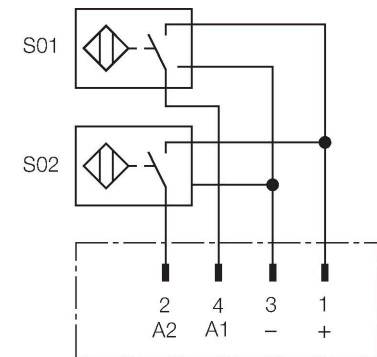


BI1-EH08/6.5K-2AP6-225/250-FSF4.4K/S922 Inductive Sensor

Features

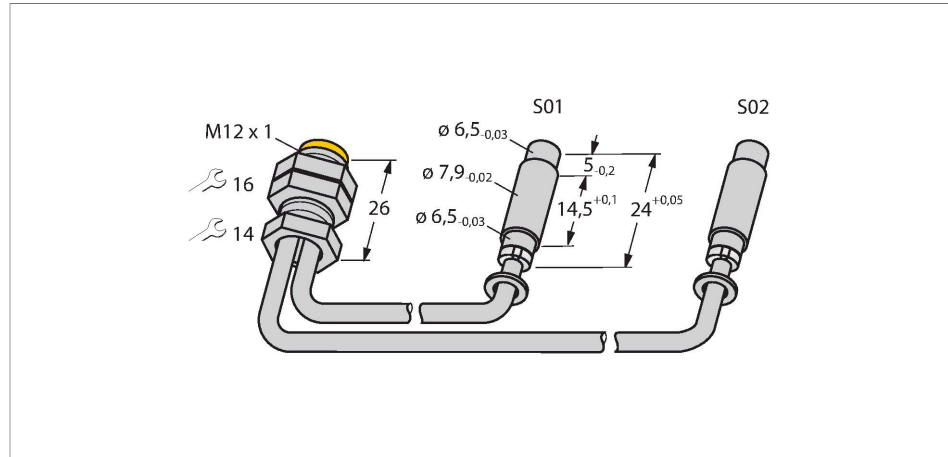
- FSF monitoring kit with two connected EH08/E6.5 sensors
- Connection via joint M12 x 1 male
- 2 x NO contact, PNP output
- DC 4-wire, 10...30 VDC

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

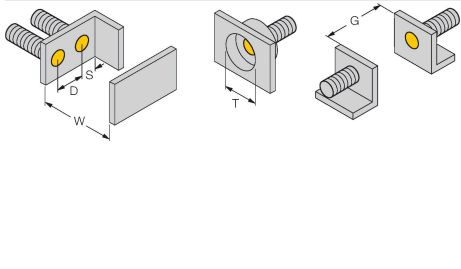
Type	BI1-EH08/6.5K-2AP6-225/250-FSF4.4K/S922
ID	1604602
Special version	S922 Corresponds to: For temperatures up to +100 °C. Supplied with a custom washer.
General data	
Rated switching distance	1 mm
Mounting conditions	Flush
Secured operating distance	$\leq (0.81 \times S_n) \text{ mm}$
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeat accuracy	$\leq 2 \text{ \% of full scale}$
Temperature drift	$\leq \pm 10 \text{ \%}$
Hysteresis	3...15 %
Electrical data	
Operating voltage U_B	10...30 VDC
Ripple U_{ss}	$\leq 10 \text{ \% } U_{Bmax}$
DC rated operating current I_B	$\leq 150 \text{ mA}$
No-load current	$\leq 20 \text{ mA}$
Residual current	$\leq 0.1 \text{ mA}$
Isolation test voltage	0.5 kV
Short-circuit protection	yes/Cyclic
Voltage drop at I_B	$\leq 1.8 \text{ V}$
Wire break/reverse polarity protection	Complete
Output function	4-wire, NO contact, PNP

Technical data

Switching frequency	0.03 kHz
Mechanical data	
Design	Monitoring kit for power clamps, EH08/6,5
Dimensions	21 mm
Housing material	Metal, 1.4301 (AISI 304)
Active area material	Plastic, PA12-GF20
Electrical connection	Connector, M12 × 1
Cable quality	Ø 2.7 mm, Lif12Y33Y, PTFE, 0.225 m, 0.25 m
Core cross-section	3 x 0.14 mm ²
Environmental conditions	
Ambient temperature	-25...+100 °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

Mounting instructions

Mounting instructions/Description



Distance D	3 x B
Distance W	3 x Sn
Distance S	1.5 x B
Distance G	6 x Sn
Distance N	2 x Sn
Width active area B	6.5 mm

Please note, non-flush mounting of this sensor is obligatory.

The following conditions allow semi-flush mounting:

N1 = 0 mm and S1 = 1 mm or
N1 = 1 mm and S1 = 0 mm
These values apply for mounting in aluminium

N1 = 0 mm and S1 = 5 mm or
N1 = 5 mm and S1 = 0 mm
These values apply for mounting in St37.

BI1-EH08/6.5K-2AP6-225/250-FSF4.4K/S922 02/21/2025 14-29 | technical changes reserved