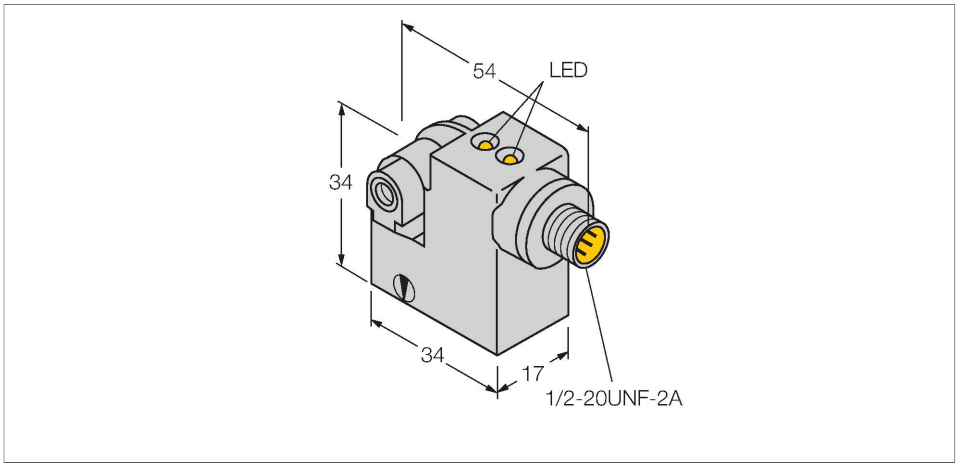
BIM-IKM-AZ3X2-B3131
Magnetic Field Sensor – For Pneumatic Cylinders



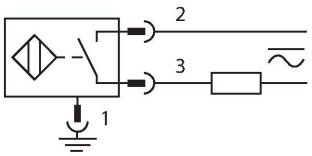
Technical data

Type	BIM-IKM-AZ3X2-B3131
Ident. no.	13471
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…250 VAC
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	≥ 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	Connector, 1/2"
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67

Features

- Rectangular, height 34 mm
- Metal, GD-Zn
- Magnetic-inductive sensor
- AC 2-wire, 20…250 VAC
- NO contact
- Connector, 1/2"

Wiring diagram



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.

BIM-IKM-AZ3X2-B3131| 09/09/2020 16-30 | technical changes reserved

Technical data

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

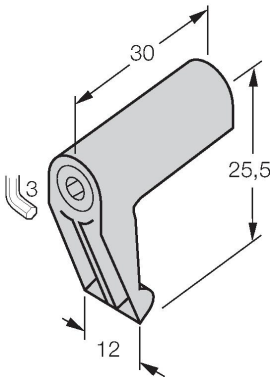
Mounting instructions

Mounting instructions/Description



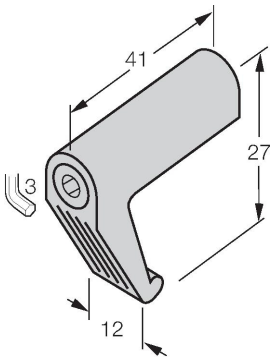
Accessories

KLI1	69710



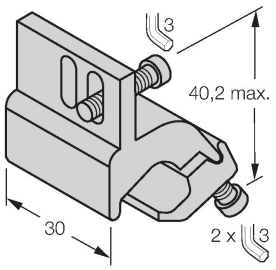
Mounting bracket for mounting magnetic field sensors on tie-rod cylinders; cylinder diameter: 32…100 mm; material: Die-cast Zinc

KLI3	69712



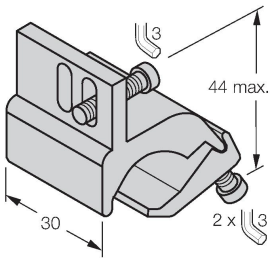
Mounting bracket for mounting magnetic field sensors on tie-rod cylinders; cylinder diameter: 63…160 mm; material: Die-cast Zinc

KLI5	6971802



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

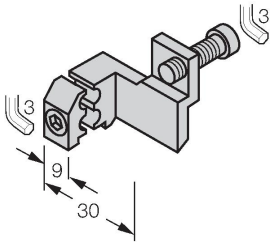
KLI6	6971805



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

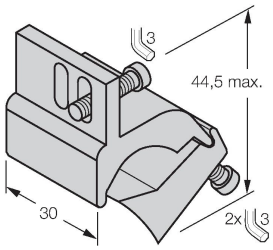
BIM-IKM-AZ3X2-B3131| 09/09/2020 16-30 | technical changes reserved

KLI7	6971810



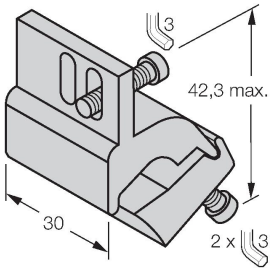
Mounting bracket for mounting magnetic field sensors on profile cylinders with external dovetail guide; cylinder diameter: 32…200 mm; material: Aluminum

KLI6Z	6971806



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

KLI5Z	6971803



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

BIM-IKM-AZ3X2-B3131| 09/09/2020 16-30 | technical changes reserved