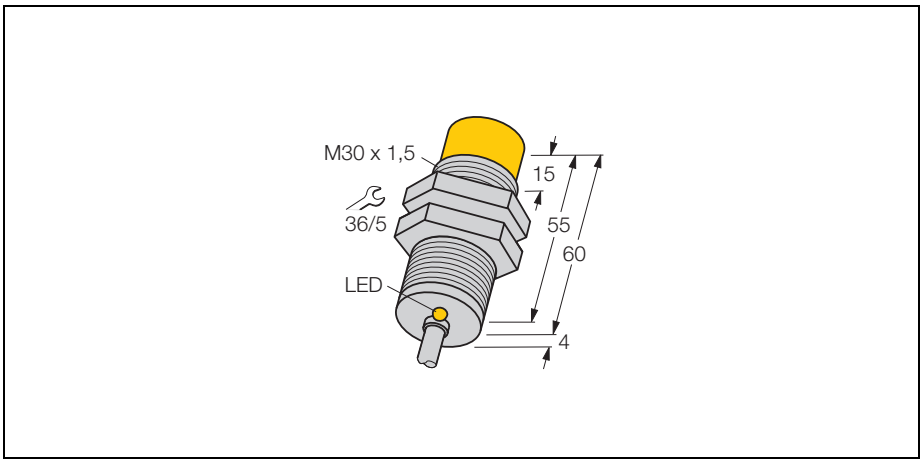
uprox®

inductive sensor

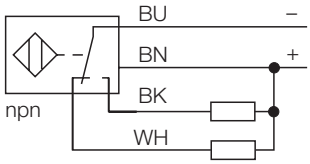
Ni20U-EM30-VN4X

TURCK
Industrial Automation



- **threaded barrel, M30 x 1,5**
- **stainless steel, 1.4301**
- **factor 1 for all metals**
- **degree of protection IP68**
- **magnetic field immune**
- **extended temperature range**
- **high switching frequency**
- **4-wire DC, 10..0.65 VDC**
- **change-over, npn output**
- **cable connection**

Wiring diagram



Function principle

Inductive sensors are designed for wear-free and non-contact detection of metal objects. Due to a ferrite-less 3-coil system, uprox factor 1 sensors have distinct advantages. They detect all metals at the same switching distance, are magnetic field immune and feature large switching distances.

Type	Ni20U-EM30-VN4X
Ident-No.	1582562
Rated operating distance Sn	20 mm
Mounting condition	non-flush
Assured switching distance	≤ (0,81 x Sn) mm
Repetition accuracy	≤ 2 %
Temperature drift	≤ ± 10 %
	≤ ± 15 %, ≤ -25 °C v ≥ +70 °C
Hysteresis	3... 15 %
ambient temperature	-30 ... + 85 °C
Operating voltage	10... 65 V DC
Residual ripple	≤ 10 % U_{ss}
DC rated operational current	≤ 200 mA
No-load current I_0	≤ 15 mA
Residual current	≤ 0.1 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes / cyclic
Voltage dip at I_e	≤ 1.8 V
Wire breakage / reverse polarity protection	yes / complete
Output function	4-wire, change-over, npn
Insulation class	⧈
Switching frequency	≤ 1.5 kHz
Housing style	threaded barrel; M30 x 1,5
Dimensions	64 mm
Housing material	metal, A2 1.4301 (AISI 304)
Material active area	plastic, PBT
End cap	plastic, EPTR
Housing nut tightening torque	75 Nm
Connection	cable
cable quality	Ø 5.2, LifYY, PVC, 2 m
Cable cross section:	4 x 0.34 mm^2
Vibration resistance	55 Hz (1 mm)
Shock resistance	30g (11 ms)
Protection degree	IP68
Switch state display	LED yellow

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