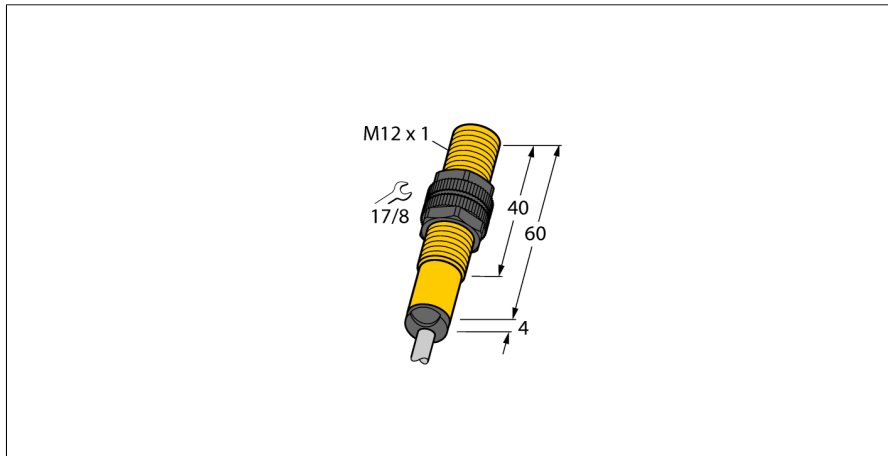


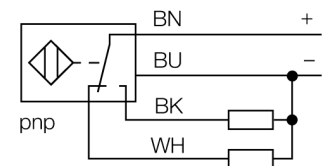
Inductive sensor

BI2-S12-VP6/S52 5M



- Threaded barrel, M12 x 1
- Plastic, PA12-GF30
- Cable exit 20 mm internally glued heat shrink.
- 4-wire DC, 10...30 VDC
- Changeover 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	BI2-S12-VP6/S52 5M
Ident-No.	1695410
Ident-No (TUSA)	M1695410
Rated operating distance Sn	2 mm
Mounting condition	flush
Assured sensing range	$\leq (0,81 \times S_n)$ mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeatability	$\leq 2\%$ of full scale
Temperaturdrift	10 %
Hysteresis	3...15 %
Ambient temperature	-25...+70 °C
Operating voltage	10...30VDC
Residual ripple	$\leq 10\%$ U_{in}
DC rated operational current	≤ 150 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_n	≤ 1.8 V
Wire breakage / Reverse polarity protection	yes/ complete
Output function	4-wire, changover contact, PNP
Switching frequency	2 kHz
Design	threaded barrel, M12 x 1
Dimensions	64 mm
Housing material	plastic, PA
Material active face	Plastic, PA
End cap	Plastic, EPTR
Max. tightening torque housing nut	1 Nm
Connection	cable
Cable quality	5.2 mm, LifYY-11Y, PUR, 5 m
Cable cross section	4 x 0.34 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

Inductive sensor
BI2-S12-VP6/S52 5M

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 12 mm

