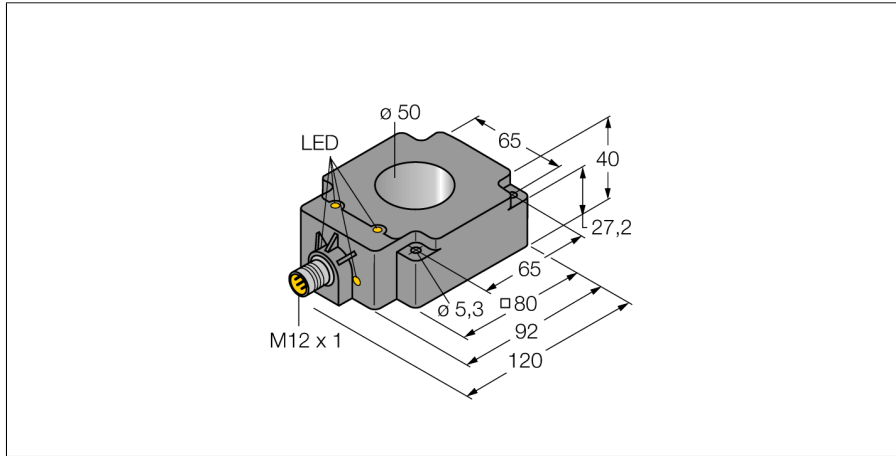
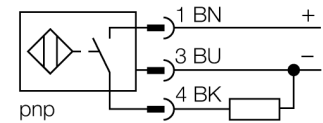


**Inductive sensor
ring sensor
BI50R-Q80-AP6X2-H1141**



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

Wiring diagram



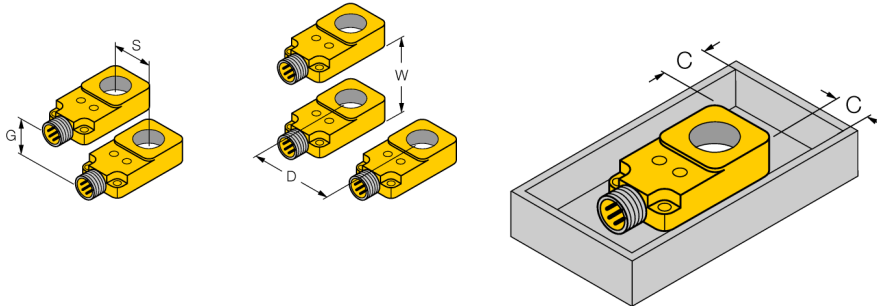
Type code	BI50R-Q80-AP6X2-H1141
Ident no.	1407530
Inside ring diameter D	50 mm
Steel ball diameter (DIN 5401)	≥ 8 mm
pulse stop	≥ 1 ms
Pulse duration at the output	100 ms ± 20 %
Ambient temperature	-25...+70 °C
Operating voltage	10...30VDC
Residual ripple	≤ 10 % U _s
DC rated operational current	≤ 200 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	92 x 80 x 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
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
BI50R-Q80-AP6X2-H1141**

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