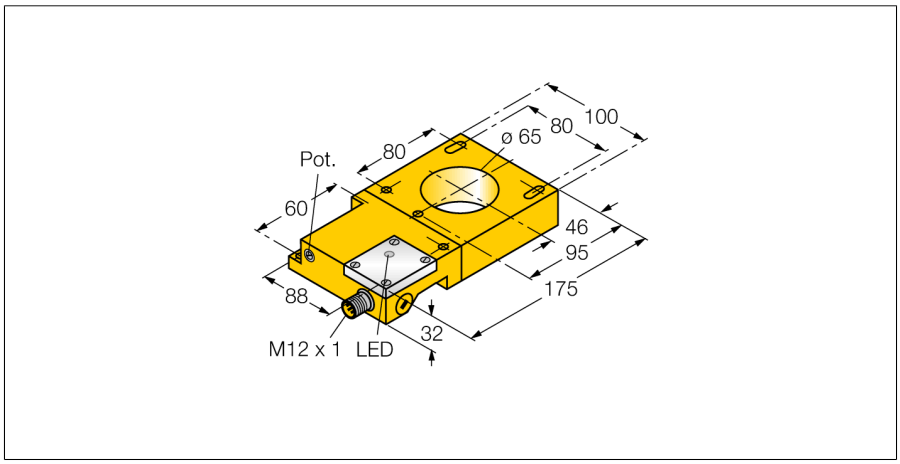
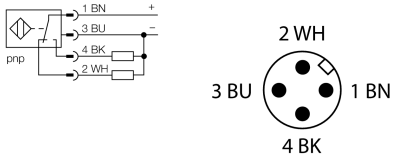
# Inductive sensor
# Ring sensor
# NI65R-S32SR-VP44X-H1141




- **Rectangular, height 32 mm**
- **Plastic, ABS**
- **Static output behaviour**
- **Sensitivity adjusted via potentiometer**
- **Modular design, ring probe and switching amplifier also separately mountable**
- **Output pulse length min. 100 ms**
- **DC 4-wire, 10…55 VDC**
- **Changeover contact, PNP output**
- **M12 x 1 male connector**

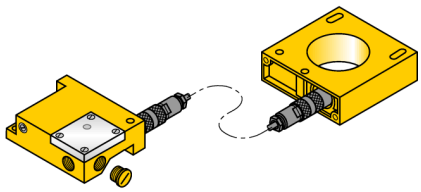
### Wiring diagram




| | |
|---|---|
| **Type code** | NI65R-S32SR-VP44X-H1141 |
| Ident no. | 1440018 |
| **Inside ring diameter D** | 65 mm |
| Steel wire diameter (St37) | ≥ 2 mm |
| pulse stop | ≥ 5 ms |
| Pulse duration at the ouput | 100 ms ± 20 % |
| Ambient temperature | -25…+70 °C |
| **Operating voltage** | 10…55VDC |
| Residual ripple | ≤ 10 % $U_{ss}$ |
| DC rated operational current | ≤ 200 mA |
| No-load current $I_0$ | ≤ 20 mA |
| Residual current | ≤ 0.1 mA |
| Rated insulation voltage | ≤ 0.5 kV |
| Short-circuit protection | yes/ cyclic |
| Voltage drop at $I_e$ | ≤ 1.8 V |
| Wire breakage / Reverse polarity protection | yes/ complete |
| Output function | 4-wire, changover contact, PNP |
| Switching frequency | 0.008 kHz |
| **Construction** | ring sensor, S32SR |
| Dimensions | 175 x 100 x 32 mm |
| Housing material | plastic, ABS |
| Connection | male, M12 x 1 |
| Coil body | plastic, POM |
| Vibration resistance | 55 Hz (1 mm) |
| Shock resistance | 30 g (11 ms) |
| IP Rating | IP65 |
| MTTF | 2283 years acc. to SN 29500 (Ed. 99) 40 °C |
| **Switching state** | LED yellow |

### Functional principle

Inductive sensors detect metal objects contactless and wear-free. For this purpose they use a high-frequency electromagnetic AC field that interacts with the target. Inductive ring sensors generate this field through an LC resonant circuit. The target acts as the coil core.



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Hans Turck GmbH & Co.KG ● D-45472 Mülheim an der Ruhr ● Witzlebenstraße 7 ● Tel. 0208 4952-0 ● Fax 0208 4952-264 ● more@turck.com ● www.turck.com

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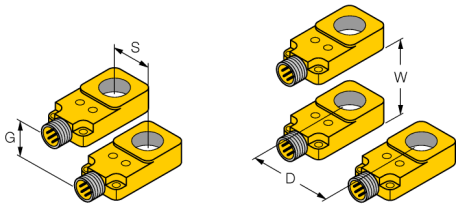
| | |
|---|---|
| **Distance D** | 150 mm |
| Distance W | 150 mm |
| Distance S | 150 mm |
| Distance G | 150 mm |

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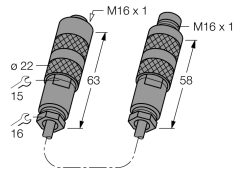
## Accessories

| Type code | Ident no. | Description | Design |
|---|---|---|---|
| ADAPTERKABEL ZUM RING 1,60M | 14306 | The adapter cable enables separate mounting of ring probe and switching amplifier; coax cable: RG58 C/U 50 Ohm |  |



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