



RZN-03ZWS-KWB

RZT7

SENSORS FOR IMI NORGREN SLOT

SICK
Sensor Intelligence.



Ordering information

| Type | Part no. |
|---------------|----------|
| RZN-03ZWS-KWB | 1117646 |

Other models and accessories → www.sick.com/RZT7



Detailed technical data

Features

| | |
|------------------------------------|---------------------|
| Cylinder type | IMI Norgren slot |
| Cylinder types with adapter | Round body cylinder |
| Housing length | 29.5 mm |
| Switching output | Reed |
| Switching frequency | 400 Hz |
| Output function | NO |
| Electrical wiring | AC/DC 2-wire |
| Enclosure rating | IP67 ¹⁾ |

¹⁾ According to EN 60529.

Mechanics/electronics

| | |
|---|---|
| Supply voltage | 5 V AC/DC ... 240 V AC/DC ¹⁾ |
| Rated insulation voltage U_i | 240 V |
| Rated impulse withstand voltage U_{imp} | 4 kV |
| Voltage drop | ≤ 3.5 V |
| Continuous current I_a | ≤ 100 mA ²⁾ |
| Switching capacity | ≤ 10 W |
| Protection class | II |
| Response sensitivity, typ. | 3 mT |
| Overrun distance, typ. | 10 mm |
| Reproducibility | ≤ 0.1 mT ³⁾ |
| Status indicator LED | Yes |
| Ambient operating temperature | -40 °C ... +80 °C |
| Shock and vibration resistance | 50 g, 11 ms / 10 ... 55 Hz, 1 mm |
| EMC | According to EN 60947-5-2 |
| Connection type | Cable, 2-wire, drag chain use, 5 m |

¹⁾ Mains fuse F < 0.5 A IEC60127-2 sheet 1.

²⁾ AC.

³⁾ Supply voltage U_B and constant ambient temperature T_a .

| | |
|-------------------------------|---|
| Connection type Detail | |
| Conductor cross section | 0.12 mm ² |
| Cable diameter | Ø 3 mm |
| Bending radius | With fixed installation > 10 x cable diameter For flexible use > 15 x cable diameter |
| Cable outlet | Axial |
| Material | |
| Housing | Plastic |
| Cable | PVC |
| Items supplied | 1 x mounting clip plugged in |

¹⁾ Mains fuse F < 0.5 A IEC60127-2 sheet 1.

²⁾ AC.

³⁾ Supply voltage U_B and constant ambient temperature T_a .

Safety-related parameters

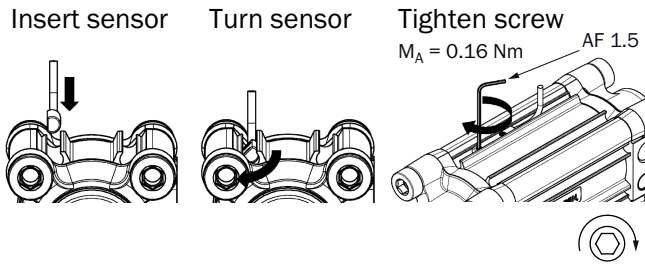
| | |
|-------------------------------------|--|
| MTTF_D | 23,876 years |
| DC_{avg} | 0 % |
| T_M (mission time) | 20 years |
| B_{10d} | 790,000 Switching cycles ¹⁾ |

¹⁾ Only for devices containing electro-mechanical components. In this case, the MTTF_D value of the entire device must be calculated from the given B_{10D} value, the number of switching cycles and the given MTTF_D value.

Classifications

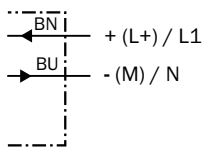
| | |
|-----------------------|----------|
| ECLASS 5.0 | 27270104 |
| ECLASS 5.1.4 | 27270104 |
| ECLASS 6.0 | 27270104 |
| ECLASS 6.2 | 27270104 |
| ECLASS 7.0 | 27270104 |
| ECLASS 8.0 | 27270104 |
| ECLASS 8.1 | 27270104 |
| ECLASS 9.0 | 27270104 |
| ECLASS 10.0 | 27270104 |
| ECLASS 11.0 | 27270104 |
| ECLASS 12.0 | 27274301 |
| ETIM 5.0 | EC002544 |
| ETIM 6.0 | EC002544 |
| ETIM 7.0 | EC002544 |
| ETIM 8.0 | EC002544 |
| UNSPSC 16.0901 | 39122230 |

Installation note



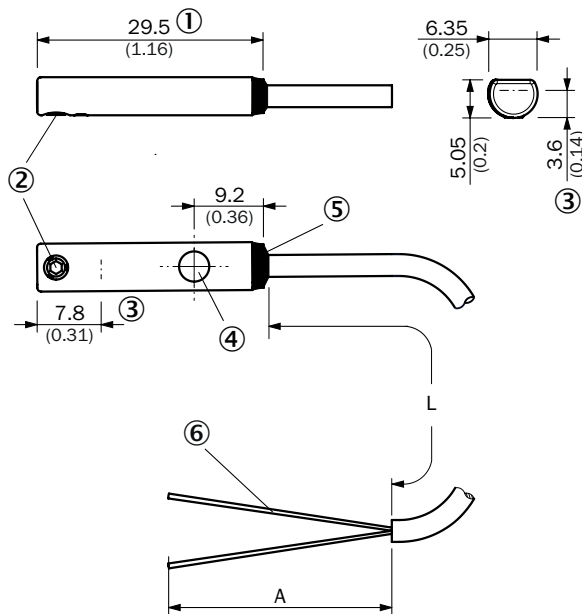
Connection diagram

Cd-037



Dimensional drawing (Dimensions in mm (inch))

Cable




- ① Housing
- ② Fixing screw M3; width across 1.5 mm
- ③ Position sensor element
- ④ Display LED
- ⑤ Delo-Duopox sleeve
- ⑥ Connection

| | | L | A | |
|---------|---------------|-----|---------|---|
| 1117647 | RZN-03ZWS-KW0 | 2 m | 31.5 mm | 2 |
| 1117646 | RZN-03ZWS-KWB | 5 m | 31.5 mm | 2 |

| | | L | A | |
|---------|---------------|----------|----------|---|
| 1117648 | RZN-03ZWS-KUB | 5 m | 31.5 mm | 2 |
| 1117645 | RZN-03ZWS-KWD | 10 m | 31.5 mm | 2 |

Recommended accessories

Other models and accessories → www.sick.com/RZT7

| | Brief description | Type | Part no. |
|---|---|-------------|-----------------|
| Brackets for cylinder sensors | | | |
|  | Mounting clip for round body cylinder, clamping range 9.2 mm to 10 mm, for piston rod diameter of 8 mm, plastic, mounting hardware included | BEF-S-R1-08 | 7902337 |
| | Mounting clip for round body cylinder, clamping range 10.9 mm to 12 mm, for piston rod diameter of 10 mm, plastic, mounting hardware included | BEF-S-R1-10 | 7901753 |
| | Mounting clip for round body cylinder, clamping range 12.9 mm to 41 mm, for piston rod diameter of 12 mm, plastic, mounting hardware included | BEF-S-R1-12 | 7901754 |
| | Mounting clip for round body cylinder, clamping range 16.9 mm to 18 mm, for piston rod diameter of 16 mm, plastic, mounting hardware included | BEF-S-R1-16 | 7901755 |
| | Mounting clip for round body cylinder, clamping range 21 mm to 22 mm, for piston rod diameter of 20 mm, plastic, mounting hardware included | BEF-S-R1-20 | 7901756 |
| | Mounting clip for round body cylinder, clamping range 26.1 mm to 27.2 mm, for piston rod diameter of 25 mm, plastic, mounting hardware included | BEF-S-R1-25 | 7901757 |
| | Mounting clip for round body cylinder, clamping range 33 mm to 35 mm, for piston rod diameter of 32 mm, plastic, mounting hardware included | BEF-S-R1-32 | 7901758 |
| | Mounting clip for round body cylinder, clamping range 41.4 mm to 42.5 mm, for piston rod diameter of 40 mm, plastic, mounting hardware included | BEF-S-R1-40 | 7901759 |
| | Mounting clip for round body cylinder, clamping range 52.5 mm to 54 mm, for piston rod diameter of 50 mm, plastic, mounting hardware included | BEF-S-R1-50 | 7901760 |
| | Mounting clip for round body cylinder, clamping range 66 mm to 67 mm, for piston rod diameter of 63 mm, plastic, mounting hardware included | BEF-S-R1-63 | 7901761 |

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com