

# M4000 Standard

High efficient solutions with maximum availability





#### Technical data overview

| Safety level                   | PL e, SIL 3, Type 4                |
|--------------------------------|------------------------------------|
| Scanning range                 | 70 m                               |
| Number of beams                | 2 8 (depends on variant)           |
| Beam separation                | 220 mm 600 mm (depends on variant) |
| Integrated laser alignment aid | - / <b>√</b> (depends on variant)  |
| End cap with integrated LED    | - / 🗸 (depends on variant)         |
| Enclosure rating               | IP65                               |
| Ambient operating temperature  | -30 °C +55 °C                      |

#### **Product description**

The M4000 Standard multiple light beam safety device is the solution for one-sided or multi-sided access protection. The M4000's large scanning range and extensive functions provide efficient access protection and maximum reliability. The functions are easy to understand and are set via the configuration keys located directly on the device. Integrated functions and status information enable quick commissioning and minimize machine downtime. The modular concept enables a high level of machine safety since device properties can be adapted to meet specific application requirements. Separate deflection mirrors are a cost-effective way to flexibly configure protective fields. In addition, sens:Control devices, accessories, and services complete the product offering and form packaged solutions designed specifically for industrial environments.

#### At a glance

- Type 4 (IEC 61496), SIL3 (IEC 61508), PL e (EN ISO 13849)
- · Robust housing with three mounting grooves
- Wide scanning range, up to 70 m
- External device monitoring (EDM), restart interlock and application diagnostic output
- Standardized M12 connectivity
- · 7-segment display
- · Configuration keys located directly on the device
- Optional integration features: laser alignment aid, LED or Actuator Sensor Interface

#### Your benefits

- The wide scanning range allows the device to be customized according to the application
- Robust design with a high level of resistance to environmental changes ensures high machine availability, even under special ambient conditions
- Customized protection field adaption with deflection mirror reduces installation costs
- · Customer-friendly interfaces and status display simplify commissioning and maintenance
- · Mounting grooves on three housing sides ensure more flexibility during mounting and simplify machine integration
- Fast start-up times due to easy alignment, using the optional laser alignment aid and performing configuration directly on the device
- Reduced downtime through 360° visible LED and diagnostics displays

#### Fields of application

- · Access protection
- · Machine tool industry
- Automotive industry, robotics industry and automatic machining centers
- · Storage and conveyor, packaging machinery, palletizer systems and stackers
- · Wood machining, large weaving machines, and stone setting systems

## Ordering information

Other models and accessories → www.sick.com/M4000\_Standard

| Number of beams | Beam separation | Sender         |          | Receiver       |            |
|-----------------|-----------------|----------------|----------|----------------|------------|
|                 |                 | Туре           | Part no. | Туре           | Part no.   |
| 2               | 500 mm          | M40S-025000AR0 | 1200000  | M40E-025000AR0 | 1205948    |
|                 |                 |                |          | M40E-025000RR0 | 1200017    |
|                 |                 |                |          | M40E-025000RT0 | 1201233    |
|                 |                 |                |          | M40E-025020RR0 | 1200033    |
|                 |                 |                |          | M40E-025020RT0 | 1200056    |
|                 |                 | M40S-025000ER0 | 1202685  | M40E-025000WR0 | 1202705    |
|                 |                 | M40S-025002AU0 | 1200053  | M40E-025002AU0 | 1200054    |
|                 |                 |                |          | M40E-025022AU0 | 1206391    |
|                 |                 | M40S-025010AR0 | 1200011  | M40E-025010RR0 | 1200028    |
|                 |                 |                |          | M40E-025010RT0 | 1200145    |
|                 |                 |                |          | M40E-025030RR0 | 1200038    |
|                 |                 |                |          | M40E-025030RT0 | 1200050    |
|                 |                 | M40S-025010ER0 | 1200048  | M40E-025010XR0 | 1200047    |
|                 |                 | M40S-025012AU0 | 1200090  | M40E-025012AU0 | 1200135    |
|                 |                 |                |          | M40E-025032AU0 | 1200136    |
|                 |                 | M40S-025012EU0 | 1200016  | M40E-025012EU0 | 1200043    |
|                 |                 |                |          | M40E-025012FU0 | 1200044    |
|                 | 600 mm          | M40S-026000AR0 | 1200001  | M40E-026000RR0 | 1200018    |
|                 |                 |                |          | M40E-026000RT0 | On request |
|                 |                 |                |          | M40E-026020RR0 | 1200034    |
|                 |                 |                |          | M40E-026020RT0 | On request |
|                 |                 | M40S-026002AU0 | 1200083  | M40E-026002AU0 | On request |
|                 |                 |                |          | M40E-026022AU0 | 1206392    |
|                 |                 | M40S-026010AR0 | 1200012  | M40E-026010RR0 | 1200029    |
|                 |                 |                |          | M40E-026010RT0 | On request |
|                 |                 |                |          | M40E-026030RR0 | 1200039    |
|                 |                 |                |          | M40E-026030RT0 | On request |
|                 |                 | M40S-026012AU0 | 1200091  | M40E-026012AU0 | On request |
|                 |                 |                |          | M40E-026032AU0 | On request |
| 3               | 220 mm          | M40S-032200AR0 | 1200002  | M40E-032200RR0 | 1200019    |
|                 |                 |                |          | M40E-032200RT0 | 1200675    |
|                 |                 |                |          | M40E-032220RR0 | 1207020    |
|                 |                 |                |          | M40E-032220RT0 | On request |
|                 |                 | M40S-032202AU0 | 1200084  | M40E-032202AU0 | On request |
| 3               | 220 mm          | M40S-032202AU0 | 1200084  | M40E-032222AU0 | On request |
|                 | 400 mm          | M40S-034000AR0 | 1200003  | M40E-034000AR0 | 1200143    |
|                 |                 |                |          | M40E-034000RR0 | 1200020    |

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|                 |                 | Туре           | Part no. | Туре           | Part no.   |
|                 |                 |                |          | M40E-034000RT0 | 1201015    |
|                 |                 |                |          | M40E-034020RR0 | 1200035    |
|                 |                 |                |          | M40E-034020RT0 | 1200144    |
|                 |                 | M40S-034000ER0 | 1202684  | M40E-034000WR0 | 1202706    |
|                 |                 | M40S-034010AR0 | 1200013  | M40E-034010IR0 | 1201556    |
|                 |                 |                |          | M40E-034010RR0 | 1200030    |
|                 |                 |                |          | M40E-034010RT0 | 1200537    |
|                 |                 |                |          | M40E-034030RR0 | 1200040    |
|                 |                 |                |          | M40E-034030RT0 | 1200051    |
|                 |                 | M40S-034012AU0 | 1200116  | M40E-034002AU0 | 1200117    |
|                 |                 |                | 1200045  | M40E-034012AU0 | 1200046    |
|                 |                 |                | 1200116  | M40E-034022AU0 | On request |
|                 |                 |                | 1200045  | M40E-034032AU0 | On request |
|                 |                 | M40S-034012EU0 | 1138544  | M40E-034012EU0 | 1138546    |
|                 |                 |                |          | M40E-034012FU0 | 1138545    |
|                 | 450 mm          | M40S-034500AR0 | 1200004  | M40E-034500RR0 | 1200021    |
|                 |                 |                |          | M40E-034500RT0 | 1200142    |
|                 |                 |                |          | M40E-034520RR0 | 1200036    |
|                 |                 |                |          | M40E-034520RT0 | On request |
|                 |                 | M40S-034502AU0 | 1200085  | M40E-034502AU0 | On request |
|                 |                 |                |          | M40E-034522AU0 | On request |
|                 |                 | M40S-034510AR0 | 1200014  | M40E-034510RR0 | 1200031    |
|                 |                 |                |          | M40E-034510RT0 | On request |
|                 |                 |                |          | M40E-034530RR0 | 1200041    |
|                 |                 |                |          | M40E-034530RT0 | On request |
|                 |                 | M40S-034512AU0 | 1200092  | M40E-034512AU0 | 1202966    |
|                 |                 |                |          | M40E-034532AU0 | On request |

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|-----------------|-----------------|----------------|----------|----------------|------------|--|
|                 |                 | Туре           | Part no. | Туре           | Part no.   |  |
| 4               | 220 mm          | M40S-042200AR0 | 1200005  | M40E-042200RR0 | 1200022    |  |
|                 |                 |                |          | M40E-042200RT0 | On request |  |
|                 |                 |                |          | M40E-042220RR0 | 1207019    |  |
|                 |                 |                |          | M40E-042220RT0 | On request |  |
|                 |                 | M40S-042202AU0 | 1200086  | M40E-042202AU0 | 1213107    |  |
|                 |                 |                |          | M40E-042222AU0 | On request |  |
|                 | 300 mm          | M40S-043000AR0 | 1200006  | M40E-043000RR0 | 1200023    |  |
|                 |                 |                |          | M40E-043000RT0 | 1202928    |  |
|                 |                 |                |          | M40E-043020RR0 | 1200037    |  |
|                 |                 |                |          | M40E-043020RT0 | On request |  |
|                 |                 | M40S-043002AU0 | 1200087  | M40E-043002AU0 | 1200530    |  |
|                 |                 |                |          | M40E-043022AU0 | On request |  |
|                 |                 | M40S-043010AR0 | 1200015  | M40E-043010RR0 | 1200032    |  |
|                 |                 |                |          | M40E-043010RT0 | On request |  |
|                 |                 |                |          | M40E-043030RR0 | 1200042    |  |
|                 |                 |                |          | M40E-043030RT0 | 1202929    |  |
|                 |                 | M40S-043012AU0 | 1200093  | M40E-043012AU0 | 1201626    |  |
|                 |                 |                |          | M40E-043032AU0 | 1201633    |  |
| 5               | 220 mm          | M40S-052200AR0 | 1200007  | M40E-052200RR0 | 1200024    |  |
|                 |                 |                |          | M40E-052200RT0 | On request |  |
|                 |                 |                |          | M40E-052220RT0 | On request |  |
|                 |                 | M40S-052202AU0 | 1200088  | M40E-052202AU0 | On request |  |
|                 |                 |                |          | M40E-052222AU0 | On request |  |
| 6               | 220 mm          | M40S-062200AR0 | 1200008  | M40E-062200RR0 | 1200025    |  |
|                 |                 |                |          | M40E-062200RT0 | 1212530    |  |
|                 |                 |                |          | M40E-062220RR0 | 1200121    |  |
|                 |                 |                |          | M40E-062220RT0 | 1200119    |  |
|                 |                 | M40S-062202AU0 | 1200089  | M40E-062202AU0 | On request |  |
|                 |                 |                |          | M40E-062222AU0 | On request |  |
| 7               | 220 mm          | M40S-072200AR0 | 1200009  | M40E-072200RR0 | 1200026    |  |
|                 |                 |                |          | M40E-072200RT0 | 1206083    |  |
|                 |                 |                |          | M40E-072220RR0 | 1203892    |  |
|                 |                 |                |          | M40E-072220RT0 | 1122950    |  |
|                 |                 | M40S-072202AU0 | 1200094  | M40E-072202AU0 | On request |  |
|                 |                 |                |          | M40E-072222AU0 | On request |  |

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|-----------------|-----------------|----------------|----------------|----------------|------------|
|                 |                 | Туре           | Part no.       | Туре           | Part no.   |
| 8               | 220 mm          | M40S-082200AR0 | 1200010        | M40E-082200RR0 | 1200027    |
|                 |                 |                |                | M40E-082200RT0 | 1201017    |
|                 |                 |                |                | M40E-082220RR0 | 1210699    |
|                 |                 |                | M40E-082220RT0 | 1204326        |            |
|                 |                 | M40S-082202AU0 | 1206049        | M40E-082202AU0 | On request |
|                 |                 |                |                | M40E-082222AU0 | 1206050    |

## SICK AT A GLANCE

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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."

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