

**MZR401A8**

**MAGNETIC SENSORS • SENSORS FOR PNEUMATIC CYLINDERS**

For many tasks in the field of automation technology, it is necessary to recognize the motional processes in pneumatic and hydraulic cylinders and to detect the position of the piston with precision. For this, magnetic cylinder sensors are used.



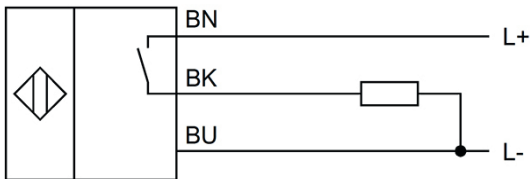
**TECHNICAL DATA**

Ambient temperature	-25 °C ... 70 °C
Cable length	2 m
Cross/short circuit identification possible	Yes
Cylinder sensors	Yes
Degree of protection (IP)	IP67
Harsh environmental conditions	Yes
Housing design	Cylinder plain
Housing material	Stainless steel
Hysteresis	1 mm
Increased ambient temperatures > 80°C	No
Low sensitivity	No
Low switching hysteresis	Yes
Material of cable sheath	PUR (Polyurethane)
Max. output current	150 mA
Metal housing	Yes
Metallic sensor surface	No
Mounting access, cylinder groove	Lateral
No-load current	15 mA
Number of switching outputs	1
Number of wires	3
Oil and cooling lubricants	Yes
Operating voltage	10 V ... 30 V
Rated supply voltage at DC	10 V ... 30 V
Reed contact	No
Relative repeat accuracy	0.1 mm
Reverse polarity protection	Yes
Sensor diameter	3.6 mm
Sensor length	20.5 mm
Sensor surface (active)	Middle area
Sensor surface position	Border area of the device

## TECHNICAL DATA

Setting via teach-in	No
Short travel path	No
Short-circuit-proof	Yes
Strong vibration / motion	Yes
Suitable for safety functions	No
Switching frequency	1000 Hz
Two switching points	No
Type of actuation	Magnet
Type of electrical connection	Cable
Type of rounded groove	3.75mm rounded groove
Type of switching function	Normally open contact
Type of switching output	PNP
Voltage drop	2 V
Voltage type	DC
With LED display	Yes
With monitoring function of downstream devices	No

## CONNECTION



**Colors:** BN (brown), BU (blue), BK (black)  
**Functions:** BN = L+, BU = L-, BK = PNP NO

## DIMENSIONAL DRAWING

## INSTALLATION



Mounting / Installation may only be carried out by a qualified electrician!

## DISPOSAL



**SAFETY WARNINGS**

Before initial operation, please make sure to follow all safety instructions that may be provided in the product information!

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