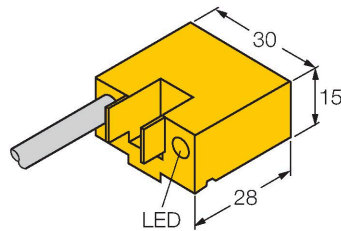


BIM-AKT-AD4X W/KLA3M

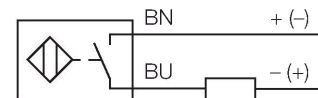
Magnetic Field Sensor – for pneumatic cylinders



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 W/KLA3M |
| Ident. no. | 4480093 |
| Pass speed | ≤ 3 m/s |
| Repeatability | ≤ ± 0.1 mm |
| Temperature drift | ≤ 0.1 mm |
| Hysteresis | ≤ 1 mm |
| Ambient temperature | -25...+70 °C |
| 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 _o | ≤ 4 V |
| Wire breakage/Reverse polarity protection | no / Complete |
| Output function | NO contact, 2-wire |
| Switching frequency | 0.3 kHz |
| Design | Rectangular, AKT |
| Dimensions | 28 x 30 x 15 mm |
| Housing material | Plastic, PA12-GF30 |
| Active area material | Plastic, PA12-GF30 |
| Electrical connection | Cable |
| Cable quality | Ø 5.2 mm, LifYY, PVC, 2 m |
| Core cross-section | 2 x 0.34 mm ² |

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

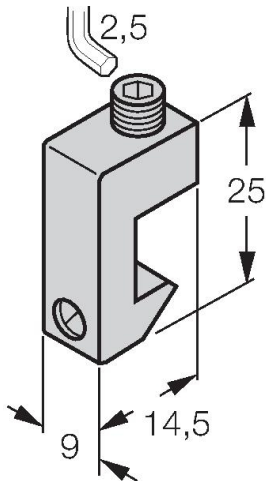
| | |
|----------------------|--|
| Vibration resistance | 55 Hz (1 mm) |
| Shock resistance | 30 g (11 ms) |
| Protection class | IP67 |
| MTTF | 2283 years acc. to SN 29500 (Ed. 99) 40 °C |

Mounting on the following profiles

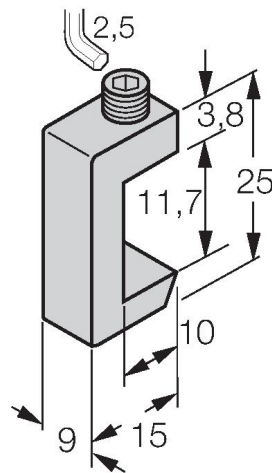
| | |
|--------------------|----------|
| Cylindrical design | # |
| Switching state | LED, Red |

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

