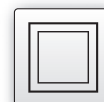
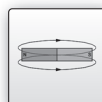


design	30 x 30 x 23mm 37.3 x 30 x 25.4mm 40.8 x 30 x 33.5mm	
pull-rod	clamping width	10mm 14mm 18mm



- ✓ simple mounting
- ✓ high sampling accuracy at small hysteresis
- ✓ shock and vibration resistant
- ✓ integrated amplifier
- ✓ high sampling frequency
- ✓ status display by LED
- ✓ connection with cable and M12-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.

Magnetic cylinder sensors offer a high 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 and 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.

application examples

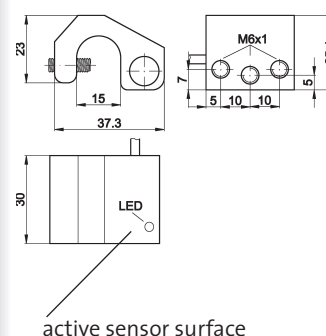
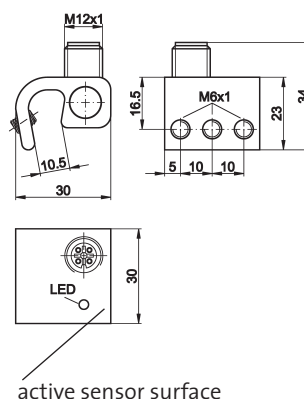
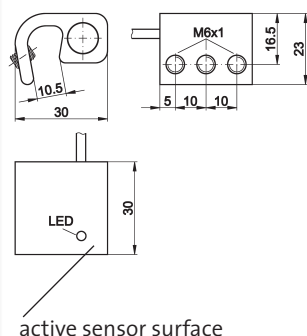
- ▶ detecting the position of a cylinder piston
- ▶ limit of travel enquiry

article-no.
clamping width
connection

MZ310100
10mm
2m cable

MZ310120
10mm
connector

MZ380100
14mm
2m cable



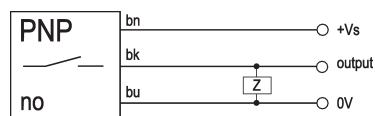
TECHNICAL DATA

sensor surface (active)	border area	border area	border 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)	≤ 10mA	≤ 10mA	≤ 10mA
output current (max. load)	300mA	300mA	300mA
voltage drop (max. load)	1.5V DC	1.5V DC	1.5V DC
hysteresis	typical 1mm	typical 1mm	typical 1mm
repeat accuracy	±0.1mm	±0.1mm	±0.1mm
sampling frequency	5kHz	5kHz	5kHz
status display	LED yellow	LED yellow	LED yellow
short-circuit protection	+	+	+
reverse polarity protection	+	+	+
housing material	aluminium	aluminium	aluminium
design	30x30x23mm	30x30x34mm	37.3x30x25.4mm
operating temperature	-25 ... +75°C	-25 ... +75°C	-25 ... +75°C
system of protection (EN 60529)	IP67	IP67	IP67
connection	2m cable, 3-wire	M12-connector, 3-pin	2m cable, 3-wire
connection accessories	-	e.g. VK200021, 2m, PUR, angular	-

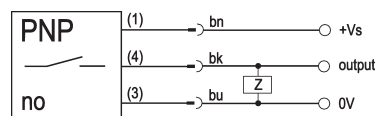
article-no.	MZ380120	MZ410100	MZ410120
clamping width	14mm	18mm	18mm
connection	connector	2m cable	connector
	<p>active sensor surface</p>	<p>active sensor surface</p>	<p>active sensor surface</p>
TECHNICAL DATA			
sensor surface (active)	border area	border area	border area
output signal	pnp, no	pnp, no	pnp, no
operating voltage	10 ... 30V DC	10 ... 30V DC	10 ... 30V DC
current consumption (w/o load)	≤ 10mA	≤ 10mA	≤ 10mA
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repeat accuracy	±0.1mm	±0.1mm	±0.1mm
sampling frequency	5kHz	5kHz	5kHz
status display	LED yellow	LED yellow	LED yellow
short-circuit protection	+	+	+
reverse polarity protection	+	+	+
housing material	aluminium	aluminium	aluminium
design	42x30x30mm	40.8x30x33.5mm	53x30x33.5mm
operating temperature	-25 ... +75°C	-25 ... +75°C	-25 ... +75°C
system of protection (EN 60529)	IP67	IP67	IP67
connection	M12-connector, 3-pin	2m PUR-cable, 3-wire	M12-connector, 3-pin
connection accessories	e.g. VK200021, 2m, PUR, angular	-	e.g. VK200021, 2m, PUR, angular

connection

cable device

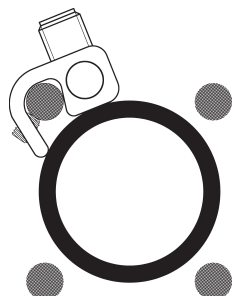


connector device



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

mounting on pull-rod cylinders



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.