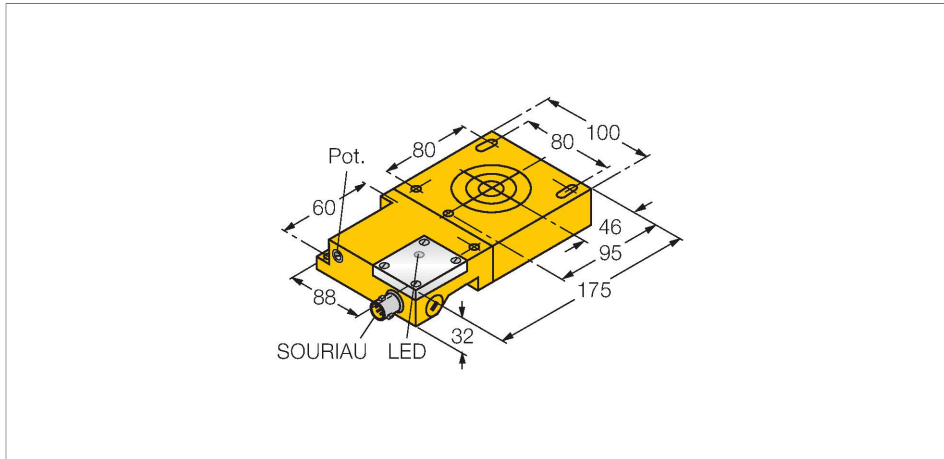


# NI40F-S32SR-AP44X-S1131

## Inductive Sensor – Rectangular Sensor



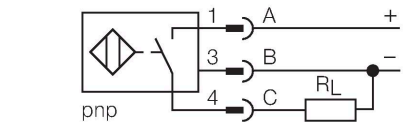
### Features

- 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

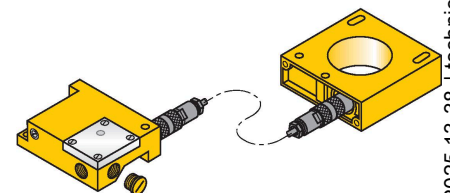
### Technical data

Type	NI40F-S32SR-AP44X-S1131
ID	1440004
<b>General data</b>	
Rated switching distance	40 mm
Repeat accuracy	≤ 2 % of full scale
pulse stop	≥ 5 ms
Pulse duration at the output	≥ 100 ms ± 20 %
Hysteresis	3...15 %
<b>Electrical data</b>	
Operating voltage $U_b$	10...55 VDC
Ripple $U_{rs}$	≤ 10 % $U_{bmax}$
DC rated operating current $I_b$	≤ 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 $I_b$	≤ 1.8 V
Wire break/reverse polarity protection	yes/Complete
Output function	3-wire, NO contact, PNP
Switching frequency	0.008 kHz
<b>Mechanical data</b>	
Design	Rectangular, S32SR
Dimensions	175 x 100 x 32 mm
Housing material	Plastic, ABS



### Functional principle

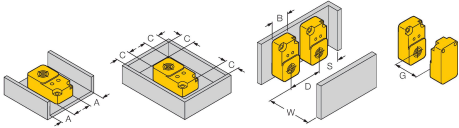
Inductive sensors detect metal objects contactless and wear-free. For this purpose they use a high-frequency electromagnetic AC field that interacts with the target. The sensors hosting a ferrite core coil generate the AC field through an LC resonant circuit.



## Technical data

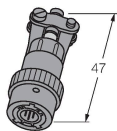
Active area material	ABS
Electrical connection	Connector, SOURIAU
Coil body	plastic, ABS
<b>Environmental conditions</b>	
Ambient temperature	-25...+70 °C
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP65
MTTF	2283 years acc. to SN 29500 (Ed. 99) 40 °C
Switching state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

## Mounting instructions

Mounting instructions/Description		
	Distance D	150 mm
	Distance W	150 mm
	Distance S	150 mm
	Distance G	150 mm
	Distance N	3 x Sn
	Distance A	2 x Sn
	Distance C	2 x Sn

## 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

