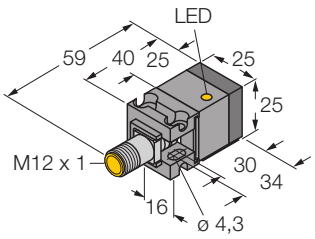
uprox®

Inductive sensor
Bi10U-CA25-AP6X2-H1141

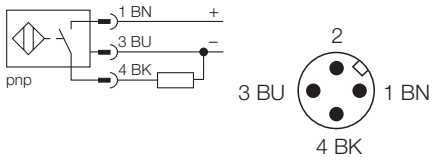
TURCK
Industrial Automation



- **rectangular, height 25 mm**
- **sensor housing, GD-CuZn 12**
- **Front cap made of Duroplast, especially temperature and impact resistant**
- **4 selectable connector positions**
- **variable orientation of active face in 5 directions**
- **factor 1 for all metals**
- **magnetic field immune**
- **extended temperature range**
- **high switching frequency**
- **3-wire DC, 10…30 VDC**
- **normally open, pnp output**
- **connector, M12 x 1**

Type	Bi10U-CA25-AP6X2-H1141
Ident-No.	1625631
Rated operating distance Sn	10 mm
Mounting condition	flush
Assured sensing range	(0,81 x Sn) mm
Repeatability	2 %
Temperature drift	± 10 %
	± 15 %, -25 °C v ≥ +70 °C
Hysteresis	3… 15 %
Ambient temperature	-30…+ 85 °C
Operating voltage	10… 30VDC
Residual ripple	10 % U_{ss}
DC rated operational current	200 mA
No-load current I_0	15 mA
Residual current	0.1 mA
Rated insulation voltage	0.5 kV
Short-circuit protection	yes / cyclic
Voltage drop at I_e	1.8V
Wire breakage / Reverse polarity protection	yes / complete
Output function	3-wire, normally open, pnp
Insulation class	
Switching frequency	0.25 kHz
Housing	rectangular, CA25
Dimensions	40 x 25 x 25 mm
	variable orientation of active face in 5 directions
Housing material	metal, GD-CuZn 12
Material active face	plastic, Duroplast
Connection	connectors, M12 x 1
Vibration resistance	55 Hz (1 mm)
Shock resistance	30g (11 ms)
Degree of protection	IP67
Operating voltage display	LED green
Display switch state	LED yellow

Wiring diagram



Functional principle

Inductive sensors are designed for wear-free and non-contact detection of metal objects. Due to a ferrite-less 3-coil system, uprox factor 1 sensors have distinct advantages. They detect all metals at the same switching distance, are magnetic field immune and feature large switching distances.

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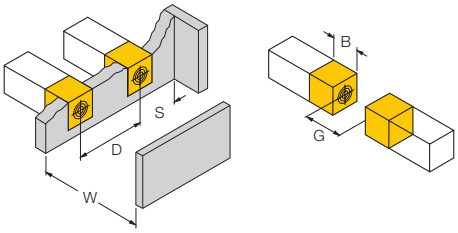
Mounting instructions	minimum distances
Distance D	2 x B
Distance W	3 x Sn
Distance S	1 x B
Distance G	6 x Sn
Width of the active face B	25 mm



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