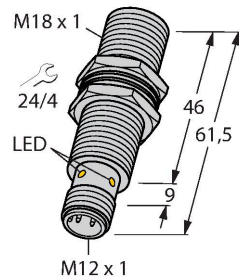


# BI5U-M18M-AD4X-H1144

## Inductive Sensor

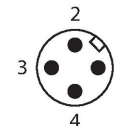
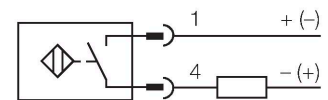


### Features

- Threaded barrel, M18 x 1
- Chrome-plated brass
- Factor 1 for all metals
- Resistant to magnetic fields
- DC 2-wire, 10...65 VDC
- NO contact
- M12 x 1 male connector

### Technical data

Type	BI5U-M18M-AD4X-H1144
ID	4405066
<b>General data</b>	
Rated switching distance	5 mm
Mounting conditions	Flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Repeat accuracy	$\leq 2 \%$ of full scale
Temperature drift	$\leq \pm 10 \%$
	$\leq \pm 15 \%, \leq -25 \text{ °C} \vee \geq +70 \text{ °C}$
Hysteresis	3...20 %
<b>Electrical data</b>	
Operating voltage $U_B$	10...65 VDC
Ripple $U_{ss}$	$\leq 10 \%$ $U_{Bmax}$
DC rated operating current $I_o$	$\leq 100$ mA
Residual current	$\leq 0.8$ mA
Isolation test voltage	0.5 kV
Short-circuit protection	yes/Cyclic
Voltage drop at $I_o$	$\leq 5$ V
Wire break/reverse polarity protection	Complete
Output function	2-wire, NO contact, 2-wire
DC field stability	300 mT
AC field stability	300 mT <sub>ss</sub>
Smallest operating current	$\geq 3$ mA
Switching frequency	0.01 kHz
<b>Mechanical data</b>	
Design	Threaded barrel, M18 x 1
Dimensions	61.5 mm



### Functional principle

Inductive sensors are designed for wear-free and contactless detection of metal objects. uprox+ sensors have significant advantages due to their patented multi-coil system. They excel thanks to their optimum switching distances, maximum flexibility and operational reliability as well as efficient standardization.

Technical data

Housing material	Metal, CuZn, Chrome-plated
Active area material	Plastic, LCP
Connector housing	plastic, PP
Max. tightening torque of housing nut	25 Nm
Electrical connection	Connector, M12 × 1
Environmental conditions	
Ambient temperature	-25...+70 °C
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

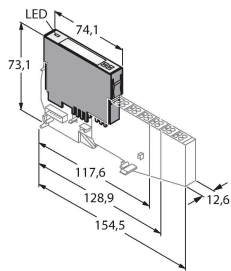
Mounting instructions/Description

Distance D	36 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 18 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.

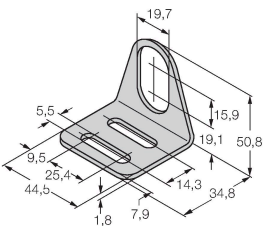
Accessories

BL20-4DI-NAMUR 6827212



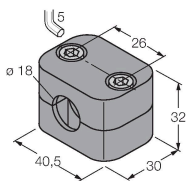
4 digital inputs acc. to EN 60947-5-6  
For NAMUR sensors, de-energized contacts or uprox®+ 2-wire DC sensors.

MW18 6945004



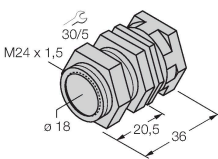
Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)

BSS-18 6901320



Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene

QM-18 6945102



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.