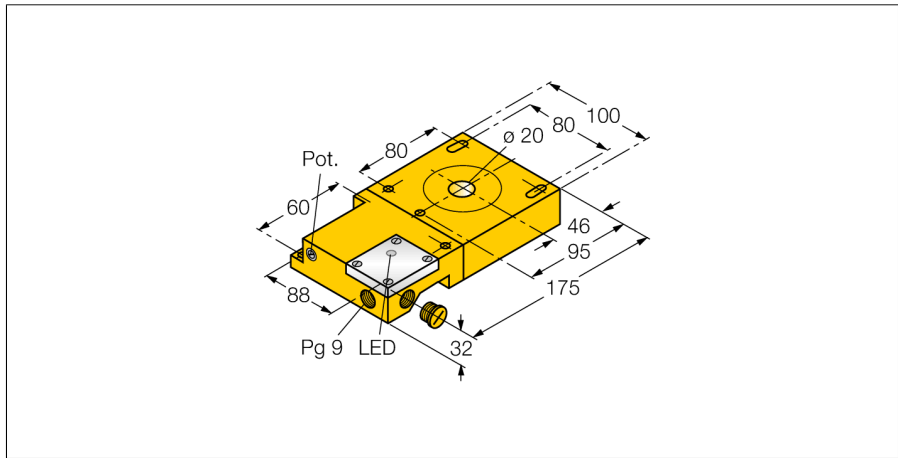
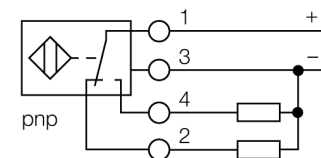


**Inductive sensor
ring sensor
NI20R-S32SR-VP44X**



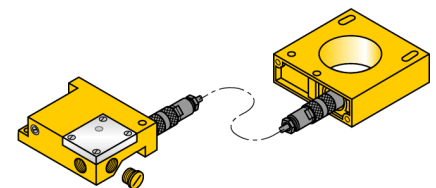
- Rectangular, height 32 mm
- Plastic, ABS
- Static output performance
- Sensitivity adjustable via potentiometer
- Modular design, ring probe and switching amplifier also separately mountable
- Output pulse length min. 100 ms
- 4-wire DC, 10...55 VDC
- Changeover contact, PNP output
- Terminal chamber

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 (S137)	≥ 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, changeover contact, PNP
Switching frequency	0.008 kHz
Design	ring sensor, S32SR
Dimensions	175 x 100 x 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	LED 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**

TURCK

Industrial
Automation

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	