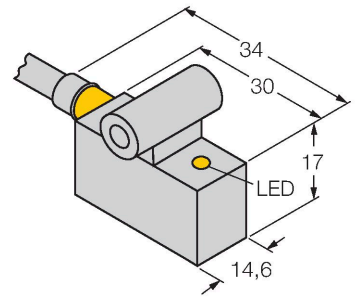
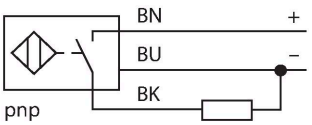
# BIM-IKT-AP6X 7M W/KLI3
# Magnetic Field Sensor – for pneumatic cylinders




## Features

- Rectangular, height 17 mm
- Metal, GD-Zn
- Magnetic-inductive sensor
- DC 3-wire, 10…30 VDC
- NO contact, PNP output
- Cable connection

## Wiring diagram




## Technical data

| | |
|---|---|
| Type | BIM-IKT-AP6X 7M W/KLI3 |
| ID | 4620097 |
| **General data** | |
| Pass speed | ≤ 10 m/s |
| Repeatability | ≤ ± 0.1 mm |
| Temperature drift | ≤ 0.1 mm |
| Hysteresis | ≤ 1 mm |
| **Electrical data** | |
| Operating voltage $U_B$ | 10…30 VDC |
| Ripple $U_{ss}$ | ≤ 10 % $U_{Bmax}$ |
| DC rated operating current $I_e$ | ≤ 200 mA |
| No-load current | ≤ 15 mA |
| Residual current | ≤ 0.1 mA |
| Isolation test voltage | 0.5 kV |
| Short-circuit protection | yes/Cyclic |
| Voltage drop at $I_e$ | ≤ 1.8 V |
| Wire break/reverse polarity protection | yes/Complete |
| Output function | 3-wire, NO contact, PNP |
| Switching frequency | 1 kHz |
| **Mechanical data** | |
| Design | Rectangular, IKT |
| Dimensions | 30 x 14.6 x 17 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.

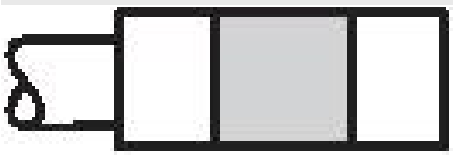
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## Technical data

| | |
|---|---|
| Electrical connection | Cable |
| Cable quality | Ø 5.2 mm, LifYY, PVC, 7 m |
| Core cross-section | 3 x 0.34 mm² |
| **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 |

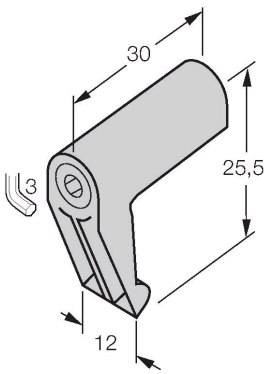
## Mounting instructions

Mounting instructions/Description



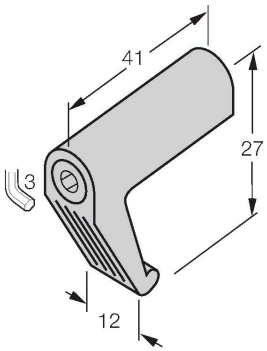
## Accessories

KLI1 69710




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

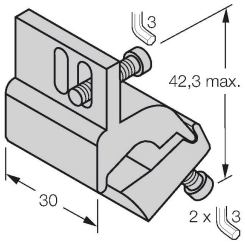
KLI3 69712




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

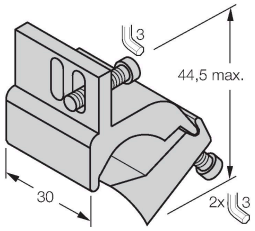
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| KLI5Z | 6971803 |
|---|---|



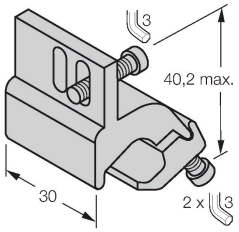

Mounting bracket for mounting magnetic field sensors on tie-rod cylinders; cylinder diameter: 32…63 mm; material: Aluminum

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



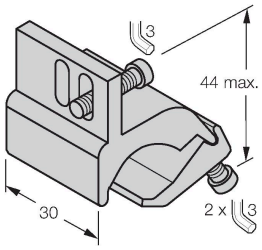

Mounting bracket for mounting magnetic field sensors on tie-rod cylinders; cylinder diameter: 50…125 mm; material: Aluminum

| KLI5 | 6971802 |
|---|---|



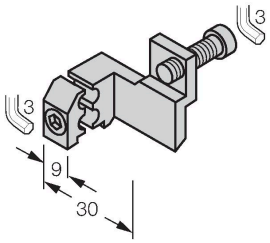

Mounting bracket for mounting magnetic field sensors on profile cylinders; cylinder diameter: 32…50 mm; material: Aluminum

| KLI6 | 6971805 |
|---|---|




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

| KLI7 | 6971810 |
|---|---|




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

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