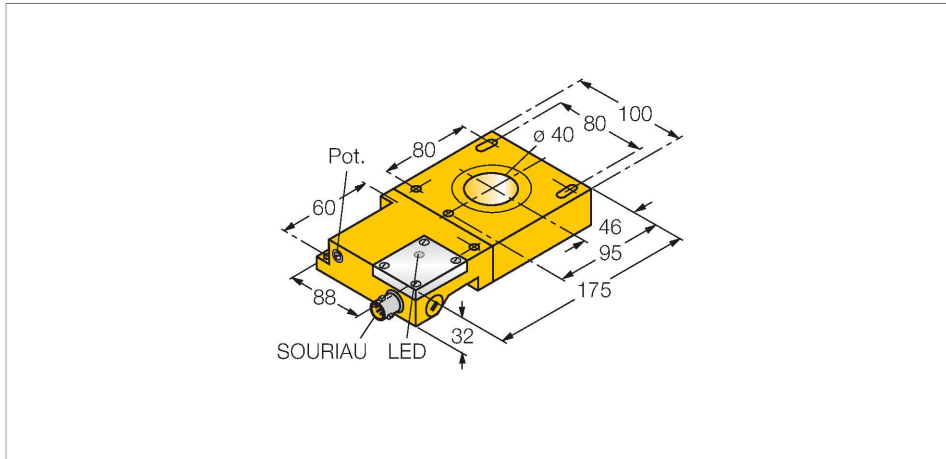


NI40R-S32SR-AP44X-S1131

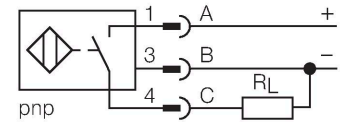
Inductive Sensor – Ring Sensor



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 3-wire, 10...55 VDC
- NO contact, PNP output
- Connector, SOURIAU

Wiring diagram

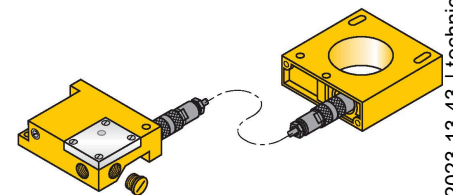


Technical data

Type	NI40R-S32SR-AP44X-S1131
ID	1440006
General data	
Inside ring diameter D	40 mm
Steel wire diameter (St37)	≥ 1 mm
Repeat accuracy	≤ 2 % of full scale
pulse stop	≥ 5 ms
Pulse duration at the output	≥ 100 ms ± 20 %
Hysteresis	3...15 %
Electrical data	
Operating voltage	10...55 VDC
Residual ripple	≤ 10 % U _{ss}
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 _o	≤ 1.8 V
Wire breakage/Reverse polarity protection	yes / Complete
Output function	3-wire, NO contact, PNP
Switching frequency	0.008 kHz
Mechanical data	
Design	Ring sensor, S32SR
Dimensions	175 x 100 x 32 mm

Functional principle

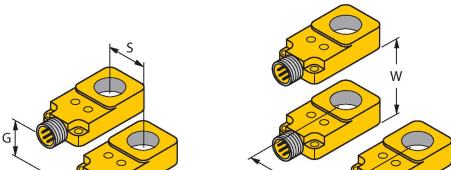
Inductive sensors detect metal objects contactless and wear-free. For this purpose they use a high-frequency electromagnetic AC field that interacts with the target. Inductive ring sensors generate this field through an LC resonant circuit. The target acts as the coil core.



Technical data

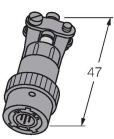
Housing material	Plastic, ABS
Electrical connection	Connector, SOURIAU
Coil body	plastic, ABS
Environmental conditions	
Ambient temperature	-25...+70 °C
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP65
MTTF	2283 years acc. to SN 29500 (Ed. 99) 40 °C
Switching state	LED, Yellow

Mounting instructions

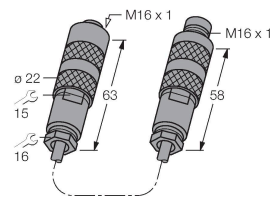
Mounting instructions/Description		
	Distance D	150 mm
	Distance W	150 mm
	Distance S	150 mm
	Distance G	150 mm

Accessories

8 51 06EC 83AP50STECKVERBINDER 14304
 Souriau connector as counter-part for coupling at ring S1131



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



NI40R-S32SR-AP44X-S1131 | 11/07/2023 13-43 | technical changes reserved