



cylinder sensors 1700

design 12 x 12 x 22mm

round cylinder strap retainer Ø6 ... Ø147mm pull-rods clamp up to 6mm double rail clamp up to 6mm



- √ easy mounting
- √ high switching accuracy with low hysteresis
- ✓ integrated amplifier
- ✓ shock and vibration proof
- √ high sampling frequency
- ✓ short-circuit and reverse polarity protection
- ✓ LED-display
- √ connection with 3-pin M8-connector

wear-free cylinder switch robust metal housing









description

On automatic machines the requirement often arises of obtaining a switch signal for certain piston positions of a pneumatic cylinder. For this, magnetic cylinder sensors are used. In control technology, these magnet sensors serve the task of non-contact and wear-free position detecting.

Magnetic cylinder sensors offer a high sensing range and at the same time, they can be used in devices with a compact design.

As magnet fields penetrate all non-magnetizable materials, the sensors can recognize magnets e.g. through non-ferrous metal walls, stainless steel walls and aluminum walls.

Through the universal type of "strap retainer fastening", this electronic cylinder sensor can be used on nearly all cylinder variants as well as directly exchangeable against reed switches which are present in three conductor cable tech-

nology.

The sensor has an indentation for the strap retainer and has rounded-off (concave) surfaces on 2 sides.

As a consequence of this, an exact fastening and a secure guide is assured on the corresponding cylinder.

Through these flexible options for fitting, the outward direction of the connector can take place in various directions. The LED display which signals the recognition of the magnetic field can clearly be seen by looking at the top side and at the front side.

application examples

- detecting the position of a cylinder piston
- ▶ limit of travel enquiry in the case of feed motions
- recognition of magnetic switch cams, even through the walls of the housing





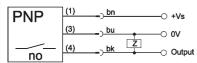
magnetic sensors

1700 cylinder sensors



article-no.	MZ130175
connection	M8-connector, 3-pin
	LED CY
TECHNICAL DATA	
sensor surface (active)	middle range
output signal	pnp, no
operating voltage	10 30V DC
current consumption (w/o load)	≤15mA
output current (max. load)	200mA
voltage drop (max. load)	2.0V DC
hysteresis	typical 1mm
repeatability	± 0.1mm
sampling frequency	1kHz
status display	yellow LED
short-circuit protection	+
reverse polarity protection	+
housing material	aluminium
design	12x12x22mm
operating temperature	-25+70°C
system of protection (EN 60529)	IP67
connection	M8-connector, 3-pin
connection accessories	e.g. VK200071 , 2m, angular
mounting accessories (clamp)	AM000005, zinc, for pull-rod and double rail up to 6mm
mounting accessories (strap retainer)	AM000003, stainless steel, for cyl. Ø6 to 17mm AM000061, stainless steel, for cyl. Ø16 to 27mm AM000004, stainless steel, for cyl. Ø26 to 37mm AM000062, stainless steel, for cyl. Ø36 to 47mm AM0000063, stainless steel, for cyl. Ø100 to 115mm AM000064, stainless steel, for cyl. Ø30 to 97mm AM000064, stainless steel, for cyl. Ø130 to 147mm

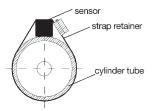
connection



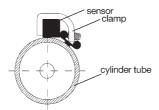
wire colors: bn = brown (1), bu = blue (3), bk = black (4)

mounting examples

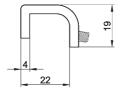
round cylinder with strap retainer



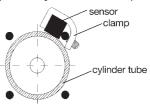
double rail cylinder with clamp



clamp



pull-rod cylinder with clamp



The list of articles 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.



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