

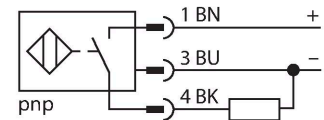
# BI50R-Q80-AP6X2-H1141

## Inductive Sensor – Ring Sensor

### Features

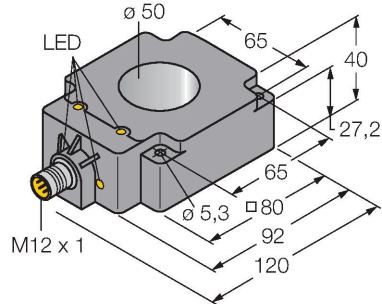
- Rectangular, height 40 mm
- Plastic, PBT-GF30-V0
- Static output behaviour
- Output pulse length min. 100 ms
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- M12 x 1 male connector

### 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.



### Technical data

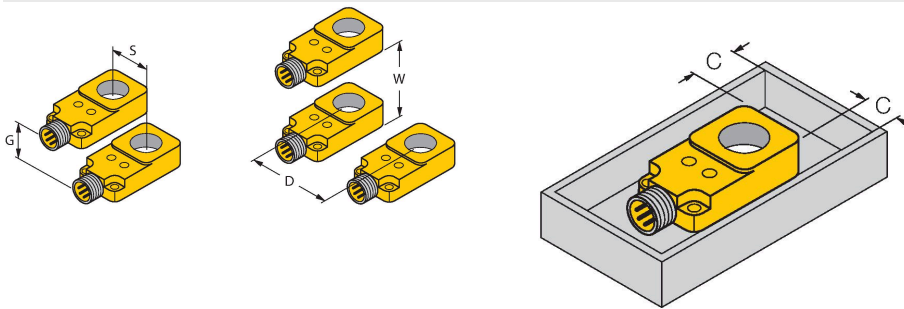
Type	BI50R-Q80-AP6X2-H1141
Ident. no.	1407530
Inside ring diameter D	50 mm
Steel ball diameter (DIN 5401)	≥ 8 mm
pulse stop	≥ 1 ms
Pulse duration at the output	≥ 100 ms ± 20 %
Ambient temperature	-25...+70 °C
Operating voltage	10...30 VDC
Residual ripple	≤ 10 % U <sub>is</sub>
DC rated operational current	≤ 200 mA
No-load current	≤ 15 mA
Residual current	≤ 0.1 mA
Isolation test voltage	≤ 0.5 kV
Short-circuit protection	yes / Cyclic
Voltage drop at I <sub>e</sub>	≤ 1.8 V
Wire breakage/Reverse polarity protection	yes / Complete
Output function	3-wire, NO contact, PNP
Switching frequency	0.01 kHz
<b>Design</b>	<b>Ring sensor, Q80</b>
Dimensions	92 x 80 x 40 mm
Housing material	Plastic, PBT-GF30-V0
Electrical connection	Connector, M12 x 1
Coil body	plastic, POM
Vibration resistance	55 Hz (1 mm)

## Technical data

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

## Mounting instructions

### Mounting instructions/Description



Distance D	140 mm
Distance W	120 mm
Distance S	50 mm
Distance G	90 mm
Distance C	0 mm

Mounting on a metal plate is permitted