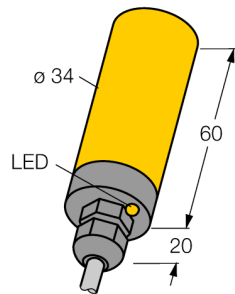
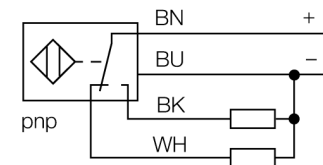


Inductive Sensor NI20-K34-VP4X



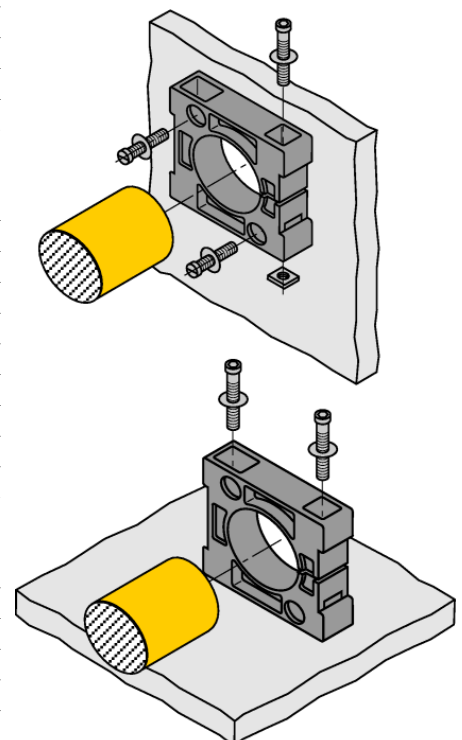
- Smooth barrel, Ø 34 mm
- Plastic, PBT-GF30-V0
- DC 4-wire, 10...65 VDC
- Changeover contact, PNP output
- Cable connection

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.



Type	NI20-K34-VP4X
ID	1565602
General data	
Rated switching distance S_n	20 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	$\leq 2\%$ of full scale
Temperature drift	$\leq \pm 10\%$
Hysteresis	3...15 %
Electrical data	
Operating voltage U_o	10...65 VDC
Ripple U_{res}	$\leq 10\% U_{\text{Bmax}}$
DC rated operating current I_o	≤ 200 mA
Residual current	≤ 0.1 mA
Isolation test voltage	0.5 kV
Short-circuit protection	yes/Cyclic
Voltage drop at I_o	≤ 1.8 V
Wire break/reverse polarity protection	yes/Complete
Output function	4-wire, Complementary contact, PNP
Switching frequency	0.5 kHz
Mechanical data	
Design	Smooth barrel, 34 mm
Dimensions	80 mm
Housing material	Plastic, PBT-GF30-V0
Active area material	Plastic, PBT-GF30-V0
End cap	Plastic, PBT-GF30-V0
Electrical connection	Cable
Cable quality	Ø 5.2mm, Gray, LifYY, PVC, 2 m
Core cross-section	4 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	
Included in delivery	LED, Yellow BS34.1, 2 M5 screws, cable gland, blanking plugs

Accessories

Type code	Ident-No.		Dimension drawing
BS34.1	6946010	Fixing clamp: Mounting block material (PBT-GF20-V0); di- mensions (58 mm x 56 mm x 16 mm), included in delivery (2 M5 screws for base mounting)	