

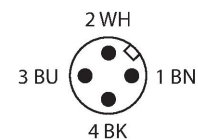
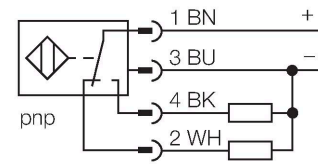
BI4U-M12E-VP44X-H1141

Inductive sensor

Features

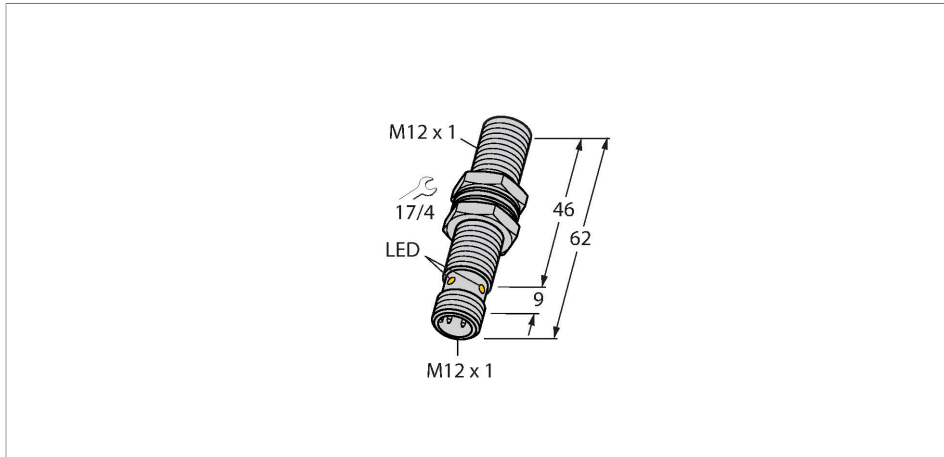
- M12 × 1 threaded barrel
- Long version
- Chrome-plated brass
- Factor 1 for all metals
- Protection class IP68
- Resistant to magnetic fields
- Large switching distance
- Recessed mountable
- DC 4-wire, 10...55 VDC
- Changeover contact, PNP output
- M12 × 1 male connector

Wiring diagram



Functional principle

Inductive sensors detect metal objects contactless and wear-free. Due to the patented multi-coil system, *uprox*[®] sensors have distinct advantages over conventional sensors. They excel in largest switching distances, maximum flexibility and operational reliability as well as efficient standardization.



Technical data

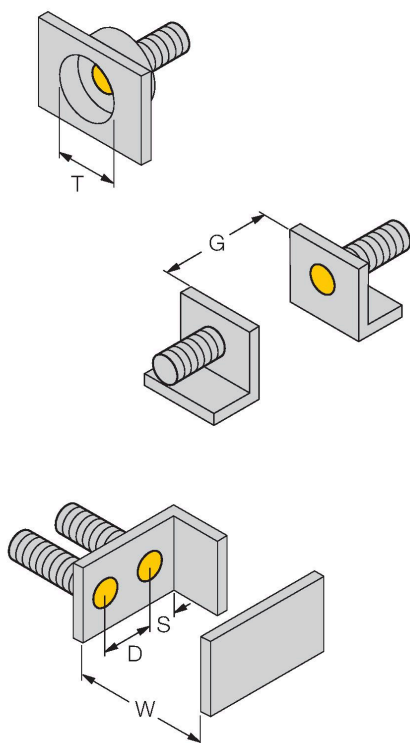
Type	BI4U-M12E-VP44X-H1141
Ident. no.	1634869
Rated switching distance	4 mm
Mounting conditions	Flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Repeat accuracy	$\leq 2\%$ of full scale
Temperature drift	$\leq \pm 10\%$
	$\leq \pm 15\%$, $\leq -25^\circ\text{C}$ v $\geq +70^\circ\text{C}$
Hysteresis	3...15 %
Ambient temperature	$-30\dots+85^\circ\text{C}$
Operating voltage	10...55 VDC
Residual ripple	$\leq 10\% U_s$
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_e	≤ 1.8 V
Wire breakage/Reverse polarity protection	yes / Complete
Output function	4-wire, Complementary contact, PNP
Insulation class	□
Switching frequency	2 kHz
Design	Threaded barrel, M12 × 1
Dimensions	62 mm

Technical data

Housing material	Metal, CuZn, Chrome-plated
Active area material	Plastic, LCP
Max. tightening torque housing nut	10 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

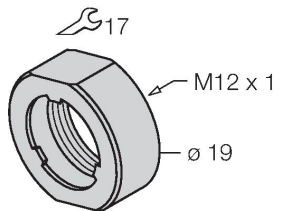
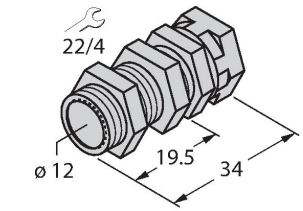
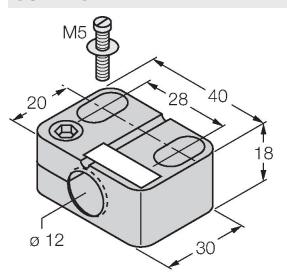
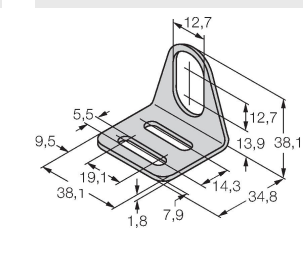
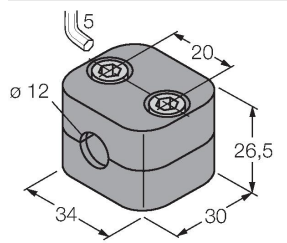
Mounting instructions/Description



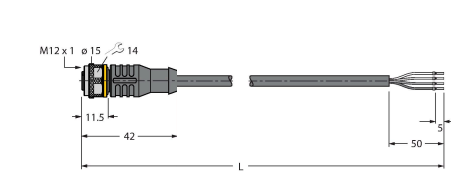
Distance D	24 mm
Distance W	3 x Sn
Distance T	3 x B
Distance S	1.5 x B
Distance G	6 x Sn
Diameter active area B	Ø 12 mm

All flush mountable *uprox*[®]+ threaded barrel types are also recessed mountable. Safe operation is ensured if the sensor is screwed in by half a turn.

Accessories

<p>PN-M12</p> 	<p>6905309</p> <p>Impact protection nut for M12x1 threaded barrel devices; material: Stainless steel A2 1.4305 (AISI 303)</p>	<p>QM-12</p> 	<p>6945101</p> <p>Quick-mount bracket with dead-stop; material: Chrome-plated brass. Male thread M16 x 1. Note: The switching distance of the proximity switches may change when using quick-mount brackets.</p>
<p>BST-12B</p> 	<p>6947212</p> <p>Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6</p>	<p>MW12</p> 	<p>6945003</p> <p>Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)</p>
<p>BSS-12</p> 	<p>6901321</p> <p>Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene</p>		

Wiring accessories

Dimension drawing	Type	Ident. no.	
	<p>RKC4.4T-2/TEL</p>	<p>6625013</p>	<p>Connection cable, female M12, straight, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com</p>

BI4U-M12E-VP44X-H11 41 | 03/07/2020 07-59 | technical changes reserved



SCATTERGOOD & JOHNSON LTD

ELECTRICAL ENGINEERING & FLUID CONTROL DISTRIBUTORS

Est.1899

At Scattergood & Johnson Ltd, we pride ourselves on being a technical distributor to specialist industries.

Working with a range of quality product suppliers across a number of specialist markets, we are not your average 'box shifter' - we are your technical and supply chain partner.

We fully support every product we sell - for free! Our internal team and external sales engineers can answer any product or application question, no matter the complexity.

Backing up this technical ability is a range of 50,000+ products available from stock for nationwide next day delivery (same day if required!), or you can collect what you need from any of our trade counters around the UK.

Select your specialist interest below to learn more about how we can help.



Online, In Branch and On the Road - Scattergood & Johnson Ltd, there when you need us.

www.scatts.co.uk