

# solution GUIDE

## Small Part Detection in Manual Assembly

Detect the presence of small plastic or metal parts such as screws, o-rings, caps, etc during their placement on car body parts at manual assembly stations.



### Key Features

- IP-69K/IP-67G & Antifouling coating for potential oil build-up
- Stainless steel body built to withstand any impact
- OLED Screen – easy to use and setup without any training!
- IO-Link Compatibility (COM 3 & COM 2 available) for continuous monitoring
- Spot and Line type available for detection of the most difficult targets/setups.

### Challenges:

1. Targets are often difficult to detect because of color, shape, surface finish without use of an expensive setup/system.
2. Higher failure rate due to human error and mundane task
3. Difficult to achieve stable detection of target due to mounting constraints of small assembly stations and limitations of sensor abilities.

### Why E3AS-HL for Small Part Detection?

1. E3AS-HL successfully detects small objects without use of a vision system to keep the costs to manufacture low.
2. E3AS-HL compact body and powerful sensing abilities allow for sensor to be placed in existing setups with flexible mounting options available
3. Increase quality of final assembly while allowing workers to assemble even faster, improving OEE.

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**OMRON**

Part Number	Descriptions
<a href="#">E3AS-HL150LMT M3</a>	Line Type; 150 mm sensing distance; M8 Quick disconnect; COM 3
<a href="#">E3AS-HL500LMT M3</a>	Line Type; 500 mm sensing distance; M8 Quick disconnect; COM3
<a href="#">E3AS-HL150MT M3</a>	Spot Type; 150 mm sensing distance; M8 Quick disconnect; COM 3
<a href="#">E3AS-HL500MT M3</a>	Spot type; 500 mm sensing distance; M8 Quick disconnect; COM 3
<a href="#">XS3F-M8PVC4S2M</a>	Water resistant; M8 4- pin; 2 m length; Straight connector
<a href="#">XS3F-M8PVC4A2M</a>	Water resistant; M8 4- pin; 2 m length; Right angled connector
<a href="#">E39-L223</a>	Rear Mounting Bracket
<a href="#">E39-L231</a>	L-shaped Mounting Bracket