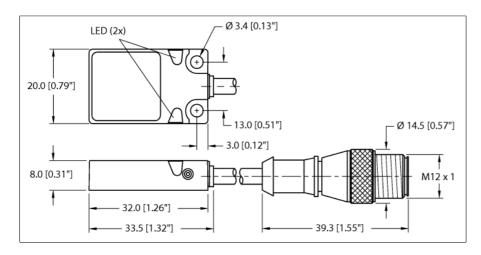


## **Inductive Sensor** With Weldguard® coating and Viton/Fiberglass sleeving BI8U-Q08-AP6X2-1-RS4T/S1764





Type	BI8U-Q08-AP6X2-1-RS4T/S1764
ID	1662089
Special version	S1764 Corresponds to:Weldguard coating Viton fire-resistant jacket The jacket begins at the end of the sensor and, except for 100 mm of shrink tubing at the end of the cable, covers the entire line

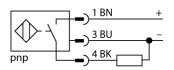
	Rectangular, height 8 mm
	Active face on top
	Metal, Zamak, nickel-plated

- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- Pigtail with male end M12 x 1

Hysteresis	315 %	
Repeat accuracy	$\leq$ 2 % of full scale	
Secured operating distance	≤ (0.81 × Sn) mm	
Mounting conditions	Flush	
Rated switching distance Sn	8 mm	
General data		

Electrical data		
Operating voltage U <sub>B</sub>	1030 VDC	
Ripple U <sub>ss</sub>	≤ 10 % U <sub>Bmax</sub>	
DC rated operating current I <sub>e</sub>	≤ 200 mA	
Residual current	≤ 0.1 mA	
Isolation test voltage	0.5 kV	
Short-circuit protection	yes/Cyclic	
Voltage drop at I <sub>e</sub>	≤ 1.8 V	
Wire break/reverse polarity protection	yes/Complete	
Output function	3-wire, NO contact, PNP	
DC field stability	300 mT	
AC field stability	300 mT <sub>ss</sub>	
Insulation class		
Switching frequency	0.25 kHz	

## 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.



Mechanical data	
Design	Rectangular, Q08
Dimensions	32 x 20 x 8 mm
Housing material	Metal, Zamak, Nickel Plated
Active area material	Plastic, PP, yellow
Material coupling nut	metal, CuZn, nickel-plated
Electrical connection	Cable with connector, M12 × 1
Cable quality	Ø 3mm, Gray, Lif9Y-11Y, PUR, 1 m
	Suited for E-ChainSystems® acc. to manufacturers
	declaration H1063M
Core cross-section	3 x 0.14 mm²
Environmental conditions	
Ambient temperature	-25+70 °C
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP68
Power-on indication	LED, Green
Switching state	LED, Yellow