

# Electrical protection











|                                      |       |
|--------------------------------------|-------|
| <b>Multigates</b> .....              | 4-5   |
| MC 3/7 .....                         | 6     |
| MC 25/27 .....                       | 7     |
| MC 35/37 .....                       | 8     |
| MB 5/11 .....                        | 9     |
| MC 3 .....                           | 10    |
| MC 25 .....                          | 11    |
| MC 35 .....                          | 12    |
| MC 16 .....                          | 13    |
| MC 10 .....                          | 14    |
| MB 4 .....                           | 15    |
| LMC 14 IP54 .....                    | 16    |
| LMC 25 IP54 .....                    | 17    |
| LMC 51 IP 54 .....                   | 18    |
| LMC 35 IP44 .....                    | 19    |
| MB 4/10 .....                        | 20    |
| MH 10 .....                          | 21    |
| MH 25 .....                          | 22    |
| MH 27 .....                          | 23    |
| ISMC Interspace .....                | 24    |
| Custom made .....                    | 25    |
| <b>Splitting Multigates</b> .....    | 26-27 |
| MC 2x8-67 .....                      | 28    |
| MC 1x8-67 .....                      | 29    |
| SCG 2x3-35 .....                     | 30    |
| SCG 1x3-35 .....                     | 31    |
| MC 2/10, MC 2/18 .....               | 32    |
| MC 1/9 .....                         | 33    |
| <b>Singlegates</b> .....             | 34-35 |
| T-VET .....                          | 36    |
| VET .....                            | 37    |
| T-GET .....                          | 38    |
| GET .....                            | 39    |
| T-GD .....                           | 40    |
| T-GDM .....                          | 41    |
| MGD .....                            | 42    |
| M 20-80 .....                        | 43    |
| <b>Comparison of Materials</b> ..... | 44    |
| <b>IP codes</b> .....                | 45    |
| <b>Assembly</b> .....                | 46-47 |
| <b>Fixing details</b> .....          | 48-49 |
| <b>Dimensions</b> .....              | 50-51 |

# Multigates

Multigates are metal or plastic reinforced cable gland plates for leading through low and medium power current cables as well various types of tubing. The products fit directly to standard cut-outs.

Multigates do not need any separate gaskets or glands which makes Multigates very easy to use, providing innumerable advantages in a single assembly unit.

Multigate cable gland plates are made of various types of polymers. All these polymers are RoHS approved and have excellent weather, UV- and ozone resistance. Also EMC-compatible and oil resistant models are available. Oil resistance has been tested according to UL 157 -standard, and these test results are available on request.

Multigates are available with plastic locking pins, which can be used to secure the Multigate to metal as well as plastic enclosures (indoor applications).



## Packing codes

| Example code 105002 |                                                                    |
|---------------------|--------------------------------------------------------------------|
| 105002b             | LMC-14 IP54 RAL7035 single packed bag                              |
| 105002f             | LMC-14 IP54 RAL7035 with fastener pins                             |
| 105002c             | LMC-14 IP54 RAL7035 single packed with fastener pins (combination) |

## IP66/67-series

Multigates MC 3/7, MC 25/27, MC 35/37 and MB 5/11 are metal reinforced cable gland plates with new excellent design. The design gives absolute protection against dust and strong jets of water and also against the effects of immersion between 15 cm and 1 m. Also the new design gives excellent protection for strongly bended cables.

## IP65-series

Multigates MC 3, MC 25 and MC 35 are metal reinforced cable gland plates with well known design. The design gives absolute protection against dust and spraying water from all directions.





## IP55-series

Multigate MB 4/10, MC-10 and MB-4 are metal reinforced cable gland plates with well known design. The design gives protection for limited ingress of dust and against water splashed from all directions.

## IP54 LMC-series

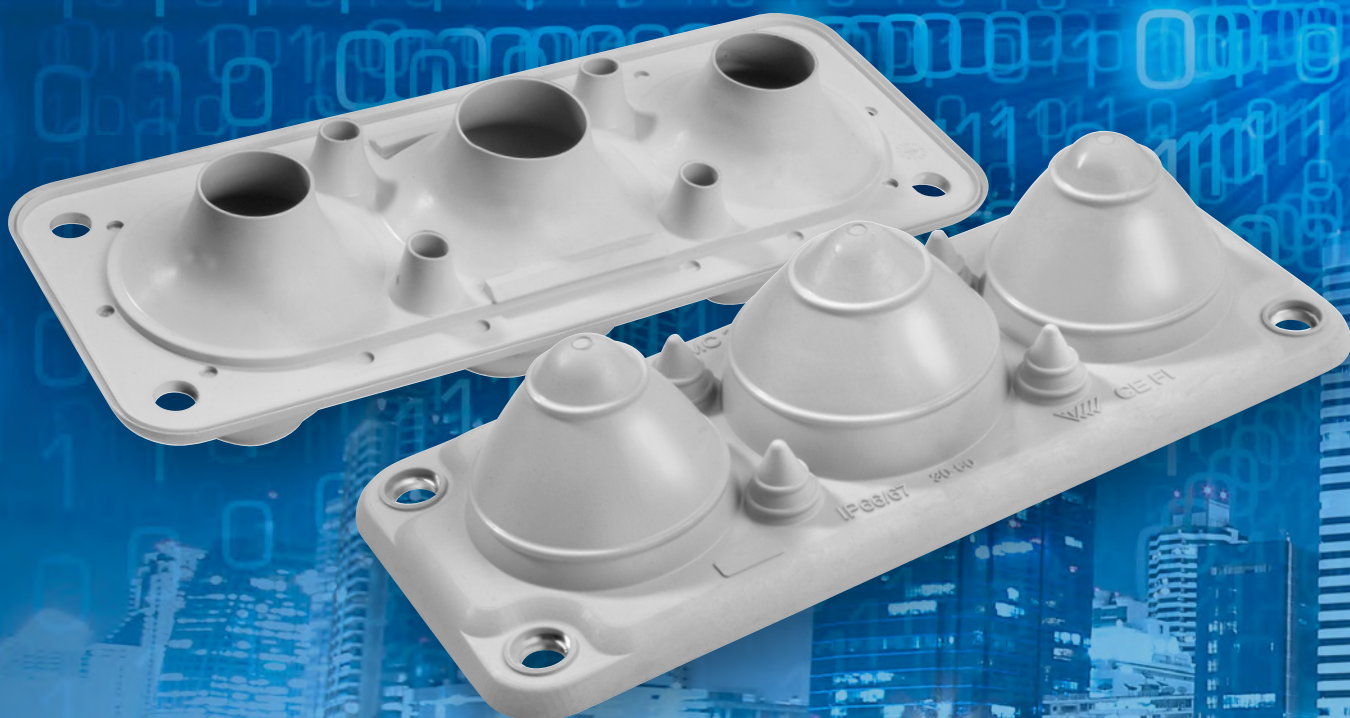
Multigates LMC 14, LMC 25, LMC 35 and LMC 51 are metal reinforced cable gland plates with new design. The design gives protection against water splashed from all directions. Also the new design gives excellent protection for separate cables when cables are bended effectly.

## IP54-series

Multigate MC 16 is plastic or metal reinforced cable gland plates with well known design. The design gives protection for limited ingress of dust and against water splashed from all directions.



# MC 3/7



MC 3/7 Multigate is suitable for leading through both low and medium power current cables as well as various types of tubing. It fits directly to a C-standard cut-out (or FL 21).

MC 3/7 Multigate is metal reinforced new type of cable gland plate made of various types of polymers. It meets the respective IP enclosure classes as it does not need separate gaskets or glands which makes it very easy to use, providing innumerable advantages in a single assembly unit.

MC 3/7 Multigate is suitable for both outdoor and indoor use.

MC 3/7 Multigate gives absolute protection against dust and both strong jets of water from all direction and against the effects of immersion between 15 cm and 1,0 m.

MC 3/7 Multigate can be used instead of MC 3 Multigate. The configuration has the same openings than MC 3.

MC 3/7 Multigate is inspected and certified by SGS.

MC 3/7 Multigate will lead through and seal cables as follows:

|            |       |
|------------|-------|
| 24 - 54 mm | 2 pcs |
| 30 - 60 mm | 1 pc  |
| 10 - 14 mm | 4 pcs |

---

Total of 7 cables

| Code   | Colour     | Ral code | Electrical number | Delivery time     | Service temperature *) | Special                     |
|--------|------------|----------|-------------------|-------------------|------------------------|-----------------------------|
| 105041 | Light Grey | 7035     | 3400353           | From Stock        | -40 - +100 °C          | Material UL 94 V-0 approved |
| 103577 | Light Grey | 7035     | 3400321           | From Stock        | -40 - +100 °C          |                             |
| 103576 | Grey       | 7032     | 3400320           | 3-4 weeks from PO | -40 - +100 °C          |                             |
| 103580 | Black      |          | 3400323           | From Stock        | -40 - +100 °C          | Material UL 94 V-0 approved |

- Packing size 60 pcs/box  
- Single packed 40 pcs/box (b)

\*) Service temperature for unstressed material



# MC 25/27



Multigates

MC 25/27 Multigate is suitable for leading through both low and medium power current cables as well as various types of tubing. It fits directly to a C-standard cut-out (or FL 21).

MC 25/27 Multigate is metal reinforced new type of cable gland plate made of various types of polymers. It meets the respective IP enclosure classes as it does not need separate gaskets or glands which makes it very easy to use, providing innumerable advantages in a single assembly unit.

MC 25/27 Multigate is suitable for both outdoor and indoor use.

MC 25/27 Multigate gives absolute protection against dust and both strong jets of water from all direction and against the effects of immersion between 15 cm and 1,0 m.

MC 25/27 Multigate can be used instead of MC 25 Multigate. The configuration has the same openings than MC 25 and 2 extra.

MC 25/27 Multigate is inspected and certified by SGS.

MC 25/27 Multigate will lead through and seal cables as follows:

|            |        |
|------------|--------|
| 5 - 7 mm   | 4 pcs  |
| 8 - 12 mm  | 4 pcs  |
| 10 - 14 mm | 13 pcs |
| 14 - 20 mm | 4 pcs  |
| 20 - 26 mm | 2 pcs  |

---

Total of 27 cables

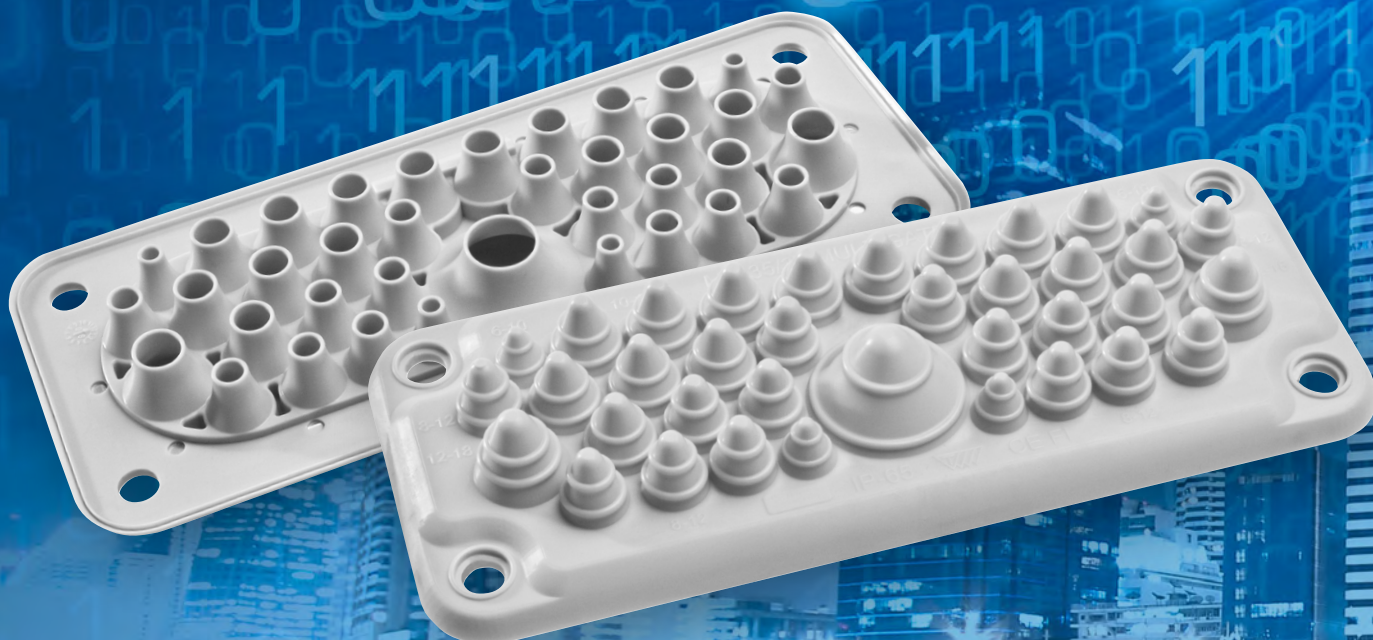
| Code   | Colour     | Ral code | Electrical number | Delivery time     | Service temperature *) | Special                     |
|--------|------------|----------|-------------------|-------------------|------------------------|-----------------------------|
| 105042 | Light Grey | 7035     | 3400354           | From Stock        | -40 – +100 °C          | Material UL 94 V-0 approved |
| 103584 | Light Grey | 7035     | 3400326           | From Stock        | -40 – +100 °C          |                             |
| 103583 | Grey       | 7032     | 3400325           | 3-4 weeks from PO | -40 – +100 °C          |                             |
| 103586 | Black      |          | 3400328           | From Stock        | -40 – +100 °C          | Material UL 94 V-0 approved |

- Packing size 60 pcs/box  
- Single packed 40 pcs/box (b)

\*) Service temperature for unstressed material



# MC 35/37



MC 35/37 Multigate is suitable for leading through both low and medium power current cables as well as various types of tubing. It fits directly to a C-standard cut-out (or FL 21).

MC 35/37 Multigate is metal reinforced new type of cable gland plate made of various types of polymers. It meets the respective IP enclosure classes as it does not need separate gaskets or glands which makes it very easy to use, providing innumerable advantages in a single assembly unit.

MC 35/37 Multigate is suitable for both outdoor and indoor use.

MC 35/37 Multigate gives absolute protection against dust and both strong jets of water from all direction and against the effects of immersion between 15 cm and 1,0 m.

MC 35/37 Multigate can be used instead of MC 35 Multigate. The configuration has the same openings than MC 35 and 2 extra.

MC 35/37 Multigate is inspected and certified by SGS.

MC 35/37 Multigate will lead through and seal cables as follows:

|            |        |
|------------|--------|
| 6 - 10 mm  | 4 pcs  |
| 8 - 12 mm  | 14 pcs |
| 10 - 14 mm | 16 pcs |
| 12 - 18 mm | 2 pcs  |
| 17 - 32 mm | 1 pc   |

---

Total of 37 cables

| Code   | Colour     | Ral code | Electrical number | Delivery time     | Service temperature *) | Special                     |
|--------|------------|----------|-------------------|-------------------|------------------------|-----------------------------|
| 105043 | Light Grey | 7035     | 3400355           | From Stock        | -40 – +100 °C          | Material UL 94 V-0 approved |
| 103589 | Light Grey | 7035     | 3400331           | From Stock        | -40 – +100 °C          |                             |
| 103588 | Grey       | 7032     | 3400330           | 3-4 weeks from PO | -40 – +100 °C          |                             |
| 103591 | Black      |          | 3400333           | From Stock        | -40 – +100 °C          | Material UL 94 V-0 approved |

- Packing size 60 pcs/box
- Single packed 40 pcs/box (b)

\*) Service temperature for unstressed material



# MB 5/11



Multigates

MB 5/11 Multigate is suitable for leading through both low and medium power current cables as well as various types of tubing. It fits directly to a B-standard cut-out (or FL 13).

MB 5/11 Multigate is metal reinforced new type of cable gland plate made of various types of polymers. It meets the respective IP enclosure classes as it does not need separate gaskets or glands which makes it very easy to use, providing innumerable advantages in a single assembly unit.

MB 5/11 Multigate is suitable for both out door and indoor use.

MB 5/11 Multigate gives absolute protection against dust and both strong jets of water from all direction and against the effects of immersion between 15 cm and 1,0 m.

MB 5/11 Multigate can be used instead of MB 5 Multigate. The configuration has the same openings than MB 5 and 6 extra.

MB 5/11 Multigate is inspected and certified by SGS.

MB 5/11 Multigate will lead through and seal cables as follows:

|            |       |
|------------|-------|
| 5 - 7 mm   | 4 pcs |
| 7 - 10 mm  | 3 pcs |
| 10 - 14 mm | 2 pcs |
| 15 - 30 mm | 2 pcs |

Total of 11 cables

| Code   | Colour     | Ral code | Electrical number | Delivery time     | Service temperature *) | Special                     |
|--------|------------|----------|-------------------|-------------------|------------------------|-----------------------------|
| 105044 | Light Grey | 7035     | 3400356           | From Stock        | -40 – +100 °C          | Material UL 94 V-0 approved |
| 103608 | Light Grey | 7035     | 3400336           | From Stock        | -40 – +100 °C          |                             |
| 103607 | Grey       | 7032     | 3400335           | 3-4 weeks from PO | -40 – +100 °C          |                             |

- Packing size 200 pcs/box

\*) Service temperature for unstressed material



# MC 3



MC 3 Multigate is suitable for leading through both low and medium power current cables as well as various types of tubing. It fits directly to a C-standard cut-out ( or FL 21 ).

MC 3 Multigate is well known metal reinforced cable gland plate made of various types of polymers. It meets the respective IP enclosure classes as it does not need separate gaskets or glands which makes it very easy to use, providing innumerable advantages in a single assembly unit.

MC 3 Multigate is suitable for both outdoor and indoor use.

MC 3 Multigate gives absolute protection against dust and spraying water from all directions.

MC 3 Multigate is inspected and certified by SGS.

MC 3 Multigate will lead through and seal cables as follows:

|            |       |      |
|------------|-------|------|
| 24 - 54 mm | 2 pcs | IP65 |
| 30 - 60 mm | 1 pc  | IP65 |
| 8 - 12 mm  | 4 pcs | IP54 |

Total of 7 cables

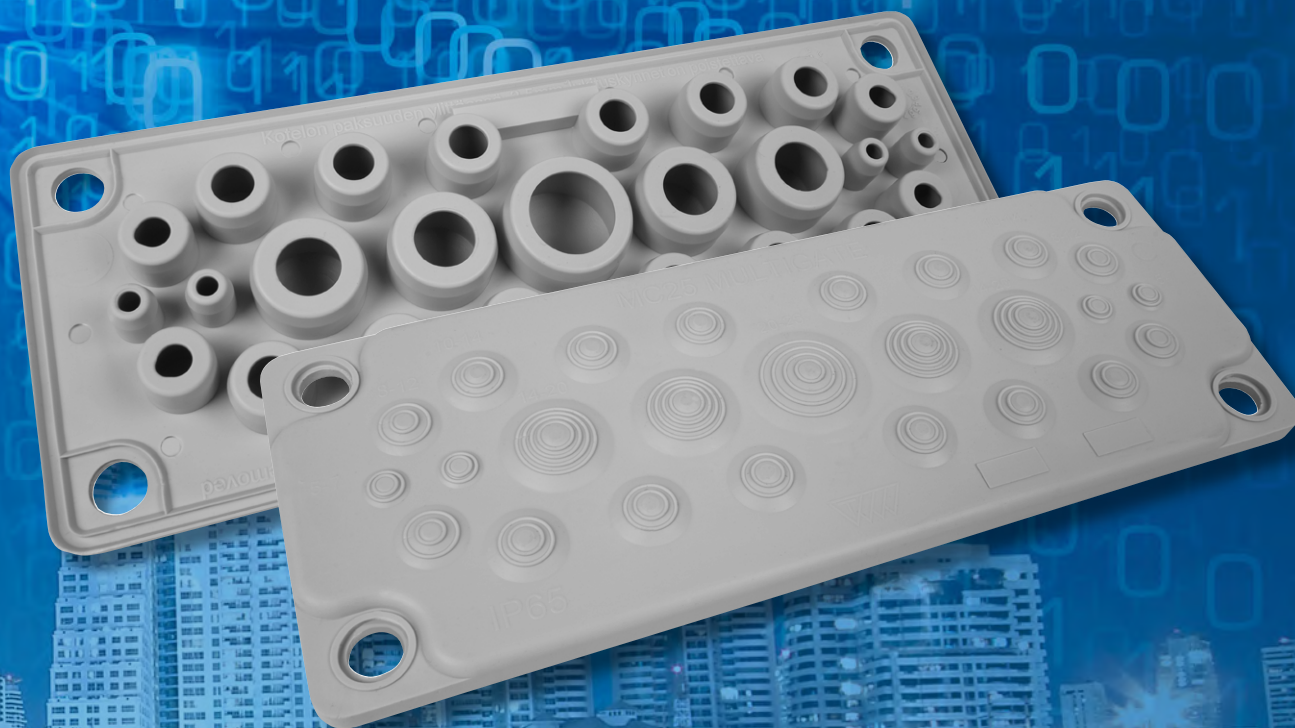
| Code   | Colour     | Ral code | Electrical number | Delivery time     | Service temperature *) | Special                     |
|--------|------------|----------|-------------------|-------------------|------------------------|-----------------------------|
| 100234 | Light Grey | 7035     | 1732351           | From Stock        | -40 – +100 °C **)      |                             |
| 100235 | Black      |          | 3400301           | From Stock        | -40 – +100 °C          | Material V-O, oil-resistant |
| 100233 | Grey       | 7032     | 1732350           | 3-4 weeks from PO | -40 – +100 °C **)      |                             |

- Packing size 100 pcs/box  
- Single packed 80 pcs/box (b)

\*) Service temperature for unstressed material  
\*\*) Available with fastener pins (f)



# MC 25



Multigates

MC 25 Multigate is suitable for leading through both low and medium power current cables as well as various types of tubing. It fits directly to a C-standard cut-out (or FL 21).

MC 25 Multigate is well known metal reinforced cable gland plate made of various types of polymers. It meets the respective IP enclosure classes as it does not need separate gaskets or glands which makes it very easy to use, providing innumerable advantages in a single assembly unit.

MC 25 Multigate is suitable for both outdoor and indoor use.

MC 25 Multigate gives absolute protection against dust and spraying water from all directions.

MC 25 Multigate is inspected and certified by SGS.

MC 25 Multigate will lead through and seal cables as follows:

|            |        |
|------------|--------|
| 5 - 7 mm   | 4 pcs  |
| 8 - 12 mm  | 4 pcs  |
| 10 - 14 mm | 12 pcs |
| 14 - 20 mm | 4 pcs  |
| 20 - 26 mm | 1 pc   |

Total of 25 cables

| Code   | Colour     | Ral code | Electrical number | Delivery time     | Service temperature *) | Special                     |
|--------|------------|----------|-------------------|-------------------|------------------------|-----------------------------|
| 100238 | Light Grey | 7035     | 1732352           | From Stock        | -40 – +100 °C **)      |                             |
| 100239 | Black      |          | 3400304           | From Stock        | -40 – +100 °C          | Material V-0, oil-resistant |
| 100237 | Grey       | 7032     | 3400306           | 3-4 weeks from PO | -40 – +100 °C **)      |                             |
| 100214 | Black      |          | 3400305           |                   | -40 – +100 °C          | EMC tested                  |

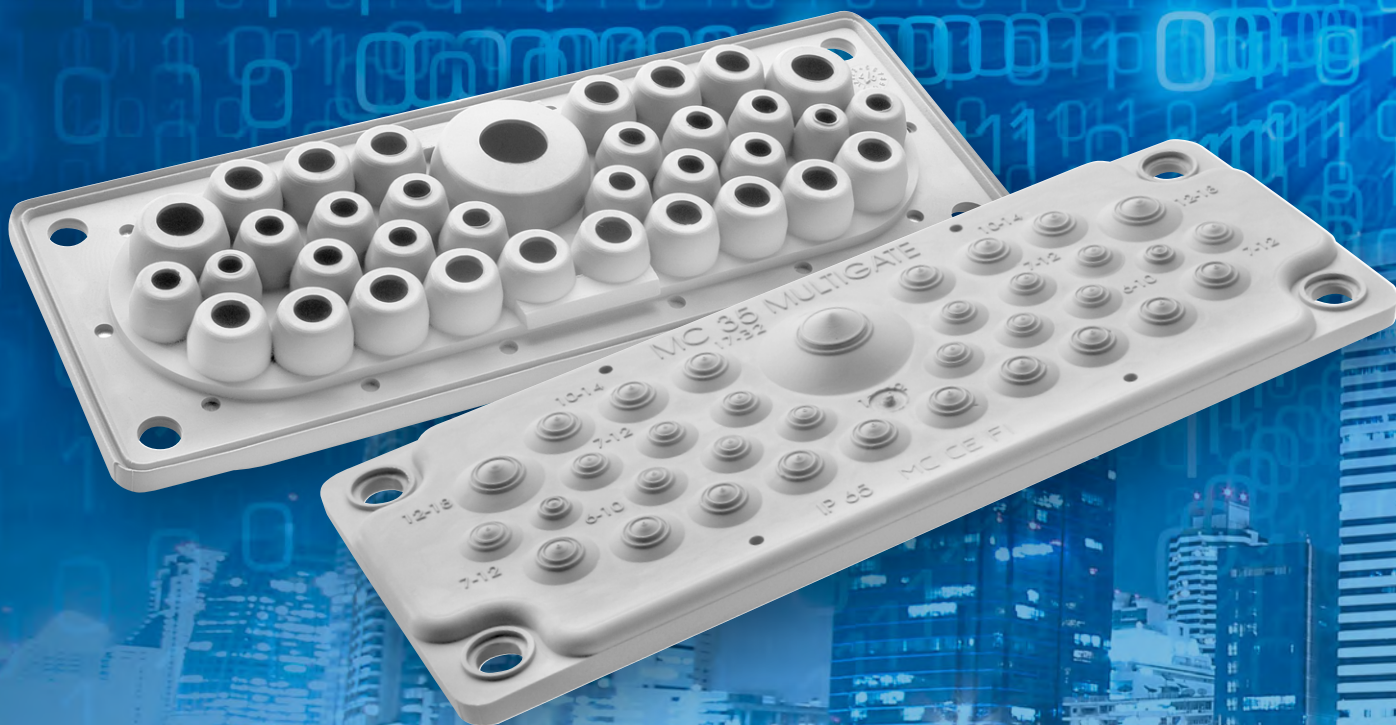
- Packing size 100 pcs/box
- Single packed 80 pcs/box (b)

\*) Service temperature for unstressed material

\*\*) Available with fastener pins (f)



# MC 35



MC 35 Multigate is suitable for leading through both low and medium power current cables as well as various types of tubing. It fits directly to a C-standard cut-out (or FL 21).

MC 35 Multigate is well known metal reinforced cable gland plate made of various types of polymers. It meets the respective IP enclosure classes as it does not need separate gaskets or glands which makes it very easy to use, providing innumerable advantages in a single assembly unit.

MC 35 Multigate is suitable for both outdoor and indoor use.

MC 35 Multigate gives absolute protection against dust and spraying water from all directions.

MC 35 Multigate is inspected and certified by SGS.

MC 35 Multigate will lead through and seal cables as follows:

|            |        |
|------------|--------|
| 6 - 10 mm  | 2 pcs  |
| 7 - 12 mm  | 14 pcs |
| 10 - 14 mm | 16 pcs |
| 12 - 18 mm | 2 pcs  |
| 17 - 32 mm | 1 pc   |

Total of 35 cables

| Code   | Colour     | Ral code | Electrical number | Delivery time     | Service temperature *) | Special                     |
|--------|------------|----------|-------------------|-------------------|------------------------|-----------------------------|
| 100244 | Light Grey | 7035     | 1732353           | From Stock        | -40 – +100 °C **)      |                             |
| 100245 | Black      |          | 3400308           | From Stock        | -40 – +100 °C          | Material V-0, oil-resistant |
| 100243 | Grey       | 7032     | 3400310           | 3-4 weeks from PO | -40 – +100 °C **)      |                             |
| 100215 | Black      |          | 3400309           |                   | -40 – +100 °C          | EMC tested                  |

- Packing size 100 pcs/box
- Single packed 80 pcs/box (b)

\*) Service temperature for unstressed material  
 \*\*) Available with fastener pins (f)



# MC 16



Multigates

MC 16 Reversible Multigate is suitable for leading through both low and medium power current cables as well as various types of tubing. It fits directly to a C-standard cut-out (or FL 21)

MC 16 Reversible Multigate is plastic reinforced cable gland plate made of various types of polymers. It meets the respective IP enclosure classes as it does not need separate gaskets or glands which makes it very easy to use, providing innumerable advantages in a single assembly unit.

MC 16 Reversible Multigate can be used by two different ways. When the Multigate is used "facade" up, it works as a regular IP54 enclosure cable gland plate. The product contains a gasket against the cabinet and it comes with self-locking pins. This means that no special tools are needed at any point of the installa-

tion. When the Multigate is used reversed it functions as a piping grommet in dry space switchboards. Pipes lock securely to the seal in the gland plate by the friction of the elastic material. Membranes on the plate seal the pipes and effectively prevent condensate formation in pipes that run, for instance, through attic space. The self-locking pins supplied with the Multigate are also suitable for reverse mounting.

MC 16 Reversible Multigate is suitable for both outdoor and indoor use.

MC 16 Reversible Multigate gives protection for limited ingress of dust and against water splashed from all directions.

MC 16 Reversible Multigate is inspected and certified by SGS.

MC 16 Multigate will lead through and seal cables as follows:

|            |        |
|------------|--------|
| 10 - 20 mm | 15 pcs |
| 10 - 30 mm | 1 pc   |

Total of 16 cables

| Code   | Colour     | Ral code | Electrical number | Delivery time     | Service temperature *) | Special |
|--------|------------|----------|-------------------|-------------------|------------------------|---------|
| 100084 | Light Grey | 7035     | 3400311           | 3-4 weeks from PO | -40 – +100°C           |         |

- Packing size 100 pcs/box
- Single packed 80 pcs/box (b)

\*) Service temperature for unstressed material



# MC 10



MC 10 Multigate is suitable for leading through both low and medium power current cables as well as various types of tubing. It fits directly to a C-standard cut-out (or FL 21).

MC 10 Multigate is metal reinforced cable gland plate made of various types of polymers. It meets the respective IP enclosure classes as it does not need separate gaskets or glands which makes it very easy to use, providing innumerable advantages in a single assembly unit.

MC 10 Multigate is suitable for both outdoor and indoor use.

MC 10 Multigate gives protection for limited ingress of dust and against water splashed from all directions.

MC 10 Multigate is inspected and certified by SGS.

MC 10 Multigate will lead through and seal cables as follows:

|            |       |
|------------|-------|
| 7 - 12 mm  | 2 pcs |
| 10 - 30 mm | 8 pcs |

---

Total of 10 cables

| Code   | Colour     | Ral code | Electrical number | Delivery time | Service temperature *) | Special                     |
|--------|------------|----------|-------------------|---------------|------------------------|-----------------------------|
| 103552 | Light Grey | 7035     | 3400312           | From Stock    | -40 – +100 °C          | Material UL 94 V-0 approved |

- Packing size 100 pcs/box
- Single packed 80 pcs/box (b)

\*) Service temperature for unstressed material





MB 4 Multigate is suitable for leading through both low and medium power current cables as well as various types of tubing. It fits directly to a B-standard cut-out (or FL 13)

MB 4 Multigate is metal reinforced cable gland plate made of various types of polymers. It meets the respective IP enclosure classes as it does not need separate gaskets or glands which makes it very easy to use, providing innumerable advantages in a single assembly unit.

MB 4 Multigate is suitable for both outdoor and indoor use.

MB 4 Multigate gives protection for limited ingress of dust and against water splashed from all directions.

MB 4 Multigate will lead through and seal cables as follows:

10 - 25 mm      4 pcs

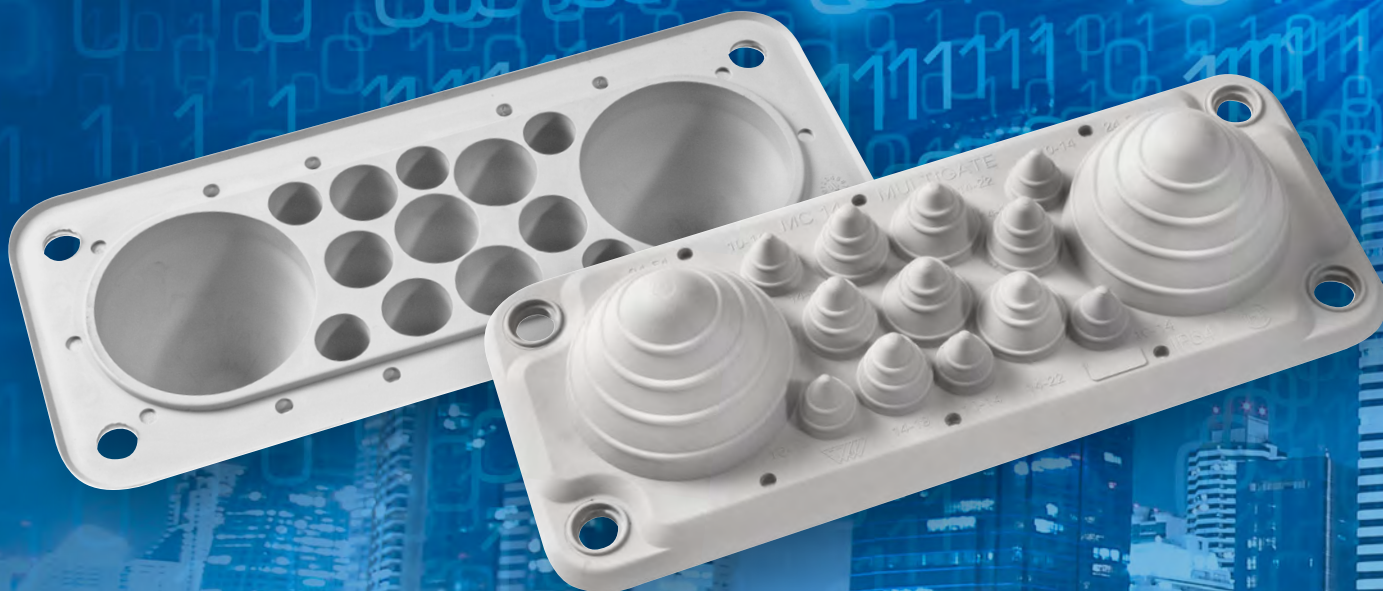
Total of 4 cables

| Code   | Colour | Electrical number | Delivery time | Service temperature *) | Special                     |
|--------|--------|-------------------|---------------|------------------------|-----------------------------|
| 100216 | White  | 3400318           | From Stock    | -40 – +100 °C          | Material UL 94 V-0 approved |

- Packing size 200 pcs/box

\*) Service temperature for unstressed material

# LMC 14 IP54



LMC 14 Multigate is suitable for leading through both low and medium power current cables as well as various types of tubing. It fits directly to a C-standard cut-out (or FL 21).

LMC 14 Multigate is metal reinforced cable gland plate made of various types of polymers. It meets the respective IP enclosure classes as it does not need separate gaskets or glands which makes it very easy to use, providing innumerable advantages in a single assembly unit.

LMC 14 Multigate is suitable for both outdoor and indoor use.

LMC 14 Multigate gives protection against water splashed from all directions.

LMC 14 Multigate is inspected and certified by SGS.

LMC 14 IP54 Multigate will lead through and seal cables as follows:

|            |       |
|------------|-------|
| 24 - 54 mm | 2 pcs |
| 14 - 22 mm | 3 pcs |
| 14 - 18 mm | 4 pcs |
| 10 - 14 mm | 5 pcs |

Total of 14 cables

| Code   | Colour     | Ral code | Electrical number | Delivery time | Service temperature *) | Special                     |
|--------|------------|----------|-------------------|---------------|------------------------|-----------------------------|
| 104338 | Light Grey | 7035     | 3400350           | From Stock    | -40 – +100 °C          | Material UL 94 V-0 approved |
| 105002 | Light Grey | 7035     | 3400357           | From Stock    | -40 – +100 °C **)      |                             |

- Packing size 100 pcs/box
- Single packed 80 pcs/box (b)

\*) Service temperature for unstressed material  
 \*\*) Available with fastener pins (f)



# LMC 25 IP54

Multigates

LMC 25 Multigate is suitable for leading through both low and medium power current cables as well as various types of tubing. It fits directly to a C-standard cut-out (or FL 21).

LMC 25 Multigate is metal reinforced cable gland plate made of various types of polymers. It meets the respective IP enclosure classes as it does not need separate gaskets or glands which makes it very easy to use, providing innumerable advantages in a single assembly unit.

LMC 25 Multigate is suitable for both outdoor and indoor use.

LMC 25 Multigate gives protection against water splashed from all directions.

LMC 25 Multigate is inspected and certified by SGS.

LMC 25 IP54 Multigate will lead through and seal cables as follows:

|             |        |
|-------------|--------|
| 14 - 35 mm  | 1 pc   |
| 14 - 22 mm  | 5 pcs  |
| 14 - 18 mm  | 12 pcs |
| 10 - 14 mm  | 5 pcs  |
| 3.5 - 11 mm | 2 pcs  |

Total of 25 cables

| Code   | Colour     | Ral code | Electrical number | Delivery time | Service temperature *) | Special                     |
|--------|------------|----------|-------------------|---------------|------------------------|-----------------------------|
| 104335 | Light Grey | 7035     | 3400341           | From Stock    | -40 – +100 °C          | Material UL 94 V-0 approved |
| 105003 | Light Grey | 7035     | 3400358           | From Stock    | -40 – +100 °C **)      |                             |

- Packing size 100 pcs/box
- Single packed 80 pcs/box (b)

\*) Service temperature for unstressed material

\*\*) Available with fastener pins (f)

# LMC 51 IP54



LMC 51 Multigate is suitable for leading through both low and medium power current cables as well as various types of tubing. It fits directly to a C-standard cut-out (or FL 21).

LMC 51 Multigate is metal reinforced cable gland plate made of various types of polymers. It meets the respective IP enclosure classes as it does not need separate gaskets or glands which makes it very easy to use, providing innumerable advantages in a single assembly unit.

LMC 51 Multigate is suitable for both outdoor and indoor use.

LMC 51 Multigate gives protection against water splashed from all directions.

LMC 51 Multigate is inspected and certified by SGS.

LMC 51 IP54 Multigate will lead through and seal cables as follows:

|            |        |
|------------|--------|
| 15 - 25 mm | 1 pc   |
| 7 - 13 mm  | 50 pcs |

---

Total of 51 cables

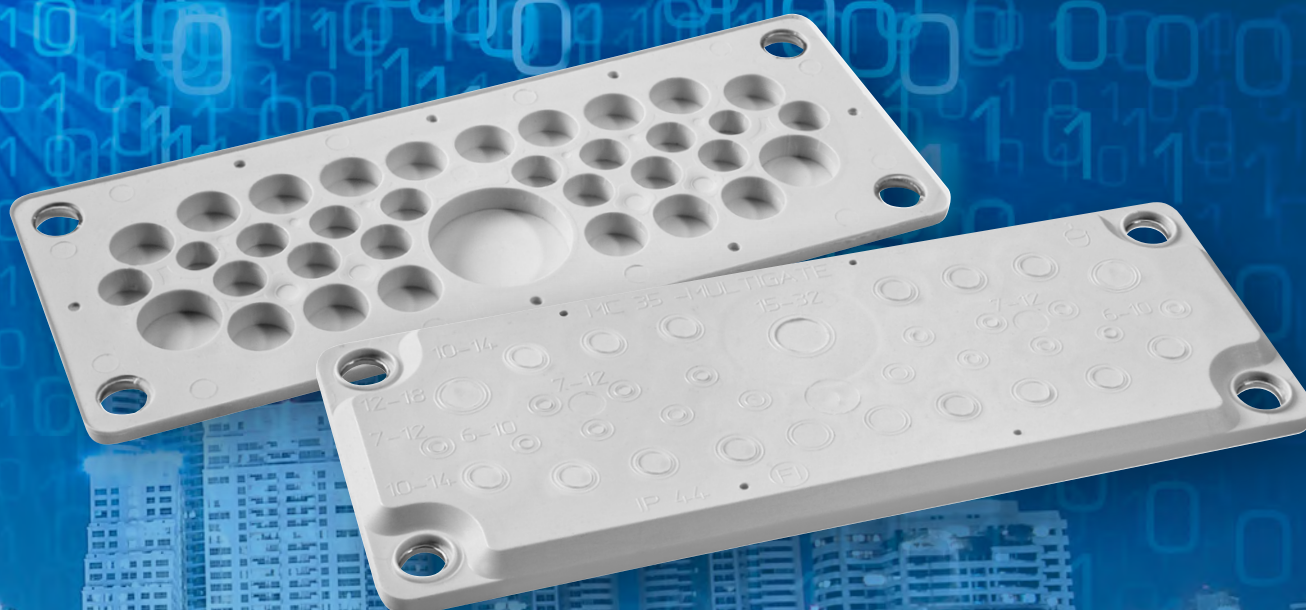
| Code   | Colour     | Ral code | Electrical number | Delivery time | Service temperature *) | Special                     |
|--------|------------|----------|-------------------|---------------|------------------------|-----------------------------|
| 104344 | Light Grey | 7035     | 3400347           | From Stock    | -40 – +100 °C          | Material UL 94 V-0 approved |
| 105004 | Light Grey | 7035     | 3400359           | From Stock    | -40 – +100 °C **)      |                             |

- Packing size 100 pcs/box
- Single packed 80 pcs/box (b)

\*) Service temperature for unstressed material  
 \*\*) Available with fastener pins (f)



# LMC 35 IP44



Multigates

LMC 35 Multigate is suitable for leading through both low and medium power current cables as well as various types of tubing. It fits directly to a C-standard cut-out (or FL 21).

LMC 35 Multigate is metal reinforced cable gland plate made of various types of polymers. It meets the respective IP enclosure classes as it does not need separate gaskets or glands which makes it very easy to use, providing innumerable advantages in a single assembly unit.

LMC 35 Multigate is suitable for both outdoor and indoor use.

LMC 35 Multigate gives protection against water splashed from all directions.

LMC 35 Multigate is inspected and certified by SGS.

LMC 35 IP44 Multigate will lead through and seal cables as follows:

|            |        |
|------------|--------|
| 15 - 32 mm | 1 pc   |
| 12 - 18 mm | 2 pcs  |
| 10 - 14 mm | 16 pcs |
| 7 - 12 mm  | 14 pcs |
| 6 - 10 mm  | 2 pcs  |

Total of 35 cables

| Code   | Colour     | Ral code | Electrical number | Delivery time | Service temperature<br>(*) | Special |
|--------|------------|----------|-------------------|---------------|----------------------------|---------|
| 100241 | Light Grey | 7035     | 3400344           | From Stock    | -40 – +100 °C              |         |

- Packing size 100 pcs/box
- Single packed 80 pcs/box (b)

\*) Service temperature for unstressed material

# MB 4/10



MB 4/10 Multigate is suitable for leading through both low and medium power current cables as well as various types of tubing. It fits directly to a B-standard cut-out (or FL 13).

MB 4/10 Multigate is metal reinforced new type of cable gland plate made of various types of polymers. It meets the respective IP enclosure classes as it does not need separate gaskets or glands which make it very easy to use, providing innumerable advantages in a single assembly unit.

MB 4/10 Multigate is suitable for both outdoor and indoor use.

MB 4/10 Multigate can be used instead of MB 4 Multigate. The configuration has the same openings than MB 4 and 6 extra.

MB 4/10 Multigate will lead through and seal cables as follows:

|            |       |
|------------|-------|
| 4 - 9 mm   | 6 pc  |
| 10 - 25 mm | 4 pcs |

---

Total of 10 cables

| Code   | Colour     | Ral code | Electrical number | Delivery time       | Service temperature *) | Special                     |
|--------|------------|----------|-------------------|---------------------|------------------------|-----------------------------|
| 105953 | Grey       | 7032     | 3400370           | 3 - 4 weeks from PO | -40 – +100 °C          |                             |
| 105954 | Light Grey | 7035     | 3400371           | From stock          | -40 – +100 °C          | Material UL 94 V-0 approved |

- Packing size 200 pcs/box

\*) Service temperature for unstressed material





MH 10 Multigate is suitable for leading through both low and medium power current cables as well as various types of tubing. It matches the cut out dimensions for 24-pole standard industrial connectors.

MH 10 Multigate is a new plastic reinforced cable gland made of halogen free polymers. It meets the respective IP enclosure classes and it does not need separate gaskets or glands. This single assembly unit provides innumerable advantages and makes it easy to use.

MH 10 Multigate is suitable for both outdoor and indoor use.

MH 10 Multigate gives protection against limited ingress of dust and against water splashed from all directions.

MH 10 Multigate will lead through and seal cables as follows:

|             |       |
|-------------|-------|
| up to 30 mm | 2 pcs |
| up to 18 mm | 2 pcs |
| up to 8 mm  | 6 pcs |

Total of 10 cables

| Code   | Colour | Electrical number | Delivery time | Service temperature *) | Special      |
|--------|--------|-------------------|---------------|------------------------|--------------|
| 106748 | Black  | 3400364           | From Stock    | -40 – +90 °C           | Material V-0 |

\*) Service temperature for unstressed material



MH 25 Multigate is suitable for leading through both low and medium power current cables as well as various types of tubing. It matches the cut out dimensions for 24-pole standard industrial connectors.

MH 25 Multigate is a new plastic reinforced cable gland made of halogen free polymers. It meets the respective IP enclosure classes and it does not need separate gaskets or glands. This single assembly unit provides innumerable advantages and makes it easy to use.

MH 25 Multigate is suitable for both outdoor and indoor use.

MH 25 Multigate gives total protection against ingress of dust and against water splashed from all directions.

MH 25 Multigate will lead through and seal cables as follows:

|            |       |
|------------|-------|
| 10 - 20 mm | 1 pc  |
| 6 - 12 mm  | 4 pcs |
| 6 - 9 mm   | 8 pcs |
| 3 - 7 mm   | 9 pcs |
| 3 - 6 mm   | 3 pcs |

Total of 25 cables

| Code   | Colour | Electrical number | Delivery time | Service temperature *) | Special      |
|--------|--------|-------------------|---------------|------------------------|--------------|
| 106714 | Black  | 3400363           | From Stock    | -40 – +90 °C           | Material V-0 |

\*) Service temperature for unstressed material





Multigates

MH 27 Multigate is suitable for leading through both low and medium power current cables as well as various types of tubing. It matches the cut out dimensions for 24-pole standard industrial connectors.

MH 27 Multigate is a new plastic reinforced cable gland made of halogen free polymers. It meets the respective IP enclosure classes and it does not need separate gaskets or glands. This single assembly unit provides innumerable advantages and makes it easy to use.

MH 27 Multigate is suitable for both outdoor and indoor use.

MH 27 Multigate gives total protection against ingress of dust and against water splashed from all directions.

MH-27 Multigate will lead through and seal cables as follows:

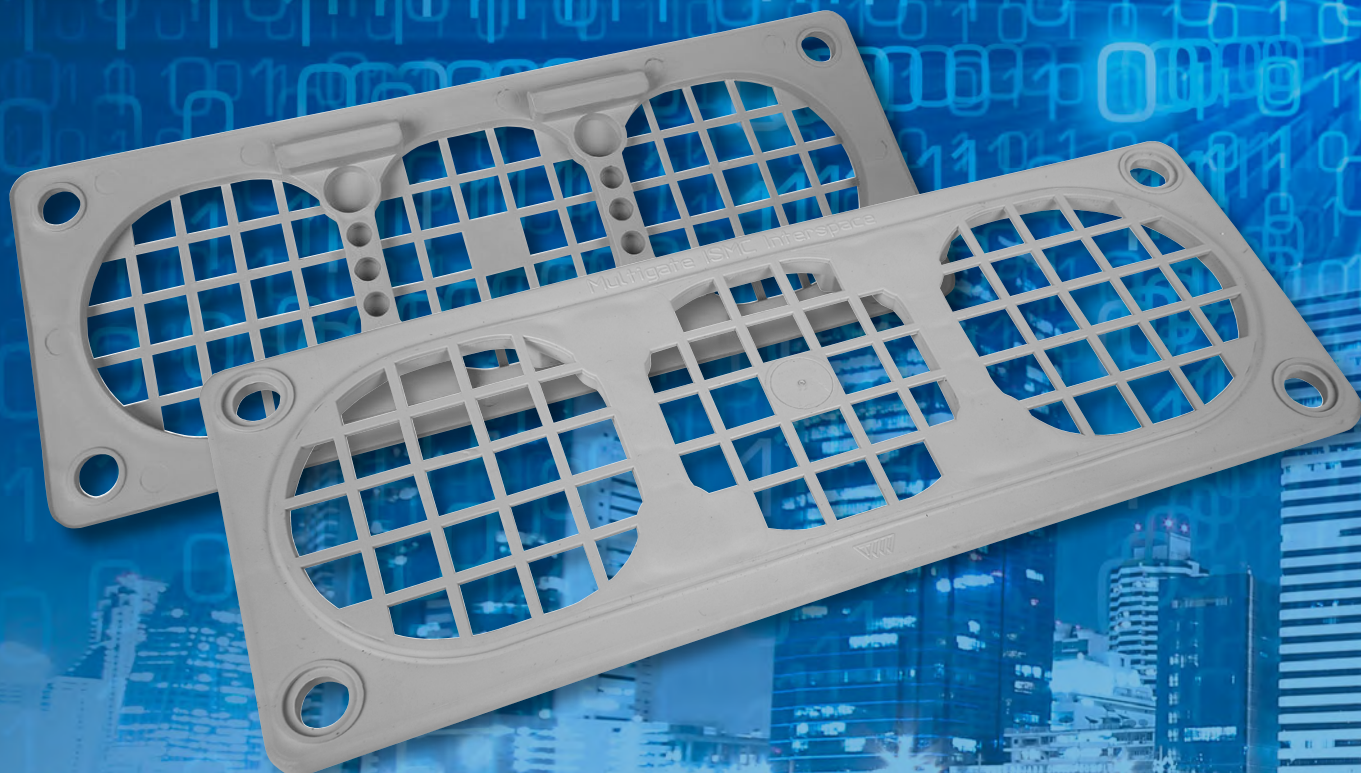
|            |        |
|------------|--------|
| 10 - 20 mm | 1 pc   |
| 3 - 6 mm   | 26 pcs |

Total of 27 cables

| Code   | Colour | Electrical number | Delivery time | Service temperature *) | Special      |
|--------|--------|-------------------|---------------|------------------------|--------------|
| 106604 | Black  | 3400362           | From Stock    | -40 – +90 °C           | Material V-0 |

\*) Service temperature for unstressed material

# ISMC



ISMC Interspace is a cable holding gland plate suitable for leading cables through cabinet walls. The structure can be cut to make it fit for cables with various dimensions. The cables can be led through in an organized way without damaging them with metal edges of the cut out.



Custom made Multigates

# Custom made



Multigates



# Splitting Multigates

## Splitting gland plates for cables with attached connectors

Often with the cables come the connectors and very often the connectors can not be removed and re-attached. The delicate data cables, HDMI's etc. are difficult or impossible to re-join at site. The Trelleborg Splitting Multigate is the solution that lets the cables be installed with the connectors and on top of that the cables can be changed as often as wanted. Choose Trelleborg Splitting Multigate for fast, safe and versatile installations.

MC 2x8-67



MC 1x8-67



SCG 2x3-35







SCG 1x3-35



MC 2/10, MC 2/18 MC 1/9







MC 2x8-67 Multigate is suitable for leading through both low and medium power current cables as well as various types of tubing. It fits directly to a C-standard aperture (or FL 21).

MC 2x8-67 Multigate is plastic reinforced new type of cable gland plate made of various types of polymers. It meets the respective IP enclosure classes as it does

not need separate gaskets or glands which make it very easy to use, providing innumerable advantages in a single assembly unit.

MC 2x8-67 Multigate is suitable for both outdoor and indoor use.

Multigate will lead through and seal cables as follows:

|                   |       |
|-------------------|-------|
| 8 - 67 mm         | 2 pcs |
| Total of 2 cables |       |

| Code   | Colour | Electrical number | Delivery time | Service temperature *) | Special                     |
|--------|--------|-------------------|---------------|------------------------|-----------------------------|
| 100074 | Black  | 1732349           | From Stock    | -40 - +90              | Material UL 94 V-0 approved |

\*) Service temperature for unstressed material





Splitting Multigates

MC 1x8-67 Multigate is suitable for leading through both low and medium power current cables as well as various types of tubing. It fits directly to a C-standard aperture (or FL 21).

MC 1x8-67 Multigate is plastic reinforced new type of cable gland plate made of various types of polymers. It meets the respective IP enclosure classes as it does

not need separate gaskets or glands which make it very easy to use, providing innumerable advantages in a single assembly unit.

MC 1x8-67 Multigate is suitable for both outdoor and indoor use.

|                                                         |       |
|---------------------------------------------------------|-------|
| Multigate will lead through and seal cables as follows: |       |
| 8 - 67 mm                                               | 1 pcs |
| Total of 1 cables                                       |       |

| Code   | Colour | Electrical number | Delivery time     | Service temperature *) | Special                     |
|--------|--------|-------------------|-------------------|------------------------|-----------------------------|
| 106692 | Black  | 3400365           | From Stock        | -40 – +90 °C           |                             |
| 106582 | Black  | 3400366           | 3-4 weeks from PO | -40 – +90 °C           | Material UL 94 V-0 approved |

\*) Service temperature for unstressed material



SCG splitting cable gland is suitable for leading through both low and medium power current cables as well as various types of tubing.

SCG splitting cable gland is plastic reinforced new type of cable gland plate made of various types of polymers. It meets the respective IP enclosure classes as it does not need separate gaskets or glands which makes it very easy to use, providing innumerable advantages in a single assembly unit.

SCG splitting cable gland is suitable for both outdoor and indoor use.

SCG will lead through and seal cables as follows:

3 - 35 mm                      2 pcs

Total of 2 cable

| Code   | Colour | Electrical number | Delivery time | Service temperature *) | Special                     |
|--------|--------|-------------------|---------------|------------------------|-----------------------------|
| 105929 | Black  | 3400369           | From stock    | -40 - +90              | Material UL 94 V-0 approved |

\*) Service temperature for unstressed material





Splitting Multigates

SCG splitting cable gland is suitable for leading through both low and medium power current cables as well as various types of tubing.

SCG splitting cable gland is plastic reinforced new type of cable gland plate made of various types of polymers. It meets the respective IP enclosure classes as it does not need separate gaskets or glands which makes it very easy to use, providing innumerable advantages in a single assembly unit.

SCG splitting cable gland is suitable for both outdoor and indoor use.

|                                                         |       |
|---------------------------------------------------------|-------|
| Multigate will lead through and seal cables as follows: |       |
| 3 - 35 mm                                               | 1 pcs |
| Total of 1 cables                                       |       |

| Code   | Colour | Electrical number | Delivery time | Service temperature *) | Special                     |
|--------|--------|-------------------|---------------|------------------------|-----------------------------|
| 105928 | Black  | 3400368           | From stock    | -40 - +90              | Material UL 94 V-0 approved |

\*) Service temperature for unstressed material

# MC 2/10

# MC 2/18



MC 2/10 & MC2/18 Multigates are suitable for leading through both low and medium power current cables as well as various types of tubing. It fits directly to a C-standard aperture (or FL21 ) MC 2/10 & MC2/18 provide possibility to assemble various cables with and without connectors.

MC 2/10 & MC2/18 Multigates are plastic reinforced type of cable gland plate made of various types of polymers. It meets the respective IP enclosure classes as it does not need separate gaskets or glands which make it very easy to use, providing innumerable advantages in a single assembly unit.

MC 2/10 Multigate will lead through and seal cables as follows:

|             |          |
|-------------|----------|
| 8 - 67 mm   | 1 pcs    |
| 5 - 11 mm   | 2 pcs    |
| 5 - 13 mm   | 2 pcs    |
| up to 14 mm | 5 pcs ** |

Total of 10 cables

MC 2/18 Multigate will lead through and seal cables as follows:

|             |           |
|-------------|-----------|
| 5 - 11 mm   | 4 pcs     |
| 5 - 13 mm   | 4 pcs     |
| up to 14 mm | 10 pcs ** |

Total of 18 cables

| Code   | Colour | Electrical number | Delivery time     | Service temperature *) | Special                     |
|--------|--------|-------------------|-------------------|------------------------|-----------------------------|
| 106618 | Black  |                   | 3-4 weeks from PO | -40 – +90 °C           | Material UL 94 V-0 approved |
| 106619 | Black  |                   | 3-4 weeks from PO | -40 – +90 °C           | Material UL 94 V-0 approved |

\*) Service temperature for unstressed material

\*\*) Only for cables without connector





Splitting Multigates

MC 1/9 is suitable for leading through low and medium current cables as well as various types of tubing. The design provides possibility to assemble cables with and without connectors. MC 1/9 is reinforced polymer composite product that meets the respective IP enclosure classes. Furthermore, it does not need separate gaskets or glands which make it easy to install.

MC 1/9 along with MC 2/10 & MC 2/18 variations cover comprehensively customers cabling needs in wide cable diameter range and regardless the attached connector sizes.

Please contact to our technical sales matter of customizing.

MC 1/9 Multigate will lead through and seal cables as follows:

|             |          |
|-------------|----------|
| 5 - 11 mm   | 2 pcs    |
| 5 - 13 mm   | 2 pcs    |
| up to 14 mm | 5 pcs ** |

Total of 9 cables

| Code   | Colour | Electrical number | Delivery time     | Service temperature *) | Special                     |
|--------|--------|-------------------|-------------------|------------------------|-----------------------------|
| 106825 | Black  |                   | 3-4 weeks from PO | -40 – +90 °C           | Material UL 94 V-0 approved |

\*) Service temperature for unstressed material  
\*\*) Only for cables without connector

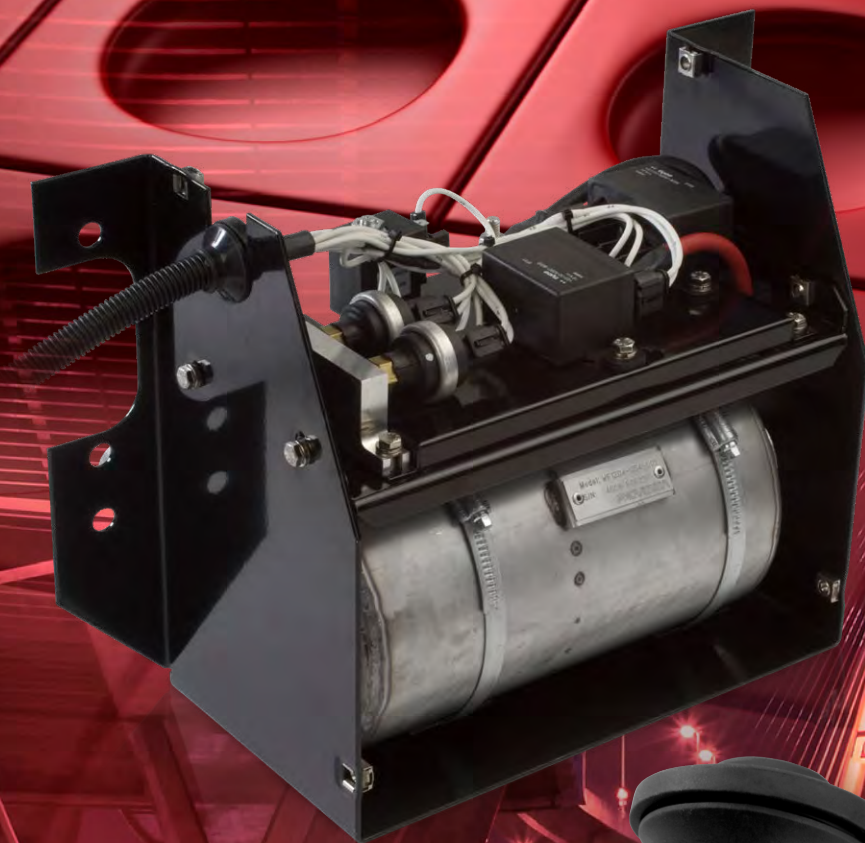


# Singlegates

Trelleborg Singlegates are grommets with various design based of IP classification or application. These grommets are for leading through both low and medium power current cables as well various types of tubings. There are available Singlegates for openings based of traditional dimensions of PG-dimensions as well as new mm-dimensions.

Trelleborg Singlegates are made of various types of polymers. For electrical applications, all these polymers are RoHS compliant and have excellent weather, UV- and ozone resistance. Also EMC-compatible and oil resistant models are available. For other applications other high quality polymers are available based of application and requirements.

Trelleborg Singlegates are supplied in various types of plastic bags and boxes based of request of customer. Standard packing sizes are available at our homepages, address [www.trelleborg.com/en/moulded-components](http://www.trelleborg.com/en/moulded-components).



## Packing size

| Item                 | Packing size |
|----------------------|--------------|
| Singlegate GET 3-5   | 50           |
| Singlegate GET 5-7   | 50           |
| Singlegate GET 7-10  | 50           |
| Singlegate GET 10-14 | 50           |
| Singlegate GET 14-20 | 25           |
| Singlegate GET 20-26 | 25           |
| Singlegate GET 26-35 | 10           |
| Singlegate GET 30-45 | 5            |
| Singlegate GET 40-60 | 5            |

| Item                 | Packing size |
|----------------------|--------------|
| Singlegate VET 3-5   | 50           |
| Singlegate VET 5-7   | 50           |
| Singlegate VET 8-14  | 50           |
| Singlegate VET 7-10  | 50           |
| Singlegate VET 10-14 | 50           |
| Singlegate VET 14-20 | 25           |
| Singlegate VET 20-26 | 25           |
| Singlegate VET 26-35 | 10           |







## IP67-series

There are available two different design alternatives for PG-openings. Both of these designs gives absolute protection against dust and strong jets of water and also against effects of immersion between 15 cm and 1 m. Model VET is traditional double seal design and T-VET is new design which one is possible to use as a sealing plug also. Also there are available two different design alternatives for mm-openings.

Both of these designs gives absolute protection against dust and strong jets of water and also against effects of immersion between 15 cm and 1 m. Model GET is traditional double seal design and T-GET is new design which one is possible to use as a plug also. With design of GET and T-GET its possible to use cable ties for special strain relief requirements.

## IP54-series

There are available two different design alternatives for PG-openings and also for mm-openings. These designs gives protection for limited ingress of dust and against water splashed from all directions. Models with customized preholes for cables and tubes are available.



Trelleborg Singlegate T-VET -grommets are for leading through both low and medium power current cables as well various types of tubing.

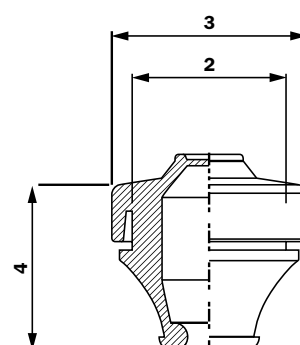
The grommets are suitable for indoor and outdoor applications. The grommets fits to openings made with dimensions of PG. Model T-VET has new double seal design where top side of the grommet is closed and is therefore possible to use as plug also.

Trelleborg Singlegate T-VET -grommets have alternative models for cables between diameters of 3 mm up to 35 mm. Wall thickness can be between 1 to 4 mm. The design gives IP67

protection against dust and strong jets of water and also against effects of immersion between 15 cm and 1 m.

Trelleborg Singlegate T-VET -grommets are available as standard of TPE-materials on table below. As request also other colours and materials like conductive EMC-material are available.

Trelleborg Singlegate T-VET-grommets are inspected and certified by SGS.



| Code   | Material | Colour     | Ral code | Classifications              | Electrical number | Cable diameter | 2  | 3    | 4  | Plate thickness |
|--------|----------|------------|----------|------------------------------|-------------------|----------------|----|------|----|-----------------|
| 100744 | TPE-S    | Grey       | 7042     |                              | 1733328           | 3-5            | 13 | 20   | 17 | 1-4             |
| 100746 | TPE-S    | Light Grey | 7035     | UL 94;V-0                    | 1733329           | 3-5            | 13 | 20   | 17 | 1-4             |
| 100747 | TPE-S    | Black      |          | UL 94; V-0,<br>Oil resistant | 1733330           | 3-5            | 13 | 20   | 17 | 1-4             |
| 100186 | TPE-S    | Grey       | 7042     |                              | 1733331           | 5-7            | 16 | 20   | 19 | 1-4             |
| 100749 | TPE-S    | Light Grey | 7035     | UL 94;V-0                    | 1733332           | 5-7            | 16 | 20   | 19 | 1-4             |
| 100187 | TPE-S    | Black      |          | UL 94; V-0,<br>Oil resistant | 1733333           | 5-7            | 16 | 20   | 19 | 1-4             |
| 100465 | TPE-S    | Grey       | 7042     |                              | 1733334           | 7-10           | 19 | 24   | 21 | 1-4             |
| 100751 | TPE-S    | Light Grey | 7035     | UL 94;V-0                    | 1733335           | 7-10           | 19 | 24   | 21 | 1-4             |
| 100188 | TPE-S    | Black      |          | UL 94; V-0,<br>Oil resistant | 1733336           | 7-10           | 19 | 24   | 21 | 1-4             |
| 100189 | TPE-S    | Grey       | 7042     |                              | 1733337           | 10-14          | 23 | 29   | 23 | 1-4             |
| 100190 | TPE-S    | Light Grey | 7035     | UL 94;V-0                    | 1733338           | 10-14          | 23 | 29   | 23 | 1-4             |
| 100191 | TPE-S    | Black      |          | UL 94; V-0,<br>Oil resistant | 1733339           | 10-14          | 23 | 29   | 23 | 1-4             |
| 100753 | TPE-S    | Grey       | 7042     |                              | 1733340           | 14-20          | 29 | 34   | 26 | 1-4             |
| 100192 | TPE-S    | Light Grey | 7035     | UL 94;V-0                    | 1733341           | 14-20          | 29 | 34   | 26 | 1-4             |
| 100193 | TPE-S    | Black      |          | UL 94; V-0,<br>Oil resistant | 1733342           | 14-20          | 29 | 34   | 26 | 1-4             |
| 100194 | TPE-S    | Grey       | 7042     |                              | 1733343           | 20-26          | 38 | 46   | 30 | 1-4             |
| 100755 | TPE-S    | Light Grey | 7035     | UL 94;V-0                    | 1733344           | 20-26          | 38 | 46   | 30 | 1-4             |
| 100195 | TPE-S    | Black      |          | UL 94; V-0,<br>Oil resistant | 1733345           | 20-26          | 38 | 46   | 30 | 1-4             |
| 100196 | TPE-S    | Grey       | 7042     |                              | 1733346           | 26-35          | 48 | 57,5 | 33 | 1-4             |
| 100197 | TPE-S    | Light Grey | 7035     | UL 94;V-0                    | 1733347           | 26-35          | 48 | 57,5 | 33 | 1-4             |
| 100198 | TPE-S    | Black      |          | UL 94; V-0,<br>Oil resistant | 1733348           | 26-35          | 48 | 57,5 | 33 | 1-4             |





Trelleborg Singlegate VET -grommets are for leading through both low and medium power current cables as well various types of tubing.

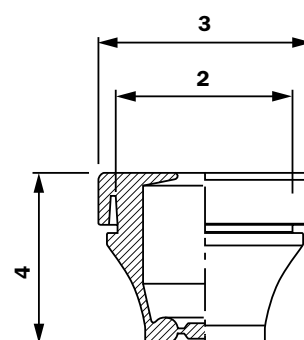
The grommets are suitable for indoor and outdoor applications. The grommets fits to openings made with dimensions of PG. Model VET has traditional double seal design where back side of the grommet is closed.

Trelleborg Singlegate VET -grommets have alternative models for cables between diameters of 3 mm up to 35 mm. Wall thickness can be between 1 to 4 mm. The design gives IP67

protection against dust and strong jets of water and also against effects of immersion between 15 cm and 1 m.

Trelleborg Singlegate VET -grommets are available as standard of materials on table below. As request also other colours and materials like silicones and EMC-models are available.

Trelleborg Singlegate VET-grommets are inspected and certified by SGS.



| Code   | Material | Colour     | Ral code | Electrical number | Cable diameter | 2    | 3    | 4    | Plate thickness |
|--------|----------|------------|----------|-------------------|----------------|------|------|------|-----------------|
| 100715 | EPDM     | Black      |          | 1733324           | 3-5            | 13.2 | 20   | 12,8 | 1-4             |
| 100716 | EPDM     | Grey       | 7042     | 1733325           | 3-5            | 13.2 | 20   | 12,8 | 1-4             |
| 104010 | EPDM     | Light Grey | 7035     | 1733326           | 3-5            | 13,2 | 20   | 12,8 | 1-4             |
| 100306 | EPDM     | Black      |          | 1733320           | 5-7            | 16   | 20   | 20   | 1-4             |
| 100307 | EPDM     | Grey       | 7042     | 1733321           | 5-7            | 16   | 20   | 20   | 1-4             |
| 100308 | EPDM     | Light Grey | 7035     | 1733322           | 5-7            | 16   | 20   | 20   | 1-4             |
| 100291 | EPDM     | Black      |          | 1733300           | 8-14           | 23   | 28   | 23,5 | 1-4             |
| 100292 | EPDM     | Grey       | 7042     | 1733301           | 8-14           | 23   | 28   | 23,5 | 1-4             |
| 100702 | EPDM     | Light Grey | 7035     | 1733302           | 8-14           | 23   | 28   | 23,5 | 1-4             |
| 100295 | EPDM     | Black      |          | 1733304           | 7-10           | 19   | 24   | 21   | 1-4             |
| 100296 | EPDM     | Grey       | 7042     | 1733305           | 7-10           | 19   | 24   | 21   | 1-4             |
| 100703 | EPDM     | Light Grey | 7035     | 1733306           | 7-10           | 19   | 24   | 21   | 1-4             |
| 100297 | EPDM     | Black      |          | 1733308           | 14-20          | 29   | 34   | 26   | 1-4             |
| 100298 | EPDM     | Grey       | 7042     | 1733309           | 14-20          | 29   | 34   | 26   | 1-4             |
| 100707 | EPDM     | Light Grey | 7035     | 1733310           | 14-20          | 29   | 34   | 26   | 1-4             |
| 100300 | EPDM     | Black      |          | 1733312           | 20-26          | 38   | 46   | 30   | 1-4             |
| 100301 | EPDM     | Grey       | 7042     | 1733313           | 20-26          | 38   | 46   | 30   | 1-4             |
| 100709 | EPDM     | Light Grey | 7035     | 1733314           | 20-26          | 38   | 46   | 30   | 1-4             |
| 100304 | EPDM     | Black      |          | 1733316           | 26-35          | 48   | 57,5 | 30   | 1-4             |
| 100305 | EPDM     | Grey       | 7042     | 1733317           | 26-35          | 48   | 57,5 | 30   | 1-4             |
| 100710 | EPDM     | Light Grey | 7035     | 1733318           | 26-35          | 48   | 57,5 | 30   | 1-4             |

# T-GET



Trelleborg Singlegate T-GET -grommets are for leading through both low and medium power current cables as well various types of tubing.

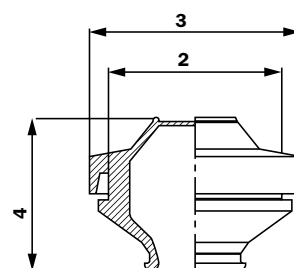
The grommets are suitable for indoor and outdoor applications. The grommets fits to openings made with dimensions of mm. Model T-GET has new double seal design where top side of the grommet is closed and is therefore possible to use as plug also.

Trelleborg Singlegate T-GET -grommets have alternative models for cables between diameters of 3 mm up to 60 mm. Wall thickness can be between 1,2 to 5,2 mm (bigger ones 1,2

to 5,2 mm). The design gives IP67 protection against dust and strong jets of water and also against effects of immersion between 15 cm and 1 m.

Trelleborg Singlegate T-GET -grommets are available as standard of TPE-materials on table below. As request also other colours and materials like conductive EMC-material are available.

Trelleborg Singlegate T-GET-grommets are inspected and certified by SGS.



| Code   | Material | Colour     | Ral code | Classifications           | Electrical number | Cable diameter | 2  | 3  | 4    | Plate thickness |
|--------|----------|------------|----------|---------------------------|-------------------|----------------|----|----|------|-----------------|
| 100722 | TPE-S    | Grey       | 7042     |                           | 1733385           | 3-5            | 12 | 19 | 20,9 | 1-5             |
| 100723 | TPE-S    | Light Grey | 7035     | UL 94;V-0                 | 1733386           | 3-5            | 12 | 19 | 20,9 | 1-5             |
| 100724 | TPE-S    | Black      |          | UL 94; V-0, Oil resistant | 1733387           | 3-5            | 12 | 19 | 20,9 | 1-5             |
| 100725 | TPE-S    | Grey       | 7042     |                           | 1733388           | 5-7            | 16 | 23 | 21,6 | 1-5             |
| 100726 | TPE-S    | Light Grey | 7035     | UL 94;V-0                 | 1733389           | 5-7            | 16 | 23 | 21,6 | 1-5             |
| 100727 | TPE-S    | Black      |          | UL 94; V-0, Oil resistant | 1733390           | 5-7            | 16 | 23 | 21,6 | 1-5             |
| 100728 | TPE-S    | Grey       | 7042     |                           | 1733391           | 7-10           | 20 | 27 | 24,3 | 1-5             |
| 100729 | TPE-S    | Light Grey | 7035     | UL 94;V-0                 | 1733392           | 7-10           | 20 | 27 | 24,3 | 1-5             |
| 100730 | TPE-S    | Black      |          | UL 94; V-0, Oil resistant | 1733393           | 7-10           | 20 | 27 | 24,3 | 1-5             |
| 100731 | TPE-S    | Grey       | 7042     |                           | 1733394           | 10-14          | 25 | 32 | 24,8 | 1-5             |
| 100732 | TPE-S    | Light Grey | 7035     | UL 94;V-0                 | 1733395           | 10-14          | 25 | 32 | 24,8 | 1-5             |
| 100733 | TPE-S    | Black      |          | UL 94; V-0, Oil resistant | 1733396           | 10-14          | 25 | 32 | 24,8 | 1-5             |
| 100734 | TPE-S    | Grey       | 7042     |                           | 1733397           | 14-20          | 32 | 39 | 28,1 | 1-5             |
| 100735 | TPE-S    | Light Grey | 7035     | UL 94;V-0                 | 1733398           | 14-20          | 32 | 39 | 28,1 | 1-5             |
| 100736 | TPE-S    | Black      |          | UL 94; V-0, Oil resistant | 1733399           | 14-20          | 32 | 39 | 28,1 | 1-5             |
| 100737 | TPE-S    | Grey       | 7042     |                           | 1733400           | 20-26          | 40 | 46 | 31,8 | 1-5             |
| 100183 | TPE-S    | Light Grey | 7035     | UL 94;V-0                 | 1733401           | 20-26          | 40 | 46 | 31,8 | 1-5             |
| 100184 | TPE-S    | Black      |          | UL 94; V-0, Oil resistant | 1733402           | 20-26          | 40 | 46 | 31,8 | 1-5             |
| 100738 | TPE-S    | Grey       | 7042     |                           | 1733403           | 26-35          | 50 | 57 | 39,7 | 1-5             |
| 100739 | TPE-S    | Light Grey | 7035     | UL 94;V-0                 | 1733404           | 26-35          | 50 | 57 | 39,7 | 1-5             |
| 100740 | TPE-S    | Black      |          | UL 94; V-0, Oil resistant | 1733405           | 26-35          | 50 | 57 | 39,7 | 1-5             |
| 103924 | TPE-S    | Grey       | 7042     |                           | 1733406           | 30-45          | 60 | 69 | 59,6 | 1-5             |
| 100741 | TPE-S    | Light Grey | 7035     | UL 94;V-0                 | 1733407           | 30-45          | 60 | 69 | 59,6 | 1-5             |
| 100185 | TPE-S    | Black      |          | UL 94; V-0, Oil resistant | 1733408           | 30-45          | 60 | 69 | 59,6 | 1-5             |
| 100743 | TPE-S    | Black      |          | UL 94; V-0, Oil resistant | 1733411           | 40-60          | 80 | 89 | 78,2 | 1,2-5,2         |





Trelleborg Singlegate GET -grommets are for leading through both low and medium power current cables as well various types of tubing.

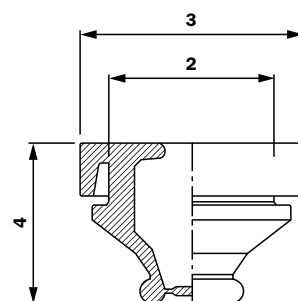
The grommets are suitable for indoor and outdoor applications. The grommets fits to openings made with dimensions of mm. Model GET has traditional double seal design where back side of the grommet is closed.

Trelleborg Singlegate GET -grommets have alternative models for cables between diameters of 3 mm up to 60 mm. Wall thickness can be between 1,3 to 5 mm. The design gives IP67

protection against dust and strong jets of water and also against effects of immersion between 15 cm and 1 m.

Trelleborg Singlegate GET -grommets are available as standard of materials on table below. As request also other colours and materials like EMC-models are available.

Trelleborg Singlegate GET-grommets are inspected and certified by SGS.



| Code   | Material   | Colour | Ral code | Electrical number | Cable diameter | 2    | 3  | 4    | Plate thickness |
|--------|------------|--------|----------|-------------------|----------------|------|----|------|-----------------|
| 100589 | EPDM       | Black  |          | 1733381           | 3-5            | 12,2 | 19 | 18,5 | 1,3-5           |
| 100590 | EPDM       | Grey   | 7042     | 1733382           | 3-5            | 12,2 | 19 | 18,5 | 1,3-5           |
| 104018 | SILICONE Q | Red    |          | 1733384           | 3-5            | 12,2 | 19 | 18,5 | 1,3-5           |
| 100587 | EPDM       | Black  |          | 1733377           | 5-7            | 16,2 | 23 | 18,5 | 1,3-5           |
| 100231 | EPDM       | Grey   | 7042     | 1733378           | 5-7            | 16,2 | 23 | 18,5 | 1,3-5           |
| 104016 | SILICONE Q | Red    |          | 1733380           | 5-7            | 16,2 | 23 | 18,5 | 1,3-5           |
| 100578 | EPDM       | Black  |          | 1733361           | 7-10           | 20,2 | 27 | 19,5 | 1,3-5           |
| 100226 | EPDM       | Grey   | 7042     | 1733362           | 7-10           | 20,2 | 27 | 19,5 | 1,3-5           |
| 100581 | SILICONE Q | Red    |          | 1733364           | 7-10           | 20,2 | 27 | 19,5 | 1,3-5           |
| 100574 | EPDM       | Black  |          | 1733361           | 10-14          | 25,2 | 32 | 19,5 | 1,3-5           |
| 100167 | EPDM       | Grey   | 7042     | 1733362           | 10-14          | 25,2 | 32 | 19,5 | 1,3-5           |
| 100576 | SILICONE Q | Red    |          | 1733364           | 10-14          | 25,2 | 32 | 19,5 | 1,3-5           |
| 100227 | EPDM       | Black  |          | 1733365           | 14-20          | 32,2 | 39 | 21,5 | 1,3-5           |
| 100228 | EPDM       | Grey   | 7042     | 1733366           | 14-20          | 32,2 | 39 | 21,5 | 1,3-5           |
| 102263 | SILICONE Q | Red    |          | 1733368           | 14-20          | 32,2 | 39 | 21,5 | 1,3-5           |
| 100583 | EPDM       | Black  |          | 1733369           | 20-26          | 40,2 | 47 | 24   | 1,3-5           |
| 100584 | EPDM       | Grey   | 7042     | 1733370           | 20-26          | 40,2 | 47 | 24   | 1,3-5           |
| 100585 | SILICONE Q | Red    |          | 1733372           | 20-26          | 40,2 | 47 | 24   | 1,3-5           |
| 100229 | EPDM       | Black  |          | 1733373           | 26-35          | 50,2 | 58 | 30   | 1,3-5           |
| 100230 | EPDM       | Grey   | 7042     | 1733374           | 26-35          | 50,2 | 58 | 30   | 1,3-5           |
| 104014 | SILICONE Q | Red    |          | 1733376           | 26-35          | 50,2 | 58 | 30   | 1,3-5           |
| 100223 | EPDM       | Black  |          | 1733349           | 30-45          | 60,2 | 69 | 45   | 1,3-5           |
| 100224 | EPDM       | Grey   | 7042     | 1733350           | 30-45          | 60,2 | 69 | 45   | 1,3-5           |
| 102258 | SILICONE Q | Red    |          | 1733352           | 30-45          | 60,2 | 69 | 45   | 1,3-5           |
| 100573 | EPDM       | Black  |          | 1733353           | 40-60          | 80,2 | 90 | 60   | 1,3-5           |
| 100225 | EPDM       | Grey   | 7042     | 1733354           | 40-60          | 80,2 | 90 | 60   | 1,3-5           |
| 104013 | SILICONE Q | Red    |          | 1733356           | 40-60          | 80,2 | 90 | 60   | 1,3-5           |

# T-GD

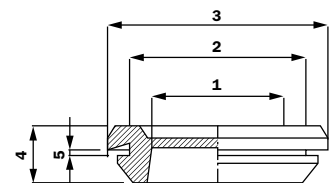


Trelleborg Singlegate T-GD-grommets are for leading through both low and medium power current cables as well various types of tubing.

The grommets are suitable for indoor and outdoor applications. The grommets fits to openings made with dimensions of PG.

Trelleborg Singlegate T-GD-grommets have alternative models for cables between diameters

of 9 mm up to 69 mm. Wall thickness can be between 1 to 2 mm and bigger ones 1,5 to 3 mm. The design gives protection for limited ingress of dust and against water splashed from all directions. Models with customized preholes for cables and tubes are available.



| Code   | Material | Colour | Ral code | Flame resistance | Electrical number | Cable diameter | 1    | 2    | 3  | 4  | 5     |
|--------|----------|--------|----------|------------------|-------------------|----------------|------|------|----|----|-------|
| 100174 | TPE-S    | Black  |          | UL 94; V-0       | 1733412           | 9              | 9    | 15,5 | 20 | 7  | 1-2   |
| 100175 | TPE-S    | Black  |          | UL 94; V-0       | 1733413           | 11             | 11   | 18,5 | 23 | 7  | 1-2   |
| 100176 | TPE-S    | Black  |          | UL 94; V-0       | 1733414           | 13,5           | 13,5 | 20,5 | 25 | 7  | 1-2   |
| 100177 | TPE-S    | Black  |          | UL 94; V-0       | 1733415           | 16             | 16   | 22,5 | 28 | 7  | 1-2   |
| 100178 | TPE-S    | Black  |          | UL 94; V-0       | 1733416           | 21             | 21   | 28   | 35 | 9  | 1-2   |
| 100179 | TPE-S    | Black  |          | UL 94; V-0       | 1733417           | 29             | 29   | 37   | 44 | 10 | 1-2   |
| 100180 | TPE-S    | Black  |          | UL 94; V-0       | 1733418           | 36             | 36   | 47   | 54 | 12 | 1,5-3 |
| 100181 | TPE-S    | Black  |          | UL 94; V-0       | 1733419           | 48             | 48   | 60   | 68 | 12 | 1,5-3 |
| 100182 | TPE-S    | Black  |          | UL 94; V-0       | 1733420           | 53             | 53   | 64   | 75 | 12 | 1,5-3 |
| 100721 | TPE-S    | Black  |          | UL 94; V-0       | 1733421           | 69             | 69   | 79   | 90 | 12 | 1,5-3 |





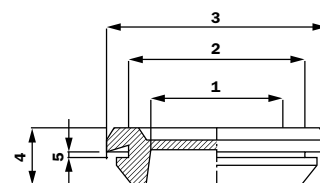
Trelleborg Singlegate T-GDM-grommets are for leading through both low and medium power current cables as well various types of tubing.

The grommets are suitable for indoor and outdoor applications. The grommets fits to openings made with dimensions of mm.

Trelleborg Singlegate T-GDM-grommets have alternative models for cables between diameters of 9 mm up to 69 mms. Wall thickness can be

between 1 to 2 mms and bigger ones 1,5 to 3 mms. The design gives protection for limited ingress of dust and against water splashed from all directions. Models with customized preholes for cables and tubes are available.

Trelleborg Singlegate T-GDM -grommets are available as standard of materials on table below. As request also other colours and materials like silicones and EMC-models are available.



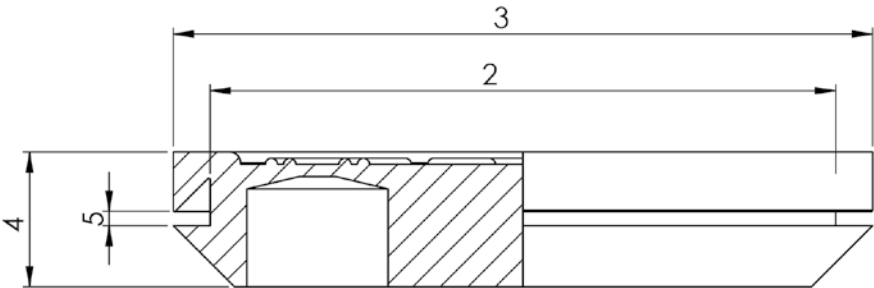
| Code   | Material | Colour | Ral code | Flame resistance | Electrical number | Cable diameter | 1    | 2    | 3  | 4  | 5     |
|--------|----------|--------|----------|------------------|-------------------|----------------|------|------|----|----|-------|
| 103665 | TPE-S    | Black  |          | UL 94; V-0       | 1733422           | 9              | 9    | 12,2 | 17 | 7  | 1-2   |
| 103933 | TPE-S    | Black  |          | UL 94; V-0       | 1733423           | 11             | 11   | 16,2 | 21 | 7  | 1-2   |
| 100199 | TPE-S    | Black  |          | UL 94; V-0       | 1733424           | 13,5           | 13,5 | 20,2 | 25 | 7  | 1-2   |
| 100200 | TPE-S    | Black  |          | UL 94; V-0       | 1733425           | 16             | 16   | 25,2 | 31 | 7  | 1-2   |
| 102342 | TPE-S    | Black  |          | UL 94; V-0       | 1733426           | 21             | 21   | 32,2 | 40 | 9  | 1-2   |
| 103523 | TPE-S    | Black  |          | UL 94; V-0       | 1733427           | 29             | 29   | 40,2 | 48 | 10 | 1-2   |
| 104019 | TPE-S    | Black  |          | UL 94; V-0       | 1733428           | 36             | 36   | 50,2 | 58 | 12 | 1,5-3 |
| 104021 | TPE-S    | Black  |          | UL 94; V-0       | 1733429           | 48             | 48   | 60,2 | 68 | 12 | 1,5-3 |
| 104022 | TPE-S    | Black  |          | UL 94; V-0       | 1733430           | 53             | 53   | 70,2 | 81 | 12 | 1,5-3 |
| 104023 | TPE-S    | Black  |          | UL 94; V-0       | 1733431           | 69             | 69   | 80,2 | 91 | 12 | 1,5-3 |



Trelleborg Singlegate M-GD-grommets are for leading through both low and medium power current cables as well various types of tubing.

The grommets are suitable for indoor and outdoor applications. The grommets fits to standard M50 opening.

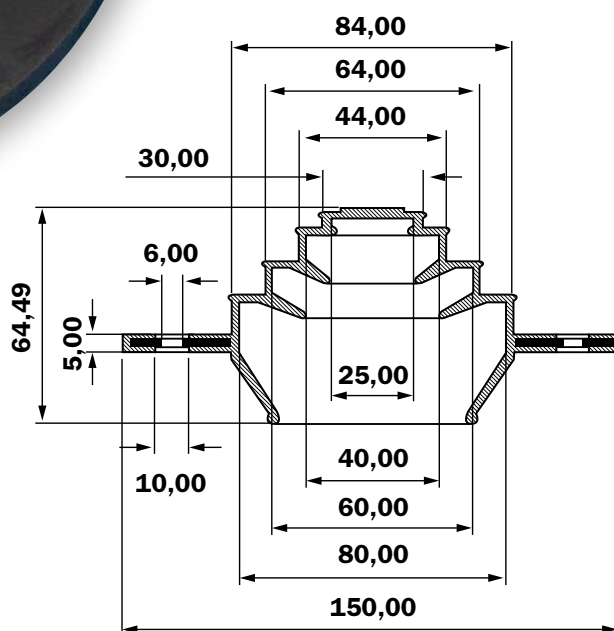
Trelleborg can also offer similar type customized solutions.



| Code   | Material | Colour     | Ral code | Electrical number | Cable diameter        | 2  | 3  | 4  | 5   |
|--------|----------|------------|----------|-------------------|-----------------------|----|----|----|-----|
| 106612 | TPE-S    | Light Grey | 7035     | 1733486           | 8 x 9 mm & 4 x 13 mm  | 51 | 57 | 11 | 1-2 |
| 106613 | TPE-S    | Light Grey | 7035     | 1733487           | 4 x 10 mm & 3 x 16 mm | 51 | 57 | 11 | 1-2 |



# M 20-80



| Code   | Colour     | Ral code | Classifications           | Delivery time     | Electrical number |
|--------|------------|----------|---------------------------|-------------------|-------------------|
| 104048 | Gray       | 7042     |                           | 3-4 weeks from PO | 1733483           |
| 104049 | Light Grey | 7035     | UL 94; V-0                | 3-4 weeks from PO | 1733484           |
| 101035 | Black      |          | UL 94; V-0; Oil resistant | From stock        | 1733485           |

# Typical properties of materials

## **TPE (Thermoplastic Elastomer)**

- excellent resistance to weathering, ozone and UV exposure
- provides good chemical resistance, and excellent electrical properties limited resistance for oils (resists oils as splash)
- flame retardant grades UL 94 V-0, halogen free
- standard hardnesses 25 ShA – 70 ShA
- recyclable
- wide range of colours, easy to customize
- service temperature range -40 to + 100°C
- FDA approved grades available

## **TPU (Thermoplastic Urethane)**

- good resistance to weathering, ozone and UV exposure
- good abrasive properties
- limited resistance for oils (resists oils as splash)
- standard hardnesses 50 ShA – 70 ShA
- recyclable
- wide range of colours, easy to customize
- service temperature range -40 - + 100°C
- FDA approved grades available

## **TPV (Thermoplastic Vulcanizate)**

- show excellent resistance to UV Light; very little change in Delta E
- improved oil and chemical resistance; Exhibit superior chemical resistance over a wide range of temperature (Oils / Petroleum and Sebum, Automotive fluids, aqueous solutions, acids and bases, organic solvents)
- flame retardant grades 50 ShA to 50 ShD, UL 94 V-0
- hardness range 15 ShA to 50 ShD Temperature range continues use up to 125°C and short-term exposure up to 150°C. Brittle point lower than -60°C for most grades. Provides good low-temperature flexibility and impact toughness
- it looks and feels like thermoset rubber
- improved compression set at elevated temperatures (over 70°C)
- medical/food contact grades from 45 ShA to 50 ShD

## **EPDM (Ethylene Propylene Diene Monomer)**

- superior resistance to weathering, ozone and UV exposure
- provides excellent chemical resistance, and good electrical properties
- resists animal and vegetable oils, steam, water and oxygenated solvents
- flame retardant grades UL 94 V-2

- standard hardnesses 40 ShA – 70 ShA
- limited range of colours
- working temperature range -40 to + 120°C
- EMC grades with attenuation around 40 dB

## **NBR (Nitrile Butadiene Rubber)**

- limited weathering resistance
- it is generally resistant to fuel and other chemicals. Also resistant to aliphatic hydrocarbons but less resistant aromatic hydrocarbons, ketones, esters, aldehydes and to ozone
- flame resistance is poor
- hardness range 20 - 95 ShA
- working temperature range of -40 to + 125°C
- environmental performances: colorability, gas permeability and water resistance are excellent
- other physical & mechanical properties: adhesion to metal and rigid materials are excellent, abrasion resistance, compression set and tear resistance are good to excellent

## **CR (Chloroprene Rubber)**

- good weathering resistance, flame retarding. Moderate resistance to petroleum-based fluids
- service temperature -45 to +120°C
- adhesion to many substrates
- good resistance toward chemicals and ageing
- CR in general has good chemical stability and maintains flexibility over a wide temperature range
- hardness range 40 – 95 ShA

## **Q (Silicone)**

- excellent resistance to weathering, ozone and UV exposure
- also provides excellent chemical resistance and good electrical properties
- resists oils as splash
- flame retardant grades UL 94 V-0
- standard hardnesses 25 ShA – 90 ShA
- wide range of colours, easy to customize
- service temperature range -50 - + 200°C

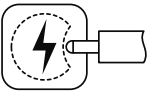
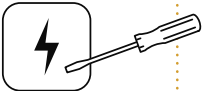
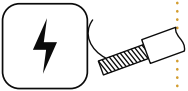
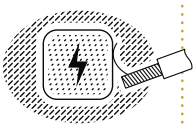
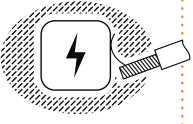


# IP codes

## First numeral

Protection against ingress of solid foreign objects

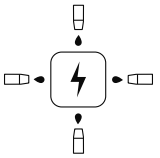
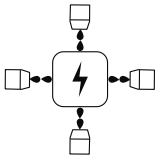
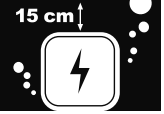
Meaning protection of persons against access to hazardous parts with:

| IP | Requirements                                                                                                                                               | Example                                                                             |                        |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------|
| 0  | No protection                                                                                                                                              |    | No protection provided |
| 1  | Full penetration of 50.0 mm diameter sphere not allowed and shall have adequate clearance from hazardous parts. Contact with hazardous parts not permitted |    | Back of hand           |
| 2  | Full penetration of 12.5 mm diameter sphere not allowed. The jointed test finger shall have adequate clearance from hazardous parts                        |   | Finger                 |
| 3  | The access probe of 2.5 mm diameter shall not penetrate                                                                                                    |  | Tool                   |
| 4  | The access probe of 1.0 mm diameter shall not penetrate                                                                                                    |  | Wire                   |
| 5  | Limited ingress of dust permitted (no harmful deposit, refer to standard)                                                                                  |  | Wire                   |
| 6  | Totally protected against ingress of dust                                                                                                                  |  | Wire                   |
|    |                                                                                                                                                            |                                                                                     |                        |
|    |                                                                                                                                                            |                                                                                     |                        |

## Second numeral

Protection against harmful ingress of water

Meaning for protection from ingress of water:

| IP | Requirements                                                                                     | Example                                                                               |                                        |
|----|--------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|----------------------------------------|
| 0  | No protection                                                                                    |    | No protection provided                 |
| 1  | Protected against vertically falling drops of water                                              |    | Vertically dripping                    |
| 2  | Protected against vertically falling drops of water with enclosure tilted 15° from the vertical. |   | Enclosure tilted 15° from the vertical |
| 3  | Protected against sprays to 60° from the vertical                                                |  | Limited spraying                       |
| 4  | Protected against water splashed from all directions                                             |  | Splashing from all directions          |
| 5  | Protected against lowpressure jets of water from all directions                                  |  | Hosing jets from all directions        |
| 6  | Protected against strong jets of water                                                           |  | Strong hosing jets from all directions |
| 7  | Protected against the effects of immersion between 15.0 cm and 1.0 m                             |  | Temporary immersion                    |
| 8  | Protected against longer periods of immersion under pressure                                     |  | Immersion                              |

# Assembly

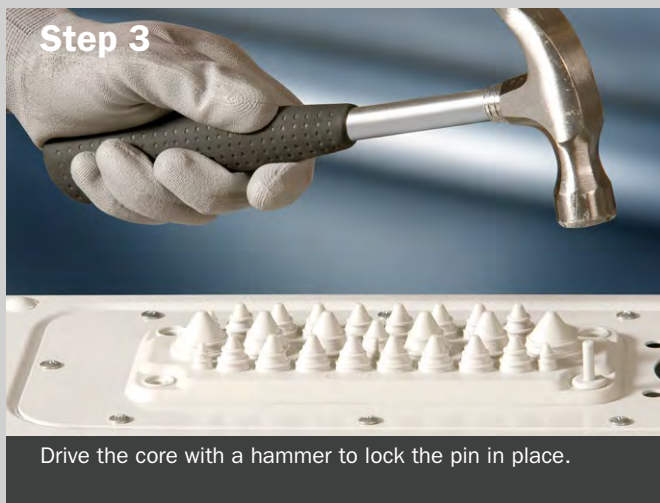
## Step 1



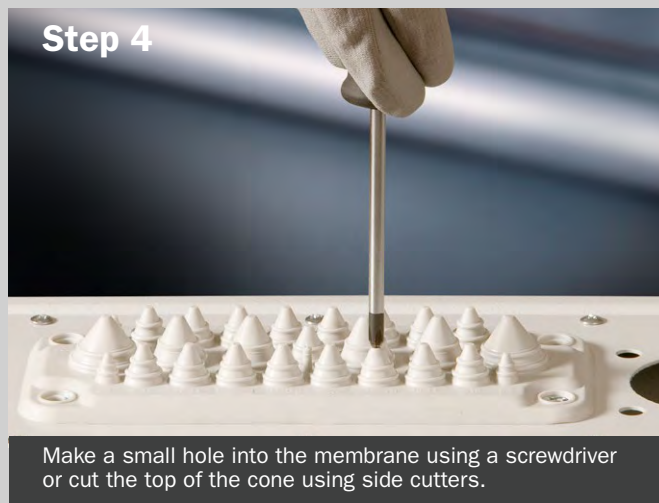
## Step 2



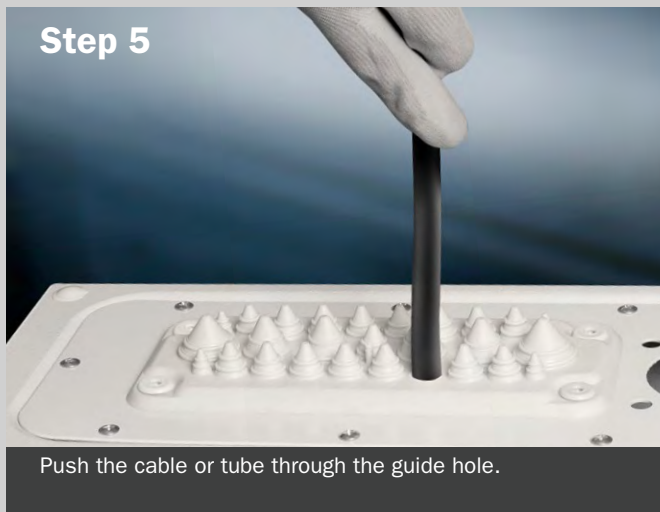
## Step 3



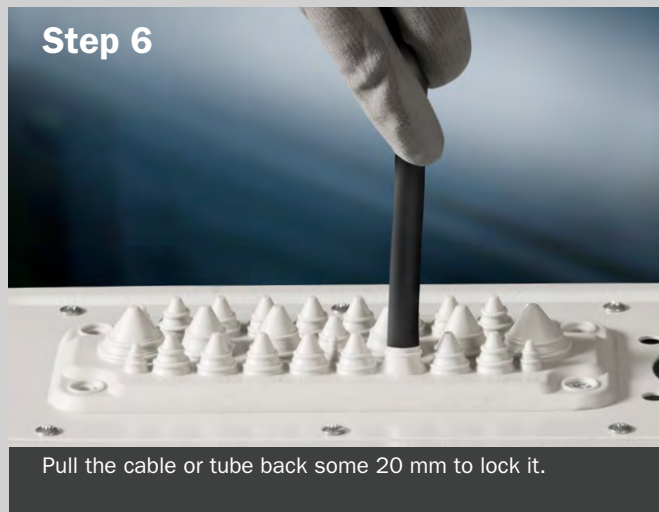
## Step 4



## Step 5

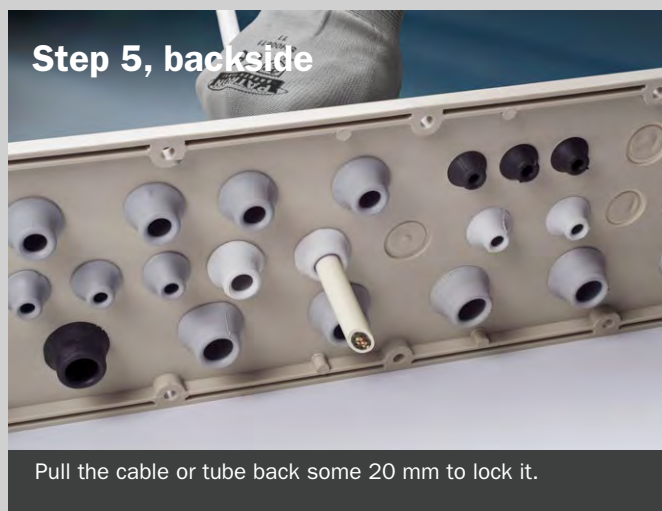
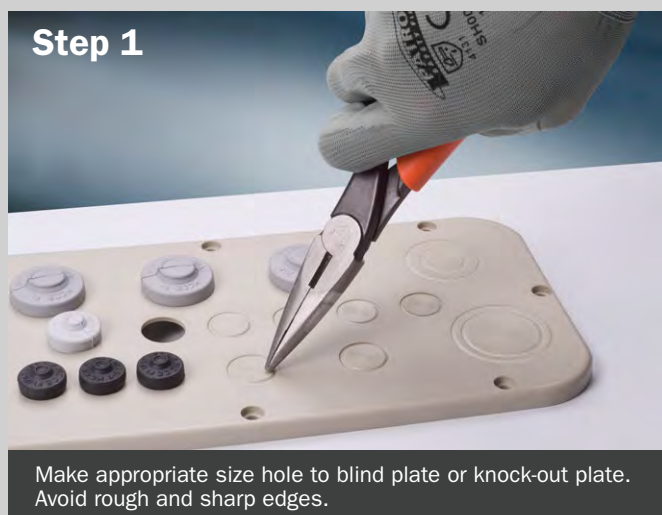


## Step 6



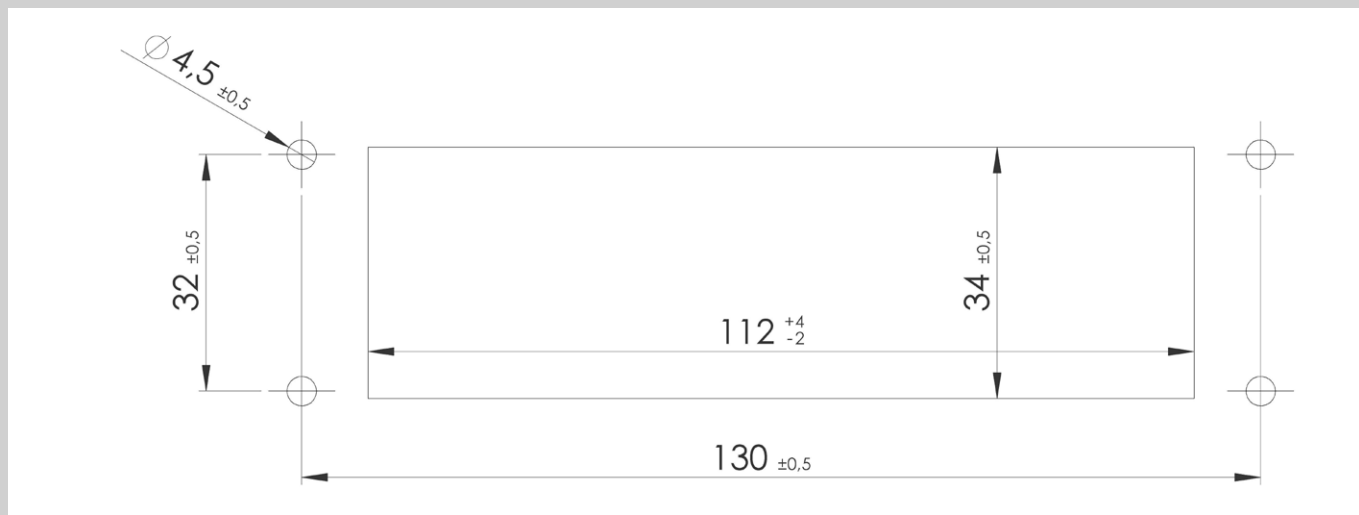


## Assembly of Singlegates

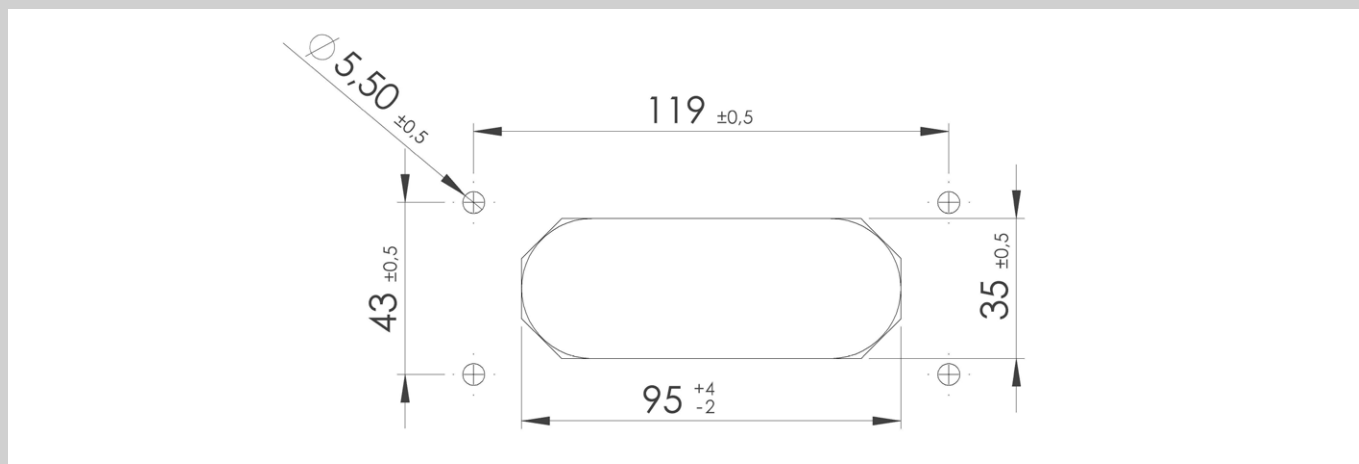


# Fixing details

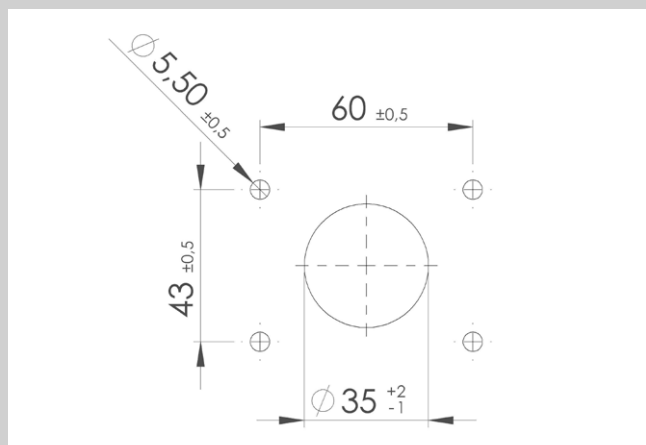
B 24



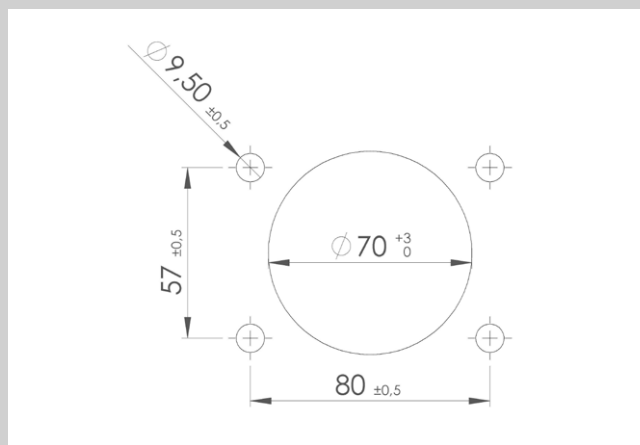
SCG 2



SCG 1

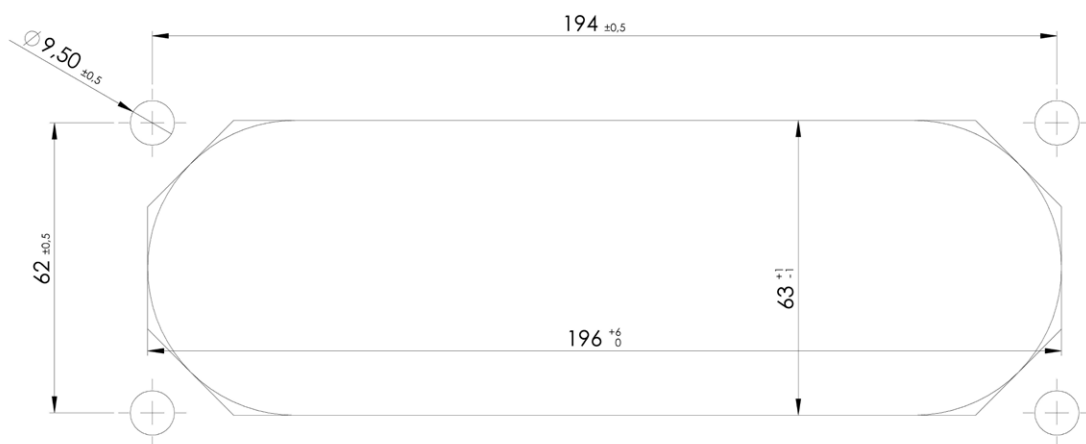


MC 1

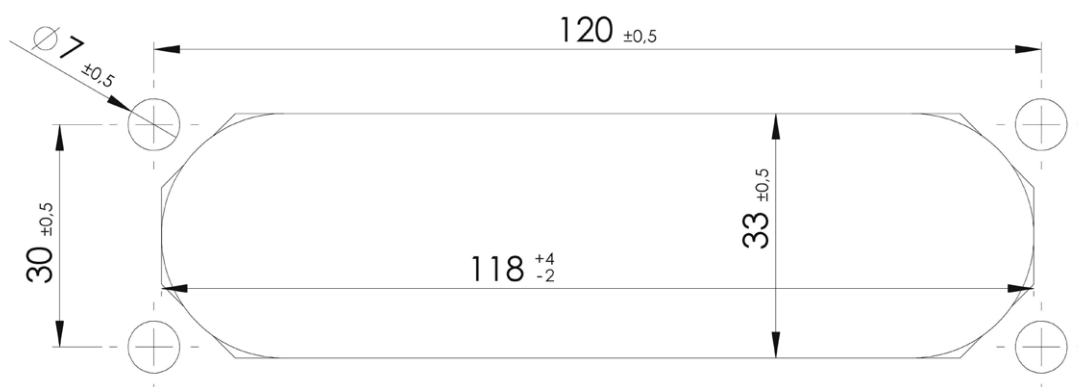




## FL 21

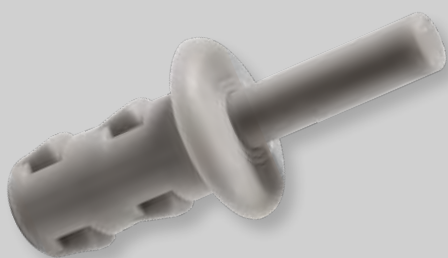


## FL 13



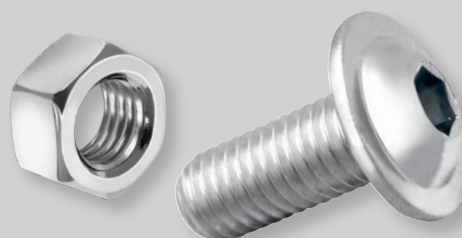
### Pin

Primarily used with MC 25 and MC 35 multigates for indoor applications.

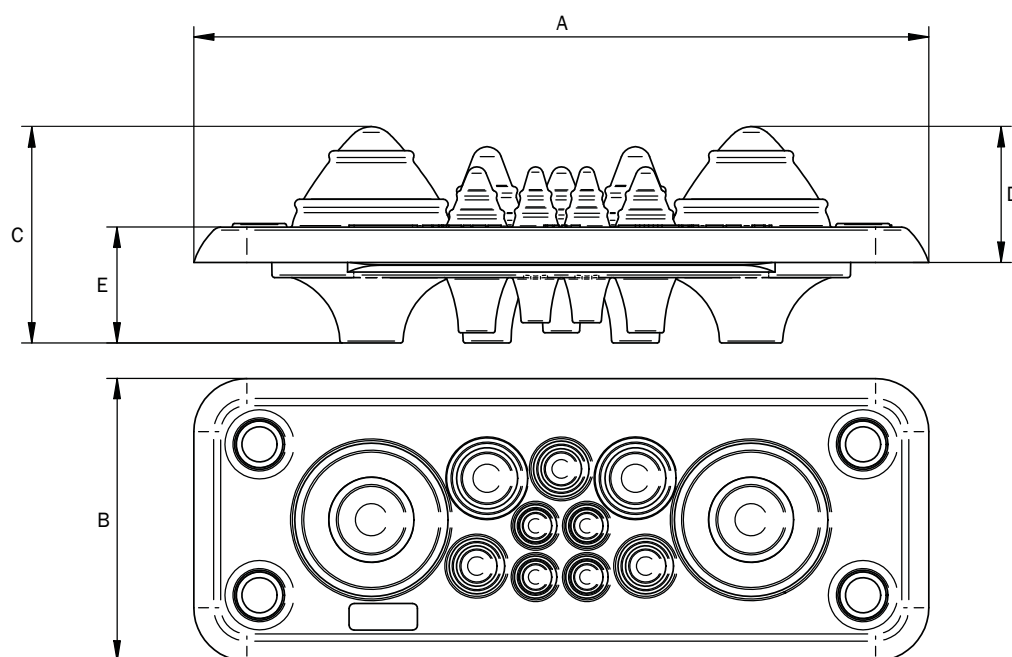


### Nut and bolt

Always for outdoor and EMC applications or with large cable sizes, recommended torque 1,8 Nm.



# Dimensions



## IP66/67-series

| Type     | Width (A) | Length (B) | Height (C) | Depth 1 (D) | Depth 2 (E) |
|----------|-----------|------------|------------|-------------|-------------|
| MC 3/7   | 222       | 92         | 76         | 53          | 33          |
| MC 25/27 | 222       | 92         | 43         | 30          | 23          |
| MC 35/37 | 222       | 92         | 43         | 30          | 23          |
| MB 5/11  | 147       | 57         | 42         | 26          | 23          |

## IP65-series

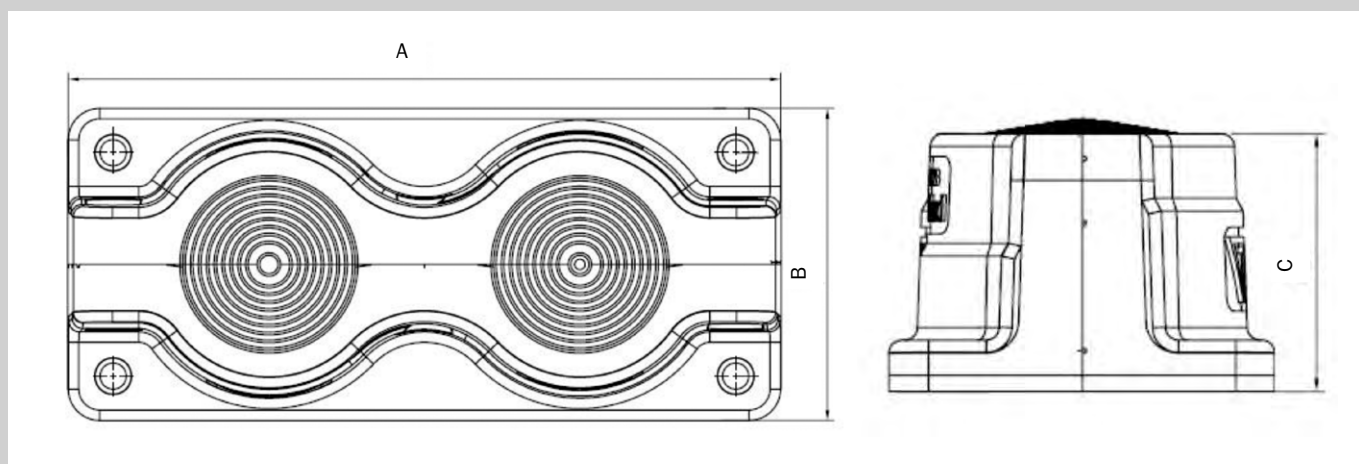
| Type  | Width (A) | Length (B) | Height (C) | Depth 1 (D) | Depth 2 (E) |
|-------|-----------|------------|------------|-------------|-------------|
| MC 3  | 214       | 84         | 37         | 19          | 27          |
| MC 25 | 216       | 84         | 27         | 15          | 21          |
| MC 35 | 216       | 84         | 31         | 17          | 22          |

## IP55 / IP54-series

| Type   | Width (A) | Length (B) | Height (C) | Depth 1 (D) | Depth 2 (E) |
|--------|-----------|------------|------------|-------------|-------------|
| MC 10  | 216       | 84         | 48         | 45          | 12          |
| MC 16  | 216       | 84         | 31         | 14          | 22          |
| MB 4   | 138       | 48         | 32         | 32          | 7           |
| LMC 14 | 222       | 92         | 52         | 52          | 10          |
| LMC 25 | 222       | 92         | 30         | 30          | 10          |
| LMC 51 | 222       | 92         | 30         | 30          | 10          |

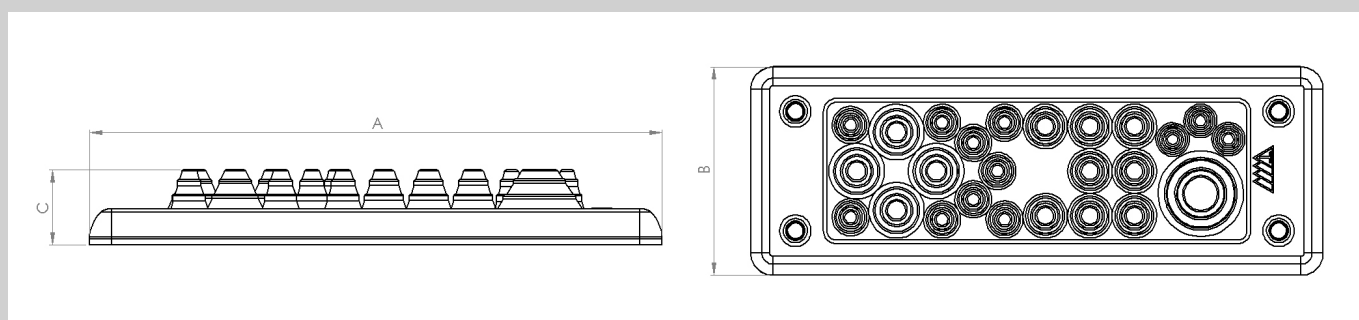


## Main dimensions



### Splitting multigates

| Type                             | Width (A) | Length (B) | Height (C) |
|----------------------------------|-----------|------------|------------|
| SCG 1 x 3 - 35 Splitting Grommet | 77        | 60         | 40         |
| SCG 2 x 3 - 35 Splitting Grommet | 136       | 60         | 40         |
| MC 2, MC 2/10, MC 2/18           | 222       | 92         | 75         |
| MC 1, MC 1/9                     | 123       | 92         | 75         |



### MH-series

| Type  | Width (A) | Length (B) | Height (C) |
|-------|-----------|------------|------------|
| MH 10 | 154       | 56         | 20         |
| MH 25 | 154       | 56         | 20         |
| MH 27 | 154       | 56         | 19         |



We seal, damp and protect in demanding industrial environments throughout the world.

Trelleborg is a global industrial group whose leading positions are based on advanced polymer technology and in-depth applications know-how.

Trelleborg Industrial Products Finland Oy is a part of Product Area Trelleborg Electrical Protection. We are the leading, flexible developer and manufacturer of elastomer-based innovative custom designed solutions that address the demanding pass-thru and sealing needs of the global telecom, electronics, power and HVAC industries. We serve the customers with fast, high quality product development and rapid prototyping. Our global presence supports multinational co-operation with flexible manufacturing capabilities.

Trelleborg Industrial Products Finland Oy  
Kikkerlöntie 72  
FI-38300 Sastamala  
FINLAND  
Tel. +358 3 512 6000  
Fax +358 3 512 6020  
[www.trelleborg.com/en/moulded-components](http://www.trelleborg.com/en/moulded-components)

Trelleborg Moulded Components (Wuxi) Co., Ltd.  
No. 8. Zhong Tong Road  
New District, Wuxi, JiangSu, PRC 214143  
CHINA  
Tel. +86 510 8530 8808  
Fax +86 510 8530 9208  
[www.trelleborg.com/china](http://www.trelleborg.com/china) Trelleborg

Trelleborg Industrial Products Sweden AB  
Stålgatan 2  
SE-703 63 Örebro  
SWEDEN  
Tel. +46 19 164700  
[www.trelleborg.com](http://www.trelleborg.com)

Industrial Products India Pvt Ltd  
19/1 Kalena Agrahara,  
Bannerghata Main road  
Bangalore - 560076  
INDIA  
Tel. +91 80 25189700  
Fax +91 80 26431109