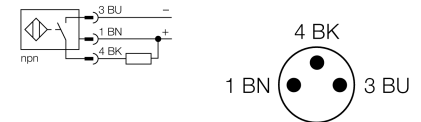


- Rectangular, height 12 mm
- Plastic, PBT-GF30-V0
- Magnetic field immune
- Factor 1 for all metals
- High sensitivity ensures detection of small parts
- Output pulse length min. 100 ms
- DC 3-wire, 10...30 VDC
- NO contact, NPN output
- M8 x 1 connector

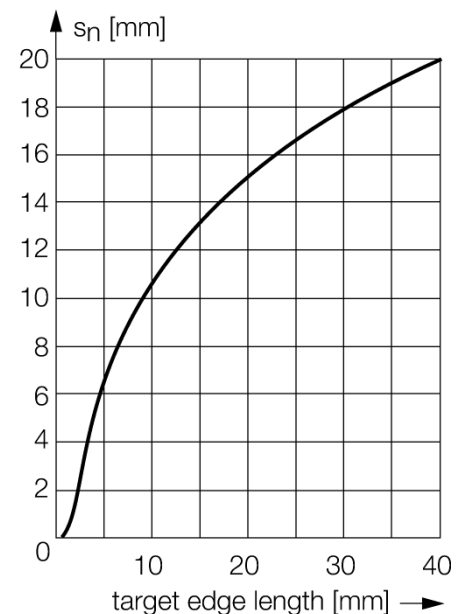
Wiring diagram



Type code	NI20U-TS12-AN6X2-V1131
Ident no.	1625822
Rated operating distance Sn	20 mm
Fly-by speed	0...20 m/s
Mounting condition	non-flush
Assured sensing range	≤ (0,81 x Sn) mm
Repeatability	≤ 2 % of full scale
pulse stop	≥ 5 ms
Pulse duration at the output	100 ms ± 20 %
Temperaturdrift	10 %
Hysteresis	3...15 %
Ambient temperature	-25...+70 °C
Operating voltage	10...30VDC
Residual ripple	≤ 10 % U _{is}
DC rated operational current	≤ 200 mA
No-load current I₀	≤ 15 mA
Residual current	≤ 0.1 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes/ cyclic
Voltage drop at I₀	≤ 1.8 V
Wire breakage / Reverse polarity protection	yes/ complete
Output function	3-wire, NO contact, NPN
Switching frequency	0.008 kHz
Design	rectangular, TS12
Dimensions	80x 17x 12 mm
Housing material	Plastic, PBT
Connection	male, 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
Operating voltage	LED green
Switching state	● yellow
Included in scope of supply	2 retaining straps

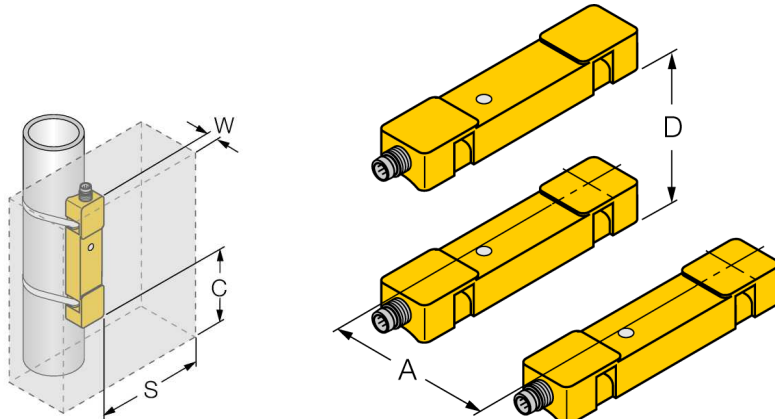
Functional principle

Due to its high sensitivity, the sensor detects even small and fast moving parts through tubes. Mounting is easily accomplished with retaining straps. The sensor can thus be repositioned or replaced during operation. This sensor is the better alternative to simple ring sensors.



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

Distance D	50 mm
Distance W	35 mm
Distance S	35 mm
Distance A	42 mm
Distance C	30 mm
<hr/>	
Width of the active face 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.