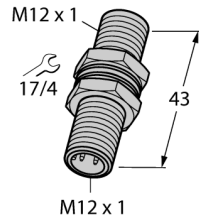


Inductive Sensor

BI2-G12K-AP6-H1141/S156



Type	BI2-G12K-AP6-H1141/S156
ID	16672
Customized imprint	192 743 4EN 5710 00001
Remark to product	Nur für Hauni
Special version	S156 Corresponds to: Collector resistance 4K7, wire-break protection diode, two lock washers, Körper label, special calibration Ni4-M12 in accordance with SL

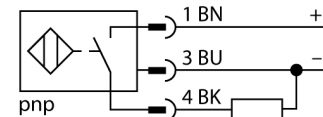
General data	
Rated switching distance S_n	2 mm
	See installation instructions
Mounting conditions	Flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeat accuracy	$\leq 2\%$ of full scale
Temperature drift	$\leq \pm 10\%$
Hysteresis	3...15 %

Electrical data	
Operating voltage U_s	10...30 VDC
Ripple U_{rs}	$\leq 10\% U_{Bmax}$
DC rated operating current I_s	≤ 200 mA
Residual current	≤ 0.1 mA
Isolation test voltage	0.5 kV
Short-circuit protection	yes/Cyclic
Voltage drop at I_s	≤ 1.8 V
Wire break/reverse polarity protection	yes/Complete
Output function	3-wire, NO contact, PNP
Switching frequency	1.5 kHz

Mechanical data	
Design	Threaded barrel, M12 x 1
Dimensions	43 mm
Housing material	Metal, CuZn, Chrome-plated
Active area material	Plastic, PA12-GF30
Max. tightening torque of housing nut	10 Nm
Electrical connection	Connector, M12 x 1

- Threaded barrel, M12 x 1
- Chrome-plated brass
- Collector resistance 4.7 kOhm
- Wire-break protection diode
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- M12 x 1 male connector

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.

Environmental conditions	
Ambient temperature	-25...+70 °C
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
Included in delivery	
Sicherungsscheiben	

Accessories

Type code	Ident no.		Dimension drawing
BST-12B	6947212	Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6	
QM-12	6945101	Quick-mount bracket with dead-stop; material: Chrome-plated brass. Male thread M16 × 1. Note: The switching distance of the proximity switches may change when using quick-mount brackets.	
MW-12	6945003	Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)	
BSS-12	6901321	Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene	