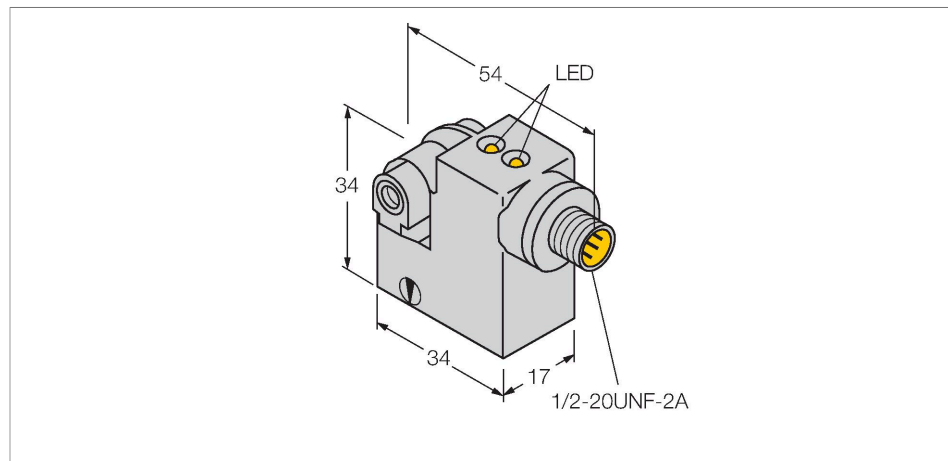


BIM-IKM-AZ3X2-B3131/S589

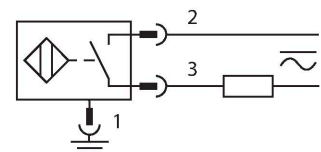
Magnetic Field Sensor – For Pneumatic Cylinders



Features

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

Wiring diagram



Technical data

| | |
|------------------------------|-----------------------------------------------|
| Type | BIM-IKM-AZ3X2-B3131/S589 |
| ID | 1347189 |
| Special version | S589 Corresponds to: BIM sensor without clamp |
| General data | |
| Pass speed | ≤ 1 m/s |
| Repeatability | $\leq \pm 0.1$ mm |
| Temperature drift | ≤ 0.1 mm |
| Hysteresis | ≤ 1 mm |
| Electrical data | |
| Operating voltage U_B | 20...250 VAC |
| AC rated operational current | ≤ 500 mA |
| Frequency | $\geq 50 \dots \leq 60$ Hz |
| Residual current | ≤ 1.7 mA |
| Isolation test voltage | 1.5 kV |
| Voltage drop at I_a | ≤ 6 V |
| Output function | 2-wire, NO contact |
| Smallest operating current | ≥ 5 mA |
| 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 |

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.

Technical data

| | |
|------------------------------------|--------------------------------------------|
| Electrical connection | Connector, 1/2" |
| 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, Red |

Mounting instructions

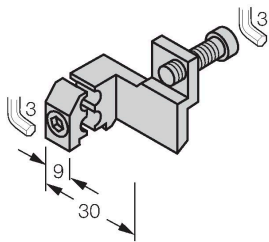
| Mounting instructions/Description |
|-----------------------------------|
| |

Accessories

| | | | |
|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>KLI1</p> | <p>69710</p> <p>Mounting bracket for mounting magnetic field sensors on tie-rod cylinders; cylinder diameter: 32...100 mm; material: Die-cast Zinc</p> | <p>KLI3</p> | <p>69712</p> <p>Mounting bracket for mounting magnetic field sensors on tie-rod cylinders; cylinder diameter: 63...160 mm; material: Die-cast Zinc</p> |
| <p>KLI5</p> | <p>6971802</p> <p>Mounting bracket for mounting magnetic field sensors on profile cylinders; cylinder diameter: 32...50 mm; material: Aluminum</p> | <p>KLI6</p> | <p>6971805</p> <p>Mounting bracket for mounting magnetic field sensors on profile cylinders; cylinder diameter: 50...100 mm; material: Aluminum</p> |

KLI7

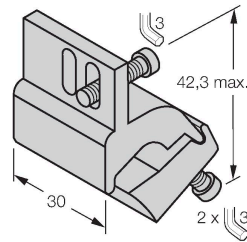
6971810



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

KLI5Z

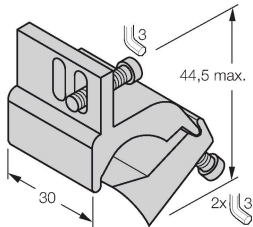
6971803



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

KLI6Z

6971806



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