

INDUCTIVE PROXIMITY SENSOR

MANUFACTURING PART # WSI-3020-SAAH	DIAMETER M30	SENSING RANGE 20 mm	MOUNTING embeddable
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Designed for
Maximum Performance in
Impact & Weld Environments

Long Range: 20mm
Stainless Steel Face & Housing
FACTOR 1 (steel & aluminum)



Weld/Interference Resistant full-metal inductive sensor with long operating distance

Main features:

- Long operating distance: 20 mm on steel and aluminum
- Resistant to welding interference: magnetic fields (current up to 100 kA)
- ACTIVSTONE weld spatter-resistant coating
- F1 (Factor 1) Sensing all metals
- Supply voltage 10 ... 30 VDC, output current 200 mA

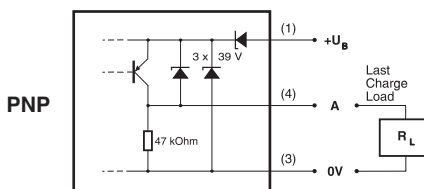


Compatible with mount WMT-30MM-FXXH

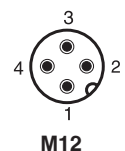
Technical data:

Rated operating distance s_n	20 mm
Hysteresis	$\leq 15\% s_r$
Standard target	60 x 60 x 1 mm, FE 360
Repeat accuracy	0,7 mm ($U_B = 20 \dots 30$ VDC, $T_A = 23\text{ }^\circ\text{C} \pm 5\text{ }^\circ\text{C}$)
Supply voltage range U_B	10 ... 30 VDC
Max. ripple content	$\leq 20\% U_B$
Output current	≤ 200 mA
Output voltage drop	$\leq 2,0$ V bei / à / at 200 mA
No-load supply current	≤ 10 mA
Leakage current	$\leq 0,1$ mA
Switching frequency	$\leq 3,6$ Hz
Time delay before availability	≤ 128 ms
LED (0 ... s_r)	Y Steady: ON, Y Blink=>80% range
Ambient temperature range T_A	-25 ... + 85 $^\circ\text{C}$
Temperature drift of s_r	$\leq 10\%$
Pressure resistance in "P" area	40 bar max.
Short-circuit protection	eingebaut / intégrée / built-in
Voltage reversal protection	eingebaut / intégrée / built-in
Induction protection	eingebaut / intégrée / built-in
Shocks and vibration	IEC 60947-5-2
Cable length	300 m max.
Weight	140 g
Degree of protection	IP 68 & IP 69K
EMC protection: IEC 61000-4-2	Level 4
IEC 61000-4-3	Level 3
IEC 61000-4-4	Level 3
Housing and sensing face material	Edelstahl / acier inox / stainless steel (V2A / 1.4305 / AISI 303)
Sensing face thickness	1 mm
Connection	M12

Wiring diagram
WSI-3020-SAAH

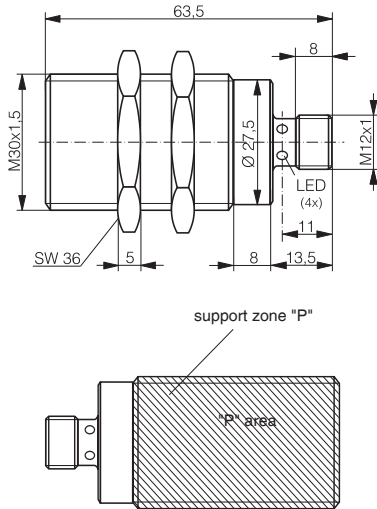


Pin assignment (view onto device)

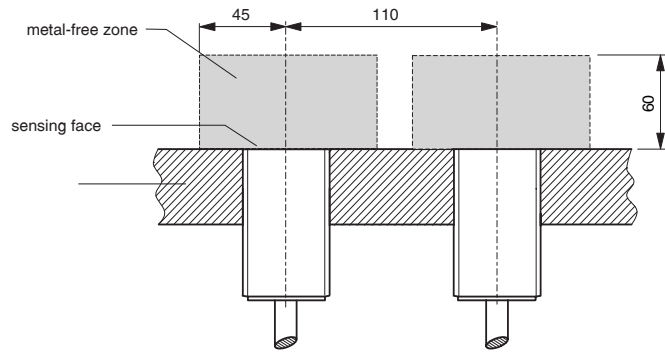


Dimensions: WSI-3020-SAAH

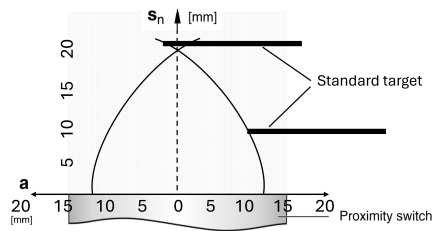
Inductive Sensor, M30 Weld/Interference Resistant, Factor 1, Stainless Steel, 20mm Sensing Range
ceramic spatter-resistant coating for durability in weld cells



Installation* (Fig. 1):



Sensing Pattern (Fig. 2):



* typical values

Correction factors for target of*:

Steel FE 360	1.0	Copper	0.9	Aluminium	1.0	Brass	1.3	Stainless steel 1mm / 2mm thick	0.4 / 0.75
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Correction factors for embeddable mounting (Fig. 1) in support of*:

Steel FE 360	0.85	Aluminium	0.7	Brass	0.6	Stainless steel	1.2
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Typenspektrum / Types disponibles / Available types:

part number	polarity	connection	output
WSI-3020-SAAH	PNP N.O.	connector M12	1 - N.O.

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.