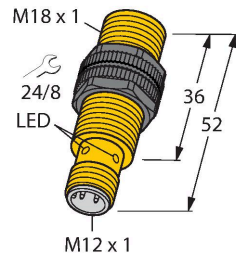


BI5U-S18-AP6X-H1141

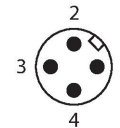
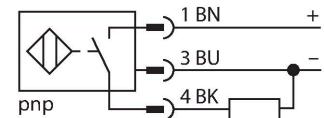
Inductive Sensor



Features

- Threaded barrel, M18 x 1
- Plastic, PBT-GF30
- Factor 1 for all metals
- Protection class IP68
- Resistant to magnetic fields
- Extended temperature range
- High switching frequency
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- M12 x 1 male connector

Wiring diagram



Technical data

Type	BI5U-S18-AP6X-H1141
Ident. no.	1635600
Rated switching distance	5 mm
Mounting conditions	Flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Repeat accuracy	≤ 2 % of full scale
Temperature drift	$\leq \pm 10$ %
	$\leq \pm 15$ %, ≤ -25 °C v $\geq +70$ °C
Hysteresis	3...15 %
Ambient temperature	-30...+85 °C
Operating voltage	10...30 VDC
Residual ripple	≤ 10 % U_{ss}
DC rated operational current	≤ 200 mA
No-load current	≤ 20 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
Insulation class	□
Switching frequency	2.5 kHz
Design	Threaded barrel, M18 x 1
Dimensions	52 mm

Functional principle

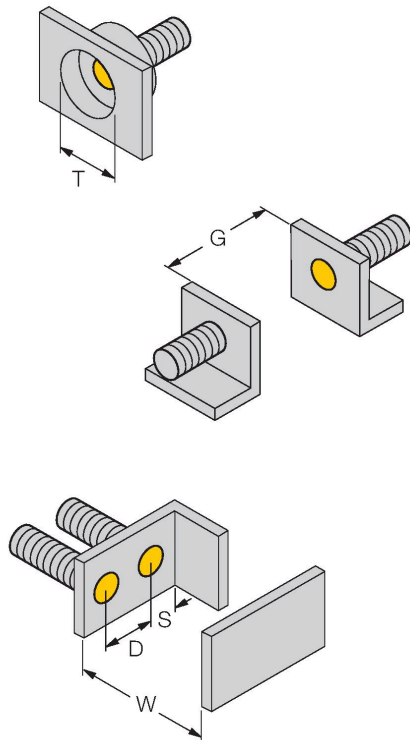
Inductive sensors are designed for wear-free and contactless detection of metal objects. uprox Factor 1 sensors have significant advantages due to their patented ferrite-coreless multi-coil system. They detect all metals at the same large switching distance and are resistant to magnetic fields.

Technical data

Housing material	Plastic, PBT-GF30
Active area material	Plastic, PBT-GF30
Max. tightening torque of housing nut	2 Nm
Electrical connection	Connector, M12 × 1
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP68
MTTF	874 years acc. to SN 29500 (Ed. 99) 40 °C
Switching state	LED, Yellow

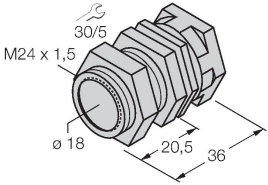
Mounting instructions

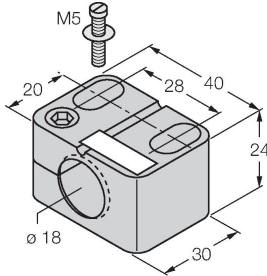
Mounting instructions/Description

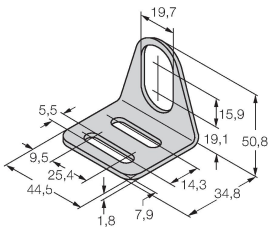


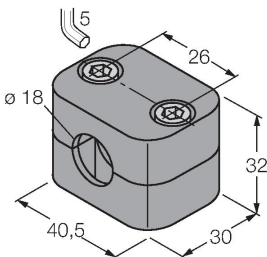
Distance D	2 x B
Distance W	3 x Sn
Distance T	3 x B
Distance S	1.5 x B
Distance G	6 x Sn
Diameter active area B	Ø 18 mm

Accessories


QM-18 	6945102 <p>Quick-mount bracket with dead-stop; material: Chrome-plated brass. Male thread M24 × 1.5. Note: The switching distance of the proximity switches may change when using quick-mount brackets.</p>
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BST-18B 	6947214 <p>Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6</p>
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MW-18 	6945004 <p>Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)</p>
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BSS-18 	6901320 <p>Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene</p>
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Wiring accessories

Dimension drawing	Type	Ident. no.	
	RKC4T-2/TEL	6625010	<p>Connection cable, female M12, straight, 3-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com</p>