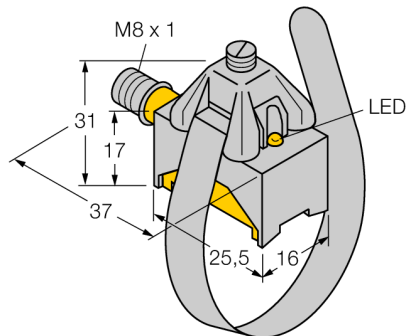


**Magnetic field sensor
for pneumatic cylinders
BIM-KST-AP6X-V1131 W/CLAMP**

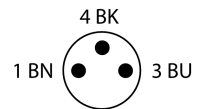
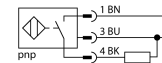
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- Rectangular, height 17 mm
- Front active face
- Metal/plastic, GD-Zn/Al/PA12-GF30
- Magnetic-inductive sensor
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- Male connector, M8 x 1

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.

Type designation	BIM-KST-AP6X-V1131 W/CLAMP
Ident-No.	46742
Ident-No (TUSA)	M4674200
Pass speed	≤ 10 m/s
Repeatability	≥ ± 0.1 mm
Temperature drift	≤ 0.1 mm
Hysteresis	≤ 1 mm
Ambient temperature	-25...+70 °C
Operating voltage	10...30 VDC
Residual ripple	≤ 10 % U _s
DC rated operational current	≤ 200 mA
No-load current I ₀	≤ 15 mA
Residual current	≤ 0.1 mA
Isolation test voltage	≤ 0.5 kV
Short-circuit protection	yes/ Cyclic
Voltage drop at I ₀	≤ 1.8 V
Wire breakage/Reverse polarity protection	yes/ Complete
Output function	3-wire, NO contact, PNP
Switching frequency	1 kHz
Design	Rectangular, KST
Dimensions	37 x 16 x 17 mm
Housing material	Metal/Plastic, GD-ZN/Al/PA12-GF30
Active area material	Plastic, PA12-GF30
Electrical connection	Connector, M8 x 1
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 yellow
Included in delivery	KST-SE, KST-MG, KST-SB170, KST-SB335

**Magnetic field sensor
for pneumatic cylinders
BIM-KST-AP6X-V1131 W/CLAMP**

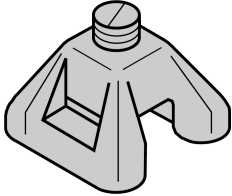
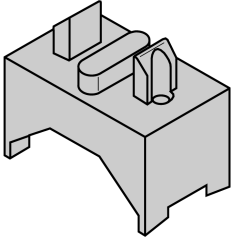
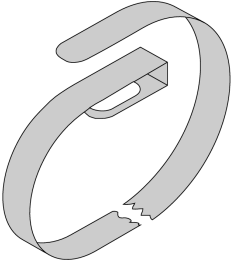


**Magnetic field sensor
for pneumatic cylinders
BIM-KST-AP6X-V1131 W/CLAMP**

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Accessories

Type code	Ident-No.	Description	
KST-SE	46736	Mounting on ○ cylinders; clamping element; material: Metall GD-Zn	
KST-MG	46735	Mounting on ○ round cylinders; metal housing; material: Metall GD-Zn	
KST-SB170	46737	Mounting on ○ cylinders; cylinder diameter 8...25 mm (material: Metal A2 1.4301 (AISI 304))	
KST-SB335	46738	Mounting on ○ cylinders; cylinder diameter 8...80 mm (material: Metal A2 1.4301 (AISI 304))	