



Your future's safe!



25 mm
30
0.2-2.5 m
4-8 mm
1.5 W
9-10 V

Lens pitch
Number of beams
Working range
Measuring time
Power consumption
Working temperature

MOD. MER 752 B
PIN 8015711
SIN 06160120

REER
REER s.p.a. TORINO (Italy)
www.reer.it

METRON



METRON

light curtains for measurement and automation

product catalogue

METRON

Aluminum casing
Anodized

-10 ... +55° C
Operating temperature

IP65 and IP67

Uscite analogiche e digitali
2 uscite

Caps
Glass reinforced
polypropylene



Measurement and
automation light curtains...



Resolution:

- 5 mm
- 10 mm
- 25 mm
- 30 mm
- 50 mm
- 75 mm

Software configuration
Easy to use and extensive
parameters choice

7-segment display and LEDs
for operating status and light
curtain self-diagnosis

...for industrial and
civil applications

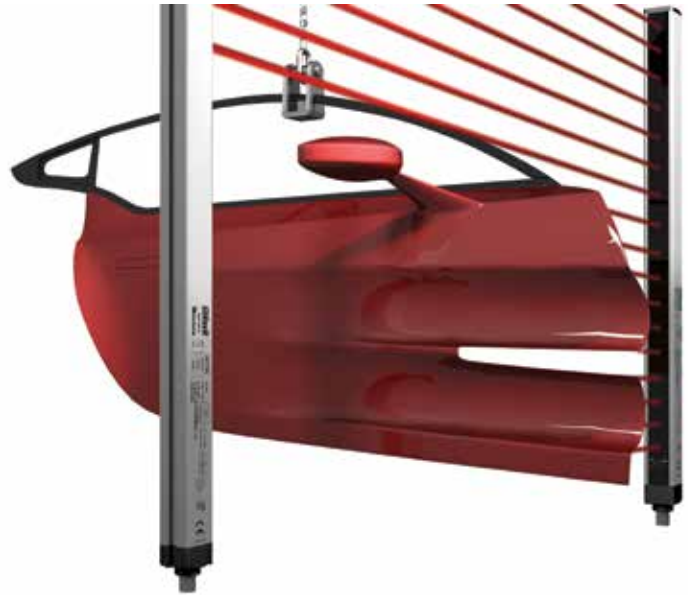


OVERVIEW

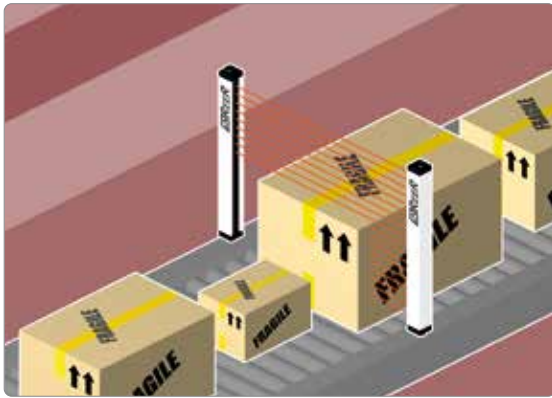
Light curtains for industrial and civil applications where it is necessary to **detect**, **measure**, and **recognise** objects.

Depending on the number and position of the beams engaged by an object, Micron and Metron can provide real time information to a PLC or PC in order to:

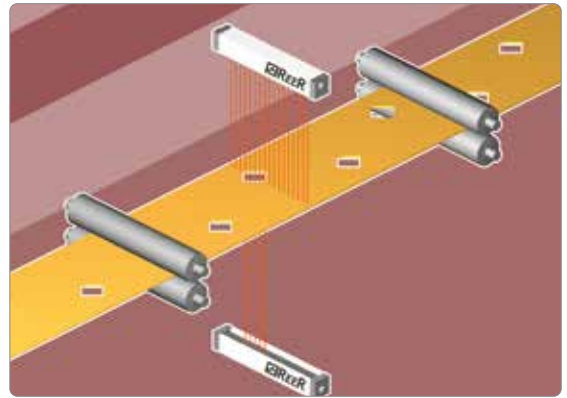
- Detect the presence or absence of objects
- Perform a count
- Detect a position
- Detect a shape or a profile
- Measure dimensions



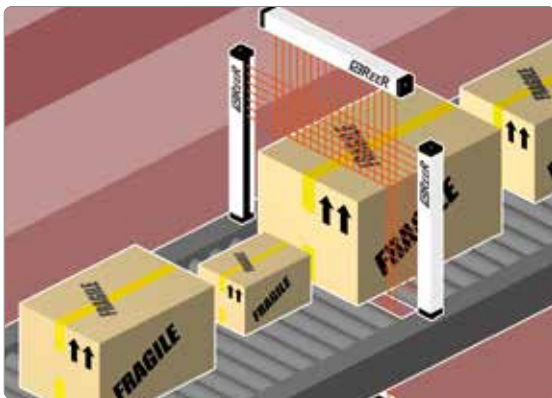
TYPICAL APPLICATIONS



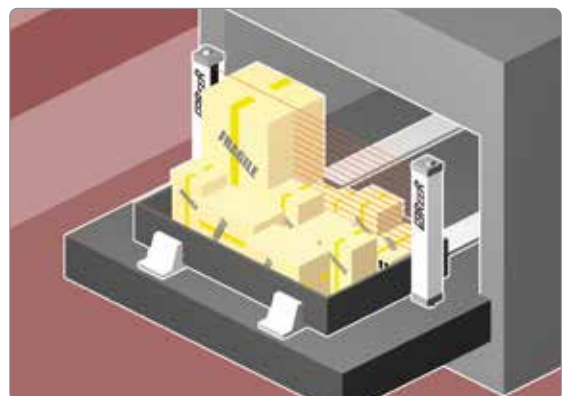
Measurement of the height of objects in transit on conveyor systems



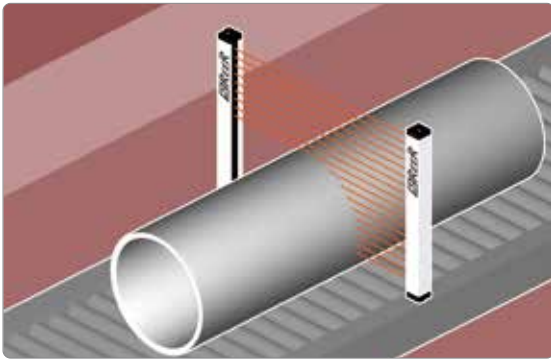
Quality control: verification of presence / absence / position of holes



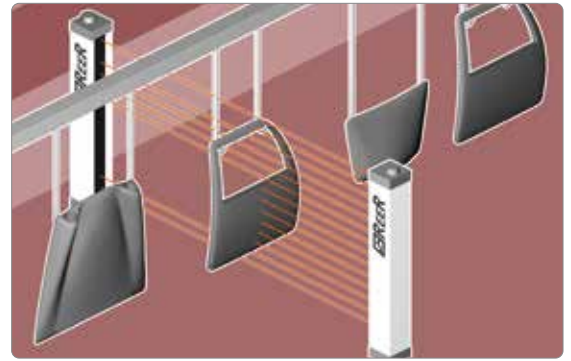
Two-dimensional detection of objects in transit on conveyor systems with use of 2 light curtains. If necessary, the calculation of the volume can be made by means of a third horizontal light curtain, or considering the transit speed



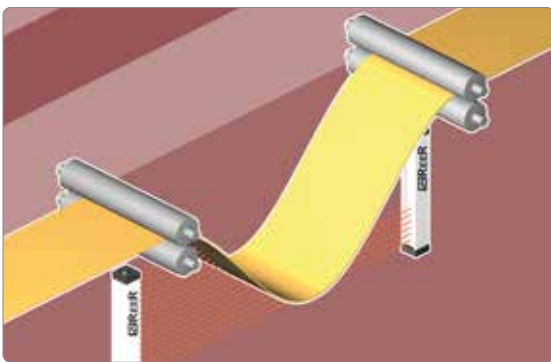
Automatic warehouses: detection of maximum height of the objects present in the boxes for efficient management of the machine's capacity



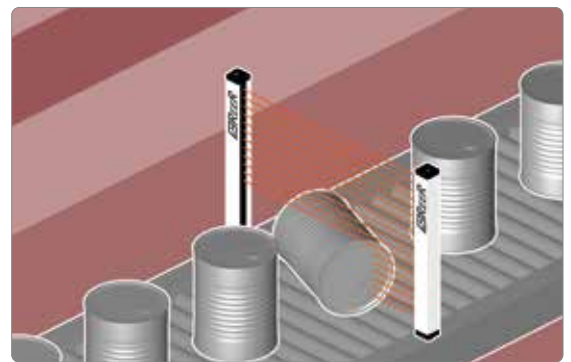
Measurement and identification of cylinders of various sizes



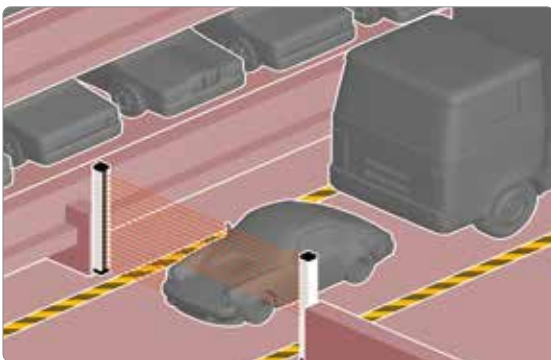
Detection of position and profile of pieces in automatic painting systems



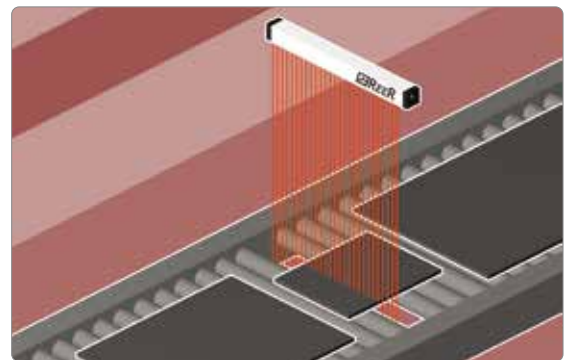
Loop control



Quality control: verification of correct positioning of objects

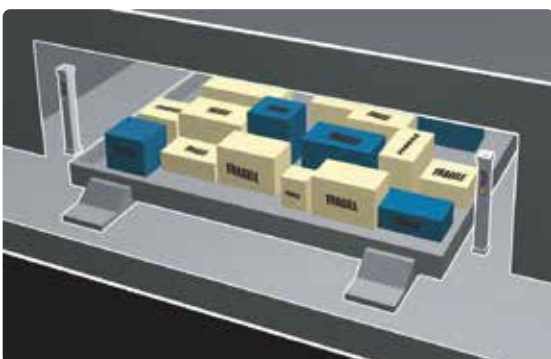


Detection of overall dimensional limits of vehicles for vehicle handling in automatic parking garages



Measurement of the width and position of panels or sheets of material in transit on roller units or conveyor belts

SPECIAL APPLICATION



Automatic warehouses: detection of maximum height of the objects present in the boxes for efficient management of the machine's capacity

Automatic warehouse versions

Special Micron models with beams spacing: 25, 50, 75 mm

The special optics of these light curtains allow detection of small objects in quick motion.

Please contact ReeR for availability and models.

THE METRON RANGE

METRON A	METRON B	METRON C
Ideal for object recognition, quality control, detection of dimensional limits.	Ideal for dimensional measurement, detection of object profile and position.	Ideal for piece counting and detection of object presence/absence in the controlled field.
Four solid state outputs (0 - 24 VDC) with programmable functions.	RS 485 serial interface with programmable functions.	Two antivalent solid state outputs.
-	Two solid state outputs (0 - 24 VDC) with programmable functions.	-
Solution providing simple on/off information related to the occurrence of the programmed conditions.	Solution providing complete and detailed information on the status of each beam via the RS 485 serial line and, by means of the two solid state outputs, further on/off information related to the occurrence of the programmed conditions.	Solution providing simple on/off information related to the status of the controlled area.

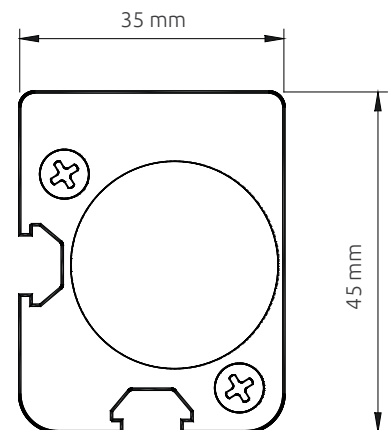
METRON CERTIFICATION



Operating temperature 0 ... +55 °C



IP65 and IP67 protection rate



1:1 scale

METRON A

TECHNICAL FEATURES

Max. range (m)	- 2 - models with beams spacing 5 mm - 6 - models with beam spacing 25, 50, 75 mm - 16 - models with beam spacing 10, 30 mm
Measurement time	(2.25 ms + 70 μs x n beams) x 2
Outputs	4 solid state programmable 0 or 24V (PNP 100 mA 24 VDC)
Inputs (on receiver)	1 digital with programmable functions - 0 or 24V
Synchronisation between emitter and receiver	Optical or via cable, selectable
Electrical connections	Connector M12 8-pole (emitter) Connector M16 12-pole (receiver) Connector M8 3-pole for RS 232 line programming (receiver)
Status display	7-segment display and LEDs for operating status and light curtain self-diagnosis
Power supply (VDC)	24 ± 20%
Fastening	Back slot, side slot, or to the top and lower end with swivel brackets



Beam spacing (mm)	Analog output
5 - 10 - 25 30 - 50 - 75	4

Models A equipped with 4 programmable solid state outputs.

Programming interface: RS 232 interface on M8 3-pole connector. See "CSL 3" on page 20

Controlled heights: 150 ... 2525 mm.

Max. length connection cables between light curtain and interface: 50 (m).

CABLES NEEDED

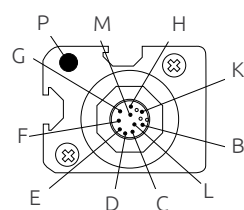
- Emitter M12 8-pole. See page 18 (C8D x, C8D x SB, C8D 9x, C8DM 9, C8DM 11)
- Receiver M16 12-pole. See page 19 (C12Dx)

ACCESSORIES

- Support columns. See page 21
- Laser alignment device. See page 24
- Vibration dampers. See page 23
- Brackets. See page 23

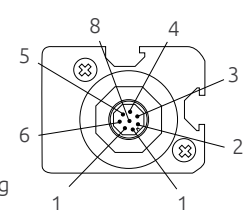
CONNECTORS

Receiver M16 12-pole



P - Programming M8 3-pole

Emitter M12 8-pole



B - SYNC A
C - OUT 1
D - SYNC B
E - OUT 4
F - OUT 3
G - OUT 2
H - 24 VDC
L - 0 VDC
M - INPUT
K - PE

1 - SYNC A
2 - 24 VDC
3 - SYNC B
4 - RANGE
5 - SEL ORIENT
6 - NC
7 - 0 VDC
8 - PE



PART NUMBERS

Metron A - Beam spacing 5 mm

Beam spacing 5 mm	ME 150A	ME 300A	ME 450A	ME 600A	ME 750A	ME 900A	ME 1050A	ME 1200A
Ordering codes	1380500	1380501	1380502	1380503	1380504	1380505	1380506	1380507
Controlled height (mm)	145	295	445	595	745	895	1045	1195
Nr. beams	30	60	90	120	150	180	210	240
Overall height (mm)	261	411	561	711	861	1011	1161	1311

Metron A - Beam spacing 10 mm

Beam spacing 10 mm	ME 151A	ME 301A	ME 451A	ME 601A	ME 751A	ME 901A	ME 1051A	ME 1201A	ME 1351A	ME 1501A	ME 1651A	ME 1801A	ME 1951A	ME 2101A	ME 2251A	ME 2401A
Ordering codes	1380000	1380001	1380002	1380003	1380004	1380005	1380006	1380007	1380008	1380009	1380010	1380011	1380012	1380013	1380014	1380015
Controlled height (mm)	140	290	440	590	740	890	1040	1190	1340	1490	1640	1790	1940	2090	2240	2390
Nr. beams	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240
Overall height (mm)	261	411	561	711	861	1011	1161	1311	1461	1611	1761	1911	2061	2211	2361	2511

Metron A - Beam spacing 25 mm

Beam spacing 25 mm	ME 302A	ME 452A	ME 602A	ME 752A	ME 902A	ME 1052A	ME 1202A	ME 1352A	ME 1502A	ME 1652A	ME 1802A	ME 1952A	ME 2102A	ME 2252A	ME 2402A	ME 2552A
Ordering codes	1380101	1380102	1380103	1380104	1380105	1380106	1380107	1380108	1380109	1380110	1380111	1380112	1380113	1380114	1380115	1380116
Controlled height (mm)	275	425	575	725	875	1025	1175	1325	1475	1625	1775	1925	2075	2225	2375	2525
Nr. beams	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102
Overall height (mm)	411	561	711	861	1011	1161	1311	1461	1611	1761	1911	2061	2211	2361	2511	2661

Metron A - Beam spacing 30 mm

Beam spacing 30 mm	ME 303A	ME 453A	ME 603A	ME 753A	ME 903A	ME 1053A	ME 1203A	ME 1353A	ME 1503A	ME 1653A	ME 1803A	ME 1953A	ME 2103A	ME 2253A	ME 2403A	ME 2553A
Ordering codes	1380201	1380202	1380203	1380204	1380205	1380206	1380207	1380208	1380209	1380210	1380211	1380212	1380213	1380214	1380215	1380216
Controlled height (mm)	270	420	570	720	870	1020	1170	1320	1470	1620	1770	1920	2070	2220	2370	2520
Nr. beams	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85
Overall height (mm)	411	561	711	861	1011	1161	1311	1461	1611	1761	1911	2061	2211	2361	2511	2661

Metron A - Beam spacing 50 mm

Beam spacing 50 mm	ME 455A	ME 605A	ME 755A	ME 905A	ME 1055A	ME 1205A	ME 1355A	ME 1505A	ME 1655A	ME 1805A	ME 1955A	ME 2105A	ME 2255A	ME 2405A	ME 2555A
Ordering codes	1380302	1380303	1380304	1380305	1380306	1380307	1380308	1380309	1380310	1380311	1380312	1380313	1380314	1380315	1380316
Controlled height (mm)	400	550	700	850	1000	1150	1300	1450	1600	1750	1900	2050	2200	2350	2500
Nr. beams	9	12	15	18	21	24	27	30	33	36	39	42	45	48	51
Overall height (mm)	561	711	861	1011	1161	1311	1461	1611	1761	1911	2061	2211	2361	2511	2661

Metron A - Beam spacing 75 mm

Beam spacing 75 mm	ME 607A	ME 757A	ME 907A	ME 1057A	ME 1207A	ME 1357A	ME 1507A	ME 1657A	ME 1807A	ME 1957A	ME 2107A	ME 2257A	ME 2407A	ME 2557A
Ordering codes	1380403	1380404	1380405	1380406	1380407	1380408	1380409	1380410	1380411	1380412	1380413	1380414	1380415	1380416
Controlled height (mm)	525	675	825	975	1125	1275	1425	1575	1725	1875	2025	2175	2325	2475
Nr. beams	8	10	12	14	16	18	20	22	24	26	28	30	32	34
Overall height (mm)	711	861	1011	1161	1311	1461	1611	1761	1911	2061	2211	2361	2511	2661

METRON B

TECHNICAL FEATURES

Max. range (m)	- 2 - models with beams spacing 5 mm - 6 - models with beam spacing 25, 50, 75 mm - 16 - models with beam spacing 10, 30 mm
Measurement time	(2.25 ms + 70 μs x n beams) x 2
Outputs	RS 485 Serial line (up to 8 nodes) 2 solid state programmable 0 or 24V (PNP 100 mA 24 VDC)
Inputs (on receiver)	1 digital with programmable functions - 0 or 24V
Synchronisation between emitter and receiver	Optical or via cable, selectable
Electrical connections	Connector M12 8-pole (emitter) Connector M16 12-pole (receiver) Connector M8 3-pole for RS 232 line programming (receiver)
Status display	7-segment display and LEDs for operating status and light curtain self-diagnosis
Power supply (VDC)	24 ± 20%
Fastening	Back slot, side slot, or to the top and lower end with swivel brackets



Beam spacing (mm)	Serial output	Digital output
5 - 10 - 25 30 - 50 - 75	RS 485 serial line	2

Models B equipped with 2 programmable solid state outputs and an RS 485 serial interface.

Programming interface: RS 232 interface on M8 3-pole connector.

Controlled heights: 150 ... 2525 mm.

Max. length connection cables between light curtain and interface: 50 (m).

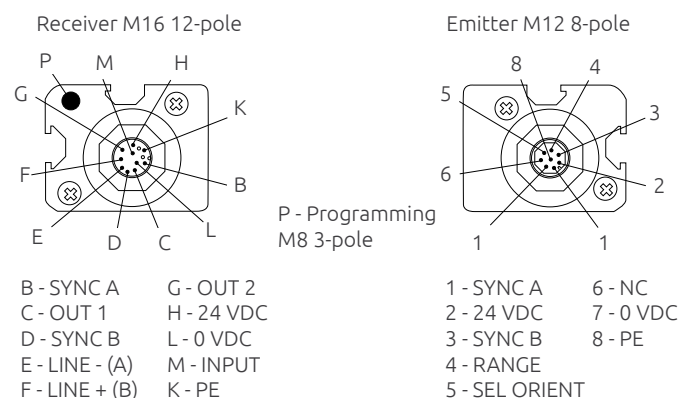
CABLES NEEDED

- Emitter M12 8-pole. See [page 18](#) (C8D x, C8D x SB, C8D 9x, C8DM 9, C8DM 11)
- Receiver M16 12-pole. See [page 19](#) (C12Dx)

ACCESSORIES

- Support columns. See [page 21](#)
- Laser alignment device. See [page 24](#)
- Vibration dumpers. See [page 23](#)
- Brackets. See [page 23](#)

CONNECTORS



PART NUMBERS

Metron B - Beam spacing 5 mm

Beam spacing 5 mm	ME 150B	ME 300B	ME 450B	ME 600B	ME 750B	ME 900B	ME 1050B	ME 1200B
Ordering codes	1380520	1380521	1380522	1380523	1380524	1380525	1380526	1380527
Controlled height (mm)	145	295	445	595	745	895	1045	1195
Nr. beams	30	60	90	120	150	180	210	240
Overall height (mm)	261	411	561	711	861	1011	1161	1311

Metron B - Beam spacing 10 mm

Beam spacing 10 mm	ME 151B	ME 301B	ME 451B	ME 601B	ME 751B	ME 901B	ME 1051B	ME 1201B	ME 1351B	ME 1501B	ME 1651B	ME 1801B	ME 1951B	ME 2101B	ME 2251B	ME 2401B
Ordering codes	1380020	1380021	1380022	1380023	1380024	1380025	1380026	1380027	1380028	1380029	1380030	1380031	1380032	1380033	1380034	1380035
Controlled height (mm)	140	290	440	590	740	890	1040	1190	1340	1490	1640	1790	1940	2090	2240	2390
Nr. beams	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240
Overall height (mm)	261	411	561	711	861	1011	1161	1311	1461	1611	1761	1911	2061	2211	2361	2511

Metron B - Beam spacing 25 mm

Beam spacing 25 mm	ME 302B	ME 452B	ME 602B	ME 752B	ME 902B	ME 1052B	ME 1202B	ME 1352B	ME 1502B	ME 1652B	ME 1802B	ME 1952B	ME 2102B	ME 2252B	ME 2402B	ME 2552B
Ordering codes	1380121	1380122	1380123	1380124	1380125	1380126	1380127	1380128	1380129	1380130	1380131	1380132	1380133	1380134	1380135	1380136
Controlled height (mm)	275	425	575	725	875	1025	1175	1325	1475	1625	1775	1925	2075	2225	2375	2525
Nr. beams	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102
Overall height (mm)	411	561	711	861	1011	1161	1311	1461	1611	1761	1911	2061	2211	2361	2511	2661

Metron B - Beam spacing 30 mm

Beam spacing 30 mm	ME 303B	ME 453B	ME 603B	ME 753B	ME 903B	ME 1053B	ME 1203B	ME 1353B	ME 1503B	ME 1653B	ME 1803B	ME 1953B	ME 2103B	ME 2253B	ME 2403B	ME 2553B
Ordering codes	1380221	1380222	1380223	1380224	1380225	1380226	1380227	1380228	1380229	1380230	1380231	1380232	1380233	1380234	1380235	1380236
Controlled height (mm)	270	420	570	720	870	1020	1170	1320	1470	1620	1770	1920	2070	2220	2370	2520
Nr. beams	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85
Overall height (mm)	411	561	711	861	1011	1161	1311	1461	1611	1761	1911	2061	2211	2361	2511	2661

Metron B - Beam spacing 50 mm

Beam spacing 50 mm	ME 455B	ME 605B	ME 755B	ME 905B	ME 1055B	ME 1205B	ME 1355B	ME 1505B	ME 1655B	ME 1805B	ME 1955B	ME 2105B	ME 2255B	ME 2405B	ME 2555B
Ordering codes	1380322	1380323	1380324	1380325	1380326	1380327	1380328	1380329	1380330	1380331	1380332	1380333	1380334	1380335	1380336
Controlled height (mm)	400	550	700	850	1000	1150	1300	1450	1600	1750	1900	2050	2200	2350	2500
Nr. beams	9	12	15	18	21	24	27	30	33	36	39	42	45	48	51
Overall height (mm)	561	711	861	1011	1161	1311	1461	1611	1761	1911	2061	2211	2361	2511	2661

Metron B - Beam spacing 75 mm

Beam spacing 75 mm	ME 607B	ME 757B	ME 907B	ME 1057B	ME 1207B	ME 1357B	ME 1507B	ME 1657B	ME 1807B	ME 1957B	ME 2107B	ME 2257B	ME 2407B	ME 2557B
Ordering codes	1380423	1380424	1380425	1380426	1380427	1380428	1380429	1380430	1380431	1380432	1380433	1380434	1380435	1380436
Controlled height (mm)	525	675	825	975	1125	1275	1425	1575	1725	1875	2025	2175	2325	2475
Nr. beams	8	10	12	14	16	18	20	22	24	26	28	30	32	34
Overall height (mm)	711	861	1011	1161	1311	1461	1611	1761	1911	2061	2211	2361	2511	2661

METRON C

TECHNICAL FEATURES

Max. range (m)	- 2 - models with beams spacing 5 mm - 6 - models with beam spacing 25, 50, 75 mm - 16 - models with beam spacing 10, 30 mm
Measurement time	(2.25 ms + 70 μs x n beams) x 2
Outputs	2 solid state 0 or 24V antivalent (PNP 100 mA 24 VDC)
Inputs (on receiver)	1 digital with programmable functions - 0 or 24V
Synchronisation between emitter and receiver	Optical or via cable, selectable
Electrical connections	Connector M12 5-pole (emitter and receiver)
Status display	7-segment display and LEDs for operating status and light curtain self-diagnosis
Power supply (VDC)	24 ± 20%
Fastening mode	Back slot, side slot, or to the top and lower end with swivel brackets



Beam spacing (mm)	Analog output
5 - 10 - 25 30 - 50 - 75	2

Models C equipped with 2 solid state antivalent outputs 0 or 24V without the need for programming.

Controlled heights: 150 ... 2525 mm.

Max. length connection cables between light curtain and interface: 50 (m).

CABLES NEEDED

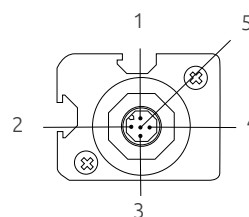
- Emitter M12 5-pole.
See [page 16](#) (CD x, CD x SB, CD 9x, CDM 9 CDM 99)
- Receiver M12 5-pole.
See [page 16](#) (CD x, CD x SB, CD 9x, CDM 9 CDM 99)

ACCESSORIES

- Support columns. See [page 21](#)
- Laser alignment device. See [page 24](#)
- Vibration dumpers. See [page 23](#)
- Brackets. See [page 23](#)

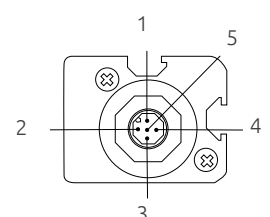
CONNECTORS

Receiver M12 5-pole



- 1 - 24 Vcc
- 2 - OUT 1
- 3 - 0 Vcc
- 4 - OUT 2
- 5 - PE

Emitter M12 8-pole



- 1 - 24 Vcc
- 2 - RANGE
- 3 - 0 Vcc
- 4 - NC
- 5 - PE



PART NUMBERS

Metron C - Beam spacing 5 mm

Beam spacing 5 mm	ME 150C	ME 300C	ME 450B	ME 600B	ME 750B	ME 900B	ME 1050B	ME 1200B
Ordering codes	1380540	1380541	1380542	1380543	1380544	1380545	1380546	1380547
Controlled height (mm)	145	295	445	595	745	895	1045	1195
Nr. beams	30	60	90	120	150	180	210	240
Overall height (mm)	261	411	561	711	861	1011	1161	1311

Metron C - Beam spacing 10 mm

Beam spacing 10 mm	ME 151C	ME 301C	ME 451C	ME 601C	ME 751C	ME 901C	ME 1051C	ME 1201C	ME 1351C	ME 1501C	ME 1651C	ME 1801C	ME 1951C	ME 2101C	ME 2251C	ME 2401C
Ordering codes	1380040	1380041	1380042	1380043	1380044	1380045	1380046	1380047	1380048	1380049	1380050	1380051	1380052	1380053	1380054	1380055
Controlled height (mm)	140	290	440	590	740	890	1040	1190	1340	1490	1640	1790	1940	2090	2240	2390
Nr. beams	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240
Overall height (mm)	261	411	561	711	861	1011	1161	1311	1461	1611	1761	1911	2061	2211	2361	2511

Metron C - Beam spacing 25 mm

Beam spacing 25 mm	ME 302C	ME 452C	ME 602C	ME 752C	ME 902C	ME 1052C	ME 1202C	ME 1352C	ME 1502C	ME 1652C	ME 1802C	ME 1952C	ME 2102C	ME 2252C	ME 2402C	ME 2552C
Ordering codes	1380141	1380142	1380143	1380144	1380145	1380146	1380147	1380148	1380149	1380150	1380151	1380152	1380153	1380154	1380155	1380156
Controlled height (mm)	275	425	575	725	875	1025	1175	1325	1475	1625	1775	1925	2075	2225	2375	2525
Nr. beams	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102
Overall height (mm)	411	561	711	861	1011	1161	1311	1461	1611	1761	1911	2061	2211	2361	2511	2661

Metron C - Beam spacing 30 mm

Beam spacing 30 mm	ME 303C	ME 453C	ME 603C	ME 753C	ME 903C	ME 1053C	ME 1203C	ME 1353C	ME 1503C	ME 1653C	ME 1803C	ME 1953C	ME 2103C	ME 2253C	ME 2403C	ME 2553C
Ordering codes	1380241	1380242	1380243	1380244	1380245	1380246	1380247	1380248	1380249	1380250	1380251	1380252	1380253	1380254	1380255	1380256
Controlled height (mm)	270	420	570	720	870	1020	1170	1320	1470	1620	1770	1920	2070	2220	2370	2520
Nr. beams	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85
Overall height (mm)	411	561	711	861	1011	1161	1311	1461	1611	1761	1911	2061	2211	2361	2511	2661

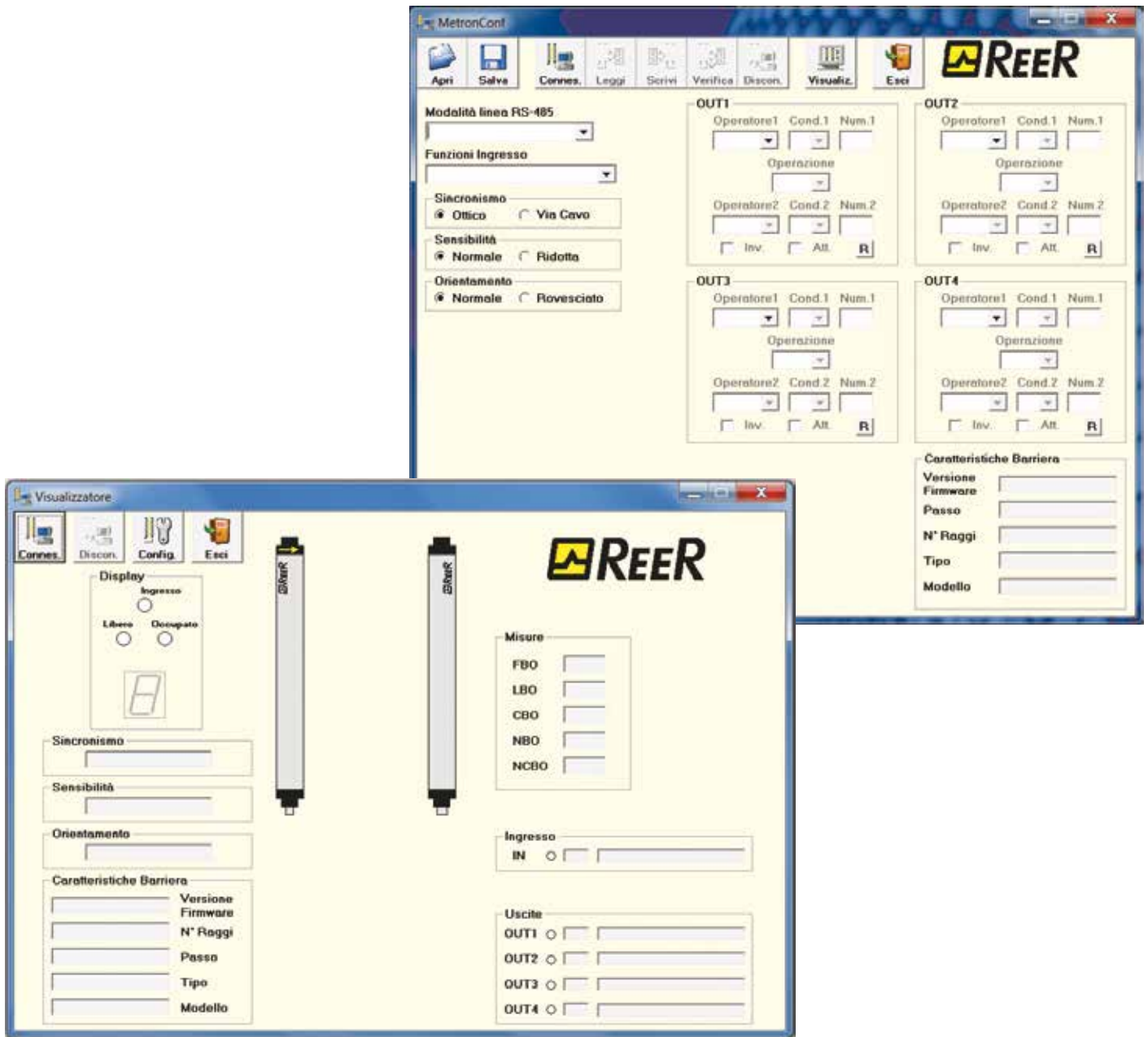
Metron C - Beam spacing 50 mm

Beam spacing 50 mm	ME 455C	ME 605C	ME 755C	ME 905C	ME 1055C	ME 1205C	ME 1355C	ME 1505C	ME 1655C	ME 1805C	ME 1955C	ME 2105C	ME 2255C	ME 2405C	ME 2555C
Ordering codes	1380342	1380343	1380344	1380345	1380346	1380347	1380348	1380349	1380350	1380351	1380352	1380353	1380354	1380355	1380356
Controlled height (mm)	400	550	700	850	1000	1150	1300	1450	1600	1750	1900	2050	2200	2350	2500
Nr. beams	9	12	15	18	21	24	27	30	33	36	39	42	45	48	51
Overall height (mm)	561	711	861	1011	1161	1311	1461	1611	1761	1911	2061	2211	2361	2511	2661

Metron C - Beam spacing 75 mm

Beam spacing 75 mm	ME 607C	ME 757C	ME 907C	ME 1057C	ME 1207C	ME 1357C	ME 1507C	ME 1657C	ME 1807C	ME 1957C	ME 2107C	ME 2257C	ME 2407C	ME 2557C
Ordering codes	1380443	1380444	1380445	1380446	1380447	1380448	1380449	1380450	1380451	1380452	1380453	1380454	1380455	1380456
Controlled height (mm)	525	675	825	975	1125	1275	1425	1575	1725	1875	2025	2175	2325	2475
Nr. beams	8	10	12	14	16	18	20	22	24	26	28	30	32	34
Overall height (mm)	711	861	1011	1161	1311	1461	1611	1761	1911	2061	2211	2361	2511	2661

CONFIGURATION SOFTWARE



Software for PC, with graphic user interface, is supplied with each light curtain (Metron models A and B only).

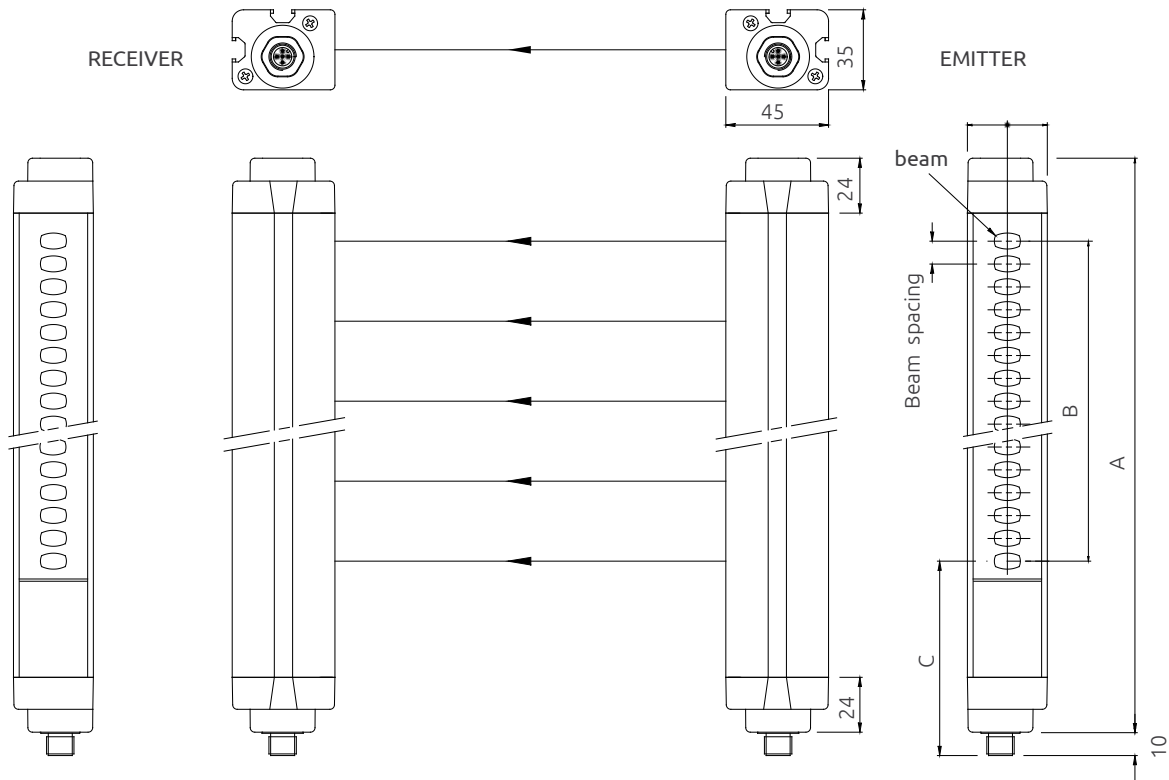
Metron models A and B are provided with an M8 3-pole connector for parameter configuration and monitoring of the light curtain, to be connected to a PC using the CSL 3 cable.

“MetroConf” CHARACTERISTICS

Possibility for on-line display on PC screen during operation: (via RS 232) Status of each individual beam and solid state outputs

Configurable parameters Operating logic (conditions for output activation)
 Parameters of the RS 485 serial line (transmission method, baud rate, parity, start-stop characters, binary, hex, ascii format, measurement time, etc.)

MECHANICAL DATA



Model ME	150	300	450	600	750	900	1050	1200
A	251	401	551	701	851	1001	1151	1301
B (controlled height)	B = (number of beams -1) x beam spacing (with cable synchronisation) B = (number of beams -2) x beam spacing (with optical synchronisation)*							
C (1 st beam position)	85 (for 10, 30 models) - 93 (for 25, 50, 75 models)							
Mounting	Complete set of 4 LS type brackets included in the package							

Model ME	1350	1500	1650	1800	1950	2100	2250	2400	2550
A	1451	1601	1751	1901	2051	2201	2351	2501	2651
B (controlled height)	B = (number of beams -1) x beam spacing (with cable synchronisation) B = (number of beams -2) x beam spacing (with optical synchronisation)*								
C (1 st beam position)	85 (for 10 - 30 models) - 93 (for 25-50-75 models)								
Mounting	Complete set of 6 LS type brackets included in the package								

* In the case of optical synchronism, the beam adjacent to the upper end cap cannot be used for measurement, as it constitutes the synchronism beam



These modules allow the connection of the Micron measurement light curtains with the following industrial field bus:

- MI - BP - Profibus DP
- MI - BD - DeviceNET
- MI - BC - CANopen
- MI - BEC - EtherCAT
- MI - BEI - Ethernet IP
- MI - BEP - PROFINET
- MI - BMR - ModBus RTU
- MI - BEM - ModBus TCP/IP
- MI - BU - USB Universal Serial Bus

MI - Bs

FIELD BUS INTERFACES FOR MICRON

Expansion unit for connect Micron light curtain to the most common industrial Field-bus systems for diagnostics and data communication.

APPLICATION EXAMPLE

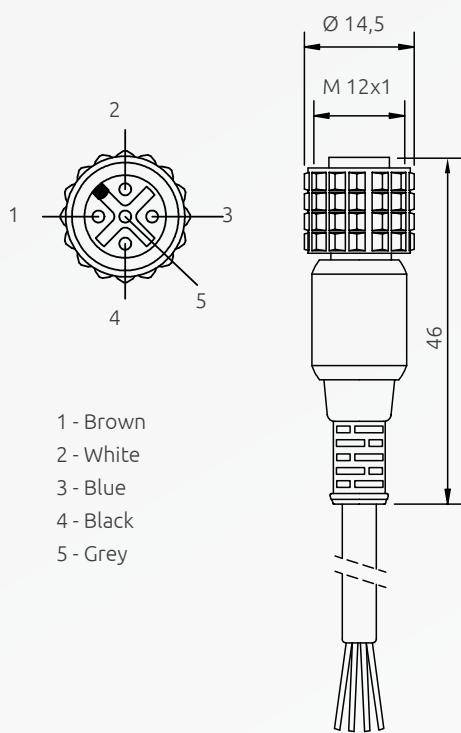
In all applications where it is required a communication between the Micron light curtains and PLC control.

TECHNICAL FEATURES

Ports	RS 485 serial ports for I/O BUS expansion USB port for configuration
Connection to Micron	Via Micron cable
Power supply (VDC)	24 ± 20%
Operating temperature (°C)	-10 ... +55 °C
Storage temperature (°C)	- 20 ... +85 °C
Protection rating	IP20 for housing IP2X for terminal block
Fastening	DIN rail fastening according to EN 50022-35 standard
Connection	Removable terminal blocks, screw contacts
Dimensions h x w x d (mm)	99 x 22,5 x 114

PART NUMBERS

1250500	MI - BP Profibus DP interface module
1250501	MI - BD DeviceNet interface module
1250502	MI - BC CANopen interface module
1250503	M - BEI Ethernet IP interface module
1250504	MI - BEC EtherCAT interface module
1250505	MI - BEP PROFINET interface module
1250506	MI - BU Universal Serial Bus interface module
1250507	MI - BMR ModBus RTU interface module
1250508	MI - BEM ModBus TCP/IP interface module



CD x

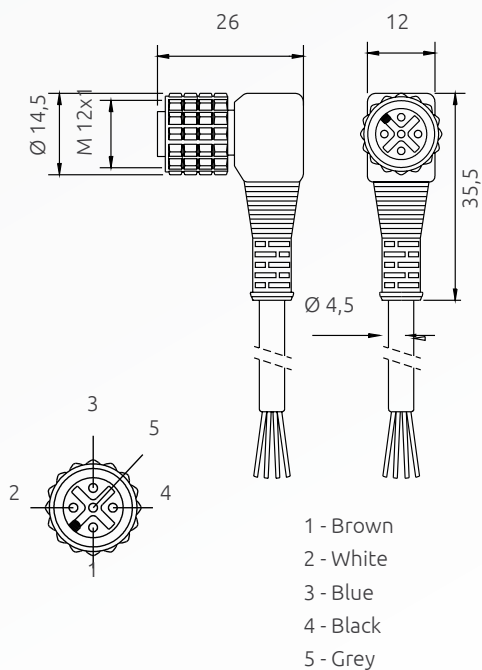
M12 STRAIGHT CONNECTOR 5-POLE

Models	Codes	Description
CD 5	1330950	Pre-wired cable 5 m
CD 10	1330956	Pre-wired cable 10 m
CD 15	1330952	Pre-wired cable 15 m
CD 20	1330957	Pre-wired cable 20 m
CD 25	1330949	Pre-wired cable 25 m
CD 50	1330965	Pre-wired cable 50 m

CD x SB

M12 STRAIGHT CONNECTOR 5-POLE, SHIELDED

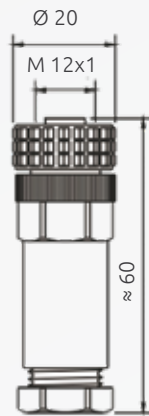
Models	Codes	Description
CD 5 SB	1330850	Pre-wired shielded cable 5 m
CD 10 SB	1330856	Pre-wired shielded cable 10 m
CD 15 SB	1330852	Pre-wired shielded cable 15 m



CD 9x

M12 90° ANGLE CONNECTOR 5-POLE

Models	Codes	Description
CD 95	1330951	Pre-wired cable 5 m
CD 910	1330958	Pre-wired cable 10 m
CD 915	1330953	Pre-wired cable 15 m



CDM 9

M12 STRAIGHT CONNECTOR 5-POLE
SCREW TERMINAL, PG9 CABLE GLAND

Model	Code
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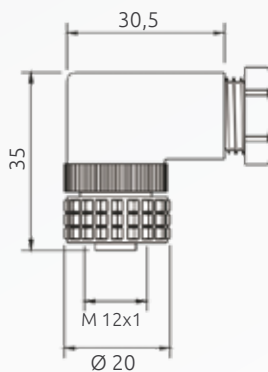
CDM 9	1330954
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C8DM 9

M12 STRAIGHT CONNECTOR 8-POLE
SCREW TERMINAL, PG9 CABLE GLAND

Model	Code
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C8DM 9	1330986
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CDM 99

M12 STRAIGHT CONNECTOR 5-POLE
SCREW TERMINAL, PG9 CABLE GLAND

Model	Code
-------	------

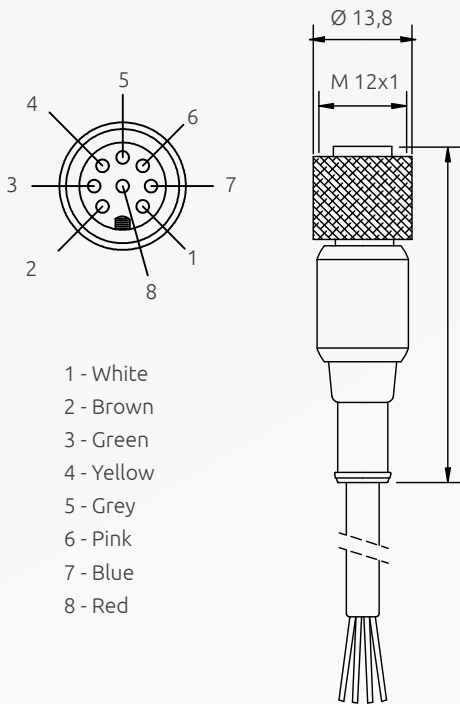
CDM 99	1330955
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C8DM 99

M12 STRAIGHT CONNECTOR 8-POLE
SCREW TERMINAL, PG9 CABLE GLAND

Model	Code
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C8DM 99	1330987
---------	---------



C8D x

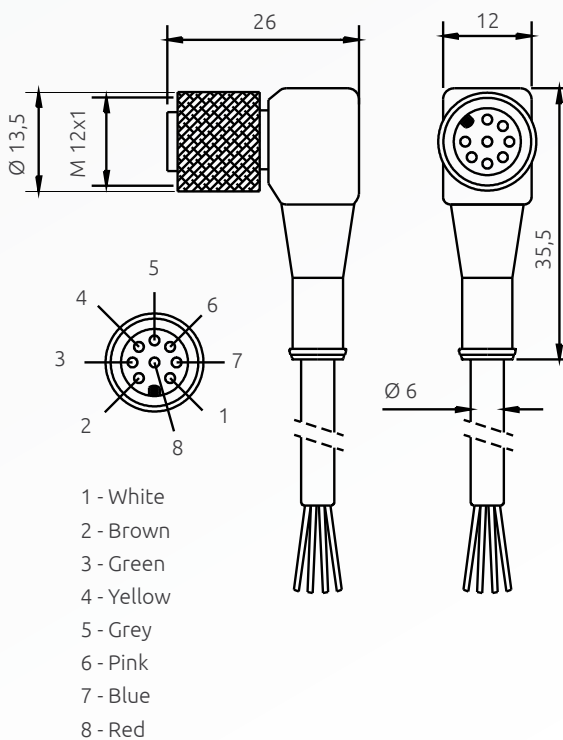
M12 STRAIGHT CONNECTOR 8-POLE

Models	Codes	Description
C8D 5	1330980	Pre-wired cable 5 m
C8D 10	1330981	Pre-wired cable 10 m
C8D 15	1330982	Pre-wired cable 15 m
C8D 25	1330967	Pre-wired cable 25 m
C8D 40	1330966	Pre-wired cable 40 m

C8D x SB

M12 STRAIGHT CONNECTOR 8-POLE, SHIELDED

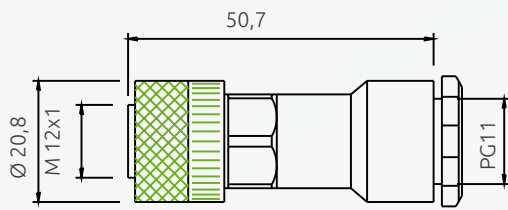
Model	Codes	Description
C8D 5 SB	1330880	Pre-wired shielded cable 5 m
C8D 10 SB	1330881	Pre-wired shielded cable 10 m
C8D 15 SB	1330882	Pre-wired shielded cable 15 m



C8D 9x

M12 90° ANGLE CONNECTOR 8-POLE

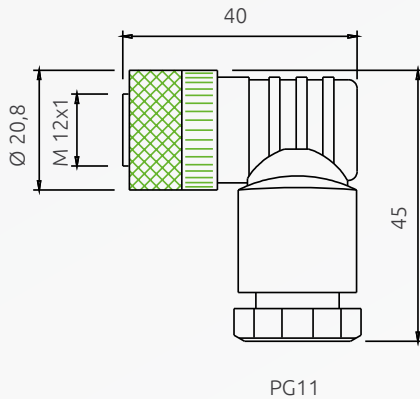
Models	Codes	Description
C8D 95	1330983	Pre-wired cable 5 m
C8D 910	1330984	Pre-wired cable 10 m
C8D 915	1330985	Pre-wired cable 15 m



C8DM 11

M12 STRAIGHT CONNECTOR 8-POLE
SCREW TERMINAL, PG11 CABLE GLAND

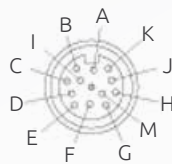
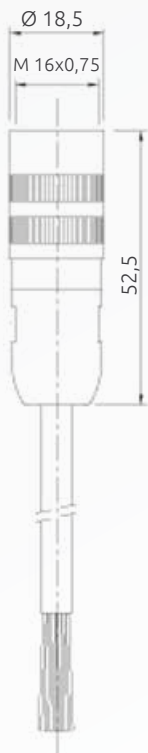
Model	Code
C8DM 11	1330978



C8DM 911

M12 90° ANGLE CONNECTOR 8-POLE
SCREW TERMINAL, PG11 CABLE GLAND

Model	Code
C8DM 911	1330979

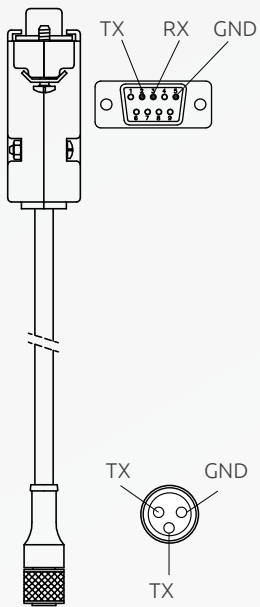


- A - Grey-pink
- B - Green
- C - White
- D - Grey
- E - Pink
- F - Red
- G - Black
- H - Violet
- J - Red-Blue
- L - Brown
- M - Blue
- K - Yellow

C12D x

M16 STRAIGHT CONNECTOR 12-POLE

Model	Codes	Description
C12D 3	1330917	Pre-wired cable 3 m
C12D 5	1330918	Pre-wired cable 5 m
C12D 3	1330919	Pre-wired cable 10 m
C12D 15	1330924	Pre-wired cable 15 m
C12D 25	1330916	Pre-wired cable 25 m



CSL 3 PROGRAMMING CABLE

Model	Code	Description
CSL 3	1330994	3 meters cable, for connecting light curtain and PC for system configuration, equipped with one M8 3-pole connector and one DB9 connector



FMC B

FMC CB

Support columns for Reer safety light curtains, designed to provide secure fastening to the floor, fast installation, and a simple and precise adjustment of the optical alignment of the system.

FMC B / FMC BR

FLOOR SUPPORT COLUMNS FOR METRON LIGHT CURTAINS

PART NUMBERS

Columns

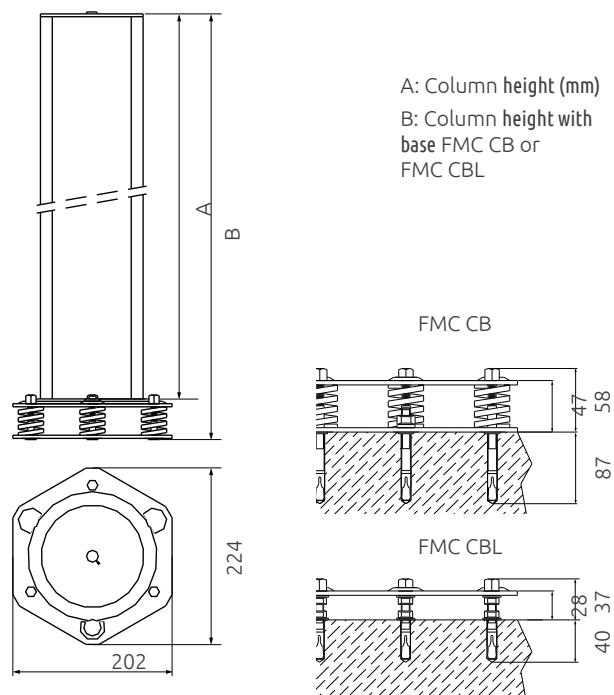
Standard models	FMC B 2	FMC B 3	FMC B 4	FMC B 1700	FMC B 2000
Ordering codes	1200610	1200611	1200612	1200618	1200616
Models with PG11 rear union for cable sheath	FMC B 2 R	FMC B 3 R	FMC B 4 R	FMC B 1700 R	FMC B 2000 R
Ordering codes	1200613	1200614	1200615	1200617	1200619
A - Height (mm)	1000	1200	1330	1670	1970
B - Overall height with FMC CB base (mm)	1055	1255	1385	1725	2025
B - Overall height with FMC CBL base (mm)	1037	1237	1367	1707	2007

Bases for columns

Models	FMC CB	FMC CBL
Ordering codes	1200500	1200501
Description	Base for column	Base for column with reduced height
Height (mm)	55	37

Note for ordering

The column ordering codes does not include the base which must be ordered separately (CB FMC and FMC CBL models).



FMC B12 / B18 SUPPORT COLUMNS

PART NUMBERS

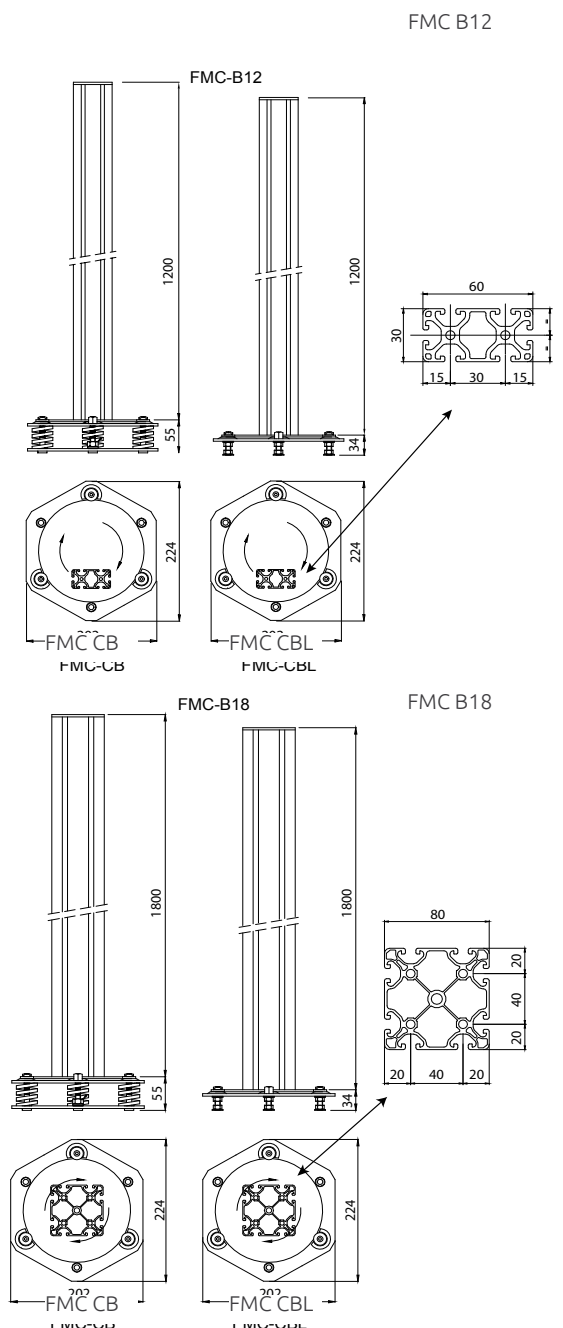
Model	FMC B12	FMC B18
Ordering codes	1200502	1200505
Dimensions (mm)	60 x 30	80 x 80
Height (mm)	1200	1800
Overall height with FMC CB base (mm)	1255	1255
Overall height with FMC CBL base (mm)	1237	1237



Simplified version support columns for Reer safety light curtains

Note for ordering

The column ordering codes does not include the base which must be ordered separately (CB FMC and FMC CBL models)





The SFB swivel brackets allow the rotation of the light curtain around its longitudinal axis, as well as the adjustment of its vertical and horizontal position.



The SAV vibration dampers have been designed to avoid mechanical damage to the light curtains installed in those applications with have a high level of vibrations.

SFB

METRON SWIVEL BRACKETS

PART NUMBERS

Model	Ordering code	Description
SFB	1330974	Set of 4 swivel brackets for Metron

One set must be ordered for each pair of light curtain (emitter + receiver)

SAV 3, SAV 4

VIBRATION DAMPERS

PART NUMBERS

Model	Ordering codes	Description	For light curtains with protected height mm / beams
SAV 3	1200088	Set 2 vibrations dampers	160... 1060 / 2,3,4 beams
SAV 4	1120089	Set 3 vibrations dampers	1210 ... 1810

One set must be ordered for each pair of light curtain (emitter + receiver)

LAD 4 - LAD 2

LASER ALIGNEMENT DEVICE

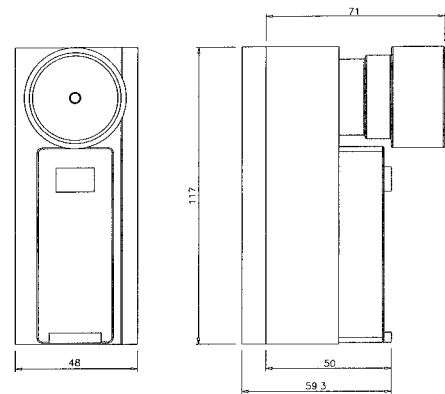
TECHNICAL FEATURES

Light source	Laser diode – wavelength 650 nm
Class light source	II – EN 60825-1
Range m	100
Beam divergence (mrd)	< 0,5
Max. power (mW)	1
Power supply (VDC)	3 (2 AAA batteries)
Fastening	Quick fastening to the light curtains
Dimensions h x w x d (mm)	117 x 48 x 80 - LAD 2 - LAD 4



LAD 2 laser alignment device allows a fast and reliable optical alignment of Reer safety light curtains; also compatible with the use of the FMC floor mounting columns.

LAD 2 device emit a laser beam with visible red light with useful range up to 100 m.



PART NUMBERS

Includes multi-language instruction manual.

Ordering code LAD 2 for Metron: **1310975**

Ordering code LAD 4 for Micron: **1220301**



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Issue 2 - Rev. 1.1
February 2020
8946307
METRON - English

Printed in Italy

