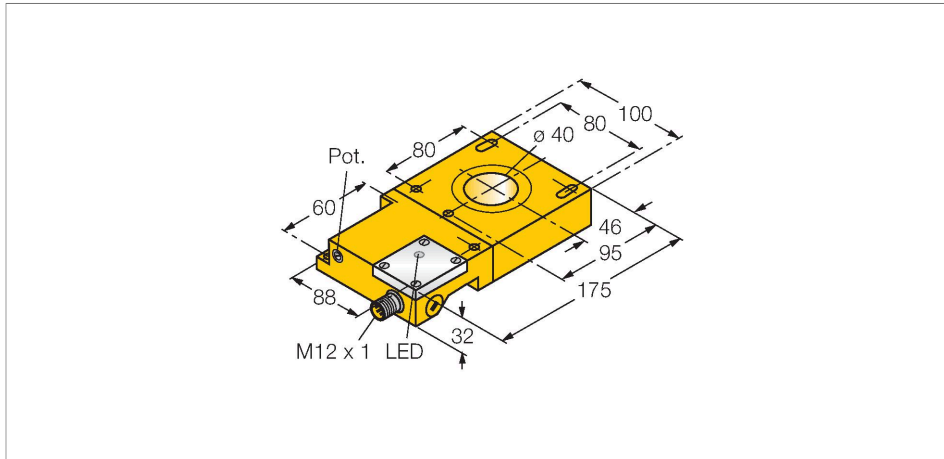


# NI40R-S32SR-VP44X-H1141

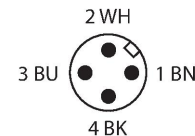
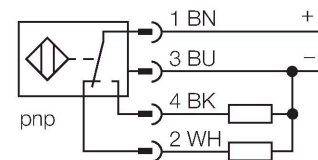
## Inductive Sensor – Ring Sensor



### Features

- Rectangular, height 32 mm
- Plastic, ABS
- Static output behavior
- 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

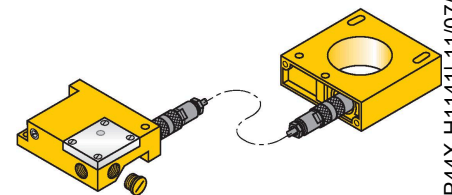


### Technical data

Type	NI40R-S32SR-VP44X-H1141
ID	1440017
<b>General data</b>	
Inside ring diameter D	40 mm
Steel wire diameter (St37)	≥ 1 mm
pulse stop	≥ 5 ms
Pulse duration at the output	≥ 100 ms ± 20 %
<b>Electrical data</b>	
Operating voltage	10...55 VDC
Residual ripple	≤ 10 % U <sub>ss</sub>
DC rated operational current	≤ 200 mA
No-load current	20 mA
Residual current	≤ 0.1 mA
Isolation test voltage	≤ 0.5 kV
Short-circuit protection	yes / Cyclic
Voltage drop at I <sub>o</sub>	≤ 1.8 V
Wire breakage/Reverse polarity protection	yes / Complete
Output function	4-wire, Complementary contact, PNP
Switching frequency	0.008 kHz
<b>Mechanical data</b>	
Design	Ring sensor, S32SR
Dimensions	175 x 100 x 32 mm
Housing material	Plastic, ABS
Electrical connection	Connector, M12 × 1

### 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.

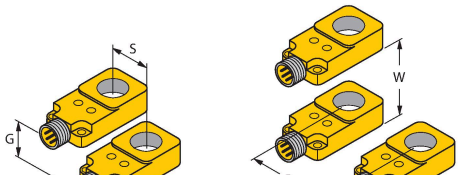


NI40R-S32SR-VP44X-H1141 | 11/07/2023 15-04 | technical changes reserved

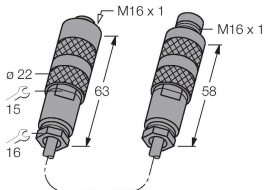
## Technical data

Coil body	plastic, ABS
<b>Environmental conditions</b>	
Ambient temperature	-25...+70 °C
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

## Mounting instructions

Mounting instructions/Description		
	Distance D	150 mm
	Distance W	150 mm
	Distance S	150 mm
	Distance G	150 mm

## Accessories

ADAPTER CABLE RING 1.6M	14306
	<p>Adapter cable enables separate mounting of ring probe and switching amplifier; coax cable: RG58 C/U 50 Ohm</p>