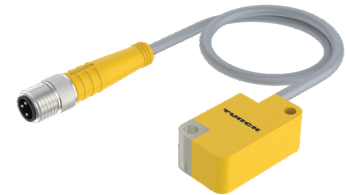
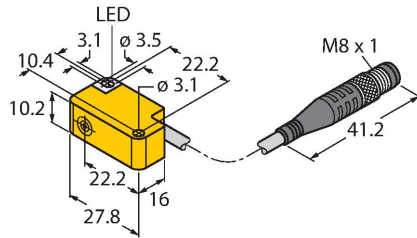


NI5U-Q10S-AP6X-0.2-PSG3M

Inductive Sensor – With Extended Switching Distance



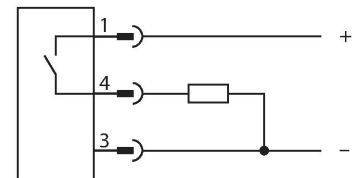
Technical data

Type	NI5U-Q10S-AP6X-0.2-PSG3M
ID	1609371
General data	
Rated switching distance	5 mm
Mounting conditions	Non-flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Repeat accuracy	$\leq 2 \%$ of full scale
	$\leq \pm 15 \%, \leq -25 \text{ °C} \vee \geq +70 \text{ °C}$
Hysteresis	3...15 %
Electrical data	
Operating voltage U_B	10...30 VDC
Ripple U_{ss}	$\leq 10 \%$ U_{Bmax}
DC rated operating current I_o	≤ 150 mA
No-load current	≤ 15 mA
Residual current	≤ 0.1 mA
Isolation test voltage	0.5 kV
Short-circuit protection	yes/Cyclic
Voltage drop at I_o	≤ 1.8 V
Wire break/reverse polarity protection	yes/Complete
Output function	3-wire, NO contact, PNP
DC field stability	300 mT
AC field stability	300 mT _{ss}
Switching frequency	1 kHz

Features

- Rectangular, height 10.2 mm
- Active face, lateral
- Cable outlet to all sides
- Plastic, PP-GF20
- Factor 1 for all metals
- Increased switching distance
- Protection class IP68
- Resistant to magnetic fields
- Auto-compensation protects against pre-damping
- Flush mounted installation on up to 4 sides
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- Pigtail with male end M8 x 1

Wiring diagram

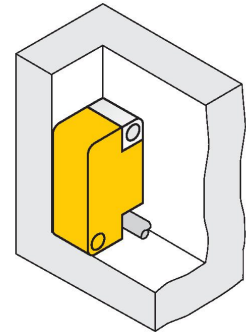


Functional principle

Inductive sensors are designed for wear-free and contactless detection of metal objects. uprox+ sensors have significant advantages due to their patented multi-coil system. They excel thanks to their optimum switching distances, maximum flexibility and operational reliability as well as efficient standardization.

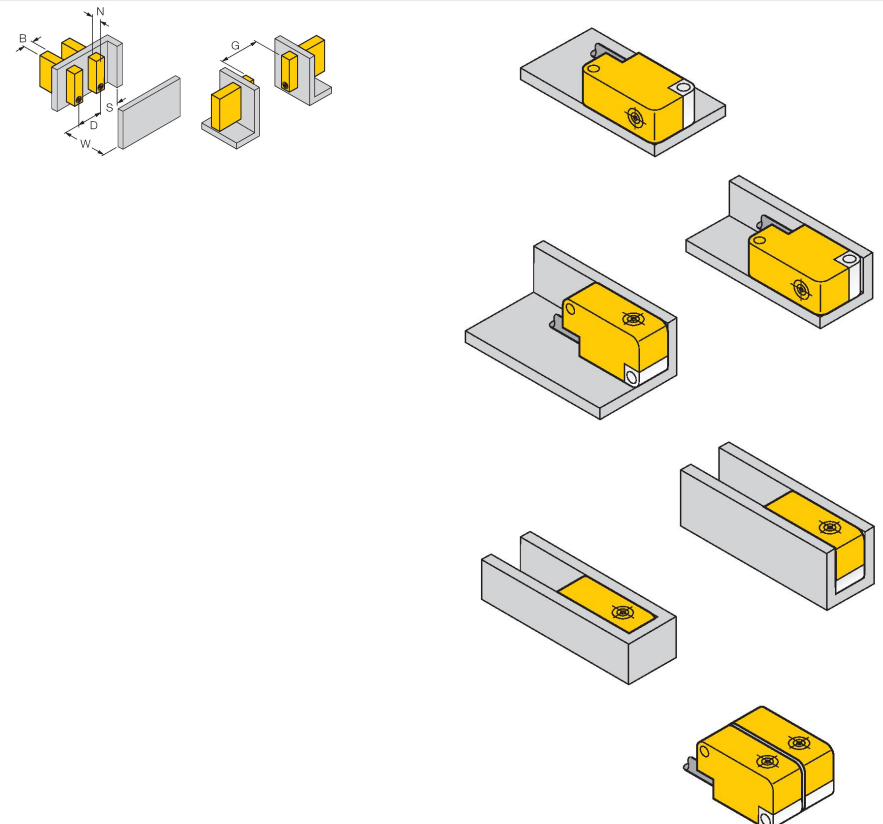
Technical data

Mechanical data	
Design	Rectangular, Q10S
Dimensions	27.8 x 16 x 10.2 mm
Housing material	Plastic, PP-GF20
Active area material	PP-GF20
Material coupling nut	metal, CuZn, nickel-plated
Electrical connection	Cable with connector, M8 × 1
Cable quality	Ø 3 mm, Gray, Lif9Y-11Y, PUR, 0.2 m
	Suited for E-ChainSystems® acc. to manufacturers declaration H1063M
Core cross-section	3 x 0.14 mm ²
Environmental conditions	
Ambient temperature	-30...+85 °C
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
Switching state	LED, Yellow



Mounting instructions

Mounting instructions/Description



Distance D	$3 \times B$
Distance W	$3 \times S_n$
Distance S	$1.5 \times B$
Distance G	$6 \times S_n$
Width active area B	10.2 mm

Flush mounting:

1-side mounting:
 $S_n = 3 \text{ mm}$

2-side mounting:
 $S_n = 3 \text{ mm}$

3-side mounting:
 $S_n = 2.6 \text{ mm}$

4-side mounting:
 $S_n = 2.3 \text{ mm}$

In many cases, sensors have to be mounted side by side to fulfill monitoring tasks. In order to avoid mutual interferences, use the Q10S-ZP shield (ident no. 6900520).

Accessories

Q10S-ZP	6900520
mounting panel Q10S	

