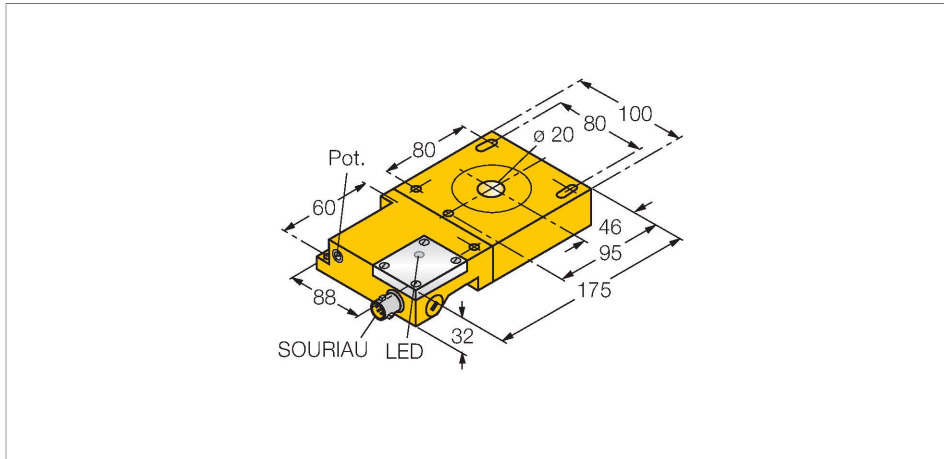


NI20R-S32SR-AP44X-S1131

Inductive Sensor – Ring Sensor



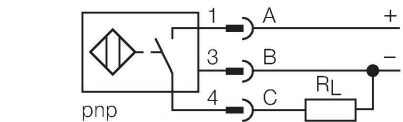
Features

- 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

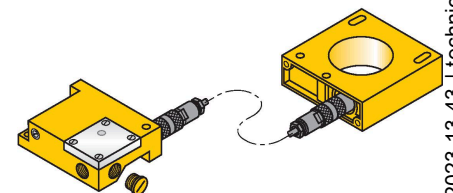
Technical data

Type	NI20R-S32SR-AP44X-S1131
ID	1440002
General data	
Inside ring diameter D	20 mm
Steel wire diameter (St37)	≥ 0.4 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.

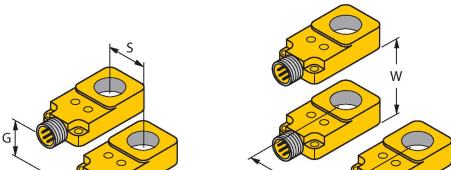


NI20R-S32SR-AP44X-S1131 | 11/07/2023 13-43 | Technical changes reserved

Technical data

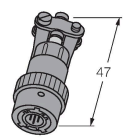
Housing material	Plastic, ABS
Electrical connection	Connector, SOURIAU
Coil body	plastic, ABS
Environmental conditions	
Ambient temperature	-25...+70 °C
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP65
MTTF	2283 years acc. to SN 29500 (Ed. 99) 40 °C
Switching state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

Mounting instructions

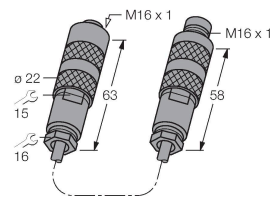
Mounting instructions/Description		
	Distance D	150 mm
	Distance W	150 mm
	Distance S	150 mm
	Distance G	150 mm

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



NI20R-S32SR-AP44X-S1131 | 11/07/2023 13-43 | technical changes reserved