



# M40S-63A300AR0

M4000 Standard Curtain

**SAFETY LIGHT CURTAINS**

**SICK**  
Sensor Intelligence.



Illustration may differ

### Ordering information

| Type           | part no. |
|----------------|----------|
| M40S-63A300ARO | 1203029  |

Other models and accessories → [www.sick.com/M4000\\_Standard\\_Curtain](http://www.sick.com/M4000_Standard_Curtain)

### Detailed technical data

#### Features

|                                |                         |
|--------------------------------|-------------------------|
| <b>System part</b>             | Sender                  |
| <b>Resolution</b>              | 30 mm                   |
| <b>Scanning range</b>          | 21 m                    |
| <b>Protective field height</b> | 750 mm                  |
| <b>Synchronization</b>         | Optical synchronization |

#### Safety-related parameters

|   |  |
|---|--|
| <b>Type</b>   | Type 4 (IEC 61496-1)                   |
| <b>Safety integrity level</b>   | SIL 3 (IEC 61508)                      |
| <b>Category</b>   | Category 4 (EN ISO 13849)              |
| <b>Performance level</b>  | PL e (EN ISO 13849)                    |
| <b>PFH<sub>D</sub> (mean probability of a dangerous failure per hour)</b> | $28 \times 10^{-9}$ (EN ISO 13849)     |
| <b>T<sub>M</sub> (mission time)</b>                                       | 20 years (EN ISO 13849)                |
| <b>Safe state in the event of a fault</b>                                 | At least one OSSD is in the OFF state. |

#### Functions

|   | Functions | Delivery status     |
|---|-----------|---------------------|
| <b>Restart interlock</b>                | ✓         | Internal            |
| <b>External device monitoring (EDM)</b> | ✓         | Activated           |
| <b>Beam coding</b>                      | ✓         | Uncoded             |
| <b>Configurable status output (ADO)</b> | ✓         | Contamination (OWS) |
| <b>Sender test</b>                      | ✓         | Deactivated         |
| <b>Configurable scanning range</b>      | ✓         | Low scanning range  |

#### Interfaces

|                          |                           |
|--------------------------|---------------------------|
| <b>System connection</b> |                           |
| Connection type          | Male connector M12, 8-pin |

<sup>1)</sup> Depending on load, power supply and wire cross-section. The technical specifications must be observed.

|                             |                          |
|-----------------------------|--------------------------|
| Permitted cable length      | $\leq 15 \text{ m}^{1)}$ |
| Permitted cross-section     | $\geq 0.25 \text{ mm}^2$ |
| <b>Configuration method</b> | Configuration buttons    |
| <b>Display elements</b>     | 7-segment display, LEDs  |
| <b>Status display</b>       | LEDs                     |

<sup>1)</sup> Depending on load, power supply and wire cross-section. The technical specifications must be observed.

## Electronics

|  |                             |
|--|-----------------------------|
| <b>Protection class</b>                | III (IEC 61140)             |
| <b>Supply voltage <math>V_S</math></b> | 24 V DC (19.2 V ... 28.8 V) |
| <b>Residual ripple</b>                 | $\leq 10 \%^{1)}$           |
| <b>Power consumption</b>               | $\leq 0.3 \text{ A}$        |

<sup>1)</sup> Within the limits of  $V_S$ .

## Mechanics

|                              |  |
|------------------------------|--|
| <b>Housing cross-section</b> | 52 mm x 55.5 mm                          |
| <b>Housing material</b>      | Aluminum alloy ALMGSI 0.5                |
| <b>Surface treatment</b>     | Powder coated                            |
| <b>Front screen material</b> | Polycarbonate, scratch-resistant coating |

## Ambient data

|                                      |                                     |
|--------------------------------------|-------------------------------------|
| <b>Enclosure rating</b>              | IP65 (EN 60529)                     |
| <b>Ambient operating temperature</b> | -30 °C ... +55 °C                   |
| <b>Storage temperature</b>           | -30 °C ... +70 °C                   |
| <b>Air humidity</b>                  | 15 % ... 95 %, Non-condensing       |
| <b>Vibration resistance</b>          | 5 g, 10 Hz ... 55 Hz (EN 60068-2-6) |
| <b>Shock resistance</b>              | 10 g, 16 ms (EN 60068-2-27)         |

## Other information

|                    |        |
|--------------------|--------|
| <b>Wave length</b> | 850 nm |
|--------------------|--------|

## Classifications

|                     |          |
|---------------------|----------|
| <b>ECLASS 5.0</b>   | 27272704 |
| <b>ECLASS 5.1.4</b> | 27272704 |
| <b>ECLASS 6.0</b>   | 27272704 |
| <b>ECLASS 6.2</b>   | 27272704 |
| <b>ECLASS 7.0</b>   | 27272704 |
| <b>ECLASS 8.0</b>   | 27272704 |
| <b>ECLASS 8.1</b>   | 27272704 |
| <b>ECLASS 9.0</b>   | 27272704 |
| <b>ECLASS 10.0</b>  | 27272704 |
| <b>ECLASS 11.0</b>  | 27272704 |
| <b>ECLASS 12.0</b>  | 27272704 |
| <b>ETIM 5.0</b>     | EC002549 |

|                       |          |
|-----------------------|----------|
| <b>ETIM 6.0</b>       | EC002549 |
| <b>ETIM 7.0</b>       | EC002549 |
| <b>ETIM 8.0</b>       | EC002549 |
| <b>UNSPSC 16.0901</b> | 46171620 |

### Recommended accessories

Other models and accessories → [www.sick.com/M4000\\_Standard\\_Curtain](http://www.sick.com/M4000_Standard_Curtain)

|   | Brief description  | Type                   | part no. |
|---|--|------------------------|----------|
| Commissioning aids and test equipment   |  |                        |          |
|    | <ul style="list-style-type: none"> <li><b>Product:</b> Alignment aids</li> <li><b>Dimensions (W x H x L):</b> 19 mm<br/>67.3 mm<br/>66.9 mm</li> <li><b>Description:</b> Laser alignment aid for various sensors, laser class 2 (IEC 60825). Do not look into the beam!</li> </ul>           | AR60                   | 1015741  |
|   | <ul style="list-style-type: none"> <li><b>Product:</b> Alignment aids</li> <li><b>Description:</b> Adapter AR60 for M4000 and M4000 Curtain</li> </ul>   | AR60 adapter,<br>M4000 | 4040006  |
| Mounting systems  |  |                        |          |
|  | <ul style="list-style-type: none"> <li><b>Description:</b> Mounting kit 1, mounting bracket, rigid, L-shaped, including fixing screws and washers</li> <li><b>Packing unit:</b> 4 pieces</li> <li><b>Suitable for:</b> All protective field heights</li> </ul>                               | BEF-3WNGBAST4          | 7021352  |
|  | <ul style="list-style-type: none"> <li><b>Description:</b> Mounting kit 12, rotatable, swivel mount</li> <li><b>Packing unit:</b> 4 pieces</li> <li><b>Suitable for:</b> All protective field heights</li> </ul>   | BEF-2SMGEAKU4          | 2030510  |
|  | <ul style="list-style-type: none"> <li><b>Description:</b> Mounting kit 6, side bracket, rotatable</li> <li><b>Material:</b> Zinc diecast</li> <li><b>Details:</b> Zinc diecast</li> <li><b>Packing unit:</b> 4 pieces</li> <li><b>Suitable for:</b> All protective field heights</li> </ul> | BEF-1SHABAZN4          | 2019506  |

## SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

## WORLDWIDE PRESENCE:

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