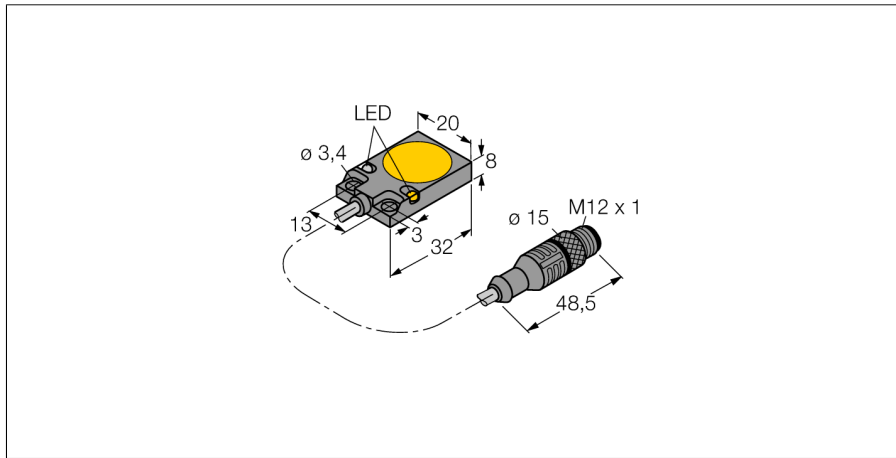
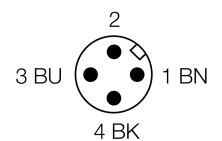
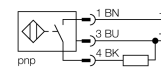


**Inductive sensor
magnetic field immune
BI5-Q08-AP6X2/S34-1XOR-RS4**



- Rectangular, height 8 mm
- Active face on top
- Metal, zinc die casting
- Magnetic field immune (weld-resistant) to DC and AC fields
- 3-wire DC, 10...30 VDC
- NO contact, PNP output
- Pigtail with male end, M8 x 1

Wiring diagram



Type code	BI5-Q08-AP6X2/S34-1XOR-RS4
Ident no.	1600801
Rated operating distance Sn	5 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 ₀	≤ 1.8 V
Wire breakage / Reverse polarity protection	yes/ complete
Output function	3-wire, NO contact, PNP
Switching frequency	0.25 kHz
Design	rectangular, Q08
Dimensions	32 x 20 x 8 mm
Housing material	metal, GD-Zn
Material coupling nut	metal, CuZn, nickel-plated
Connection	cable with connector, M12 x 1
Cable quality	4 mm, LifXX, PVC, 1 m
Cable cross section	3 x 0.25 mm ²
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. The sensors hosting a ferrite core coil generate the AC field through an LC resonant circuit. Magnetic field sensors incorporate a special ferrite core making them immune to magnetic AC and DC fields. Hence, they can be applied in welding systems.

**Inductive sensor
magnetic field immune
BI5-Q08-AP6X2/S34-1XOR-RS4**

Distance D	2 x B
Distance W	3 x Sn
Distance S	1 x B
Distance G	6 x Sn

Width of the active face B 20 mm

