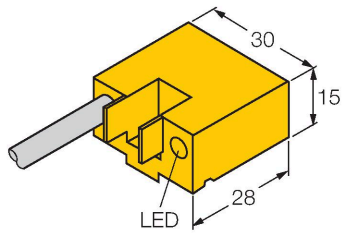
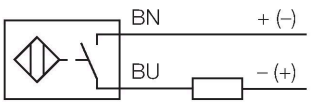
# BIM-AKT-AD4X 7M W/KLA1
# Magnetic Field Sensor – For Pneumatic Cylinders




## Features

- Rectangular, height 15mm
- Concentric active face
- Plastic, PA12-GF30
- Magnetic-inductive sensor
- DC 2-wire, 10…65 VDC
- NO contact
- Cable connection

## Wiring diagram




## Technical data

| | |
|---|---|
| Type | BIM-AKT-AD4X 7M W/KLA1 |
| ID | 4480095 |
| **General data** | |
| Pass speed | ≤ 3 m/s |
| Repeatability | ≤ ± 0.1 mm |
| Temperature drift | ≤ 0.1 mm |
| Hysteresis | ≤ 1 mm |
| **Electrical data** | |
| Operating voltage $U_B$ | 10…65 VDC |
| Ripple $U_{ss}$ | ≤ 10 % $U_{Bmax}$ |
| DC rated operating current $I_e$ | ≤ 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 break/reverse polarity protection | no/Complete |
| Output function | NO contact, 2-wire |
| Switching frequency | 0.3 kHz |
| **Mechanical data** | |
| Design | Rectangular, AKT |
| Dimensions | 28 x 30 x 15 mm |
| Housing material | Plastic, PA12-GF30 |
| Active area material | Plastic, PA12-GF30 |
| Electrical connection | Cable |

## 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.

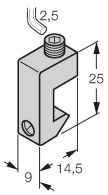
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## Technical data

| | |
|---|---|
| Cable quality | Ø 5.2 mm, LifYY, PVC, 7 m |
| Core cross-section | 2 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, Red |
| Included in delivery | KLA1 |

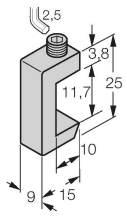
## Accessories

KLA1 69700



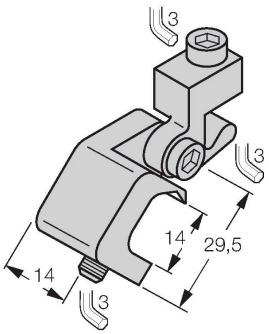

Mounting bracket for mounting magnetic field sensors on tie-rod cylinders; cylinder diameter 32… 50 mm, material: Anodized aluminum

KLA3 69702




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

KLA2 69701




Mounting bracket for mounting magnetic field sensors on tie-rod cylinders; cylinder diameter 40… 125 mm; material: Aluminum

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