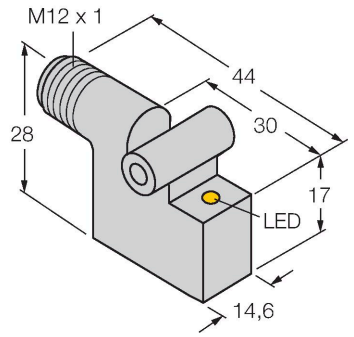
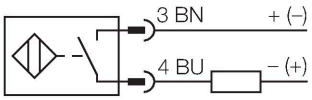
# BIM-IKE-AD4X-H1141 W/KLI3
# Magnetic Field Sensor – For Pneumatic Cylinders

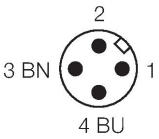



## Features

- Rectangular, height 28 mm
- Metal, GD-Zn
- Magnetic-inductive sensor
- DC 2-wire, 10…65 VDC
- NO contact
- Male connector M12 x 1

## Wiring diagram



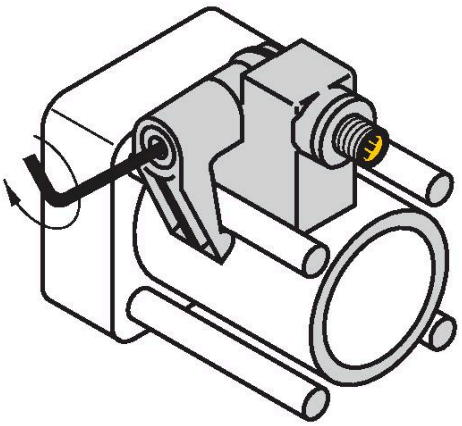

## Technical data

| | |
|---|---|
| Type | BIM-IKE-AD4X-H1141 W/KLI3 |
| ID | 4421690 |
| **General data** | |
| Pass speed | ≤ 3 m/s |
| Repeatability | ≤ ± 0.1 mm |
| Temperature drift | ≤ 0.1 mm |
| Hysteresis | ≤ 1 mm |
| **Electrical data** | |
| Operating voltage | 10…65 VDC |
| Residual ripple | ≤ 10 % $U_{ss}$ |
| DC rated operational current | ≤ 100 mA |
| Residual current | ≤ 0.8 mA |
| Isolation test voltage | ≤ 0.5 kV |
| Short-circuit protection | yes / Cyclic |
| Voltage drop at $I_e$ | ≤ 4 V |
| Wire breakage/Reverse polarity protection | no / Complete |
| Output function | NO contact, 2-wire |
| Switching frequency | 0.3 kHz |
| **Mechanical data** | |
| Design | Rectangular, IKE |
| Dimensions | 30 x 14.6 x 28 mm |
| Housing material | Metal, GD-Zn |
| Active area material | Plastic, PA12-GF30 |
| Electrical connection | Connector, M12 × 1 |

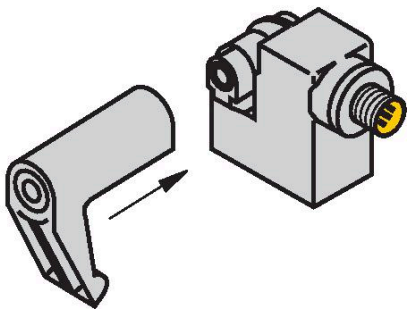
## Functional principle

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

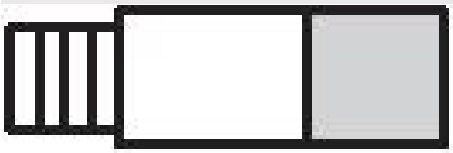


| Environmental conditions | |
|---|---|
| Ambient temperature | -25…+70 °C |
| Vibration resistance | 55 Hz (1 mm) |
| Shock resistance | 30 g (11 ms) |
| Protection class | IP67 |
| MTTF | 2283 years acc. to SN 29500 (Ed. 99) 40 °C |
| **Mounting on the following profiles** | |
| Cylindrical design | ◯ ## |
| Switching state | LED, Yellow |
| Included in delivery | KLI3 |



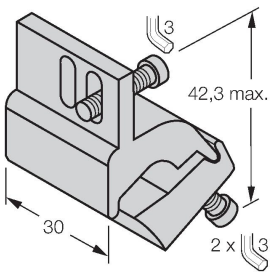
## Mounting instructions

| Mounting instructions/Description |
|---|



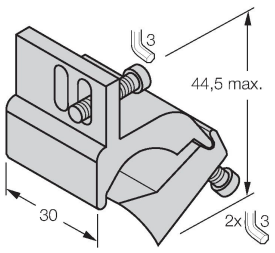
## Accessories

| KLI5Z | 6971803 |
|---|---|



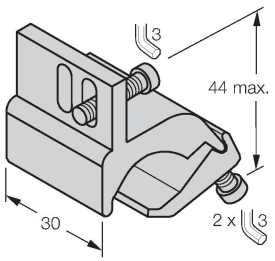

Mounting bracket for mounting magnetic field sensors on tie-rod cylinders; cylinder diameter: 32…63 mm; material: Aluminum

| KLI6Z | 6971806 |
|---|---|



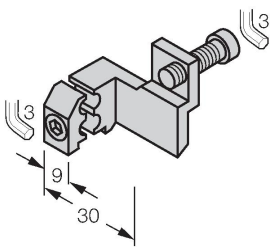

Mounting bracket for mounting magnetic field sensors on tie-rod cylinders; cylinder diameter: 50…125 mm; material: Aluminum

KLI6 6971805



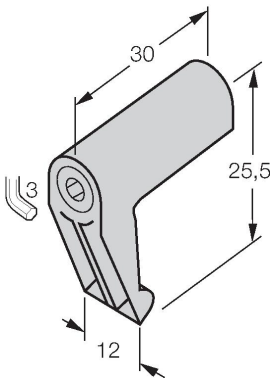

Mounting bracket for mounting magnetic field sensors on profile cylinders; cylinder diameter: 50…100 mm; material: Aluminum

KLI7 6971810



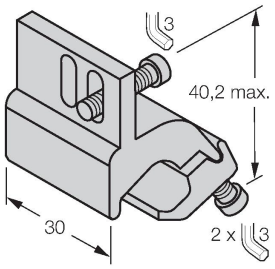

Mounting bracket for mounting magnetic field sensors on profile cylinders with external dovetail guide; cylinder diameter: 32…200 mm; material: Aluminum

KLI1 69710



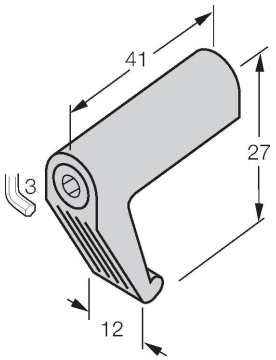

Mounting bracket for mounting magnetic field sensors on tie-rod cylinders; cylinder diameter: 32…100 mm; material: Die-cast Zinc

KLI5 6971802




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

KLI3 69712




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

BIM-IKE-AD4X-H1141 W/KLI3| 11/29/2022 09-09 | technical changes reserved