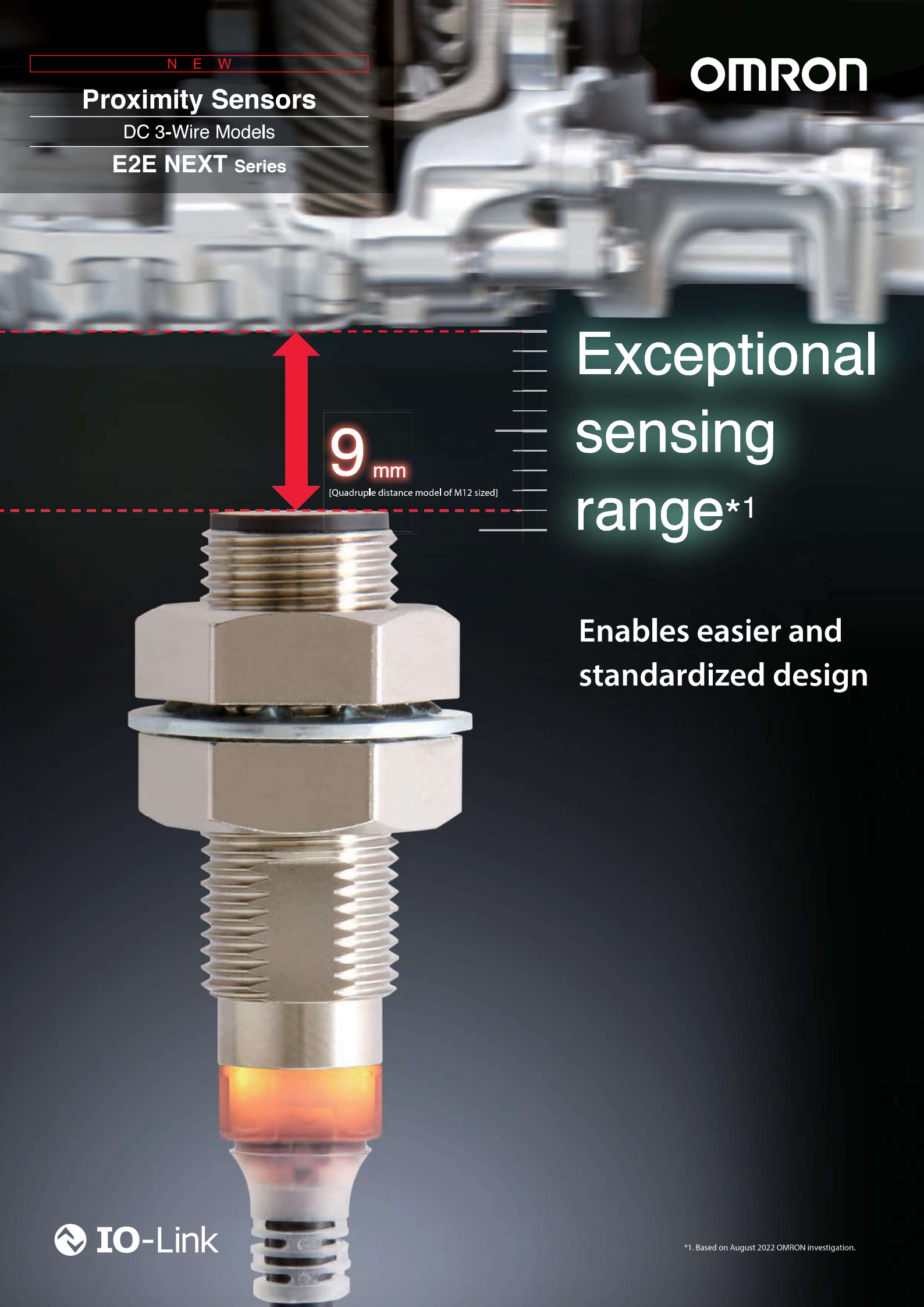
N E W

Proximity Sensors

DC 3-Wire Models

E2E NEXT Series

OMRON



Exceptional sensing range*1

Enables easier and standardized design

IO-Link

*1. Based on August 2022 OMRON investigation.

designs

New standards for usability

Early error detection

1 location, all new E2E Sensors can be monitored with IO-Link IO-Link P.8

Quick recovery

10 second replaceable with e-jig (adaptor) P.10

360 degree view with high visibility LED indicator P.10

Less unexpected facility stoppages

Strong resistance to cutting oil 2 -year oil resistance *3 P.12

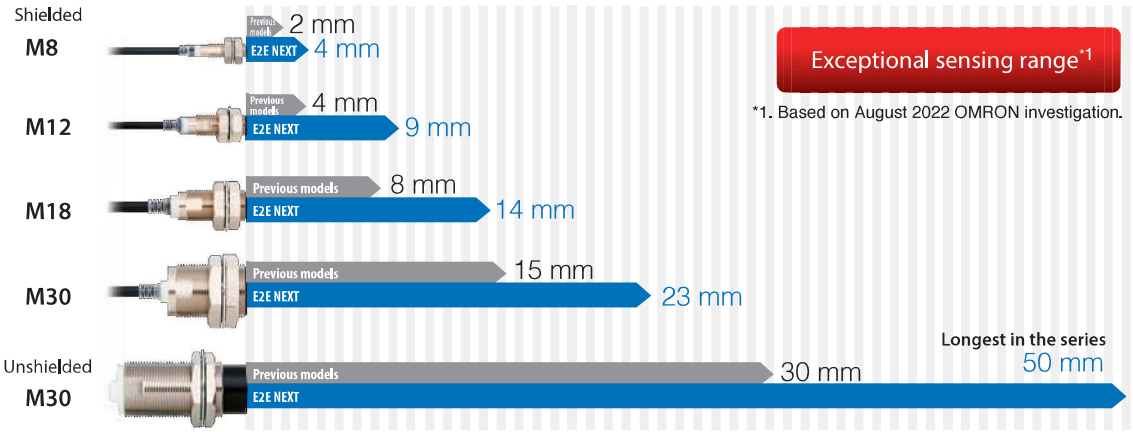
*3. Pre-wired models and pre-wired connector models.

Allows for more spacious design with less risk of contact

With previous models, to avoid false detections, you were forced to adopt sensor installation designs that risked contact. The E2E NEXT PREMIUM Proximity Sensor can detect accurately from a greater distance, which means you can adopt designs with more space and less risk of contact.

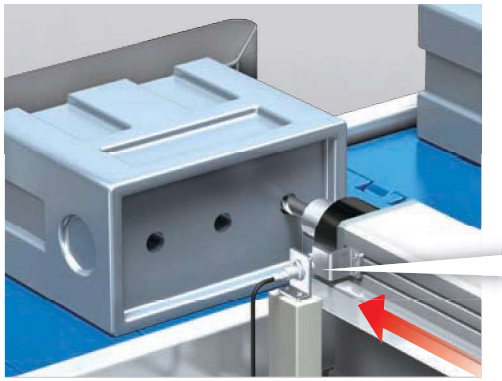
■Approximately double the sensing distance of previous models

Sensing distance comparisons (Quadruple distance models)



*1. Based on August 2022 OMRON investigation.

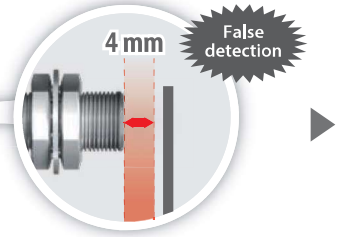
Less false detection even when a stationary gets away from the sensor due to equipment vibration



Spindle presence detection

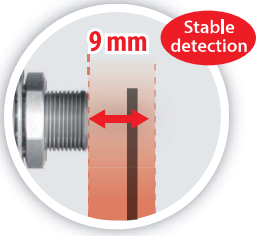
Previous models

The equipment vibration widens the distance between a stationary and a sensor to cause false detection and facility stoppages.



E2E NEXT

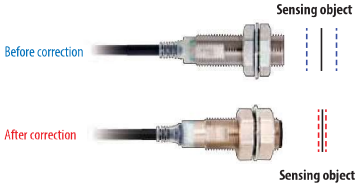
Long-distance detection enhances the degree of the detection margin. **Stable detection even when a stationary gets away.**



* Quadruple distance models of M12 sized

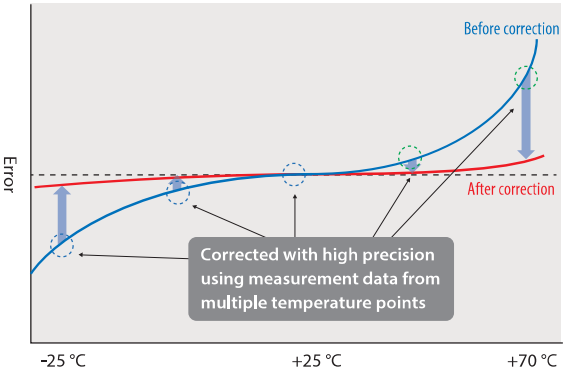
PROX3 hybrid circuitry with Thermal Distance Control 2 eliminates ambient temperature influence to enable extended sensing ranges.

Proximity sensors with longer sensing distance require increased sensitivity. However, with the increased sensitivity, temperature changes will have bigger influence in sensing distance, and differences between individual sensors will be bigger. E2E NEXT Proximity Sensors (3-wire models) solve these issues by newly implementing Thermal Distance Control 2, a technology to enable extended sensing ranges. It enables in-line measurements of each sensor's temperature characteristics, using multiple temperature points, in IoT-enabled production processes. The optimal correction values are then calculated based on our unique algorithm. The values are written into the analog digital hybrid IC (PROX3) for shipping to minimize differences between sensors and the influence of temperature changes that may occur in the customer's environments.



PATENTED *2 **Thermal Distance Control 2 technology reduces the extent of error**

Sensing distance fluctuation due to ambient temperature

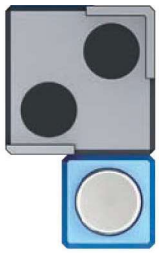


*2. "Patent Pending" means that we applied for a patent in Japan, and "Patented" means that we obtained a patent in Japan. (As of September 2022)

Easy to install, even where space is limited

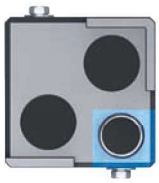
E2E NEXT PREMIUM Model Proximity Sensors ensure equivalent sensing distance while being one size smaller than previous models, allowing you to install them in spaces where conventional sensors were too big to fit.

Previous models Proximity sensors could not be installed due to limited space.



E2E NEXT **They can be installed due to limited space.**

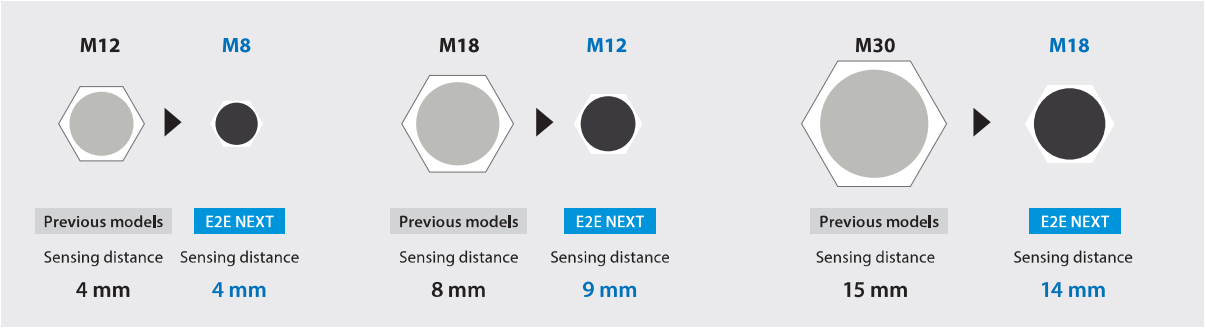
One size smaller to allow you to install proximity sensors where space is limited.



Note: When installing proximity sensors, make sure to factor the influence of surrounding metal into your designs.
(Refer to *Influence of Surrounding Metal upon Design* on page 51, page 70, page 84 and page 105 for details.)

■One size smaller than previous models

Size comparisons between models with equivalent sensing distance ("E2E NEXT" refers to quadruple distance models)



Unifying the model types to reduce the number of parts kept in inventory.

Previous models Two models (M12 and M18) stocked

E2E NEXT The extended range of the new sensors allows you to reduce the sensor size from M18 down to M12.