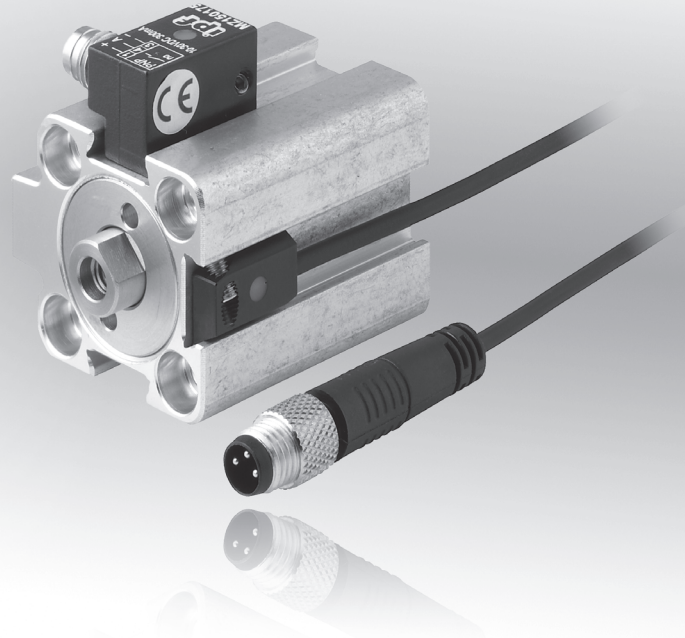


design 13.5 x 13.5 x 20mm
 11.8 x 4.5 x 16.5mm

dovetailed tenon sensor surface border area
 middle area



- ✓ easy mounting from above
- ✓ independent from cylinder manufacturer
- ✓ shock- and vibration proof
- ✓ operating temperature up to +130°C
- ✓ high sampling accuracy at low hysteresis
- ✓ high sampling frequency
- ✓ status display by LED
- ✓ connection with cable or M8-connector

**electronic cylinder switch
robust metal housing**



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. They are used everywhere where inductive sensors reach their limits.

Compared with inductive sensors, magnetic cylinder sensors offer a significantly higher sensing range and at the same time, have a smaller design.

As magnetic fields penetrate all non-magnetizable materials,

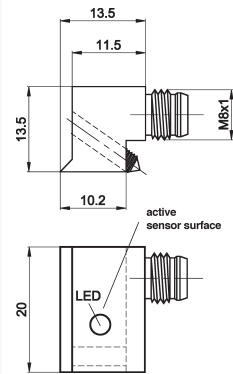
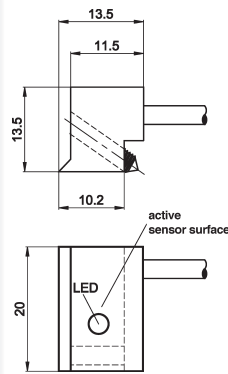
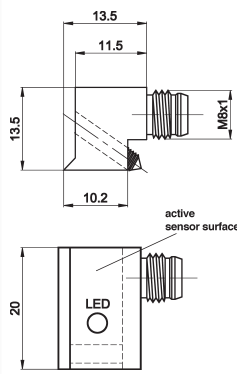
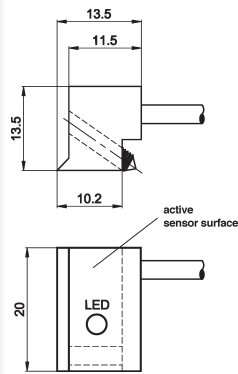
the sensor magnets can for example sense through non-ferrous metal walls, steel walls, aluminium walls, plastic walls or wooden walls.

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.

application examples

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

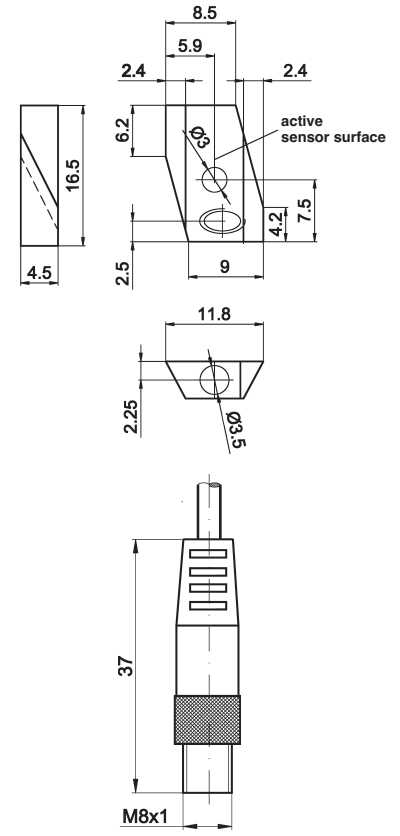
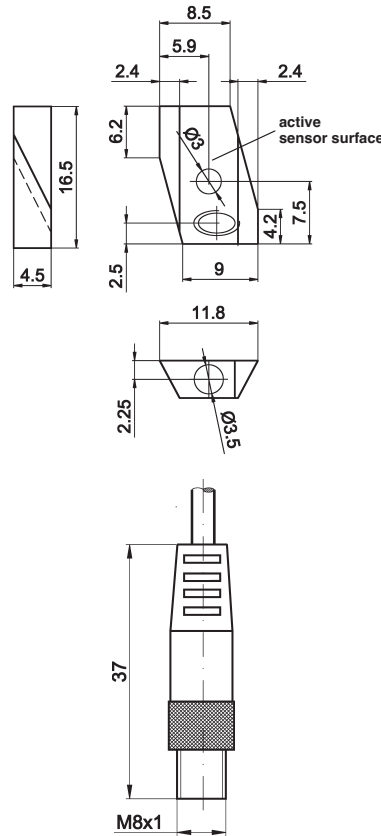
article-no.	MZ150103	MZ150173	MZ150105	MZ150175
sensor surface	border area	border area	middle area	middle area
operating temperature	-25 ... +75°C	-25 ... +75°C	-25 ... +75°C	-25 ... +75°C
connection	2m PUR-cable	M8-connector	2m PUR-cable	M8-connector



TECHNICAL DATA

sensor surface (active)	border area	border area	middle area	middle area
output signal	pnp, no	pnp, no	pnp, no	pnp, no
operating voltage	10 ... 30V DC	10 ... 30V DC	10 ... 30V DC	10 ... 30V DC
current consumption (w/o load)	≤ 15mA	≤ 15mA	≤ 15mA	≤ 15mA
output current (max. load)	150mA	150mA	150mA	150mA
voltage drop (max. load)	2.0V DC	2.0V DC	2.0V DC	2.0V DC
hysteresis	typ. 1mm	typ. 1mm	typ. 1mm	typ. 1mm
repeatability	±0.1mm	±0.1mm	±0.1mm	±0.1mm
sampling frequency	1kHz	1kHz	1kHz	1kHz
status display	yellow LED	yellow LED	yellow LED	yellow LED
short-circuit protection	+	+	+	+
reverse polarity protection	+	+	+	+
housing material	zinc diecast	zinc diecast	zinc diecast	zinc diecast
design	13.5x13.5x20mm	13.5x13.5x20mm	13.5x13.5x20mm	13.5x13.5x20mm
operating temperature	-25 ... +75°C	-25 ... +75°C	-25 ... +75°C	-25 ... +75°C
system of protection (EN 60529)	IP67	IP67	IP67	IP67
connection	2m PUR-cable, 3-wire	M8-connector, 3-pin	2m PUR-cable, 3-wire	M8-connector, 3-pin
connection accessories	-	e.g. VK200071, 2m, PUR, angular	-	e.g. VK200071, 2m, PUR, angular

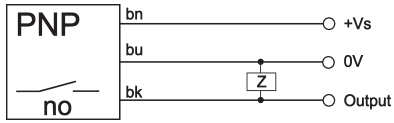
article-no.	MZ150156	MZ150176
sensor surface	middle area	middle area
operating temperature	-25 ... +120°C	-25 ... +75°C
connection	M8-cable connector, teflon cable, length 600mm	M8-cable connector, PUR-cable, length 300mm



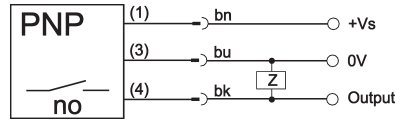
TECHNICAL DATA		
sensor surface (active)	middle area	middle area
output signal	pnp, no	pnp, no
operating voltage	10 ... 30V DC	10 ... 30V DC
current consumption (w/o load)	≤ 15mA	≤ 15mA
output current (max. load)	150mA	150mA
voltage drop (max. load)	2.0V DC	2.0V DC
hysteresis	typ. 1mm	typ. 1mm
repeatability	±0.1mm	±0.1mm
sampling frequency	1kHz	1kHz
status display	yellow LED	yellow LED
short-circuit protection	+	+
reverse polarity protection	+	+
housing material	aluminium	aluminium
design	11.8x4.5x16.5mm	11.8x4.5x16.5mm
operating temperature	-25 ... +120°C	-25 ... +75°C
system of protection (EN 60529)	IP67	IP67
connection	M8-cable connector, 3-pin	M8-cable connector, 3-pin
connection accessories	e.g. VK200075 , 2m, PUR, straight	e.g. VK200075 , 2m, PUR, straight

connection

cable device

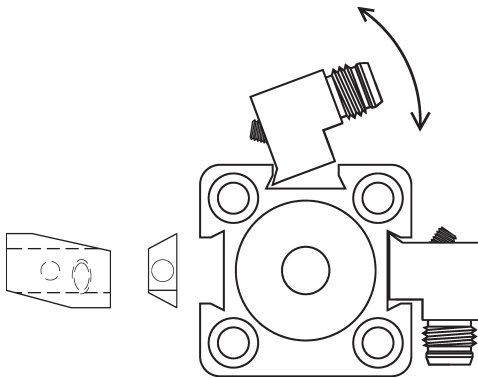


connector device



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

mounting



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 for "VK".

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