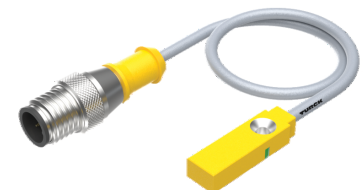
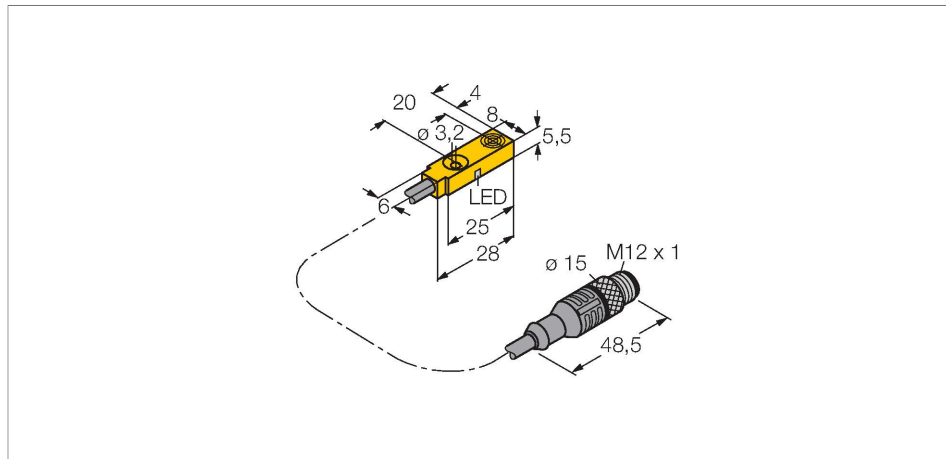


NI3.5-Q5.5-AP6X-0.5-RS4T/S1765

Inductive Sensor – With weldguard® coating



Technical data

Type	NI3.5-Q5.5-AP6X-0.5-RS4T/S1765
ID	46136011
Special version	S1765 corresponds to: weldguard coated sensor with silicone sleeving

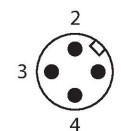
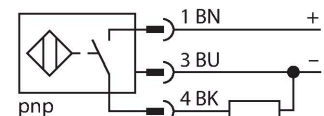
General data	
Rated switching distance	3.5 mm
Mounting conditions	Non-flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeat accuracy	$\leq 2\%$ of full scale
Hysteresis	3...15 %

Electrical data	
Operating voltage	10...30 VDC
Residual ripple	$\leq 10\% U_{ss}$
DC rated operational current	≤ 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 breakage/Reverse polarity protection	yes / Complete
Output function	3-wire, NO contact, PNP
Switching frequency	2 kHz

Features

- Rectangular, height 5.5 mm
- Active face on top
- Plastic, PP
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- Pigtail with male end M12 x 1

Wiring diagram



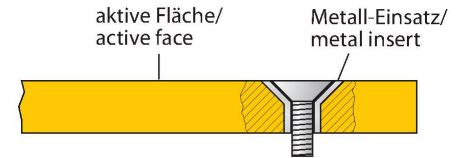
Functional principle

Inductive sensors detect metal objects contactless and wear-free. For this, they use a high-frequency electromagnetic AC field that interacts with the target. Inductive sensors generate this field via an RLC circuit with a ferrite coil.

NI3.5-Q5.5-AP6X-0.5-RS4T/S1765 | 11/07/2023 14-10 | technical changes reserved

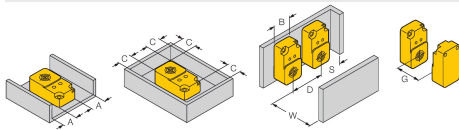
Technical data

Mechanical data	
Design	Rectangular, Q5,5
Dimensions	28 x 8 x 5.5 mm
Housing material	Plastic, PP-GF20
Active area material	PP-GF20
Material coupling nut	metal, CuZn, nickel-plated
Tightening torque fixing screw	0.5 Nm
Electrical connection	Cable with connector, M12 × 1
Cable quality	Ø 3 mm, Gray, Lif9Y-11Y, PUR, 0.5 m
	Suited for E-ChainSystems® acc. to manufacturers declaration H1063M
Core cross-section	3 x 0.14 mm ²
Environmental conditions	
Ambient temperature	-25...+70 °C
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
MTTF	2283 years acc. to SN 29500 (Ed. 99) 40 °C
Switching state	LED, Yellow



Mounting instructions

Mounting instructions/Description



Distance D	3 x B
Distance W	3 x Sn
Distance S	1.5 x B
Distance G	6 x Sn
Distance N	2 x Sn
Distance A	1 x Sn
Distance C	2 x Sn
Width active area B	8 mm

Accessories

MW-Q4.7/Q5.5

6945013

Mounting bracket for rectangular Q4.7
or Q5.5; material VA 1.4401

