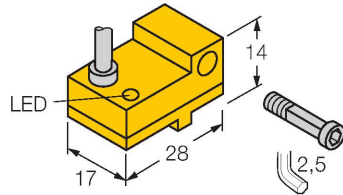


# BIM-NST-RP6X/S235

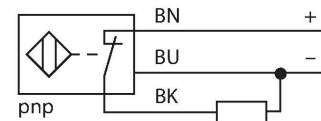
## Magnetic Field Sensor – Magnetic-inductive Proximity Sensor



### 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
ID	4685512
Special version	S235 Corresponds to:Special calibration (increased sensitivity)
<b>General data</b>	
Pass speed	≤ 10 m/s
Repeatability	≤ ± 0.1 mm
Temperature drift	≤ 0.1 mm
Hysteresis	≤ 1 mm
<b>Electrical data</b>	
Operating voltage $U_B$	10...30 VDC
Ripple $U_{ss}$	≤ 10 % $U_{Bmax}$
DC rated operating current $I_o$	≤ 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 $I_o$	≤ 1.8 V
Wire break/reverse polarity protection	yes/Complete
Output function	3-wire, NC contact, PNP
Switching frequency	1 kHz
<b>Mechanical data</b>	
Design	Rectangular, NST
Dimensions	28 x 17 x 14 mm

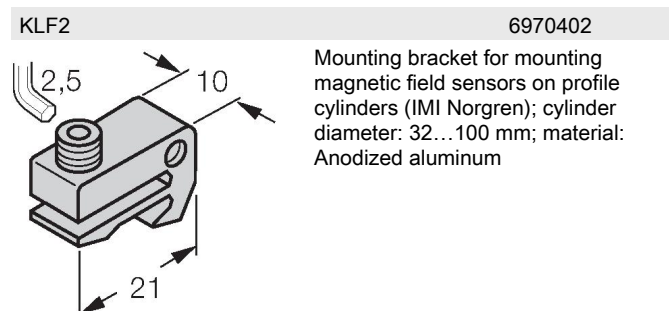
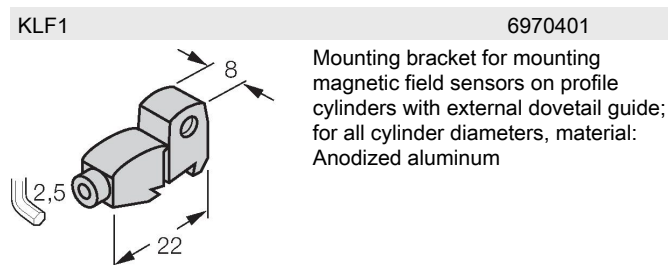
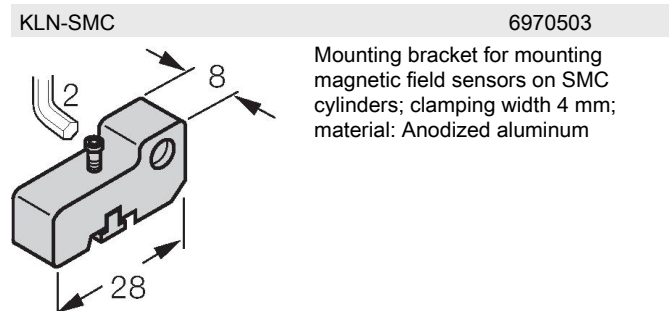
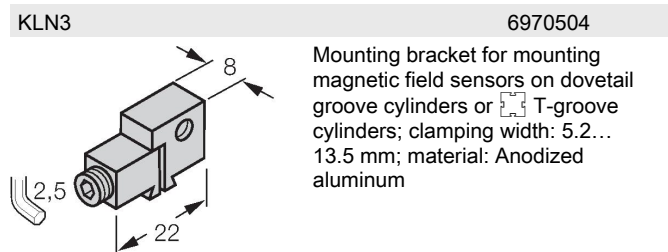
### Functional principle

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

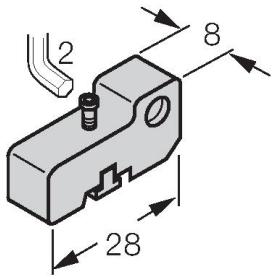
Housing material	Plastic, PA12-GF30
Active area material	Plastic, PA12-GF30
Electrical connection	Cable
Cable quality	Ø 4 mm, Gray, LifYY, PVC, 2 m
Core cross-section	3 x 0.25 mm <sup>2</sup>
<b>Environmental conditions</b>	
Ambient temperature	-25...+70 °C
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
MTTF	2283 years acc. to SN 29500 (Ed. 99) 40 °C
<b>Mounting on the following profiles</b>	
Cylindrical design	 # # #
Switching state	LED, Yellow
Included in delivery	1 x screw M3x20, 1 x tension bolt, 1 x spring washer

## Accessories



SMC-325

A3106



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