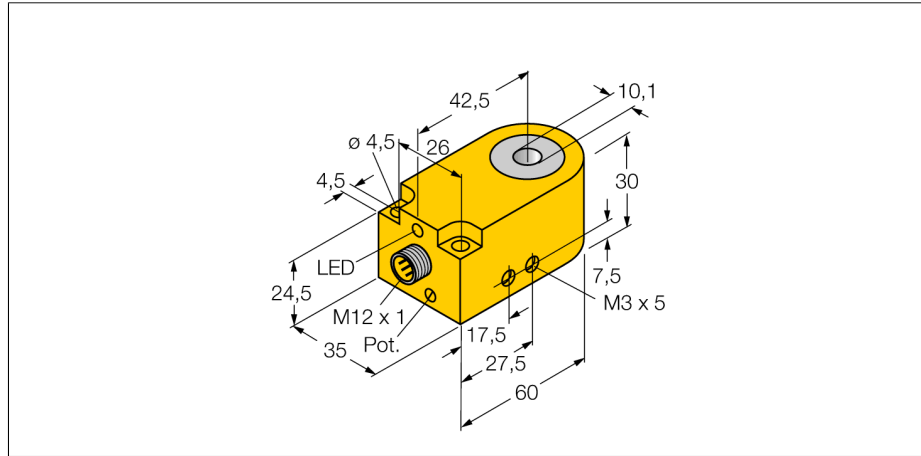
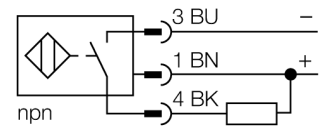


**Inductive sensor
ring sensor
BI10R-W30-DAN6X-H1141**



- Rectangular, height 30 mm
- Plastic, PA12-GF30
- Pulse duration 100 ms
- Sensitivity adjusted via potentiometer
- DC 3-wire, 10...30 VDC
- Dynamic output performance
- NO contact, NPN output
- M12 x 1 connector

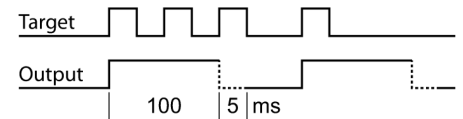
Wiring diagram



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.

Output performance



Type code	BI10R-W30-DAN6X-H1141
Ident no.	14039
Inside ring diameter D	10.1 mm
Steel ball diameter (DIN 5401)	≥ 1 mm
Fly-by speed	0.1...50 m/s
pulse stop	≥ 5 ms
Pulse duration	100 ms ± 20 %
Ambient temperature	-25...+70 °C
Operating voltage	10...30VDC
Residual ripple	≤ 10 % U _{in}
DC rated operational current	≤ 200 mA
No-load current I ₀	≤ 10 mA
Residual current	≤ 0.1 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes/ cyclic
Voltage drop at I ₀	≤ 2.5 V
Wire breakage / Reverse polarity protection	yes/ complete
Output function	3-wire, NO contact, NPN
Switching frequency	0.008 kHz
Design	ring sensor, W30
Dimensions	60x 35x 30 mm
Housing material	Plastic, PA
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
Switching state	● yellow

**Inductive sensor
ring sensor
BI10R-W30-DAN6X-H1141**

Distance D	120 mm
Distance W	120 mm
Distance S	10 mm
Distance G	120 mm

