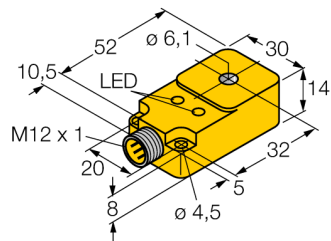


Inductive sensor
Ring sensor
BI6R-Q14-AP6X2-H1141

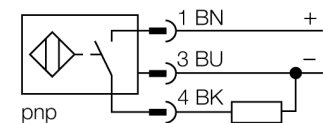
TURCK
works

Industrial
Automation



- 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, PNP output
- M12 x 1 male connector

Wiring diagram



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.

Type code	BI6R-Q14-AP6X2-H1141
Ident-No.	1407000
Ident-No (TUSA)	M1407000
Inside ring diameter D	6.1 mm
Steel ball diameter (DIN 5401)	≥ 2 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...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, PNP
Switching frequency	0.008 kHz
Construction	ring sensor, Q14
Dimensions	62.5 x 30 x 14 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	IP67
MTTF	2283 years acc. to SN 29500 (Ed. 99) 40 °C
Power-on indication	LED green
Switching state	LED yellow

Inductive sensor
Ring sensor
BI6R-Q14-AP6X2-H1141

TURCK
works

Industrial
Automation

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

