

NEW

Welding Proximity Sensors

DC 3-Wire Models

E2EW Series

Stable detection for both
aluminum and iron

Full Metal Body

Equivalent sensing distances for iron and aluminum

12mm

M18 quadruple
distance models

Exceptional sensing range



Exceptional sensing range

Equal sensing distances for iron and aluminum



- Standardize on a single sensor for iron and aluminum detection
- Reduced design work and enhance operation rates
- Reduce false detection and sensor damage with exceptional sensing distance
- Detect iron and aluminum stably in weld environments

12 mm

E2EW

* M18 quadruple distance models

Iron workpieces

Aluminum workpieces

7 mm

about 2 mm

Previous models

* M18 models

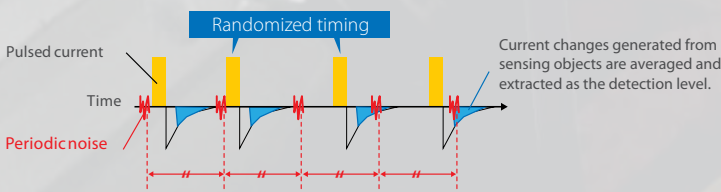
For both iron and aluminum workpieces

Omron's unique technologies provide equally long sensing distances for both iron and aluminum

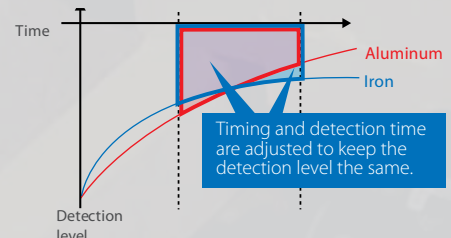
E2EW Proximity Sensors are equipped with Omron's unique technology for suppressing noise influence as well as the PRD* technology. The technologies reduce the influence of noise, extending the sensing distance. Furthermore, equally long distance detection for iron and aluminum is possible by adjusting the timing and time to detect current changes of sensing objects.

Technology for suppressing noise influence

Random timing of pulsed current reduces the periodic noise effect on the detection signals.



Long sensing distances for both iron and aluminum



*PRD (Pulse Response Detection) is a technology to detect current changes of sensing objects when pulsed currents are applied to coils.

Long-lasting spatter resistance

Lasts 60 times longer than previous Omron models



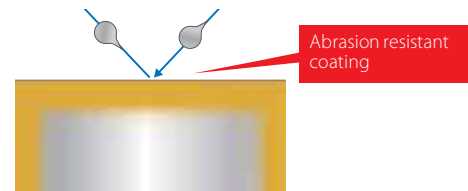
Fewer sensor replacements needed

Abrasion resistant coating reduces maintenance work



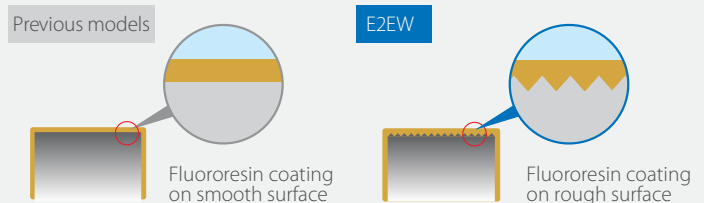
Technologies for increasing spatter resistance

Omron has developed a better adhering, longer lasting coating to reduce the effect of abrasion on the protective coating.



Technologies to prevent coating abrasion

Omron's unique coating film formation technologies coupled with a specially treated base surface greatly reduces abrasion, to approximately 1/60 of previous models.



1. E2EF-Q products. 2. Brush 10 times vertically and horizontally for each maintenance. Repeat 6 times. 3. Comparison with E2EF-Q products. Based on June 2019 OMRON investigation.

Clear status visualization

Detection level visualization with IO-Link



Detection level visualization

A real-time view of how the proximity sensors are detecting objects provides understanding of everyday changes in facility conditions that may not be visible to the naked eye.

*PREMIUM Models only

■ **Application example:**
Maintenance management based on spatter accumulation

Weld spatter can cause proximity sensors to malfunction. Monitoring detection level changes can allow for timely maintenance.

