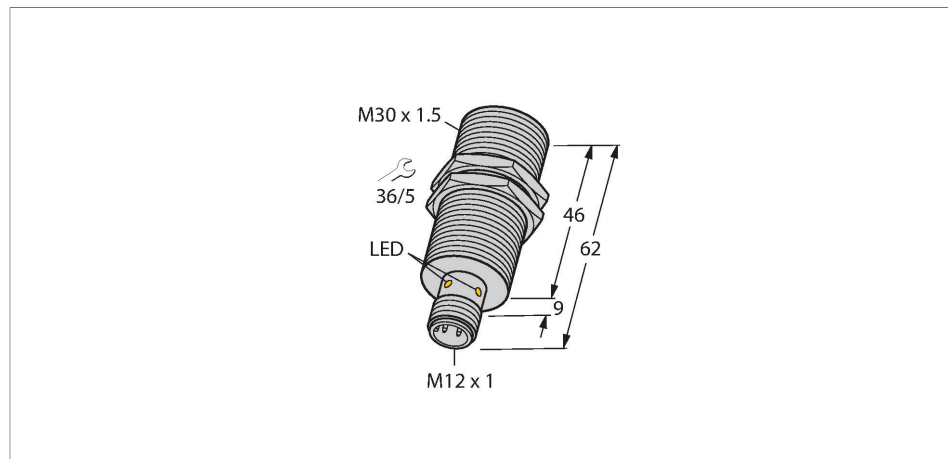


# BI15-M30-VN4X-H1141

## Inductive Sensor – With Increased Switching Distance



### Technical data

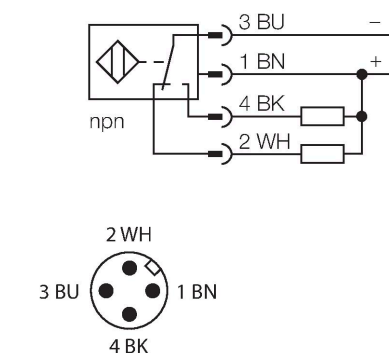
Type	BI15-M30-VN4X-H1141
ID	4570711
<b>General data</b>	
Rated switching distance	15 mm
Mounting conditions	Flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeat accuracy	$\leq 2\%$ of full scale
Hysteresis	3...15 %
<b>Electrical data</b>	
Operating voltage	10...65 VDC
Residual ripple	$\leq 10\%$ $U_{ss}$
DC rated operational current	$\leq 200$ mA
No-load current	15 mA
Residual current	$\leq 0.1$ mA
Isolation test voltage	$\leq 0.5$ kV
Short-circuit protection	yes / Cyclic
Voltage drop at $I_o$	$\leq 1.8$ V
Wire breakage/Reverse polarity protection	yes / Complete
Output function	4-wire, Complementary contact, NPN
Switching frequency	0.15 kHz
<b>Mechanical data</b>	
Design	Threaded barrel, M30 x 1.5



### Features

- M30 × 1.5 threaded tube
- Chrome-plated brass
- Large sensing range
- DC 4-wire, 10...65 VDC
- Changeover contact, NPN output
- M12 x 1 male connector

### Wiring diagram



### Functional principle

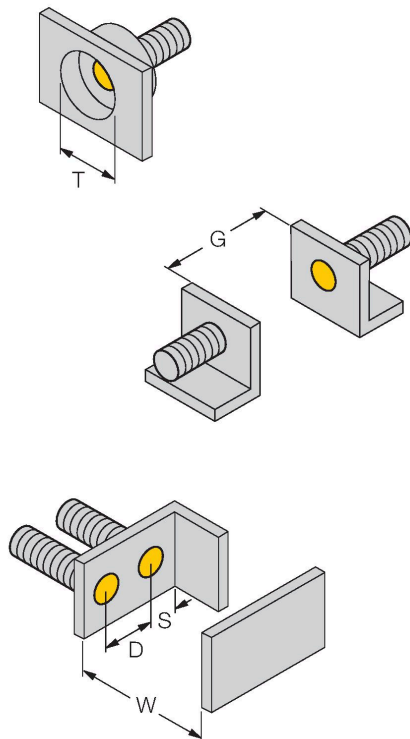
Inductive sensors detect metal objects contactless and wear-free. For this, they use a high-frequency electromagnetic AC field that interacts with the target. Inductive sensors generate this field via an RLC circuit with a ferrite coil.

## Technical data

Dimensions	62 mm
Housing material	Metal, CuZn, Chrome-plated
Active area material	Plastic, PA12-GF30
Max. tightening torque of housing nut	75 Nm
Electrical connection	Connector, M12 × 1
<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



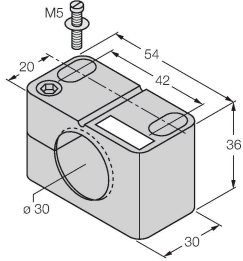
Distance D	2 x B
Distance W	3 x Sn
Distance T	3 x B
Distance S	1.5 x B
Distance G	6 x Sn
Diameter active area B	Ø 30 mm

## Accessories

**BST-30B**

6947216

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



**QM-30**

6945103

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.



**MW-30**

6945005

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



**BSS-30**

6901319

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

