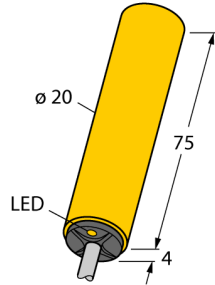


Inductive sensor NI10-K20-AZ3X

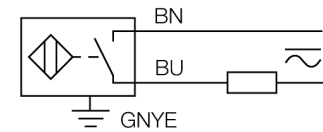
TURCK
works

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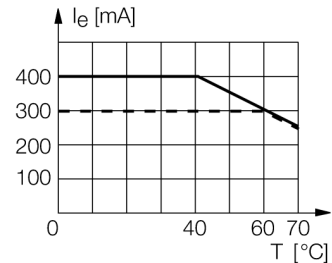
- Smooth barrel, Ø 20 mm
- Plastic, PBT-GF30-V0
- AC 2-wire, 20...250 VAC
- DC 2-wire, 10...300 VDC
- NO contact
- Cable connection

Wiring Diagram



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.



Type designation	NI10-K20-AZ3X
Ident-No.	43585
Ident-No (TUSA)	M4358500
Rated switching distance Sn	10 mm
Mounting conditions	non-flush
Assured switching distance	≤ (0,81 x Sn) mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeatability	≤ 2 % of full scale
Temperature drift	≤ ± 10 %
Hysteresis	3...15 %
Ambient temperature	-25...+70 °C
Operating voltage	20...250 VAC
Operating voltage	10... 300VDC
AC rated operational current	≤ 400 mA
DC rated operational current	≤ 300 mA
Frequency	≥ 50...≤ 60 Hz
Residual current	≤ 1.7 mA
Rated insulation voltage	≤ 1.5 kV
Surge current	≤ 8 A (≤ 10 ms max. 5 Hz)
Voltage drop at I _e	≤ 6 V
Output function	2-wire, NO contact
Smallest operating current I _m	≥ 3 mA
Switching frequency	0.02 kHz
Construction	Smooth barrel, 20 mm
Dimensions	79 mm
Housing material	Plastic, PBT-GF30-V0
Active area material	Plastic, PBT-GF30-V0
End cap	Plastic, EPTR
Electrical connection	cable
Cable quality	5.2 mm, LifYY, PVC, 2m
Cable cross section	2 x 0.34 mm ²
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

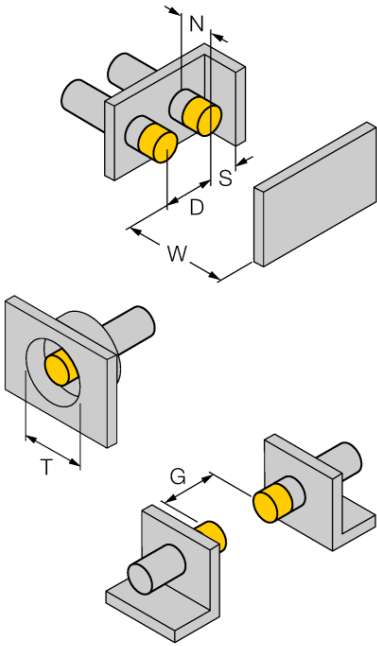
Inductive sensor NI10-K20-AZ3X

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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 of the active area B \varnothing 20 mm



Inductive sensor NI10-K20-AZ3X



Accessories

Type code	Ident-No.	Description	
BS-20	69464	Fixing clamp; material mounting block: PBT	