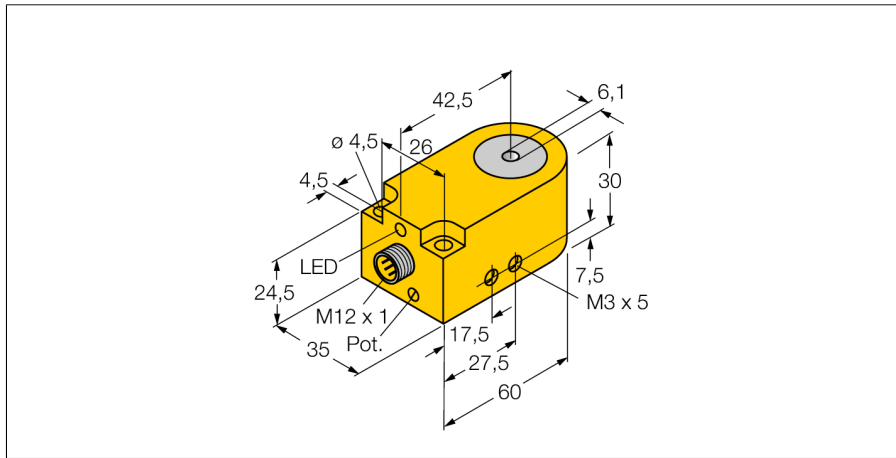
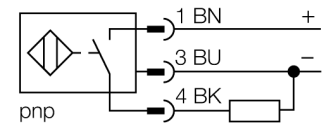


**Inductive sensor  
ring sensor  
BI6R-W30-DAP6X-H1141**



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

**Wiring diagram**



**Type code** BI6R-W30-DAP6X-H1141  
**Ident no.** 14036

**Inside ring diameter D** 6.1 mm  
Steel ball diameter (DIN 5401)  $\geq 0.6$  mm  
Fly-by speed 0.1...50 m/s  
pulse stop  $\geq 5$  ms  
Pulse duration 100 ms  $\pm 20\%$   
Ambient temperature -25...+70 °C

**Operating voltage** 10...30VDC  
Residual ripple  $\leq 10\% U_{in}$   
DC rated operational current  $\leq 200$  mA  
No-load current  $I_0$   $\leq 10$  mA  
Residual current  $\leq 0.1$  mA  
Rated insulation voltage  $\leq 0.5$  kV  
Short-circuit protection yes/ cyclic  
Voltage drop at  $I_0$   $\leq 2.5$  V  
Wire breakage / Reverse polarity protection yes/ complete  
Output function 3-wire, NO contact, PNP  
Switching frequency 0.008 kHz

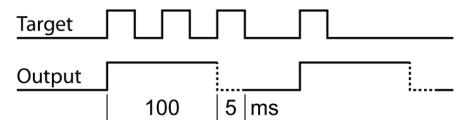
**Design** ring sensor, W30  
Dimensions 60 x 35 x 30 mm  
Housing material plastic, PA  
Connection male, M12 x 1  
Coil body plastic, POM  
Vibration resistance 55 Hz (1 mm)  
Shock resistance 30 g (11 ms)  
Protection class IP67  
MTTF 2283 years acc. to SN 29500 (Ed. 99) 40 °C

**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 performance**



**Inductive sensor  
ring sensor  
BI6R-W30-DAP6X-H1141**

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Distance D	120 mm
Distance W	120 mm
Distance S	6 mm
Distance G	120 mm



**Inductive sensor  
ring sensor  
BI6R-W30-DAP6X-H1141**

**Wiring accessories**

Type code	Ident no.	Description	Dimension drawing
RKC4T-2/TEL	6625010	Connection cable, female M12, straight, 3-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see <a href="http://www.turck.com">www.turck.com</a>	