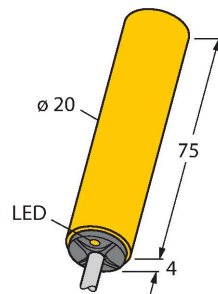


NI10-K20-AZ3X

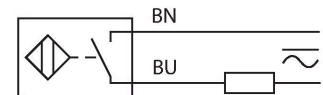
Inductive Sensor



Features

- Smooth barrel, Ø 20 mm
- Plastic, PBT-GF30-V0
- AC 2-wire, 20...250 VAC
- DC 2-wire, 10...300 VDC
- NO contact
- Cable connection

Wiring diagram

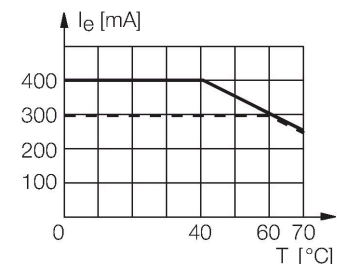


Technical data

Type	NI10-K20-AZ3X
ID	43585
General data	
Rated switching distance	10 mm
Mounting conditions	Non-flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeat accuracy	≤ 2 % of full scale
Temperature drift	$\leq \pm 10$ %
Hysteresis	3...15 %
Electrical data	
Operating voltage U_B	20...250 VAC
Operating voltage U_B	10...300 VDC
AC rated operational current	≤ 400 mA
DC rated operating current I_o	≤ 300 mA
Frequency	$\geq 50... \leq 60$ Hz
Residual current	≤ 1.7 mA
Isolation test voltage	1.5 kV
Surge current	≤ 8 A (≤ 10 ms max. 5 Hz)
Voltage drop at I_o	≤ 6 V
Output function	2-wire, NO contact, 2-wire
Smallest operating current	≥ 3 mA
Switching frequency	0.02 kHz
Mechanical data	
Design	Smooth barrel, 20 mm
Dimensions	79 mm

Functional principle

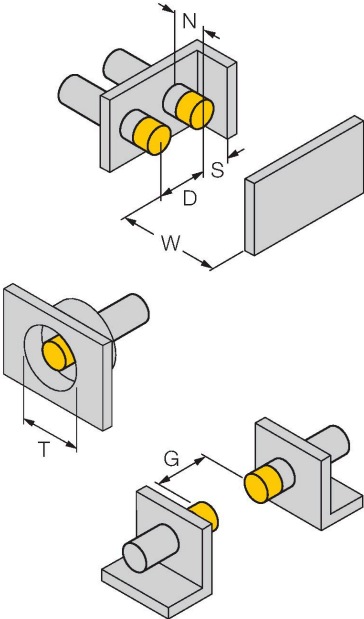
Inductive sensors detect metal objects contactless and wear-free. For this, they use a high-frequency electromagnetic AC field that interacts with the target. Inductive sensors generate this field via an RLC circuit with a ferrite coil.



Technical data

Housing material	Plastic, PBT-GF30-V0
Active area material	Plastic, PBT-GF30-V0
End cap	Plastic, EPTR
Electrical connection	Cable
Cable quality	Ø 5.2 mm, LifYY, PVC, 2 m
Core cross-section	2 x 0.34 mm ²
Environmental conditions	
Ambient temperature	-25...+70 °C
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
MTTF	2283 years acc. to SN 29500 (Ed. 99) 40 °C
Switching state	LED, Red
Included in delivery	BS20

Mounting instructions

Mounting instructions/Description		
	Distance D	3 x B
	Distance W	3 x Sn
	Distance T	3 x B
	Distance S	1.5 x B
	Distance G	6 x Sn
	Distance N	2 x Sn
	Diameter active area B	Ø 20 mm

Accessories

BS 20

69464

Fixing clamp; material mounting
block: PBT

