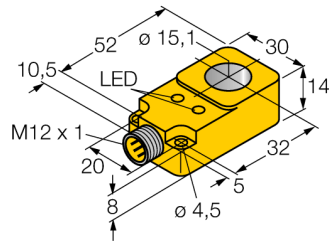
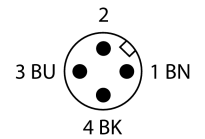
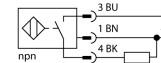


Inductive sensor
Ring sensor
BI15R-Q14-AN6X2-H1141



- Rectangular, height 14 mm
- Plastic, PBT-GF30-V0
- Static output behaviour
- Output pulse length min. 100 ms
- DC 3-wire, 10...30 VDC
- NO contact, NPN output
- M12 x 1 male connector

Wiring Diagram



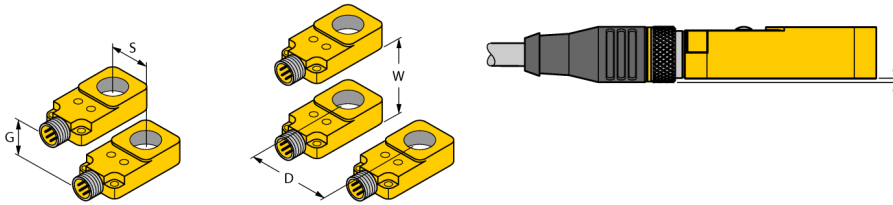
Type designation	BI15R-Q14-AN6X2-H1141
Ident-No.	1407220
Inside ring diameter D	15.1 mm
Steel ball diameter (DIN 5401)	≥ 3 mm
Fly-by speed	1...28 m/s
pulse stop	≥ 5 ms
Pulse duration at the output	100 ms ± 20 %
Ambient temperature	-25...+70 °C
Operating voltage	10...30 VDC
Residual ripple	≤ 10 % U _{in}
DC rated operational current	≤ 200 mA
No-load current I ₀	≤ 15 mA
Residual current	≤ 0.1 mA
Isolation test voltage	≤ 0.5 kV
Short-circuit protection	yes/ Cyclic
Voltage drop at I ₀	≤ 1.8 V
Wire breakage/Reverse polarity protection	yes/ Complete
Output function	3-wire, NO contact, NPN
Switching frequency	0.008 kHz
Design	Ring sensor, Q14
Dimensions	62.5 x 30 x 14 mm
Housing material	Plastic, PBT-GF30-V0
Electrical connection	Connector, M12 x 1
Coil body	plastic, POM
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
Power-on indication	LED, Green
Switching state	LED, Yellow

Functional principle

Inductive sensors detect metal objects contactless and wear-free. For this purpose they use a high-frequency electromagnetic AC field that interacts with the target. Inductive ring sensors generate this field through an LC resonant circuit. The target acts as the coil core.

Inductive sensor
Ring sensor
BI15R-Q14-AN6X2-H1141

Distance D	45 mm
Distance W	45 mm
Distance S	14 mm
Distance G	30 mm



When mounting the sensor with an M12 connector, observe a low horizontal offset to the surface. This may vary depending on the choice of the connector.

Inductive sensor
 Ring sensor
 BI15R-Q14-AN6X2-H1141



Wiring accessories

Type code	Ident-No.	Description	
RKC4T-2/TEL	6625010	Connection cable, female M12, straight, 3-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com	