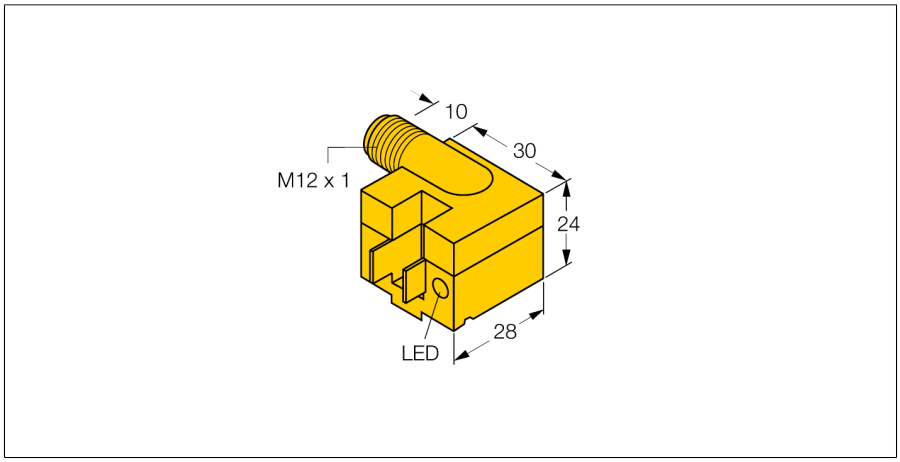
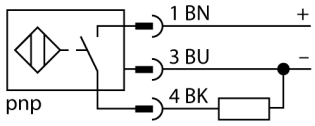
Magnetic Field Sensor
For Pneumatic Cylinders
BIM-AKT-AP6X-H1141 W/KLA-3M



- Rectangular, height 24 mm
- Concentric active face
- Plastic, PA12-GF30
- Magnetic-inductive sensor
- DC 3-wire, 10…30 VDC
- NO contact, PNP output
- Male connector, M12 x 1

Wiring Diagram



Type	BIM-AKT-AP6X-H1141 W/KLA-3M
ID	4675096
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
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, AKT
Dimensions	28 x 30 x 24 mm
Housing material	Plastic, PA12-GF30
Active area material	Plastic, PA12-GF30
Electrical connection	Connector, M12 × 1
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

Functional principle

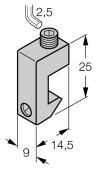
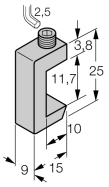
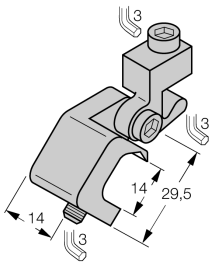
Magnetic field sensors are activated by magnetic fields and are especially suited for piston position detection in pneumatic cylinders. Based on the fact that magnetic fields can permeate non-magnetizable metals, it is possible to detect a permanent magnet attached to the piston through the aluminium wall of the cylinder.

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Mounting on the following profiles	
Cylindrical design	
Switching state	LED, Red
Included in delivery	KLA-3M

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Accessories

Type code	Ident-No.		Dimension drawing
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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