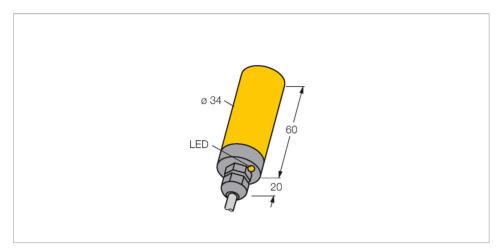


# NI20-K34-VP4X Inductive Sensor



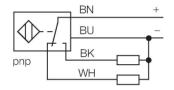
# Technical data

Туре	NI20-K34-VP4X
Ident. no.	1565602
	20 mm
Rated switching distance	
Mounting conditions	Non-flush
Secured operating distance	$\leq$ (0.81 $\times$ Sn) mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeat accuracy	≤ 2 % of full scale
Temperature drift	≤ ± 10 %
Hysteresis	315 %
Ambient temperature	-25+70 °C
Operating voltage	1065 VDC
Residual ripple	≤ 10 % U <sub>ss</sub>
DC rated operational current	≤ 200 mA
No-load current	≤ 15 mA
Residual current	≤ 0.1 mA
Isolation test voltage	≤ 0.5 kV
Short-circuit protection	yes / Cyclic
Voltage drop at I <sub>e</sub>	≤ 1.8 V
Wire breakage/Reverse polarity protection	yes / Complete
Output function	4-wire, Complementary contact, PNP
Switching frequency	0.5 kHz
Design	Smooth barrel, 34 mm
Dimensions	80 mm
Housing material	Plastic, PBT-GF30-V0

### **Features**

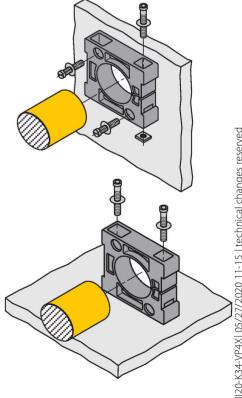
- Smooth barrel, Ø 34 mm
- Plastic, PBT-GF30-V0
- DC 4-wire, 10...65 VDC
- Changeover contact, PNP output
- Cable connection

# 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.



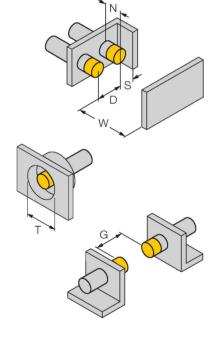


# Technical data

Active area material	Plastic, PBT-GF30-V0
End cap	Plastic, PBT-GF30-V0
Electrical connection	Cable
Cable quality	Ø 5.2 mm, Gray, LifYY, PVC, 2 m
Core cross-section	4 x 0.34 mm <sup>2</sup>
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, Yellow
Included in delivery	BS34.1, 2 M5 screws, cable gland, blanking plugs

# 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	20 mm
Diameter active area B	Ø 34 mm



# Accessories

# BS34.1 16 44 44 0 34 30 58

### 6946010

Fixing clamp: Mounting block material (PBT-GF20-V0); dimensions (58 mm x 56 mm x 16 mm), included in delivery (2 M5 screws for base mounting)