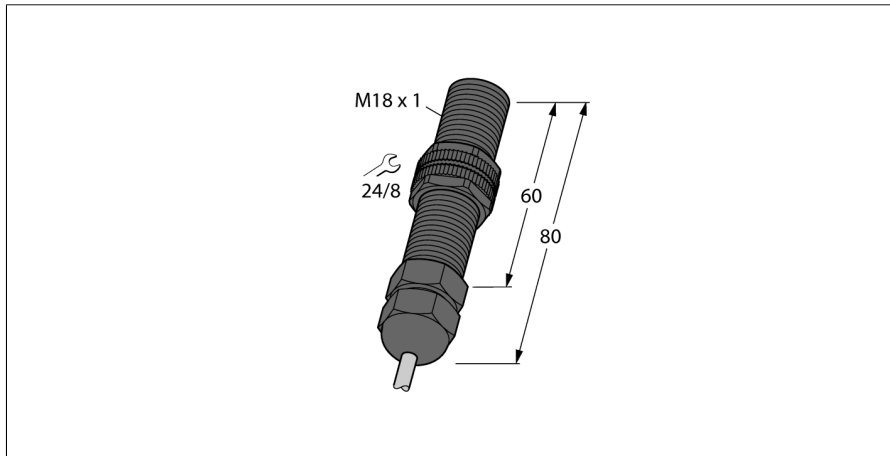


Inductive sensor

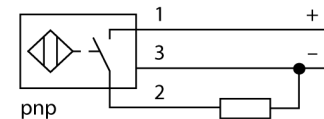
For underwater applications

BI5-P18-AP6/S139-S1261 7M



- Threaded barrel, M18 x 1
- Plastic, POM
- For underwater and off-shore applications
- Oil and seawater resistant
- Protection class IP68, 350 m water column
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- Cable connection

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	BI5-P18-AP6/S139-S1261 7M
Ident-No.	1650244
Assured switching distance	≤ (0,81 x Sn) mm
Hysteresis	3...15 %
Temperature drift	≤ ± 10 %
Repeatability	≤ 2 % of full scale
Ambient temperature	-25...+70 °C
Operating voltage	10...30VDC
Residual ripple	≤ 10 % U _s
DC rated operational current	≤ 200 mA
No-load current I ₀	≤ 15 mA
Residual current	≤ 0.1 mA
Switching frequency	0.5 kHz
Rated insulation voltage	≤ 0.5 kV
Output function	3-wire, NO contact, PNP
Short-circuit protection	yes/ cyclic
Voltage drop at I ₀	≤ 1.8 V
Wire breakage / Reverse polarity protection	yes/ complete
Construction	threaded barrel, M18 x 1
Dimensions	80 mm
Housing material	plastic, POM, black
Material active area	plastic, POM, Black
Max. tightening torque housing nut	2 Nm
Connection	cable
Cable quality	Ø 5.2, Ölflex rugged 210, TPE, 7m
Cable cross section	3 x 0.5 mm ²
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
IP Rating	IP68

Inductive sensor
For underwater applications
BI5-P18-AP6/S139-S1261 7M

Distance D	2 x B
Distance W	3 x Sn
Distance T	3 x B
Distance S	1.5 x B
Distance G	6 x Sn

Diameter of the active area B \varnothing 18 mm

