

# BI10U-M30-AD4X-H1144 Inductive Sensor



# Technical data

Туре	BI10U-M30-AD4X-H1144
ID	4405072
General data	
Rated switching distance	10 mm
Mounting conditions	Flush
Secured operating distance	≤ (0.81 × Sn) mm
Repeat accuracy	≤ 2 % of full scale
Temperature drift	≤ ±10 %
	≤ ± 15 %, ≤ -25 °C v ≥ +70 °C
Hysteresis	320 %
Electrical data	
Operating voltage	1065 VDC
Residual ripple	≤ 10 % U <sub>ss</sub>
DC rated operational current	≤ 100 mA
Residual current	≤ 0.8 mA
Isolation test voltage	≤ 0.5 kV
Short-circuit protection	yes / Cyclic
Voltage drop at I <sub>e</sub>	≤ 5 V
Wire breakage/Reverse polarity protec- tion	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	≥ 3 mA
Switching frequency	0.01 kHz
Mechanical data	
Design	Threaded barrel, M30 x 1.5



# Features

M30 × 1.5 threaded tube
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





# 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

Dimensions	62 mm
Housing material	Metal, CuZn, Chrome-plated
Active area material	Plastic, LCP
Max. tightening torque of housing nut	75 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	60 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 30 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

#### BST-30B



6947216 Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6 QM-30

BSS-30

ø 30

15



#### 6945103

6901319

Quick-mount bracket with dead-stop; material: Chrome-plated brass. Male thread M36 × 1.5. Note: The switching distance of the proximity switches may change when using quick-mount brackets.

Mounting clamp for smooth and

Polypropylene

threaded barrel sensors; material:

MW-30



BL20-4DI-NAMUR



6945005 Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)

# 6827212

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