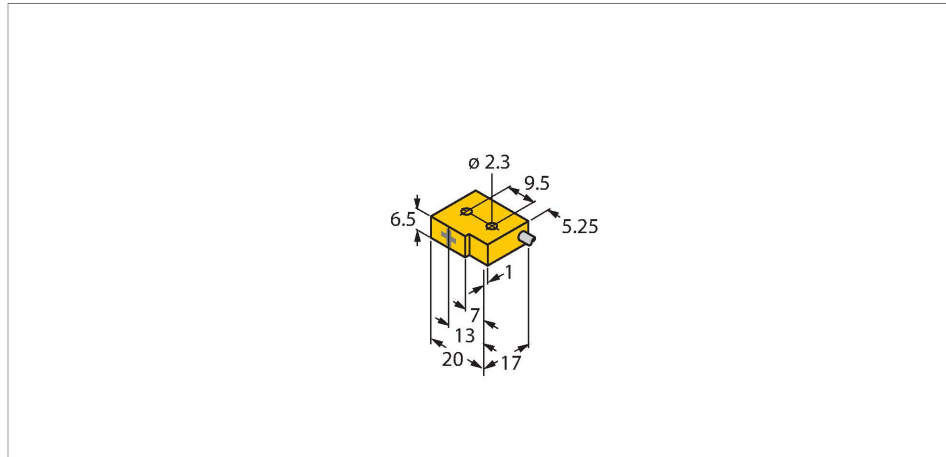


BI0.7-Q6.5-AP6/S1279

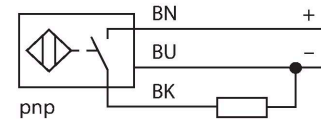
Inductive Sensor – With Increased Temperature Range



Features

- Rectangular, height 6.5 mm
- Active face, lateral
- Plastic, PP GR-20
- Temperatures up to +85°C
- Resistant to magnetic fields
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- Cable connection

Wiring diagram



Technical data

Type	BI0.7-Q6.5-AP6/S1279
ID	4613409
Special version	S1279 Corresponds to: Temperature range up to 85 °C and small hysteresis, resistant to magnetic fields
General data	
Rated switching distance	0.7 mm
	Secured operating distance 0.7...1.0 mm
Mounting conditions	Flush
Secured operating distance	≤ (0.81 × Sn) mm
Correction factors	St37 = 1; Al = 0; stainless steel = 0.6; Ms = 0
Repeat accuracy	≤ 2 % of full scale
Temperature drift	≤ ±8 %
Hysteresis	1...4 %
Electrical data	
Operating voltage U _B	10...30 VDC
Ripple U _{rs}	≤ 10 % U _{Bmax}
DC rated operating current I _B	≤ 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 _B	≤ 1.8 V
Wire break/reverse polarity protection	yes/Complete

Functional principle

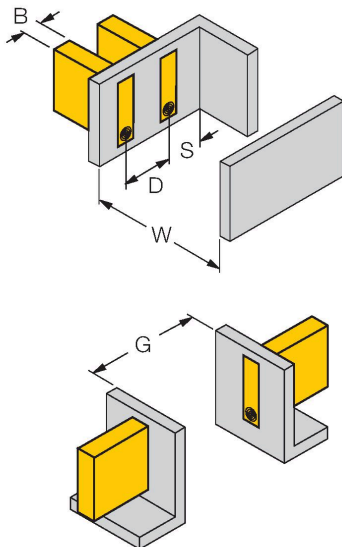
Inductive sensors detect metal objects contactless and wear-free. For this, they use a high-frequency electromagnetic AC field that interacts with the target. Inductive sensors generate this field via an RLC circuit with a ferrite coil.

Technical data

Output function	3-wire, NO contact, PNP
Switching frequency	1 kHz
Mechanical data	
Design	Rectangular, Q6,5
Dimensions	20.2 x 17.2 x 6.5 mm
Housing material	Plastic, PP GR-20
Active area material	PP GR-20
Electrical connection	Cable
Cable quality	Ø 2 mm, Gray, Lif9Y-11Y, PUR, 2 m
Core cross-section	3 x 0.08 mm ²
Litz wire	40 x 0.05 mm
Environmental conditions	
Ambient temperature	-25...+85 °C
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67

Mounting instructions

Mounting instructions/Description



Distance D	2 x B
Distance W	3 x Sn
Distance S	1 x B
Distance G	6 x Sn
Width active area B	6.5 mm