

Micro MF

Technical data

Optical

Operating range	
• Static installation	0.8 ... 6 m
• Static / dynamic installation	0 ... 4 m
Number of elements	4 ... 32
Wavelength IR	925 nm
Max. ambient light	100,000 Lux
Aperture angle at 2 m	Tx: $\pm 10^\circ$ and Rx: $\pm 20^\circ$

Mechanical

Dimensions (w × h × l)	12 × 16 × max. 2,500 mm
Max. protection height	2,322 mm
Housing material	Natural or black anodized Aluminum, other colors on request
Enclosure rating	IP65 or IP67
Temperature range	-40 °C ... +60 °C

Electrical

Supply voltage U _{sp}	14 ... 30 VDC
Current consumption at 24 VDC	Typ. 60 mA
Max. inrush current per edge	< 2 A
Output	PNP/NPN (push-pull)
Optional output	TMS output (NPN)
Max. output load	120 mA, 100 nF
Response time	25 ... 100 ms (depending on number of elements)

General

EMC emission	EN 61000-6-3:2007
EMC immunity	EN 61000-6-2:2005
Vibration	EN 60068-2-6:2008
Shock	IEC 60068-2-27:2009
Cable durability	IEC 60227-2:2003
RoHS	2011/65/EU
Certificate	CE

Connection cable and electrical connection

Emitter	
Cable length	5 m
Diameter	Ø 3.5 mm
Material	PVC, black
Connection	M8, 4-pin
Plug color	White
Wires	AWG26
• brown	U _{sp} (14 ... 30 VDC)
• blue	GND (0 V)
• black	Not used
• white	Test input

Receiver	
Cable length	5 m
Diameter	Ø 3.5 mm
Material	PVC, black
Plug color	Blue
Wires	AWG26
• brown	U _{sp} (14 ... 30 VDC)
• blue	GND (0 V)
• black	Output
• white	TMS output



CEDES AG is certified according to ISO 9001: 2008



Features

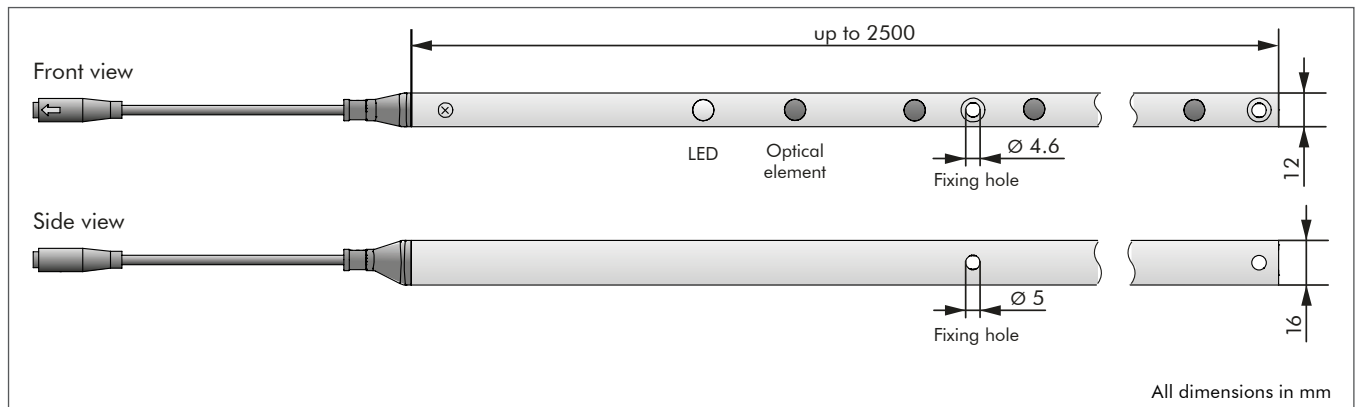
- For all kinds of door and gate applications
- Simple and quick to install thanks to the universal mounting kit
- Integrated controller
- LED indicator integrated into the edge
- High EMC immunity
- Telemonitoring status output (TMS)
- Test input for increased safety
- Dense surveillance field through criss-cross beams

Standard types

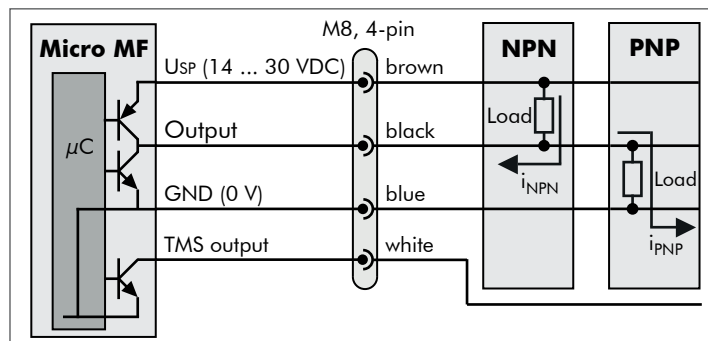
Type	Total edge length / protection height (in mm)	Number of elements	Number of beams	Lowest element (in mm)	Mounting hole (in mm)	Operating range	Grid (in mm)
MF-900-4	900 / 726	4	10	30	7 / 700	1.8 ... 6 m	232
MF-900-8	900 / 722	8	22	22	7 / 700	0.8 ... 6 m	100
MF-1300-12	1,300 / 1,122	12	34	22	7 / 470 / 970	0.8 ... 6 m	100
MF-950-16	950 / 772	16	46	22	7 / 750	0.8 ... 6 m	50
MF-1925-24	1,925 / 1,747	24	70	22	7 / 880 / 1,717	0.8 ... 6 m	75
MF-990-32	990 / 797	32	94	22	7 / 812	0.8 ... 6 m	25
MF-1750-32	1,750 / 1,572	32	94	22	7 / 847 / 1,547	0.8 ... 6 m	50
MF-2000-12	2,000 / 1,800	12	34	20	7 / 847 / 1,717	0.8 ... 6 m	162

Other types on request

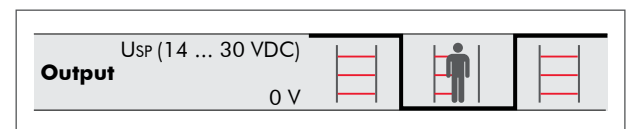
Dimensions



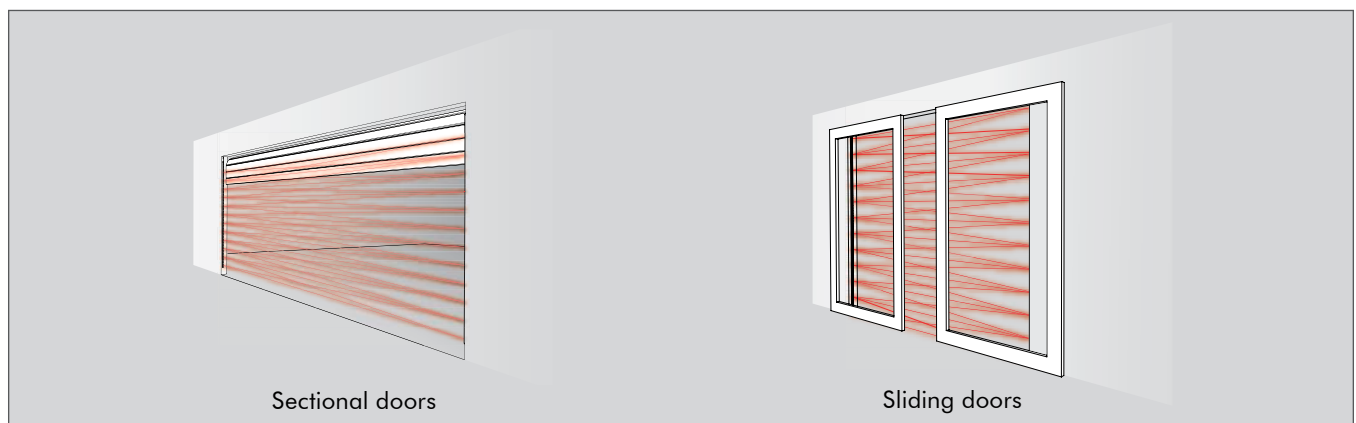
PNP/NPN-Connections



Output logic



Applications

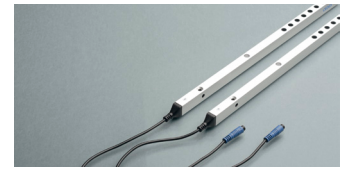


Micro MF

Ordering information

Standard versions

Part No.	Type	Description
106 208	Micro MF-900-4-IP65	Light curtain system, 900 mm length, with 4 optical elements
106 717	Micro MF-900-4-IP67	Light curtain system, 900 mm length, with 4 optical elements
106 734	Micro MF-900-8-IP65	Light curtain system, 900 mm length, with 8 optical elements
106 726	Micro MF-900-8-IP67	Light curtain system, 900 mm length, with 8 optical elements
106 748	Micro MF-1300-12-IP65	Light curtain system, 1,300 mm length, with 12 optical element
106 740	Micro MF-1300-12-IP67	Light curtain system, 1,300 mm length, with 12 optical elements
106 762	Micro MF-950-16-IP65	Light curtain system, 950 mm length, with 16 optical elements
106 754	Micro MF-950-16-IP67	Light curtain system, 950 mm length, with 16 optical elements
106 776	Micro MF-1925-24-IP65	Light curtain system, 1,925 mm length, with 24 optical elements
106 768	Micro MF-1925-24-IP67	Light curtain system, 1,925 mm length, with 24 optical elements
106 790	Micro MF-990-32-IP65	Light curtain system, 990 mm length, with 32 optical elements
106 782	Micro MF-990-32-IP67	Light curtain system, 990 mm length, with 32 optical elements
106 804	Micro MF-1750-32-IP65	Light curtain system, 1,750 mm length, with 32 optical elements
106 796	Micro MF-1750-32-IP67	Light curtain system, 1,750 mm length, with 32 optical elements
109 224	Micro MF-2000-12-IP65	Light curtain system, 2,000 mm length, with 12 optical elements
109 230	Micro MF-2000-12-IP67	Light curtain system, 2,000 mm length, with 12 optical elements



Single components

Universal power supply

Part No.

103 600

Description

Universal power supply, 20 ... 265 VAC/DC, 200 mA max. output current



Relay module

Part No.

103 602

Description

Changes the semiconductor output into relay output



Mounting clamp

Part No.

103 739

Description

Spring steel metal clamp, 10 pcs.



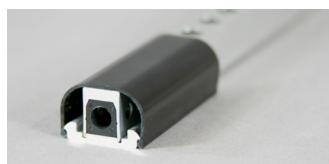
Vision Shield

Part No.

On request

Description

Polycarbonate, black, length up to 2,500 mm



Power line converter

Part No.

106 666

Description

85 ... 265 VAC, for 24 V sensors with up to 250 mA current consumption



Mounting clip

Part No.

103 738

Description

Plastic, black, for 1.3 ... 1.7 mm sheet thickness, 14 pcs.



Screws

Part No.

104 420

Description

Steel, black, torx KA 3.5 x 32 mm, 14 pcs.

