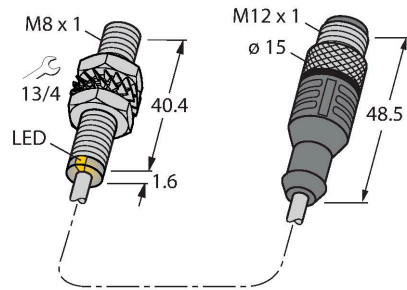


# BI1.5-EG08-RD6X-0.2-RS4.2T

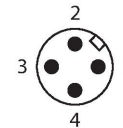
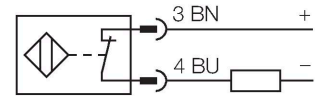
## Inductive Sensor



### Features

- Threaded barrel, M8 x 1
- Stainless steel, 1.4427 SO
- DC 2-wire, 10...30 VDC
- NC contact

### Wiring diagram



### 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

Type	BI1.5-EG08-RD6X-0.2-RS4.2T
ID	16043431
<b>General data</b>	
Rated switching distance	1.5 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...30 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	NC contact, 2-wire
Smallest operating current	$\geq 3$ mA
Switching frequency	3 kHz
<b>Mechanical data</b>	
Design	Threaded barrel, M8 x 1

## Technical data

Dimensions	42 mm
Housing material	Stainless steel, 1.4427 SO
Active area material	Plastic
End cap	Plastic, Trogamid
Material coupling nut	metal, CuZn, nickel-plated
Max. tightening torque of housing nut	5 Nm
Electrical connection	Cable with connector, M12 × 1
Cable quality	Ø 4 mm, Gray, LifYY, PVC, 0.2 m
Core cross-section	2 x 0.25 mm <sup>2</sup>
<b>Environmental conditions</b>	
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



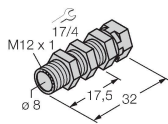
Distance D	2 x B
Distance W	3 x Sn
Distance T	3 x B
Distance S	1.5 x B
Distance G	6 x Sn
Diameter active area B	Ø 8 mm

## Accessories

QM-08

6945100

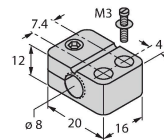
Quick-mount bracket with dead-stop, chrome-plated brass, male thread M12 x 1. Note: The switching distance of proximity switches may be reduced through the use of quick-mount brackets.



BST-08B

6947210

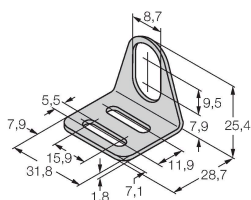
Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6



MW08

6945008

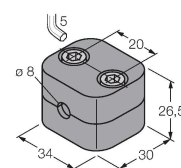
Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)



BSS-08

6901322

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



MBS80

69479

Mounting clamp for smooth barrel sensors; mounting block material:  
Anodized aluminum

