



M2000 RES/EDM

Integrated RES and EDM functions for enhanced access protection

SICK
Sensor Intelligence.



Technical data overview

Safety level	PL c, SIL 1, Type 2
Scanning range	25 m / 70 m (depending on type)
Number of beams	2 ... 9 (depending on type)
Beam separation	116 mm ... 500 mm (depending on type)
Enclosure rating	IP65



Product description

The M2000 RES/EDM multiple light beam safety device is an economical solution for one-sided or multi-sided access protection. The integrated restart interlock (RES) provides shorter cable runs and reduced commissioning times. High scanning ranges and high signal reserves open a wide range of application possibilities, even under harsh ambient conditions. The functions are easy to understand and the mechanical and electrical interfaces are simple to manage. Integrated functions and status information enable quick commissioning and minimize machine downtime. The modularity of the M2000 RES/EDM enables the sensor to adapt to the application requirements. 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 2 (IEC 61496), PL c (EN ISO 13849)
- Robust, industrial housing
- 7-segment display
- Wide scanning range, up to 70 m
- External device monitoring (EDM), restart interlock (RES), and internal self-testing (configurable without PC)
- Beam coding for correct system allocation
- Standardized M12 connectivity

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
- Reduced downtime due to diagnostics displays located directly on the device
- Integrated restart interlock provides shorter cable runs and quicker commissioning times
- Fast start-up times due to easy alignment using the optional laser alignment aid (separate accessories)

Fields of application

- Access protection on stone and ceramic processing machines
- Access protection on print, paper, and packaging machinery
- Access protection on wood machining
- Storage and conveyor
- Protective device for narrow aisles
- Rear area protection on presses and shears

Ordering information

Other models and accessories → www.sick.com/M2000_RES_EDM

- **System connection:** Hirschmann plug M26, 7-pin, Hirschmann male connector M26, 12-pin
- **Scanning range:** 0 m 25 m configurable

Number of beams	Beam separation or resolution	Sender		Receiver	
		Type	Part no.	Type	Part no.
2	500 mm	M20S-02150A120	1016405	M20S-02150A221	1018032
3	400 mm	M20S-03140A120	1016428	M20E-03140A221	1018034
4	300 mm	M20S-04130A120	1016509	M20E-04130A221	1018217
6	170 mm	M20S-061A3A120	1016446	M20E-061A3A221	1018221
7	170 mm	M20S-071A3A120	1016434	M20E-071A3A221	1018225
8	116 mm	M20S-081A2A120	1016438	M20E-081A2A221	1018229
	170 mm	M20S-081A3A120	1016440	M20E-081A3A221	1018233
9	170 mm	M20S-091A3A120	1016442	M20E-091A3A221	1018036

- **System connection:** Hirschmann plug M26, 7-pin, Hirschmann male connector M26, 12-pin
- **Scanning range:** 0 m 70 m configurable

Number of beams	Beam separation or resolution	Sender		Receiver	
		Type	Part no.	Type	Part no.
2	500 mm	M20S-02250A120	1018172	M20E-02250A221	1018206
3	400 mm	M20S-03240A120	1018176	M20E-03240A221	1018208
4	300 mm	M20S-04230A120	1018180	M20E-04230A221	1018210

- **System connection:** male connector M12, 8-pin
- **Scanning range:** 0 m 25 m configurable

Number of beams	Beam separation or resolution	Sender		Receiver	
		Type	Part no.	Type	Part no.
2	500 mm	M20S-02150A122	1018186	M20E-02150A222	1018213
3	400 mm	M20S-03140A122	1018188	M20E-03140A222	1018215
4	300 mm	M20S-04130A122	1018190	M20E-04130A222	1018219
6	170 mm	M20S-061A3A122	1018192	M20E-061A3A222	1018223
7	170 mm	M20S-071A3A122	1018194	M20E-071A3A222	1018227
8	116 mm	M20S-081A2A122	1018196	M20E-081A2A222	1018231
	170 mm	M20S-081A3A122	1018198	M20E-081A3A222	1018235
9	170 mm	M20S-091A3A122	1018200	M20E-091A3A222	1018237

- **System connection:** male connector M12, 8-pin
- **Scanning range:** 0 m 70 m configurable

Number of beams	Beam separation or resolution	Sender		Receiver	
		Type	Part no.	Type	Part no.
2	500 mm	M20S-02250A122	1018174	M20E-02250A222	1018207
3	400 mm	M20S-03240A122	1018178	M20E-03240A222	1018209

Number of beams	Beam separation or resolution	Sender		Receiver	
		Type	Part no.	Type	Part no.
4	300 mm	M20S-04230A122	1018182	M20E-04230A222	1018211

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