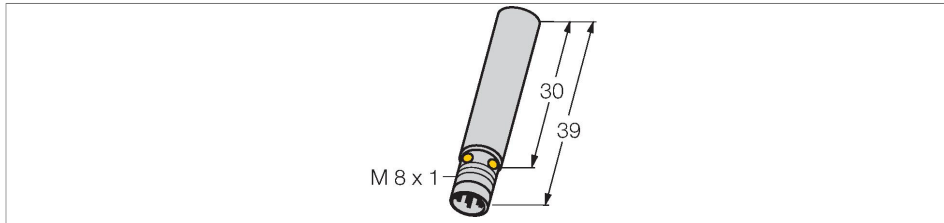


BI1.5-H08K-AP6X-V1131

Inductive Sensor



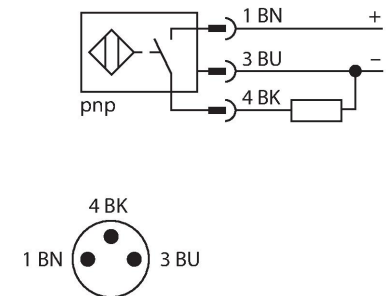
Features

- Smooth barrel, Ø 8 mm
- Stainless steel, 1.4301
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- M8 x 1 male connector

Technical data

Type	BI1.5-H08K-AP6X-V1131
ID	1604330
General data	
Rated switching distance	1.5 mm
Mounting conditions	Flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeat accuracy	≤ 2 % of full scale
Temperature drift	$\leq \pm 10$ %
Hysteresis	3...15 %
Electrical data	
Operating voltage U_B	10...30 VDC
Ripple U_{ss}	≤ 10 % U_{Bmax}
DC rated operating current I_o	≤ 150 mA
No-load current	≤ 15 mA
Residual current	≤ 0.1 mA
Isolation test voltage	0.5 kV
Short-circuit protection	yes/Cyclic
Voltage drop at I_o	≤ 1.8 V
Wire break/reverse polarity protection	yes/Complete
Output function	3-wire, NO contact, PNP
Switching frequency	3 kHz
Mechanical data	
Design	Smooth barrel, 8 mm
Dimensions	39 mm
Housing material	Metal, 1.4301 (AISI 304)
Active area material	Plastic, PA12-GF30
Electrical connection	Connector, M8 x 1

Wiring diagram



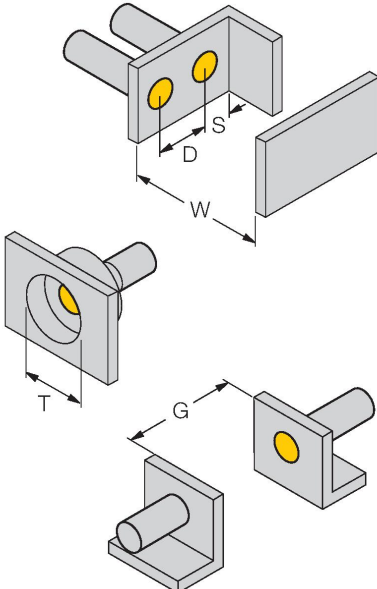
Functional principle

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.

Technical data

Environmental conditions	
Ambient temperature	-25...+70 °C
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	LED, Yellow

Mounting instructions

Mounting instructions/Description	
	Distance D
	2 x B
	Distance W
	3 x Sn
	Distance T
	3 x B
	Distance S
	1.5 x B
Diameter active area B	Distance G
	6 x Sn
Diameter active area B	
Ø 8 mm	