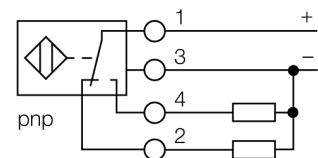


**Inductive sensor
ring sensor
NI20R-S32SR-VP44X**

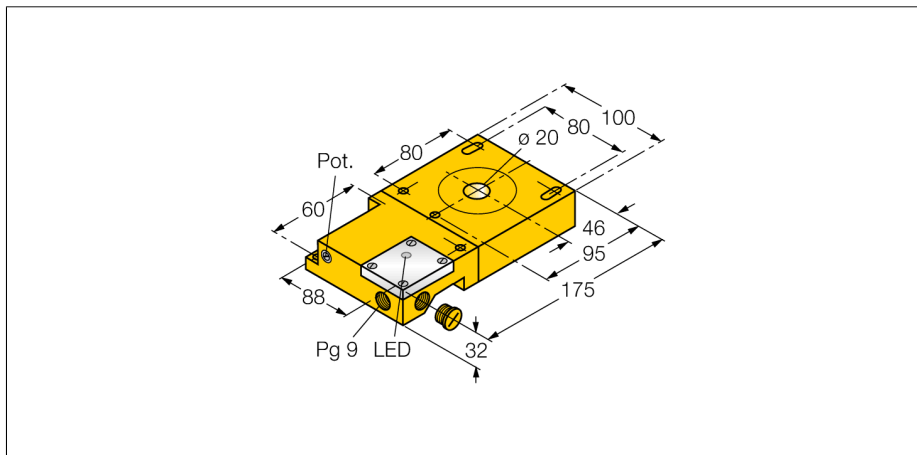
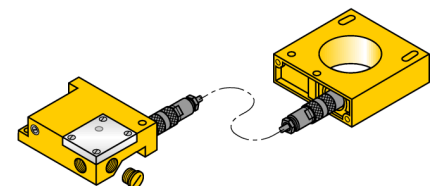
- Rectangular, height 32 mm
- Plastic, ABS
- Static output performance
- Sensitivity adjustable via potentiometer
- Modular design, ring probe and switching amplifier also separately mountable
- Output pulse length min. 100 ms
- DC 4-wire, 10...55 VDC
- Changeover contact, PNP output
- Terminal chamber

Wiring diagram



Functional principle

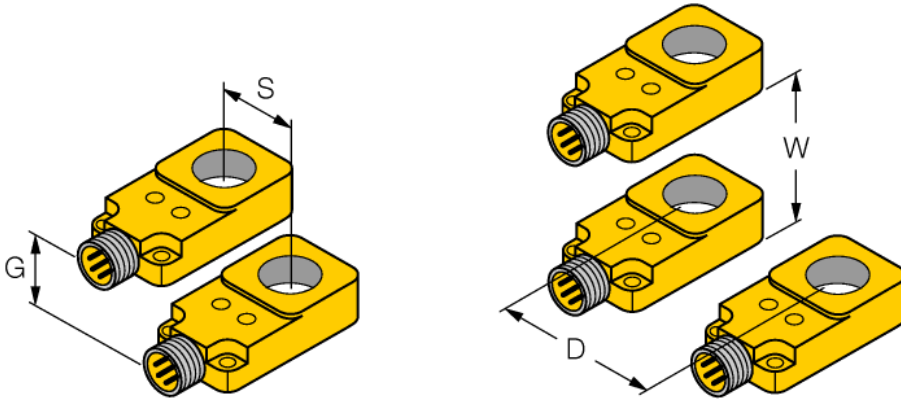
Inductive sensors detect metal objects contactless and wear-free. For this purpose they use a high-frequency electromagnetic AC field that interacts with the target. Inductive ring sensors generate this field through an LC resonant circuit. The target acts as the coil core.



| | |
|---|--|
| Type code | NI20R-S32SR-VP44X |
| Ident no. | 1440001 |
| Inside ring diameter D | 20 mm |
| Steel wire diameter (St37) | ≥ 0.4 mm |
| Repeatability | ≤ 2 % of full scale |
| pulse stop | ≥ 5 ms |
| Pulse duration at the output | 100 ms ± 20 % |
| Ambient temperature | -25...+70 °C |
| Operating voltage | 10...55VDC |
| Residual ripple | ≤ 10 % U _{in} |
| 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 ₀ | ≤ 1.8 V |
| Wire breakage / Reverse polarity protection | yes/ complete |
| Output function | 4-wire, changover contact, PNP |
| Switching frequency | 0.008 kHz |
| Design | ring sensor, S32SR |
| Dimensions | 175x 100x 32 mm |
| Housing material | Plastic, ABS |
| Connection | Terminal chamber |
| Coil body | plastic, ABS |
| Vibration resistance | 55 Hz (1 mm) |
| Shock resistance | 30 g (11 ms) |
| Protection class | IP65 |
| MTTF | 2283 years acc. to SN 29500 (Ed. 99) 40 °C |
| Switching state | ● yellow |
| Included in scope of supply | cable gland, blanking plug |

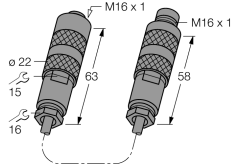
**Inductive sensor
ring sensor
NI20R-S32SR-VP44X**

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



**Inductive sensor
ring sensor
NI20R-S32SR-VP44X**

Accessories

| Type code | Ident no. | Description | Dimension drawing |
|-----------------------------|-----------|--|---|
| 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 |  |