



Main

Range of product	OsiSense XS
Series name	Application
Sensor type	Inductive proximity sensor
Device application	Welding machine
Sensor name	XS9
Sensor design	Cylindrical M12
Size	60 mm
Body type	Single piece body
Enclosure material	Stainless steel 303
Type of output signal	Discrete
Wiring technique	3-wire
[Sn] nominal sensing distance	6 mm
Discrete output function	1 NO
Discrete output type	PNP
Electrical connection	4 pins M12 male connector
[Us] rated supply voltage	12...24 V DC with reverse polarity protection
Switching capacity in mA	<= 200 mA with overload and short-circuit protection
IP degree of protection	IP68 conforming to IEC 60529 IP69K conforming to DIN 40050

Complementary

Thread type	M12 x 1
Detection face	Frontal
Detector flush mounting acceptance	Flush mountable
Material	Stainless steel 303
Front material	Stainless steel 303
Operating zone	> 0...4.8 mm
Differential travel	1...15 % of Sr
Repeat accuracy	<= 5 % of Sr
Output circuit type	DC
Status LED	1 LED yellow for output state

Supply voltage limits	10...30 V DC
Residual current	<= 0.1 mA for open state
Switching frequency	<= 15 Hz
Voltage drop	<= 2 V at closed state
Current consumption	<= 10 mA at no-load
Delay first up	<= 80 ms
Delay response	<= 0.0001 ms
Delay recovery	<= 0.015 ms
Marking	CE
Threaded length	41 mm
Height	12 mm
Length	60 mm
Product weight	0.024 kg

Environment

Product certifications	cULus
Ambient air temperature for operation	-25...70 °C
Ambient air temperature for storage	-25...70 °C
Vibration resistance	25 gn amplitude = +/- 1 mm (f = 10...55 Hz) conforming to IEC 60068-2-6
Shock resistance	30 gn for 11 ms conforming to IEC 60068-2-27

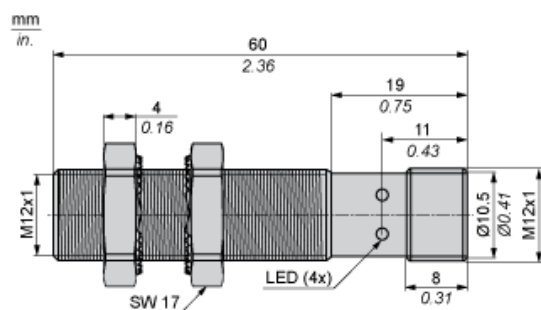
Offer Sustainability

RoHS (date code: YYWW)	Will not be compliant Will not be compliant
REACH	Reference not containing SVHC above the threshold Reference not containing SVHC above the threshold

Contractual warranty

Warranty period	18 months
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Dimensions



Minimum Mounting Distances in mm

Side by side



$e (1) \geq 38 \text{ mm}/1.50 \text{ in.}$

Face to face



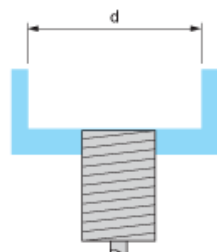
$e (2) \geq 30 \text{ mm}/1.18 \text{ in.}$

Facing a metal object



$e (3) \geq 20 \text{ mm}/0.79 \text{ in.}$

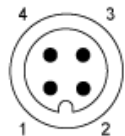
Mounted in a metal support



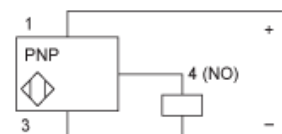
$d \geq 24 \text{ mm}/0.94 \text{ in.}$

Wiring Schemes

M12 connector



PNP



- 1 : (+)
- 2 : Not connected
- 3 : (-)
- 4 : NO Output