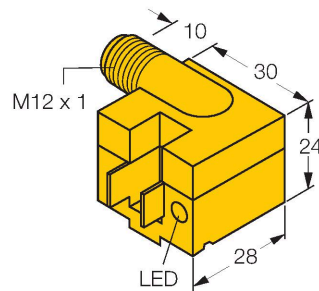


# BIM-AKT-AD4X-H1141 W/KLA1

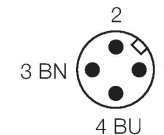
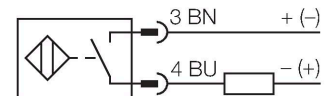
## Magnetic Field Sensor – For Pneumatic Cylinders



### Features

- Rectangular, height 24 mm
- Concentric active face
- Plastic, PA12-GF30
- Magnetic-inductive sensor
- DC 2-wire, 10...65 VDC
- NO contact
- Male connector M12 x 1

### Wiring diagram



### 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

Type	BIM-AKT-AD4X-H1141 W/KLA1
ID	4480290
<b>General data</b>	
Pass speed	≤ 3 m/s
Repeatability	≤ ± 0.1 mm
Temperature drift	≤ 0.1 mm
Hysteresis	≤ 1 mm
<b>Electrical data</b>	
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
<b>Mechanical data</b>	
Design	Rectangular, AKT
Dimensions	28 x 30 x 24 mm
Housing material	Plastic, PA12-GF30
Active area material	Plastic, PA12-GF30
Electrical connection	Connector, M12 x 1

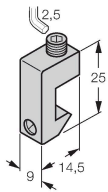
## Technical data

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, Red
Included in delivery	KLA1

## Accessories

KLA1

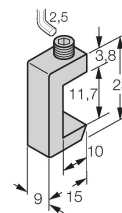
69700



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

KLA3

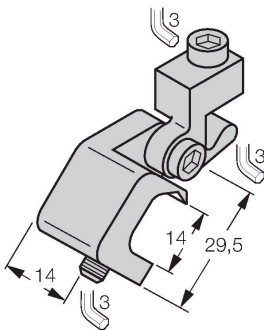
69702



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