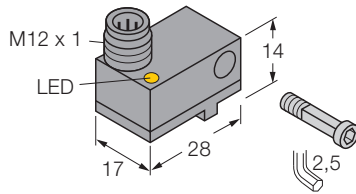
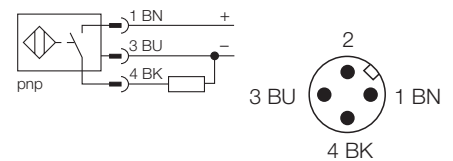


magnetic field sensor for pneumatic cylinders (magnetic-field immune) BIM-NST-AP6X-H1141/S34



- rectangular, height 6mm
- plastic, PA12-GF30
- Magnetic-inductive sensor
- weld-field immune to AC fields of 50...60 Hz
- 3-wire DC, 10...30 VDC
- normally open, pnp output
- connector, M12 x 1

Wiring diagram



Functional principle

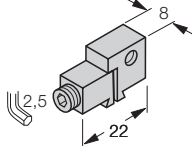
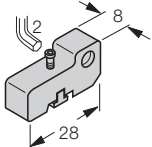
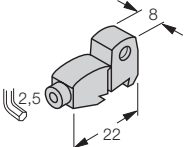
Magnetic field sensors are activated by magnetic fields and are especially suited for piston position detection in pneumatic cylinders. Based on the fact that magnetic fields can permeate non-magnetizable metals, it is possible to detect a permanent magnet attached to the piston through the aluminium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

Weld-field immune permapprox sensors "freeze" the switching status when detecting a magnetic AC field (50..60 Hz). Consequently, false switching operations are prevented during the welding process. When the AC field disappears, the sensors resume standard operation.

Type	BIM-NST-AP6X-H1141/S34
Ident-No.	4685401
Pass speed	≤ 1 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	≤ 1.8V
Wire breakage / Reverse polarity protection	yes / complete
Output function	3-wire, normally open, pnp
Switching frequency	≤ 0.02 kHz
Housing	rectangular, NST
Dimensions	28 x 17 x 14 mm
Housing material	plastic, PA12-GF30
Material active face	plastic, PA12-GF30
Connection	Connectors, M12 x 1
Vibration resistance	55 Hz (1 mm)
Shock resistance	30g (11 ms)
Degree of protection	IP67
Mounting on the following profiles	
Display switch state	LED yellow
Included in scope of supply	1 x screw M3x20, 1 x tension bolt, 1 x spring washer

**magnetic field sensor
for pneumatic cylinders (magnetic-field immune)
BIM-NST-AP6X-H1141/S34**

Accessories

Type code	Ident-No.	Short text	Dimension drawing
KLN3	6970504	mounting on  dovetail groove cylinders or  T-groove cylinders; clamping width 5.2...13.5 mm; material: anodized aluminium	
KLN-SMC	6970503	mounting on  SMC cylinders; clamping width 4 mm; material: anodized aluminium	
KLF1	6970401	mounting on  external dovetail grooves; for all cylinder diameters, material: anodized aluminium	
KLF2	6970402	mounting on  external dovetail grooves (IMI Norgrem); for all cylinder diameters, material: anodized aluminium	