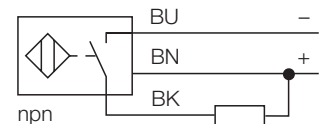


- threaded barrel, M30 x 1,5
- stainless steel, 1.4301
- factor 1 for all metals
- degree of protection IP68
- magnetic field immune
- extended temperature range
- high switching frequency
- predamping protection through self-compensation
- 3-wire DC, 10..0.30 VDC
- normally open npn output
- cable connection

| | |
|---|---------------------------------------|
| Type | Ni20U-EM30-AN6X |
| Ident-No. | 1646320 |
| Rated operating distance Sn | 20 mm |
| Mounting condition | non-flush, partial embedding possible |
| Assured switching distance | ≤ (0,81 x Sn) mm |
| Repetition accuracy | ≤ 2 % |
| Temperature drift | ≤ ± 10 % |
| Hysteresis | ≤ ± 15 %, ≤ -25 °C v ≥ +70 °C |
| ambient temperature | -30 ... + 85 °C |
| Operating voltage | 10... 30 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 | 3-wire, normally open, 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: | 3 x 0.34 mm ² |
| Vibration resistance | 55 Hz (1 mm) |
| Shock resistance | 30g (11 ms) |
| Protection degree | IP68 |
| Switch state display | LED yellow |

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.