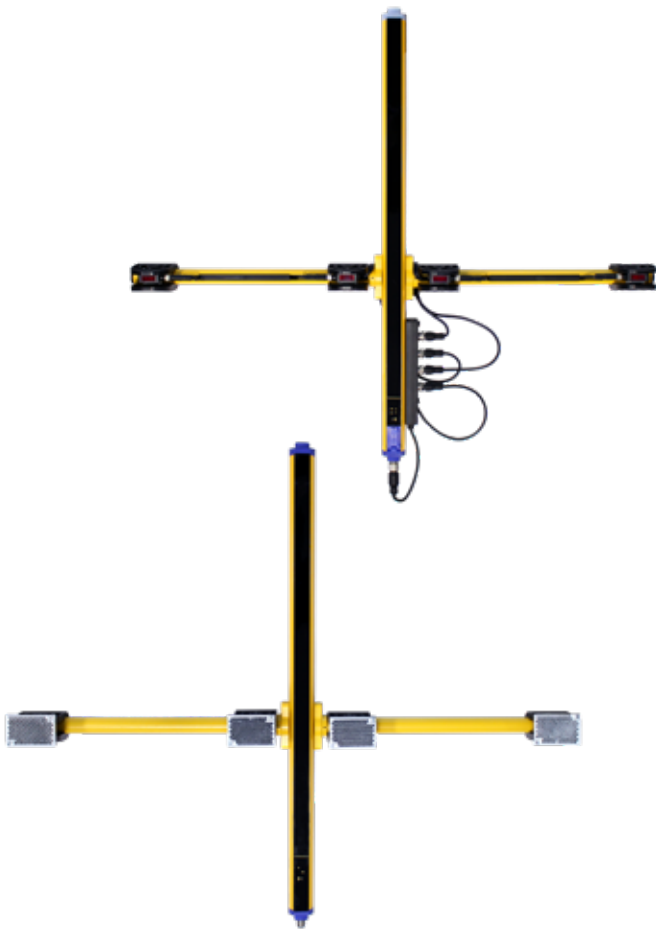


EXTERNAL SENSORS MUTING ARMS: SG-M

Modular, ready-to-use muting sensor kit for flexible installation

The SG-M muting sensors kit regulates the position and orientation of muting beams in order to adapt quickly and easily to any kind of situation.



APPLICATIONS

- Palletizers / Depalletizers
- Conveyor lines

INDUSTRIES

- Material Handling
- Food & Beverage
- Metal working
- Automotive
- Wood
- Ceramics



SG-M L - S8 - 200 - L

| MUTING CONFIGURATION | |
|----------------------|--|
| L | L configuration: 2 sensors, 2 reflectors. Parallel beams. Monodirectional (Exit only). |
| T | T configuration: 4 sensors, 4 reflectors. Parallel beams. Bidirectional. |
| X | X configuration: 2 sensors, 2 reflectors. Crossed beams. Bidirectional. |

| CABLE LENGTH | |
|--------------|---------|
| --- | 700 mm |
| 200 | 2000 mm |

| MUTING SENSOR | |
|---------------|----------------------|
| S8 | 2 x S8-PR-5-B01-PP |
| S100 | 2 x S100-PR-5-B10-PK |

| ARM ORIENTATION | |
|-----------------|--|
| L | Left: the muting arm is to the left, looking at light curtain receiver |
| R | Right: muting arm is to the right, looking at light curtain receiver |

A flexible solution for muting

In some access guarding applications, like in palletizing/depalletizing machines, safety light curtains are muted while a load passes through their monitored area.

When the load has an irregular shape, or has holes in it, muting can end before the load has completely passed the light curtain, causing the unnecessary stop of the machine. In cases like this, the ability to regulate the position and orientation the position and orientation of muting beams with increased flexibility, allows the system to adapt quickly and easily to any kind of situation. To simplify the installation of muting sensors in these kind of applications, Datalogic has developed the new SG-M muting sensors modular Kits. The SG-M includes retroreflective photocells as muting sensors, reflectors, cylindrical metallic arms, orientable plastic brackets, cables with M12 connectors, and a connection box for the quick wiring of the sensor outputs to the safety light curtain dedicated muting connector.

The SG-M is the newest addition to a safety portfolio that includes integrated muting arms (SG-T-ARM and SG-L-ARM).

The arms with external sensors can be attached directly to the light curtains of SG Series (fig. 1) or to their protective stands SG-PSB (fig. 2).

With SG-M, three standard configurations for muting beams can be easily installed: T Muting (fig.3), L Muting (fig. 4 and 5) and X Muting (fig. 6).

Sensors provided with the kit are retroreflective, dark on photocells, and come in two versions:

- S100-PR-5-B10-PK, for standard applications with no specific requirements
- S8-PR-5-B01-PP for applications where beam intensity regulation is required.

On the opposite side of the sensors, an R6 reflector is mounted.

Sensors and reflectors can be positioned along the arms and orientated both horizontally and vertically thanks to their brackets shape.

Sensors have detachable cables (in T and L muting kits) or pigtailed. Both cables have an M12 connector M12 connector, for a quick connection to the safety light curtains through a dedicated connection box (SG-M-CB), or to an external safety controller through normal cables.

The cables are protected inside the metallic arms and have different lengths (700 and 2000 mm), for easy installation on the light curtains, or on the protective stands.

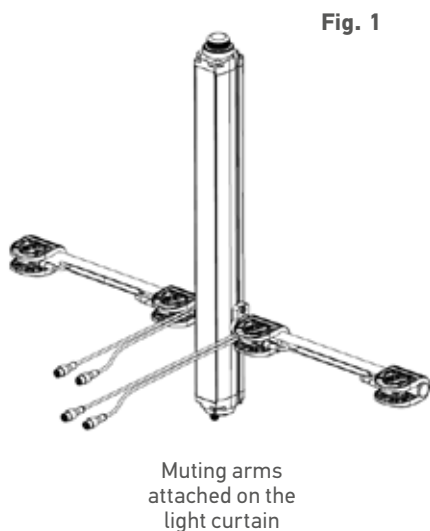


Fig. 1

Muting arms attached on the light curtain



Fig. 2

Muting arms attached to the protective stands

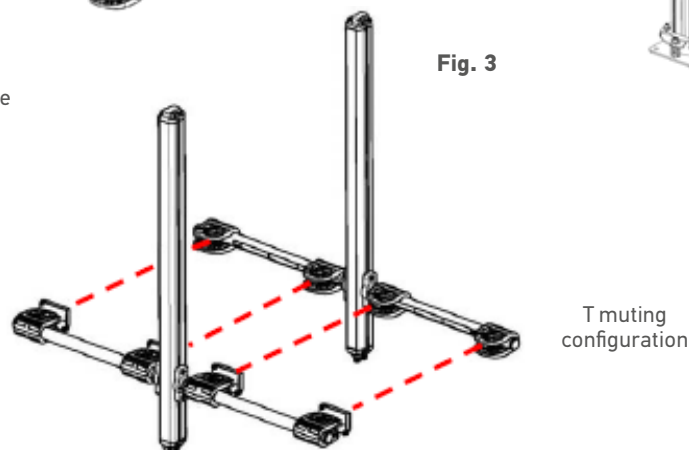


Fig. 3

T muting configuration

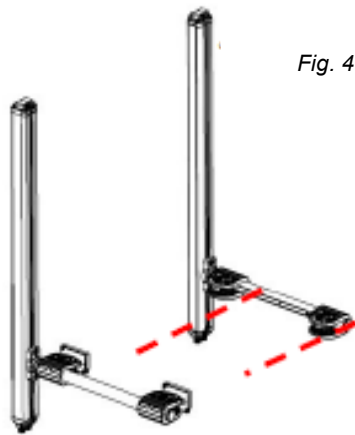


Fig. 4

L muting configuration with orientation to the right.

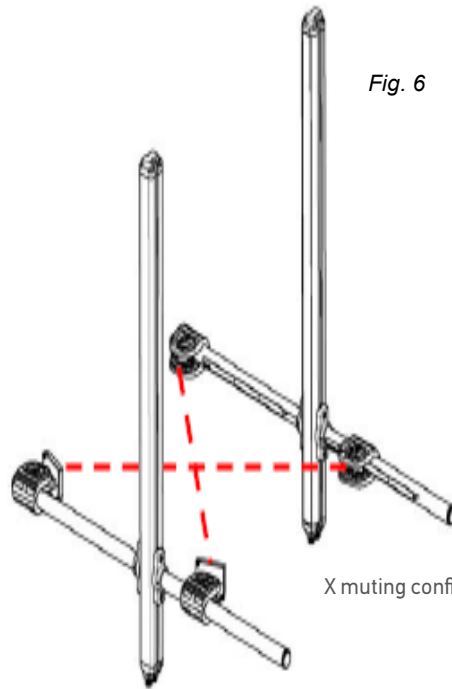


Fig. 6

X muting configuration

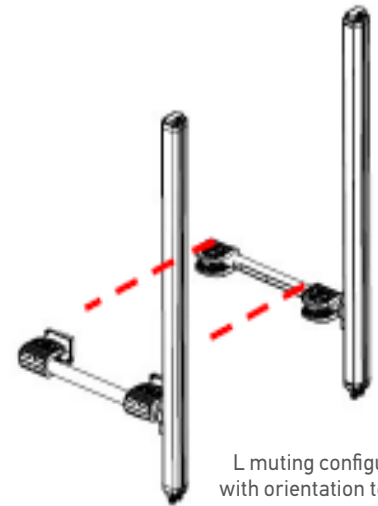


Fig. 5

L muting configuration with orientation to the left

SG-M MUTING KITS

| MUTING CONFIGURATION | MODEL | DIRECTION *1 | SENSOR ADJUSTMENT TRIMMER | MIN/MAX DISTANCE *4 | SENSORS *2 | CABLES *3 | ORDER NUMBER |
|----------------------|------------------|--------------|---------------------------|---------------------|-----------------------------|-----------------------------|--------------|
| L Muting | SG-ML-S100-L | left side | No | 0.2 ... 3 m | 2 x S100-PR-5-B10-PK | 2 x CS-M1-02-B-007 (700 mm) | 95ASE2620 |
| | SG-ML-S100-R | right side | No | 0.2 ... 3 m | 2 x S100-PR-5-B10-PK | 2 x CS-M1-02-B-007 (700 mm) | 95ASE2430 |
| | SG-ML-S100-200-L | left side | No | 0.2 ... 3 m | 2 x S100-PR-5-B10-PK | 2 x CS-M1-02-B-02 (2000 mm) | 95ASE2610 |
| | SG-ML-S100-200-R | right side | No | 0.2 ... 3 m | 2 x S100-PR-5-B10-PK | 2 x CS-M1-02-B-02 (2000 mm) | 95ASE2400 |
| | SG-ML-S8-L | left side | Yes | 0.2 ... 3 m | 2 x S8-PR-5-B01-PP | 2 x CS-M1-02-B-007 (700 mm) | 95ASE2600 |
| | SG-ML-S8-R | right side | Yes | 0.2 ... 3 m | 2 x S8-PR-5-B01-PP | 2 x CS-M1-02-B-007 (700 mm) | 95ASE2370 |
| | SG-ML-S8-200-L | left side | Yes | 0.2 ... 3 m | 2 x S8-PR-5-B01-PP | 2 x CS-M1-02-B-02 (2000 mm) | 95ASE2590 |
| SG-ML-S8-200-R | right side | Yes | 0.2 ... 3 m | 2 x S8-PR-5-B01-PP | 2 x CS-M1-02-B-02 (2000 mm) | 95ASE2340 | |
| T Muting | SG-MT-S100 | | No | 0.2 ... 3 m | 4 x S100-PR-5-B10-PK | 4 x CS-M1-02-B-007 (700 mm) | 95ASE2440 |
| | SG-MT-S100-200 | | No | 0.2 ... 3 m | 4 x S100-PR-5-B10-PK | 4 x CS-M1-02-B-02 (2000 mm) | 95ASE2410 |
| | SG-MT-S8 | | Yes | 0.2 ... 3 m | 4 x S8-PR-5-B01-PP | 4 x CS-M1-02-B-007 (700 mm) | 95ASE2380 |
| | SG-MT-S8-200 | | Yes | 0.2 ... 3 m | 4 x S8-PR-5-B01-PP | 4 x CS-M1-02-B-02 (2000 mm) | 95ASE2350 |
| X Muting | SG-MX-S100 | | No | 0.45 ... 3 m | 2 x S100-PR-2-B10-PK SV4973 | pigtail 700 mm | 95ASE2450 |
| | SG-MX-S100-200 | | No | 0.45 ... 3 m | 2 x S100-PR-2-B10-PK SV4974 | pigtail 2000 mm | 95ASE2420 |
| | SG-MX-S8 | | Yes | 0.6 ... 3 m | 2 x S8-PR-5-B01-PP SV4973 | pigtail 700 mm | 95ASE2390 |
| | SG-MX-S8-200 | | Yes | 0.6 ... 3 m | 2 x S8-PR-5-B01-PP SV4974 | pigtail 2000 mm | 95ASE2360 |

NOTE

*1 "Left side" and "Right side", related to L muting kits, refers to the position of the arm looking towards the receiver of the light curtain.

"Left side" and "Right side" kits differ only mechanically, in order to keep the regulating screws upside.

*2 In X Muting Kits, special versions of photocells with pigtailed and M12 connectors have been used.

*3 Cables used in T and L muting kits have M8 connectors on the sensors side, and M12 connectors at the external side.

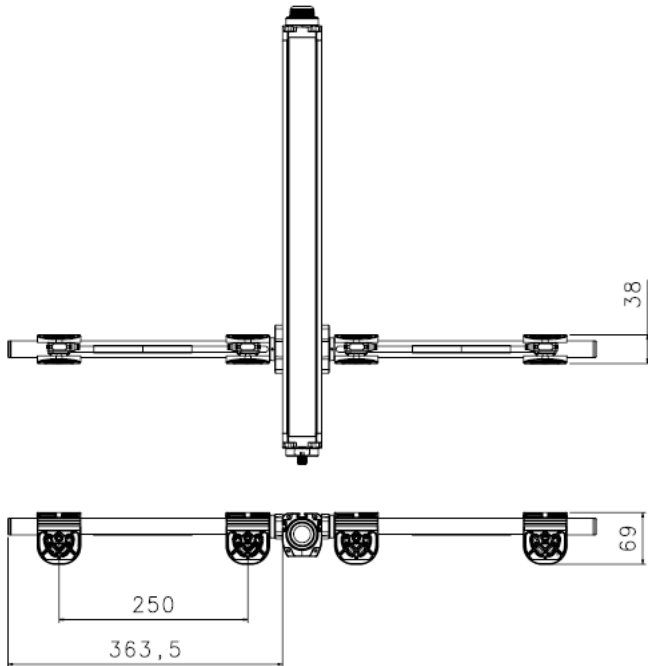
*4 Minimum distance of 0.2 m is determined by the light curtain. Maximum distance of 3 m is to avoid interferences between muting sensors

COMPATIBILITY

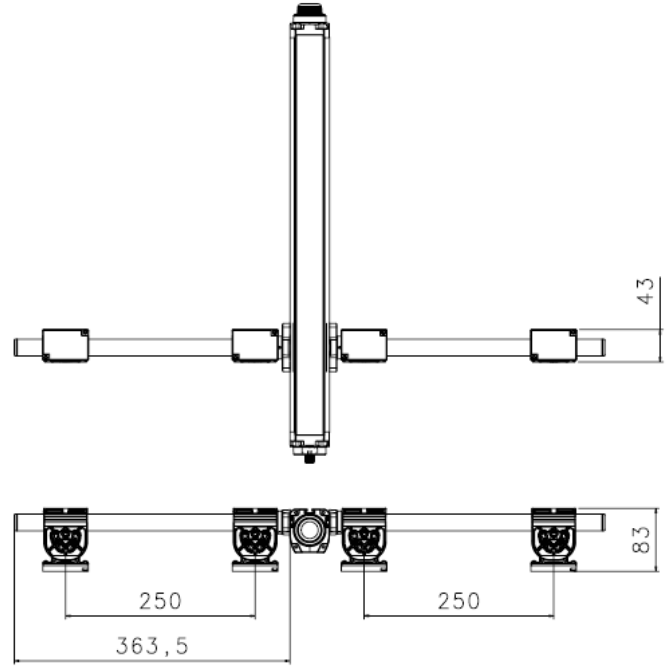
SG BODY COMPACT MUTING
 SG BODY BIG MUTING
 SG BODY REFLECTOR MUTING
 SG2 MUTING
 SG4 EXTENDED
 SG-PSB (only models with 2000 mm cables (SG-Mx-xxx-200-x))

DIMENSIONS

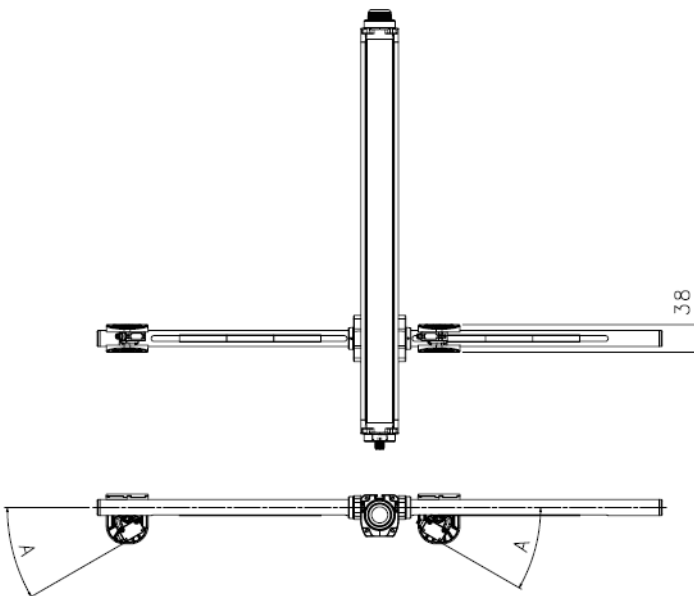
SG-M-T Active Side



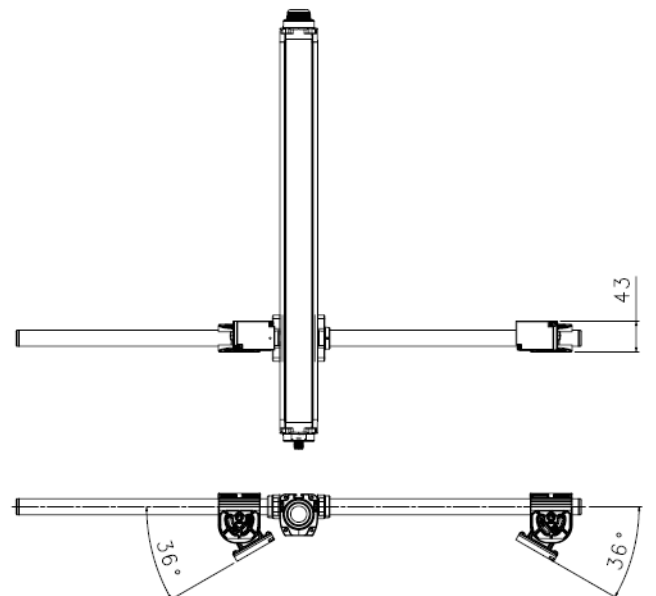
SG-M-T Passive Side



SG-M-X Active Side



SG-M-X Passive Side



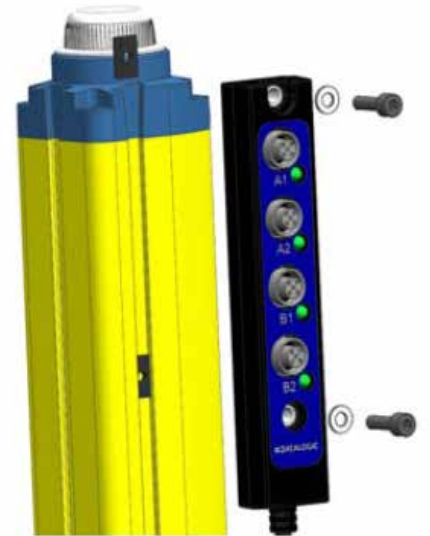
| Angle/Sensor Type | S100 | S8 |
|-------------------|------|-----|
| A | 38° | 31° |

SG-M CONNECTION BOX

The SG-M connection box has 4 M12 connectors on board, one for each muting sensor to be connected to an SG Series light curtain. Unused connectors need to be covered by a cap, in order to maintain IP65 protection.

A green LED indicator signals when the muting sensor is generating the corresponding muting signal towards the safety light curtain.

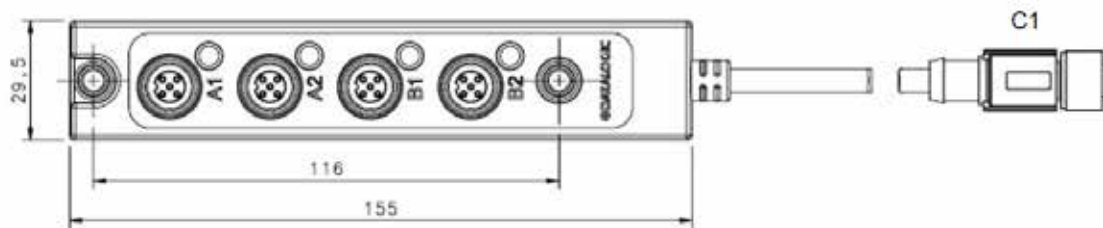
Inside the connection box, signals are put in parallel: A1 with A2 and B1 with B2, and forwarded to the pigtail connector, that has to be inserted into the muting connector of the light curtain.



| MODEL | DESCRIPTION | ORDER NUMBER |
|-------------|------------------------------|--------------|
| SG-M-CB | Connection Box for SG-M kits | 95ASE2500 |
| SG-M-CB-KIT | SG-M-CB Mounting Kit | 95ASE2830 |

COMPATIBILITY

SG BODY COMPACT MUTING
 SG BODY BIG MUTING
 SG BODY REFLECTOR MUTING
 SG2 MUTING
 SG4 EXTENDED
 SG-PSB



| PIN # | S8 | S100 |
|-------|--------------|----------------------|
| 1 | | +24 Vdc |
| 2 | Alarm output | Light/Dark selection |
| 3 | | 0 Vdc |
| 4 | | PnP Output |

S100 AND S8 SENSORS

| MODEL | CHARACTERISTICS | REGULATIONS | MAX. OPERATING DISTANCE | CONNECTION | ORDER NUMBER |
|-------------------------|---|--|-------------------------|---------------------|--------------|
| S100-PR-5-B10-PK | Polarized retroreflective, red LED, PnP Output, Plastic | Dark/Light | 6 m | M8 | 950811310 |
| S100-PR-2-B10-PK SV4972 | | | | 400 mm pigtail M12 | 950815060 |
| S100-PR-2-B10-PK SV4973 | | | | 700 mm pigtail M12 | 950815070 |
| S100-PR-2-B10-PK SV4974 | | | | 2000 mm pigtail M12 | 950815080 |
| S8-PR-5-B01-PP | | Dark/Light Mono-turn sensitivity adjustment trimmer | 7 m | M8 | 950801160 |
| S8-PR-5-B01-PP SV4972 | | | | 400 mm pigtail M12 | 950805340 |
| S8-PR-5-B01-PP SV4973 | | | | 700 mm pigtail M12 | 950805350 |
| S8-PR-5-B01-PP SV4974 | | | | 2000 mm pigtail M12 | 950805360 |

NOTES

1* With reflector R6

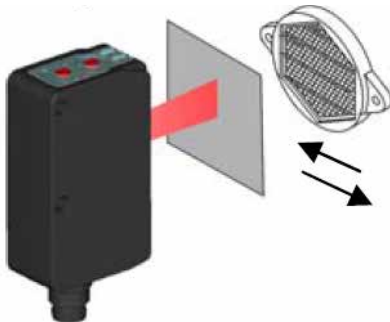
For more detailed technical information about the sensors, refer to Datasheet of S100 or S8 families.

S8 SETTINGS

DARK



Rotate trimmer in a clockwise direction to set the DARK mode (output ON in presence of the object).



Position the sensor in front of its reflector



If needed, regulate the intensity of the beam by rotating the adjustment trimmer

SPARE PARTS

| MODEL | NOTES | ORDER NUMBER |
|----------------|---|--------------|
| SG-M-ARM | Cylindrical Metallic Arm | 95ASE2460 |
| CS-M1-02-B-004 | 4 poles M8 female M12 male cable 400mm | 95ASE2470 |
| CS-M1-02-B-007 | 4 poles M8 female M12 male 700mm | 95ASE2480 |
| CS-M1-02-B-02 | 4 poles M8 female M12 male 2000mm | 95ASE2490 |
| SG-M BRACKET | Single plastic orientable bracket, to mount S8, S100, or R6 | 95ASE2630 |
| R6 | Prismatic reflector 36 x 55 mm - plastic support 40.5 x 60 mm | 95A151350 |