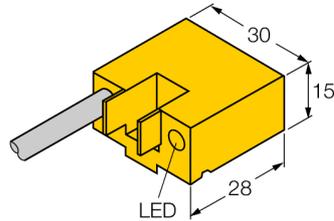
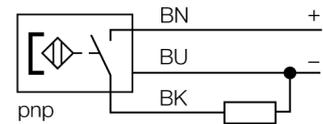


**Magnetic field sensor  
magnet-inductive proximity sensor  
BIM-AKT-AP6X/S235**



- Rectangular, height 15mm
- Concentric active face
- Plastic, PA12-GF30
- Increased sensitivity
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- Cable connection

**Wiring diagram**



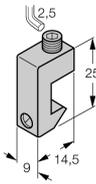
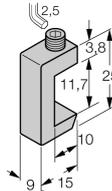
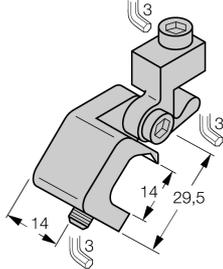
**Functional principle**

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.

<b>Type</b>	BIM-AKT-AP6X/S235
Ident-No.	4675021
<b>Pass speed</b>	≤ 10 m/s
Repeatability	≥ ± 0.1 mm
Temperature drift	≤ 0.1 mm
Hysteresis	≤ 1 mm
Ambient temperature	-25...+70 °C
<b>Operating voltage</b>	10...30VDC
Residual ripple	≤ 10 % U <sub>s</sub>
DC rated operational current	≤ 200 mA
No-load current I <sub>0</sub>	≤ 15 mA
Residual current	≤ 0.1 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes/ cyclic
Voltage drop at I <sub>0</sub>	≤ 1.8 V
Wire breakage / Reverse polarity protection	yes/ complete
Output function	3-wire, NO contact, PNP
Switching frequency	1 kHz
<b>Design</b>	rectangular, AKT
Dimensions	28 x 30 x 15 mm
Housing material	Plastic, PA12-GF30
Material active face	Plastic, PA12-GF30
Connection	cable
Cable quality	4 mm, grey, LifYY, PVC, 2 m
Cable cross section	3 x 0.25 mm <sup>2</sup>
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
MTTF	2283years acc. to SN 29500 (Ed. 99) 40 °C
Mounting on the following profiles	
<b>Switching state</b>	LED yellow

**Magnetic field sensor  
magnet-inductive proximity sensor  
BIM-AKT-AP6X/S235**

**Accessories**

Type code	Ident-No.	Short text	Dimension drawing
KLA1	69700	Mounting on tie-rod cylinders; for cylinder diameters of 32... 50 mm; material: Anodized aluminium	 <p>Technical drawing of the KLA1 mounting bracket. It is a rectangular block with a U-shaped cutout at the bottom. Dimensions: total height 25 mm, total width 14.5 mm, bottom cutout width 9 mm, and a small top protrusion of 2.5 mm.</p>
KLA3	69702	Mounting on tie-rod cylinders; for cylinder diameters of 32... 63 mm; material: Stainless steel	 <p>Technical drawing of the KLA3 mounting bracket. It is a rectangular block with a U-shaped cutout at the bottom. Dimensions: total height 25 mm, total width 15 mm, bottom cutout width 10 mm, a small top protrusion of 2.5 mm, and a distance of 11.7 mm from the bottom edge to the top of the cutout.</p>
KLA2	69701	Mounting on tie-rod cylinders; for cylinder diameters of 40... 125 mm; material: Metal GdZn	 <p>Technical drawing of the KLA2 mounting bracket. It is a larger, more complex bracket with a U-shaped cutout. Dimensions: total height 29.5 mm, total width 14 mm, bottom cutout width 14 mm, and a small top protrusion of 3 mm.</p>