

# MZT7, RZT7

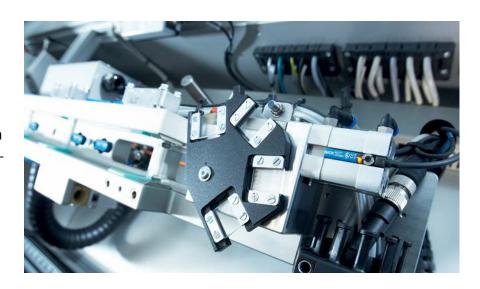
MAXIMIZE WHAT MATTERS

**Sensors for T-slot cylinders** 



## THE PERFECT CYLINDER SENSOR FOR STANDARD APPLICATIONS

The MZT7 magnetic cylinder sensor enables quick, precise and contactless sensing of the piston's position in compact pneumatic cylinders. It is easy to mount, can be used in numerous applications and offers an outstanding price-performance ratio.



#### The Application Areas: Universal in Factory Automation

Assembly and handling machines, packaging machines and electronics production: The MZT7 magnetic cylinder sensor is the ideal solution for a multitude of applications and the widest range of cylinder types. It is so versatile that you only need one sensor variant. The advantages not only include savings on warehouse space and costs, but also the time spent on documentation and maintenance. The sensor is also available as RZT7 with reed technology and a supply voltage of up to 230 V - an especially cost-effective solution.

Standardization reduces costs

#### The Sensor Design: For Almost Every Cylinder Profile

The MZT7 magnetic cylinder sensor never loses its grip: when mounted directly in the T-slot, the universal housing design compensates for the various slot dimensions from the widest range of cylinder manufacturers. And for cylinders without a T-slot, such as round, tie-rod and profile cylinders, an extensive range of mounting adapter accessories are available.

S Can be mounted anywhere, directly or with an adapter







## AFFORDABLE RELIABILITY



## The combination screw: Truly Captive

The MZT7 magnetic cylinder sensor is mounted in the T-slot using a combination screw. It can be tightened using either an Allen key or a flat-blade screwdriver. Another advantage of the combination screw is that it is securely attached to the sensor housing and thus cannot be lost.



#### The Mounting: easily inserted and locked

Thanks to its design, the MZT7 cylinder sensor can be easily inserted into the T-slot from above. The end caps of the pneumatic cylinder do not have to be removed. Side retaining ribs hold the sensor in position before the screw is tightened to secure it in the slot. A quarter turn of the combination screw completes the time-saving drop-in mounting and locks the sensor securely.

Time-saving mounting and secure locking



#### The Sensor: Secured in Every Situation

The combination screw fixes the sensor to the base of the cylinder slot. This prevents the MZT7 from slipping in the slot, even in the event of strong vibrations, tension on the sensor cable or slot dimension tolerances. Another advantage is that the sensor can be used within a wide temperature range.

**Y** Permanent switching reliability

## MAXIMIZE WHAT MATTERS



#### **Product description**

The SICK MZT7 magnetic cylinder sensor with GMR technology reliably detects the piston position in pneumatic drives. The MZT7 can be mounted directly into all cylinders with standard Tslots. SICK also has an extensive range of adapters which enable the MZT7 to

be used with other cylinder types. The MZT7 is characterized by its simple mounting principle: Insert the sensor into the slot and rotate the locking screw a quarter turn to fix it securely to the cylinder.

#### At a glance

 Can be used in all standard cylinders, linear slides, and grippers using the
 T-slot and – with the help of adapters
– in round rod, tie-rod, profile cylinders and dovetail groove cylinders

- · Easy to insert the sensor into the slot
- Locking screw combines an Allen key and slotted screw
- · LED for indicating the output state
- IP 67 enclosure rating

#### Your benefits

- A sensor for a wide range of applications: The sensor design fits into all standard T-slots used around the world, regardless of the cylinder profile or manufacturer
- Simple mounting: Thanks to the retaining ribs on the side, the sensor holds its position even before the screw is tightened, ensuring that it does not fall out
- Fast mounting: The sensor is fixed quickly and securely in the slot simply by rotating the locking screw a quarter turn
- The rugged locking screw holds the sensor in the required position, even when exposed to shocks and vibrations
- It is easy to replace the sensor during servicing without removing the end caps



#### Additional information

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→ www.mysick.com/en/MZT7

For more information, just enter the link or scan the QR code and get direct access to technical data, CAD design models, operating instructions, software, application examples and much more



#### Detailed technical data

#### **Features**

| Cylinder type               | T-slot  |
|-----------------------------|---|
| Cylinder types with adapter | Profile cylinder Tie-rod cylinder Round body cylinder Dovetail groove cylinder SMC rail CDQ2 SMC rail ECDQ2 |
| Housing length              | 29.5 mm   |
| Output type                 | PNP / NPN (depending on type)   |
| Switching frequency, typ.   | ± 1,000 Hz  |
| Output function             | NO / NC (depending on type)   |
| Enclosure rating 1)         | IP 65, IP 67  |

 $<sup>^{\</sup>scriptscriptstyle 1)}$  According to EN 60529.

## Mechanics/electronics

| Supply voltage 1)   | 10 V DC 30 V DC  |
|---|--|
| Power consumption 2)  | ≤ 8 mA   |
| Voltage drop  | ≤ 2 V  |
| Continuous current I <sub>a</sub>   | ≤ 100 mA   |
| Protection class  | III  |
| Response sensitivity, typ.  | 3 mT   |
| Overrun distance, typ.  | 10 mm  |
| Hysteresis, typ.  | < 0.8 mT   |
| Repeatability 3)  | ≤ 0.1 mT   |
|   |  |
| Reverse polarity protection   | <b>V</b>   |
| Reverse polarity protection  Short-circuit protection   | v<br>v   |
|   | -30 °C +80 °C (PUR)<br>-30 °C +70 °C (PVC)   |
| Short-circuit protection  | -30 °C +80 °C (PUR) -30 °C +70 °C (PVC) (depending on type)  |
| Short-circuit protection  Ambient operating temperature   | -30 °C +80 °C (PUR) -30 °C +70 °C (PVC) (depending on type) 30 g, 11 ms / 10 55 Hz, 1 mm                                   |
| Short-circuit protection  Ambient operating temperature  Shock and vibration resistance  EMC                | -30 °C +80 °C (PUR) -30 °C +70 °C (PVC) (depending on type)  |
| Short-circuit protection  Ambient operating temperature  Shock and vibration resistance                     | -30 °C +80 °C (PUR) -30 °C +70 °C (PVC) (depending on type) 30 g, 11 ms / 10 55 Hz, 1 mm According to EN 60947-5-2 Plastic |
| Short-circuit protection Ambient operating temperature  Shock and vibration resistance EMC Housing material | -30 °C +80 °C (PUR) -30 °C +70 °C (PVC) (depending on type) 30 g, 11 ms / 10 55 Hz, 1 mm According to EN 60947-5-2         |

 $<sup>^{1\!\!/}</sup>$  Limit values when operated in short-circuit protected network: max. 8 A.

<sup>&</sup>lt;sup>2)</sup> Without load.

 $<sup>^{\</sup>scriptscriptstyle{(3)}}$  Ub and Ta constant.

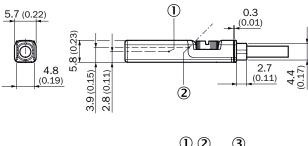
## Ordering information

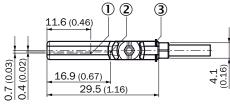
#### MZT7

• Magnetic field sensitivity, min.: 3 mT

| Output<br>type | Output<br>function | Connection type   | Cable<br>material | Enclosure rating | Connection diagram | Туре           | Part no. |
|----------------|--------------------|---|-------------------|------------------|--------------------|----------------|----------|
|                |                    | Cable 2 wine 2 m  | PUR               | IP 65, IP 67     | Cd-001             | MZT7-03VPS-KU0 | 1070829  |
|                |                    | Cable, 3-wire, 2 m  | PVC               | IP 65, IP 67     | Cd-001             | MZT7-03VPS-KW0 | 1070838  |
|                |                    | Cable 2 wire Em   | PUR               | IP 65, IP 67     | Cd-001             | MZT7-03VPS-KUB | 1070833  |
|                | NO                 | Cable, 3-wire, 5 m  | PVC               | IP 65, IP 67     | Cd-001             | MZT7-03VPS-KWB | 1070842  |
| PNP            | NO                 | Cable with connector M8, 3-pin, 0.3 m                     | PUR               | IP 65, IP 67     | Cd-002             | MZT7-03VPS-KP0 | 1070814  |
| FINE           |                    | Cable with connector M8, 3-pin, with knurled nuts, 0.5 m  | PUR               | IP 65, IP 67     | Cd-002             | MZT7-03VPS-KR0 | 1070821  |
|                |                    | Cable with connector M12, 3-pin, with knurled nuts, 0.3 m | PUR               | IP 65, IP 67     | Cd-002             | MZT7-03VPS-KQ0 | 1070825  |
|                | NC                 | Cable, 3-wire, 2 m  | PUR               | IP 65, IP 67     | Cd-003             | MZT7-03VPO-KU0 | 1070830  |
|                | NC                 | Cable with connector M8, 3-pin, 0.3 m                     | PUR               | IP 65, IP 67     | Cd-004             | MZT7-03VPO-KP0 | 1070818  |
|                |                    | Cable, 3-wire, 2 m  | PUR               | IP 65, IP 67     | Cd-001             | MZT7-03VNS-KU0 | 1070831  |
|                |                    | Cable, 3-wire, 5 m  | PUR               | IP 65, IP 67     | Cd-001             | MZT7-03VNS-KUB | 1070835  |
|                |                    | Cable, 3-wire, 2 m  | PVC               | IP 65, IP 67     | Cd-001             | MZT7-03VNS-KW0 | 1070840  |
|                | NO                 | Cable, 3-wire, 5 m  | PVC               | IP 65, IP 67     | Cd-001             | MZT7-03VNS-KWB | 1070844  |
| NPN            | NO                 | Cable with connector M8, 3-pin, 0.3 m                     | PUR               | IP 65, IP 67     | Cd-002             | MZT7-03VNS-KP0 | 1070819  |
| INPIN          |                    | Cable with connector M8, 3-pin, with knurled nuts, 0.5 m  | PUR               | IP 65, IP 67     | Cd-002             | MZT7-03VNS-KR0 | 1070823  |
|                |                    | Cable with connector M12, 3-pin, with knurled nuts, 0.3 m | PUR               | IP 65, IP 67     | Cd-002             | MZT7-03VNS-KQ0 | 1070827  |
|                | NC                 | Cable, 3-wire, 2 m  | PUR               | IP 65, IP 67     | Cd-003             | MZT7-03VNO-KU0 | 1070832  |
|                | NC                 | Cable with connector M8, 3-pin, 0.3 m                     | PUR               | IP 65, IP 67     | Cd-004             | MZT7-03VNO-KP0 | 1070820  |

#### Dimensional drawing (Dimensions in mm (inch))

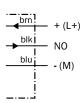




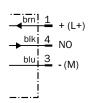
- ① Position sensor element
- ② Status LED
- $\ensuremath{\mathfrak{3}}$  Retaining ribs

## Connection type and diagram

Cd-001



Cd-002



Cd-003



Cd-004



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#### **Product description**

The SICK RZT7 magnetic cylinder sensor with reed contact reliably detects the piston position in pneumatic drives. The RZT7 can be mounted directly into all cylinders with standard T-slots. SICK also has an extensive range of adapters

which enable the RZT7 to be used with other cylinder types. The RZT7 is characterized by its simple mounting principle: Insert the sensor into the slot and rotate the locking screw a quarter turn to fix it securely to the cylinder.

#### At a glance

- Can be used in all standard cylinders, linear slides, and grippers using the
   T-slot and – with the help of adapters
  – in round rod, tie-rod, profile cylinders and dovetail groove cylinders
- Easy to insert the sensor into the slot
- Locking screw combines an Allen key and slotted screw
- · LED for indicating the output state
- IP 67 enclosure rating
- Supply voltage up to 230 V

#### Your benefits

- A sensor for a wide range of applications: The sensor design fits into all standard T-slots used around the world, regardless of the cylinder profile or manufacturer
- Simple mounting: Thanks to the retaining ribs on the side, the sensor holds its position even before the screw is tightened, ensuring that it does not fall out
- Fast mounting: The sensor is fixed quickly and securely in the slot simply by rotating the locking screw a quarter turn
- The rugged locking screw holds the sensor in the required position, even when exposed to shocks and vibrations
- It is easy to replace the sensor during servicing without removing the end caps



#### Additional information

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→ www.mysick.com/en/RZT7

For more information, just enter the link or scan the QR code and get direct access to technical data, CAD design models, operating instructions, software, application examples and much more.



#### Detailed technical data

#### **Features**

|                             | AC/DC 2-wire  | AC/DC 3-wire |
|-----------------------------|---|--------------|
| Cylinder type               | T-slot  |              |
| Cylinder types with adapter | Profile cylinder Tie-rod cylinder Round body cylinder Dovetail groove cylinder SMC rail CDQ2 SMC rail ECDQ2 |              |
| Housing length              | 29.5 mm / 32.5 mm (depending on type)   | 29.5 mm      |
| Output type                 | Reed  |              |
| Switching frequency, typ.   | ± 400 Hz  |              |
| Output function             | NO / NC (depending on type)   | NO           |
| Enclosure rating 1)         | IP 65, IP 67  |              |

<sup>1)</sup> According to EN 60529.

## Mechanics/electronics

|                                   | AC/DC 2-wire  | AC/DC 3-wire                    |
|-----------------------------------|---|---------------------------------|
| Supply voltage <sup>1)</sup>      | 5 V AC/DC 30 V AC/DC<br>5 V AC/DC 120 V AC/DC<br>5 V AC/DC 230 V AC/DC<br>(depending on type) | 5 V AC/DC 30 V AC/DC            |
| Voltage drop                      | ≤ 3.5 V   | ≤ 0.1 V <sup>2)</sup>           |
| Continuous current I <sub>a</sub> | ≤ 100 mA  | ≤ 500 mA (DC),<br>≤ 300 mA (AC) |
| Switching capacity                | ≤ 6 W   |                                 |
| Protection class                  | III / II (depending on type)  | III                             |
| Response sensitivity, typ.        | 3 mT  |                                 |
| Overrun distance, typ.            | 10 mm   |                                 |
| Repeatability 3)                  | ≤ 0.1 mT  |                                 |
| Reverse polarity protection       | -   | V                               |
| Ambient operating temperature     | -30 °C +80 °C (PUR)<br>-30 °C +70 °C (PVC)<br>(depending on type)                             |                                 |
| Shock and vibration resistance    | 30 g, 11 ms / 10 55 Hz, 1 mm  |                                 |
| EMC                               | According to EN 60947-5-2   |                                 |
| Housing material                  | Plastic   |                                 |
| Cable material                    | PUR / PVC (depending on type)   |                                 |
| Conductor cross-section           | 0.14 mm <sup>2</sup> / 0.12 mm <sup>2</sup> (depending on type)                               |                                 |

 $<sup>^{1)}</sup>$  Limit values when operated in short-circuit protected network: max. 8 A.

 $<sup>^{\</sup>rm 2)}$  For cable length up to 0.3 m.

 $<sup>^{\</sup>scriptscriptstyle (3)}$  Ub and Ta constant.

## Ordering information

#### AC/DC 2-wire

Electrical wiring: AC/DC 2-wire
 Continuous current I<sub>a</sub>: ≤ 100 mA

| Supply volt-<br>age      | Protection class | Output function | Connection                            | Cable<br>material  | Enclosure rating 1) | Connection diagram | Туре               | Part no.       |  |        |                |         |
|--------------------------|------------------|-----------------|---------------------------------------|--|---------------------|--------------------|--------------------|----------------|--|--------|----------------|---------|
|                          |                  |                 | Cable 2 wire 2 m                      | PUR  | IP 65, IP 67        | Cd-037             | RZT7-03ZUS-KU0     | 1070861        |  |        |                |         |
|                          |                  |                 | Cable, 2-wire, 2 m                    | PVC  | IP 65, IP 67        | Cd-037             | RZT7-03ZUS-KW0     | 1070865        |  |        |                |         |
|                          |                  |                 | Cable 2 wire Em                       | PUR  | IP 65, IP 67        | Cd-037             | RZT7-03ZUS-KUB     | 1070863        |  |        |                |         |
| 5 V AC/DC                |                  |                 | Cable, 2-wire, 5 m                    | PVC  | IP 65, IP 67        | Cd-037             | RZT7-03ZUS-KWB     | 1070867        |  |        |                |         |
| 30 V AC/DC               | III              | NO              | Cable with connector M8, 3-pin, 0.3 m | PUR  | IP 65, IP 67        | Cd-038             | RZT7-03ZUS-KP0     | 1070855        |  |        |                |         |
|                          |                  |                 |                                       | Cable with connector M8, 3-pin, with knurled nuts, 0.5 m | PUR                 | IP 65, IP 67       | Cd-038             | RZT7-03ZUS-KR0 | 1070857  |        |                |         |
|                          |                  |                 |                                       |  |                     |                    |                    |                | Cable with connector M12,<br>3-pin, with knurled nuts, 0.3 m | PUR    | IP 65, IP 67   | Cd-345  |
| 5 V AC/DC<br>120 V AC/DC | II               | NC              | Cable, 2-wire, 2 m                    | PVC  | IP 65, IP 67        | Cd-037             | RZT7-03ZVO-KW0     | 1070866        |  |        |                |         |
|                          |                  |                 | Cable 2 wire 2 m                      | PUR  | IP 65, IP 67        | Cd-037             | RZT7-03ZWS-KU0     | 1070869        |  |        |                |         |
| 5 V AC/DC<br>230 V AC/DC | п                | NO              | Cable, 2-wire, 2 m                    | PVC  | IP 65, IP 67        | Cd-037             | RZT7-03ZWS-KW0     | 1070871        |  |        |                |         |
|                          | "                | NO              | Cable 2 wire Em                       | PUR  | IP 65, IP 67        | Cd-037             | RZT7-03ZWS-KUB     | 1070870        |  |        |                |         |
|                          |                  |                 |                                       |  |                     |                    | Cable, 2-wire, 5 m | PVC            | IP 65, IP 67   | Cd-037 | RZT7-03ZWS-KWB | 1070872 |

<sup>1)</sup> According to EN 60529.

## AC/DC 3-wire

• Electrical wiring: AC/DC 3-wire

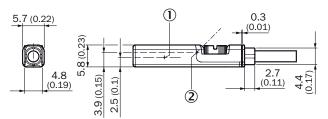
• Continuous current I<sub>2</sub>: ≤ 500 mA, ≤ 300 mA, DC, AC

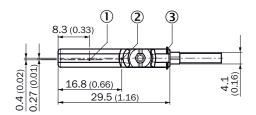
| Supply volt-<br>age | Protec-<br>tion class | Output function | Connection   | Cable<br>material | Enclosure rating 1) | Connection diagram | Туре           | Part no. |  |                                       |              |                     |                |                |         |                |         |
|---------------------|-----------------------|-----------------|--|-------------------|---------------------|--------------------|----------------|----------|--|---------------------------------------|--------------|---------------------|----------------|----------------|---------|----------------|---------|
|                     |                       |                 | Cable, 3-wire, 2 m   | PUR               | IP 65, IP 67        | Cd-035             | RZT7-03ZRS-KU0 | 1070850  |  |                                       |              |                     |                |                |         |                |         |
|                     |                       |                 | Cable, 5-wile, 2 III   | PVC               | IP 65, IP 67        | Cd-035             | RZT7-03ZRS-KW0 | 1070852  |  |                                       |              |                     |                |                |         |                |         |
|                     |                       |                 | Cable, 3-wire, 5 m   | PUR               | IP 65, IP 67        | Cd-035             | RZT7-03ZRS-KUB | 1070851  |  |                                       |              |                     |                |                |         |                |         |
|                     |                       |                 | Cable, 5-wire, 5 III   | PVC               | IP 65, IP 67        | Cd-035             | RZT7-03ZRS-KWB | 1070853  |  |                                       |              |                     |                |                |         |                |         |
| 5 V AC/DC           | III                   | NO              | NO   | NO                | NO                  | NO                 | NO             | NO       | III NO   | NO                                    | NO           | Cable, 3-wire, 10 m | PVC            | IP 65, IP 67   | Cd-035  | RZT7-03ZRS-KWD | 1070854 |
| 30 V AC/DC          |                       |                 |  |                   |                     |                    |                |          |  | Cable with connector M8, 3-pin, 0.3 m | PUR          | IP 65, IP 67        | Cd-036         | RZT7-03ZRS-KP0 | 1070847 |                |         |
|                     |                       |                 |  |                   |                     |                    |                |          | Cable with connector M8, 3-pin, with knurled nuts, 0.5 m | PUR                                   | IP 65, IP 67 | Cd-036              | RZT7-03ZRS-KR0 | 1070848        |         |                |         |
|                     |                       |                 | Cable with connector M12,<br>3-pin, with knurled nuts, 0.3 m | PUR               | IP 65, IP 67        | Cd-036             | RZT7-03ZRS-KQ0 | 1070849  |  |                                       |              |                     |                |                |         |                |         |

<sup>1)</sup> According to EN 60529.

#### Dimensional drawings (Dimensions in mm (inch))

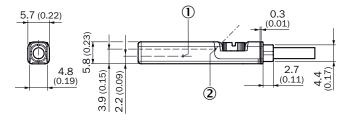
#### 10 V AC/DC ... 30 V AC/DC

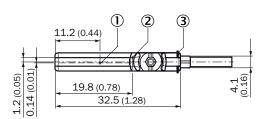




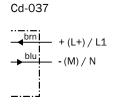
- ① Position sensor element
- ② Status LED
- 3 Retaining ribs

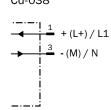
#### 10 V AC/DC ... 230 V AC/DC

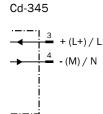




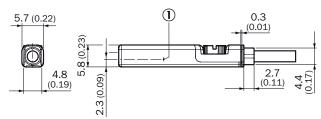
- ① Position sensor element
- ② Status LED
- 3 Retaining ribs

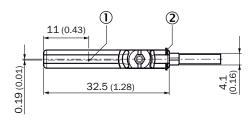






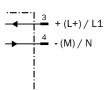
#### 10 V AC/DC ... 120 V AC/DC

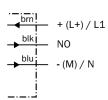




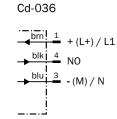
- ① Position sensor element
- 2 Retaining ribs

## Connection type and diagram





Cd-035



#### Recommended accessories

#### Brackets for cylinder sensors

#### For cylinders with dovetail-slot

| Figure | Material | Description                                      | Туре        | Part no. |
|--------|----------|--|-------------|----------|
|        | Aluminum | Mounting bracket for cylinder with dovetail slot | BEF-KHZ-ST1 | 2022703  |

#### For profile cylinders and tie-rod cylinders

| Figure | Material     | Description   | Туре        | Part no. |
|--------|--------------|---|-------------|----------|
|        | Zinc diecast | Mounting bracket for integrated profile cylinder/tie-rod cylinder | BEF-KHZ-PT1 | 2022702  |

#### For round body cylinders

| Figure      | Material                     | Description  | Туре            | Part no. |
|-------------|------------------------------|--|-----------------|----------|
| A >         |                              | Mounting bracket on round body cylinder with piston diameter of 12 mm $^{1)}$        | BEF-KHZ-RT-12   | 2077681  |
|             | Plastic,<br>Aluminum         | Mounting bracket on round body cylinder with piston diameter of 16 mm $^{1)}$        | BEF-KHZ-RT-16   | 2077680  |
|             | ,                            | Mounting bracket on round body cylinder with piston diameter of 20 mm $^{1)}$        | BEF-KHZ-RT-20   | 2077679  |
|             |                              | Mounting bracket on round body cylinder with piston diameter of 25 mm $^{1)}$        | BEF-KHZ-RT-25   | 2077678  |
| <b>ל</b> יק | Plastic,<br>Aluminum         | Mounting bracket on round body cylinder with piston diameter of 32 $\mbox{mm}^{ 1)}$ | BEF-KHZ-RT-32   | 2077677  |
|             |                              | Mounting bracket on round body cylinder with piston diameter of 40 $\mbox{mm}^{ 1)}$ | BEF-KHZ-RT-40   | 2077676  |
| **          | Plastic,<br>Aluminum         | Mounting bracket on round body cylinder with piston diameter of 50 mm $^{1)}$        | BEF-KHZ-RT-50   | 2077675  |
|             |                              | Mounting bracket on round body cylinder with piston diameter of 63 mm $^{1)}$        | BEF-KHZ-RT-63   | 2077674  |
| a           | Stainless steel,<br>die cast | Mounting bracket on round body cylinder with piston diameter of 8 mm 25 mm           | BEF-KHZ-RT1-25  | 2077682  |
| A A         |                              | Mounting bracket on round body cylinder with piston diameter of 8 mm $\dots$ 63 mm   | BEF-KHZ-RT1-63  | 2077683  |
| TILL        |                              | Mounting bracket on round body cylinder with piston diameter of 8 mm $\dots$ 130 mm  | BEF-KHZ-RT1-130 | 2077684  |

<sup>1)</sup> Ambient temperature min 0 °C max 50 °C.

#### For SMC rails CDQ2 (T-slot)

| Figure | Material | Description  | Туре        | Part no. |
|--------|----------|--|-------------|----------|
|        | Aluminum | Mounting bracket for mounting on SMC rails CDQ2 (T-slot) | BEF-KHZ-TT2 | 2046440  |

#### For SMC rails ECDQ2 (T-slot)

| Figure | Material | Description   | Туре        | Part no. |
|--------|----------|---|-------------|----------|
|        | Aluminum | Mounting bracket for mounting on SMC rails ECDQ2 (T-slot) | BEF-KHZ-TT1 | 2046439  |

## Plug connectors and cables

Connecting cables with female connector

#### M12, 3-pin, PUR, halogen-free

| Figure | Connection type head A      | Connection type head B      | Connecting cable | Туре           | Part no. |
|--------|-----------------------------|-----------------------------|------------------|----------------|----------|
|        | Female connector, M12,      | Cable, open conductor       | 5 m, 3-wire      | DOL-1203-G05MC | 6039076  |
| 1      | 3-pin, straight, unshielded | heads                       | 10 m, 3-wire     | DOL-1203-G10MC | 6039077  |
|        | Female connector, M12,      | Cable, open conductor heads | 5 m, 3-wire      | DOL-1203-W05MC | 6039079  |
| 10     | 3-pin, angled, unshielded   |                             | 10 m, 3-wire     | DOL-1203-W10MC | 6036752  |

#### M8, 3-pin, PVC, chemical resistant

| Figure | Connection type head A            | Connection type head B | Connecting cable | Туре          | Part no. |
|--------|-----------------------------------|------------------------|------------------|---------------|----------|
| //     | Female connector, M8,             | Cable, open conductor  | 2 m, 3-wire      | DOL-0803-G02M | 6010785  |
|        | 3-pin, straight, unshielded heads | heads                  | 5 m, 3-wire      | DOL-0803-G05M | 6022009  |
|        | Female connector, M8,             |                        | 2 m, 3-wire      | DOL-0803-W02M | 6008489  |
|        | 3-pin, angled, unshielded         |                        | 5 m, 3-wire      | DOL-0803-W05M | 6022010  |

#### Female connectors (ready to assemble)

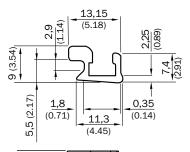
| Figure | Connection type head A                               | Connection type head B | Туре       | Part no. |
|--------|--|------------------------|------------|----------|
|        | Female connector, M8,<br>3-pin, straight, unshielded | Screw-type terminals   | DOS-0803-G | 7902077  |
| O. C.  | Female connector, M8,<br>3-pin, angled, unshielded   | Solder connection      | DOS-0803-W | 7902078  |

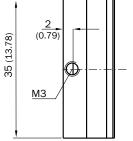
#### Male connectors (ready to assemble)

| Figure | Connection type head A                          | Connection type head B | Туре       | Part no. |
|--------|---|------------------------|------------|----------|
|        | Male connector, M8, 3-pin, straight, unshielded | Screw-type terminals   | STE-0803-G | 6037322  |

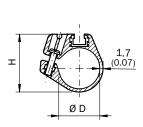
#### Dimensional drawings for accessories (Dimensions in mm (inch))

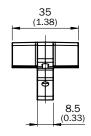
## For cylinders with dovetail-slot BEF-KHZ-ST1





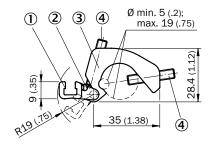
### For round body cylinders BEF-KHZ-RT-xx

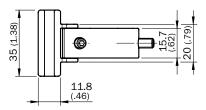




| Part no. | Туре          | Ø D  | Cylinder<br>piston Ø | Н    |
|----------|---------------|------|----------------------|------|
| 2077681  | BEF-KHZ-RT-12 | 13.5 | 12                   | 22.4 |
| 2077680  | BEF-KHZ-RT-16 | 17.7 | 16                   | 26.6 |
| 2077679  | BEF-KHZ-RT-20 | 21.7 | 20                   | 30.6 |
| 2077678  | BEF-KHZ-RT-25 | 26.8 | 25                   | 35.7 |
| 2077677  | BEF-KHZ-RT-32 | 34   | 32                   | 42.9 |
| 2077676  | BEF-KHZ-RT-40 | 42   | 42                   | 50.9 |
| 2077675  | BEF-KHZ-RT-50 | 52.9 | 50                   | 61.8 |
| 2077674  | BEF-KHZ-RT-63 | 65   | 63                   | 73.9 |

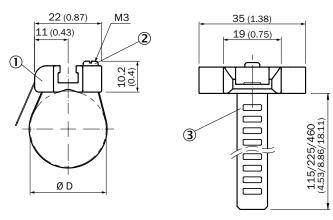
## For profile cylinders and tie-rod cylinders BEF-KHZ-PT1





- $\ensuremath{\textcircled{1}}$  Sensoradapter with T-Slot for magn. cylilndersensors
- ② Fixing for cable < Ø 3.2 mm ( 0.126 inch)
- 3 Cylinderadapter
- 4 Mounting screws M5

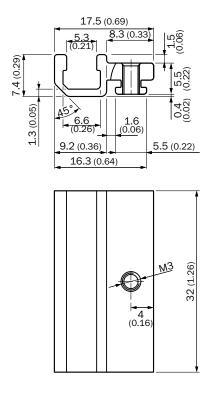
#### BEF-KHZ-RT1-xx



- $\ensuremath{\textcircled{1}}$  Sensoradapter with T-slot for round body cylinder
- ② Fixing screw
- 3 Strap

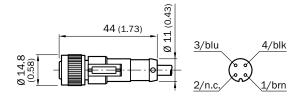
| Part no. | Туре            | Ø D (cylinder piston) |
|----------|-----------------|-----------------------|
| 2077682  | BEF-KHZ-RT1-25  | 8 25                  |
| 2077683  | BEF-KHZ-RT1-63  | 8 63                  |
| 2077684  | BEF-KHZ-RT1-130 | 8 130                 |

## For SMC rails CDQ2 (T-slot) BEF-KHZ-TT2

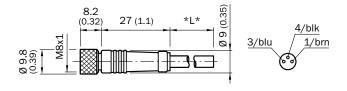


## Connecting cables with female connector

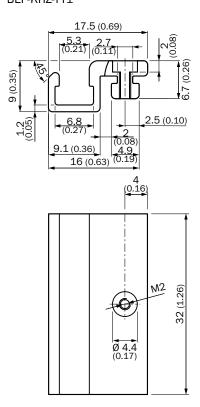
#### DOL-1203-GxxMC



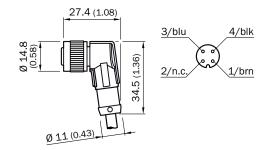
#### DOL-0803-GxxM



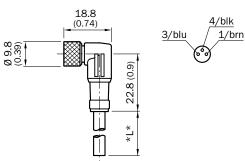
## For SMC rails ECDQ2 (T-slot) BEF-KHZ-TT1



#### DOL-1203-WxxMC

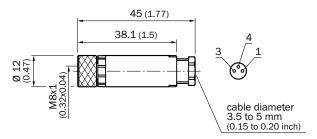


#### DOL-0803-WxxM

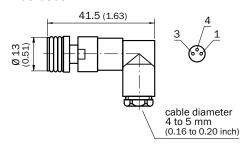


#### Female connectors (ready to assemble)

#### DOS-0803-G

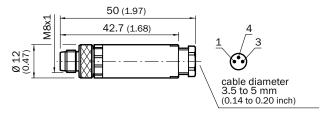


#### DOS-0803-W



## Male connectors (ready to assemble)

#### STE-0803-G



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