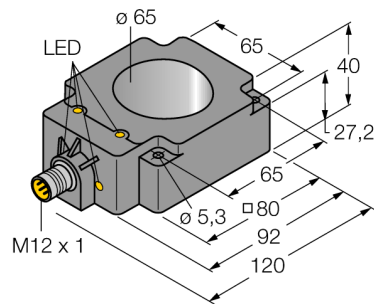


**Inductive sensor
ring sensor
BI65R-Q80-AP6X2-H1141**

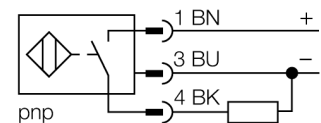
TURCK

Industrial
Automation



- Rectangular, height 40 mm
- Plastic, PBT-GF30-V0
- Static output performance
- Output pulse length min. 100 ms
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- M12 x 1 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.

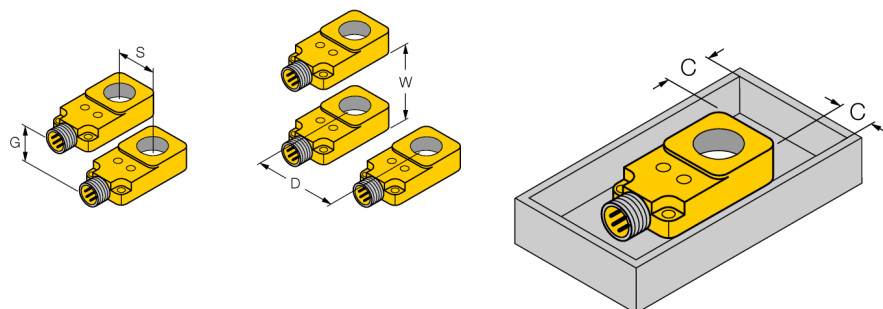
Type code	BI65R-Q80-AP6X2-H1141
Ident no.	1407531
Inside ring diameter D	65 mm
Steel ball diameter (DIN 5401)	≥ 10 mm
Mounting condition	non-flush
pulse stop	≥ 1 ms
Pulse duration at the output	100 ms ± 20 %
Ambient temperature	-25...+70 °C
Operating voltage	10...30VDC
Residual ripple	≤ 10 % U _{ss}
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	0.01 kHz
Design	ring sensor, Q80
Dimensions	92x 80x 40 mm
Housing material	Plastic, PBT
Connection	male, M12 x 1
Coil body	plastic, PA66
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
Operating voltage	LED green
Switching state	• yellow

**Inductive sensor
ring sensor
BI65R-Q80-AP6X2-H1141**

TURCK

Industrial
Automation

Distance D	140 mm
Distance W	150 mm
Distance S	65 mm
Distance G	90 mm
Distance C	30 mm



mounting on a metal plate is not permitted