

| | | |
|----------|---|----------------------------|
| design | 6.2 x 6.3 x 30mm 10.1 x 22 x 23mm 9.6 x 16 x 22mm | |
| T-groove | sensor surface | border area middle area |



- ✓ easy mounting
- ✓ high sampling accuracy at low hysteresis
- ✓ integrated amplifier
- ✓ high sampling frequency
- ✓ LED display
- ✓ connection with cable, M8- or M12-connector
- ✓ robust metal housing (vibration proof)

**electronic microsensor
shock proof and wear resistant**



description

With automatic machines there is often the requirement to retain a switch signal for certain piston positions of a pneumatic cylinder. For this, magnetic cylinder sensors are used.

These magnetic sensors enable contactless position recognition in the control system in a way which avoids wear and tear.

Magnetic cylinder sensors offer a higher sensing range and at the same time, have a small design.

As magnetic fields penetrate all non-magnetizable materials, the sensor magnets can for example sense through non-ferrous metal walls, steel walls or aluminium walls.

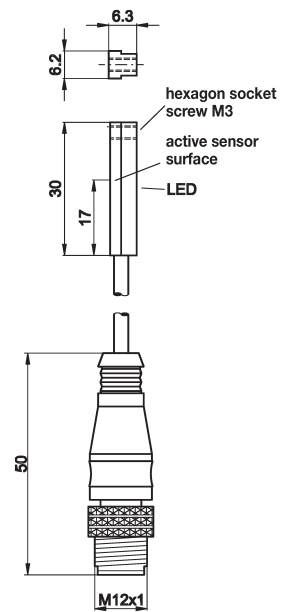
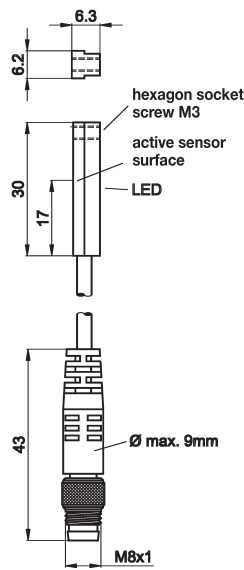
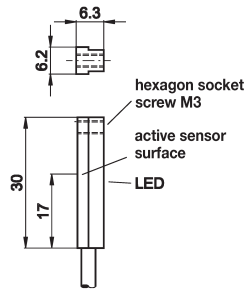
The electronic cylinder sensors can be used on all cylinders made by leading manufacturers (Bosch, Festo, Norgren Martonair, Numatics) and are directly exchangeable against three-wire system technology reed switches.

To keep the same position when exchanging a cylinder sensor the positive stop **AM000076** is offered as an accessory.

application examples

- ▶ detecting the position of a cylinder piston
- ▶ limit of travel enquiry

| | | | |
|-------------|--------------|-------------------------|--------------------------|
| article-no. | MZ0701A4 | MZ070174 | MZ070124 |
| connection | 2m PUR cable | 0.3m M8-cable connector | 0.3m M12-cable connector |
| article-no. | - | MZ0701F4 | MZ0701E4 |
| connection | - | 0.6m M8-cable connector | 0.6m M12-cable connector |
| article-no. | - | MZ0701K4 | - |
| connection | - | 1.0m M8-cable connector | - |
| article-no. | - | - | MZ0701U4 |
| connection | - | - | 2.0m M12-cable connector |



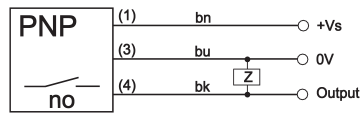
TECHNICAL DATA

| | | | |
|---------------------------------|----------------------|----------------------------------|----------------------------------|
| sensor surface (active) | border area | border area | middle area |
| output signal | pnp, no | pnp, no | pnp, no |
| operating voltage | 10 ... 30V DC | 10 ... 30V DC | 10 ... 30V DC |
| current consumption (w/o load) | ≤ 15mA | ≤ 15mA | ≤ 15mA |
| output current (max. load) | 200mA | 200mA | 200mA |
| voltage drop (max. load) | 2.0V DC | 2.0V DC | 2.0V DC |
| hysteresis | typical 1mm | typical 1mm | typical 1mm |
| repeatability | ±0.1mm | ±0.1mm | ±0.1mm |
| sampling frequency | 1kHz | 1kHz | 1kHz |
| display (signal) | yellow LED | yellow LED | yellow LED |
| short-circuit protection | + | + | + |
| reverse polarity protection | + | + | + |
| housing material | zinc diecast | zinc diecast | zinc diecast |
| design | 6.2x6.3x30mm | 6.2x6.3x30mm | 6.2x6.3x30mm |
| operating temperature | -25 ... +75°C | -25 ... +75°C | -25 ... +75°C |
| system of protection (EN 60529) | IP67 | IP67 | IP67 |
| connection | 2m PUR-cable, 3-wire | M8-connector, 3-pin | M12-connector, 3-pin |
| connection accessories | - | e.g. VK200075, 2m, PUR, straight | e.g. VK200025, 2m, PUR, straight |
| mounting accessories | AM000076 | AM000076 | AM000076 |

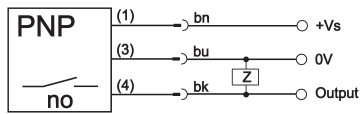
| article-no. | MZ070125 | MZ070175 |
|---------------------------------|--|--|
| connection | M12-connector | M8-connector |
| | | |
| TECHNICAL DATA | | |
| sensor surface (active) | border area | border area |
| output signal | pnp, no | pnp, no |
| operating voltage | 10 ... 30V DC | 10 ... 30V DC |
| current consumption (w/o load) | ≤ 15mA | ≤ 15mA |
| output current (max. load) | 200mA | 200mA |
| voltage drop (max. load) | 2.0V DC | 2.0V DC |
| hysteresis | typical 1mm | typical 1mm |
| repeatability | ±0.1mm | ±0.1mm |
| sampling frequency | 1kHz | 1kHz |
| display (signal) | yellow LED | yellow LED |
| short-circuit protection | + | + |
| reverse polarity protection | + | + |
| housing material | zinc diecast | zinc diecast |
| design | 10.1x22x23mm | 9.6x16x22mm |
| operating temperature | -25 ... +75°C | -25 ... +75°C |
| system of protection (EN 60529) | IP67 | IP67 |
| connection | M12-connector, 3-pin | M8-connector, 3-pin |
| connection accessories | e.g. VK200025 , 2m, PUR, straight | e.g. VK200075 , 2m, PUR, straight |
| mounting accessories | AM000076 | AM000076 |

connector

connector device

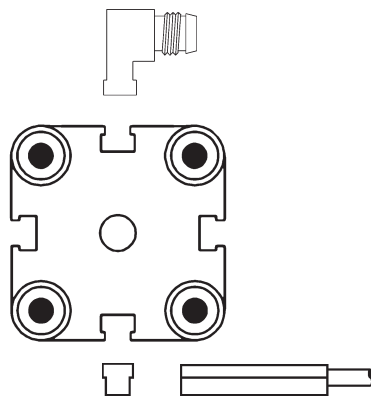


connector device

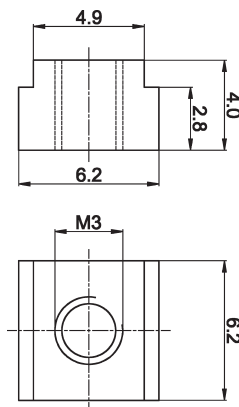


wire colors: bn = brown (1), bu = blue (3), bk = black (4)

mounting



positive stop AM000076



ACCESSORIES

| article-no. | description | material |
|-------------|----------------------------|----------|
| AM000076 | positive stop for T-groove | zinc |

This data sheet contains the standard versions only. Kindly request the availability of other output- and connection functions.

We will be pleased to supply the matching cable socket for your devices with connector. Please refer to the list in catalog chapter "accessories" under "cable sockets **ipf-SENSORFLEX**" or search our website www.ipf-electronic.com for "VK".

Warning: Never use these devices in applications where the safety of a person depends on their functionality.