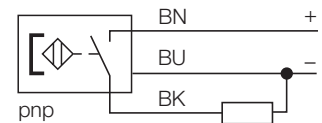


- rectangular, height 6mm
- plastic, PA12-GF30
- magnet-inductive sensor
- 3-wire DC, 10..0.30 VDC
- normally open, pnp output
- cable connection

**Wiring diagram**



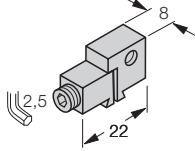

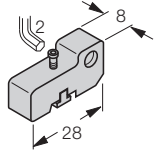

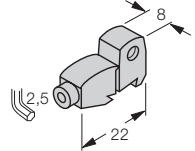

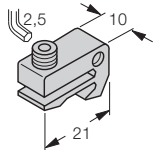


**Function principle**

Magnetic field sensors are actuated 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.

|   |  |
|---|--|
| <b>Type</b>                                 | BIM-NST-AP6X   |
| Ident-No.                                   | 4685600  |
| <b>Pass speed</b>                           | ≤ 10 m/s   |
| Hysteresis                                  | ≤ 1 mm   |
| Temperature drift                           | ≤ 0.1 mm   |
| Repetition accuracy                         | ≥ ± 0.1 mm   |
| Ambient temperature                         | -25...+ 70 °C  |
| <b>Operating voltage</b>                    | 10... 30 V DC  |
| Residual ripple                             | ≤ 10 % U <sub>SS</sub>                               |
| DC rated operational current                | ≤ 200 mA   |
| No-load current I <sub>0</sub>              | ≤ 15 mA  |
| Residual current                            | ≤ 0.1 mA   |
| Switching frequency                         | ≤ 1 kHz  |
| Rated insulation voltage                    | ≤ 0.5 kV   |
| Output function                             | 3-wire, normally open, pnp                           |
| Short-circuit protection                    | yes / cyclic   |
| Voltage dip at I <sub>e</sub>               | ≤ 1.8 V  |
| Wire breakage / reverse polarity protection | yes / complete                                       |
| <b>Housing style</b>                        | rectangular; NST                                     |
| Dimensions                                  | 28x 17x 14mm   |
| Housing material                            | plastic, plastic, PA12-GF20                          |
| Material active area                        | plastic, PA12-GF30                                   |
| Connection                                  | cable  |
| cable quality                               | Ø 4, grey, LifYY, PVC, 2 m                           |
| Cable cross section                         | 3 x 0.25 mm <sup>2</sup>                             |
| Litz  | 65 x 0.07 mm <sup>2</sup>                            |
| Vibration resistance                        | 55 Hz (1 mm)   |
| Shock resistance                            | 30g (11 ms)  |
| Protection degree                           | IP67   |
| <b>Mounting on the following profiles</b>   |  |
| <b>Switch state display</b>                 | LED yellow   |
| Included in scope of supply                 | 1 x screw M3x20, 1 x tension bolt, 1 x spring washer |

**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   |  |