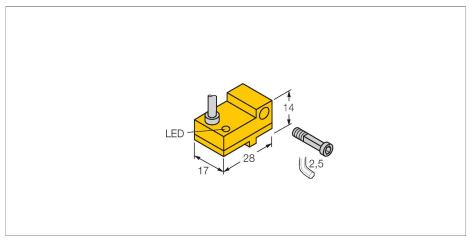


# BIM-NST-AP6X Magnetic Field Sensor – For Pneumatic Cylinders



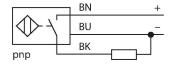
## Technical data

Туре	BIM-NST-AP6X
ID	4685600
General data	
	< 40 m/s
Pass speed	≤ 10 m/s
Repeatability	≤ ± 0.1 mm
Temperature drift	≤ 0.1 mm
Hysteresis	≤ 1 mm
Electrical data	
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, PNP
Switching frequency	1 kHz
Mechanical data	
Design	Rectangular, NST
Dimensions	28 x 17 x 14 mm
Housing material	Plastic, PA12-GF30
Active area material	Plastic, PA12-GF30
Electrical connection	Cable
Cable quality	Ø 4 mm, Gray, LifYY, PVC, 2 m
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## **Features**

- ■Plastic, PA12-GF30
- Magnetic-inductive sensor
- ■DC 3-wire, 10...30 VDC
- ■NO contact, PNP output
- Cable connection

## Wiring diagram



## Functional principle

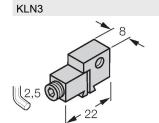
Magnetic field sensors are activated by magnetic fields and are especially suited for piston position detection in pneumatic cylinders. Based on the fact that magnetic fields can permeate non-magnetizable metals, it is possible to detect a permanent magnet attached to the piston through the aluminium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



### Technical data

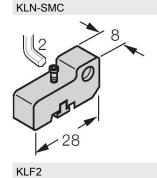
3 x 0.25 mm <sup>2</sup>
-25+70 °C
55 Hz (1 mm)
30 g (11 ms)
IP67
2283 years acc. to SN 29500 (Ed. 99) 40 °C
I I ###
LED, Yellow
1 x screw M3x20, 1 x tension bolt, 1 x spring washer

#### Accessories



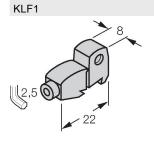
6970504

Mounting bracket for mounting magnetic field sensors on dovetail groove cylinders or T-groove cylinders; clamping width: 5.2... 13.5 mm; material: Anodized aluminum



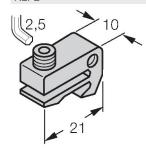
6970503

Mounting bracket for mounting magnetic field sensors on SMC cylinders; clamping width 4 mm; material: Anodized aluminum



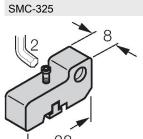
6970401

Mounting bracket for mounting magnetic field sensors on profile cylinders with external dovetail guide; for all cylinder diameters, material: Anodized aluminum



6970402

Mounting bracket for mounting magnetic field sensors on profile cylinders (IMI Norgren); cylinder diameter: 32...100 mm; material: Anodized aluminum



A3106

Mounting bracket for mounting magnetic field sensors on SMC cylinders; clamping width 4 mm; material: Anodized aluminum