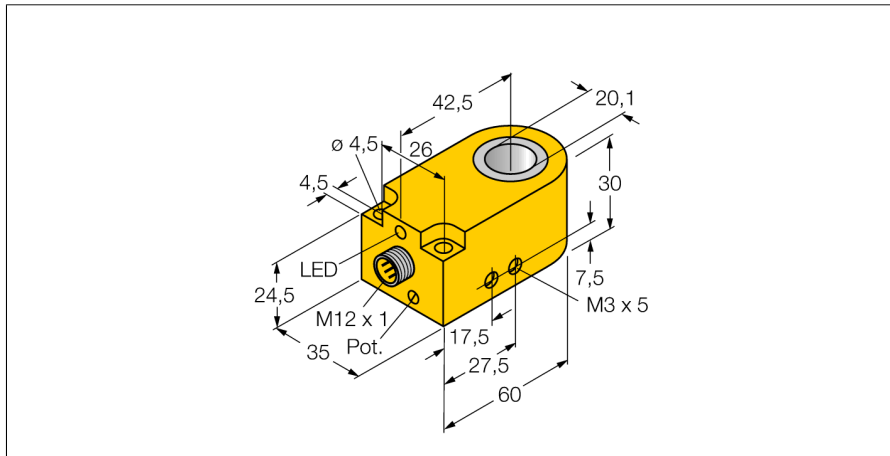
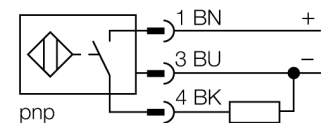


Inductive sensor
Ring sensor
BI20R-W30-DAP6X-H1141/500ms/S204



- Rectangular, height 30 mm
- Plastic, PA12-GF30
- Pulse duration 500 ms
- DC 3-wire, 10...30 VDC
- Dynamic output behaviour
- NO contact, PNP output
- M12 x 1 male connector

Wiring diagram

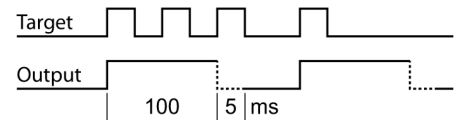


Type code	BI20R-W30-DAP6X-H1141/500ms/S204
Ident-No.	1403201
Inside ring diameter D	20.1 mm
Steel ball diameter (DIN 5401)	≥ 2 mm
Fly-by speed	0.1...50 m/s
pulse stop	≥ 5 ms
Pulse duration	500 ms ± 20 %
Ambient temperature	-25...+70 °C
Operating voltage	10...30VDC
Residual ripple	≤ 10 % U _{in}
DC rated 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, PNP
Switching frequency	0.004 kHz
Construction	ring sensor, W30
Dimensions	60 x 35 x 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)
IP Rating	IP67
MTTF	2283 years acc. to SN 29500 (Ed. 99) 40 °C
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.

Output behaviour



Inductive sensor
Ring sensor
BI20R-W30-DAP6X-H1141/500ms/S204

Distance D	120 mm
Distance W	120 mm
Distance S	20 mm
Distance G	120 mm

