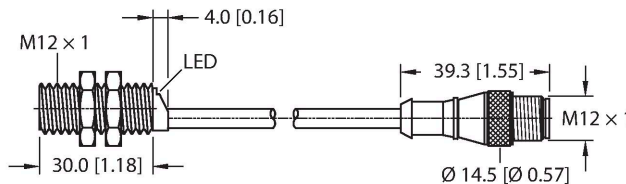


# BI3-GT12K-AD4X-0.3-RS4.23T

## Inductive Sensor

### Features

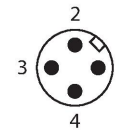
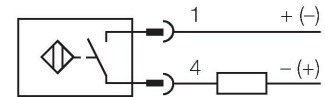
- Threaded barrel, M12 x 1
- Brass, PTFE-coated
- DC 2-wire, 10...65 VDC
- NO contact
- Cable with male end



mm [Inch]

### Technical data

Type	BI3-GT12K-AD4X-0.3-RS4.23T
ID	44050991
<b>General data</b>	
Rated switching distance	3 mm
Mounting conditions	Flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeat accuracy	$\leq 2$ % of full scale
Hysteresis	1...15 %
<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	$\leq 0.6$ 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
Smallest operating current	$\geq 3$ mA
Switching frequency	1 kHz
<b>Mechanical data</b>	
Design	Threaded barrel, M12 x 1



### Functional principle

Inductive sensors detect metal objects contactless and wear-free. For this, they use a high-frequency electromagnetic AC field that interacts with the target. Inductive sensors generate this field via an RLC circuit with a ferrite coil.

## Technical data

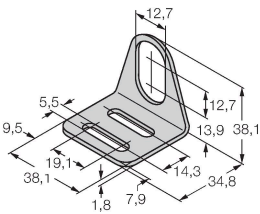
Dimensions	34 mm
Housing material	Metal, CuZn, PTFE-coated
Active area material	Plastic, PA12-GF30
End cap	Plastic, EPTR
Material coupling nut	CuZn, nickel-plated
Max. tightening torque of housing nut	10 Nm
Electrical connection	Cable with connector, M12 × 1
Cable quality	Ø 5.2 mm, LifYY, PVC, 0.3 m
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	IP67
MTTF	2283 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 12 mm

Accessories

MW12	6945003
Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)	



BSS-12	6901321
Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene	

