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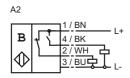
### **Model Number**

MB-F32-A2-5M

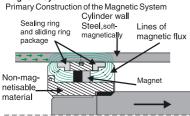
## **Features**

- For hydraulic cylinder
- Zero-contact detection of piston positi-
- No holes are required in the cylinder
- Freely positionable
- Simple, protected attachment

# Connection



Magnetic System



For this sensor principle it is not sufficient to simply mount the permanent magnet onto the piston. A magnetic system has to be constructed which conducts the magnetic flux of the permanent magnets directly into the cylinder wall in order to achieve the strongest possible magnetisation. For further details regarding the construction of magnetic systems, refer to the manual. A field trial is generally recommended before practical operation!

#### Magnets

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The magnets are axially magnetised. It must be ensured that all magnets are mounted with the same polarity!

#### **Definition of polarity**

An approaching permanent magnet with the north pole pointing towards the cable connection of the sensor causes output 1 to respond and the red LED to light.



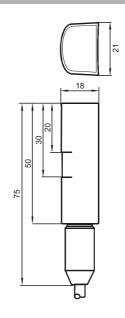
Antivalent output
By means of the sensor's antivalent output stage the appropriate output can be chosen depending on the polarity of the magnetic system or the mounting location of the sensor.

# Mounting

The sensor is mounted directly on the surface towards tightening straps or hose band clamps can be used.

## **Dimensions**

Protection degree



| Technical Data                    |                |   |
|-----------------------------------|----------------|---|
| General specifications            |                |   |
| Switching element function        |                | PNP Antivalent                              |
| Rated operating distance          | s <sub>n</sub> |   |
| Installation                      |                | on the cylinder                             |
| Output polarity                   |                | DC  |
| Switching range                   | $s_b$          | typ. 50 mm                                  |
| Nominal ratings                   |                |   |
| Operating voltage                 | $U_B$          | 10 30 V                                     |
| Reverse polarity protection       |                | protected against reverse polarity          |
| Short-circuit protection          |                | pulsing                                     |
| Voltage drop                      | $U_d$          | ≤ 1.5 V                                     |
| Operating current                 | ΙL             | 0 100 mA                                    |
| No-load supply current            | I <sub>0</sub> | ≤ 30 mA                                     |
| Indication of the switching state |                | LED, red (output 1); LED, yellow (output 2) |
| Standard conformity               |                |   |
| Standards                         |                | EN 60947-5-2                                |
| Ambient conditions                |                |   |
| Ambient temperature               |                | -25 85 °C (248 358 K)                       |
| Mechanical specifications         |                |   |
| Connection type                   |                | 5 m, PVC cable                              |
| Core cross-section                |                | 0.5 mm <sup>2</sup>                         |
| Housing material                  |                | Polyamide (PA)                              |
| Sensing face                      |                | Polyamide (PA)                              |

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