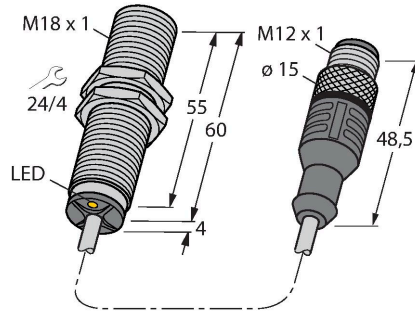


# BI5U-MT18M-AD4X-0.3-RS4.23/XOR Inductive Sensor

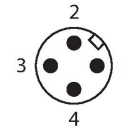
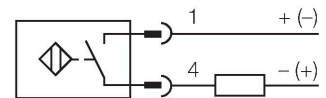


## Features

- Threaded barrel, M18 x 1
- Brass, PTFE-coated
- Factor 1 for all metals
- Resistant to magnetic fields
- DC 2-wire, 10...65 VDC
- NO contact
- Cable with male end

## Technical data

Type	BI5U-MT18M-AD4X-0.3-RS4.23/XOR
ID	4405049
General data	
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 %
Electrical data	
Operating voltage $U_B$	10...65 VDC
Ripple $U_{ss}$	$\leq 10 \%$ $U_{Bmax}$
DC rated operating current $I_o$	$\leq 100 \text{ mA}$
Residual current	$\leq 0.8 \text{ mA}$
Isolation test voltage	0.5 kV
Short-circuit protection	yes/Cyclic
Voltage drop at $I_o$	$\leq 5 \text{ V}$
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	$\geq 3 \text{ mA}$
Switching frequency	0.01 kHz



## Functional principle

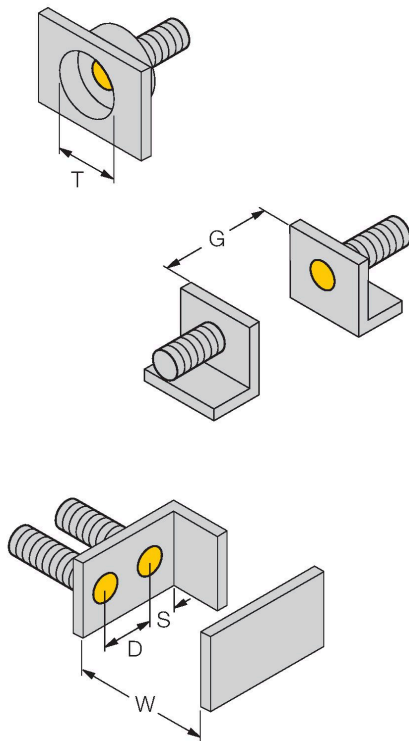
Inductive sensors are designed for wear-free and contactless detection of metal objects. uprox+ sensors have significant advantages due to their patented multi-coil system. They excel thanks to their optimum switching distances, maximum flexibility and operational reliability as well as efficient standardization.

## Technical data

Mechanical data	
Design	Threaded barrel, M18 x 1
Dimensions	64 mm
Housing material	Metal, CuZn, PTFE-coated
Active area material	Plastic, LCP, PTFE-coated
Material coupling nut	metal, CuZn, nickel-plated
Max. tightening torque of housing nut	15 Nm
Electrical connection	Cable with connector, M12 × 1
Cable quality	Ø 5.2 mm, Orange, LifXX, PVC, 0.3 m
Core cross-section	2 x 0.34 mm <sup>2</sup>
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

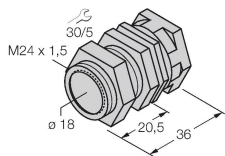
All flush mountable uprox+ threaded barrel types are also recessed mountable. Safe operation is ensured if the sensor is screwed in by half a turn.

## Accessories

### QMT-18

6945104

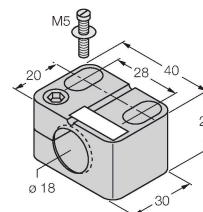
Quick-mount bracket with dead-stop; material: brass, PTFE-coated; Male thread M24 x 1.5. Note: The switching distance of the proximity switches may change when using quick-mount brackets.



### BST-18B

6947214

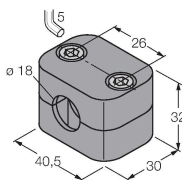
Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6



### BSS-18

6901320

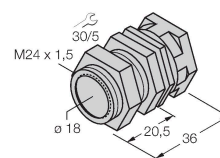
Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene



### QM-18

6945102

Quick-mount bracket with dead-stop; material: Chrome-plated brass. Male thread M24 x 1.5. Note: The switching distance of the proximity switches may change when using quick-mount brackets.



## 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.

