

NI4U-Q8SE-AP6X-0.3-RS4T

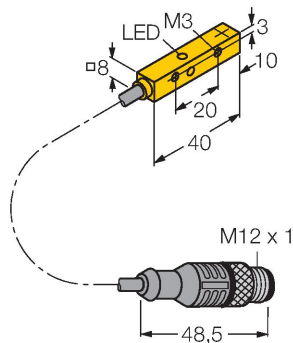
Inductive Sensor – With Extended Switching Distance

Features

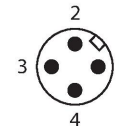
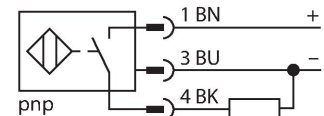
- Rectangular, height 8 mm
- Active face on top
- Plastic, PP
- Factor 1 for all metals
- Increased switching distance
- Protection class IP68
- Resistant to magnetic fields
- Auto-compensation protects against pre-damping
- Flush mounted installation on up to 4 sides
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- Pigtail with male end M12 x 1

Technical data

Type	NI4U-Q8SE-AP6X-0.3-RS4T
ID	4635891
General data	
Rated switching distance	4 mm
Mounting conditions	Non-flush, flush mountable
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Repeat accuracy	$\leq 2 \%$ of full scale
	$\leq \pm 15 \%$, $\leq -25 \text{ }^{\circ}\text{C}$ v $\geq +70 \text{ }^{\circ}\text{C}$
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	200 mT
AC field stability	200 mT _{ss}
Insulation class	□
Switching frequency	1 kHz



Wiring diagram



Functional principle

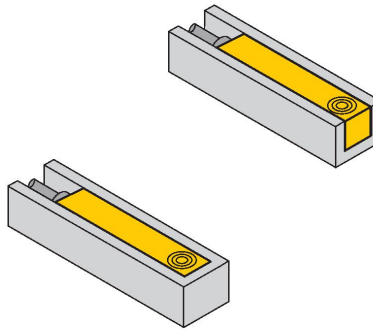
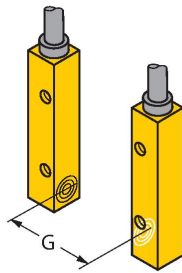
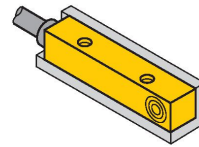
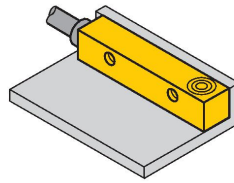
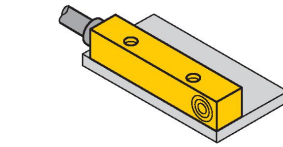
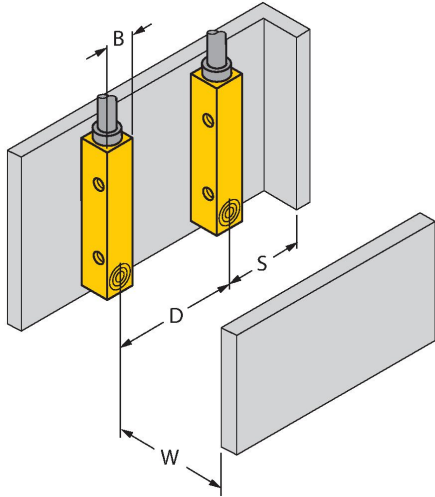
Inductive sensors are designed for wear-free and contactless detection of metal objects. uprox+ sensors have significant advantages due to their patented multi-coil system. They excel thanks to their optimum switching distances, maximum flexibility and operational reliability as well as efficient standardization.

Technical data

Mechanical data	
Design	Rectangular, Q8SE
Dimensions	40 x 8 x 8 mm
Housing material	Plastic, PP, Yellow
Active area material	PP, yellow
Material coupling nut	metal, CuZn, nickel-plated
Tightening torque	≤ 0.6 Nm
Electrical connection	Cable with connector, M12 × 1
Cable quality	Ø 3 mm, Gray, Lif9Y-11Y, PUR, 0.3 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 24 mm

Distance W $3 \times S_n$

Distance S $1.5 \times B$

Distance G $6 \times S_n$

Width active area B 8 mm

Flush-mounted installation on up to 4 sides:

1-side flush-mounted:
Sr = 3.5 mm

2-side flush-mounted:
Sr = 3.0 mm

3-side flush-mounted:
Sr = 2.5 mm

4-side flush-mounted:
Sr = 2.0 mm