

The SICK logo is displayed in a bold, blue, sans-serif font. It is centered within a white rectangular box that is set against a background of light blue concentric arcs, suggesting a sensor's field of view.

**M40P-70A503RB0**

M4000 Advanced Curtain

**SAFETY LIGHT CURTAINS**

**SICK**  
Sensor Intelligence.



### Ordering information

Type	part no.
M40P-70A503RB0	1043293

Illustration may differ

**Included in delivery:** M40E-70A503RB0 (1), M40S-70A503AA0 (1)

Other models and accessories → [www.sick.com/M4000\\_Advanced\\_Curtain](http://www.sick.com/M4000_Advanced_Curtain)

### Detailed technical data

#### Features

<b>System part</b>	Pair
<b>Resolution</b>	14 mm
<b>Scanning range</b>	10 m
<b>Protective field height</b>	1,800 mm
<b>Response time</b>	
Without beam coding	26 ms
With beam coding	56 ms
<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>	$28 * 10^{-9}$ (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
<b>Safe SICK device communication via EFI</b>	✓	
<b>Differentiation between man and material (muting)</b>	✓ <sup>1)</sup>	

<sup>1)</sup> The muting functions can only be used in combination with the UE403 muting switching amplifier or a suitable safety controller (e.g., Flexi Classic, Flexi Soft).

## Functions - Functions in combination with UE403

<b>Concurrence monitoring</b>	✓
<b>Monitoring of total muting time</b>	✓
<b>Sensor gap monitoring</b>	✓
<b>Belt stop</b>	✓
<b>Muting with override</b>	✓
<b>Exit monitoring</b>	✓
<b>End of muting by ESPE</b>	✓

## Interfaces

<b>System connection</b>	
Connection type	Hirschmann male connector M26, 12-pin
Permitted cable length	≤ 50 m <sup>1)</sup>
Permitted cross-section	≥ 0.75 mm <sup>2</sup>
<b>Extension connection</b>	Female connector M12, 5-pin
<b>Configuration method</b>	Via software
<b>Configuration connection</b>	Female connector M8, 4-pin
<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>	≤ 10 % <sup>1)</sup>

<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

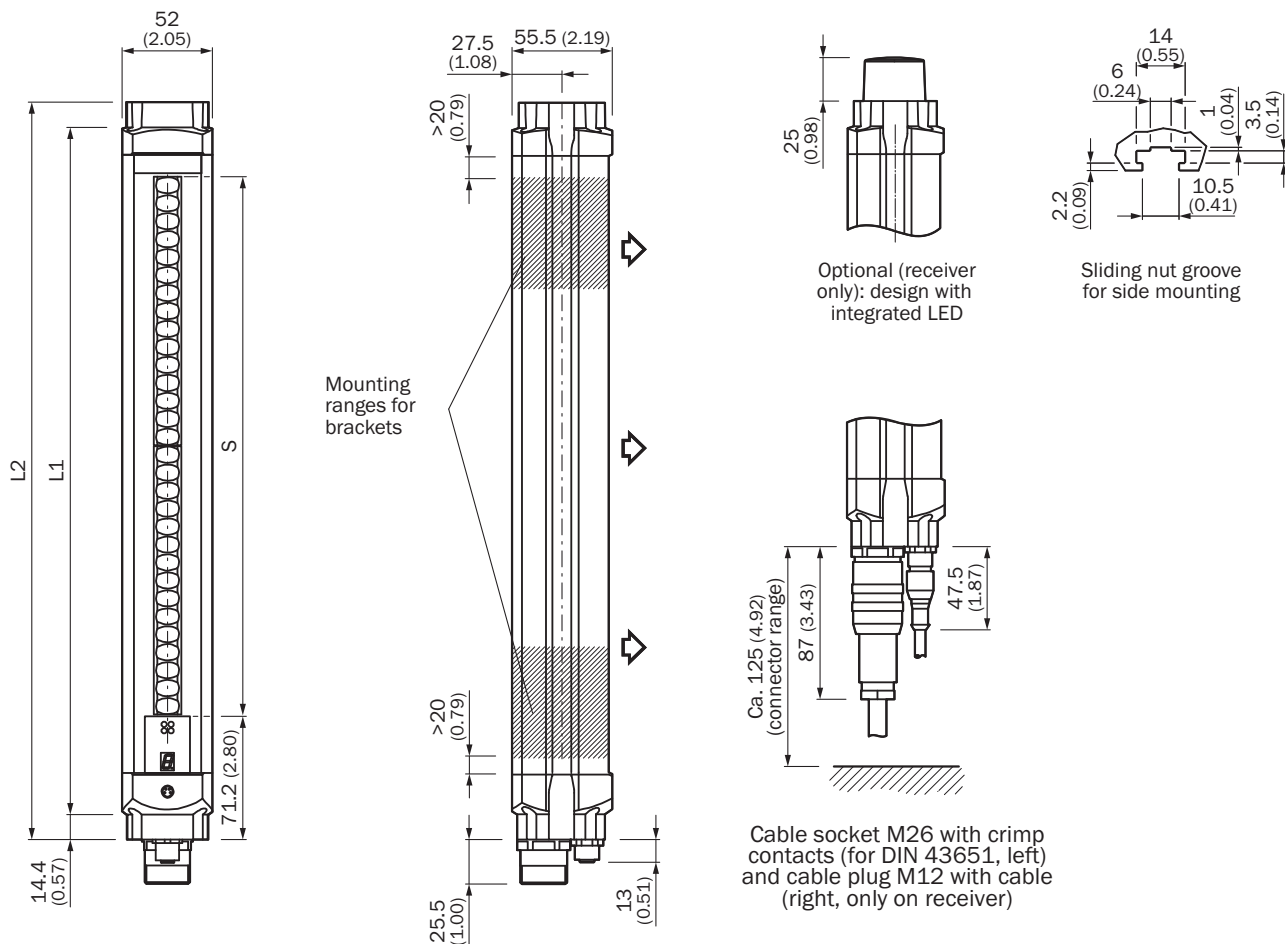
<b>Wave length</b>	850 nm
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## Classifications

<b>ECLASS 5.0</b>	27272704
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<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

### Dimensional drawing





Dimensions in mm (inch)

	L1	L2
300	387	416
450	537	566
600	687	716
750	837	866
900	987	1,016
1,050	1,137	1,166
1,200	1,287	1,316
1,350	1,437	1,466
1,500	1,587	1,616
1,650	1,737	1,766
1,800	1,887	1,916

### Recommended accessories

Other models and accessories → [www.sick.com/M4000\\_Advanced\\_Curtain](http://www.sick.com/M4000_Advanced_Curtain)

	Brief description	Type	part no.
<b>Commissioning aids and test equipment</b>			
	<ul style="list-style-type: none"> <li><b>Product:</b> Alignment aids</li> <li><b>Dimensions (W x H x L):</b> 19 mm 67.3 mm 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, M4000	4040006
<b>Mounting systems</b>			
	<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

	Brief description	Type	part no.
connectors and cables			
	<ul style="list-style-type: none"> <li>• <b>Connection type head A:</b> Female connector, M26, 12-pin, straight, A-coded</li> <li>• <b>Description:</b> Unshielded</li> <li>• <b>Connection systems:</b> Crimp contacts</li> <li>• <b>Permitted cross-section:</b> 0.5 mm<sup>2</sup> ... 1.5 mm<sup>2</sup></li> <li>• <b>Note:</b> 12 crimping contacts enclosed</li> </ul>	DOS-0612G000GA3KMC	6020757
	<ul style="list-style-type: none"> <li>• <b>Connection type head A:</b> Male connector, M8, 4-pin, straight</li> <li>• <b>Connection type head B:</b> Male connector, USB-A, straight</li> <li>• <b>Cable:</b> 10 m, 4-wire, PVC</li> <li>• <b>Description:</b> Unshielded</li> </ul>	DSL-8U04G10M025KM:	6034575
	<ul style="list-style-type: none"> <li>• <b>Connection type head A:</b> Female connector, M26, 12-pin, straight</li> <li>• <b>Connection type head B:</b> Flying leads</li> <li>• <b>Signal type:</b> Sensor/actuator cable</li> <li>• <b>Cable:</b> 20 m, 12-wire, PVC</li> <li>• <b>Description:</b> Sensor/actuator cable, unshielded</li> <li>• <b>Connection systems:</b> Flying leads</li> <li>• <b>Application:</b> Uncontaminated zones, Zones with chemicals</li> </ul>	DOL-0612G20M075KMC	2022549
	<ul style="list-style-type: none"> <li>• <b>Connection type head A:</b> Male connector, M8, 4-pin, straight</li> <li>• <b>Connection type head B:</b> Male connector, USB-A, straight</li> <li>• <b>Cable:</b> 2 m, 4-wire, PVC</li> <li>• <b>Description:</b> Unshielded</li> </ul>	DSL-8U04G02M025KM:	6034574
	<ul style="list-style-type: none"> <li>• <b>Connection type head A:</b> Female connector, M26, 12-pin, straight</li> <li>• <b>Connection type head B:</b> Flying leads</li> <li>• <b>Signal type:</b> Sensor/actuator cable</li> <li>• <b>Cable:</b> 15 m, 12-wire, PVC</li> <li>• <b>Description:</b> Sensor/actuator cable, unshielded</li> <li>• <b>Connection systems:</b> Flying leads</li> <li>• <b>Application:</b> Uncontaminated zones, Zones with chemicals</li> </ul>	DOL-0612G15M075KMC	2022548
	<ul style="list-style-type: none"> <li>• <b>Connection type head A:</b> Female connector, M26, 12-pin, straight</li> <li>• <b>Connection type head B:</b> Flying leads</li> <li>• <b>Signal type:</b> Sensor/actuator cable</li> <li>• <b>Cable:</b> 10 m, 12-wire, PVC</li> <li>• <b>Description:</b> Sensor/actuator cable, unshielded</li> <li>• <b>Connection systems:</b> Flying leads</li> <li>• <b>Application:</b> Uncontaminated zones, Zones with chemicals</li> </ul>	DOL-0612G10M075KMC	2022547
	<ul style="list-style-type: none"> <li>• <b>Connection type head A:</b> Female connector, M26, 12-pin, straight</li> <li>• <b>Connection type head B:</b> Flying leads</li> <li>• <b>Cable:</b> 5 m, PVC</li> <li>• <b>Description:</b> Unshielded</li> <li>• <b>Connection systems:</b> Flying leads</li> <li>• <b>Note:</b> Without EFI: Pin 9 and 10 not connected</li> <li>• <b>Application:</b> Uncontaminated zones, Zones with chemicals</li> </ul>	DOL-0610G05M075KMC	2046888
	<ul style="list-style-type: none"> <li>• <b>Connection type head A:</b> Female connector, M26, 12-pin, straight</li> <li>• <b>Connection type head B:</b> Flying leads</li> <li>• <b>Cable:</b> 10 m, PVC</li> <li>• <b>Description:</b> Unshielded</li> <li>• <b>Connection systems:</b> Flying leads</li> <li>• <b>Note:</b> Without EFI: Pin 9 and 10 not connected</li> <li>• <b>Application:</b> Uncontaminated zones, Zones with chemicals</li> </ul>	DOL-0610G10M075KMC	2046889
	<ul style="list-style-type: none"> <li>• <b>Connection type head A:</b> Female connector, M26, 12-pin, straight</li> <li>• <b>Connection type head B:</b> Flying leads</li> <li>• <b>Signal type:</b> Sensor/actuator cable</li> <li>• <b>Cable:</b> 5 m, 12-wire, PVC</li> <li>• <b>Description:</b> Sensor/actuator cable, unshielded</li> <li>• <b>Connection systems:</b> Flying leads</li> <li>• <b>Application:</b> Uncontaminated zones, Zones with chemicals</li> </ul>	DOL-0612G05M075KMC	2022545
system plugs and extension modules			
	<ul style="list-style-type: none"> <li>• <b>Applications:</b> Muting switching amplifier</li> <li>• <b>Compatible sensor types:</b> M4000 Advanced multiple light beam safety devices</li> <li>• <b>Mounting:</b> Flexible mounting on the M4000 Advanced or directly in the system</li> </ul>	UE403-A0930	1026287

## 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:

Contacts and other locations –[www.sick.com](http://www.sick.com)