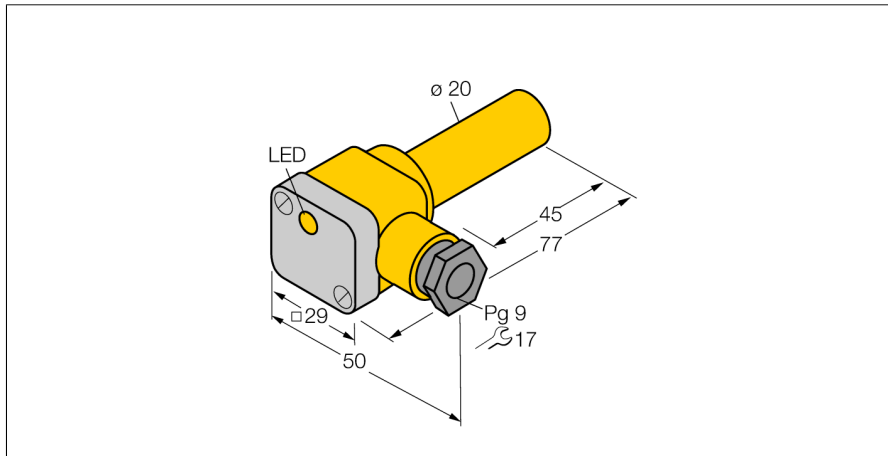
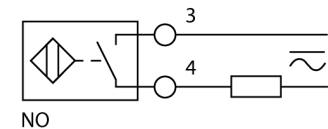


**Inductive sensor
NI10-K20SK-AZ3X**



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

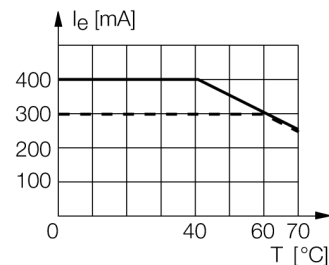
Wiring diagram



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.

We offer special versions for temperatures of -60 °C up to +250 °C.



Type code	NI10-K20SK-AZ3X
Ident no.	43591
Rated operating distance Sn	10 mm
Mounting condition	non-flush
Assured sensing range	≤ (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
Design	smooth barrel, 20 mm
Dimensions	77 mm
Housing material	plastic, PBT
Terminal chamber cover material	plastic, Ultem
Terminal chamber housing material	plastic, plastic, PA12-GF20
Material active area	Plastic, PBT
Connection	terminal chamber
Clamping ability	≤ 2.5 mm ²
Cable external diameter	4.5...8mm
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 scope of supply	BS20; cable gland; 2x plastic seals

**Inductive sensor
NI10-K20SK-AZ3X**

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-K20SK-AZ3X**

TURCK

Industrial
Automation

Accessories

Type code	Ident no.	Description	Dimension drawing
BS 20	69464	Fixing clamp; material mounting block: PBT	