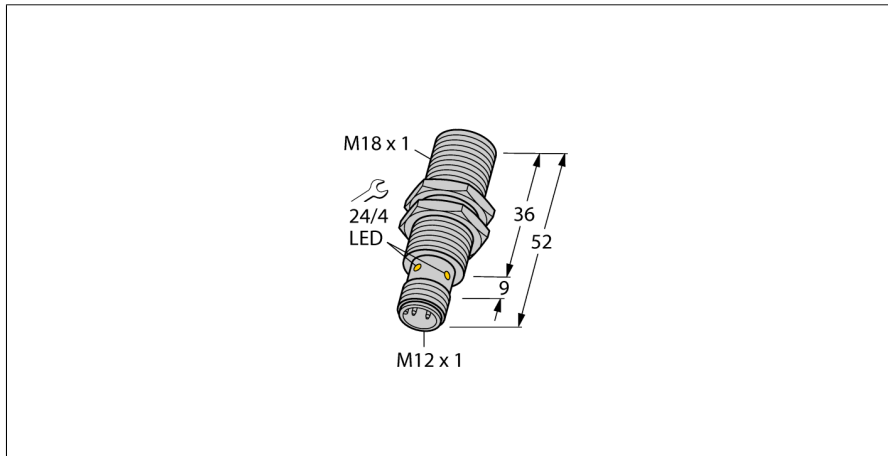


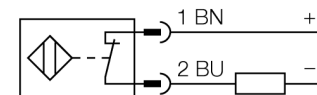
Inductive sensor

BI5-M18-RD4X-H1141



- Threaded barrel, M18 x 1
- Chrome-plated brass
- DC 2-wire, 10...65 VDC
- NC contact
- M12 x 1 connector

Wiring diagram



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.

Type	BI5-M18-RD4X-H1141
Ident-No.	4411102
Ident-No (TUSA)	M4411102
Rated operating distance Sn	5 mm
Mounting condition	flush
Assured sensing range	$\leq (0,81 \times S_n)$ mm
Correction factors	St37 = 1, V2A ~ 0.7, Ms ~ 0.4, Al ~ 0.3
Repeatability	$\leq 2\%$
Temperaturdrift	10 %
Hysteresis	1...15 %
Ambient temperature	-25...+70 °C
Operating voltage	10...65VDC
Residual ripple	$\leq 10\% U_{in}$
DC rated operational current	≤ 100 mA
Residual current	≤ 0.6 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes/ cyclic
Voltage drop at I_n	≤ 5 V
Smallest operating current I_m	≤ 3 mA
Switching frequency	1 kHz
Design	threaded barrel, M18 x 1
Dimensions	52 mm
Housing material	Metal, CuZn, chrome-plated
Material active face	Plastic, PA
Max. tightening torque housing nut	25 Nm
Connection	male, M12 x 1
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	● yellow

Inductive sensor BI5-M18-RD4X-H1141

TURCK
works

Industrial
Automation

Mounting instructions	minimum distances
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	Ø 18 mm
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