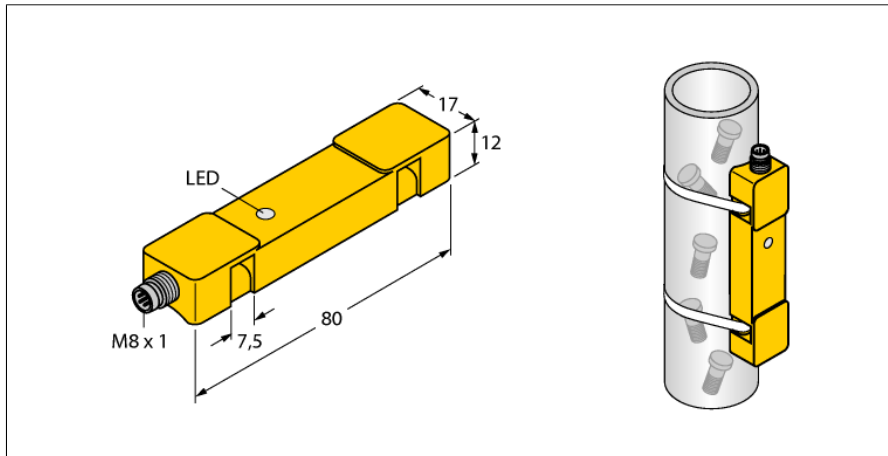
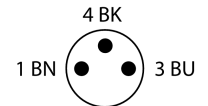
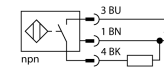


Inductive sensor
Detection of small and fast tube-guided parts
NI20U-TS12-AN6X2-V1131



- Rectangular, height 12 mm
- Plastic, PBT-GF30-V0
- Resistant to magnetic fields
- Factor 1 for all metals
- High sensitivity for detection of small parts
- Output pulse length min. 100 ms
- DC 3-wire, 10...30 VDC
- NO contact, NPN output
- M8 x 1 male connector

Wiring Diagram



Type designation NI20U-TS12-AN6X2-V1131
Ident no. 1625822

Rated switching distance S_n 20 mm
Fly-by speed 0...20 m/s
Mounting conditions Non-flush
Secured operating distance $\leq (0,81 \times S_n)$ mm
Repeat accuracy $\leq 2\%$ of full scale
pulse stop ≥ 5 ms
Pulse duration at the output 100 ms $\pm 20\%$
Temperature drift $\leq \pm 10\%$
Hysteresis 3...15 %
Ambient temperature -25...+70 °C

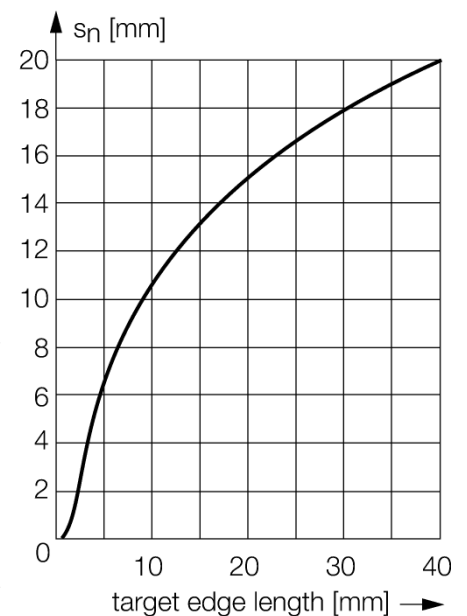
Operating voltage 10...30 VDC
Residual ripple $\leq 10\% U_{s\text{}}$
DC rated operational current ≤ 200 mA
No-load current I_0 ≤ 15 mA
Residual current $\leq 0,1$ mA
Isolation test voltage $\leq 0,5$ kV
Short-circuit protection yes/ Cyclic
Voltage drop at I_0 $\leq 1,8$ V
Wire breakage/Reverse polarity protection yes/ Complete
Output function 3-wire, NO contact, NPN
Reverse polarity protection Complete
Switching frequency 0.008 kHz

Design Rectangular, TS12
Dimensions 80 x 17 x 12 mm
Housing material Plastic, PBT-GF30-V0
Electrical connection Connector, M8 x 1
Vibration resistance 55 Hz (1 mm)
Shock resistance 30 g (11 ms)
Protection class IP68
MTTF 874 years acc. to SN 29500 (Ed. 99) 40 °C

Power-on indication LED green
Switching state LED yellow
Included in delivery 2 retaining straps

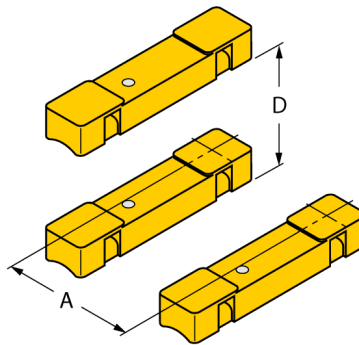
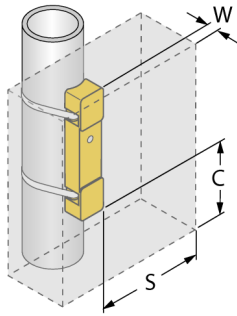
Functional principle

The highly sensitive sensor detects even small and fast tube-guided parts. Easily mounted with retaining straps. Can be repositioned or replaced during operation. High-quality alternative to simple ring sensors.



Inductive sensor
Detection of small and fast tube-guided parts
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Distance D	50 mm
Distance W	35 mm
Distance S	35 mm
Distance A	42 mm
Distance C	30 mm
<hr/>	
Width active area B	17 mm



The TS12 has no tailback detection function.

To achieve optimal functionality, use only small targets with a max. length of 20 mm.