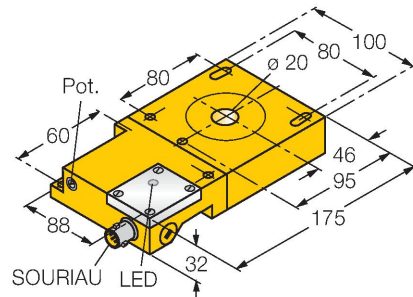


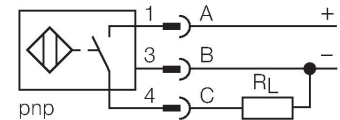
NI20R-S32SR-AP44X-S1131 Inductive Sensor – Ring Sensor



Features

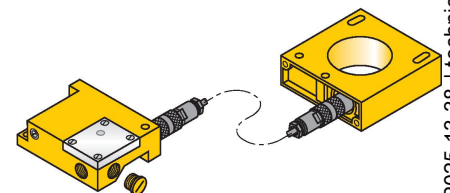
- Rectangular, height 32 mm
- Plastic, ABS
- Static output behavior
- Sensitivity adjusted via potentiometer
- Modular design, ring probe and switching amplifier also separately mountable
- Output pulse length min. 100 ms
- DC 3-wire, 10...55 VDC
- NO contact, PNP output
- Connector, SOURIAU

Wiring diagram



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.



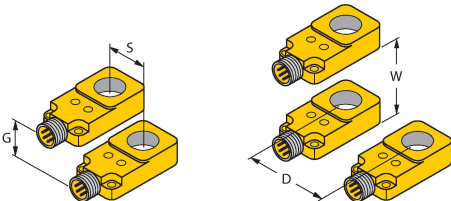
Technical data

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 U_B	10...55 VDC
Ripple U_{ss}	≤ 10 % U_{Bmax}
DC rated operating current I_o	≤ 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 break/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

Technical data

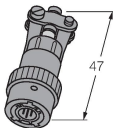
Housing material	Plastic, ABS
Electrical connection	Connector, SOURIAU
Coil body	plastic, ABS
Environmental conditions	
Ambient temperature	-25...+70 °C
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP65
MTTF	2283 years acc. to SN 29500 (Ed. 99) 40 °C
Switching state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

