

E3S-DB

Outstanding detection performance for all kinds of transparent objects

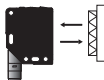




- Most reliable detection of all transparent objects such as PET bottles, glass bottles or transparent trays
- SmartTeach for fast set up and optimum threshold setting
- Sensing distance up to 4.5 m
- Narrow beam types with 2 mm spot detecting smallest gaps
- Proven for environments in Food & Beverage industry



Ordering Information

Sensors

 Red light






| Sensor type | Sensitivity adjustment | Connection method | Sensing distance, typ. | Model | |
|---|------------------------|---|---|---------------|---------------|
| | | | | NPN output | PNP output |
| Retro-reflective with MSR function  | SmartTeach | Pre-wired (2 m) |  0 to 4.5 m with E39-R8 | E3S-DBN11 2M | E3S-DBP11 2M |
| | | Connector (M12, 4 pins) | | E3S-DBN21 | E3S-DBP21 |
| | | Pigtail Connector* ¹ (M12, 4 pins) | | E3S-DBN31 | E3S-DBP31 |
| | | Pre-wired (2 m) | Narrow beam  0 to 0.7 m with E39-R21 | E3S-DBN12 2M | E3S-DBP12 2M |
| | | Connector (M12, 4 pins) | | E3S-DBN22 | E3S-DBP22 |
| | | Pigtail Connector* ¹ (M12, 4 pins) | | E3S-DBN32 | E3S-DBP32 |
| | Trimmer (11 turns) | Pre-wired (2 m) |  0 to 4.5 m with E39-R8 | E3S-DBN11T 2M | E3S-DBP11T 2M |
| | | Connector (M12, 4 pins) | | E3S-DBN21T | E3S-DBP21T |
| | | Pigtail Connector* ¹ (M12, 4 pins) | | E3S-DBN31T | E3S-DBP31T |
| | | Pre-wired (2 m) | Narrow beam  0 to 0.7 m with E39-R21 | E3S-DBN12T 2M | E3S-DBP12T 2M |
| | | Connector (M12, 4 pins) | | E3S-DBN22T | E3S-DBP22T |
| | | Pigtail Connector* ¹ (M12, 4 pins) | | E3S-DBN32T | E3S-DBP32T |

*¹ OMRON SmartClick connector for fast and save connection.

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Reflectors [Refer to Dimensions on page 9.]



Reflectors required for Retro-reflective Sensors: A Reflector is not provided with the Sensor. Be sure to order a Reflector separately.

| Sensor | Sensing distance, typ. | Appearance | Dimensions [mm] | Remarks | Model |
|--------------|------------------------|---|-----------------|--|---------|
| E3S-DB__1(T) | 0 to 4.5 m |  | 100 × 100 | | E39-R8 |
| | 0 to 3.5 m |  | 60 × 40 | | E39-R1S |
| | 0 to 3 m |  | 60 × 40 | Special polarizing filter for enhanced PET detection | E39-RP1 |
| E3S-DB__2(T) | 0 to 700 mm |  | 35 × 30 | For narrow gap detection | E39-R21 |
| | 0 to 700mm |  | 60 × 20 | | E39-R52 |

Note: For more reflectors please check OMRON catalogue or contact your OMRON representative.

Mounting brackets [Refer to Dimensions on page 9.]

A Mounting Bracket is not enclosed with the Sensor. Order a Mounting Bracket separately if required.

| Appearance | Material | Remarks | Model |
|---|----------|---|----------|
|  | SUS304 | A Mounting bracket is not provided with the Sensor. | E39-L192 |
|  | SUS304 | A Mounting bracket is not provided with the Sensor. | E39-L193 |

Sensor I/O connectors

| Size | Specifications | Appearance | Cable type | Model |
|--------------|----------------|------------|------------|--------------------|
| M12 (4 pins) | Standard PVC | Straight | 2 m | XS2F-M12PVC4S2M-EU |
| | | | 5 m | XS2F-M12PVC4S5M-EU |
| | | Angled | 2 m | XS2F-M12PVC4A2M-EU |
| | | | 5 m | XS2F-M12PVC4A5M-EU |
| | Smartclick PVC | Straight | 2 m | XS5F-D421-D80-F |
| | | | 5 m | XS5F-D421-G80-F |