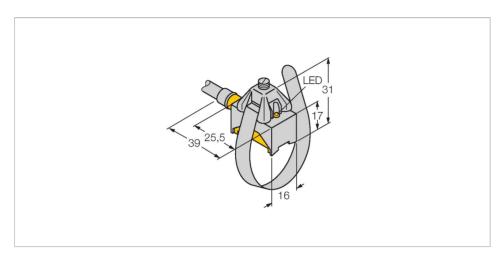


# BIM-KST-AN6X Magnetic Field Sensor – For Pneumatic Cylinders



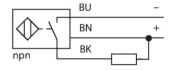
## Technical data

Type	BIM-KST-AN6X
ldent. no.	46741
Pass speed	≤ 10 m/s
Repeatability	≤ ± 0.1 mm
Temperature drift	≤ 0.1 mm
Hysteresis	≤ 1 mm
Ambient temperature	-25+70 ℃
Operating voltage	1030 VDC
Residual ripple	≤ 10 % U <sub>ss</sub>
DC rated operational current	≤ 200 mA
No-load current	≤ 15 mA
Residual current	≤ 0.1 mA
Isolation test voltage	≤ 0.5 kV
Short-circuit protection	yes / Cyclic
Voltage drop at I <sub>e</sub>	≤ 1.8 V
Wire breakage/Reverse polarity protection	yes / Complete
Output function	3-wire, NO contact, NPN
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	Cable
Cable quality	Ø 4 mm, Gray, LifYY, PVC, 2 m

#### **Features**

- 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, NPN 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 nonmagnetizable metals, it is possible to detect a permanent magnet attached to the piston through the aluminium wall of the cylinder.



## Technical data

Core 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	2283 years acc. to SN 29500 (Ed. 99) 40 °C
Mounting on the following profiles	
Cylindrical design	$\circ$
Switching state	LED, Yellow
Included in delivery	KST-SE, KST-MG, KST-SB170, KST-SB335

# Accessories

KST-SE 46736

Mounting bracket for mounting magnetic field sensors on round cylinders; clamping element; material: Metall GD-Zn

KST-MG

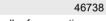


Metall GD-Zn

KST-SB170 46737



Clip collar for mounting magnetic field sensors on round cylinders; cylinder diameter 8...25 mm, material: Metal A2 1.4301 (AISI 304) KST-SB335





Clip collar for mounting magnetic field sensors on round cylinders; cylinder diameter 8...80 mm, material: Metal A2 1.4301 (AISI 304)