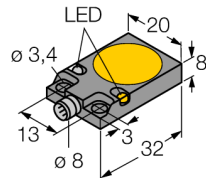
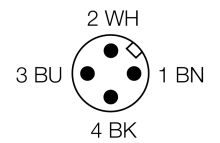
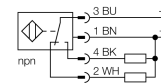


**Inductive sensor
with extended switching distance
BI7-Q08-VN6X2-V1141**



- Rectangular, height 8 mm
- Active face on top
- Metal, GD-Zn
- Connector with snap-lock
- Large detection range
- 4-wire DC, 10...30 VDC
- Changeover contact, NPN output
- Flange connector, Ø 8 mm

Wiring diagram



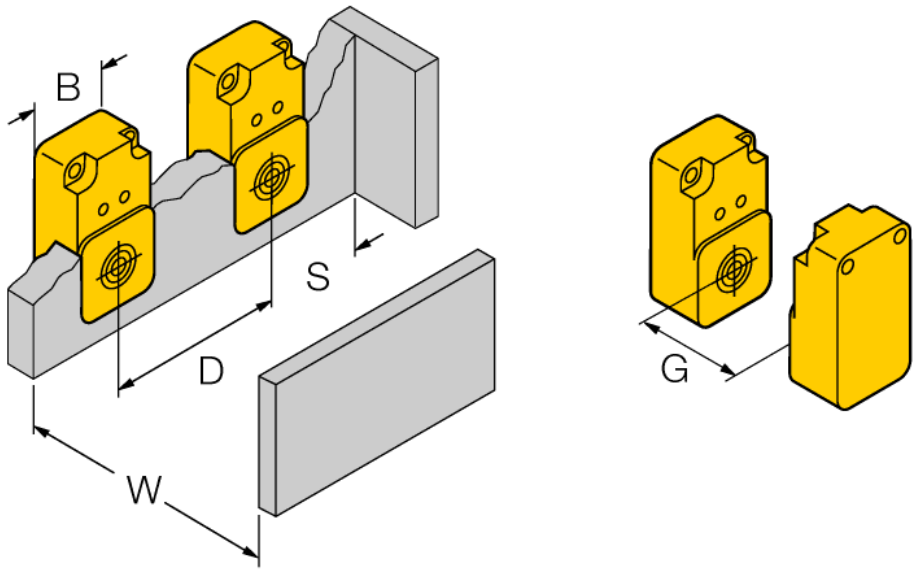
Functional principle

Inductive sensors detect metal objects contactless and wear-free. For this, they use a high-frequency electromagnetic AC field that interacts with the target. Inductive sensors generate this field via an RLC circuit with a ferrite coil.

Type code	BI7-Q08-VN6X2-V1141
Ident no.	1600922
Rated operating distance Sn	7 mm
Mounting condition	flush
Assured sensing range	≤ (0,81 x Sn) mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeatability	≤ 2 % of full scale
Temperature drift	10 %
Hysteresis	3...15 %
Ambient temperature	-25...+70 °C
Operating voltage	10...30VDC
Residual ripple	≤ 10 % U _{ss}
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 _e	≤ 1.8 V
Wire breakage / Reverse polarity protection	yes/ complete
Output function	4-wire, changover contact, NPN
Switching frequency	0.5 kHz
Design	rectangular, Q08
Dimensions	32 x 20 x 8 mm
Housing material	metal, GD-Zn
Connection	male, Ø 8 mm
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

**Inductive sensor
with extended switching distance
BI7-Q08-VN6X2-V1141**

Distance D	2 x B
Distance W	3 x Sn
Distance S	1 x B
Distance G	6 x Sn
<hr/>	
Width of the active face B	20 mm



**Inductive sensor
with extended switching distance
BI7-Q08-VN6X2-V1141**

Wiring accessories

Type code	Ident no.	Description	Dimension drawing
PKG4S-2/TEL	6627370	Connection cable, female Ø 8 mm, straight, 4-pin, snap-on type, cable length: 2 m; sheath material: PVC, sheath color: black, cULus approved, RoHS conform, protection class IP67	