

- Rectangular, height 40 mm
- Active face on top
- Plastic, PBT-GF30-V0
- 4 LEDs for optimum view on supply voltage and switching state from any position
- Factor 1 for all metals
- Increased switching distance
- Protection class IP68
- Resistant to magnetic fields
- Auto-compensation protects against pre-attenuation
- Partially embeddable
- DC 3-wire, 10...30 VDC
- NO contact, NPN output
- M12 x 1 male connector

Type designation	NI75U-Q80-AN6X2-H1141
Ident-No.	1625856
Ident-No (TUSA)	M1625856

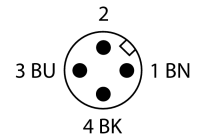
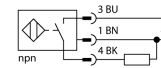
Rated switching distance S_n	75 mm
Mounting conditions	Non-flush, partially embeddable
Repeat accuracy	≤ 2 % of full scale
Temperature drift	≤ ± 10 %
Hysteresis	3...15 %
Ambient temperature	-25...+70 °C

Operating voltage	10...30 VDC
Residual ripple	≤ 10 % U _{is}
DC rated operational current	≤ 200 mA
No-load current I ₀	≤ 15 mA
Residual current	≤ 0.1 mA
Isolation test voltage	≤ 0.5 kV
Short-circuit protection	yes/ Cyclic
Voltage drop at I ₀	≤ 1.8 V
Wire breakage/Reverse polarity protection	yes/ Complete
Output function	3-wire, NO contact, NPN
Protection class	□
Switching frequency	0.25 kHz

Design	Rectangular, Q80
Dimensions	92 x 80 x 40 mm
Housing material	Plastic, PBT-GF30-V0, Yellow
Tightening torque fixing screw	4 Nm
Electrical connection	Connector, M12 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

Wiring Diagram

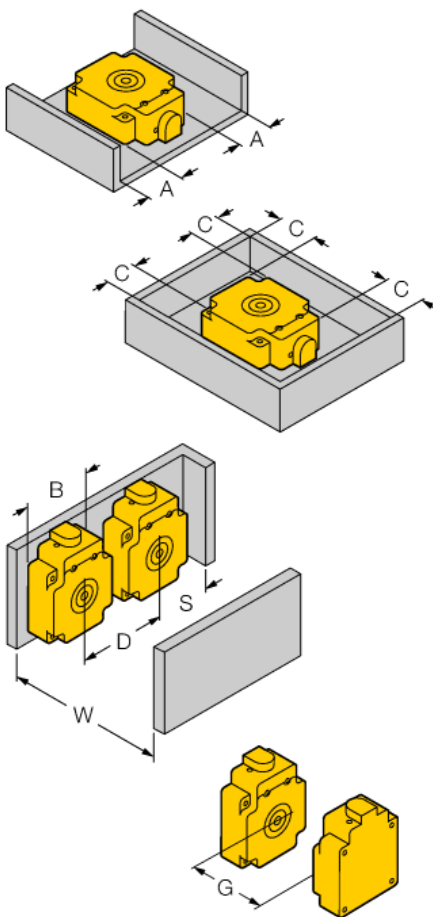


Functional principle

Inductive sensors detect metal objects contactless and wear-free. Due to the patented multi-coil system, *uprox*+ sensors have distinct advantages over conventional sensors. They excel in largest switching distances, maximum flexibility and operational reliability as well as efficient standardization.

Distance D	240 mm
Distance W	225 mm
Distance S	60 mm
Distance G	450 mm
Distance A	20 mm
Distance C	80 mm

Width active area B 80 mm



Mounting on metal: $S_r = 75 \text{ mm}$

1-side mounting: $S_r = 50 \text{ mm}$

2-side mounting: $S_r = 45 \text{ mm}$

3-side mounting: $S_r = 40 \text{ mm}$

4-side mounting: $S_r = 40 \text{ mm}$

recessed mounting without metal baseplate: $S_r = 65 \text{ mm}$

The values stated relate to a 1 mm thick steel plate.

Switching distances with different target sizes:

Sheet steel 150 x 150 mm: $S_n = 65 \text{ mm}$

Sheet steel 60 x 60 mm: $S_n = 50 \text{ mm}$

Sheet steel 40 x 40 mm: $S_n = 40 \text{ mm}$

Sheet steel 120 x 40 mm: $S_n = 45 \text{ mm}$ (simulation of a skid runner)

Wiring accessories

Type code	Ident-No.	Description	
RKC4T-2/TEL	6625010	Connection cable, female M12, straight, 3-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com	