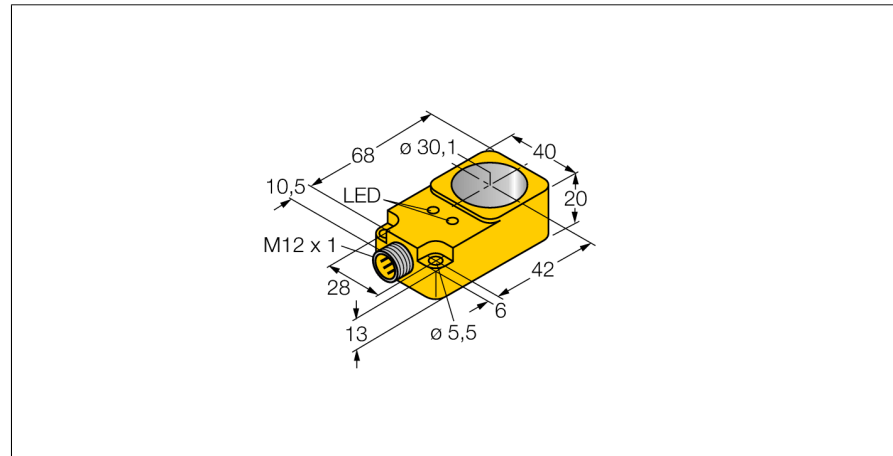
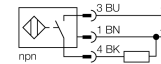


**Inductive sensor
ring sensor
BI30R-Q20-AN6X2-H1141**



- Rectangular, height 20 mm
- Plastic, PBT-GF30-V0
- Static output performance
- Output pulse length min. 100 ms
- 3-wire DC, 10...30 VDC
- NO contact, NPN output
- Male M12 x 1

Wiring diagram



Type code	BI30R-Q20-AN6X2-H1141
Ident no.	1407520
Inside ring diameter D	30.1 mm
Steel ball diameter (DIN 5401)	≥ 6 mm
pulse stop	≥ 5 ms
Pulse duration at the output	100 ms ± 20 %
Ambient temperature	-25...+70 °C
Operating voltage	10...30VDC
Residual ripple	≤ 10 % U _{ss}
DC rated operational current	≤ 200 mA
No-load current I ₀	≤ 15 mA
Residual current	≤ 0.1 mA
Rated insulation 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, Q20
Dimensions	68 x 40 x 20 mm
Housing material	plastic, PBT
Connection	male, M12 x 1
Coil body	plastic, POM
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP65
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
BI30R-Q20-AN6X2-H1141**

Distance D	55 mm
Distance W	55 mm
Distance S	20 mm
Distance G	40 mm



**Inductive sensor
ring sensor
BI30R-Q20-AN6X2-H1141**

Wiring accessories

Type code	Ident no.	Description	Dimension drawing
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	