



Magnetic cylinder sensors  
Detecting piston positions with precision

# Magnetic cylinder sensors

## Precise, rugged and durable

### Highlights

- Precision – The sensors' operation point has been precisely defined and each sensor is examined individually
- Rugged - Compact, rugged plastic housing offering IP 67 and PUR cable
- Durable – PNP or NPN outputs exhibit a significantly longer service life when compared with Reed contacts
- Economical – Cable or mating version with rotating cap nut
- Universal – The extensive variety of accessories provided can be applied in an optimal manner in the wide range of cylinders

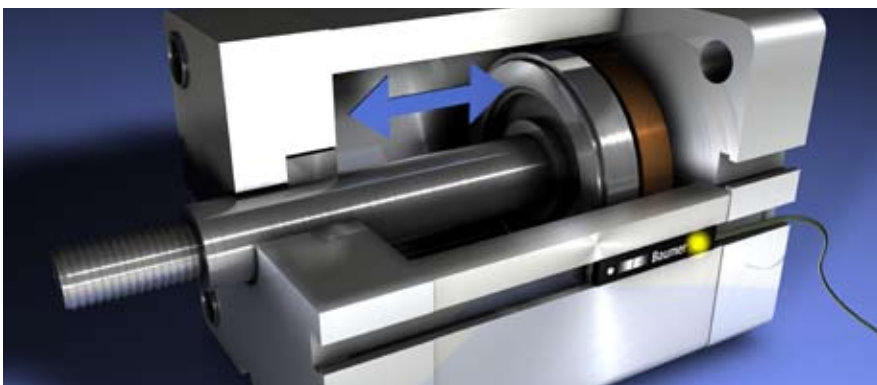
### Your benefit

- Reproducible switching behavior guarantees precise switch positioning and fast, simple installation
- The sensors operate with extreme reliability under even the harshest industrial conditions such as humidity, dirt or vibration
- Install and forget – Baumer cylinder sensors reduce your stock maintenance expenses
- Plug-in or cable connection? You decide based on your cabling design
- C and T slot sensors can be employed for a wide variety of applications – thus eliminating expensive special designs.



### How do magneto-resistive cylinder sensors work?

Permanent magnets are installed in the piston ring of the pneumatic cylinder and are then detected by the cylinder sensor through the nonmagnetic cylinder wall. As the piston moves towards the sensor, its output switches. An LED integrated in the sensor indicates the switch state.



# Magnetic cylinder sensors for all cylinders

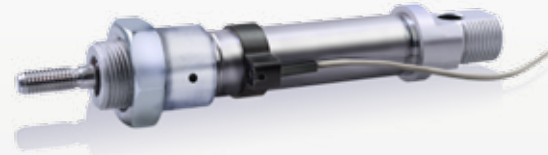
## Cylinders with T and C slots

For those cylinders equipped with standard T or C slots, sensors can be installed directly in the slot. A version capable of being installed in the slot directly from above is available for T slot sensors.



## Round cylinders

Mounting straps are available for round cylinders. Standard C and T slot sensors can be used in conjunction with the available adapters.



## Cylinders with tie-rods

Using a mounting bracket, both C and T slot sensors can be quickly and simply installed on cylinders equipped with tie rods.

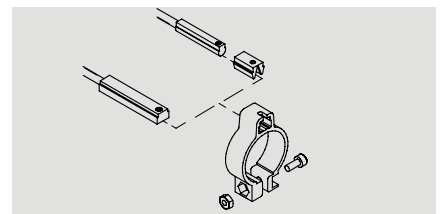


## A defining detail – accessories

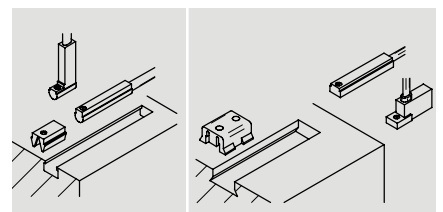
The variety of cylinders and the different sensor fastening methods are both extremely large. The available accessories play a decisive role in keeping this broad sensor variety manageable. A range of adapters and fastening clamps allow the same sensors to be used with many different kinds of cylinders, thus also significantly reducing warehouse administration expenses.



Fastening clamps for round cylinders



Adapters for T slots or for swallowtail slots



# The most important technical features

	C slot sensors		T slot sensors		
					
	MZCK 03x1011	MZCK 03x1012	MZTK 06x1011	MZTK 06x1012	MZTK 06x1013
Nominal operation point	4 mT	4 mT	4 mT	2 mT	4 mT
Switch state indicator	LED yellow	LED yellow	LED yellow	LED yellow	LED yellow
Max. switching frequency	200 kHz	200 kHz	200 kHz	200 kHz	200 kHz
Cable output	axial	lateral	axial	lateral	axial
Protection class	IP 67	IP 67	IP 67	IP 67	IP 67

Sensors designated as MZTK 06x1013 can be installed from above in the slot.

## Ordering information

Order designation		Connection method	Order designation		Connection method
MZCK 03P1011	PNP	cable PUR 3 pin, 2,5 m	MZTK 06P1011	PNP	cable PUR 3 pin, 2,5 m
MZCK 03P1011/KS35D	PNP	flylead connector M8 PUR 3 pin	MZTK 06P1011/KS35D	PNP	flylead connector M8 PUR 3 pin
MZCK 03P1012	PNP	cable PUR 3 pin, 2,5 m	MZTK 06P1012	PNP	cable PUR 3 pin, 2,5 m
MZCK 03P1012/KS35D	PNP	flylead connector M8 PUR 3 pin	MZTK 06P1012/KS35D	PNP	flylead connector M8 PUR 3 pin
			MZTK 06P1013	PNP	cable PUR 3 pin, 2,5 m
			MZTK 06P1013/KS35D	PNP	flylead connector M8 PUR 3 pin

All sensors are also available with NPN output switching.

## Accessories

Adapter set	Fastening clamps	Mounting brackets
		
<b>MZZA 01</b> Adapter set for: C slot sensors in T slots; T slot sensors in swallowtail slots; T and C slot sensors with fastening clamps for round cylinders	<b>MZZB 01/0xx</b> Fastening clamps for round cylinders, measuring 08, 10, 12, 16, 20 and 25 mm in diameter	<b>MZZC 01/xxx</b> Mounting brackets for round cylinders with tie rods, measuring from 5 – 125 mm in diameter.

For more detailed information please go to [www.baumer.com/news/497](http://www.baumer.com/news/497)

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