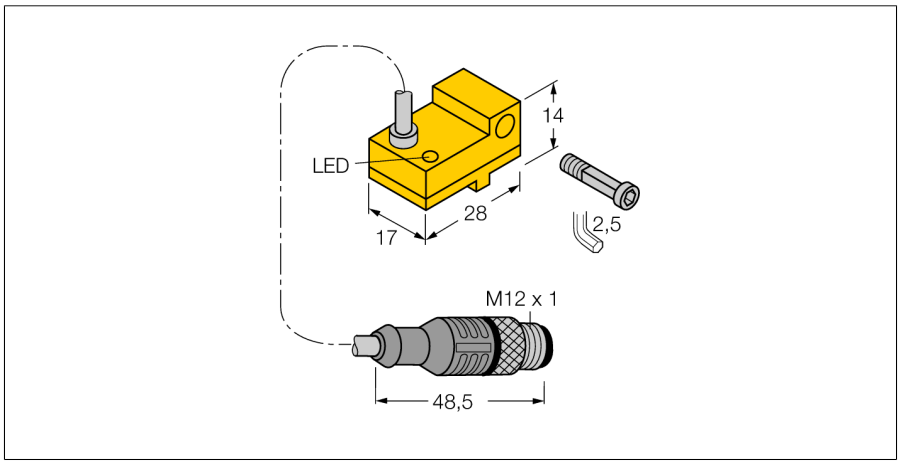
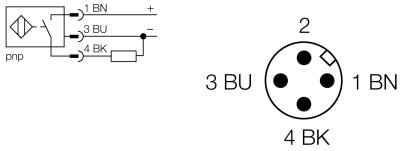
Magnetic field sensor
for pneumatic cylinders
BIM-NST-AP6X-0,2XOR-RS4



- **Rectangular, height 6mm**
- **Plastic, PA12-GF30**
- **Magnetic-inductive sensor**
- **DC 3-wire, 10…30 VDC**
- **NO contact, PNP output**
- **Pigtail with male end, M12 x 1**

Wiring diagram



Type code	BIM-NST-AP6X-0,2XOR-RS4
Ident no.	4685601
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…30VDC
Residual ripple	≤ 10 % U_{ss}
DC rated operational current	≤ 200 mA
No-load current I_0	≤ 15 mA
Residual current	≤ 0.1 mA
Rated insulation 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, PA
Material active face	Plastic, PA
Connection	cable with connector, M12 x 1
Cable quality	5.2 mm, LifXX, PVC, 0.2 m
Cable cross section	3 x 0.34 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 scope of supply	1 x screw M3x20, 1 x tension bolt, 1 x spring washer

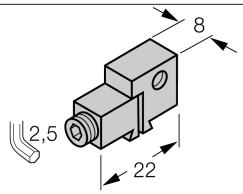
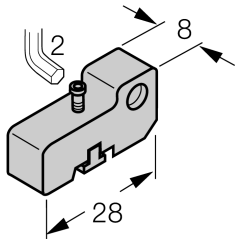
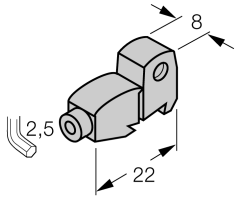
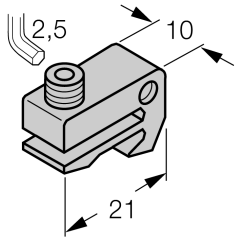
Functional principle

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.

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Accessories

Type code	Ident no.	Description	Dimension drawing
KLN 3 KLEMMSTÜCK	6970504	Mounting on Dovetail groove cylinders or T-groove cylinders; clamping width 5.2…13.5 mm; material: Anodized aluminium	
KLN-SMC KLEMMSTÜCK	6970503	Mounting on SMC cylinders; clamping width 4 mm; material: Anodized aluminium	
KLF 1 KLEMMSTÜCK	6970401	Mounting on external dovetail grooves; for all cylinder diameters, material: Anodized aluminium	
KLF 2 KLEMMSTÜCK	6970402	Mounting on external dovetail grooves (IMI Norgrem); for all cylinder diameters, material: Anodized aluminium	

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