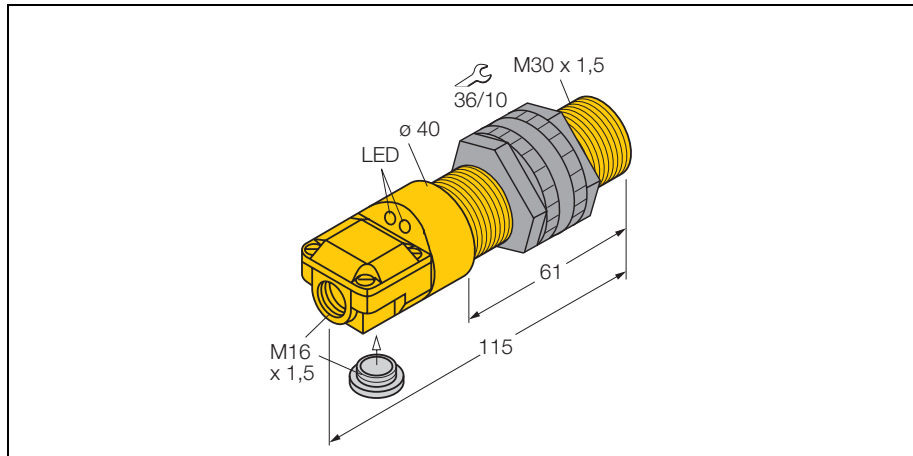
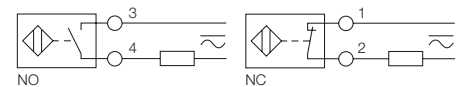


**Inductive sensor**  
**Bi10-P30SR-FZ3X2**



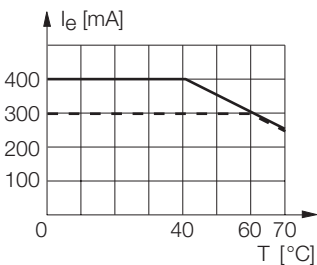
- 2 cable entries (axial, radial)
- threaded barrel, M30 x 1.5
- plastic, ABS
- AC 2-wire, 20...250 VAC
- 2-wire DC, 10...300 VDC
- connection programmable (n.c./n.o.)
- Terminal chamber

**Wiring diagram**



**Functional principle**

Inductive sensors are designed for wear-free and non-contact detection of metal objects. For this purpose they use a high-frequency electro-magnetic AC field that interacts with the target. Concerning inductive sensors, this field is generated by an LC resonant circuit with a ferrite core coil.



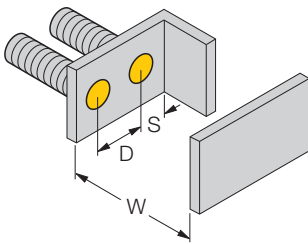
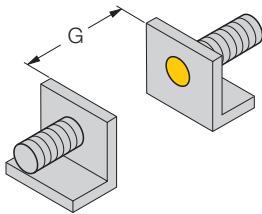
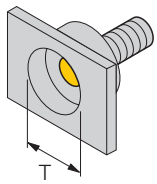
<b>Type</b>	Bi10-P30SR-FZ3X2
Ident-No.	13420
<b>Rated operating distance S<sub>n</sub></b>	10 mm
Mounting condition	flush
Assured sensing range	≤ (0,81 x S <sub>n</sub> ) mm
Correction factors	St37 = 1, V2A ~ 0.7, Ms ~ 0.4, Al ~ 0.3
Repeatability	≤ 2 %
Temperature drift	≤ ± 10 %
Hysteresis	3... 15 %
Ambient temperature	-25... + 70 °C
<b>Operating voltage</b>	20... 250VAC
Operating voltage	10... 300VDC
AC rated operational current	≤ 400 mA
DC rated operational current	≤ 300 mA
Frequency	50... 60 Hz
Residual current	≤ 1.7 mA
Rated insulation voltage	≤ 1.5 kV
Surge current	≤ 8 A (≤ 10 ms max. 5 Hz)
Voltage drop at I <sub>e</sub>	≤ 6V
Output function	2-wire, connection programmable
Smallest operating current I <sub>m</sub>	≥ 3 mA
Switching frequency	≤ 0.02 kHz
<b>Housing</b>	threaded barrel, M30 x 1.5
Dimensions	115 mm
Housing material	plastic, ABS
Material active face	plastic, ABS
Tightening torque of housing nut	5 Nm
Connection	Terminal chamber
Clamping ability	≤ 2.5mm <sup>2</sup>
Vibration resistance	55 Hz (1 mm)
Shock resistance	30g (11 ms)
Degree of protection	IP67
<b>Operating voltage display</b>	LED green
Display switch state	LED red
Included in scope of supply	cable gland, blanking plug

**Inductive sensor  
Bi10-P30SR-FZ3X2**

Mounting instructions	minimum distances
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

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**Diameter of the active area B**                       $\varnothing$  30 mm

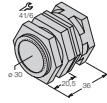
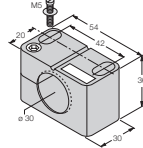
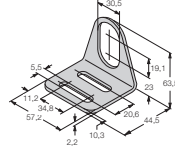


# Inductive sensor Bi10-P30SR-FZ3X2

**TURCK**

Industrial  
Automation

## Accessories

Type code	Ident-No.	Short text	Dimension drawing
QM-30	6945103	quick-mount fixing clamp with dead-stop; material: chrome-plated brass male thread M36 x 1.5. Note: The switching distance of proximity switches can be reduced by the use of quick mounting brackets.	
BST-30B	6947216	fixing clamp with dead-stop; material: PA6	
MW-30	6945005	mounting bracket; material: stainless steel A2 1.4301 (AISI 304)	
BSS-30	6901319	fixing clamp; material: polypropylene	