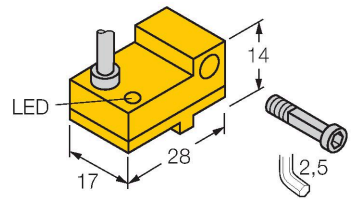
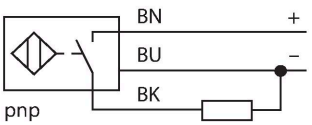
BIM-NST-AP6X
Magnetic Field Sensor – For Pneumatic Cylinders



Features

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

Wiring diagram



Technical data

Type	BIM-NST-AP6X
Ident. no.	4685600
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_{ss}
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_e	≤ 1.8 V
Wire breakage/Reverse polarity protection	yes / Complete
Output function	3-wire, NO contact, PNP
Switching frequency	1 kHz
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

Functional principle

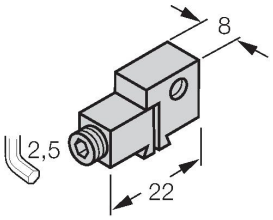
Magnetic field sensors are activated by magnetic fields and are especially suited for piston position detection in pneumatic cylinders. Based on the fact that magnetic fields can permeate non-magnetizable metals, it is possible to detect a permanent magnet attached to the piston through the aluminium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

Technical data

Core cross-section	3 x 0.25 mm²
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	1 x screw M3x20, 1 x tension bolt, 1 x spring washer

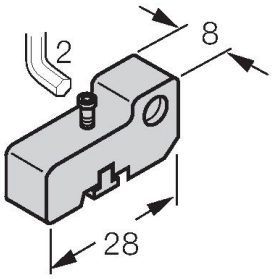
Accessories

KLN3 6970504



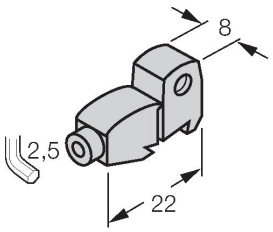
Mounting bracket for mounting magnetic field sensors on dovetail groove cylinders or T-groove cylinders; clamping width: 5.2… 13.5 mm; material: Anodized aluminum

KLN-SMC 6970503



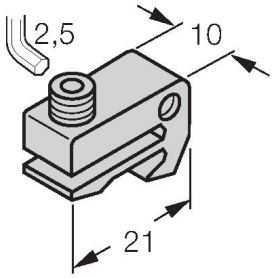
Mounting bracket for mounting magnetic field sensors on SMC cylinders; clamping width 4 mm; material: Anodized aluminum

KLF1 6970401



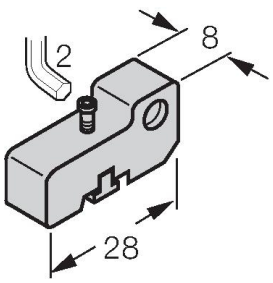
Mounting bracket for mounting magnetic field sensors on profile cylinders with external dovetail guide; for all cylinder diameters, material: Anodized aluminum

KLF2 6970402



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

SMC-325 A3106



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

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