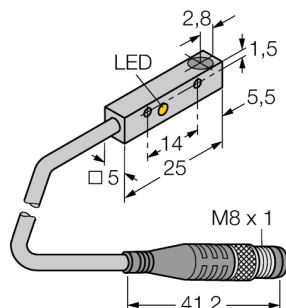


Inductive Sensor

BI0.8-Q5SE-AP6X-0.2-PSG3M



Type	BI0.8-Q5SE-AP6X-0.2-PSG3M
ID	1619343

General data	
Rated switching distance S_n	0.8 mm
Mounting conditions	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	$\leq 5\%$ of full scale
Temperature drift	$\leq \pm 20\%$
Hysteresis	3...15 %

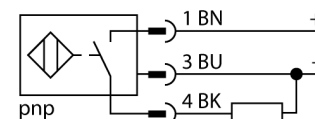
Electrical data	
Operating voltage U_s	10...30 VDC
Ripple U_{rs}	$\leq 10\% U_{Bmax}$
DC rated operating current I_s	≤ 100 mA
Residual current	≤ 0.1 mA
Isolation test voltage	0.5 kV
Short-circuit protection	yes/Cyclic
Voltage drop at I_s	≤ 1.8 V
Wire break/reverse polarity protection	yes/Complete
Output function	3-wire, NO contact, PNP
Switching frequency	3 kHz

Mechanical data	
Design	Rectangular, Q5SE
Dimensions	19.5 x 5 x 5 mm
Housing material	Metal, AL, Anodized
Material coupling nut	metal, CuZn, nickel-plated
Electrical connection	Connector, M8 x 1
Cable quality	Ø 3 mm, LifYY-11Y, PUR, 0.3 m
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

- Rectangular, height 5 mm
- Active face on top
- Metal, GD-ZnAl
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- M8 x 1 male connector

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.

Switching state	LED, Red
Included in delivery	2x screws DIN 84A 4.8 1,6x10 mm