



Your future's safe!



new

Includes
R.SAFE^{RFID}
RFID Safety Switches
SR
Safety Interfaces

Safety Devices and Solutions
for the Machine Automation Industry

Panorama

YOUR TECHNOLOGY PARTNER SINCE 1959

ReeR was established in 1959 with a mission to distribute automation products for industrial, lighting, and home applications. By the mid-1970s, the first safety sensors were developed. Not long after, the first light curtains were produced.

Today, ReeR is the leading Italian company in the industry and one of the largest manufacturers in the world of optoelectronic sensors for industrial safety.

The Safety Division has the expertise to support customers all over the world. Its talented network of distributors provides industry-leading support services to customers in more than 50 countries.

QUALITY

ReeR is committed to continuously improving its quality management system by minimizing defective returns and ensuring high product reliability.

Product traceability and production process control are delivered using ReeR's proprietary management software.

Product quality is guaranteed by the TÜV certified Quality System according to the ISO 9001 standard.

SAFETY AND AUTOMATION

Safety is essential in every workplace. It becomes even more crucial in highly automated environments.

Thanks to our collaboration with world-leading companies in the machine-tool, automotive, packaging, and palletization industries, ReeR is able to offer a wide range of safety devices such as light curtains, programmable controllers, photocells, laser scanners, and interfaces able to meet the demands of any application.

ReeR specializes in the field of optoelectronic curtains for automation, measurement, and control.

REER'S INDUSTRY EXPERTISE

Technological excellence and application know-how embody the spirit of ReeR.

Fourteen percent (14%) of ReeR's workforce is employed in the R&D department with expertise in safety hardware, software, and firmware.

In addition to developing its own technology and devices, the experts at ReeR work hard to participate in the standardization development process for the industry. As one of the main players in the space, ReeR plays a vital role in national and international organizing committees on machinery safety requirements.



HQ in Turin, Italy



Logistic centre and warehouse in Leini, Italy



Electronic components assembly line in Turin, Italy



SAFETY LIGHT CURTAINS

EOS

SAFEGATE

ADMIRAL

EOS4 - EOS2

COMPACT SAFETY LIGHT CURTAINS AND GRIDS

One simple product range to cover most of today's industrial applications.

-  Safety light curtains: finger, hand and body detection
-  Safety light grids: multi-beam (2, 3 or 4 beams for access control)
-  Unique features and a comprehensive range of accessories
-  Standard versions with automatic restart
-  Integrated function versions with selectable automatic/manual restart
-  Operating range up to 20 m, protected height up to 2,2 m



CHARACTERISTICS

| STANDARD (A) | | INTEGRATED FUNCTIONS (X) | | INTEGRATED FUNCTIONS (X) FOR CASCADE CONNECTION |
|--|--|--|--|--|
| EOS4 A / AT / ATL EOS2 A / AT / ATL | EOS4 AH (high range) | EOS4 X / XT / XTL EOS2 X / XT / XTL | EOS4 XH (high range) | EOS4 XM / XS / XS2 EOS2 XM / XS / XS2 |
| Selectable operating range: 0 ... 4 m - low, 0 ... 12 m - high | Selectable operating range: 0 ... 10 m - low 3 ... 20 m - high | Selectable operating range: 0 ... 4 m - low, 0 ... 12 m - high | Selectable operating range: 0 ... 10 m - low 3 ... 20 m - high | Selectable operating range: 0 ... 4 m - low, 0 ... 12 m - high EOS4 with 14 mm resolution models: 0 ... 3 m - low, 1 ... 6 m - high |
| EOS4 A with 14 mm resolution models: 0 ... 3 m - low, 1 ... 6 m - high | ATL versions: 0 ... 2 m - low, 0 ... 6 m - high | XTL versions: 0 ... 2 m - low, 0 ... 6 m - high | | |
| Automatic Start/Restart | | Selectable manual or automatic Start/Restart | | |
| External relay monitoring (EDM) through external interfaces, i.e. SR ONE, Mosaic or safety PLC | | Integrated feedback input for external relay monitoring (EDM). When a relay output is needed, the use of a SR ZERO is recommended | | |

2 safety static outputs PNP with auto-test protected against short circuits and overloads

CABLES NEEDED

| EOS4 and EOS2 standard versions (A) | EOS4 and EOS2 with integrated functions versions (X) |
|--------------------------------------|--|
| Emitter: M12 5-pole (CDx) | Emitter: M12 5-pole (CDx) |
| Receiver: M12 5-pole (CDx) | Receiver: M12 8-pole (C8Dx) |
| Master, Slave 2 and Slave connection | M12 5-pole (CDx) |

SAFETY LEVEL

TYPE 4

SIL 3 - SILCL 3
PL e - Cat. 4

SAFETY LEVEL

TYPE 2

SIL 1 - SILCL 1
PL c - Cat. 2

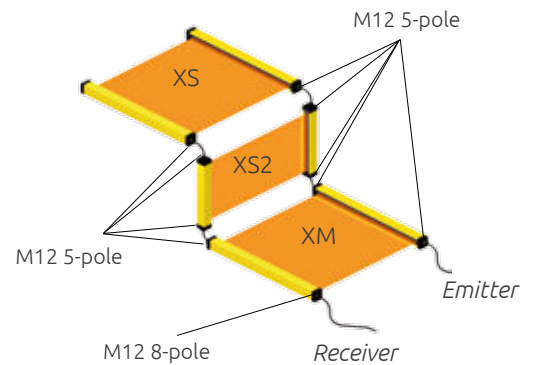


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EOS4 - EOS2 MASTER/SLAVE FOR CASCADE CONNECTION



Master/Slave versions for cascade connection of two or three curtains



EOS4 - EOS2 WTF / WTHF

WITH WATERTIGHT ENCLOSURE, FOOD-GRADED, IP69K CERTIFIED



Available also with integrated heater

Special models with watertight enclosure allow light curtains and light grids to be used in harsh working environments, with exposure to water and steam. The use of inert and non-toxic components allows WTF and WTHF enclosures to be used in the Food & Beverage industry, where frequent washdown procedures are requested.



Material resistance test according to cleaning procedures for food and beverage industry.



The IP69K rated compact WTF/WTHF cylindrical enclosure (56 mm diameter) can withstand up to 80 bar of water jets pressure at the temperature of +80 °C. The enclosure incorporates a valve to drain humidity and to avoid condensation.

WTF: watertight
WTHF: watertight + integrated heater

EOS4 - EOS2 T VERSIONS

RESISTANT TO HIGH VIBRATIONS



Special versions resistant to high vibrations for applications on presses and in the textile industry. Available as Standard version (AT), with Integrated Functions (XT) and with reduced sensibility for low range applications (ATL, XTL).

These versions are able to maintain beams alignment also in the presence of strong mechanical stresses and vibrations according to EN 60068-2-6:2009. The use of Vibration Dampers (SAV) is mandatory.

EOS4 ATEX

SAFETY LIGHT CURTAINS FOR EXPLOSIVE ATMOSPHERE



Ideal for access protection in environments with potentially explosive atmosphere.

- Typo 4, SIL 3, PL e safety light curtains
- Classified Zone 2, 22 ATEX (Directive 2014/34/UE)
- Gas: II 3G Ex nA IIC T6 Gc, Dust: II 3D Ex tc IIIC T 60 °C Dc



EOS4 - EOS2

PART NUMBERS

EOS4 - STANDARD VERSIONS (A) AND WITH INTEGRATED FUNCTIONS (X)

Resolution 14 mm

| | | | | | | | | | | | | | | |
|-----------------------|---------------|---|---------------|---------------|---------------|---------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| A versions | EOS4 151 A | - | EOS4 301 A | EOS4 451 A | EOS4 601 A | EOS4 751 A | EOS4 901 A | EOS4 1051 A | EOS4 1201 A | EOS4 1351 A | EOS4 1501 A | EOS4 1651 A | EOS4 1801 A | EOS4 1951 A |
| Part number | 1310000 | - | 1310001 | 1310002 | 1310003 | 1310004 | 1310005 | 1310006 | 1310007 | 1310008 | 1310009 | 1310070 | 1310071 | 1310711 |
| X versions | EOS4 151 X | - | EOS4 301 X | EOS4 451 X | EOS4 601 X | EOS4 751 X | EOS4 901 X | EOS4 1051 X | EOS4 1201 X | EOS4 1351 X | EOS4 1501 X | EOS4 1651 X | EOS4 1801 X | EOS4 1951 X |
| Part number | 1310010 | - | 1310011 | 1310012 | 1310013 | 1310014 | 1310015 | 1310016 | 1310017 | 1310018 | 1310019 | 1310072 | 1310073 | 1310712 |
| Protected height (mm) | 160 | | 310 | 460 | 610 | 760 | 910 | 1060 | 1210 | 1360 | 1510 | 1660 | 1810 | 1960 |
| Number of beams | 15 | | 30 | 45 | 60 | 75 | 90 | 105 | 120 | 135 | 150 | 165 | 180 | 195 |
| Overall height (mm) | 213 | | 363 | 513 | 663 | 813 | 963 | 1113 | 1263 | 1413 | 1563 | 1713 | 1863 | 2013 |

Resolution 20 mm

| | | | | | | | | | | | | | | |
|-----------------------|----------------|---|----------------|----------------|----------------|----------------|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| AH versions | EOS4 152 AH | - | EOS4 302 AH | EOS4 452 AH | EOS4 602 AH | EOS4 752 AH | EOS4 902 AH | EOS4 1052 AH | EOS4 1202 AH | EOS4 1352 AH | EOS4 1502 AH | EOS4 1652 AH | EOS4 1802 AH | EOS4 1952 AH |
| Part number | 1310150 | - | 1310151 | 1310152 | 1310153 | 1310154 | 1310155 | 1310156 | 1310157 | 1310158 | 1310159 | 1310180 | 1310181 | 1310715 |
| XH versions | EOS4 152 XH | - | EOS4 302 XH | EOS4 452 XH | EOS4 602 XH | EOS4 752 XH | EOS4 902 XH | EOS4 1052 XH | EOS4 1202 XH | EOS4 1352 XH | EOS4 1502 XH | EOS4 1652 XH | EOS4 1802 XH | EOS4 1952 XH |
| Part number | 1310160 | - | 1310161 | 1310162 | 1310163 | 1310164 | 1310165 | 1310166 | 1310167 | 1310168 | 1310169 | 1310182 | 1310183 | 1310716 |
| Protected height (mm) | 160 | | 310 | 460 | 610 | 760 | 910 | 1060 | 1210 | 1360 | 1510 | 1660 | 1810 | 1960 |
| Number of beams | 15 | | 30 | 45 | 60 | 75 | 90 | 105 | 120 | 135 | 150 | 165 | 180 | 195 |
| Overall height (mm) | 213 | | 363 | 513 | 663 | 813 | 963 | 1113 | 1263 | 1413 | 1563 | 1713 | 1863 | 2013 |

Resolution 30 mm

| | | | | | | | | | | | | | | | | |
|-----------------------|----------------|---------------|----------------|----------------|----------------|----------------|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| A versions | EOS4 153 A | EOS4 253 A | EOS4 303 A | EOS4 453 A | EOS4 603 A | EOS4 753 A | EOS4 903 A | EOS4 1053 A | EOS4 1203 A | EOS4 1353 A | EOS4 1503 A | EOS4 1653 A | EOS4 1803 A | EOS4 1953 A | EOS4 2103 A | EOS4 2253 A |
| Part number | 1310200 | 1311205 | 1310201 | 1310202 | 1310203 | 1310204 | 1310205 | 1310206 | 1310207 | 1310208 | 1310209 | 1310270 | 1310271 | 1310719 | 1310720 | 1310721 |
| X versions | EOS4 153 X | EOS4 253 X | EOS4 303 X | EOS4 453 X | EOS4 603 X | EOS4 753 X | EOS4 903 X | EOS4 1053 X | EOS4 1203 X | EOS4 1353 X | EOS4 1503 X | EOS4 1653 X | EOS4 1803 X | EOS4 1953 X | EOS4 2103 X | EOS4 2253 X |
| Part number | 1310210 | 1311200 | 1310211 | 1310212 | 1310213 | 1310214 | 1310215 | 1310216 | 1310217 | 1310218 | 1310219 | 1310272 | 1310273 | 1310733 | 1310734 | 1310735 |
| AH versions | EOS4 153 AH | - | EOS4 303 AH | EOS4 453 AH | EOS4 603 AH | EOS4 753 AH | EOS4 903 AH | EOS4 1053 AH | EOS4 1203 AH | EOS4 1353 AH | EOS4 1503 AH | EOS4 1653 AH | EOS4 1803 AH | EOS4 1953 AH | EOS4 2103 AH | EOS4 2253 AH |
| Part number | 1310250 | - | 1310251 | 1310252 | 1310253 | 1310254 | 1310255 | 1310256 | 1310257 | 1310258 | 1310259 | 1310280 | 1310281 | 1310736 | 1310737 | 1310738 |
| XH versions | EOS4 153 XH | - | EOS4 303 XH | EOS4 453 XH | EOS4 603 XH | EOS4 753 XH | EOS4 903 XH | EOS4 1053 XH | EOS4 1203 XH | EOS4 1353 XH | EOS4 1503 XH | EOS4 1653 XH | EOS4 1803 XH | EOS4 1953 XH | EOS4 2103 XH | EOS4 2253 XH |
| Part number | 1310260 | - | 1310261 | 1310262 | 1310263 | 1310264 | 1310265 | 1310266 | 1310267 | 1310268 | 1310269 | 1310282 | 1310283 | 1310739 | 1310740 | 1310741 |
| Protected height (mm) | 160 | 260 | 310 | 460 | 610 | 760 | 910 | 1060 | 1210 | 1360 | 1510 | 1660 | 1810 | 1960 | 2110 | 2260 |
| Number of beams | 8 | 13 | 16 | 23 | 31 | 38 | 46 | 53 | 61 | 68 | 76 | 83 | 91 | 98 | 106 | 113 |
| Overall height (mm) | 213 | 313 | 363 | 513 | 663 | 813 | 963 | 1113 | 1263 | 1413 | 1563 | 1713 | 1863 | 2013 | 2163 | 2313 |

Resolution 40 mm

| | | | | | | | | | | | | | | | | |
|-----------------------|----------------|---------------|----------------|----------------|----------------|----------------|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| A versions | EOS4 154 A | EOS4 254 A | EOS4 304 A | EOS4 454 A | EOS4 604 A | EOS4 754 A | EOS4 904 A | EOS4 1054 A | EOS4 1204 A | EOS4 1354 A | EOS4 1504 A | EOS4 1654 A | EOS4 1804 A | EOS4 1954 A | EOS4 2104 A | EOS4 2254 A |
| Part number | 1310300 | 1311202 | 1310301 | 1310302 | 1310303 | 1310304 | 1310305 | 1310306 | 1310307 | 1310308 | 1310309 | 1310370 | 1310371 | 1310723 | 1310724 | 1310725 |
| X versions | EOS4 154 X | EOS4 254 X | EOS4 304 X | EOS4 454 X | EOS4 604 X | EOS4 754 X | EOS4 904 X | EOS4 1054 X | EOS4 1204 X | EOS4 1354 X | EOS4 1504 X | EOS4 1654 X | EOS4 1804 X | EOS4 1954 X | EOS4 2104 X | EOS4 2254 X |
| Part number | 1310310 | 1311209 | 1310311 | 1310312 | 1310313 | 1310314 | 1310315 | 1310316 | 1310317 | 1310318 | 1310319 | 1310372 | 1310373 | 1310751 | 1310752 | 1310753 |
| AH versions | EOS4 154 AH | - | EOS4 304 AH | EOS4 454 AH | EOS4 604 AH | EOS4 754 AH | EOS4 904 AH | EOS4 1054 AH | EOS4 1204 AH | EOS4 1354 AH | EOS4 1504 AH | EOS4 1654 AH | EOS4 1804 AH | EOS4 1954 AH | EOS4 2104 AH | EOS4 2254 AH |
| Part number | 1310350 | - | 1310351 | 1310352 | 1310353 | 1310354 | 1310355 | 1310356 | 1310357 | 1310358 | 1310359 | 1310380 | 1310381 | 1310754 | 1310755 | 1310756 |
| XH versions | EOS4 154 XH | - | EOS4 304 XH | EOS4 454 XH | EOS4 604 XH | EOS4 754 XH | EOS4 904 XH | EOS4 1054 XH | EOS4 1204 XH | EOS4 1354 XH | EOS4 1504 XH | EOS4 1654 XH | EOS4 1804 XH | EOS4 1954 XH | EOS4 2104 XH | EOS4 2254 XH |
| Part number | 1310360 | - | 1310361 | 1310362 | 1310363 | 1310364 | 1310365 | 1310366 | 1310367 | 1310368 | 1310369 | 1310382 | 1310383 | 1310757 | 1310758 | 1310759 |
| Protected height (mm) | 160 | 260 | 310 | 460 | 610 | 760 | 910 | 1060 | 1210 | 1360 | 1510 | 1660 | 1810 | 1960 | 2110 | 2260 |
| Number of beams | 6 | 9 | 11 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 |
| Overall height (mm) | 213 | 313 | 363 | 513 | 663 | 813 | 963 | 1113 | 1263 | 1413 | 1563 | 1713 | 1863 | 2013 | 2163 | 2313 |



Resolution 50 mm

| | | | | | | | | | | | | | | | |
|-----------------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| A versions | EOS4 155 A | EOS4 305 A | EOS4 455 A | EOS4 605 A | EOS4 755 A | EOS4 905 A | EOS4 1055 A | EOS4 1205 A | EOS4 1355 A | EOS4 1505 A | EOS4 1655 A | EOS4 1805 A | EOS4 1955 A | EOS4 2105 A | EOS4 2255 A |
| Part number | 1310400 | 1310401 | 1310402 | 1310403 | 1310404 | 1310405 | 1310406 | 1310407 | 1310408 | 1310409 | 1310470 | 1310471 | 1310769 | 1310770 | 1310761 |
| X versions | EOS4 155 X | EOS4 305 X | EOS4 455 X | EOS4 605 X | EOS4 755 X | EOS4 905 X | EOS4 1055 X | EOS4 1205 X | EOS4 1355 X | EOS4 1505 X | EOS4 1655 X | EOS4 1805 X | EOS4 1955 X | EOS4 2105 X | EOS4 2255 X |
| Part number | 1310410 | 1310411 | 1310412 | 1310413 | 1310414 | 1310415 | 1310416 | 1310417 | 1310418 | 1310419 | 1310472 | 1310473 | 1310772 | 1310773 | 1310774 |
| AH versions | EOS4 155 AH | EOS4 305 AH | EOS4 455 AH | EOS4 605 AH | EOS4 755 AH | EOS4 905 AH | EOS4 1055 AH | EOS4 1205 AH | EOS4 1355 AH | EOS4 1505 AH | EOS4 1655 AH | EOS4 1805 AH | EOS4 1955 AH | EOS4 2105 AH | EOS4 2255 AH |
| Part number | 1310450 | 1310451 | 1310452 | 1310453 | 1310454 | 1310455 | 1310456 | 1310457 | 1310458 | 1310459 | 1310480 | 1310481 | 1310775 | 1310776 | 1310777 |
| XH versions | EOS4 155 XH | EOS4 305 XH | EOS4 455 XH | EOS4 605 XH | EOS4 755 XH | EOS4 905 XH | EOS4 1055 XH | EOS4 1205 XH | EOS4 1355 XH | EOS4 1505 XH | EOS4 1655 XH | EOS4 1805 XH | EOS4 1955 XH | EOS4 2105 XH | EOS4 2255 XH |
| Part number | 1310460 | 1310461 | 1310462 | 1310463 | 1310464 | 1310465 | 1310466 | 1310467 | 1310468 | 1310469 | 1310482 | 1310483 | 1310778 | 1310779 | 1310780 |
| Protected height (mm) | 160 | 310 | 460 | 610 | 760 | 910 | 1060 | 1210 | 1360 | 1510 | 1660 | 1810 | 1960 | 2110 | 2260 |
| Number of beams | 4 | 8 | 12 | 16 | 20 | 24 | 28 | 32 | 36 | 40 | 44 | 48 | 52 | 54 | 60 |
| Overall height (mm) | 213 | 363 | 513 | 663 | 813 | 963 | 1113 | 1263 | 1413 | 1563 | 1713 | 1863 | 2013 | 2163 | 2313 |



Resolution 90 mm

| | | | | | | | | | | | | | | | |
|-----------------------|---|----------------|----------------|----------------|----------------|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| A versions | - | EOS4 309 A | EOS4 459 A | EOS4 609 A | EOS4 759 A | EOS4 909 A | EOS4 1059 A | EOS4 1209 A | EOS4 1359 A | EOS4 1509 A | EOS4 1659 A | EOS4 1809 A | EOS4 1959 A | EOS4 2109 A | EOS4 2259 A |
| Part number | - | 1310501 | 1310502 | 1310503 | 1310504 | 1310505 | 1310506 | 1310507 | 1310508 | 1310509 | 1310570 | 1310571 | 1310790 | 1310791 | 1310792 |
| X versions | - | EOS4 309 X | EOS4 459 X | EOS4 609 X | EOS4 759 X | EOS4 909 X | EOS4 1059 X | EOS4 1209 X | EOS4 1359 X | EOS4 1509 X | EOS4 1659 X | EOS4 1809 X | EOS4 1959 X | EOS4 2109 X | EOS4 2259 X |
| Part number | - | 1310511 | 1310512 | 1310513 | 1310514 | 1310515 | 1310516 | 1310517 | 1310518 | 1310519 | 1310572 | 1310573 | 1310793 | 1310794 | 1310795 |
| AH versions | - | EOS4 309 AH | EOS4 459 AH | EOS4 609 AH | EOS4 759 AH | EOS4 909 AH | EOS4 1059 AH | EOS4 1209 AH | EOS4 1359 AH | EOS4 1509 AH | EOS4 1659 AH | EOS4 1809 AH | EOS4 1959 AH | EOS4 2109 AH | EOS4 2259 AH |
| Part number | - | 1310551 | 1310552 | 1310553 | 1310554 | 1310555 | 1310556 | 1310557 | 1310558 | 1310559 | 1310580 | 1310581 | 1310796 | 1310797 | 1310798 |
| XH versions | - | EOS4 309 XH | EOS4 459 XH | EOS4 609 XH | EOS4 759 XH | EOS4 909 XH | EOS4 1059 XH | EOS4 1209 XH | EOS4 1359 XH | EOS4 1509 XH | EOS4 1659 XH | EOS4 1809 XH | EOS4 1959 XH | EOS4 2109 XH | EOS4 2259 XH |
| Part number | - | 1310561 | 1310562 | 1310563 | 1310564 | 1310565 | 1310566 | 1310567 | 1310568 | 1310569 | 1310582 | 1310583 | 1310799 | 1310800 | 1310801 |
| Protected height (mm) | - | 310 | 460 | 610 | 760 | 910 | 1060 | 1210 | 1360 | 1510 | 1660 | 1810 | 1960 | 2110 | 2260 |
| Number of beams | - | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 24 | 26 | 28 | 30 |
| Overall height (mm) | - | 363 | 513 | 663 | 813 | 963 | 1113 | 1263 | 1413 | 1563 | 1713 | 1863 | 2013 | 2163 | 2313 |

EOS2 - STANDARD VERSIONS (A) AND WITH INTEGRATED FUNCTIONS (X)



Resolution 30 mm

| | | | | | | | | | | | | | | | | |
|-----------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| A versions | EOS2 153 A | EOS2 253 A | EOS2 303 A | EOS2 453 A | EOS2 603 A | EOS2 753 A | EOS2 903 A | EOS2 1053 A | EOS2 1203 A | EOS2 1353 A | EOS2 1503 A | EOS2 1653 A | EOS2 1803 A | EOS2 1953 A | EOS2 2103 A | EOS2 2253 A |
| Part number | 1320200 | 1321205 | 1320201 | 1320202 | 1320203 | 1320204 | 1320205 | 1320206 | 1320207 | 1320208 | 1320209 | 1320270 | 1320271 | 1320719 | 1320720 | 1320721 |
| X versions | EOS2 153 X | EOS2 253 X | EOS2 303 X | EOS2 453 X | EOS2 603 X | EOS2 753 X | EOS2 903 X | EOS2 1053 X | EOS2 1203 X | EOS2 1353 X | EOS2 1503 X | EOS2 1653 X | EOS2 1803 X | EOS2 1953 X | EOS2 2103 X | EOS2 2253 X |
| Part number | 1320210 | 1321200 | 1320211 | 1320212 | 1320213 | 1320214 | 1320215 | 1320216 | 1320217 | 1320218 | 1320219 | 1320272 | 1320273 | 1320733 | 1320734 | 1320735 |
| Protected height (mm) | 160 | 260 | 310 | 460 | 610 | 760 | 910 | 1060 | 1210 | 1360 | 1510 | 1660 | 1810 | 1960 | 2110 | 2260 |
| Number of beams | 8 | 13 | 16 | 23 | 31 | 38 | 46 | 53 | 61 | 68 | 76 | 83 | 91 | 98 | 106 | 113 |
| Overall height (mm) | 213 | 313 | 363 | 513 | 663 | 813 | 963 | 1113 | 1263 | 1413 | 1563 | 1713 | 1863 | 2013 | 2163 | 2313 |



Resolution 40 mm

| | | | | | | | | | | | | | | | | |
|-----------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| A versions | EOS2 154 A | EOS2 254 A | EOS2 304 A | EOS2 454 A | EOS2 604 A | EOS2 754 A | EOS2 904 A | EOS2 1054 A | EOS2 1204 A | EOS2 1354 A | EOS2 1504 A | EOS2 1654 A | EOS2 1804 A | EOS2 1954 A | EOS2 2104 A | EOS2 2254 A |
| Part number | 1320300 | 1321202 | 1320301 | 1320302 | 1320303 | 1320304 | 1320305 | 1320306 | 1320307 | 1320308 | 1320309 | 1320370 | 1320371 | 1320723 | 1320724 | 1320725 |
| X versions | EOS2 154 X | EOS2 254 X | EOS2 304 X | EOS2 454 X | EOS2 604 X | EOS2 754 X | EOS2 904 X | EOS2 1054 X | EOS2 1204 X | EOS2 1354 X | EOS2 1504 X | EOS2 1654 X | EOS2 1804 X | EOS2 1954 X | EOS2 2104 X | EOS2 2254 X |
| Part number | 1320310 | 1321209 | 1320311 | 1320312 | 1320313 | 1320314 | 1320315 | 1320316 | 1320317 | 1320318 | 1320319 | 1320372 | 1320373 | 1320751 | 1320752 | 1320753 |
| Protected height (mm) | 160 | 260 | 310 | 460 | 610 | 760 | 910 | 1060 | 1210 | 1360 | 1510 | 1660 | 1810 | 1960 | 2110 | 2260 |
| Number of beams | 6 | 9 | 11 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 |
| Overall height (mm) | 213 | 313 | 363 | 513 | 663 | 813 | 963 | 1113 | 1263 | 1413 | 1563 | 1713 | 1863 | 2013 | 2163 | 2313 |

EOS4 - EOS2

PART NUMBERS



Resolution 50 mm

| A versions | EOS2 155 A | EOS2 305 A | EOS2 455 A | EOS2 605 A | EOS2 755 A | EOS2 905 A | EOS2 1055 A | EOS2 1205 A | EOS2 1355 A | EOS2 1505 A | EOS2 1655 A | EOS2 1805 A | EOS2 1955 A | EOS2 2105 A | EOS2 2255 A |
|-----------------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Part number | 1320400 | 1320401 | 1320402 | 1320403 | 1320404 | 1320405 | 1320406 | 1320407 | 1320408 | 1320409 | 1320470 | 1320471 | 1320769 | 1320770 | 1320771 |
| X versions | EOS2 155 X | EOS2 305 X | EOS2 455 X | EOS2 605 X | EOS2 755 X | EOS2 905 X | EOS2 1055 X | EOS2 1205 X | EOS2 1355 X | EOS2 1505 X | EOS2 1655 X | EOS2 1805 X | EOS2 1955 X | EOS2 2105 X | EOS2 2255 X |
| Part number | 1320410 | 1320411 | 1320412 | 1320413 | 1320414 | 1320415 | 1320416 | 1320417 | 1320418 | 1320419 | 1320472 | 1320473 | 1320772 | 1320773 | 1320774 |
| Protected height (mm) | 160 | 310 | 460 | 610 | 760 | 910 | 1060 | 1210 | 1360 | 1510 | 1660 | 1810 | 1960 | 2110 | 2260 |
| Number of beams | 4 | 8 | 12 | 16 | 20 | 24 | 28 | 32 | 36 | 40 | 44 | 48 | 52 | 54 | 60 |
| Overall height (mm) | 213 | 363 | 513 | 663 | 813 | 963 | 1113 | 1263 | 1413 | 1563 | 1713 | 1863 | 2013 | 2163 | 2313 |



Resolution 90 mm

| A versions | - | EOS2 309 A | EOS2 459 A | EOS2 609 A | EOS2 759 A | EOS2 909 A | EOS2 1059 A | EOS2 1209 A | EOS2 1359 A | EOS2 1509 A | EOS2 1659 A | EOS2 1809 A | EOS2 1959 A | EOS2 2109 A | EOS2 2259 A |
|-----------------------|---|---------------|---------------|---------------|---------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Part number | - | 1320501 | 1320502 | 1320503 | 1320504 | 1320505 | 1320506 | 1320507 | 1320508 | 1320509 | 1320570 | 1320571 | 1320790 | 1320791 | 1320792 |
| X versions | - | EOS2 309 X | EOS2 459 X | EOS2 609 X | EOS2 759 X | EOS2 909 X | EOS2 1059 X | EOS2 1209 X | EOS2 1359 X | EOS2 1509 X | EOS2 1659 X | EOS2 1809 X | EOS2 1959 X | EOS2 2109 X | EOS2 2259 X |
| Part number | - | 1320511 | 1320512 | 1320513 | 1320514 | 1320515 | 1320516 | 1320517 | 1320518 | 1320519 | 1320572 | 1320573 | 1320793 | 1320707 | 1320794 |
| Protected height (mm) | | 310 | 460 | 610 | 760 | 910 | 1060 | 1210 | 1360 | 1510 | 1660 | 1810 | 1960 | 2110 | 2260 |
| Number of beams | | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 24 | 26 | 28 | 30 |
| Overall height (mm) | | 363 | 513 | 663 | 813 | 963 | 1113 | 1263 | 1413 | 1563 | 1713 | 1863 | 2013 | 2163 | 2313 |

EOS4 - MULTIBEAMS



2, 3, 4 beams

| A versions | EOS4 2B A | EOS4 3B A | EOS4 4B A |
|-----------------------|------------|------------|------------|
| Part number | 1310600 | 1310601 | 1310602 |
| X versions | EOS4 2B X | EOS4 3B X | EOS4 4B X |
| Part number | 1310610 | 1310611 | 1310612 |
| AH versions | EOS4 2B AH | EOS4 3B AH | EOS4 4B AH |
| Part number | 1310650 | 1310651 | 1310652 |
| XH versions | EOS4 2B XH | EOS4 3B XH | EOS4 4B XH |
| Part number | 1310660 | 1310661 | 1310662 |
| Number of beams | 2 | 3 | 4 |
| Beam spacing (mm) | 500 | 400 | 300 |
| Protected height (mm) | 510 | 810 | 910 |
| Overall height (mm) | 653 | 953 | 1053 |

EOS2 - MULTIBEAMS



2, 3, 4 beams

| A versions | EOS2 2B A | EOS2 3B A | EOS2 4B A |
|-----------------------|-----------|-----------|-----------|
| Part number | 1320600 | 1320601 | 1320602 |
| X versions | EOS2 2B X | EOS2 3B X | EOS2 4B X |
| Part number | 1320610 | 1320611 | 1320612 |
| Number of beams | 2 | 3 | 4 |
| Beam spacing (mm) | 500 | 400 | 300 |
| Protected height (mm) | 510 | 810 | 910 |
| Overall height (mm) | 653 | 953 | 1053 |

EOS4 - MASTER/SLAVE VERSIONS WITH INTEGRATED FUNCTIONS



Resolution 14 mm

| MASTER | - | - | EOS4 301 XM | EOS4 451 XM | EOS4 601 XM | EOS4 751 XM | EOS4 901 XM | EOS4 1051 XM | EOS4 1201 XM | EOS4 1351 XM | EOS4 1501 XM | EOS4 1651 XM | EOS4 1801 XM | EOS4 1951 XM |
|-----------------------|----------------|---|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Part number | - | - | 1310021 | 1310022 | 1310023 | 1310024 | 1310025 | 1310026 | 1310027 | 1310028 | 1310029 | 1310074 | 1310075 | 1310713 |
| SLAVE | EOS4 151 XS | - | EOS4 301 XS | EOS4 451 XS | EOS4 601 XS | EOS4 751 XS | EOS4 901 XS | EOS4 1051 XS | EOS4 1201 XS | EOS4 1351 XS | EOS4 1501 XS | EOS4 1651 XS | EOS4 1801 XS | EOS4 1951 XS |
| Part number | 1310030 | - | 1310031 | 1310032 | 1310033 | 1310034 | 1310035 | 1310036 | 1310037 | 1310038 | 1310039 | 1310076 | 1310076 | 1310729 |
| SLAVE 2 | - | - | EOS4 301 XS2 | EOS4 451 XS2 | EOS4 601 XS2 | EOS4 751 XS2 | EOS4 901 XS2 | EOS4 1051 XS2 | EOS4 1201 XS2 | EOS4 1351 XS2 | EOS4 1501 XS2 | EOS4 1651 XS2 | EOS4 1801 XS2 | EOS4 1951 XS2 |
| Part number | - | - | 1310041 | 1310042 | 1310043 | 1310044 | 1310045 | 1310046 | 1310047 | 1310048 | 1310049 | 1310078 | 1310079 | 1310730 |
| Protected height (mm) | 160 | | 310 | 460 | 610 | 760 | 910 | 1060 | 1210 | 1360 | 1510 | 1660 | 1810 | 1960 |
| Number of beams | 15 | | 30 | 45 | 60 | 75 | 90 | 105 | 120 | 135 | 150 | 165 | 180 | 195 |
| Overall height (mm) | | | | | | | | | | | | | | |
| Master / Slave 2 * | 236,5 | | 386,5 | 536,5 | 686,5 | 836,5 | 986,5 | 1136,5 | 1286,5 | 1436,5 | 1586,5 | 1736,5 | 1886,5 | 2036,5 |

* On Slave versions, the overall height of the light curtain is the same of the standard model.
On Master and Slave 2, the total height of the light curtain is greater due to the addition of the secondary connector.



Resolution 30 mm

| | | | | | | | | | | | | | | | | |
|---|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| MASTER | - | EOS4 253 XM | EOS4 303 XM | EOS4 453 XM | EOS4 603 XM | EOS4 753 XM | EOS4 903 XM | EOS4 1053 XM | EOS4 1203 XM | EOS4 1353 XM | EOS4 1503 XM | EOS4 1653 XM | EOS4 1803 XM | EOS4 1953 XM | EOS4 2103 XM | EOS4 2253 XM |
| Part number | | 1311206 | 1310221 | 1310222 | 1310223 | 1310224 | 1310225 | 1310226 | 1310227 | 1310228 | 1310229 | 1310274 | 1310275 | 1310742 | 1310743 | 1310744 |
| SLAVE | EOS4 153 XS | EOS4 253 XS | EOS4 303 XS | EOS4 453 XS | EOS4 603 XS | EOS4 753 XS | EOS4 903 XS | EOS4 1053 XS | EOS4 1203 XS | EOS4 1353 XS | EOS4 1503 XS | EOS4 1653 XS | EOS4 1803 XS | EOS4 1953 XS | EOS4 2103 XS | EOS4 2253 XS |
| Part number | 1310230 | 1311207 | 1310231 | 1310232 | 1310233 | 1310234 | 1310235 | 1310236 | 1310237 | 1310238 | 1310239 | 1310276 | 1310277 | 1310745 | 1310746 | 1310747 |
| SLAVE 2 | - | EOS4 253 XM2 | EOS4 303 XS2 | EOS4 453 XS2 | EOS4 603 XS2 | EOS4 753 XS2 | EOS4 903 XS2 | EOS4 1053 XS2 | EOS4 1203 XS2 | EOS4 1353 XS2 | EOS4 1503 XS2 | EOS4 1653 XS2 | EOS4 1803 XS2 | EOS4 1953 XS2 | EOS4 2103 XS2 | EOS4 2253 XS2 |
| Part number | - | 1311208 | 1310241 | 1310242 | 1310243 | 1310244 | 1310245 | 1310246 | 1310247 | 1310248 | 1310249 | 1310278 | 1310279 | 1310748 | 1310749 | 1310750 |
| Protected height (mm) | 160 | 260 | 310 | 460 | 610 | 760 | 910 | 1060 | 1210 | 1360 | 1510 | 1660 | 1810 | 1960 | 2110 | 2260 |
| Number of beams | 8 | 13 | 16 | 23 | 31 | 38 | 46 | 53 | 61 | 68 | 76 | 83 | 91 | 98 | 106 | 113 |
| Overall height (mm) Master / Slave 2 * | 236,5 | 336,5 | 386,5 | 536,5 | 686,5 | 836,5 | 986,5 | 1136,5 | 1286,5 | 1436,5 | 1586,5 | 1736,5 | 1886,5 | 2036,5 | 2186,5 | 2336,5 |



Resolution 40 mm

| | | | | | | | | | | | | | | | | |
|---|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| MASTER | - | EOS4 254 XM | EOS4 304 XM | EOS4 454 XM | EOS4 604 XM | EOS4 754 XM | EOS4 904 XM | EOS4 104 XM | EOS4 1204 XM | EOS4 1354 XM | EOS4 1504 XM | EOS4 1654 XM | EOS4 1804 XM | EOS4 1954 XM | EOS4 2104 XM | EOS4 2254 XM |
| Part number | | 1311210 | 1310321 | 1310322 | 1310323 | 1310324 | 1310325 | 1310326 | 1310327 | 1310328 | 1310329 | 1310374 | 1310375 | 1310760 | 1310761 | 1310762 |
| SLAVE | EOS4 154 XS | EOS4 254 XS | EOS4 304 XS | EOS4 454 XS | EOS4 604 XS | EOS4 754 XS | EOS4 904 XS | EOS4 1054 XS | EOS4 1204 XS | EOS4 1354 XS | EOS4 1504 XS | EOS4 1654 XS | EOS4 1804 XS | EOS4 1954 XS | EOS4 2104 XS | EOS4 2254 XS |
| Part number | 1310330 | 1311211 | 1310331 | 1310332 | 1310333 | 1310334 | 1310335 | 1310336 | 1310337 | 1310338 | 1310339 | 1310376 | 1310377 | 1310763 | 1310764 | 1310765 |
| SLAVE 2 | - | EOS4 254 XM2 | EOS4 304 XS2 | EOS4 454 XS2 | EOS4 604 XS2 | EOS4 754 XS2 | EOS4 904 XS2 | EOS4 1054 XS2 | EOS4 1204 XS2 | EOS4 1354 XS2 | EOS4 1504 XS2 | EOS4 1654 XS2 | EOS4 1804 XS2 | EOS4 1954 XS2 | EOS4 2104 XS2 | EOS4 2254 XS2 |
| Part number | | 1311212 | 1310341 | 1310342 | 1310343 | 1310344 | 1310345 | 1310346 | 1310347 | 1310348 | 1310349 | 1310378 | 1310379 | 1310766 | 1310767 | 1310768 |
| Protected height (mm) | 160 | 260 | 310 | 460 | 610 | 760 | 910 | 1060 | 1210 | 1360 | 1510 | 1660 | 1810 | 1960 | 2110 | 2260 |
| Number of beams | 6 | 9 | 11 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 |
| Overall height (mm) Master / Slave 2 * | 236,5 | 336,5 | 386,5 | 536,5 | 686,5 | 836,5 | 986,5 | 1136,5 | 1286,5 | 1436,5 | 1586,5 | 1736,5 | 1886,5 | 2036,5 | 2186,5 | 2336,5 |



Resolution 50 mm

| | | | | | | | | | | | | | | | | |
|---|----------------|---|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| MASTER | - | - | EOS4 305 XM | EOS4 455 XM | EOS4 605 XM | EOS4 755 XM | EOS4 905 XM | EOS4 105 XM | EOS4 1205 XM | EOS4 1355 XM | EOS4 1505 XM | EOS4 1655 XM | EOS4 1805 XM | EOS4 1955 XM | EOS4 2105 XM | EOS4 2255 XM |
| Part number | | | 1310421 | 1310422 | 1310423 | 1310424 | 1310425 | 1310426 | 1310427 | 1310428 | 1310429 | 1310474 | 1310475 | 1310781 | 1310782 | 1310783 |
| SLAVE | EOS4 155 XS | - | EOS4 305 XS | EOS4 455 XS | EOS4 605 XS | EOS4 755 XS | EOS4 905 XS | EOS4 1055 XS | EOS4 1205 XS | EOS4 1355 XS | EOS4 1505 XS | EOS4 1655 XS | EOS4 1805 XS | EOS4 1955 XS | EOS4 2105 XS | EOS4 2255 XS |
| Part number | 1310430 | - | 1310431 | 1310432 | 1310433 | 1310434 | 1310435 | 1310436 | 1310437 | 1310438 | 1310439 | 1310476 | 1310477 | 1310784 | 1310785 | 1310786 |
| SLAVE 2 | - | - | EOS4 305 XS2 | EOS4 455 XS2 | EOS4 605 XS2 | EOS4 755 XS2 | EOS4 905 XS2 | EOS4 1055 XS2 | EOS4 1205 XS2 | EOS4 1355 XS2 | EOS4 1505 XS2 | EOS4 1655 XS2 | EOS4 1805 XS2 | EOS4 1955 XS2 | EOS4 2105 XS2 | EOS4 2255 XS2 |
| Part number | - | - | 1310441 | 1310442 | 1310443 | 1310444 | 1310445 | 1310446 | 1310447 | 1310448 | 1310449 | 1310478 | 1310479 | 1310787 | 1310788 | 1310789 |
| Protected height (mm) | 160 | | 310 | 460 | 610 | 760 | 910 | 1060 | 1210 | 1360 | 1510 | 1660 | 1810 | 1960 | 2110 | 2260 |
| Number of beams | 4 | | 8 | 12 | 16 | 20 | 24 | 28 | 32 | 36 | 40 | 44 | 48 | 52 | 56 | 60 |
| Overall height (mm) Master / Slave 2 * | 236,5 | | 386,5 | 536,5 | 686,5 | 836,5 | 986,5 | 1136,5 | 1286,5 | 1436,5 | 1586,5 | 1736,5 | 1886,5 | 2036,5 | 2186,5 | 2336,5 |



Resolution 90 mm

| | | | | | | | | | | | | | | | | |
|---|---|---|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| MASTER | - | - | EOS4 309 XM | EOS4 459 XM | EOS4 609 XM | EOS4 759 XM | EOS4 909 XM | EOS4 1059 XM | EOS4 1209 XM | EOS4 1359 XM | EOS4 1509 XM | EOS4 1659 XM | EOS4 1809 XM | EOS4 1959 XM | EOS4 2109 XM | EOS4 2259 XM |
| Part number | - | - | 1310521 | 1310522 | 1310523 | 1310524 | 1310525 | 1310526 | 1310527 | 1310528 | 1310529 | 1310574 | 1310575 | 1310801 | 1310802 | 1310803 |
| SLAVE | - | - | EOS4 309 XS | EOS4 459 XS | EOS4 609 XS | EOS4 759 XS | EOS4 909 XS | EOS4 1059 XS | EOS4 1209 XS | EOS4 1359 XS | EOS4 1509 XS | EOS4 1659 XS | EOS4 1809 XS | EOS4 1959 XS | EOS4 2109 XS | EOS4 2259 XS |
| Part number | - | - | 1310531 | 1310532 | 1310533 | 1310534 | 1310535 | 1310536 | 1310537 | 1310538 | 1310539 | 1310576 | 1310577 | 1310804 | 1310805 | 1310806 |
| SLAVE 2 | - | - | EOS4 309 XS2 | EOS4 459 XS2 | EOS4 609 XS2 | EOS4 759 XS2 | EOS4 909 XS2 | EOS4 1059 XS2 | EOS4 1209 XS2 | EOS4 1359 XS2 | EOS4 1509 XS2 | EOS4 1659 XS2 | EOS4 1809 XS2 | EOS4 1959 XS2 | EOS4 2109 XS2 | EOS4 2259 XS2 |
| Part number | - | - | 1310541 | 1310542 | 1310543 | 1310544 | 1310545 | 1310546 | 1310547 | 1310548 | 1310549 | 1310578 | 1310579 | 1310807 | 1310808 | 1310809 |
| Protected height (mm) | | | 310 | 460 | 610 | 760 | 910 | 1060 | 1210 | 1360 | 1510 | 1660 | 1810 | 1960 | 2110 | 2260 |
| Number of beams | | | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 24 | 52 | 56 | 60 |
| Overall height (mm) Master / Slave 2 * | | | 386,5 | 536,5 | 686,5 | 836,5 | 986,5 | 1136,5 | 1286,5 | 1436,5 | 1586,5 | 1736,5 | 1886,5 | 2036,5 | 2186,5 | 2336,5 |

EOS4 - EOS2

PART NUMBERS

EOS2 - MASTER/SLAVE VERSIONS WITH INTEGRATED FUNCTIONS

Resolution 30 mm

| | | | | | | | | | | | | | | | | |
|---|----------------|------------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| MASTER | - | EOS 2 253 XM | EOS2 303 XM | EOS2 453 XM | EOS2 603 XM | EOS2 753 XM | EOS2 903 XM | EOS2 1053 XM | EOS2 1203 XM | EOS2 1353 XM | EOS2 1503 XM | EOS2 1653 XM | EOS2 1803 XM | EOS2 1953 XM | EOS2 2103 XM | EOS2 2253 XM |
| Part number | - | 1321206 | 1320221 | 1320222 | 1320223 | 1320224 | 1320225 | 1320226 | 1320227 | 1320228 | 1320229 | 1320274 | 1320275 | 1320742 | 1320743 | 1320744 |
| SLAVE | EOS2 153 XS | EOS 2 253 XS | EOS2 303 XS | EOS2 453 XS | EOS2 603 XS | EOS2 753 XS | EOS2 903 XS | EOS2 1053 XS | EOS2 1203 XS | EOS2 1353 XS | EOS2 1503 XS | EOS2 1653 XS | EOS2 1803 XS | EOS2 1953 XS | EOS2 2103 XS | EOS2 2253 XS |
| Part number | 1320230 | 1321207 | 1320231 | 1320232 | 1320233 | 1320234 | 1320235 | 1320236 | 1320237 | 1320237 | 1320239 | 1320276 | 1320277 | 1320745 | 1320746 | 1320747 |
| SLAVE 2 | - | EOS 2 253 XM2 | EOS2 303 XS2 | EOS2 453 XS2 | EOS2 603 XS2 | EOS2 753 XS2 | EOS2 903 XS2 | EOS2 1053 XS2 | EOS2 1203 XS2 | EOS2 1353 XS2 | EOS2 1503 XS2 | EOS2 1653 XS2 | EOS2 1803 XS2 | EOS2 1953 XS2 | EOS2 2103 XS2 | EOS2 2253 XS2 |
| Part number | - | 1321208 | 1320241 | 1320242 | 1320243 | 1320244 | 1320245 | 1320246 | 1320247 | 1320248 | 1320249 | 1320278 | 1320279 | 1320748 | 1320749 | 1320750 |
| Protected height (mm) | 160 | 260 | 310 | 460 | 610 | 760 | 910 | 1060 | 1210 | 1360 | 1510 | 1660 | 1810 | 1960 | 2110 | 2260 |
| Number of beams | 8 | 13 | 16 | 23 | 31 | 38 | 46 | 53 | 61 | 68 | 76 | 83 | 91 | 98 | 106 | 113 |
| Overall height (mm) Master / Slave 2 * | 236.5 | 336.5 | 386.5 | 536.5 | 686.5 | 836.5 | 986.5 | 1136.5 | 1286.5 | 1436.5 | 1586.5 | 1736.5 | 1886.5 | 2013 | 2163 | 2313 |

Resolution 40 mm

| | | | | | | | | | | | | | | | | |
|---|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| MASTER | - | EOS2 254 XM | EOS2 304 XM | EOS2 454 XM | EOS2 604 XM | EOS2 754 XM | EOS2 904 XM | EOS2 1054 XM | EOS2 1204 XM | EOS2 1354 XM | EOS2 1504 XM | EOS2 1654 XM | EOS2 1804 XM | EOS2 1954 XM | EOS2 2104 XM | EOS2 2254 XM |
| Part number | - | 1321210 | 1320321 | 1320322 | 1320323 | 1320324 | 1320325 | 1320326 | 1320327 | 1320328 | 1320329 | 1320374 | 1320375 | 1320760 | 1320761 | 1320762 |
| SLAVE | EOS2 154 XS | EOS2 254 XS | EOS2 304 XS | EOS2 454 XS | EOS2 604 XS | EOS2 754 XS | EOS2 904 XS | EOS2 1054 XS | EOS2 1204 XS | EOS2 1354 XS | EOS2 1504 XS | EOS2 1654 XS | EOS2 1804 XS | EOS2 1954 XS | EOS2 2104 XS | EOS2 2254 XS |
| Part number | 1320330 | 1321211 | 1320331 | 1320332 | 1320333 | 1320334 | 1320335 | 1320336 | 1320337 | 1320338 | 1320339 | 1320376 | 1320377 | 1320763 | 1320764 | 1320765 |
| SLAVE 2 | - | EOS2 254 XS2 | EOS2 304 XS2 | EOS2 454 XS2 | EOS2 604 XS2 | EOS2 754 XS2 | EOS2 904 XS2 | EOS2 1054 XS2 | EOS2 1204 XS2 | EOS2 1354 XS2 | EOS2 1504 XS2 | EOS2 1654 XS2 | EOS2 1804 XS2 | EOS2 1954 XS2 | EOS2 2104 XS2 | EOS2 2254 XS2 |
| Part number | - | 1321212 | 1320341 | 1320342 | 1320343 | 1320344 | 1320345 | 1320346 | 1320347 | 1320348 | 1320349 | 1320378 | 1320379 | 1320766 | 1320767 | 1320768 |
| Protected height (mm) | 160 | 260 | 310 | 460 | 610 | 760 | 910 | 1060 | 1210 | 1360 | 1510 | 1660 | 1810 | 1960 | 2110 | 2260 |
| Number of beams | 6 | 9 | 11 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 |
| Overall height (mm) Master / Slave 2 * | 236.5 | 336.5 | 386.5 | 536.5 | 686.5 | 836.5 | 986.5 | 1136.5 | 1286.5 | 1436.5 | 1586.5 | 1736.5 | 1886.5 | 2013 | 2163 | 2313 |

Resolution 50 mm

| | | | | | | | | | | | | | | | | |
|---|----------------|---|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| MASTER | - | - | EOS2 305 XM | EOS2 455 XM | EOS2 605 XM | EOS2 755 XM | EOS2 905 XM | EOS2 105 XM | EOS2 1205 XM | EOS2 1355 XM | EOS2 1505 XM | EOS2 1655 XM | EOS2 1805 XM | EOS2 1955 XM | EOS2 2105 XM | EOS2 2255 XM |
| Part number | - | - | 1320421 | 1320422 | 1320423 | 1320424 | 1320425 | 1320426 | 1320427 | 1320428 | 1320429 | 1320474 | 1320475 | 1320781 | 1320782 | 1320783 |
| SLAVE | EOS2 155 XS | - | EOS2 305 XS | EOS2 455 XS | EOS2 605 XS | EOS2 755 XS | EOS2 905 XS | EOS2 1055 XS | EOS2 1205 XS | EOS2 1355 XS | EOS2 1505 XS | EOS2 1655 XS | EOS2 1805 XS | EOS2 1955 XS | EOS2 2105 XS | EOS2 2255 XS |
| Part number | 1320430 | - | 1320431 | 1320432 | 1320433 | 1320434 | 1320435 | 1320436 | 1320437 | 1320438 | 1320439 | 1320476 | 1320477 | 1320784 | 1320785 | 1320786 |
| SLAVE 2 | - | - | EOS2 305 XS2 | EOS2 455 XS2 | EOS2 605 XS2 | EOS2 755 XS2 | EOS2 905 XS2 | EOS2 1055 XS2 | EOS2 1205 XS2 | EOS2 1355 XS2 | EOS2 1505 XS2 | EOS2 1655 XS2 | EOS2 1805 XS2 | EOS2 1955 XS2 | EOS2 2105 XS2 | EOS2 2255 XS2 |
| Part number | - | - | 1320441 | 1320442 | 1320443 | 1320444 | 1320445 | 1320446 | 1320447 | 1320448 | 1320449 | 1320478 | 1320479 | 1320787 | 1320788 | 1320789 |
| Protected height (mm) | 160 | - | 310 | 460 | 610 | 760 | 910 | 1060 | 1210 | 1360 | 1510 | 1660 | 1810 | 1960 | 2110 | 2260 |
| Number of beams | 4 | - | 8 | 12 | 16 | 20 | 24 | 28 | 32 | 36 | 40 | 44 | 48 | 52 | 56 | 60 |
| Overall height (mm) Master / Slave 2 * | 236.5 | - | 386.5 | 536.5 | 686.5 | 836.5 | 986.5 | 1136.5 | 1286.5 | 1436.5 | 1586.5 | 1736.5 | 1886.5 | 2013 | 2163 | 2313 |

Resolution 90 mm


| | | | | | | | | | | | | | | | | |
|---|---|---|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| MASTER | - | - | EOS2 309 XM | EOS2 459 XM | EOS2 609 XM | EOS2 759 XM | EOS2 909 XM | EOS2 1059 XM | EOS2 1209 XM | EOS2 1359 XM | EOS2 1509 XM | EOS2 1659 XM | EOS2 1809 XM | EOS2 1959 XM | EOS2 2109 XM | EOS2 2259 XM |
| Part number | - | - | 1320521 | 1320522 | 1320523 | 1320524 | 1320525 | 1320526 | 1320527 | 1320528 | 1320529 | 1320574 | 1320575 | 1320801 | 1320802 | 1320803 |
| SLAVE | - | - | EOS2 309 XS | EOS2 459 XS | EOS2 609 XS | EOS2 759 XS | EOS2 909 XS | EOS2 1059 XS | EOS2 1209 XS | EOS2 1359 XS | EOS2 1509 XS | EOS2 1659 XS | EOS2 1809 XS | EOS2 1959 XS | EOS2 2109 XS | EOS2 2259 XS |
| Part number | - | - | 1320531 | 1320532 | 1320533 | 1320534 | 1320535 | 1320536 | 1320537 | 1320538 | 1320539 | 1320576 | 1320577 | 1320804 | 1320805 | 1320806 |
| SLAVE 2 | - | - | EOS2 309 XS2 | EOS2 459 XS2 | EOS2 609 XS2 | EOS2 759 XS2 | EOS2 909 XS2 | EOS2 1059 XS2 | EOS2 1209 XS2 | EOS2 1359 XS2 | EOS2 1509 XS2 | EOS2 1659 XS2 | EOS2 1809 XS2 | EOS2 1959 XS2 | EOS2 2109 XS2 | EOS2 2259 XS2 |
| Part number | - | - | 1320541 | 1320542 | 1320543 | 1320544 | 1320545 | 1320546 | 1320547 | 1320548 | 1320549 | 1320578 | 1320579 | 1320807 | 1320808 | 1320809 |
| Protected height (mm) | - | - | 310 | 460 | 610 | 760 | 910 | 1060 | 1210 | 1360 | 1510 | 1660 | 1810 | 1960 | 2110 | 2260 |
| Number of beams | - | - | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 24 | 26 | 28 | 30 |
| Overall height (mm) Master / Slave 2 * | - | - | 386.5 | 536.5 | 686.5 | 836.5 | 986.5 | 1136.5 | 1266.5 | 1436.5 | 1586.5 | 1736.5 | 1886.5 | 2013 | 2163 | 2313 |

EOS4 - MASTER/SLAVE MULTIBEAMS

 2, 3, 4 beams

| MASTER | EOS4 2B XM | EOS4 3B XM | EOS4 4B XM |
|--|-------------|-------------|-------------|
| Part number | 1310620 | 1310621 | 1310622 |
| SLAVE | EOS4 2B XS | EOS4 3B XS | EOS4 4B XS |
| Part number | 1310630 | 1310631 | 1310632 |
| SLAVE 2 | EOS4 2B XS2 | EOS4 3B XS2 | EOS4 4B XS2 |
| Part number | 1310640 | 1310641 | 1310642 |
| Number of beams | 2 | 3 | 4 |
| Beam spacing (mm) | 500 | 400 | 300 |
| Protected height (mm) | 510 | 810 | 910 |
| Overall height (mm) Master / Slave 2* | 677 | 977 | 1077 |

EOS2 - MASTER/SLAVE MULTIBEAMS

 2, 3, 4 beams

| MASTER | EOS2 2B XM | EOS2 3B XM | EOS2 4B XM |
|--|-------------|-------------|-------------|
| Part number | 1320620 | 1320621 | 1320622 |
| SLAVE | EOS2 2B XS | EOS2 3B XS | EOS2 4B XS |
| Part number | 1320630 | 1320631 | 1320632 |
| SLAVE 2 | EOS2 2B XS2 | EOS2 3B XS2 | EOS2 4B XS2 |
| Part number | 1320640 | 1320641 | 1320642 |
| Number of beams | 2 | 3 | 4 |
| Beam spacing (mm) | 500 | 400 | 300 |
| Protected height (mm) | 510 | 810 | 910 |
| Overall height (mm) Master / Slave 2* | 677 | 977 | 1077 |

* On Slave versions, the overall height of the light curtain is the same of the standard model.
On Master and Slave 2, the total height of the light curtain is greater due to the addition of the secondary connector.

EOS4 / EOS2 - T (HIGH VIBRATIONS)



 Resolution 30 mm

| AT versions | EOS4 153 AT | EOS4 303 AT | EOS4 453 AT | EOS4 603 AT |
|-----------------------|--------------|--------------|--------------|--------------|
| Part number | 1310821 | 1310822 | 1310823 | 1310824 |
| ATL versions | EOS4 153 ATL | EOS4 303 ATL | EOS4 453 ATL | EOS4 603 ATL |
| Part number | 1310825 | 1310826 | 1310827 | 1310828 |
| XT versions | EOS4 153 XT | EOS4 303 XT | EOS4 453 XT | EOS4 603 XT |
| Part number | 1310816 | 1310817 | 1310818 | 1310810 |
| XTL versions | EOS4 153 XTL | EOS4 303 XTL | EOS4 453 XTL | EOS4 603 XTL |
| Part number | 1310819 | 1310702 | 1310820 | 1310815 |
| AT versions | EOS2 153 AT | EOS2 303 AT | EOS2 453 AT | EOS2 603 AT |
| Part number | 1321222 | 1321201 | 1321223 | 1321224 |
| ATL versions | EOS2 153 ATL | EOS2303 ATL | EOS2453 ATL | EOS2603 ATL |
| Part number | 1321225 | 1321226 | 1321227 | 1321228 |
| XT versions | EOS2 153 XT | EOS2 303 XT | EOS2 453 XT | EOS2 603 XT |
| Part number | 1321214 | 1321213 | 1321216 | 1321217 |
| XTL versions | EOS2 153 XTL | EOS2 303 XTL | EOS2 453 XTL | EOS2 603 XTL |
| Part number | 1321218 | 1321219 | 1321220 | 1321221 |
| Protected height (mm) | 160 | 310 | 460 | 610 |
| Number of beams | 8 | 16 | 23 | 31 |
| Overall height (mm) | 213 | 363 | 513 | 663 |

EOS4 - ATEX VERSIONS*



 Resolution 30 mm

| AH EX versions | EOS4 603 AH EX | EOS4 903 AH EX | EOS4 1203 AH EX | EOS4 1503 AH EX |
|-----------------------|----------------|----------------|-----------------|-----------------|
| Part number | 1010253 | 1010255 | 1010257 | 1010259 |
| Protected height (mm) | 610 | 910 | 1210 | 1510 |
| Number of beams | 31 | 46 | 61 | 76 |
| Overall height (mm) | 780 | 1080 | 1380 | 1680 |

 2, 3, 4 beams

| AH EX versions | EOS4 2B AH EX | EOS4 3B AH EX | EOS4 4B AH EX |
|-----------------------|---------------|---------------|---------------|
| Part number | 1010650 | 1010651 | 1010652 |
| Number of beams | 2 | 3 | 4 |
| Beam spacing (mm) | 500 | 400 | 300 |
| Protected height (mm) | 510 | 810 | 910 |
| Overall height (mm) | 780 | 1080 | 1180 |

* Note: The safety light curtain/grid is delivered already enclosed into its watertight tube with a 10m long prewired cable and the related fastening brackets

EOS4 / EOS2 - WTF / WTHF VERSIONS*



 Resolution 14 mm

| X WTF versions | EOS4 151 X WTF | EOS4 301 X WTF | EOS4 451 X WTF | EOS4 601 X WTF | EOS4 751 X WTF | EOS4 901 X WTF | EOS4 1051 X WTF | EOS4 1201 X WTF | EOS4 1351 X WTF | EOS4 1501 X WTF | EOS4 1651 X WTF | EOS4 1801 X WTF |
|-----------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Part number | 1110030 | 1110031 | 1110032 | 1110033 | 1110034 | 1110035 | 1110036 | 1110037 | 1110038 | 1110039 | 1110051 | 1110052 |
| X WTHF versions | EOS4 151 X WTHF | EOS4 301 X WTHF | EOS4 451 X WTHF | EOS4 601 X WTHF | EOS4 751 X WTHF | EOS4 901 X WTHF | EOS4 1051 X WTHF | EOS4 1201 X WTHF | EOS4 1351 X WTHF | EOS4 1501 X WTHF | EOS4 1651 X WTHF | EOS4 1801 X WTHF |
| Part number | 1110040 | 1110041 | 1110042 | 1110043 | 1110044 | 1110045 | 1110046 | 1110047 | 1110048 | 1110049 | 1110055 | 1110056 |
| Protected height (mm) | 160 | 310 | 460 | 610 | 760 | 910 | 1060 | 1210 | 1360 | 1510 | 1660 | 1810 |
| Number of beams | 15 | 30 | 45 | 60 | 75 | 90 | 105 | 120 | 135 | 150 | 165 | 180 |
| Overall height (mm) | 337 | 487 | 637 | 787 | 937 | 1087 | 1237 | 1387 | 1537 | 1687 | 1837 | 1987 |

PART NUMBERS

Resolution 30 mm

| XH WTF versions | EOS4 153 XH WTF | EOS4 303 XH WTF | EOS4 453 XH WTF | EOS4 603 XH WTF | EOS4 753 XH WTF | EOS4 903 XH WTF | EOS4 1053 XH WTF | EOS4 1203 XH WTF | EOS4 1353 XH WTF | EOS4 1503 XH WTF | EOS4 1653 XH WTF | EOS4 1803 XH WTF |
|-----------------------|------------------|------------------|------------------|------------------|------------------|------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Part number | 1110280 | 1110281 | 1110282 | 1110283 | 1110284 | 1110285 | 1110286 | 1110287 | 1110288 | 1110289 | 1110053 | 1110054 |
| XH WTHF versions | EOS4 153 XH WTHF | EOS4 303 XH WTHF | EOS4 453 XH WTHF | EOS4 603 XH WTHF | EOS4 753 XH WTHF | EOS4 903 XH WTHF | EOS4 1053 XH WTHF | EOS4 1203 XH WTHF | EOS4 1353 XH WTHF | EOS4 1503 XH WTHF | EOS4 1653 XH WTHF | EOS4 1803 XH WTHF |
| Part number | 1110290 | 1110291 | 1110292 | 1110293 | 1110294 | 1110295 | 1110296 | 1110297 | 1110298 | 1110299 | 1110057 | 1110058 |
| Protected height (mm) | 160 | 310 | 460 | 610 | 760 | 910 | 1060 | 1210 | 1360 | 1510 | 1660 | 1810 |
| Number of beams | 8 | 16 | 23 | 31 | 38 | 46 | 53 | 61 | 68 | 76 | 83 | 91 |
| Overall height (mm) | 337 | 487 | 637 | 787 | 937 | 1087 | 1237 | 1387 | 1537 | 1687 | 1837 | 1987 |

Resolution 30 mm

| XH WTF versions | EOS2 153 X WTF | EOS2 303X WTF | EOS2 453 X WTF | EOS2 603 X WTF | EOS2 753 X WTF | EOS2 903 X WTF | EOS2 1053 X WTF | EOS2 1203 X WTF | EOS2 1353 X WTF | EOS2 1503 X WTF | EOS2 1653 X WTF | EOS2 1803 X WTF |
|-----------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Part number | 1120230 | 1120231 | 1120232 | 1120233 | 1120234 | 1120235 | 1120236 | 1120237 | 1120238 | 1120239 | 1120050 | 1120051 |
| XH WTHF versions | EOS2 153 X WTHF | EOS2 303 X WTHF | EOS2 453 X WTHF | EOS2 603 X WTHF | EOS2 753 X WTHF | EOS2 903 X WTHF | EOS2 1053 X WTHF | EOS2 1203 X WTHF | EOS2 1353 X WTHF | EOS2 1503 X WTHF | EOS2 1653 X WTHF | EOS2 1803 X WTHF |
| Part number | 1120240 | 1120241 | 1120242 | 1120243 | 1120244 | 1120245 | 1120246 | 1120247 | 1120248 | 1120249 | 1120052 | 1120053 |
| Protected height (mm) | 160 | 310 | 460 | 610 | 760 | 910 | 1060 | 1210 | 1360 | 1510 | 1660 | 1810 |
| Number of beams | 8 | 16 | 23 | 31 | 38 | 46 | 53 | 61 | 68 | 76 | 83 | 91 |
| Overall height (mm) | 337 | 487 | 637 | 787 | 937 | 1087 | 1237 | 1387 | 1537 | 1687 | 1837 | 1987 |

EOS4 - WTF / WTHF MULTIBEAMS

2, 3, 4 beams

| | WTF versions | | | WTHF versions | | |
|-----------------------|----------------|----------------|----------------|-----------------|-----------------|-----------------|
| | EOS4 2B XH WTF | EOS4 3B XH WTF | EOS4 4B XH WTF | EOS4 2B XH WTHF | EOS4 3B XH WTHF | EOS4 4B XH WTHF |
| Part number | 1110670 | 1110671 | 1110672 | 1110675 | 1110676 | 1110677 |
| Number of beams | 2 | 3 | 4 | 2 | 3 | 4 |
| Beam spacing (mm) | 500 | 400 | 300 | 500 | 400 | 300 |
| Protected height (mm) | 510 | 810 | 910 | 510 | 810 | 910 |
| Overall height (mm) | 777 | 1077 | 1177 | 777 | 1077 | 1177 |

EOS2 - WTF / WTHF MULTIBEAMS

2, 3, 4 beams

| | WTF versions | | | WTHF versions | | |
|-----------------------|---------------|---------------|---------------|----------------|----------------|----------------|
| | EOS2 2B X WTF | EOS2 3B X WTF | EOS2 4B X WTF | EOS2 2B X WTHF | EOS2 3B X WTHF | EOS2 4B X WTHF |
| Part number | 1120620 | 1120621 | 1120622 | 1120625 | 1120626 | 1120627 |
| Number of beams | 2 | 3 | 4 | 2 | 3 | 4 |
| Beam spacing (mm) | 500 | 400 | 300 | 500 | 400 | 300 |
| Protected height (mm) | 510 | 810 | 910 | 510 | 810 | 910 |
| Overall height (mm) | 777 | 1077 | 1177 | 777 | 1077 | 1177 |

* Note: The safety light curtain/grid is delivered already enclosed into its watertight tube with a 10m long prewired cable and the related fastening brackets

AVAILABLE ACCESSORIES

- Connecting cables
- Special mounting brackets
- Floor mounting columns
- Heavy-duty protection screens
- Laser alignment aid
- Vibration dampers

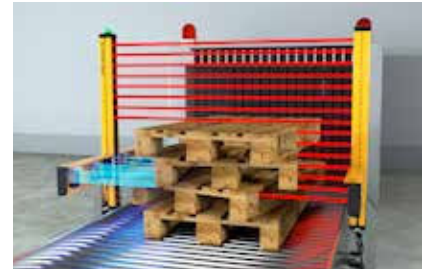
See page 45



ACCESS CONTROL BARRIERS

The Safegate Type 4 range of access control barriers is the ideal solution for the protection of a vast number of high-risk industrial applications, in particular those requiring a high level of integration of the Muting functions.

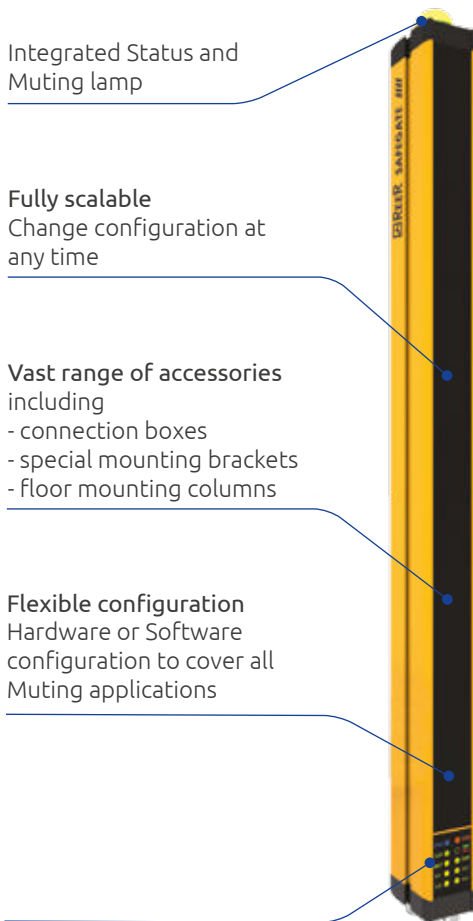
Safegate guarantees the perfect integration of all Muting sensors directly connected to the access control barrier.



Safegate Configuration Software (SCS) for SMPO versions



Configuration with MA Muting Arms with integrated single-beam sensors



Integrated Status and Muting lamp

Fully scalable
Change configuration at any time

Vast range of accessories including
- connection boxes
- special mounting brackets
- floor mounting columns

Flexible configuration
Hardware or Software configuration to cover all Muting applications

Pre-configured and pre-wired Muting arms

LONG RANGE

Special version S and SO with range up to 80 m (without Muting functions)

3 pre-configured Muting logics
- Exit-only (parallel/crossed beams)
- Entry-Exit (parallel beams)
- Entry-Exit (crossed beams)

Watch the video!



Configuration with MZ Muting Brackets with M⁵ multi-beam sensors or M^{TRX} retro-reflector sensors

M⁵ multi-beam Muting sensors
Ideal for sensing unconventional objects
Also available in TRX version with retro-reflective Muting sensors **M^{TRX}**

Color-coding

Color-coded connectors for easy installation



SAFETY LEVEL

TYPE 4

SIL 3 - SILCL 3
PL e - Cat. 4



MUTING SENSORS AND ACCESSORIES

VERSIONS AVAILABLE



Without Muting functions



Hardware configuration









Hardware configuration with integrated Status and Muting lamp


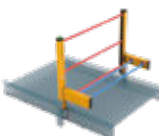

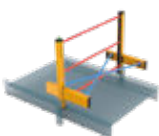
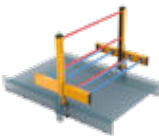
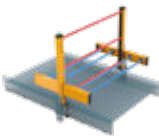
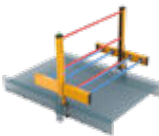


Hardware or Software configuration with integrated Status and Muting lamp

Also available as  with passive retro-reflective elements

MUTING SENSORS

| | | | | | | |
|--|---|--|---|--|---|--|
|  | MA L2X [1390800] 2 integrated sensors (emitter and receiver) |  | L Muting logic Crossed beams One-way Exit-only Range (m) 1 ... 2,5 |  | MA T2X [1390802] 2 integrated sensors (emitter and receiver) | T Muting logic Crossed beams Two-way Entry-Exit Range (m) 1 ... 2,5 |
|  | MA L2P TRX [1390804] 2 integrated retro-reflector sensors |  | L Muting logic Parallel beams One-way Exit-only Range (m) 0 ... 3,5 |  | MA T4P TRX [1390805] 4 integrated retro-reflector sensors | T Muting logic Parallel beams Two-way Entry-Exit Range (m) 0 ... 3,5 |

| | | | | | | |
|---|---|---|---|---|--|--|
|  | MZ Muting brackets with M ^S or M ^{TRX} sensors |  | MZ L2XP [1390808] 2 M ^S multi-beam sensors |  | MZ L2XP TRX [1390815] 2 M ^{TRX} retro-reflector sensors | L Muting logic Crossed or Parallel beams One-way Exit-only Range (m) 0 ... 3,5 |
| |  | MZ T2X [1390809] 2 M ^S multi-beam sensors |  | MZ T2X TRX [1390816] 2 M ^{TRX} retro-reflector sensors | T Muting logic Crossed beams Two-way Entry-Exit Range (m) 0 ... 3,5 | |
| |  | MZ T4P [1390810] 4 M ^S multi-beam sensors |  | MZ T4P TRX [1390817] 4 M ^{TRX} retro-reflector sensors | T Muting logic Parallel beams Two-way Entry-Exit Range (m) 0 ... 3,5 | |
| | For Muting sensors M ^S and M ^{TRX} see page 42 | | | | | |

SPECIAL MUTING SENSORS

| Model | Part number | Used for.. | Model | Part number | Used for.. |
|---------------|-------------|--|---------------|-------------|---|
| MA L2P TRX G | 1390813 | Transparent material (range 0 ... 2 m) | MA L2P TRX VG | 1390821 | High speed conveyors for transparent material (range 0 ... 2 m) |
| MA T4P TRX G | 1390814 | | MA T4P TRX VG | 1390822 | |
| MZ L2XP TRX G | 1390818 | | MZ L2XP H | 1390823 | |
| MZ T2X TRX G | 1390819 | | MZ L2XP TRX H | 1390826 | |
| MZ T4P TRX G | 1390820 | | MZ T2X H | 1390824 | |
| MA L2P TRX V | 1390806 | High speed conveyors (range 0 ... 3,5 m) | MZ T2X TRX H | 1390828 | High range (range 0 ... 5 m) |
| MA T4P TRX V | 1390807 | | MZ T4P H | 1390825 | |
| MZ L2XP V | 1390811 | | MZ T4P TRX H | 1390827 | |
| MZ L2XP V | 1390811 | | | | |
| MZ T4P V | 1390812 | | | | |

CABLES NEEDED

| SM / SMO / SMPO | S | LR / LR ILP |
|--------------------------------------|-------------------|-------------------|
| Emitter: M12 5-pole (CDx) | M12 5-pole (CDx) | M12 5-pole (CDx) |
| Receiver: M12 12-pole (CS12Dx) | M12 8-pole (C8Dx) | M12 8-pole (C8Dx) |
| SM TRX / SMO TRX / SMPO TRX | | |
| Active element: M12 12-pole (CS12Dx) | | |
| S TRX | | S TRX - A |
| Active element: M12 8-pole (C8Dx) | | M12 5-pole (CDx) |

CS12USB [1390905] USB-M12 5-pole - SMPO e SMPO TRX versions programming cable

Resolution 14 mm

| | | | | | | | | | | | | |
|-----------------------|----------|----------|----------|----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| SM versions | SM 301 | SM 451 | SM 601 | SM 751 | SM 901 | SM 1051 | SM 1201 | SM 1351 | SM 1501 | SM 1651 | SM 1801 | SM 1951 |
| Part number | 1390021 | 1390022 | 1390023 | 1390024 | 1390025 | 1390026 | 1390027 | 1390028 | 1390029 | 1390030 | 1390031 | 1390032 |
| SMO versions | SMO 301 | SMO 451 | SMO 601 | SMO 751 | SMO 901 | SMO 1051 | SMO 1201 | SMO 1351 | SMO 1501 | SMO 1651 | SMO 1801 | SMO 1951 |
| Part number | 1390041 | 1390042 | 1390043 | 1390044 | 1390045 | 1390046 | 1390047 | 1390048 | 1390049 | 1390050 | 1390051 | 1390052 |
| SMPO versions | SMPO 301 | SMPO 451 | SMPO 601 | SMPO 751 | SMPO 901 | SMPO 1051 | SMPO 1201 | SMPO 1351 | SMPO 1501 | SMPO 1651 | SMPO 1801 | SMPO 1951 |
| Part number | 1390081 | 1390082 | 1390083 | 1390084 | 1390085 | 1390086 | 1390087 | 1390088 | 1390089 | 1390090 | 1390091 | 1390092 |
| Protected height (mm) | 310 | 460 | 610 | 760 | 910 | 1060 | 1210 | 1360 | 1510 | 1660 | 1810 | 1960 |
| Number of beams | 30 | 45 | 60 | 75 | 90 | 105 | 120 | 135 | 150 | 165 | 180 | 195 |
| Overall height (mm)* | 420 | 570 | 720 | 870 | 1020 | 1170 | 1320 | 1470 | 1620 | 1770 | 1920 | 2070 |

* with lamp

Resolution 30 mm

| | | | | | | | | | | | | | | |
|-----------------------|----------|----------|----------|----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| S versions | S 303 | S 453 | S 603 | S 753 | S 903 | S 1053 | S 1203 | S 1353 | S 1503 | S 1653 | S 1803 | S 1953 | S 2103 | S 2253 |
| Part number | 1390201 | 1390202 | 1390203 | 1390204 | 1390205 | 1390206 | 1390207 | 1390208 | 1390209 | 1390210 | 1390211 | 1390212 | 1390213 | |
| SM versions | SM 303 | SM 453 | SM 603 | SM 753 | SM 903 | SM 1053 | SM 1203 | SM 1353 | SM 1503 | SM 1653 | SM 1803 | SM 1953 | SM 2103 | SM 2253 |
| Part number | 1390221 | 1390222 | 1390223 | 1390224 | 1390225 | 1390226 | 1390227 | 1390228 | 1390229 | 1390230 | 1390231 | 1390232 | 1390233 | 1390234 |
| SMO versions | SMO 303 | SMO 453 | SMO 603 | SMO 753 | SMO 903 | SMO 1053 | SMO 1203 | SMO 1353 | SMO 1503 | SMO 1653 | SMO 1803 | SMO 1953 | SMO 2103 | SMO 2253 |
| Part number | 1390241 | 1390242 | 1390243 | 1390244 | 1390245 | 1390246 | 1390247 | 1390248 | 1390249 | 1390250 | 1390251 | 1390252 | 1390253 | 1390254 |
| SMPO versions | SMPO 303 | SMPO 453 | SMPO 603 | SMPO 753 | SMPO 903 | SMPO 1053 | SMPO 1203 | SMPO 1353 | SMPO 1503 | SMPO 1653 | SMPO 1803 | SMPO 1953 | SMPO 2103 | SMPO 2253 |
| Part number | 1390281 | 1390282 | 1390283 | 1390284 | 1390285 | 1390286 | 1390287 | 1390288 | 1390289 | 1390290 | 1390291 | 1390292 | 1390293 | 1390294 |
| Protected height (mm) | 310 | 460 | 610 | 760 | 910 | 1060 | 1210 | 1360 | 1510 | 1660 | 1810 | 1960 | 2110 | 2260 |
| Number of beams | 16 | 23 | 31 | 38 | 46 | 53 | 61 | 68 | 76 | 83 | 91 | 98 | 106 | 113 |
| Overall height (mm)* | 420 | 570 | 720 | 870 | 1020 | 1170 | 1320 | 1470 | 1620 | 1770 | 1920 | 2070 | 2220 | 2370 |

* with lamp

Resolution 40 mm

| | | | | | | | | | | | | | | |
|-----------------------|----------|----------|----------|----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| S versions | S 304 | S 454 | S 604 | S 754 | S 904 | S 1054 | S 1204 | S 1354 | S 1504 | S 1654 | S 1804 | S 1954 | S 2104 | S 2254 |
| Part number | 1390301 | 1390302 | 1390303 | 1390304 | 1390305 | 1390306 | 1390307 | 1390308 | 1390309 | 1390310 | 1390311 | 1390312 | 1390313 | 1390314 |
| SM versions | SM 304 | SM 454 | SM 604 | SM 754 | SM 904 | SM 1054 | SM 1204 | SM 1354 | SM 1504 | SM 1654 | SM 1804 | SM 1954 | SM 2104 | SM 2254 |
| Part number | 1390321 | 1390322 | 1390323 | 1390324 | 1390325 | 1390326 | 1390327 | 1390328 | 1390329 | 1390330 | 1390331 | 1390332 | 1390333 | 1390334 |
| SMO versions | SMO 304 | SMO 454 | SMO 604 | SMO 754 | SMO 904 | SMO 1054 | SMO 1204 | SMO 1354 | SMO 1504 | SMO 1654 | SMO 1804 | SMO 1954 | SMO 2104 | SMO 2254 |
| Part number | 1390341 | 1390342 | 1390343 | 1390344 | 1390345 | 1390346 | 1390347 | 1390348 | 1390349 | 1390350 | 1390351 | 1390352 | 1390353 | 1390354 |
| SMPO versions | SMPO 304 | SMPO 454 | SMPO 604 | SMPO 754 | SMPO 904 | SMPO 1054 | SMPO 1204 | SMPO 1354 | SMPO 1504 | SMPO 1654 | SMPO 1804 | SMPO 1954 | SMPO 2104 | SMPO 2254 |
| Part number | 1390381 | 1390382 | 1390383 | 1390384 | 1390385 | 1390386 | 1390387 | 1390388 | 1390389 | 1390390 | 1390391 | 1390392 | 1390393 | 1390394 |
| Protected height (mm) | 310 | 460 | 610 | 760 | 910 | 1060 | 1210 | 1360 | 1510 | 1660 | 1810 | 1960 | 2110 | 2260 |
| Number of beams | 11 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 |
| Overall height (mm)* | 420 | 570 | 720 | 870 | 1020 | 1170 | 1320 | 1470 | 1620 | 1770 | 1920 | 2070 | 2220 | 2370 |

* with lamp

Resolution 40 mm Long Range



| | | | | | | | | | | | |
|-----------------------|---|-----------|-----------|---|-----------|---|------------|---|------------|---|------------|
| S LR versions | - | S 404 LR | S 604 LR | - | S 904 LR | - | S 1204 LR | - | S 1504 LR | - | S 1804 LR |
| Part number | - | 1390079 | 1390093 | - | 1390094 | - | 1390095 | - | 1390096 | - | 1390097 |
| SO LR versions | - | SO 404 LR | SO 604 LR | - | SO 904 LR | - | SO 1204 LR | - | SO 1504 LR | - | SO 1804 LR |
| Part number | - | 1390100 | 1390113 | - | 1390114 | - | 1390115 | - | 1390116 | - | 1390117 |
| Protected height (mm) | - | 400 | 600 | - | 900 | - | 1200 | - | 1500 | - | 1800 |
| Number of beams | - | 20 | 30 | - | 45 | - | 60 | - | 75 | - | 90 |
| Overall height (mm)* | - | 500 | 700 | - | 1000 | - | 1300 | - | 1600 | - | 1800 |

* with lamp

PART NUMBERS



2, 3, 4 beams

| S versions | S 2B | S 3B | S 4B |
|-------------------------------|---------|---------|---------|
| Part number | 1390600 | 1390601 | 1390602 |
| SM versions | SM 2B | SM 3B | SM 4B |
| Part number | 1390620 | 1390621 | 1390622 |
| SMO versions | SMO 2B | SMO 3B | SMO 4B |
| Part number | 1390640 | 1390641 | 1390642 |
| SMPO versions | SMPO 2B | SMPO 3B | SMPO 4B |
| Part number | 1390680 | 1390681 | 1390682 |
| Number of beams | 2 | 3 | 4 |
| Beams spacing (mm) | 500 | 400 | 300 |
| Protect. height (mm) | 510 | 810 | 910 |
| Overall height with lamp (mm) | 710 | 1010 | 1110 |

Note: Overall height of versions without lamp (S, S TRX, SM, SM TRX) is 25 mm lower than indicated in the tables.



2, 3, 4 beams TRX

| S TRX versions | S 2B TRX | S 3B TRX | S 4B TRX |
|-------------------------------|--------------|--------------|--------------|
| Part number | 1390610 | 1390611 | 1390612 |
| S TRX - A versions | S 2B TRX - A | S 3B TRX - A | S 4B TRX - A |
| Part number | 1390616 | 1390617 | 1390618 |
| SM TRX versions | SM 2B TRX | SM 3B TRX | SM 4B TRX |
| Part number | 1390630 | 1390631 | 1390632 |
| SMO TRX versions | SMO 2B TRX | SMO 3B TRX | SMO 4B TRX |
| Part number | 1390650 | 1390651 | 1390652 |
| SMPO TRX versions | SMPO 2B TRX | SMPO 3B TRX | SMPO 4B TRX |
| Part number | 1390690 | 1390691 | 1390692 |
| Number of beams | 2 | 3 | 4 |
| Beams spacing (mm) | 500 | 400 | 300 |
| Protect. height (mm) | 510 | 810 | 910 |
| Overall height with lamp (mm) | 699 | 970 | 1070 |



2, 3, 4 beams Long Range / Long Range ILP*

| S LR versions | S 2B LR | S 3B LR | S 4B LR |
|-------------------------------|--------------|--------------|--------------|
| Part number | 1390013 | 1390014 | 1390015 |
| S LR ILP versions | S 2B LR ILP | S 3B LR ILP | S 4B LR ILP |
| Part number | 1390033 | 1390034 | 1390035 |
| SO LR versions | SO 2B LR | SO 3B LR | SO 4B LR |
| Part number | 1390016 | 1390017 | 1390018 |
| SO LR ILP versions | SO 2B LR ILP | SO 3B LR ILP | SO 4B LR ILP |
| Part number | 1390036 | 1390037 | 1390038 |
| Number of beams | 2 | 3 | 4 |
| Beams spacing (mm) | 500 | 400 | 300 |
| Protect. height (mm) | 510 | 810 | 910 |
| Overall height with lamp (mm) | 673 / 698 | 973 / 998 | 1073 / 1098 |

ILP: Integrated laser pointer.



2, 3, 4 beams Long Range / Long Range ILP with automatic restart

| S LR-A versions | S 2B LR-A | S 3B LR-A | S 4B LR-A |
|-------------------------------|----------------|----------------|----------------|
| Part number | 1390053 | 1390054 | 1390055 |
| S LR-A ILP versions | S 2B LR-A ILP | S 3B LR-A ILP | S 4B LR-A ILP |
| Part number | 1390073 | 1390074 | 1390075 |
| SO LR-A versions | SO 2B LR-A | SO 3B LR-A | SO 4B LR-A |
| Part number | 1390056 | 1390057 | 1390058 |
| SO LR-A ILP versions | SO 2B LR-A ILP | SO 3B LR-A ILP | SO 4B LR-A ILP |
| Part number | 1390076 | 1390077 | 1390078 |
| Number of beams | 2 | 3 | 4 |
| Beams spacing (mm) | 500 | 400 | 300 |
| Protect. height (mm) | 510 | 810 | 910 |
| Overall height with lamp (mm) | 673 / 698 | 973 / 998 | 1073 / 1098 |

Note: A indicates the version of light curtain with Automatic Restart

CONNECTION BOXES

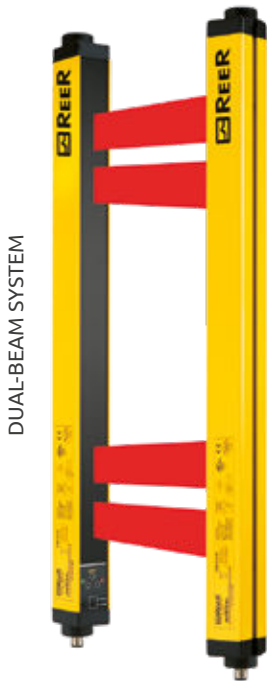


| Models | M SG BOX | M SGO BOX | M SG BOX RST | M SG BOX PLUS | M SGO BOX PLUS | M SG BOX OSSD | M SGO BOX OSSD | M SG BOX RST P |
|--|---------------------------------|-----------|---------------------|---------------------------------|----------------|----------------------------|----------------|-----------------|
| Part number | 1390953 | 1390952 | 1390959 | 1390955 | 1390956 | 1390957 | 1390958 | 1390960 |
| Lamp | no | yes | no | no | yes | no | yes | no |
| Safety outputs * | Relè - 2 NA + 1 NC 2A - 250 Vca | | | Relè - 4 NA + 1 NC 2A - 250 Vca | | 2 OSSD 2 PNP 400mA - 24Vcc | | |
| For light curtains models... | All excepted S version | | S and S TRX version | All excepted S version | | | | S TRX-A version |
| Override | yes | | no | yes | | | | no |
| I/O modules connection | no | | | | | | | |
| Receiver or TRX active element connector | CFF12Px | | CFF8Px | CFF12Px | | | | CJBEx |
| Emitter connector | CFM5Px | | | | | | | |
| Aux. lamp connector | no | CFM5Px | no | CFM5Px | no | CFM5Px | CFM5Px | no |
| I/O module connector | no | | | | | | | |

* Each NO safety output line is interrupted twice by the integrated relays

ADMIRAL AX LR / LR DB

LONG RANGE AND LONG RANGE DUAL-BEAM



Admiral Long Range including a special version featuring an innovative Dual-Beam System. Ideal for outdoor applications as it decreases the sensitivity of the light curtain from small objects that could accidentally interrupt the beams, i.e. birds or leaves but also heavy rain or snow.

- AX LR versions - Max. range: selectable 22 or 60 m
- AX LR DB versions - Max. range: selectable 25 or 80 m



2, 3, 4 beams

| | AX 2B LR | AX 3B LR | AX 4B LR | AX 2B LR DB | AX 3B LR DB | AX 4B LR DB |
|-----------------------|----------|----------|----------|-------------|-------------|-------------|
| Part number | 1334603 | 1334604 | 1334605 | 1334606 | 1334607 | 1334608 |
| Nr. beams | 2 | 3 | 4 | 2 | 3 | 4 |
| Protected height (mm) | 510 | 810 | 910 | 510 | 810 | 910 |
| Overall height (mm) | 711 | 1011 | 1111 | 771 | 1072 | 1172 |

CABLES NEEDED

Emitter: M12 5-pole (CDx)
Receiver: M12 8-pole (C8Dx)

See page 46

ADMIRAL AX LR WT / LR WTH / LR DB WTH

WITH IP67 WATERTIGHT ENCLOSURE



Heated versions available

The IP67 watertight enclosure allows the light curtains to be used in harsh working environments with exposure to water and steam.

- AX LR WT / WTH models - Max. range: selectable 18 or 50 m
- AX LR DB WTH models - Max. range: selectable 20 or 60 m



2, 3, 4 beams

| | AX 2B LR WT | AX 3B LR WT | AX 4B LR WT | AX 2B LR WTH | AX 3B LR WTH | AX 4B LR WTH |
|-----------------------|------------------------------------|-------------|-----------------|--------------|-----------------|--------------|
| Part number | 1134603 | 1134604 | 1134605 | 1139603 | 1139604 | 1139605 |
| Nr. beams | 2 | 3 | 4 | 2 | 3 | 4 |
| Protected height (mm) | 510 | 810 | 910 | 510 | 810 | 910 |
| Overall height (mm) | 841 | 1141 | 1241 | 841 | 1141 | 1241 |
| | AX 2B LR DB WTH | | AX 3B LR DB WTH | | AX 3B LR DB WTH | |
| Part number | 1139606 | | 1139607 | | 1139645 | |
| Nr. beams | 2 | | 3 | | 4 | |
| Protected height (mm) | 510 | | 810 | | 910 | |
| Overall height (mm) | 902 | | 1202 | | 1302 | |
| Wiring | Supplied with pre-wired 10 m cable | | | | | |

WT: watertight
WTH: watertight + heated

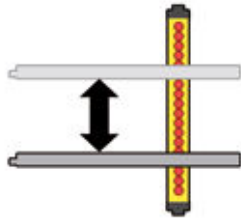
SAFETY LEVEL



BLANKING VERSIONS

ADMIRAL AX BK

WITH BLANKING FUNCTION



Built-in floating blanking function with 5 configuration options. Floating Blanking allows the detected object to move freely inside the light curtain's protected field, under the condition that the intercepted beams are adjacent and that their number is not higher than the configured one. The ideal light curtain for protecting press brakes, automatic machines and robotised areas, where the material being processed or moving parts of the machine cross the field protected by the light curtain.

- Start/Restart interlock and EDM via external SR ONE interface
- Protected heights: 160 mm ... 2160 mm
- Max. range: 18 m

CABLES NEEDED

Emitter: M12 5-pole (CDx)
Receiver: M12 8-pole (C8Dx)

See page 46



SAFETY LEVEL

TYPE 4

SILCL 3
PLe - Cat. 4

Resolution 14 mm

| AX BK versions | AX 151 BK | AX 301 BK | AX 451 BK | AX 601 BK | AX 751 BK | AX 901 BK | AX 1051 BK | AX 1201 BK | AX 1351 BK | AX 1501 BK | AX 1651 BK | AX 1801 BK |
|-----------------------|-----------|-----------|-----------|-----------|-----------|-----------|------------|------------|------------|------------|------------|------------|
| Part Number | 1334060 | 1334061 | 1334062 | 1334063 | 1334064 | 1334065 | 1334066 | 1334067 | 1334068 | 1334069 | 1334070 | 1334071 |
| Protected height (mm) | 160 | 310 | 460 | 610 | 760 | 910 | 1060 | 1210 | 1360 | 1510 | 1660 | 1810 |
| Number of beams | 15 | 30 | 45 | 60 | 75 | 90 | 105 | 120 | 135 | 150 | 165 | 180 |
| Overall height (mm) | 261 | 411 | 561 | 711 | 861 | 1011 | 1161 | 1311 | 1461 | 1611 | 1761 | 1911 |

Resolution 20 mm

| AX BK versions | AX 152 BK | AX 302 BK | AX 452 BK | AX 602 BK | AX 752 BK | AX 902 BK | AX 1052 BK | AX 1202 BK | AX 1352 BK | AX 1502 BK | AX 1652 BK | AX 1802 BK |
|-----------------------|-----------|-----------|-----------|-----------|-----------|-----------|------------|------------|------------|------------|------------|------------|
| Part Number | 1334160 | 1334161 | 1334162 | 1334163 | 1334164 | 1334165 | 1334166 | 1334167 | 1334168 | 1334169 | 1334170 | 1334171 |
| Protected height (mm) | 160 | 310 | 460 | 610 | 760 | 910 | 1060 | 1210 | 1360 | 1510 | 1660 | 1810 |
| Number of beams | 15 | 30 | 45 | 60 | 75 | 90 | 105 | 120 | 135 | 150 | 165 | 180 |
| Overall height (mm) | 261 | 411 | 561 | 711 | 861 | 1011 | 1161 | 1311 | 1461 | 1611 | 1761 | 1911 |

Resolution 40 mm

| AX BK versions | AX 104 BK | - | AX 454 BK | AX 604 BK | AX 754 BK | AX 904 BK | AX 1054 BK | AX 1204 BK | AX 1354 BK | AX 1504 BK | AX 1654 BK | AX 1804 BK | AX 1954 BK | AX 2104 BK | AX 2254 BK |
|-----------------------|-----------|---|-----------|-----------|-----------|-----------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Part Number | 1334361 | - | 1334362 | 1334363 | 1334364 | 1334365 | 1334366 | 1334367 | 1334368 | 1334369 | 1334370 | 1334371 | 1334461 | 1334465 | 1334468 |
| Protected height (mm) | 310 | - | 460 | 610 | 760 | 910 | 1060 | 1210 | 1360 | 1510 | 1660 | 1810 | 1960 | 2110 | 2260 |
| Number of beams | 10 | - | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 |
| Overall height (mm) | 411 | - | 561 | 711 | 861 | 1011 | 1161 | 1311 | 1461 | 1611 | 1761 | 1911 | 2061 | 2211 | 2361 |

Resolution 90 mm

| AX BK versions | - | - | - | AX 609 BK | AX 759 BK | AX 909 BK | AX 1059 BK | AX 1209 BK | AX 1359 BK | AX 1509 BK | AX 1659 BK | AX 1809 BK | AX 1959 BK | AX 2109 BK | AX 2259 BK |
|-----------------------|---|---|---|-----------|-----------|-----------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Part Number | - | - | - | 1334563 | 1334564 | 1334565 | 1334566 | 1334567 | 1334568 | 1334569 | 1334570 | 1334571 | 1334463 | 1334572 | 1334470 |
| Protected height (mm) | - | - | - | 610 | 760 | 910 | 1060 | 1210 | 1360 | 1510 | 1660 | 1810 | 1960 | 2110 | 2260 |
| Number of beams | - | - | - | 9 | 11 | 13 | 15 | 17 | 19 | 21 | 23 | 25 | 27 | 29 | 31 |
| Overall height (mm) | - | - | - | 711 | 861 | 1011 | 1161 | 1311 | 1461 | 1611 | 1761 | 1911 | 2061 | 2211 | 2361 |



MOSAIC

MODULAR SAFETY
INTEGRATED CONTROLLER

[1100xxx] with screw terminal
[1100xxx] with clamp terminal

Compatibility

Mosaic M1

Not compatible with the following expansion units:
MA2, MA4, MI8O4, MO4L

Mosaic M1S and Mosaic M1S COM

Compatible with all expansion units

MOSAIC M1

[1100000] [1100002]
Standard Master Unit

- 8 digital inputs
- 2 inputs for Start/Restart interlock and EDM
- 2 pairs OSSD safety outputs (PNP 400 mA)
- 2 status outputs (PNP 100 mA)
- 4 test outputs (for short-circuit monitoring)
- Field-bus interface with MBx modules



Connect up to 14 expansions...

Additional inputs



Additional outputs



Additional I/Os



Additional status outputs



MIx / MI12 T8 / MAX

Input expansion units

MI8 [1100020] [1100120]

- 8 digital inputs
- 4 test outputs (for short-circuit monitoring)

MI16 [1100021] [1100121]

- 16 digital inputs
- 4 test outputs (for short-circuit monitoring)

MI12 T8 [1100022] [1100122]

- 12 digital inputs
- 8 test outputs (for short-circuit monitoring)

Can manage up to 4 independent safety mats/edges

MA2 [1100026] [1100126]

MA4 [1100025] [1100125]

2 (MA2) or 4 (MA4) independent isolated analogue channels (500 V)

Each channel can detect a 4-20 mA current or a 0-10 V voltage (selectable via MSD software)

Each channel can supply 24VDC up to 30 mA

MOx / MO4L HC S8 / MO4L

Output expansion units

MO2 [1100030] [1100130]

- 2 pairs OSSD safety outputs (PNP 400 mA)
- 2 inputs for Start/Restart interlock and EDM
- 2 status outputs (PNP 100 mA). *See note 2*

MO4 [1100031] [1100131]

- 4 pairs OSSD safety outputs (PNP 400 mA)
- 4 inputs for Start/Restart interlock and EDM
- 4 status outputs (PNP 100 mA). *See note 2*

MO4L [1100012] [1100212]

- 4 single (or 2 pairs) OSSD safety outputs (PNP 400 mA)

Up to 4 inputs for Start/Restart interlock and EDM. *See note 1*

Up to 4 status outputs (PNP 100 mA). *See note 1 and note 2*

MO4L HC S8 POWER [1100032] [1100132]

- 4 single (or 2 pairs) OSSD safety outputs (PNP 2,0 A for each channel, total current 8 A)
- 4 inputs for Start/Restart interlock and EDM
- 8 status outputs (PNP 100 mA). *See note 2*



MI8Ox

Input/Output expansion units

MI8O2 [1100010] [1100110]

- 8 digital inputs
- 2 inputs for Start/Restart interlock and EDM

2 pairs OSSD safety outputs (PNP 400 mA)

2 status outputs (PNP 100 mA). *See note 2*

4 test outputs (for short-circuit monitoring)

MI8O4 [1100011] [1100111]

- 8 digital inputs
- Up to 4 inputs for Start/Restart interlock and EDM. *See note 1*

4 single (or 2 pairs) OSSD safety outputs (PNP 400 mA)

Up to 4 status outputs (PNP 100 mA). *See note 1 and note 2*

4 test outputs (for short-circuit monitoring)

MOSx

Status output expansion units

MOS8 [1100091] [1100191]

- 8 status outputs (PNP 100 mA). *See note 2*

MOS16 [1100092] [1100192]

- 16 status outputs (PNP 100 mA). *See note 2*

Note 1:
The total number of feedback inputs + status outputs must be not greater than 4

Note 2:
Safety Level:
SIL 1 - SILCL1 PL C

ACCESSORIES

MSC [1100061]

Mosaic Safety Communication connector

MCM [1100060]

Mosaic Configuration Memory

MTBC-Y [1100046]

6 x clamp terminal blocks

MTB-Y [1100044]

6 x screw terminal blocks

HM1 [1100090]

Display Unit

CSU [1100062]

USB-A configuration cable
Mosaic M1 Standard Master

CSU-C [1100039]

USB-C configuration cable
Mosaic M1S and M1S COM
Enhanced Master

MC10 [1100113] - 10 m

MC25 [1100063] - 25 m

MC50 [11 00064] - 50 m

MC100 [1100065] - 100 m

Serial cable for MSC bus



MOSAIC M1S
[1100003] [1100004]

Enhanced Master Unit

- 8 digital inputs
- Up to 4 inputs for Start/Restart interlock and EDM. *See note 1*
- 4 single (or 2 pairs) OSSD safety outputs (PNP 400 mA)
- Up to 4 status outputs (PNP 100 mA). *See note 2*
- 4 test outputs (for short-circuit monitoring)
- Field-bus interface with MBx modules



MOSAIC M1S COM
[1100006] [1100007]

Enhanced Field-bus Ready Master Unit

- 8 digital inputs
- Up to 4 inputs for Start/Restart interlock and EDM. *See note 1*
- 4 single (or 2 pairs) OSSD safety outputs (PNP 400 mA)
- Up to 4 status outputs (PNP 100 mA). *See note 2*
- 4 test outputs (for short-circuit monitoring)
- Integrated Ethernet field-bus interface. Protocols: Ethernet IP, EtherCAT, PROFINET, Modbus TCP
- Remote connectivity

...to the Master Units

Safety relays



MOR4/MOR4 S8/MRx

Safety relay output expansion units

- MR2** [1100040] [1100140]
2 safety relays with guided contacts
2 NO + 1 NC contacts (250 VAC 6 A)
1 NC contacts for EDM feedback
- MR4** [1100041] [1100141]
4 safety relays with guided contacts
4 NO + 2 NC contacts (250 VAC 6 A)
2 NC contacts for EDM feedback
- MR8** [1100049] [1100149]
8 safety relays with guided contacts
8 NO + 4 NC contacts (250 VAC 6 A)
4 NC contacts for EDM feedback
- MOR4** [1100042] [1100142]
4 safety relays with guided contacts
4 NO contacts (250 VAC 6 A)
It is possible to select two different configurations via MSD:
- 4 independent single channel outputs
- 2 dual channel outputs
4 inputs for Start/Restart interlock and EDM
Individual channel LED signaling
- MOR4 S8** [1100043] [1100143]
As MOR4, with 8 status outputs (PNP 100 mA)

Speed monitoring



MVx

Speed monitoring expansion units

- Safety speed monitoring units (up to PL e). Can control zero speed, maximum speed, speed range and direction
- MV0** [1100077] [1100177]
Inputs for 2 proximity switches
- MV1**
Inputs for 1 incremental encoder and 2 proximity switches:
- **MV1T** [1100070] [1100170] - TTL
- **MV1TB** [1100086] [1100186] - TTL 24 VDC
- **MV1H** [1100071] [1100171] - HTL
- **MV1S** [1100072] [1100172] - SIN/COS
- MV2**
Inputs for 2 incremental encoders and 2 proximity switches:
- **MV2T** [1100073] [1100173] - TTL
- **MV2TB** [1100087] [1100187] - TTL 24 VDC
- **MV2H** [1100074] [1100174] - HTL
- **MV2S** [1100076] [1100176] - SIN/COS
- MCCV 15P 3F 1.0 m** [1100069]
Sniffer cable (splitter D-Sub 15-pole/RJ45)
- MCCV 15P 3F 1.4 m** [1100067]
Sniffer cable (splitter D-Sub 15-pole/RJ45)
- MCCV 15P 3F 1.8 m** [1100048]
Sniffer cable (splitter D-Sub 15-pole/RJ45)
- MCCV 25P 2F 2.5 m** [1100068]
Sniffer cable (splitter D-Sub 25-pole/RJ45)

Communication



MBx

Field-bus

- MBP** [1100050] [1100150]
Profibus DP
- MBD** [1100051] [1100151]
DeviceNET
- MBC** [1100052] [1100152]
CANopen
- MBEC** [1100053] [1100153]
EtherCAT
- MBEI** [1100054] [1100154]
EthernetIP
- MBEP** [1100055] [1100155]
Profinet
- MBU** [1100056] [1100156]
USB
- MBCC** [1100059] [1100159]
CC-Link
- MBMR** [1100082] [1100182]
Modbus RTU
- MBEM** [1100083] [1100183]
Modbus TCP
- MBE COM** [1100133] [1100233]
Ethernet IP, EtherCAT, PROFINET, Modbus TCP

MCT

Remote interface units

- Interface unit allowing the connection of remote expansions via proprietary MSC bus
- MCT1** [1100058] [1100158]
1 connection interface (1 I/O)
- MCT2** [1100057] [1100157]
2 connections interface (2 I/O)

INDUSTRY
4.0
ready



SAFETY LEVEL

SIL 3

SIL3 - SILCL 3
PL e - Cat. 4



MODULAR SAFETY INTEGRATED CONTROLLER

Mosaic is a configurable safety hub able to manage all safety functions of a machinery or a plant. Configurable and scalable, allows costs reduction and minimal wiring.

Mosaic can manage safety sensors and devices such as: light curtains, photocells, laser scanners, emergency stops, electromechanical switches, guard-lock door switches, magnetic switches, RFID switches, inductive sensors, mats and edges, two-hand controls, hand grip switches, encoders / proximities for safety speed control and analogue sensors (i.e. loading cells, pressure switches, temperature measurement, flow and level measurement, etc.).



MVx
Expansion units for safety speed monitoring

MOR4
Safety relay units with configurable outputs

Master Unit: Mosaic M1 (Standard) or Mosaic M1S (Enhanced) or Mosaic M1S COM (Enhanced field-bus ready)

The Master Units can be used as a stand-alone device or to control other expansion units

MBx
Expansion units for connection to the most common industrial Fieldbus systems for diagnostics and data communication

Field-bus ready LAN (RJ45) connectors (Mosaic M1S COM only)

ADVANTAGES

- Reducing the number of devices and wiring used and, therefore, the overall size of the project
- Speeding-up control panel construction
- Allow tamper-proof system configurations
- All logic is configured through a graphic interface. No more laborious wiring is needed as with traditional solutions
- A lower number of electromechanical components also means a better Performance Level and, therefore, a higher Safety Level
- The project report provides the actual values of PFH_D , DC_{avg} and $MTTF_D$ according to EN 13849-1 and EN 62061
- Remote connectivity (Mosaic M1S COM only)



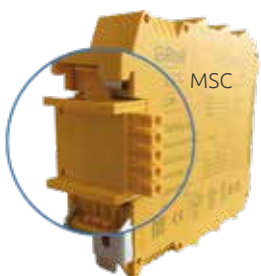
MAx
Analogue inputs expansion unit

MSC Mosaic Safety Communication connector
Allows communication between the various units through a proprietary high-speed safety bus

Removable terminals
MTBC
Clamp terminal blocks
MTB
Screw terminal blocks

Configuration via USB
USB 2.0 serial bus for the connection to the Mosaic Safety Designer software (MSD)

MCM Mosaic Configuration Memory
Removable memory card for saving Mosaic configuration data for subsequent transfers to a new device (without using a PC) or for backup



MOSAIC SAFETY DESIGNER

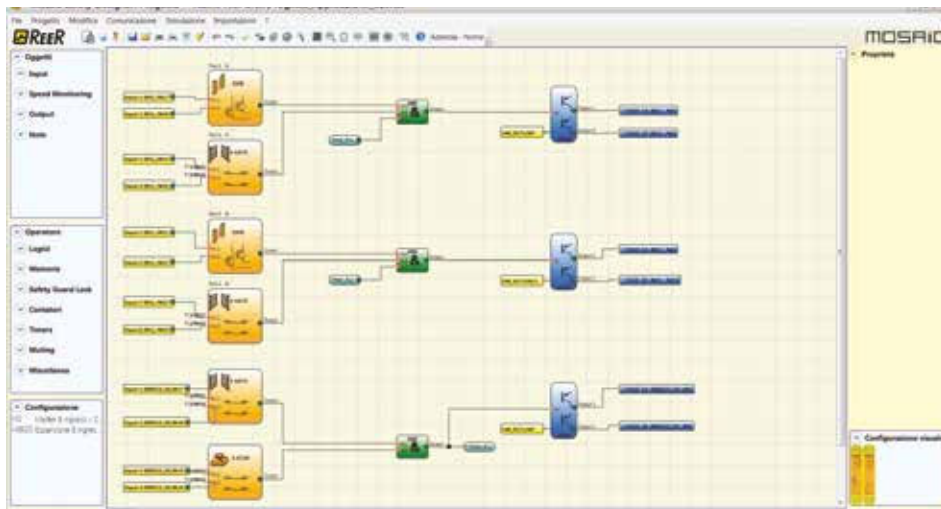
Mosaic M1, Mosaic M1S and Mosaic M1S COM Master Units come with a complementary copy of the MSD designer software. The modules configuration is done via a USB connection.

The Drag & Drop functionality allows to easily create all logic scenarios in a machine directive compliant environment.

Now with remote connection (Mosaic M1S COM master unit).



MSD
 Download the MSD software from:
www.reersafety.com/download/mosaic

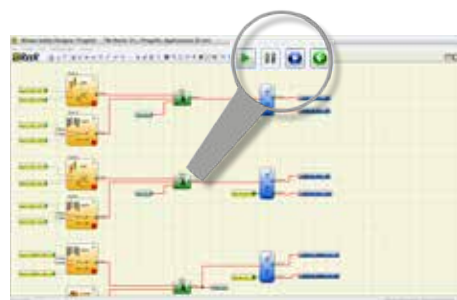
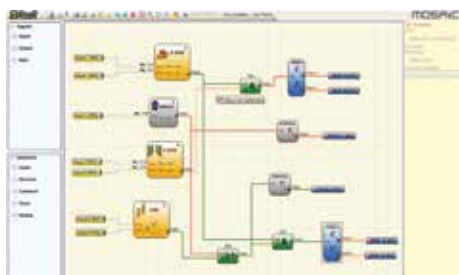


- Drag & Drop functionality
- User-friendly
- Project information
- Built-in simulator
- Design validation
- Security 2-level password
- Reports and log files
- Real-time monitor

BUILT-IN SIMULATOR

REAL-TIME MONITOR

FIELD-BUS PARAMETER CONFIGURATION



MCT

Remote Interface Units



Interface module allowing the connection of remote expansion units via the MSC safety bus

Mosaic M1S COM can be connected to field-bus: *ModBus TCP, EtherNet/IP, Profinet RT or EtherCat.*

You can choose whether to set automatically the LAN parameters (DHCP active) or (by selecting "Manual") manually configure the necessary network parameters.

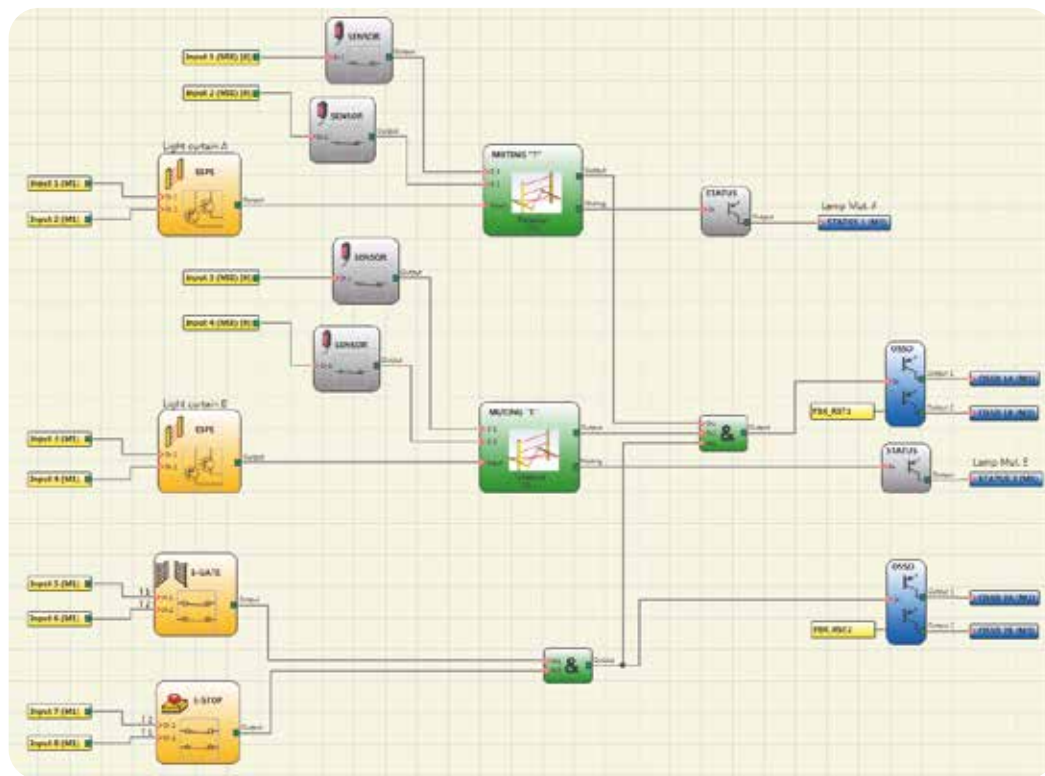
APPLICATION EXAMPLE

SAFETY MANAGEMENT OF A MACHINING CENTRE WITH ALTERNATE LOAD / UNLOAD

A machining centre operates over two independent bays alternatively. Once the machine is positioned in one bay, this bay is considered dangerous, whilst the other remains accessible to the operator for load/unload operations of workpieces. The hazardous working area is protected by two horizontal safety light curtains. In this case, each light curtain must be equipped with the Muting function so as to permit access to the working area by personnel during the non-hazardous phase of the machine cycle. The Muting condition of the two safety light curtains will then be inverted when the tool is required to operate on the opposite side of the machine. The remaining sides of the machine are completely protected by fences with an access gate equipped with a safety switch. If the gate is opened, the machine stops. A manual restart control is located close to each safety light curtain. The system is equipped with three emergency stops that, if activated, shall stop the machine.



Total safety components: 2 safety light curtains, 2 restart buttons for the safety light curtains, 1 safety gate switch, 3 emergency stops. If using conventional safety relay modules to build up the safety circuit, a total of four safety relays would be necessary: 2 safety relays for the safety light curtains with Muting function, 1 safety relay for the gate switch, 1 safety relay for the emergency stops (connected in series).



THE MOSAIC SOLUTION

For a correct configuration with Mosaic, a total of two units must be used:

- Mosaic Master Unit
- MI8 Expansion Unit

NOTE: the Reset buttons are not displayed on the diagram because they are directly connected to the feedback of the OSSD safety outputs (inputs FBK_RST1, FBK_RST2).

The 3 e-stops are connected in series and are represented in the diagram with a single block.

The diagram also shows 2 status outputs used to drive the indication lights of the active Muting.

System capabilities: 16 inputs - 2 OSSD pairs - 8 test outputs - 2 signal outputs



MZERO

STAND-ALONE SAFETY
CONTROLLER

STAND-ALONE SAFETY INTEGRATED CONTROLLER

MZERO is a configurable safety hub able to manage all safety functions of a machinery or a plant. Allows cost reductions and minimal wiring.

MZERO can manage safety sensors and signals such as light curtains, photocells, laser scanners, emergency stops, electromechanical switches, guard-lock door switches, magnetic switches, RFID switches, inductive sensors, mats and edges, two-hand controls and hand grip switches.

Configuration via USB
USB 2.0 serial bus for the connection to the MZERO Safety Designer software (MZD)

Removable terminals
MTBC Clamp terminal blocks
MTB Screw terminal blocks

4 inputs for Start/Restart interlock, EDM or single input devices

16 safety inputs

64 logical operators

4 test outputs (for short-circuit monitoring)

4 pairs OSSD safety outputs (PNP 400 mA)

4 SIL 1/PL c status outputs (PNP 100 mA)

SAFETY LEVEL
SIL 3
SIL3 - SILCL 3
PL e - Cat. 4

CE, UKCA, UL LISTED IND. CONT. EQ. 4HY4, UL LISTED SRGD 4VK5, TÜV SÜD, RoHS Compliant, and other certification logos.

PART NUMBERS

MZERO 16.4 [1100005] with screw terminal block
MZERO 16.4 C [1100205] with clamp terminal block

MZERO SAFETY DESIGNER

Easy-to-use designer software included with the MZERO unit. Includes all the features and options of MSD (Mosaic Safety designer) software.

Download the MSD software from:
www.reersafety.com/download/mosaic

ADDITIONAL SAFETY RELAY OUTPUT MODULES

| MR2 [1100040] [1100140] | MR4 [1100041] [1100141] | MR8 [1100049] [1100149] |
|--------------------------------------|--------------------------------------|--------------------------------------|
| 2 safety relays with guided contacts | 4 safety relays with guided contacts | 8 safety relays with guided contacts |
| 2 NO + 1 NC contacts (250 VAC 6 A) | 4 NO + 2 NC contacts (250 VAC 6 A) | 8 NO + 4 NC contacts (250 VAC 6 A) |
| 1 NC contacts for EDM feedback | 2 NC contacts for EDM feedback | 4 NC contacts for EDM feedback |

ADVANTAGES

- Bringing full configuration capabilities at the cost of a standard safety relay
- Reducing the number of devices and wiring used and, therefore, the overall size of the project
- Speeding-up control panel construction
- Allow tamper-proof system configurations
- All logic is configured through a graphic interface. No more laborious wiring is needed as with traditional solutions
- A lower number of electromechanical components also means a better Performance Level and, therefore, a higher Safety Level
- The project report provides the actual values of PFH_D , DC_{avg} and $MTTF_D$ according to EN 13849-1 and EN 62061



SAFETY INTERFACES

MULTIFUNCTION SAFETY INTERFACE



The new SR SELECT allows four different operating modes offering the possibility to connect and control different types of safety devices, including: Safety Light Curtains, Solid-State-Output Devices (i.e. RFID safety switches), Dual-Channel Emergency Stops, Two-Hand Controls and Type 2 Safety Photocells.

- Different safety functions selectable via rotary switch
- Selectable manual or automatic restart
- 2 N.O. outputs with guided contact safety relays
- 1 system monitor PNP output
- 1 external contactors feedback input
- 1 system test input (for Type 2 light curtains)

PART NUMBER

SR SELECT [1330941] with screw terminal

SR SELECT C [1330813] with clamp terminal



TECHNICAL CHARACTERISTICS

| | |
|-----------------------------|---|
| Power supply (VDC) | 24 ± 20% |
| Power requirement (W) | 5 max. |
| Relay output | 2 NA - 6A; 250 Vca |
| System status output | PNP - 100 mA; 24 Vcc |
| Response time (ms) | ≤ 20 |
| Operating modes | Automatic, Monitored or Manual (selectable via rotary switch) |
| External relay control EDM | Series of contacts NC (20 mA; 24 VDC) |
| Connections | Terminal block with protection against reversal of polarity |
| LED status indicators | Input – Output – Fail |
| Length of connections (m) | 100 Max. |
| Operating temperature (°C) | -30 ... +55 |
| Protection rating | Enclosure IP 20 Terminal block IP 2X |
| Fastening | Fast attachment to rail according to EN 50022-35 |
| Dimensions (h x w x d) (mm) | 99 x 22,5 x 114,5 |
| Weight (g) | 150 |
| B10d | 800.000 |
| Device lifetime (years) | 20 |

OPERATING MODES

- Type 4 interface for OSSD output devices
- Safety relay for emergency stop and safety switches.
- Safety relay for two-hand control
- Type 2 control unit for safety photocells

Selectable via the Rotary Switch.

| Rotary Switch position | Operating mode | Operating function |
|------------------------|----------------|---|
| 0 | Prog. | Programming mode start |
| 1 | 1A | OSSD double input, automatic restart mode |
| 2 | 1C | OSSD double input, monitored restart mode |
| 3 | 2A | Gate monitoring/Emergency stop function, automatic restart mode |
| 4 | 2M | Gate monitoring/Emergency stop function, manual restart mode (not monitored) |
| 5 | 2C | Gate monitoring/Emergency stop function, monitored restart mode |
| 6 | 3A | Two-hand control 2 NO contacts, automatic restart mode. (Certified according to EN 574 - IIIA) |
| 7 | 3C | Two-hand control changeover contact, monitored restart mode. (Certified according to EN 574 - IIIC) |
| 8 | 4A | Type 2 photocells control, automatic restart mode |
| 9 | 4C | Type 2 photocells control, monitored restart mode |



SAFETY INTERFACES

SAFETY LEVEL

SIL 3

SIL3 - SILCL 3
PL e - Cat. 4



SR ZERO [1330801] - SR ZERO A [1330802]
SR ZERO C [1330806] - SR ZERO A C [1330807]
FOR DEVICES WITH INTEGRATED EDM



Guided-contact safety relays.

Can only be connected to safety sensors equipped with feedback input for monitoring external relays (EDM).

Additional NC contact line for the monitoring by light curtain EDM (input and output).

Power Supply (VDC)

24 ± 20%

Safety relay output

SR ZERO: 2 NO + 1 NC (2 A, 250 VAC)

SR ZERO A: 2 NO (2 A, 250 VAC)

Response time (ms)

≤ 20

Dimensions h x w x d (mm)

99 x 22,5 x 114,5

SR T [1330805]
SR T C [1330810]

FOR TWO-HAND CONTROLS



Guided-contact safety relays.

Input with 3 or 4 contacts for two-hand control unit.

Certified as **Type III C** according to the EN 574 standard, monitors the simultaneity between the two inputs (< 0.5 sec).

EDM feedback input.

24 ± 20%

2 NO (6 A 240 VAC / 24 VDC)

≤ 30

99 x 22,5 x 114,5

SAFETY LEVEL

PL e

Cat. 4
Type III C (EN 574)

TYPE 4 INTERFACES FOR OSSD OUTPUT SAFETY DEVICES

SAFETY LEVEL

TYPE 4

SILCL 3
PL e - Cat. 4



SR ONE [1330900] - SR ONE C [1330811]



Guided-contact safety relays.

Manual or automatic Start/Restart.

EDM feedback input.

Power Supply (VDC)

24 ± 20%

Safety relay output

2 NO - 6 A 250 VAC

Status output

PNP - 100 mA at 24 VDC

Response time (ms)

≤ 20

Dimensions h x w x d (mm)

99 x 22,5 x 114

SR ONE M [1330904] - SR ONE M C [1330812]
WITH INTEGRATED MUTING FUNCTIONS



Sensor logic integrated Muting (0 or 24 VDC - PNP or relay - dark-on).

Input for Muting enable (0 or 24 VDC - PNP or relay).

Muting Time-out: 30 sec. or infinite.

Override (max. 15 min.).

24 ± 20%

2 NO - 6 A 250 VAC

PNP - 100 mA at 24 VDC

≤ 20

99 x 35 x 114

INTERFACES FOR EMERGENCY STOP BUTTONS AND SAFETY SWITCHES

SAFETY LEVEL

PL e

SIL 3 - SIL CL 3
Cat. 4



SR E4 [1330803] - SR E4 C [1330808]



Guided-contact safety relays.

Manual or automatic Start/Restart.

EDM feedback input.

Power Supply (VDC)

24 ± 10%

Safety relay output

2 NO (6 A 240 VAC / 24 VDC)

Response time (ms)

≤ 20

Dimensions h x w x d (mm)

99 x 22,5 x 114

SR E4R [1330804] - SR E4R C [1330809]



Guided-contact safety relays.

Manual monitored Start/Restart.

EDM feedback input.

24 ± 10%

2 NO (6 A 240 VAC / 24 VDC)

≤ 20

99 x 22,5 x 114

INTERFACES FOR SAFETY ILION AND ULISSE PHOTOCELLS

SAFETY LEVEL

TYPE 2

SILCL 1
PL c - Cat. 2



SR X [1201710] - SR X C [1201714]



Guided-contact safety relays.

Self test every 5 sec.

Manual or automatic Start/Restart.

EDM feedback input.

Power Supply (VDC)

24 ± 20%

Safety relay output

2 NO - 6 A 250 VAC

Response time (ms)

≤ 30

Dimensions h x w x d (mm)

99 x 22,5 x 114

SR X M [1201711] - SR X M C [1201715]
WITH INTEGRATED MUTING FUNCTIONS



Sensor logic integrated Muting (0 or 24 VDC - PNP or relay - dark-on).

Input for Muting enable (0 or 24 VDC - PNP or relay).

Muting Time-out: 30 sec. or infinite.

Override (max. 15 min.).

24 ± 20%

2 NO - 6 A 250 VAC

≤ 30

99 x 35 x 114

Note: C version with clamp terminals



R.SAFE



SAFETY DEVICES

R-SAFE RFID

PI-SAFE

MAGNUS MG

ILION - ULISSE

CONTACTLESS RFID SAFETY SWITCH



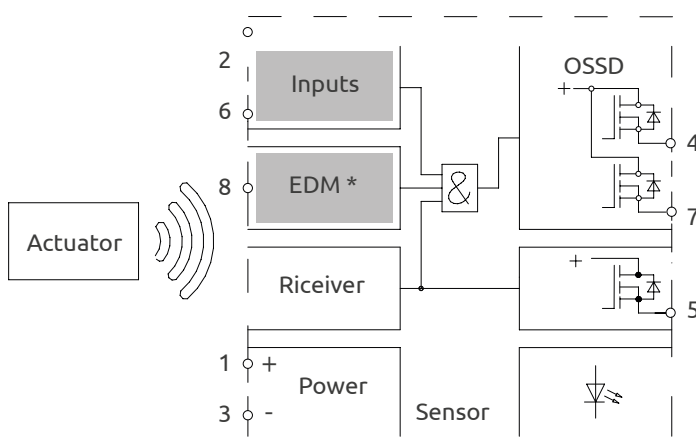
R-Safe RFID Basic (with M12 5 poles)

R-Safe RFID Pro (with M12 8 poles)

R-Safe RFID Plus (with M12 8 poles)

Safety switches for position control of movable guards.

- RFID technology
- Two actuators type: Standard and Slim
- 22 mm interaxis with standard actuator
- 40 mm interaxis with slim actuator
- IP65, IP67 and IP69K protection degree
- Three types of connections: integrated M12 connector, Pigtail with M12 connector, cable (different lengths)
- Series connection with status information (R-Safe Plus models)
- Highly visible status LED
- Anti-tampering protection caps



Inputs available on Plus and Pro models only

* EDM input for R-Safe Pro models
EDM/Restart/Serial for R-Safe Plus models

TECHNICAL CHARACTERISTICS

Electrical specifications

| | |
|--------------------------------------|---|
| Supply voltage (VDC) | 24 ± 20% |
| Power consumption (W) | 0,5 |
| Switching current safety output (mA) | Max. 300 |
| Switching current status output (mA) | Max. 100 |
| Safety outputs | 2 OSSD active high |
| Safety inputs | 2 inputs active high |
| Status output | 1 output active high |
| Restart | Monitored normally open Restart input in series with EDM |

Operating characteristics

| | |
|-------------------------------------|--------------------------------------|
| Functioning operating distance (mm) | 12 mm |
| Assured release distance - Sar (mm) | 25 mm |
| Operating temperature (°C) | -25 ... +70 |
| Storage temperature (°C) | -25 ... +70 |
| Humidity | 0% @ 70 °C ... 90% @ 20 °C |
| Protection class | IP65/IP67 (IP69K version with cable) |
| Shock resistance | 30g / 11ms IEC 60068 |
| Vibration resistance | 10 ... 55 Hz, amplitude 1 mm |
| Switch-on delay (s) | 10 typical, 15 max. |
| Standalone Risk time (ms) | Δ Rt ≤ 55 |
| Operating direction | Any direction |
| Switching principle | Electronic |
| Series connection | Max. 16 sensors |
| Technology | RFID |

Mechanical data

| | |
|--|--|
| Material | Nylon |
| Housing | Rectangular |
| Connector type | M12 8 or 5 poles |
| Cable | PVC 8 or 5 wires |
| Cross-section of wire (mm ²) | 0,25 |
| Temp. range cable (°C) | -25 ... 80 |
| Sensor dimension h x w x d (mm) | 28,5 x 28,5 x 57 |
| Actuator dimensions h x w x d (mm) | 28,5 x 42 x 18 (Standard) 8,5 x 52 x 18 mm (Slim) |
| Mounting type | M4 screws (countersunk) |

Multiple options of actuation technology

Generic coding (low level coding)

The actuator is free and not specifically assigned to the sensor (one actuator can work with multiple generic sensors)

Teach-in coding (high level coding)

The actuator is programmed via teach-in and permanently assigned to the sensor during set-up (the process can be repeated if necessary)

Unique coding (high level coding)

The actuator is permanently assigned to the sensor during manufacturing (it cannot be replaced with another actuator)

CONTACTLESS RFID SAFETY SWITCH

THREE MODELS FOR ALL APPLICATION NEEDS

| Basic models | Pro models | Plus models |
|-------------------------------|---|--|
| Automatic restart without EDM | Automatic restart with EDM | Selectable Automatic/Manual restart with EDM |
| | Automatic restart without EDM | Selectable Automatic/manual restart without EDM |
| | Digital inputs for series connection, thought OSSD outputs | Digital inputs for series connection, thought OSSD outputs |
| | Individual status signal for each sensor (not serialisable) | Serialisable status signal with individual status indication for each sensor |

Note: operating mode is selected by different wiring configurations.

PRODUCT IDENTIFICATION

RRFID PLUS C S G C

BASIC model
PRO model
PLUS model

C Combo
S Sensor
A Actuator

S Standard actuator
22 mm interaxis
M Slim actuator
40 mm interaxis

C M12 connector
P M12 Pigtail connector
1 Cable 1 m
3 Cable 3 m
5 Cable 5 m
X Cable 10 m

G Generic coding
T Teach-In coding
U Unique coding

Approvals and safety characteristics

| | |
|-----------------|-------------|
| PL e | ISO 13849-1 |
| Category 4 | ISO 13849-1 |
| PFHd 3,58E-9 | IEC 61508-1 |
| SFF 90% ... 99% | IEC 61508-1 |
| SIL 3 | IEC 61508-1 |



Watch the video!

WATERPROOF HOUSING COMPLIANT WITH IP67 AND IP69K* REQUIREMENTS



Unique mechanical characteristics allow protection against cleaning agents and washdown processes, a typical requirement of the food industry.

Certification of compatibility **ECOLAB**

High resistance of the sensor to cleaning procedures solutions and hygiene products commonly and worldwide used in Food and Beverage Industries.

* Cable versions only

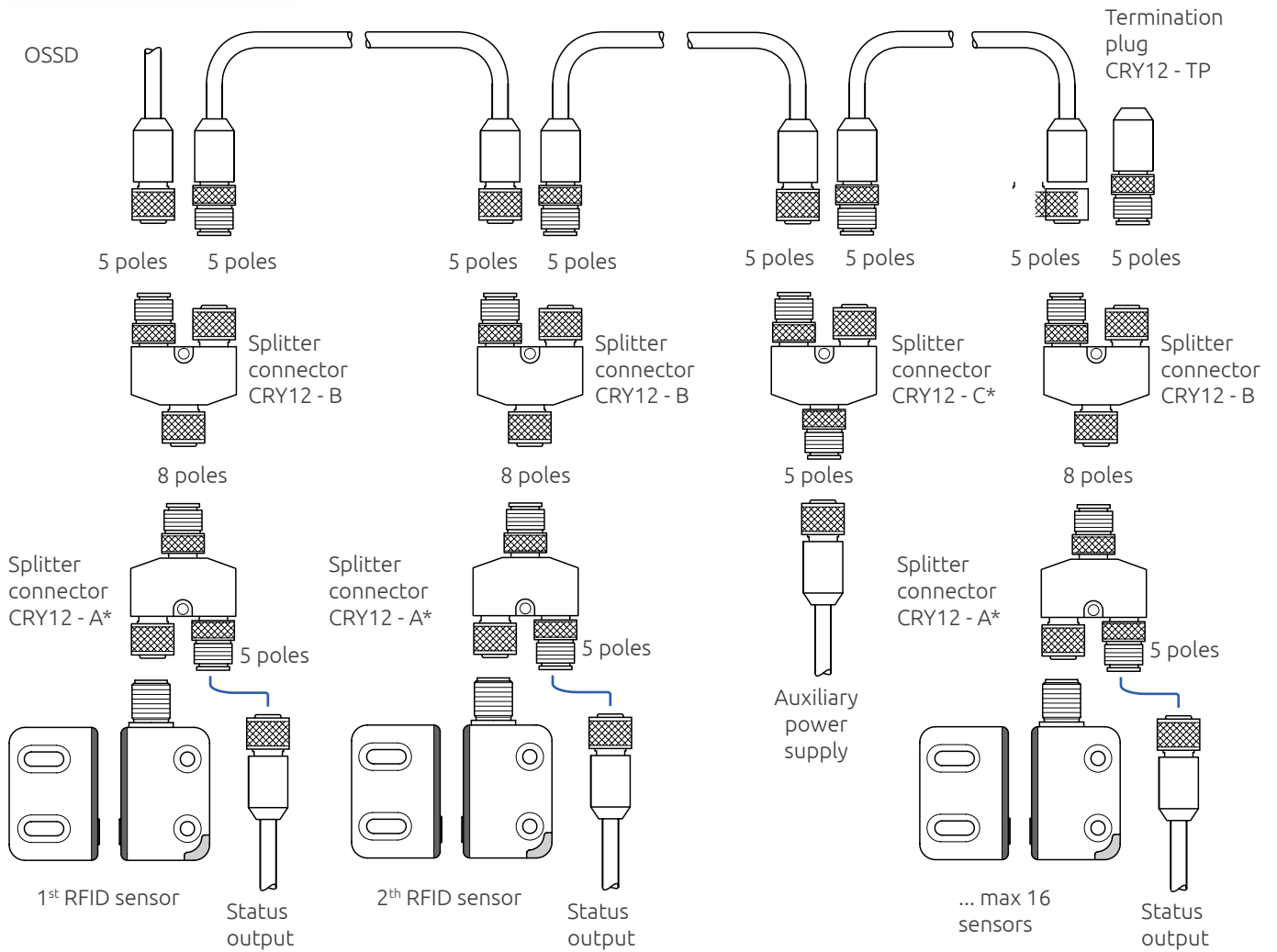
CONTACTLESS RFID SAFETY SWITCH

SERIES CONNECTION PRO MODELS

Up to PL e
Performance Level according to EN ISO 13849-1



MOSAIC or PLC or safety interfaces



Splitter connectors (for series connection)

- CRY12 - A** [1292404]
Used to connect the status signal
- CRY12 - B** [1292403]
for the last sensor of the serie
- CRY12 - C** [1292405]
Used for auxiliary power supply
- CRY12 - TP** [1292402]
Termination plug

* In a serial connection where the use of the "Status" signal or external relay control (EDM) is required, the use of the CRY12 - A, CRY12 - B, CRY12 -TP splitter connectors is recommended.

If the length of the serial chain and individual connections is between 160 m and 260 m, an auxiliary power supply must be provided using the splitter connector CRY12 - C.

CONTACTLESS RFID SAFETY SWITCH

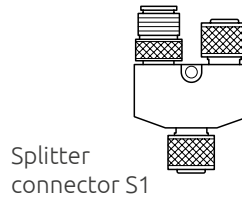
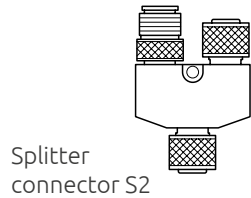
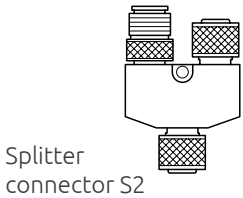
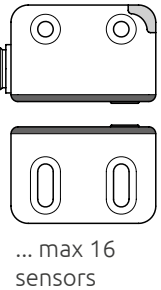
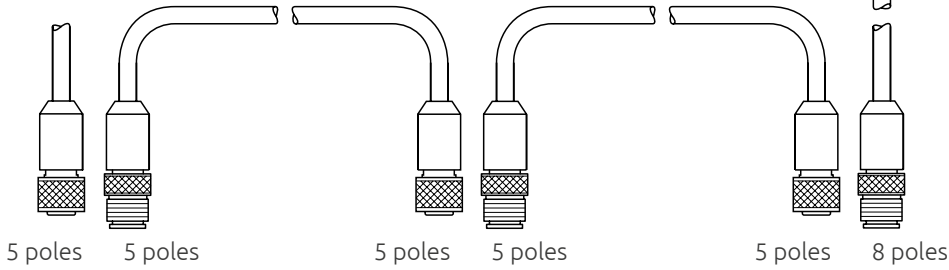
SERIES CONNECTION PLUS MODELS



MOSAIC or PLC or safety interfaces

Up to PL e
Performance Level according to EN ISO 13849-1

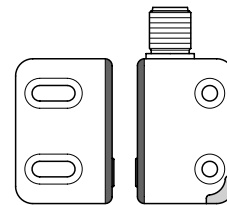
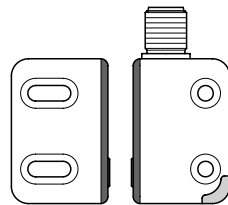
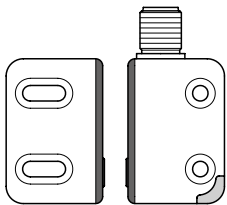
OSSD + Status



Splitter connectors
(for series connection)

CRY12 - S1 [1295106]
TYPE S1 connector, for the last sensor of the serie

CRY12 - S2 [1295107]
TYPE S2 connector, for all sensors of the series (escl. last)



EXAMPLE OF CONNECTION WITH MOSAIC*

Allows individual status reading without individual status output wiring.

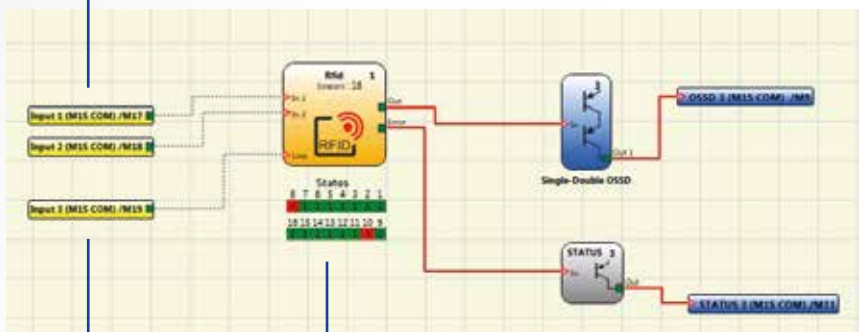
The signal status contains the individual status of each sensor in the series.

A simple logic signal readable by any PLC or directly with Mosaic M1S or Mosaic M1S COM.

The status of each single sensor is also available on fieldbus data information.

*Mosaic M1S and M1S COM only

OSSD outputs from the first sensor of the series



Status output from first sensor of the series

Status of each single sensor

CONTACTLESS RFID SAFETY SWITCH

PART NUMBERS

Combo¹ (Sensor + Standard actuator)

| Model | Part number | Connection | Coding | Operative modes |
|---------------------|-------------|---------------|-----------------|------------------------------|
| RRFID PLUS C S G 1 | 1295047 | Cable 1 m | Generic coding | |
| RRFID PLUS C S G 3 | 1295057 | Cable 3 m | | |
| RRFID PLUS C S G 5 | 1295000 | Cable 5 m | | |
| RRFID PLUS C S G X | 1294020 | Cable 10 m | | |
| RRFID PLUS C S T 1 | 1295048 | Cable 1 m | Teach-In coding | Manual restart |
| RRFID PLUS C S T 3 | 1295058 | Cable 3 m | | |
| RRFID PLUS C S T 5 | 1295001 | Cable 5 m | | |
| RRFID PLUS C S T X | 1294023 | Cable 10 m | | |
| RRFID PLUS C S U 1 | 1295049 | Cable 1 m | Unique coding | Automatic restart (with EDM) |
| RRFID PLUS C S U 3 | 1295059 | Cable 3 m | | |
| RRFID PLUS C S U 5 | 1295002 | Cable 5 m | | |
| RRFID PLUS C S U X | 1294026 | Cable 10 m | | |
| RRFID PLUS C S G P | 1295003 | M12 pigtail | Generic coding | Serial status output |
| RRFID PLUS C S T P | 1295004 | | Teach-In coding | |
| RRFID PLUS C S U P | 1295005 | | Unique coding | |
| RRFID PLUS C S G C | 1295006 | | Generic coding | |
| RRFID PLUS C S T C | 1295007 | M12 connector | Teach-In coding | |
| RRFID PLUS C S U C | 1295008 | | Unique coding | |
| RRFID PRO C S G 1 | 1295051 | Cable 1 m | Generic coding | |
| RRFID PRO C S G 3 | 1295065 | Cable 3 m | | |
| RRFID PRO C S G 5 | 1295028 | Cable 5 m | | |
| RRFID PRO C S G X | 1295025 | Cable 10 m | | |
| RRFID PRO C S T 1 | 1295056 | Cable 1 m | Teach-In coding | Automatic restart |
| RRFID PRO C S T 3 | 1295066 | Cable 3 m | | |
| RRFID PRO C S T 5 | 1295029 | Cable 5 m | | |
| RRFID PRO C S T X | 1295026 | Cable 10 m | | |
| RRFID PRO C S U 1 | 1295061 | Cable 1 m | Unique coding | Automatic restart (with EDM) |
| RRFID PRO C S U 3 | 1295067 | Cable 3 m | | |
| RRFID PRO C S U 5 | 1295030 | Cable 5 m | | |
| RRFID PRO C S U X | 1295027 | Cable 10 m | | |
| RRFID PRO C S G P | 1295031 | M12 pigtail | Generic coding | Individual status output |
| RRFID PRO C S T P | 1295032 | | Teach-In coding | |
| RRFID PRO C S U P | 1295033 | | Unique coding | |
| RRFID PRO C S G C | 1295034 | | Generic coding | |
| RRFID PRO C S T C | 1295035 | M12 connector | Teach-In coding | |
| RRFID PRO C S U C | 1295036 | | Unique coding | |
| RRFID BASIC C S G 1 | 1295050 | Cable 1 m | Generic coding | |
| RRFID BASIC C S G 3 | 1295060 | Cable 3 m | | |
| RRFID BASIC C S G 5 | 1295010 | Cable 5 m | | |
| RRFID BASIC C S G X | 1294029 | Cable 10 m | | |
| RRFID BASIC C S T 1 | 1294021 | Cable 1 m | Teach-In coding | |
| RRFID BASIC C S T 3 | 1294022 | Cable 3 m | | |
| RRFID BASIC C S T 5 | 1294024 | Cable 5 m | | |
| RRFID BASIC C S T X | 1294025 | Cable 10 m | | |
| RRFID BASIC C S U 1 | 1295052 | Cable 1 m | Unique coding | Automatic restart |
| RRFID BASIC C S U 3 | 1295062 | Cable 3 m | | |
| RRFID BASIC C S U 5 | 1295012 | Cable 5 m | | |
| RRFID BASIC C S U X | 1294032 | Cable 10 m | | |
| RRFID BASIC C S G P | 1295013 | M12 pigtail | Generic coding | |
| RRFID BASIC C S T P | 1294019 | | Teach-In coding | |
| RRFID BASIC C S U P | 1295015 | | Unique coding | |
| RRFID BASIC C S G C | 1295016 | | Generic coding | |
| RRFID BASIC C S T C | 1294018 | M12 connector | Teach-In coding | |
| RRFID BASIC C S U C | 1295018 | | Unique coding | |

Combo¹ (Sensor + Slim actuator)

| Model | Part number | Connection | Coding | Operative modes |
|---------------------|-------------|---------------|-----------------|------------------------------|
| RRFID PLUS C M G 1 | 1294120 | Cable 1 m | Generic coding | |
| RRFID PLUS C M G 3 | 1294121 | Cable 3 m | | |
| RRFID PLUS C M G 5 | 1294122 | Cable 5 m | | |
| RRFID PLUS C M G X | 1294123 | Cable 10 m | | |
| RRFID PLUS C M T 1 | 1294124 | Cable 1 m | Teach-In coding | Manual restart |
| RRFID PLUS C M T 3 | 1294125 | Cable 3 m | | |
| RRFID PLUS C M T 5 | 1294126 | Cable 5 m | | |
| RRFID PLUS C M T X | 1294127 | Cable 10 m | | |
| RRFID PLUS C M U 1 | 1294128 | Cable 1 m | Unique coding | Automatic restart (with EDM) |
| RRFID PLUS C M U 3 | 1294129 | Cable 3 m | | |
| RRFID PLUS C M U 5 | 1294130 | Cable 5 m | | |
| RRFID PLUS C M U X | 1294131 | Cable 10 m | | |
| RRFID PLUS C M G P | 1294132 | M12 pigtail | Generic coding | Serial status output |
| RRFID PLUS C M T P | 1294133 | | Teach-In coding | |
| RRFID PLUS C M U P | 1294134 | | Unique coding | |
| RRFID PLUS C M G C | 1294135 | | Generic coding | |
| RRFID PLUS C M T C | 1294136 | M12 connector | Teach-In coding | |
| RRFID PLUS C M U C | 1241137 | | Unique coding | |
| RRFID PRO C M G 1 | 1294138 | Cable 1 m | Generic coding | |
| RRFID PRO C M G 3 | 1294139 | Cable 3 m | | |
| RRFID PRO C M G 5 | 1294140 | Cable 5 m | | |
| RRFID PRO C M G X | 1294141 | Cable 10 m | | |
| RRFID PRO C M T 1 | 1294142 | Cable 1 m | Teach-In coding | Automatic restart |
| RRFID PRO C M T 3 | 1294143 | Cable 3 m | | |
| RRFID PRO C M T 5 | 1294144 | Cable 5 m | | |
| RRFID PRO C M T X | 1294145 | Cable 10 m | | |
| RRFID PRO C M U 1 | 1294146 | Cable 1 m | Unique coding | Automatic restart (with EDM) |
| RRFID PRO C M U 3 | 1294147 | Cable 3 m | | |
| RRFID PRO C M U 5 | 1294148 | Cable 5 m | | |
| RRFID PRO C M U X | 1294149 | Cable 10 m | | |
| RRFID PRO C M G P | 1294150 | M12 pigtail | Generic coding | Individual status output |
| RRFID PRO C M T P | 1294151 | | Teach-In coding | |
| RRFID PRO C M U P | 1294152 | | Unique coding | |
| RRFID PRO C M G C | 1294153 | | Generic coding | |
| RRFID PRO C M T C | 1294154 | M12 connector | Teach-In coding | |
| RRFID PRO C M U C | 1294155 | | Unique coding | |
| RRFID BASIC C M G 1 | 1294100 | Cable 1 m | Generic coding | |
| RRFID BASIC C M G 3 | 1294102 | Cable 3 m | | |
| RRFID BASIC C M G 5 | 1294103 | Cable 5 m | | |
| RRFID BASIC C M G X | 1294104 | Cable 10 m | | |
| RRFID BASIC C M T 1 | 1294105 | Cable 1 m | Teach-In coding | |
| RRFID BASIC C M T 3 | 1294106 | Cable 3 m | | |
| RRFID BASIC C M T 5 | 1294107 | Cable 5 m | | |
| RRFID BASIC C M T X | 1294108 | Cable 10 m | | |
| RRFID BASIC C M U 1 | 1294109 | Cable 1 m | Unique coding | Automatic restart |
| RRFID BASIC C M U 3 | 1294111 | Cable 3 m | | |
| RRFID BASIC C M U 5 | 1294112 | Cable 5 m | | |
| RRFID BASIC C M U X | 1294113 | Cable 10 m | | |
| RRFID BASIC C M G P | 1294114 | M12 pigtail | Generic coding | |
| RRFID BASIC C M T P | 1294115 | | Teach-In coding | |
| RRFID BASIC C M U P | 1294116 | | Unique coding | |
| RRFID BASIC C M G C | 1294117 | | Generic coding | |
| RRFID BASIC C M T C | 1294118 | M12 connector | Teach-In coding | |
| RRFID BASIC C M U C | 1294119 | | Unique coding | |

CONTACTLESS RFID SAFETY SWITCH

PART NUMBERS

| Sensor | | | | |
|---------------------|-------------|---------------|-----------------|------------------------------|
| Model | Part number | Connection | Coding | Operative modes |
| RRFID PLUS S S G 1 | 1295043 | Cable 1 m | Generic coding | Manual restart |
| RRFID PLUS S S G 3 | 1295053 | Cable 3 m | | |
| RRFID PLUS S S G 5 | 1294000 | Cable 5 m | | |
| RRFID PLUS S S G X | 1294010 | Cable 10 m | | |
| RRFID PLUS S S T 1 | 1295044 | Cable 1 m | Teach-In coding | Automatic restart |
| RRFID PLUS S S T 3 | 1295054 | Cable 3 m | | |
| RRFID PLUS S S T 5 | 1294001 | Cable 5 m | | |
| RRFID PLUS S S T X | 1294013 | Cable 10 m | | |
| RRFID PLUS S S G P | 1294003 | M12 pigtail | Generic coding | Serial connection |
| RRFID PLUS S S T P | 1294004 | M12 pigtail | Teach-In coding | |
| RRFID PLUS S S G C | 1294006 | M12 connector | Generic coding | |
| RRFID PLUS S S T C | 1294007 | M12 connector | Teach-In coding | |
| RRFID PRO S S G 1 | 1295037 | Cable 1 m | Generic coding | Automatic restart |
| RRFID PRO S S G 3 | 1295063 | Cable 3 m | | |
| RRFID PRO S S G 5 | 1295011 | Cable 5 m | | |
| RRFID PRO S S G X | 1295023 | Cable 10 m | | |
| RRFID PRO S S T 1 | 1295046 | Cable 1 m | Teach-In coding | Automatic restart (with EDM) |
| RRFID PRO S S T 3 | 1295064 | Cable 3 m | | |
| RRFID PRO S S T 5 | 1295014 | Cable 5 m | | |
| RRFID PRO S S T X | 1295024 | Cable 10 m | | |
| RRFID PRO S S G P | 1295017 | M12 pigtail | Generic coding | Serial connection |
| RRFID PRO S S T P | 1295020 | M12 pigtail | Teach-In coding | |
| RRFID PRO S S G C | 1295021 | M12 connector | Generic coding | |
| RRFID PRO S S T C | 1295022 | M12 connector | Teach-In coding | |
| RRFID BASIC S S G 1 | 1295045 | Cable 1 m | Generic coding | Automatic restart |
| RRFID BASIC S S G 3 | 1295055 | Cable 3 m | | |
| RRFID BASIC S S G 5 | 1294009 | Cable 5 m | | |
| RRFID BASIC S S G X | 1294016 | Cable 10 m | | |
| RRFID BASIC S S T 1 | 1294030 | Cable 1 m | Teach-In coding | Automatic restart |
| RRFID BASIC S S T 3 | 1294031 | Cable 3 m | | |
| RRFID BASIC S S T 5 | 1294033 | Cable 5 m | | |
| RRFID BASIC S S T X | 1294034 | Cable 10 m | | |
| RRFID BASIC S S G P | 1294012 | M12 pigtail | Generic coding | Serial connection |
| RRFID BASIC S S T P | 1294028 | M12 pigtail | Teach-In coding | |
| RRFID BASIC S S G C | 1294015 | M12 connector | Generic coding | |
| RRFID BASIC S S T C | 1294027 | M12 connector | Teach-In coding | |

| Standard actuator | | |
|-------------------|-------------|-----------------|
| Model | Part number | Coding |
| RRFID A S G | 1294050 | Generic coding |
| RRFID A S T | 1294051 | Teach-In coding |

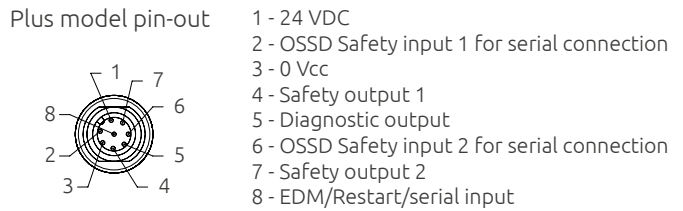
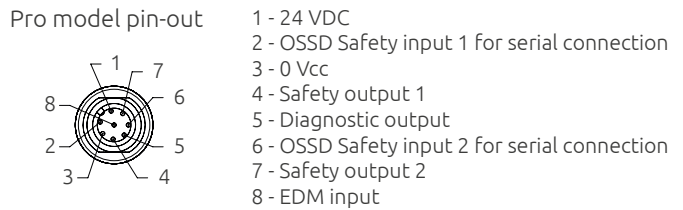
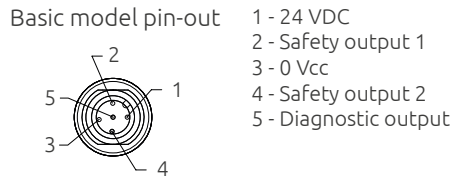
| Slim actuator | | |
|---------------|-------------|-----------------|
| Model | Part number | Coding |
| RRFID A M G | 1294035 | Generic coding |
| RRFID A M T | 1294036 | Teach-In coding |

Note 1
Each Combo set is provided with a Sensor and the corresponding Actuator. Sensors and Actuators can be also ordered separately

CABLES NEEDED

- Models with M12 connector and M12 Pigtail - Cables CDx and CF8x. See page 46.
- Extension cables for series connection - Cable CFM5Px and CFM8Px. See page 46.

CONNECTION



MECHANICAL ADAPTER INTERAXIS 22 / 78

22T078 [1295110] for the installation of R-Safe switches with 22 mm interaxis distance on holders with holes of 78 mm interaxis distance. [1295111] Kit 10 adapter



FIXING SCREWS KIT

| AF 4.2x25 T15 INOX | | | M4x20 T20 INOX | | |
|--------------------|-------------|-------------|----------------|-------------|-------------|
| 1295112 | 1295113 | 1295114 | 1295115 | 1295116 | 1295117 |
| 4 + insert | 20 + insert | 40 + insert | 4 + insert | 20 + insert | 40 + insert |

PROXIMITY INDUCTIVE SAFETY SENSOR



A complete range of safety switches for position detection. Inductive safety applications are special applications which require a non-contact and safe detection of a metal object.

- Compliant to EN 60947-5-3 for electromechanical control gear
- Ensuring operator and machine safety
- No special actuator for electronic fail-safe sensors required
- Connection to safety interface, safety controller or safety PLC (i.e. SR ONE, Mosaic)

PART NUMBERS

| | Cylindrical with metal thread | | | | | | | Rectangular | |
|------------------|-------------------------------|--------------|--------------|--------------|-----------------|--------------|------------|------------------------------|---------------------|
| | PI M12 NF | PI M18 NF | PI M30 NF | PI M30 NF K | PI M18 F | PI M18 FR | PI M30 F | PI SQ F-NF | PI SQ NF |
| Safety level | PL d / SIL 2 | | | PL e / SIL 3 | PL d / SIL 2 | | | PL e / SIL 3 | |
| Mounting | Non-flush mountable | | | | Flush mountable | | | Non-flush or flush mountable | Non-flush mountable |
| Dimensions (mm) | M12x1 - 70 | M18x1 - 70,5 | M30x1,5 - 70 | M30x1,5 - 80 | M18x1 - 70 | M18x1 - 86,5 | M30x1,5 70 | 40x40x66 | 40x40x66 |
| Enable zone (mm) | 0,5 ... 4 | 1 ... 8 | 1 ... 15 | 6 ... 12 | 1 ... 5 | > 10 | 6 ... 12 | 10 ... 15 | 4 ... 20 |
| Part number | 1293000 | 1293001 | 1293004 | 1293006 | 1293002 | 1293003 | 1293005 | 1293007 | 1293008 |

MAIN FEATURES

| | |
|-------------------------|--|
| Operating voltage (VDC) | 19,2 ... 30 |
| Switching current (mA) | Max. 100 |
| Safety output | 2 OSSD |
| Electrical design | DC PNP |
| Connection | M12 4-pole connector |
| Signalling | LED yellow (signal), LED green (power) |
| Protection class | III |

ACCESSORIES



Angle brackets

M12 [1293100]
M18 [1293101]
M30 [1293102]



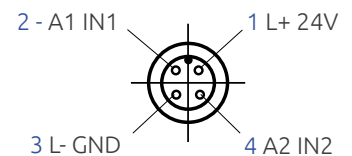
Mounting clamps

M12 [1293103]
M18 [1293104]
M30 [1293105]

CABLES NEEDED

All models: M12 5-pole See page 46

CONNECTORS



APPLICATIONS

1. Door or flaps detection at closed position
2. Cylinder shaft detection
3. Treads up detection
4. Cable position detection
5. Equipment position control
6. Robot cell working limitation of the working area
7. Safe position
8. Wind turbine lock / end-position of the blade



MAGNUS MG

CONTACTLESS MAGNETIC SAFETY SWITCH

- Compact and robust thermoplastic enclosure (PBT)
- Coded magnetic operations, tamper resistant
- Can be connected to the Mosaic safety configurable controller to form a certified PL e safety system
- Sensor with 4 wires: 2 NO contacts.



S SERIES

22 mm interaxis

| | |
|----------------------------|---------------------------------|
| Operating voltage (VDC) | 24 |
| Switching current (mA) | Max. 100 |
| Series resistance (Ohm) | 22 |
| Switching power (W) | 3 |
| Shock resistance (Hz/g) | 10 - 2000/35 |
| Possible actuation magnets | MG S M to be ordered separately |



B SERIES

78 mm interaxis

| | |
|---------------------------------------|---|
| Operating voltage (VDC) | 24 |
| Switching current (mA) | Max. 100 |
| Series resistance (Ohm) | 22 |
| Switching power (W) | 3 |
| Shock resistance (Hz/g) | 10 - 2000/35 |
| Possible actuation magnets | MG B M to be ordered separately MG B M+ to be ordered separately (only use reinforced actuation magnets if a gap of more than 4 mm is unavoidable) |
| Possible actuation reinforced magnets | |



M SERIES

Cylindrical housing M20 mounting

| | |
|---------------------------------------|---|
| Operating voltage (VDC) | 24 |
| Switching current (mA) | max. 100 |
| Series resistance (Ohm) | 22 |
| Switching power (W) | 3 |
| Shock resistance (Hz/g) | 10 - 2000/35 |
| Possible actuation magnets | MG M M to be ordered separately MG M M+ to be ordered separately (only use reinforced actuation magnets if a gap of more than 4 mm is unavoidable) |
| Possible actuation reinforced magnets | |

CABLES NEEDED

C8 G3 [1291070] 3m
C8 G5 [1291072] 5m
M8 4-pole (female)

C8 G93 [1291070] 3m
C8 G95 [1291072] 5m
M8 4-pole (female) 90° angle connector

SAFETY PHOTOCELLS

ILION

Type 2 safety photocell with M18 cylindrical metal body



| Model | Part number | Characteristics |
|-------|-------------|--|
| | | Minimum detectable object 12 mm |
| | | Max. range: - 8 m IL 10 - 20 m IL 20 |
| IL 10 | 1200201 | |
| IL 20 | 1200202 | |
| | | Output: PNP - 100 mA |
| | | Electrical connections: M12 4-pole |
| | | Dimensions: Ø 18 x 85mm |

CABLES NEEDED

Models IL 10 and IL 20: M12 5-pole. Pin 5 not connected.

ACCESSORIES

IL FB [1200090]
Set of 2 adjustable brackets



ULISSE

Type 2 safety photocell with metal body and M8 3-pole connector

| Model | Part number | Characteristics |
|-------|-------------|-------------------------------------|
| | | Minimum detectable object: 8 mm |
| | | Max. range: 6 m |
| UPC | 1200300 | UPC output: PNP - 100 mA max |
| UNC | 1200302 | UNC output: NPN - 100 mA max |
| | | Electrical connections: M8 a 3 poli |
| | | Dimensions: 58 x 15 x 25 mm |

CABLES NEEDED

C 85 [1200217] 5m
C 815 [1200219] 15m

EXTERNAL SAFETY INTERFACES

- SR X [1201710] Type 2 control unit. [See page 29](#)
- SR X M [1201711] Type 2 control unit with integrated Muting. [See page 29](#)
- SR SELECT [1330941] Multifunction safety relay with screw terminal - Photocells control program (4) [See page 28](#)
- SR SELECT C [1330813] Multifunction safety relay with clamp terminal - Photocells control program (4) [See page 28](#)



SR X



SR X M



SR Select



Michon

MEASUREMENT AND AUTOMATION
LIGHT CURTAINS

MEASUREMENT AND AUTOMATION LIGHT CURTAINS

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

Aluminum casing
Powder-coated



-10 ... +55° C
Operating temperature

Caps
Glass reinforced
polypropylene

Compact size
Only 30 x 28 mm

M12 connectors
Cables easy to source
and replace

IP65 and IP67

Controlled height
up to 3 meters

Beam spacing
5 mm, 10 mm, 25 mm
30 mm, 50 mm, 75 mm

Status display

Analogue and Digital readings
2 outputs

Software configuration
Easy to use and extensive
parameters choice



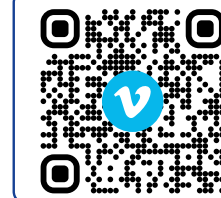
IO-Link



Versions with IO-Link protocol

- Detect the presence/absence of an object
- Perform a count
- Detect a position
- Detect a shape or profile
- Measure dimensions

Watch the video!



VERSIONS AVAILABLE

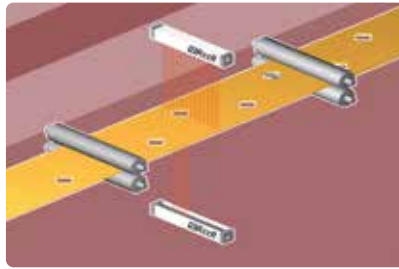
| MICRON A | | MICRON B | MICRON C | MICRON IO-LINK |
|--|--|--|---|---|
| Versions MI AV | Versions MI AC | Versions MI B | Versions MI C | Versions MI IOL |
| Ideal for object measurement and detection of dimensional limits | | Ideal for dimensional measurement, detection of object profile and position | Ideal for piece counting and detection of object presence/absence in the controlled field | Ideal for dimensional measurement, detection of object profile and position |
| Two analogue outputs (0-10 VDC) with programmable functions | Two analogue outputs (4-20 mA) with programmable functions | RS 485 serial interface with programmable functions | Two antivalent solid state outputs | IO-Link protocol |
| Two programmable digital outputs | Two programmable digital outputs | Two programmable digital outputs | - | IO-Link output |
| Solution providing simple measurement with easy interfacing | | Solution providing complete and detailed information on the status of each beam via the RS 485 serial line | Solution providing simple on/off information related to the status of the controlled area | Data available via the IO-Link protocol data mapping: NCBO, NBO, CBO, LBO, FBO, curtain status, object detected, individual beam status |



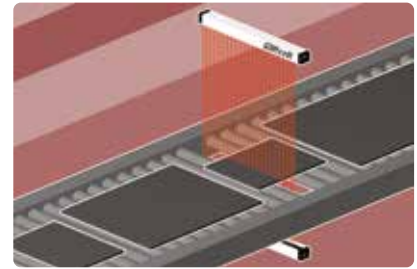
TYPICAL APPLICATIONS



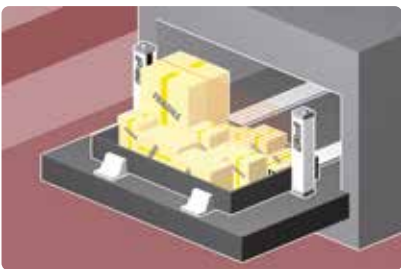
Measurement of the height of objects in transit on conveyor systems. Two-dimensional detection of objects in transit with use of 2 sets of light curtains



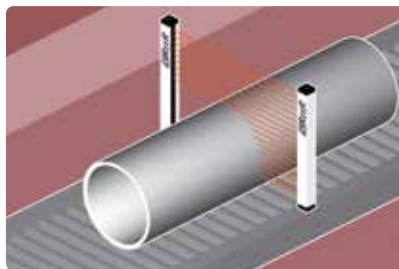
Quality control: verification of presence / absence / position of holes



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



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



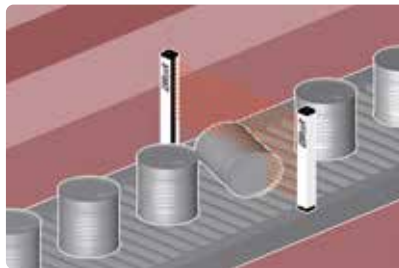
Measurement and identification of cylinders of various sizes



Detection of position and profile of workpieces in automated painting systems



Loop control



Quality control: verification of correct positioning of objects



Detection of overall dimensional limits of vehicles in automated parking garages

MUTING AND AUTOMATION PHOTOCELLS

M⁵ MULTI-BEAM PHOTOCELL

Through-beam barrier type photocell with 5 beams.

M⁵ [1250910] A coding photocell (range 0 ... 3,5 m)

M⁵ [1250911] B coding photocell (range 0 ... 3,5 m)

M⁵H [1250916] A coding high range photocell (range 0 ... 5 m)

M⁵H [1250917] B coding high range photocell (range 0 ... 5 m)

M^{TRX} RETRO-REFLECTIVE PHOTOCELL

Single-beam retro-reflective photocell, consisting of active TX/RX element and retro-reflector (to be ordered separately).

M^{TRX} [1250912] A coding retro-reflective photocell

M^{TRX} [1250913] B coding retro-reflective photocell

CD8 [1210032] Retro-reflector (range 0 ... 5)

C3F8 [1210221] Retro-reflector (range 0 ... 3,5)

C3F10 [1210035] Retro-reflector (range 0 ... 2,5)



BACKLIT TOP COVER WITH STATUS LED

Part numbers on request

All Micron models can be manufactured with WTF or WTHF water-tight enclosure (factory programmed only) for use in harsh working environments with exposure to water and steam.



Beam spacing 5 mm

| | | | | | | | | | | |
|-----------------------|----------|----------|----------|----------|----------|----------|-----------|-----------|-----------|-----------|
| Micron A (AV) | MI 150AV | MI 300AV | MI 450AV | MI 600AV | MI 750AV | MI 900AV | MI 1050AV | MI 1200AV | MI 1350AV | MI 1500AV |
| Part number | 1250580 | 1250581 | 1250582 | 1250583 | 1250584 | 1250585 | 1250586 | 1250587 | 1250588 | 1250589 |
| Micron A (AC) | MI 150AC | MI 300AC | MI 450AC | MI 600AC | MI 750AC | MI 900AC | MI 1050AC | MI 1200AC | MI 1350AC | MI 1500AC |
| Part number | 1250520 | 1250521 | 1250522 | 1250523 | 1250524 | 1250525 | 1250526 | 1250527 | 1250528 | 1250529 |
| Micron B | MI 150B | MI 300B | MI 450B | MI 600B | MI 750B | MI 900B | MI 1050B | MI 1200B | MI 1350B | MI 1500B |
| Part number | 1250540 | 1250541 | 1250542 | 1250543 | 1250544 | 1250545 | 1250546 | 1250547 | 1250548 | 1250549 |
| Micron C | MI 150C | MI 300C | MI 450C | MI 600C | MI 750C | MI 900C | MI 1050C | MI 1200C | MI 1350C | MI 1500C |
| Part number | 1250560 | 1250561 | 1250562 | 1250563 | 1250564 | 1250565 | 1250566 | 1250567 | 1250568 | 1250569 |
| Measuring height (mm) | 145 | 295 | 395 | 595 | 745 | 895 | 1045 | 1195 | 1345 | 1495 |
| Number of beams | 30 | 60 | 90 | 120 | 150 | 180 | 210 | 240 | 270 | 300 |
| Overall height (mm) | 223 | 373 | 523 | 673 | 823 | 973 | 1123 | 1273 | 1423 | 1573 |

CABLES NEEDED

Micron A and Micron B

Emitter: M12 5-pole (CDx)

Receiver: M12 8-pole (C8Dx)

Programming: M5 4-pole (CSU M5)

Micron C

Emitter: M12 5-pole (CDx)

Receiver: M12 5-pole (CDx)

Micron IO-Link

Emitter: M12 5-pole (CDx or CFM5Px)

Receiver: M12 5-pole (CDx or CFM5Px)

Y Splitter cable M 12 5-pole. For 24 V transmitter and Sync receiver connection. (CSYIOLH High range configuration) or (CSYIOLL Low range configuration)

Beam spacing 10 mm

| | | | | | | | | | | | | | | | | | | | | |
|-----------------------|-----------|-----------|-----------|-----------|-----------|-----------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Micron A (AV) | MI 151AV | MI 301AV | MI 451AV | MI 601AV | MI 751AV | MI 901AV | MI 1051AV | MI 1201AV | MI 1351AV | MI 1501AV | MI 1651AV | MI 1801AV | MI 1951AV | MI 2101AV | MI 2251AV | MI 2401AV | MI 2551AV | MI 2701AV | MI 2851AV | MI 3001AV |
| Part number | 1250020 | 1250021 | 1250022 | 1250023 | 1250024 | 1250025 | 1250026 | 1250027 | 1250028 | 1250029 | 1250030 | 1250031 | 1250032 | 1250033 | 1250034 | 1250035 | 1250036 | 1250037 | 1250038 | 1250039 |
| Micron A (AC) | MI 151AC | MI 301AC | MI 451AC | MI 601AC | MI 751AC | MI 901AC | MI 1051AC | MI 1201AC | MI 1351AC | MI 1501AC | MI 1651AC | MI 1801AC | MI 1951AC | MI 2101AC | MI 2251AC | MI 2401AC | MI 2551AC | MI 2701AC | MI 2851AC | MI 3001AC |
| Part number | 1250120 | 1250121 | 1250122 | 1250123 | 1250124 | 1250125 | 1250126 | 1250127 | 1250128 | 1250129 | 1250130 | 1250131 | 1250132 | 1250133 | 1250134 | 1250135 | 1250136 | 1250137 | 1250138 | 1250139 |
| Micron B | MI 151B | MI 301B | MI 451B | MI 601B | MI 751B | MI 901B | MI 1051B | MI 1201B | MI 1351B | MI 1501B | MI 1651B | MI 1801B | MI 1951B | MI 2101B | MI 2251B | MI 2401B | MI 2551B | MI 2701B | MI 2851B | MI 3001B |
| Part number | 1250220 | 1250221 | 1250222 | 1250223 | 1250224 | 1250225 | 1250226 | 1250227 | 1250228 | 1250229 | 1250230 | 1250231 | 1250232 | 1250233 | 1250234 | 1250235 | 1250236 | 1250237 | 1250238 | 1250239 |
| Micron C | MI 151C | MI 301C | MI 451C | MI 601C | MI 751C | MI 901C | MI 1051C | MI 1201C | MI 1351C | MI 1501C | MI 1651C | MI 1801C | MI 1951C | MI 2101C | MI 2251C | MI 2401C | MI 2551C | MI 2701C | MI 2851C | MI 3001C |
| Part number | 1250320 | 1250321 | 1250322 | 1250323 | 1250324 | 1250325 | 1250326 | 1250327 | 1250328 | 1250329 | 1250330 | 1250331 | 1250332 | 1250333 | 1250334 | 1250335 | 1250336 | 1250337 | 1250338 | 1250339 |
| Micron IO-Link | MI 151IOL | MI 301IOL | MI 451IOL | MI 601IOL | MI 751IOL | MI 901IOL | MI 1051IOL | MI 1201IOL | MI 1351IOL | MI 1501IOL | MI 1651IOL | MI 1801IOL | MI 1951IOL | MI 2101IOL | MI 2251IOL | MI 2401IOL | MI 2551IOL | MI 2701IOL | MI 2851IOL | MI 3001IOL |
| Part number | 1250700 | 1250701 | 1250702 | 1250703 | 1250704 | 1250705 | 1250706 | 1250707 | 1250708 | 1250709 | 1250710 | 1250711 | 1250712 | 1250713 | 1250714 | 1250715 | 1250716 | 1250717 | 1250718 | 1250719 |
| Measuring height (mm) | 140 | 290 | 440 | 590 | 740 | 890 | 1040 | 1190 | 1340 | 1490 | 1640 | 1790 | 1940 | 2090 | 2240 | 2390 | 2540 | 2690 | 2840 | 2990 |
| Number of beams | 15 | 30 | 45 | 60 | 75 | 90 | 105 | 120 | 135 | 150 | 165 | 180 | 195 | 210 | 225 | 240 | 255 | 270 | 285 | 300 |
| Overall height (mm) | 213 | 363 | 513 | 663 | 813 | 963 | 1113 | 1263 | 1413 | 1563 | 1713 | 1863 | 2013 | 2163 | 2313 | 2463 | 2613 | 2763 | 2913 | 3063 |



Beam spacing 25 mm

Micron IO-Link 25 mm

| | | | | | | | | | | | | | | | | | | | | |
|-----------------------|-----------|-----------|-----------|-----------|-----------|-----------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Micron A (AV) | MI 152AV | MI 302AV | MI 452AV | MI 602AV | MI 752AV | MI 902AV | MI 1052AV | MI 1202AV | MI 1352AV | MI 1502AV | MI 1652AV | MI 1802AV | MI 1952AV | MI 2102AV | MI 2252AV | MI 2402AV | MI 2552AV | MI 2702AV | MI 2852AV | MI 3002AV |
| Part number | 1250040 | 1250041 | 1250042 | 1250043 | 1250044 | 1250045 | 1250046 | 1250047 | 1250048 | 1250049 | 1250050 | 1250051 | 1250052 | 1250053 | 1250054 | 1250055 | 1250056 | 1250057 | 1250058 | 1250059 |
| Micron A (AC) | MI 152AC | MI 302AC | MI 452AC | MI 602AC | MI 752AC | MI 902AC | MI 1052AC | MI 1202AC | MI 1352AC | MI 1502AC | MI 1652AC | MI 1802AC | MI 1952AC | MI 2102AC | MI 2252AC | MI 2402AC | MI 2552AC | MI 2702AC | MI 2852AC | MI 3002AC |
| Part number | 1250140 | 1250141 | 1250142 | 1250143 | 1250144 | 1250145 | 1250146 | 1250147 | 1250148 | 1250149 | 1250150 | 1250151 | 1250152 | 1250153 | 1250154 | 1250155 | 1250156 | 1250157 | 1250158 | 1250159 |
| Micron B | MI 152B | MI 302B | MI 452B | MI 602B | MI 752B | MI 902B | MI 1052B | MI 1202B | MI 1352B | MI 1502B | MI 1652B | MI 1802B | MI 1952B | MI 2102B | MI 2252B | MI 2402B | MI 2552B | MI 2702B | MI 2852B | MI 3002B |
| Part number | 1250240 | 1250241 | 1250242 | 1250243 | 1250244 | 1250245 | 1250246 | 1250247 | 1250248 | 1250249 | 1250250 | 1250251 | 1250252 | 1250253 | 1250254 | 1250255 | 1250256 | 1250257 | 1250258 | 1250259 |
| Micron C | MI 152C | MI 302C | MI 452C | MI 602C | MI 752C | MI 902C | MI 1052C | MI 1202C | MI 1352C | MI 1502C | MI 1652C | MI 1802C | MI 1952C | MI 2102C | MI 2252C | MI 2402C | MI 2552C | MI 2702C | MI 2852C | MI 3002C |
| Part number | 1250340 | 1250341 | 1250342 | 1250343 | 1250344 | 1250345 | 1250346 | 1250347 | 1250348 | 1250349 | 1250350 | 1250351 | 1250352 | 1250353 | 1250354 | 1250355 | 1250356 | 1250357 | 1250358 | 1250359 |
| Micron IO-Link | MI 152IOL | MI 302IOL | MI 452IOL | MI 602IOL | MI 752IOL | MI 902IOL | MI 1052IOL | MI 1202IOL | MI 1352IOL | MI 1502IOL | MI 1652IOL | MI 1802IOL | MI 1952IOL | MI 2102IOL | MI 2252IOL | MI 2402IOL | MI 2552IOL | MI 2702IOL | MI 2852IOL | MI 3002IOL |
| Part number | 1250740 | 1250741 | 1250742 | 1250743 | 1250744 | 1250745 | 1250746 | 1250747 | 1250748 | 1250749 | 1250750 | 1250751 | 1250752 | 1250753 | 1250754 | 1250755 | 1250756 | 1250757 | 1250758 | 1250759 |
| Measuring height (mm) | 125 | 275 | 425 | 575 | 725 | 875 | 1025 | 1175 | 1325 | 1475 | 1625 | 1775 | 1925 | 2075 | 2225 | 2375 | 2525 | 2625 | 2825 | 2975 |
| Number of beams | 6 | 12 | 18 | 24 | 30 | 36 | 42 | 48 | 54 | 60 | 66 | 72 | 78 | 84 | 90 | 96 | 102 | 108 | 114 | 120 |
| Overall height (mm) | 213 | 363 | 513 | 663 | 813 | 963 | 1113 | 1263 | 1413 | 1563 | 1713 | 1863 | 2013 | 2163 | 2313 | 2463 | 2613 | 2763 | 2913 | 3063 |

PART NUMBERS

Beam spacing 30 mm

| | | | | | | | | | | | | | | | | | | | | |
|-----------------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Micron A (AV) | MI 153AV | MI 303AV | MI 453AV | MI 603AV | MI 753AV | MI 903AV | MI 1053AV | MI 1203AV | MI 1353AV | MI 1503AV | MI 1653AV | MI 1803AV | MI 1953AV | MI 2103AV | MI 2253AV | MI 2403AV | MI 2553AV | MI 2703AV | MI 2853AV | MI 3003AV |
| Part number | 1250060 | 1250061 | 1250062 | 1250063 | 1250064 | 1250065 | 1250066 | 1250067 | 1250068 | 1250069 | 1250070 | 1250071 | 1250072 | 1250073 | 1250074 | 1250075 | 1250076 | 1250077 | 1250078 | 1250079 |
| Micron A (AC) | MI 153AC | MI 303AC | MI 453AC | MI 603AC | MI 753AC | MI 903AC | MI 1053AC | MI 1203AC | MI 1353AC | MI 1503AC | MI 1653AC | MI 1803AC | MI 1953AC | MI 2103AC | MI 2253AC | MI 2403AC | MI 2553AC | MI 2703AC | MI 2853AC | MI 3003AC |
| Part number | 1250160 | 1250161 | 1250162 | 1250163 | 1250164 | 1250165 | 1250166 | 1250167 | 1250168 | 1250169 | 1250170 | 1250171 | 1250172 | 1250173 | 1250174 | 1250175 | 1250176 | 1250177 | 1250178 | 1250179 |
| Micron B | MI 153B | MI 303B | MI 453B | MI 603B | MI 753B | MI 903B | MI 1053B | MI 1203B | MI 1353B | MI 1503B | MI 1653B | MI 1803B | MI 1953B | MI 2103B | MI 2253B | MI 2403B | MI 2553B | MI 2703B | MI 2853B | MI 3003B |
| Part number | 1250260 | 1250261 | 1250262 | 1250263 | 1250264 | 1250265 | 1250266 | 1250267 | 1250268 | 1250269 | 1250270 | 1250271 | 1250272 | 1250273 | 1250274 | 1250275 | 1250276 | 1250277 | 1250278 | 1250279 |
| Micron C | MI 153C | MI 303C | MI 453C | MI 603C | MI 753C | MI 903C | MI 1053C | MI 1203C | MI 1353C | MI 1503C | MI 1653C | MI 1803C | MI 1953C | MI 2103C | MI 2253C | MI 2403C | MI 2553C | MI 2703C | MI 2853C | MI 3003C |
| Part number | 1250360 | 1250361 | 1250362 | 1250363 | 1250364 | 1250365 | 1250366 | 1250367 | 1250368 | 1250369 | 1250370 | 1250371 | 1250372 | 1250373 | 1250374 | 1250375 | 1250376 | 1250377 | 1250378 | 1250379 |
| Micron IO-Link | MI 153IOL | MI 303IOL | MI 453IOL | MI 603IOL | MI 753IOL | MI 903IOL | MI 1053IOL | MI 1203IOL | MI 1353IOL | MI 1503IOL | MI 1653IOL | MI 1803IOL | MI 1953IOL | MI 2103IOL | MI 2253IOL | MI 2403IOL | MI 2553IOL | MI 2703IOL | MI 2853IOL | MI 3003IOL |
| Part number | 1250720 | 1250721 | 1250722 | 1250723 | 1250724 | 1250725 | 1250726 | 1250727 | 1250728 | 1250729 | 1250730 | 1250731 | 1250732 | 1250733 | 1250734 | 1250735 | 1250736 | 1250737 | 1250738 | 1250739 |
| Measuring height (mm) | 120 | 270 | 420 | 570 | 720 | 870 | 1020 | 1170 | 1320 | 1470 | 1620 | 1770 | 1920 | 2070 | 2220 | 2370 | 2520 | 2670 | 2820 | 2970 |
| Number of beams | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 | 85 | 90 | 95 | 100 |
| Overall height (mm) | 213 | 363 | 513 | 663 | 813 | 963 | 1113 | 1263 | 1413 | 1563 | 1713 | 1863 | 2013 | 2163 | 2313 | 2463 | 2613 | 2763 | 2913 | 3063 |

Beam spacing 50 mm

| | | | | | | | | | | | | | | | | | | | | |
|-----------------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Micron A (AV) | MI 155AV | MI 305AV | MI 455AV | MI 605AV | MI 755AV | MI 905AV | MI 1055AV | MI 1205AV | MI 1355AV | MI 1505AV | MI 1655AV | MI 1805AV | MI 1955AV | MI 2105AV | MI 2255AV | MI 2405AV | MI 2555AV | MI 2705AV | MI 2855AV | MI 3005AV |
| Part number | 1250080 | 1250081 | 1250082 | 1250083 | 1250084 | 1250085 | 1250086 | 1250087 | 1250088 | 1250089 | 1250090 | 1250091 | 1250092 | 1250093 | 1250094 | 1250095 | 1250096 | 1250097 | 1250098 | 1250099 |
| Micron A (AC) | MI 155AC | MI 305AC | MI 455AC | MI 605AC | MI 755AC | MI 905AC | MI 1055AC | MI 1205AC | MI 1355AC | MI 1505AC | MI 1655AC | MI 1805AC | MI 1955AC | MI 2105AC | MI 2255AC | MI 2405AC | MI 2555AC | MI 2705AC | MI 2855AC | MI 3005AC |
| Part number | 1250180 | 1250181 | 1250182 | 1250183 | 1250184 | 1250185 | 1250186 | 1250187 | 1250188 | 1250189 | 1250190 | 1250191 | 1250192 | 1250193 | 1250194 | 1250195 | 1250196 | 1250197 | 1250198 | 1250199 |
| Micron B | MI 155B | MI 305B | MI 455B | MI 605B | MI 755B | MI 905B | MI 1055B | MI 1205B | MI 1355B | MI 1505B | MI 1655B | MI 1805B | MI 1955B | MI 2105B | MI 2255B | MI 2405B | MI 2555B | MI 2705B | MI 2855B | MI 3005B |
| Part number | 1250280 | 1250281 | 1250282 | 1250283 | 1250284 | 1250285 | 1250286 | 1250287 | 1250288 | 1250289 | 1250290 | 1250291 | 1250292 | 1250293 | 1250294 | 1250295 | 1250296 | 1250297 | 1250298 | 1250299 |
| Micron C | MI 155C | MI 305C | MI 455C | MI 605C | MI 755C | MI 905C | MI 1055C | MI 1205C | MI 1355C | MI 1505C | MI 1655C | MI 1805C | MI 1955C | MI 2105C | MI 2255C | MI 2405C | MI 2555C | MI 2705C | MI 2855C | MI 3005C |
| Part number | 1250380 | 1250381 | 1250382 | 1250383 | 1250384 | 1250385 | 1250386 | 1250387 | 1250388 | 1250389 | 1250390 | 1250391 | 1250392 | 1250393 | 1250394 | 1250395 | 1250396 | 1250397 | 1250398 | 1250399 |
| Measuring height (mm) | 100 | 250 | 400 | 550 | 700 | 850 | 1000 | 1150 | 1300 | 1450 | 1600 | 1750 | 1900 | 2050 | 2200 | 2350 | 2500 | 2650 | 2800 | 2950 |
| Number of beams | 3 | 6 | 9 | 12 | 15 | 18 | 21 | 24 | 27 | 30 | 33 | 36 | 39 | 42 | 45 | 48 | 51 | 54 | 57 | 60 |
| Overall height (mm) | 213 | 363 | 513 | 663 | 813 | 963 | 1113 | 1263 | 1413 | 1563 | 1713 | 1863 | 2013 | 2163 | 2313 | 2463 | 2613 | 2763 | 2913 | 3063 |

Beam spacing 75 mm

| | | | | | | | | | | | | | | | | | | | | |
|-----------------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Micron A (AV) | MI 157AV | MI 307AV | MI 457AV | MI 607AV | MI 757AV | MI 907AV | MI 1057AV | MI 1207AV | MI 1357AV | MI 1507AV | MI 1657AV | MI 1807AV | MI 1957AV | MI 2107AV | MI 2257AV | MI 2407AV | MI 2557AV | MI 2707AV | MI 2857AV | MI 3007AV |
| Part number | 1250100 | 1250101 | 1250102 | 1250103 | 1250104 | 1250105 | 1250106 | 1250107 | 1250108 | 1250109 | 1250110 | 1250111 | 1250112 | 1250113 | 1250114 | 1250115 | 1250116 | 1250117 | 1250118 | 1250119 |
| Micron A (AC) | MI 157AC | MI 307AC | MI 457AC | MI 607AC | MI 757AC | MI 907AC | MI 1057AC | MI 1207AC | MI 1357AC | MI 1507AC | MI 1657AC | MI 1807AC | MI 1957AC | MI 2107AC | MI 2257AC | MI 2407AC | MI 2557AC | MI 2707AC | MI 2857AC | MI 3007AC |
| Part number | 1250200 | 1250201 | 1250202 | 1250203 | 1250204 | 1250205 | 1250206 | 1250207 | 1250208 | 1250209 | 1250210 | 1250211 | 1250212 | 1250213 | 1250214 | 1250215 | 1250216 | 1250217 | 1250218 | 1250219 |
| Micron B | MI 157B | MI 307B | MI 457B | MI 607B | MI 757B | MI 907B | MI 1057B | MI 1207B | MI 1357B | MI 1507B | MI 1657B | MI 1807B | MI 1957B | MI 2107B | MI 2257B | MI 2407B | MI 2557B | MI 2707B | MI 2857B | MI 3007B |
| Part number | 1250300 | 1250301 | 1250302 | 1250303 | 1250304 | 1250305 | 1250306 | 1250307 | 1250308 | 1250309 | 1250310 | 1250311 | 1250312 | 1250313 | 1250314 | 1250315 | 1250316 | 1250317 | 1250318 | 1250319 |
| Micron C | MI 157C | MI 307C | MI 457C | MI 607C | MI 757C | MI 907C | MI 1057C | MI 1207C | MI 1357C | MI 1507C | MI 1657C | MI 1807C | MI 1957C | MI 2107C | MI 2257C | MI 2407C | MI 2557C | MI 2707C | MI 2857C | MI 3007C |
| Part number | 1250400 | 1250401 | 1250402 | 1250403 | 1250404 | 1250405 | 1250406 | 1250407 | 1250408 | 1250409 | 1250410 | 1250411 | 1250412 | 1250413 | 1250414 | 1250415 | 1250416 | 1250417 | 1250418 | 1250419 |
| Measuring height (mm) | 75 | 225 | 375 | 525 | 675 | 825 | 975 | 1125 | 1275 | 1425 | 1575 | 1725 | 1875 | 2025 | 2175 | 2325 | 2475 | 2625 | 2775 | 2925 |
| Number of beams | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 24 | 26 | 28 | 30 | 32 | 34 | 36 | 38 | 40 |
| Overall height (mm) | 213 | 363 | 513 | 663 | 813 | 963 | 1113 | 1263 | 1413 | 1563 | 1713 | 1863 | 2013 | 2163 | 2313 | 2463 | 2613 | 2763 | 2913 | 3063 |

SPECIAL MODELS

| | |
|---|--|
| Automatic warehouse applications models | Beams spacing 25, 50, 75 mm |
| 20 mm models | Beams spacing 20 mm |
| AH models | Beams spacing 10 and 30 mm with range up to 18 m |

Please contact ReeR for availability and models

PERIMETER PROTECTIONS

FLOOR-MOUNTED COLUMNS

EOS and MICRON light curtains

| Model | Part number | For light curtains with protected height |
|---------------|-------------|--|
| FMC EB2 | 1207814 | 310, 460, 610 mm and 2 beams |
| FMC EB4 | 1207815 | 760, 910, 1060 mm, 3 and 4 beams |
| FMC EB 1700 | 1207816 | Up to 1360 mm |
| FMC EB 2000 | 1207817 | Up to 1660 mm |
| FMC EB 2200 | 1207819 | Up to 1800 mm |
| FMC EB 2400 | 1207818 | Up to 2100 mm |
| FMC EB 2 R | 1207824 | 310, 460, 610 mm and 2 beams |
| FMC EB 4 R | 1207825 | 760, 910, 1060 mm, 3 and 4 beams |
| FMC EB 1700 R | 1207826 | Up to 1360 mm |
| FMC EB 2000 R | 1207827 | Up to 1660 mm |

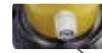
FMC EB
FMC EB R
with PG11
rear union
for cable
sheath



ADMIRAL light curtains

| Model | Part number | For light curtains with protected height |
|--------------|-------------|--|
| FMC B2 | 1200610 | 2 beams |
| FMC B3 | 1200611 | 3 beams |
| FMC B4 | 1200612 | 4 beams |
| FMC B 1700 | 1200618 | Up to 1360 mm |
| FMC B 2000 | 1200616 | Up to 1660 mm |
| FMC B 2 R | 1200613 | 2 beams |
| FMC B 3 R | 1200614 | 3 beams |
| FMC B 4 R | 1200615 | 4 beams |
| FMC B 1700 R | 1200617 | Up to 1360 mm |
| FMC B 2000 R | 1200619 | Up to 1660 mm |

FMC B
FMC B R
with PG11
rear union
for cable
sheath



All models

| Model | Part number | Description |
|---------|-------------|--|
| FMC B12 | 1200502 | Support column height 1200 mm, dimensions 60 x 30 mm |
| FMC B18 | 1200505 | Support column height 1800 mm, dimensions 80 x 80 mm |



SAFEGATE light curtains

| Model | Part number | For light curtains with protected height |
|---------------|-------------|--|
| FMC SG B2 | 1200700 | 2 beams |
| FMC SG B3 | 1200701 | 3 beams |
| FMC SG B4 | 1200702 | 4 beams |
| FMC SG 1700 | 1200703 | Up to 1360 mm |
| FMC SG 2000 | 1200704 | Up to 1660 mm |
| FMC SG B2 R | 1200705 | 2 beams |
| FMC SG B3 R | 1200706 | 3 beams |
| FMC SG B4 R | 1200707 | 4 beams |
| FMC SG 1700 R | 1200708 | Up to 1360 mm |
| FMC SG 2000 R | 1200709 | Up to 1660 mm |

FMC SG
FMC SG R
with PG11
rear union
for cable
sheath



COLUMNS WITH DEFLECTING MIRRORS

| Model | Part number | Description |
|------------|-------------|--|
| FMC S2 | 1200620 | Single mirror for 2 beams light curtains |
| FMC S3 | 1200621 | Single mirror for 3 beams light curtains |
| FMC S4 | 1200622 | Single mirror for 4 beams light curtains |
| FMC S 1700 | 1200625 | Single mirror for controlled height up to 1360 mm light curtains |
| FMC S 2000 | 1200623 | Single mirror for controlled height up to 1660 mm light curtains |
| FMC S2200 | 1200628 | Single mirror for controlled height up to 1800 mm light curtains |
| FMC SB2 | 1200645 | 2 adjustable deflecting mirrors for 2 beams light curtains |
| FMC SB3 | 1200646 | 3 adjustable deflecting mirrors for 3 beams light curtains |
| FMC SB4 | 1200647 | 4 adjustable deflecting mirrors for 4 beams light curtains |

FMC S

FMC SB



DEFLECTING MIRRORS

| Model | Part number | Mirror height (mm) | For light curtains with protected height (mm) |
|-----------|-------------|--------------------|---|
| SP 100 S | 1201805 | 250 | 160 |
| SP 200 S | 1201800 | 370 | 250 |
| SP 300 S | 1201806 | 400 | 310 |
| SP 400 S | 1201801 | 540 | 460 |
| SP 600 S | 1201811 | 715 | 610 or 2 beams |
| SP 700 S | 1201802 | 885 | 760 |
| SP 900 S | 1201812 | 1065 | 910 or 3 beams |
| SP 1100 S | 1201803 | 1230 | 1060 or 4 beams |
| SP 1200 S | 1201810 | 1400 | 1210 |
| SP 1300 S | 1201807 | 1450 | 1360 |
| SP 1500 S | 1201808 | 1600 | 1510 |
| SP 1600 S | 1201813 | 1750 | 1600 |
| SP 1800 S | 1201809 | 1900 | 1810 |



BASES FOR COLUMNS

All column models

| Model | Part number | Description |
|---------|-------------|---------------------|
| FMC CB | 1200500 | Standard base |
| FMC CBL | 1200501 | Reduced height base |



Note: Columns part numbers do not include the base which must be ordered separately


ACCESSORIES

CABLES AND BRACKETS

BRACKETS AND VIBRATION DAMPERS

| EOS, MICRON | | | SAFEGATE | ADMIRAL | DAMPERS | |
|--|---|---|---|--|---|---|
|  |  |  |  |  |  |  |
| SFB 4E [1310976] Set of 4 swivel brackets SFB 6E [1310977] Set of 6 swivel brackets | SFB E180 [1310980] Set of 4 180° swivel brackets | FE 4 [1310997] Set of 4 flat brackets | SFB FAST 4E [1310969] Set of 4 fast-coupling brackets | SFB 4SG [1390950] Set of 4 adjustable brackets SFB 6SG [1390951] Set of 6 adjustable brackets | SFB [1330974] Set of 4 swivel brackets | SAV-4E [1310972] SAV-8E [1310973] SAV-12E [1310974] Sets of 4, 8, 12 vibration dampers for EOS end MICRON SAV-3 [1200088] SAV-4 [1200089] Sets of 2, 3 vibration dampers for ADMIRAL |

CABLES

| Straight connector cables | | 90° angle connector cables | | Extension cables | |
|--|---|--|--|--|--|
| M12 5-pole female straight connector | M12 8-pole female straight connector | M12 5-pole female 90° angle connector | Cable with 2 female straight connectors M12 5-pole | Cable with 2 male/female straight connectors M12 5-pole | |
| CD3 [1330969] 3 m CD5 [1330950] 5 m CD10 [1330956] 10 m CD15 [1330952] 15 m CD20 [1330957] 20 m CD25 [1330949] 25 m CD40 [1330907] 40 m CD50 [1330965] 50 m | C8D5 [1330980] 5 m C8D10 [1330981] 10 m C8D15 [1330982] 15 m C8D20 [1330908] 20 m C8D25 [1330967] 25 m C8D40 [1330966] 40 m C8D50 [1330909] 50 m | CD95 [1330951] 5 m CD910 [1330958] 10 m CD915 [1330953] 15 m | CDS03 [1330990] 0,3 m CDS01 [1330968] 1 m CJBE3 [1360960] 3 m CJBE5 [1360961] 5 m CJBE10 [1360962] 10 m CJBE25 [1360963] 25 m | CFM5P3 [1390908] 3 m CFM5P5 [1390909] 5 m CFM5P10 [1390911] 10 m | |
| M12 8-pole female straight connector for R-Safe sensors | | | | Cable with 2 male/female straight connectors M12 8-pole | |
| CF8P2 [1295118] 2 m CF8P3 [1295103] 3 m CF8P5 [1295104] 5 m | | CF8P10 [1295105] 10 m CF8P20 [1295119] 20 m CF8P25 [1295121] 25 m | | CFM8P3 [1295100] 3 m CFM8P5 [1295101] 5 m CFM8P10 [1295102] 10 m | |
| M12 5-pole shielded female straight connector | M12 8-pole shielded female straight connector | M12 8-pole female 90° angle connector | Cable with 2 female straight connectors M12 8-pole | Cable with 2 female straight connectors M12 12-pole | |
| CD5 SB [1330850] 5 m CD10 SB [1330856] 10 m CD15 SB [1330852] 15 m | C8D5 SB [1330880] 5 m C8D10 SB [1330881] 10 m C8D15 SB [1330882] 15 m | C8D95 [1330983] 5 m C8D910 [1330984] 10 m C8D915 [1330985] 15 m | CFF8P3 [1390918] 3 m CFF8P5 [1390919] 5 m CFF8P10 [1390920] 10 m | CFF12P3 [1390912] 3 m CFF12P5 [1390913] 5 m CFF12P10 [1390914] 10 m | |
| M12 5-pole male straight connector | M12 12-pole female straight connector |  | | | |
| CJS1 [1390915] 1 m CJS3 [1390916] 3 m | CS12D3 [1390900] 3 m CS12D5 [1390901] 5 m CS12D10 [1390902] 10 m CS12D15 [1390906] 15 m CS12D20 [1390907] 20 m | | | | |

Other cables lengths and versions available on request.
Visit reersafety.com

LASER ALIGNMENT DEVICES

- LAD 4 [1310975] For EOS and MICRON light curtains
- LAD 2 [1220301] For ADMIRAL light curtains
- LAD 5 [1390940] For SAFEGATE light curtains



A REFERENCE FOR SAFETY AT WORK

We actively participate in several National, European and International (IEC) Standard Committees on Machine Safety, allowing us to be always at the forefront about products standards compliance.

- ISO/TC 199 - CEN/TC 114
- IEC/TC44 - CLC/TC 44X
- CEI/TC 44
- UNI Safety Committee

Reer participates in the development of the following international standards:

- IEC 61496-1: Safety of Machinery - Electro-Sensitive Protective Equipment Part 1: General requirements and tests
- IEC 61496-2: Safety of Machinery - Electro-Sensitive Protective Equipment Part 2: Particular requirements for equipment using Active Opto-electronic Protective Devices (AOPDs)
- IEC 61496-3: Safety of Machinery - Electro-Sensitive Protective Equipment - Part 3: Particular requirements for Active Opto-electronic Protective Devices responsive to Diffuse Reflection (AOPDDR)
- IEC 61496-4-2: Safety of machinery - Electro-sensitive protective equipment - Part 4-2: Particular requirements for equipment using vision based protective devices (VBPD) - Additional requirements when using stereo vision techniques (VBPDST)
- IEC 61496-4-3: Safety of machinery - Electro-sensitive protective equipment - Part 4-3: Particular requirements for equipment using vision based protective devices (VBPD) - Additional requirements when using reference pattern techniques (VBPDP)
- IEC 62046: Safety of Machinery - Application of protective equipment to detect the presence of persons
- ISO 13849-1: Safety of machinery - Safety related parts of control system - Part 1: General principles for design
- ISO 13850: Safety of machinery - Emergency Stop - Principles for design



COMPANY CERTIFICATIONS



Reer Customer Service is committed to support all customers that need technical guidance regarding functionality, handling and installation of our products.

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