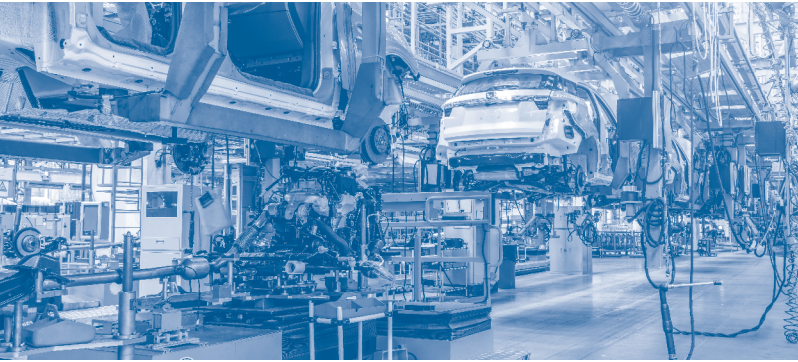# OMRON

E2EW Metal Face Proximity Sensors
Product Guide

Overview

Weight lightening with non-ferrous metals helps manufacturers meet customer and regulatory requirements, but it presents challenges for metal part detection. Our E2EW Series Metal Face Proximity Sensors solves this need with industry-leading sensing distances and Factor 1 sensing that allows the sensor to detect ferrous and non-ferrous metals at the same distance.

Additionally, the new sensor family features weld field immunity, IP67 ratings, IO-Link support and a proprietary slag resistance coating (slag resistance models) to continue operations in even the most troublesome applications.

Applications

- Ferrous and non-ferrous metal detection in the same process
- Metal part detection at long range (ferrous and non-ferrous)
- Welding applications where part position is monitored continuously
- Welding applications with high likelihood of weld slag buildup

Primary Benefits

- Enables sensor standardization for ferrous and non-ferrous metal detection
- Reduces downtime related to target impact
- Improves size flexibility due to extended detection range
- Functions well amid moisture and slag buildup (slag resistance models)
- Makes setup and configuration easy with IO-Link

Key features

- Extended sensing range
- Factor 1 sensing of ferrous and non-ferrous metals
- Weld field immunity
- IP67 rating for environmental robustness
- Proprietary slag resistance coating
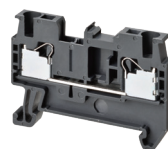- IO-link configurability and output monitoring

Product Selection

Connection Method	Sensing range	Barrel Size	Sensing Distance	NPN	PNP
M12 Pigtail[1]	1X	M12	2 mm	E2EW-X2C112-M1TJ 0.3M	E2EW-X2B112-M1TJ 0.3M
		M18	5 mm	E2EW-X5C118-M1TJ 0.3M	E2EW-X5B118-M1TJ 0.3M
Pre-wire		M12	2 mm	E2EW-X2C112 5M	E2EW-X2B112 5M
		M18	5 mm	E2EW-X5C118 5M	E2EW-X5B118 5M

Connection Method	Sensing range	Barrel Size	Sensing Distance	NPN	PNP
M12 4pin Connector	4X	M12	7 mm	E2EW-X7C112 M1	E2EW-X7B1T12 M1
		M18	12 mm	E2EW-X12C118 M1	E2EW-X12B1T18 M1
		M30	22 mm	E2EW-X22C130 M1	E2EW-X22B1T30 M1
M12 Pigtail[1]		M12	7 mm	E2EW-X7C112-M1TJ 0.3M	E2EW-X7B1T12-M1TJ 0.3M
		M18	12 mm	E2EW-X12C118-M1TJ 0.3M	E2EW-X12B1T18-M1TJ 0.3M
Pre-wire		M12	7 mm	E2EW-X7C112 5M	E2EW-X7B1T12 5M
		M18	12 mm	E2EW-X12C118 5M	E2EW-X12B1T18 5M

1: There is a 4-pin M12 connector on the end of the pigtail.

Related Products

Product Name	XS2FM4	XW5T	S8VKG
Type	M2 Connector Cordsets	Terminal Blocks	Power supplies
Description	Straight and Right-angle	DIN track terminal blocks with screw terminals	Single phase DIN rail power supply
Common Part Numbers	XS2F-M12PUR4S2M XS2F-M12PVC4S2M XS2W-M12PUR4SS2M XS2W-M12PVC4SS2M	XW5T-S4.0-1.1-1	S8VK-G01524