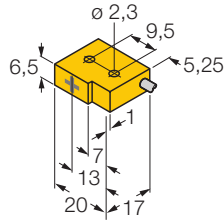
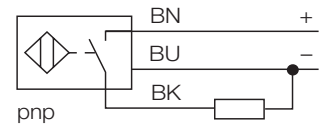


**Inductive sensor  
magnetic field immune  
Bi1-Q6,5-AP6/S34**



- rectangular, height 6.5 mm
- lateral active face
- plastic, PP GR-20
- magnetic field immunity (welding resistance) to DC and AC fields
- 3-wire DC, 10...30 VDC
- normally open, pnp output
- cable connection

**Wiring diagram**



**Functional principle**

Inductive sensors are designed for wear-free and non-contact detection of metal objects. For this purpose they use a high-frequency electro-magnetic AC field that interacts with the target. With inductive sensors, this field is generated by an LC resonant circuit with a ferrite core coil. Magnetic field sensors incorporate a special ferrite core which makes them immune to magnetic AC and DC fields. They may thus be used in welding applications.

<b>Type</b>	Bi1-Q6,5-AP6/S34
Ident-No.	4613401
<b>Rated operating distance Sn</b>	1 mm
Mounting condition	flush
Assured sensing range	(0,81 x Sn) mm
Correction factors	St37 = 1, V2A ~ 0.7, Ms ~ 0.4, Al ~ 0.3
Repeatability	2 %
Temperature drift	± 10 %
Hysteresis	3... 15 %
Ambient temperature	-25...+ 70 °C
<b>Operating voltage</b>	10... 30VDC
Residual ripple	10 % U <sub>SS</sub>
DC rated operational current	150 mA
No-load current I <sub>0</sub>	15 mA
Residual current	0.1 mA
Rated insulation voltage	0.5 kV
Short-circuit protection	yes / cyclic
Voltage drop at I <sub>e</sub>	1.8V
Wire breakage / Reverse polarity protection	yes / complete
Output function	3-wire, normally open, pnp
Switching frequency	0.03 kHz
<b>Housing</b>	rectangular, Q6.5
Dimensions	20 x 17 x 6.5 mm
Housing material	plastic, PP GR-20
Material active face	plastic, PP GR-20
Connection	cable
Cable quality	Ø 2, grey, Lif9Y-11Y, PUR, 2 m
Cable cross section:	3 x 0.08mm <sup>2</sup>
Litz wire	40 x 0.05mm <sup>2</sup>
Vibration resistance	55 Hz (1 mm)
Shock resistance	30g (11 ms)
Degree of protection	IP67

**Inductive sensor  
magnetic field immune  
Bi1-Q6,5-AP6/S34**

Mounting instructions	minimum distances
Distance D	2 x B
Distance W	3 x Sn
Distance S	1 x B
Distance G	6 x Sn

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<b>Width of the active face B</b>	6.5 mm
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