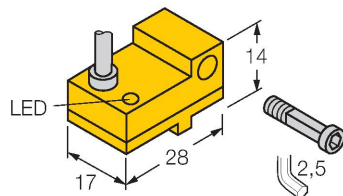


BIM-NST-RP6X/S235

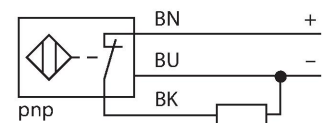
Magnetic Field Sensor – Magnetic-inductive Proximity Sensor



Features

- Plastic, PA12-GF30
- Increased sensitivity
- DC 3-wire, 10...30 VDC
- NC contact, PNP output
- Cable connection

Wiring diagram



Technical data

Type	BIM-NST-RP6X/S235
Ident. no.	4685512
Special version	S235 = BIM-...: Special calibration (increased sensitivity)
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	≤ 1.8 V
Wire breakage/Reverse polarity protection	yes / Complete
Output function	3-wire, NC 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
Core cross-section	3 x 0.25 mm ²
Vibration resistance	55 Hz (1 mm)

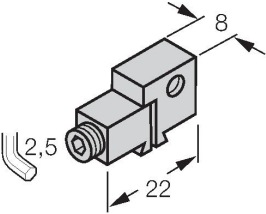
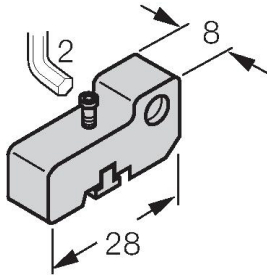
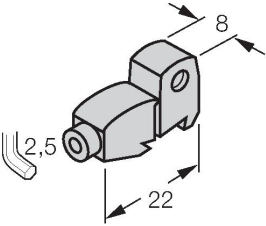
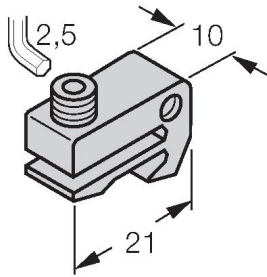
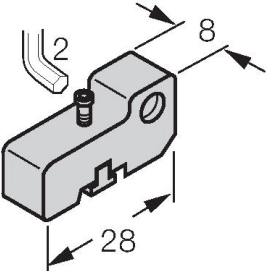
Functional principle

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

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		