

### INDUCTIVE PROXIMITY SENSOR

MANUFACTURING PART #
WSI-0803-SABH

DIAMETER

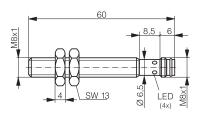
SENSING RANGE

M8 3 mm

MOUNTING

embeddable

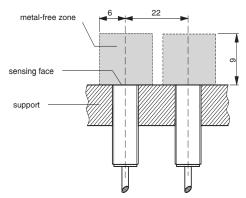




## Weld-immune full-metal sensor Main features:

- Long operating distance: 3 mm on steel and aluminum
- Resistant to medium frequency magnetic fields (current up to 15 kA)
- Resistant to 50 Hz magnetic fields up to 40 mT
- Extremely robust: one-piece stainless steel housing and sensing face
- ACTIVSTONE weld-spatter resistant coating
- F1 (Factor 1) Sensing all metals

### Installation (Fig. 1):



Pin assignment (view onto device) M8



	Wiring diagram	
PNP	3 x 39 V	(4) A Last Charge Load R <sub>L</sub>

<sup>\*</sup> typical values

# Technical data:

(according to IEC 60947-5-2)	CE
Rated operating distance s <sub>n</sub> Hysteresis	3 mm ≤ 15 % s <sub>r</sub>
Standard target	9 x 9 x 1 mm, FE 360
Repeat accuracy	0.15 mm (U <sub>B</sub> = 20 30 VDC,
· ·	$T_A = 23  ^{\circ}\text{C} \pm 5  ^{\circ}\text{C}$
Supply voltage range U <sub>B</sub>	10 30 VDC
Max. ripple content	≤ 20% U <sub>B</sub>
Output current	≤ 200 mA
Output voltage drop	≤ 2.0 V at 200 mA
No-load supply current	≤ 10 mA
Leakage current	≤ 0.1 mA
Switching frequency	≤ 15 Hz
Time delay before availability  Degree of protection	≤ 50 msec. IP 68 & IP 69K
• •	
Ambient temperature range T <sub>A</sub> Temperature drift of s <sub>r</sub>	-25 + 85 °C ≤ 10%
Pressure resistance in "P" area	80 bar max.
Short-circuit protection	built-in
Voltage reversal protection	built-in

Housing and sensing face material stainless steel (V2A / 1.4305 / AISI 303)

EMC protection: IEC 60947-5-2 (7.2.3.1) 1 kV

built-in

IEC 60947-5-2 / 7.4

IEC 61000-4-2 Level 3
IEC 61000-4-3 Level 3
IEC 61000-4-4 Level 3

Induction protection

Shocks and vibration

### Correction factors for target of\*:

Steel FE 360 1.0 copper 1.0 aluminum 1.0 brass 1.3 stainless steel 1mm / 2mm thick 0.4 / 0.7

### Correction factors for embeddable mounting (Fig. 1) in support of\*:

Steel FE 360 0.9 aluminum 0.9 brass 0.75 stainless steel 0.8 "Quicktube" 0.9

### **APPLICATION NOTE**

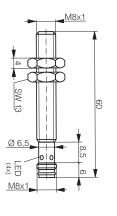
- Product not intended for safety applications
- Operators of the product are responsible for compliance with measures relating to the protections of persons, equipment, electrical standards and environmental regulations.



IN WELDING ENVIRONMENTS

WSI-0803-SABH

Weld Immune - 3mm Sn - Embeddable M8 Inductive Proximity Sensor



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