

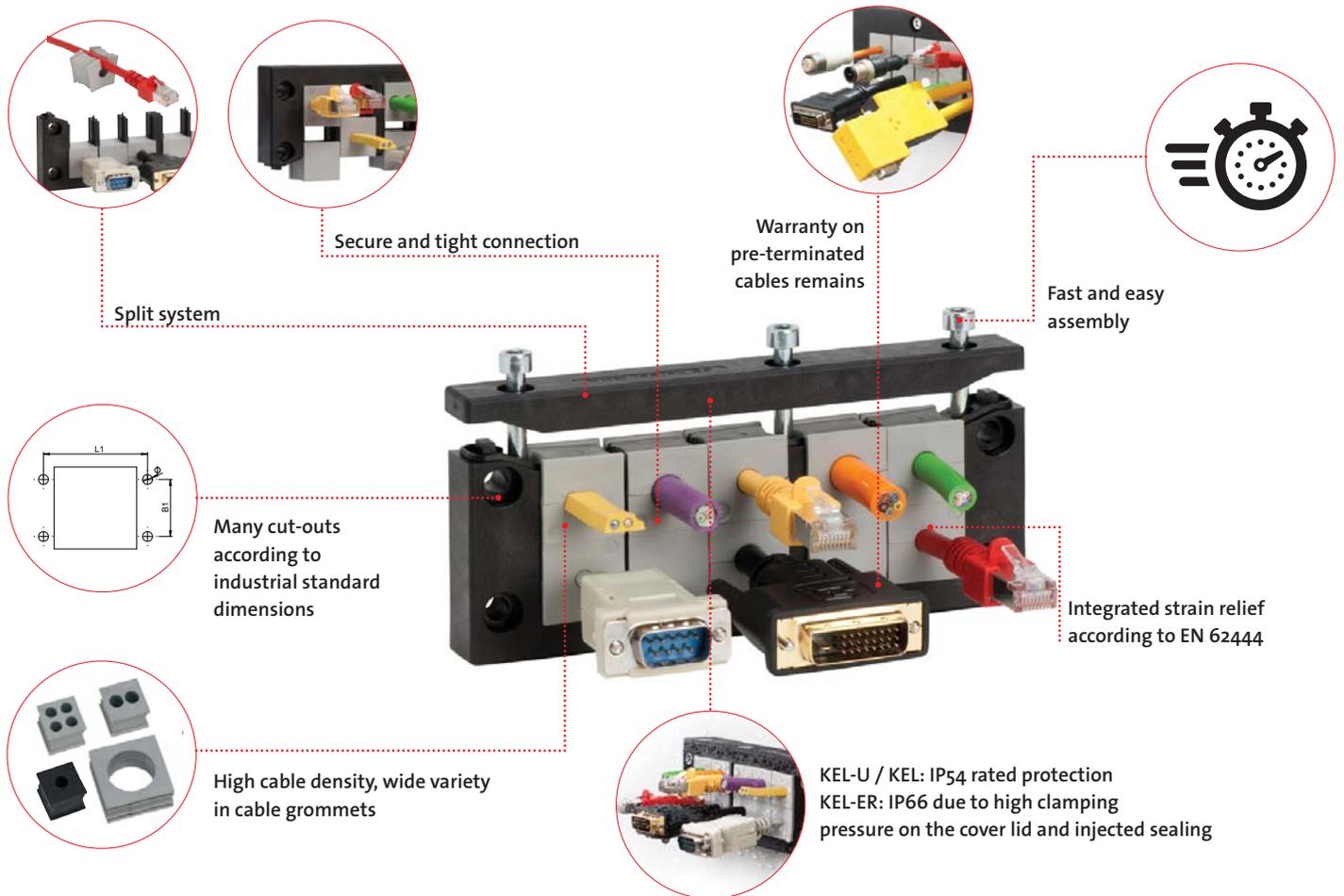
1.11 Split Cable Entry Frames for the KT Grommet System



The patented cable entry system enables the user to enter, seal and provide strain relief for cables with and without connectors as well as for hoses and conduits.

The key feature of icotek's patented system is the split frame and slit grommets which provide quick, convenient and cost effective routing of pre-terminated and multi-conductor cables, hoses or conduits. The split frame and

slit grommets alleviate the need to cut and rewire pre-terminated cables. Therefore, cable warranties are unaffected. Cables, pipes and conduits with various diameters can be routed due to large variety of slit grommets. When assembled correctly, the slit grommets are held tightly within the frame. Correctly sizing the grommet to the cable diameter ensures a high degree of protection (up to IP66 / UL type 4X) and provides strain relief.



Product Range



Chapter Content 1.11

1.11



Split cable entry frames | UL types 4X / 12 for cable diameters up to 35 mm

KEL-ER 24 / KEL-ER 16 / KEL-ER 10 / KEL-ER-B

9 - 14



Split cable entry frames | UL type 12 for cable diameters up to 16 mm

KEL-ER-E5 / KEL-ER-E4 / KEL-ER-E3 / KEL-ER-E2

17



Split cable entry frames | UL type 12 for cable diameters up to 35 mm

KEL-U 24 / KEL-U 16 / KEL-U 10 / KEL-U-B

8 - 14



Split cable entry frames | UL type 12 for cable diameters up to 17 mm

KEL-E5 / KEL-E4 / KEL-E3 / KEL-E2

16



Centrally split cable entry frames | UL type 12 for cable diameters up to 35 mm

KEL 24 / KEL 16 / KEL 10 / KEL-B

18 - 21



Extended cable entry frames | UL type 12 for cable diameters up to 35 mm

KEL 24-E / KEL 24-MT / KEL 24-2MT
KEL 16-E / KEL 16-MT / KEL 16-2MT

22 - 27



Split flange enclosure for cable diameters up to 35 mm

KEL-FG-A / KEL-FG-B /
KEL-FG-E5 / KEL-FG-E3 / KEL-FG-E2

28 - 30



Snap mounting frames | UL type 12 for installation of KEL-U / KEL frames

KEL-SNAP 24 / KEL-SNAP 16 / KEL-SNAP 10 /
KEL-SNAP-B / KEL-SNAP 24-E / KEL-SNAP 24-MT

31



Split cable entry frames for flat cables & round cables up to 16 mm in diameter

KEL-FL / FT

32 - 33



Split cable entry frames | UL type 12 for cable diameters up to 75 mm

KEL 183 / KEL 183-E / KTMB 183

34 - 35



Split cable entry frames | UL type 12 for cable diameters up to 65 mm

KEL-JUMBO / KTF

36 - 37



Grommets and plugs | UL types 4X / 12 for cables with/without connectors, cable diameter range 1 - 35 mm

KT small / KT large / KT-DPF / KTMB / DT / ST /
KT Service Box

47 - 53

KEL-U 24

Cable Entry Frames



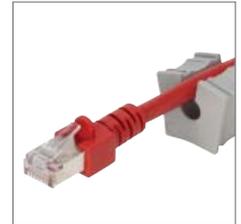
IP54



Also available with stainless steel screws (V2A).



Also available with threaded steel bushings.



Slit KT grommets

Product Description

Split cable entry system for routing pre-terminated cables providing an IP54 / UL type 12 rating. Routing, sealing and providing strain relief for cable diameters from 1 to 35 mm. The new cable entry system is easy to install. Cable grommets are placed into compartments in the frame and are securely fixed to the frame during assembly. The KEL-U 24 frame matches exactly the cut-out dimensions for 24-pin standard industrial connectors. Either a cut-out of 36 mm or 46 mm in height can be chosen depending on the cables being routed. A flat rubber gasket is included in the shipment.

Advantages & Benefits

- Fast and easy assembly
- Warranty on pre-terminated cables remains
- Retrofits, repairs and maintenance can be done much more easily and quickly
- High cable density, wide variety of grommets
- Strain relief according to EN 62444
- High stability, vibration resistant

Specifications

| | |
|-----------------------|--|
| Material | Polyamide (PA) |
| Flame class | UL94-Vo |
| IP Rating | IP54, with gasket and correct selection of cable grommets (certified acc. to EN 60529) |
| UL type rating | UL type 12 (acc. to UL 50E) |
| Operating temperature | - 40°C to + 140°C (static) - 40°F to + 284°F (static) |
| Properties | Halogen-free, silicone-free |
| Cut-out dimensions | 36 × 112 mm / 1.378 × 4.409" / page 218 - 219 |
| Frame depth | 17 mm / 0.669" |

Accessories

| | |
|--------------------------|-----------|
| Cable grommets | 48 - 52 |
| KEL-SNAP Mounting frames | 31 |
| KEL-EMC Grounding mounts | 138 - 140 |
| KDR Gland plates | 164 - 177 |
| FP Flange plates | 178 - 183 |
| MP Module plates | 174 - 175 |
| ST Plugs | 53 |

| Description | Type | Order No. | Grommets small large | PU |
|-------------|-----------------------------|-----------|------------------------|----|
| | KEL-U 24 10 | 54241 | 10 - | 10 |
| | KEL-U 24 10 with V2A screws | 54241.200 | 10 - | 10 |
| | KEL-U 24 7 | 54247 | 6 1 | 10 |
| | KEL-U 24 7 with V2A screws | 54247.200 | 6 1 | 10 |
| | KEL-U 24 4 | 54244 | 2 2 | 10 |
| | KEL-U 24 4 with V2A screws | 54244.200 | 2 2 | 10 |

KEL-ER 24

Cable Entry Frames



V2A anti-corrosive

Also available with stainless steel screws (V2A).



Also available with threaded bushings.

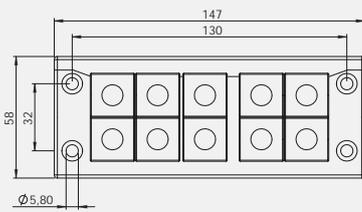
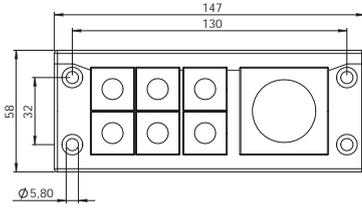
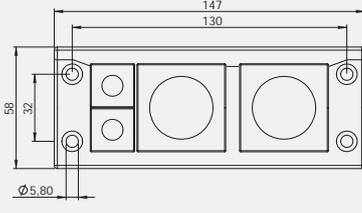


Slit KT grommets



IP66

1.11

| Description | Type | Order No. | Grommets small large | PU |
|--|------------------------------|-----------|------------------------|----|
|  | KEL-ER 24 10 | 48241 | 10 - | 10 |
| | KEL-ER 24 10 with V2A screws | 48241.200 | 10 - | 10 |
|  | KEL-ER 24 7 | 48247 | 6 1 | 10 |
| | KEL-ER 24 7 with V2A screws | 48247.200 | 6 1 | 10 |
|  | KEL-ER 24 4 | 48244 | 2 2 | 10 |
| | KEL-ER 24 4 with V2A screws | 48244.200 | 2 2 | 10 |

Product Description

Split cable entry system for routing and sealing cables with connectors, providing an IP66 / up to UL type 4X rating and strain relief for cable diameters from 1 to 16 mm (KT 1 - 15) and 16 to 35 mm (KT 16 - 34).

The new cable entry system is easy to install. Cable grommets are placed compartments in the frame and are securely fixed to the frame during assembly. The KEL-ER 24 frame matches exactly the cut-out dimensions for 24-pin standard industrial connectors. A flat rubber gasket is included in the shipment.

Advantages & Benefits

- Warranty on pre-terminated cables remains
- Retrofits, repairs and maintenance can be done much more easily and quickly
- High cable density, wide variety of grommets
- Strain relief according to EN 62444
- High stability, vibration resistant

Specifications

| | |
|-----------------------|---|
| Material | Polyamide (PA) |
| Flame class | UL94-Vo |
| IP rating | IP66, with gasket and correct selection of single grommets (certified acc. to EN 60529) |
| UL type rating | UL type 4X (acc. to UL 50E) |
| Operating temperature | - 40°C to + 140°C (static) - 40°F to + 284°F (static) |
| Properties | Halogen-free, silicone-free |
| Cut-out dimensions | 36/46 × 112 mm / 1.378/1.811 × 4.409 " |
| | Page 218 - 219 |
| Frame depth | 17 mm / 0.669 " |

Accessories

| | |
|--------------------------|-----------|
| KT Cable grommets | 48 - 50 |
| KEL-EMC Grounding mounts | 138 - 140 |
| ST Plugs | 53 |

KEL-U 16

Cable Entry Frames



IP54

1.11



Slit KT grommets



V2A anti-corrosive

Also available with stainless steel screws (V2A).



Also available with threaded bushings.

Product Description

Split cable entry system for routing cables with connectors, providing an IP54 / up to UL type 12 rating. Routing, sealing and providing strain relief for cable diameters from 1 to 35 mm. The new cable entry system is easy to install. Cable grommets are placed into compartments in the frame and are securely fixed to the frame during assembly. The KEL-U 16 frame matches exactly the cut-out dimensions for 16-pin standard industrial connectors. Either a cut-out of 36 mm or 46 mm in height can be chosen depending on the cables being routed. A flat rubber gasket is included in the shipment.

Advantages & Benefits

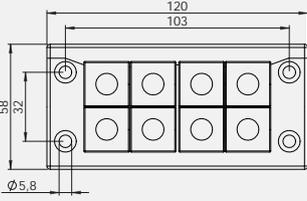
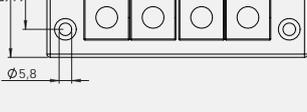
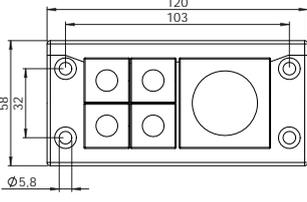
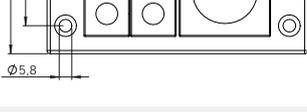
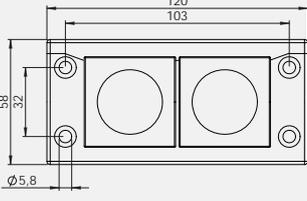
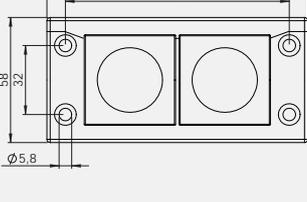
- Fast and easy assembly
- Warranty on pre-terminated cables remains
- Retrofits, repairs and maintenance can be done much more easily and quickly
- High cable density, wide variety of grommets
- Strain relief according to EN 62444
- High stability, vibration resistant

Specifications

| | |
|-----------------------|--|
| Material | Polyamide (PA) |
| Flame class | UL94-Vo |
| IP rating | IP54, with gasket and correct selection of cable grommets (certified acc. to EN 60529) |
| UL type rating | UL type 12 (acc. to UL 50E) |
| Operating temperature | - 40°C to + 140°C (static) - 40°F to + 284°F (static) |
| Properties | Halogen-free, silicone-free |
| Cut-out dimensions | 36/46 × 86 mm / 1.378/1.811 x 3.386" / Page 218 - 219 |
| Frame depth | 17 mm / 0.669" |

Accessories

| | |
|--------------------------|-----------|
| Cable grommets | 48 - 52 |
| KEL-SNAP Mounting frames | 31 |
| KEL-EMC Grounding mounts | 138 - 140 |
| KDR Gland plates | 164 - 177 |
| FP Flange plates | 178 - 183 |
| ST Plugs | 53 |

| Description | Type | Order No. | Grommets small large | PU |
|--|----------------------------|-----------|------------------------|----|
|  | KEL-U 16 8 | 54168 | 8 - | 10 |
|  | KEL-U 16 8 with V2A screws | 54168.200 | 8 - | 10 |
|  | KEL-U 16 5 | 54165 | 4 1 | 10 |
|  | KEL-U 16 5 with V2A screws | 54165.200 | 4 1 | 10 |
|  | KEL-U 16 2 | 54162 | - 2 | 10 |
|  | KEL-U 16 2 with V2A screws | 54162.200 | - 2 | 10 |

KEL-ER 16

Cable Entry Frames

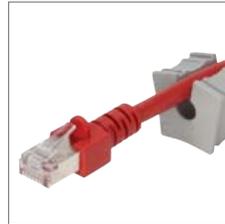


V2A
anti-corrosive

Also available with stainless steel screws (V2A).



Also available with threaded bushings.

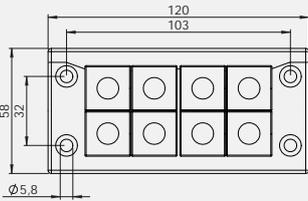
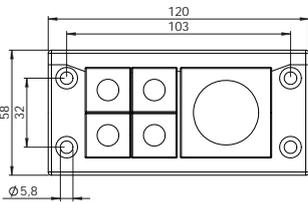
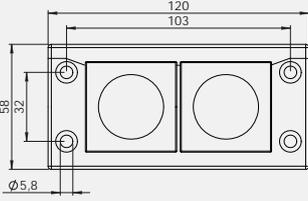


Slit KT grommets



IP66

1.11

| Description | Type | Order No. | Grommets small large | PU |
|---|--------------------------------|-----------|---------------------------|----|
|  | KEL-ER 16 8 | 48168 | 8 - | 10 |
| | KEL-ER 16 8 with V2A screws | 48168.200 | 8 - | 10 |
|  | KEL-ER 16 5 | 48165 | 4 1 | 10 |
| | KEL-ER 16 5 with V2A screws | 48165.200 | 4 1 | 10 |
|  | KEL-ER 16 2 | 48162 | - 2 | 10 |
| | KEL-ER 16 2 with V2A screws | 48162.200 | - 2 | 10 |

Product Description

Split cable entry system for routing and sealing cables with connectors, providing an IP66 / up to UL type 4X rating and strain relief for cable diameters from 1 to 16 mm (KT 1 - 15) and 16 to 35 mm (KT 16 - 34).

The new cable entry system is easy to install. Cable grommets are placed into compartments in the frame and are securely fixed to the frame during assembly. The KEL-ER 16 frame matches exactly the cut-out dimensions for 16-pin standard industrial connectors. A flat rubber gasket is included in the shipment.

Advantages & Benefits

- Warranty on pre-terminated cables remains
- Retrofits, repairs and maintenance can be done much more easily and quickly
- High cable density, wide variety of grommets
- Strain relief according to EN 62444
- High stability, vibration resistant

Specifications

| | |
|-----------------------|---|
| Material | Polyamide (PA) |
| Flame class | UL94-Vo |
| IP rating | IP66, with gasket and correct selection of single grommets (certified acc. to EN 60529) |
| UL type rating | UL type 4X (acc. to UL 50E) |
| Operating temperature | - 40°C to + 140°C (static) - 40°F to + 284°F (static) |
| Properties | Halogen-free, silicone-free |
| Cut-out dimensions | 36/46 × 86 mm / 1.378/1.811 x 3.386" / Page 218 - 219 |
| Frame depth | 17 mm / 0.669 " |

Accessories

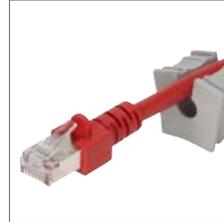
| | |
|--------------------------|-----------|
| KT Cable grommets | 48 - 50 |
| KEL-EMC Grounding mounts | 138 - 140 |
| ST Plugs | 53 |

KEL-U 10

Cable Entry Frames



IP54



Slit KT grommets



V2A anti-corrosive

Also available with stainless steel screws (V2A).



Also available with threaded bushings.

Product Description

Split cable entry system for routing cables with connectors, providing an IP54 / up to UL type 12 rating. Routing, sealing and providing strain relief for cable diameters from 1 to 35 mm. The new cable entry system is easy to install. Cable grommets are placed into compartments in the frame and are securely fixed to the frame during assembly. The KEL-U 10 frame matches exactly the cut-out dimensions for 10-pin standard industrial connectors. Either a cut-out of 36 mm or 46 mm in height can be chosen depending on the cables being routed. A flat rubber gasket is included in the shipment.

Advantages & Benefits

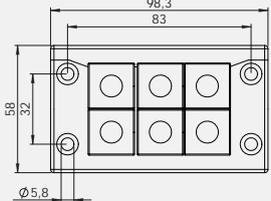
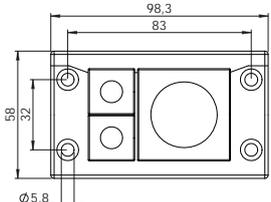
- Fast and easy assembly
- Warranty on pre-terminated cables remains
- Retrofits, repairs and maintenance can be done much more easily and quickly
- High cable density, wide variety of grommets
- Strain relief according to EN 62444
- High stability, vibration resistant

Specifications

| | |
|-----------------------|--|
| Material | Polyamide (PA) |
| Flame class | UL94-V0 |
| IP rating | IP54, with gasket and correct selection of cable grommets (certified acc. to EN 60529) |
| UL type rating | UL type 12 (acc. to UL 50E) |
| Operating temperature | - 40°C to + 140°C (static) - 40°F to + 284°F (static) |
| Properties | Halogen-free, silicone-free |
| Cut-out dimensions | 36/46 × 65 mm / 1.378/1.811 x 2.559" / Page 218 - 219 |
| Frame depth | 17 mm / 0.669" |

Accessories

| | |
|--------------------------|-----------|
| Cable grommets | 48 - 52 |
| KEL-SNAP Mounting frames | 31 |
| KEL-EMC Grounding mounts | 138 - 140 |
| ST Plugs | 53 |

| Description | Type | Order No. | Grommets small large | PU |
|--|----------------------------|-----------|------------------------|----|
|  | KEL-U 10 6 | 54216 | 6 - | 10 |
| | KEL-U 10 6 with V2A screws | 54216.200 | 6 - | 10 |
|  | KEL-U 10 3 | 54212 | 2 1 | 10 |
| | KEL-U 10 3 with V2A screws | 54212.200 | 2 1 | 10 |

KEL-ER 10

Cable Entry Frames



V2A anti-corrosive

Also available with stainless steel screws (V2A).



Also available with threaded bushings.

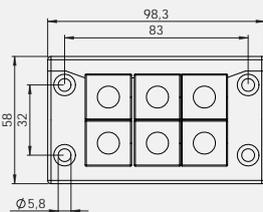
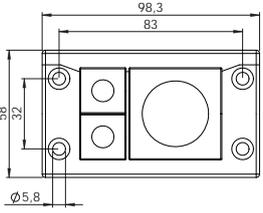


Slit KT grommets



IP66

1.11

| Description | Type | Order No. | Grommets small large | PU |
|---|-----------------------------|-----------|------------------------|----|
|  | KEL-ER 10 6 | 48216 | 6 - | 10 |
| | KEL-ER 10 6 with V2A screws | 48216.200 | 6 - | 10 |
|  | KEL-ER 10 3 | 48212 | 2 1 | 10 |
| | KEL-ER 10 3 with V2A screws | 48212.200 | 2 1 | 10 |

Product Description

Split cable entry system for routing and sealing cables with connectors, providing an IP66 / up to UL type 4X rating and strain relief for cable diameters from 1 to 16 mm (KT 1 - 15) and 16 to 35 mm (KT 16 - 34).

The new cable entry system is easy to install. Cable grommets are placed into compartments in the frame and are securely fixed to the frame during assembly. The KEL-ER 10 frame matches exactly the cut-out dimensions for 10-pin standard industrial connectors. A flat rubber gasket is included in the shipment.

Advantages & Benefits

- Warranty on pre-terminated cables remains
- Retrofits, repairs and maintenance can be done much more easily and quickly
- High cable density, wide variety of grommets
- Strain relief according to EN 62444
- High stability, vibration resistant

Specifications

| | |
|-----------------------|---|
| Material | Polyamide (PA) |
| Flame class | UL94-Vo |
| IP rating | IP66, with gasket and correct selection of single grommets (certified acc. to EN 60529) |
| UL type rating | UL type 4X (acc. to UL 50E) |
| Operating temperature | - 40°C to + 140°C (static) - 40°F to + 284°F (static) |
| Properties | Halogen-free, silicone-free |
| Cut-out dimensions | 36 / 46 x 65 mm / 1.378 / 1.811 x 2.559 " / Page 218 - 219 |
| Frame depth | 17 mm / 0.669 " |

Accessories

| | |
|--------------------------|-----------|
| KT Cable grommets | 48 - 50 |
| KEL-EMC Grounding mounts | 138 - 140 |
| ST Plugs | 53 |

KEL-U-B

Cable Entry Frames



IP54



Slit KT grommets



V2A anti-corrosive

Also available with stainless steel screws (V2A).



Also available with threaded bushings.

Product Description

Split cable entry system for routing cables with connectors, providing an IP54 / up to UL type 12 rating. Routing, sealing and providing strain relief for cable diameters from 1 to 35 mm.

The new cable entry system is easy to install. Cable grommets are placed into compartments in the frame and are securely fixed to the frame during assembly. The KEL-U-B frame matches exactly the cut-out dimensions of 46 × 46 mm measuring instruments. A flat rubber gasket is included in the shipment.

Advantages & Benefits

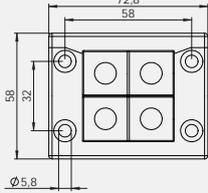
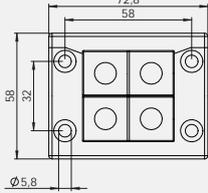
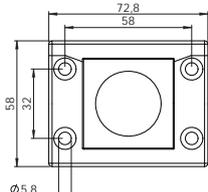
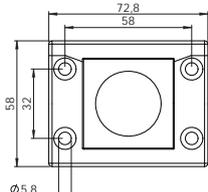
- Fast and easy assembly
- Warranty on pre-terminated cables remains
- Retrofits, repairs and maintenance can be done much more easily and quickly
- High cable density, wide variety of grommets
- Strain relief according to EN 62444
- High stability, vibration resistant

Specifications

| | |
|-----------------------|--|
| Material | Polyamide (PA) |
| Flame class | UL94-Vo |
| IP rating | IP54, with gasket and correct selection of cable grommets (certified acc. to EN 60529) |
| UL type rating | UL type 12 (acc. to UL 50E) |
| Operating temperature | - 40°C to + 140°C (static) - 40°F to + 284°F (static) |
| Properties | Halogen-free, silicone-free |
| Cut-out dimensions | 46 × 46 mm / 1.811 x 1.811" / Page 218 - 219 |
| Frame depth | 17 mm / 0.669" |

Accessories

| | |
|--------------------------|-----------|
| Cable grommets | 48 - 52 |
| KEL-SNAP Mounting frames | 31 |
| KEL-EMC Grounding mounts | 138 - 140 |
| FP Flange plates | 178 - 183 |
| ST Plugs | 53 |

| Description | Type | Order No. | Grommets small large | PU |
|---|--------------------------|-----------|------------------------|----|
|  | KEL-U-B4 | 54204 | 4 - | 10 |
|  | KEL-U-B4 with V2A screws | 54204.200 | 4 - | 10 |
|  | KEL-U-B1 | 54206 | - 1 | 10 |
|  | KEL-U-B1 with V2A screws | 54206.200 | - 1 | 10 |

KEL-ER-B

Cable Entry Frames

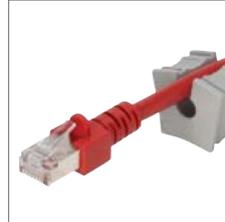


V2A anti-corrosive

Also available with stainless steel screws (V2A).



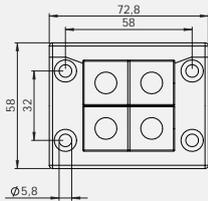
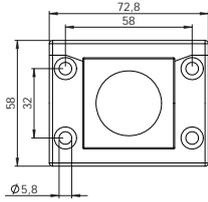
Also available with threaded bushings.



Slit KT grommets



1.11

| Description | Type | Order No. | Grommets small large | PU |
|---|---------------------------|-----------|------------------------|----|
|  | KEL-ER-B4 | 48204 | 4 - | 10 |
| | KEL-ER-B4 with V2A screws | 48204.200 | 4 - | 10 |
|  | KEL-ER-B1 | 48206 | - 1 | 10 |
| | KEL-ER-B1 with V2A screws | 48206.200 | - 1 | 10 |

Product Description

Split cable entry system for routing and sealing cables with connectors, providing an IP66 / up to UL type 4X rating and strain relief for cable diameters from 1 to 16 mm (KT 1 - 15) and 16 to 35 mm (KT 16 - 34).

The new cable entry system is easy to install. Cable grommets are placed into compartments in the frame and are securely fixed to the frame during assembly. The KEL-ER-B frame matches exactly the cut-out dimensions of 46 × 46 mm measuring instruments. A flat rubber gasket is included in the shipment.

Advantages & Benefits

- Warranty on pre-terminated cables remains
- Retrofits, repairs and maintenance can be done much more easily and quickly
- Small cut-out, high cable density
- Strain relief according to EN 62444
- High stability, vibration resistant

Specifications

| | |
|-----------------------|---|
| Material | Polyamide (PA) |
| Flame class | UL94-Vo |
| IP rating | IP66, with gasket and correct selection of single grommets (certified acc. to EN 60529) |
| UL type rating | UL type 4X (acc. to UL 50E) |
| Operating temperature | - 40°C to + 140°C (static) - 40°F to + 284°F (static) |
| Properties | Halogen-free, silicone-free |
| Cut-out dimensions | 46 × 46 mm / 1.811 x 1.811" / Page 218 - 219 |
| Frame depth | 17 mm / 0.669" |

Accessories

| | |
|--------------------------|-----------|
| KT Cable grommets | 48 - 50 |
| KEL-EMC Grounding mounts | 138 - 140 |
| ST Plugs | 53 |

KEL-E

Compact Cable Entry Frames

1.11



IP54



Slit KT grommets



V2A anti-corrosive

Also available with stainless steel screws (V2A).



Also available with threaded bushings.

Product Description

Split cable entry system for routing cables with connectors, providing an IP54 / up to UL type 12 rating. Routing, sealing and providing strain relief for cable diameters from 1 to 17 mm. The KEL-E version is particularly suited for flat connectors. The small frame is ideal for applications with limited space.

A flat rubber gasket is included in the shipment.

Advantages & Benefits

- Warranty on pre-terminated cables remains
- Retrofits, repairs and maintenance can be done much more easily and quickly
- Space saving shape
- Optimal for D-Sub connectors
- Strain relief according to EN 62444
- High stability, vibration resistant

Specifications

| | |
|-----------------------|--|
| Material | Polyamide (PA) |
| Flame class | UL94-Vo |
| IP rating | IP54, with gasket and correct selection of cable grommets (certified acc. to EN 60529) |
| UL type rating | UL type 12 (acc. to UL 50E) |
| Operating temperature | - 40°C to + 140°C (static) - 40°F to + 284°F (static) |
| Properties | Halogen-free, silicone-free |
| Frame depth | 17 mm / 0.669 " |

| Description | Type | Order No. | Cut-out [mm] | Grommets small large | PU |
|-------------|------------------------|-----------|-----------------------------|------------------------|----|
| | KEL-E2 | 42249 | 43 × 24 1.693 x 0.945 " | 2 - | 10 |
| | KEL-E2 with V2A screws | 42249.200 | 43 × 24 1.693 x 0.945 " | 2 - | 10 |
| | KEL-E3 | 42258 | 65 × 24 2.56 x 0.945 " | 3 - | 10 |
| | KEL-E3 with V2A screws | 42258.200 | 65 × 24 2.56 x 0.945 " | 3 - | 10 |
| | KEL-E4 | 42259 | 86 × 24 3.386 x 0.945 " | 4 - | 10 |
| | KEL-E4 with V2A screws | 42259.200 | 86 × 24 3.386 x 0.945 " | 4 - | 10 |
| | KEL-E5 | 42250 | 112 × 24 4.409 X 0.945 " | 5 - | 10 |
| | KEL-E5 with V2A screws | 42250.200 | 112 × 24 4.409 X 0.945 " | 5 - | 10 |

Accessories

| | |
|--------------------------|-----------|
| Cable grommets | 48 - 51 |
| KEL-EMC Grounding mounts | 138 - 140 |
| ST Plugs | 53 |

KEL-ER-E

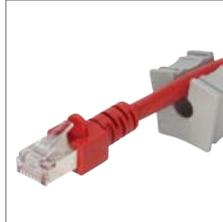
Compact Cable Entry Frames



V2A anti-corrosive



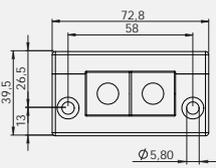
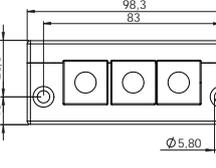
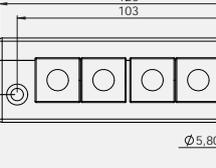
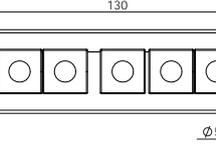
Also available with threaded bushings.



Slit KT grommets



1.11

| Description | Type | Order No. | Cut-out [mm] | Grommets small large | PU |
|---|---------------------------|-----------|-----------------------------|------------------------|----|
|  | KEL-ER-E2 | 48249 | 43 x 24 1.693 x 0.945 " | 2 - | 10 |
| | KEL-ER-E2 with V2A screws | 48249.200 | 43 x 24 1.693 x 0.945 " | 2 - | 10 |
|  | KEL-ER-E3 | 48258 | 65 x 24 2.56 x 0.945 " | 3 - | 10 |
| | KEL-ER-E3 with V2A screws | 48258.200 | 65 x 24 2.56 x 0.945 " | 3 - | 10 |
|  | KEL-ER-E4 | 48259 | 86 x 24 3.386 x 0.945 " | 4 - | 10 |
| | KEL-ER-E4 with V2A screws | 48259.200 | 86 x 24 3.386 x 0.945 " | 4 - | 10 |
|  | KEL-ER-E5 | 48250 | 112 x 24 4.409 x 0.945 " | 5 - | 10 |
| | KEL-ER-E5 with V2A screws | 48250.200 | 112 x 24 4.409 x 0.945 " | 5 - | 10 |

Product Description

Split cable entry system for routing and sealing cables with connectors, providing an IP66 / up to UL type 12 rating and strain relief for cable diameters from 1 to 16 mm (KT 1 - 15). It is particularly suited for flat connectors. The small frame is ideal for applications with limited space.

The new cable entry system is easy to install. Cable grommets are placed into compartments in the frame and are securely fixed to the frame during assembly. A flat rubber gasket is included in the shipment.

Advantages & Benefits

- Warranty on pre-terminated cables remains
- Retrofits, repairs and maintenance can be done much more easily and quickly
- Strain relief according to EN 62444
- Space saving shape
- Optimal for D-Sub connectors
- High stability, vibration resistant

Specifications

| | |
|-----------------------|---|
| Material | Polyamide (PA) |
| Flame class | UL94-Vo |
| IP rating | IP66, with gasket and correct selection of single grommets (certified acc. to EN 60529) |
| UL type rating | UL type 12 (acc. to UL 50E) |
| Operating temperature | - 40°C to + 140°C (static) |
| Properties | - 40°F to + 284°F (static) |
| Frame depth | Halogen-free, silicone-free 17 mm / 0.669 " |

Accessories

| | |
|--------------------------|-----------|
| KT Cable grommets | 48 - 50 |
| KEL-EMC Grounding mounts | 138 - 140 |
| ST Plugs | 53 |

KEL 24

Cable Entry Frames



Slit KT grommets



V2A anti-corrosive

Also available with stainless steel screws (V2A).



Also available with threaded bushings.

Product Description

Centrally split cable entry system for routing cables with connectors, providing an IP54 / up to UL type 12 rating. The slit grommet matching the cable diameter is placed around the cable and inserted into the cable entry frame. Either a cut-out of 36 mm or 46 mm in height can be chosen depending on the cables being routed. The split cable entry frame KEL 24 matches exactly the cut-out dimensions of 24-pin standard industrial connectors. A flat rubber gasket is included in the shipment.

Advantages & Benefits

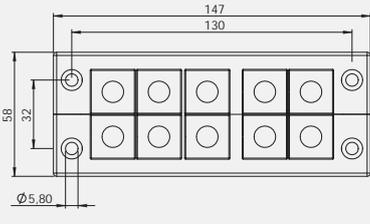
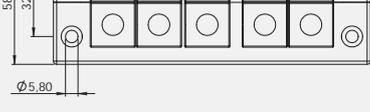
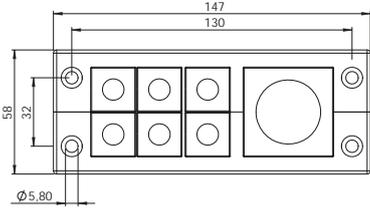
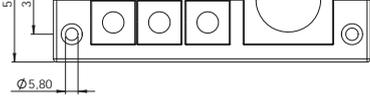
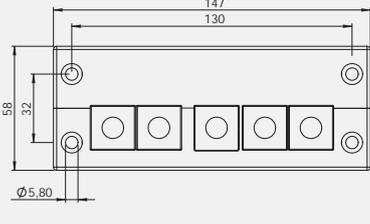
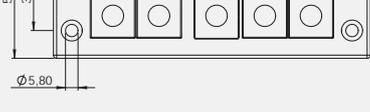
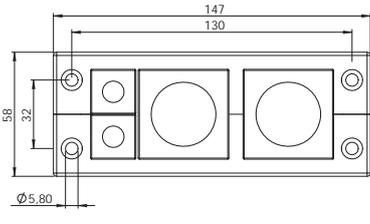
- Warranty on pre-terminated cables remains
- Retrofits, repairs and maintenance can be done much more easily and quickly
- High cable density, wide variety of grommets
- Strain relief according to EN 62444
- High stability, vibration resistant

Specifications

| | |
|-----------------------|--|
| Material | Polyamide (PA) |
| Flame class | UL94-V0 |
| IP rating | IP54, with gasket and correct selection of cable grommets (certified acc. to EN 60529) |
| UL type rating | UL type 12 (acc. to UL 50E) |
| Operating temperature | - 40°C to + 140°C (static) - 40°F to + 284°F (static) |
| Properties | Halogen-free, silicone-free |
| Cut-out dimensions | 36/46 × 112 mm / 1.378/1.811 x 4.409 " / Page 218 - 219 |
| Frame depth | 17 mm / 0.669 " |

Accessories

| | |
|--------------------------|-----------|
| Cable grommets | 48 - 52 |
| KEL-SNAP Mounting frames | 31 |
| KEL-EMC Grounding mounts | 138 - 140 |
| KDR Gland plates | 164 - 177 |
| FP Flange plates | 178 - 183 |
| MP Module plates | 174 - 175 |
| ST Plugs | 53 |

| Description | Type | Order No. | Grommets small large | PU |
|--|---------------------------|-----------|------------------------|----|
|  | KEL 24 10 | 42241 | 10 - | 10 |
|  | KEL 24 10 with V2A screws | 42241.200 | 10 - | 10 |
|  | KEL 24 7 | 42247 | 6 1 | 10 |
|  | KEL 24 7 with V2A screws | 42247.200 | 6 1 | 10 |
|  | KEL 24 5 | 42248 | 5 - | 10 |
|  | KEL 24 5 with V2A screws | 42248.200 | 5 - | 10 |
|  | KEL 24 4 | 42244 | 2 2 | 10 |
|  | KEL 24 4 with V2A screws | 42244.200 | 2 2 | 10 |

KEL 16 Cable Entry Frames



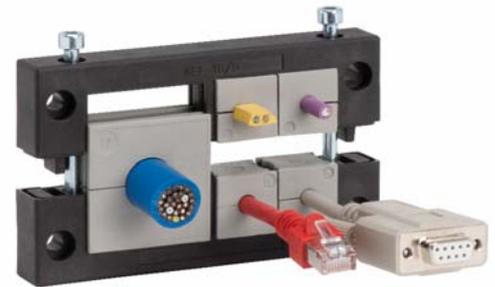
Slit KT grommets



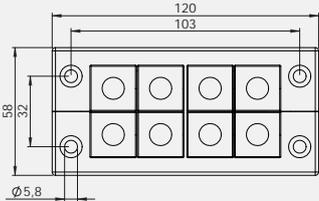
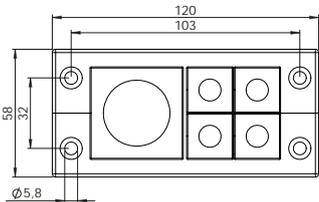
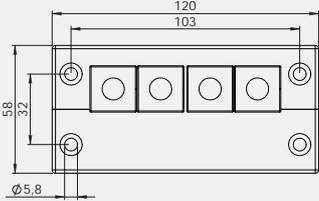
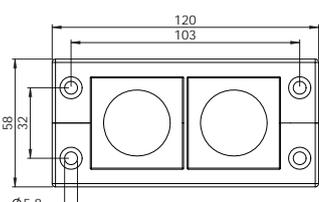
Also available with stainless steel screws (V2A).



Also available with threaded bushings.



1.11

| Description | Type | Order No. | Grommets small large | PU |
|---|--------------------------|-----------|------------------------|----|
|  | KEL 16 8 | 42168 | 8 - | 10 |
| | KEL 16 8 with V2A screws | 42168.200 | 8 - | 10 |
|  | KEL 16 5 | 42165 | 4 1 | 10 |
| | KEL 16 5 with V2A screws | 42165.200 | 4 1 | 10 |
|  | KEL 16 4 | 42164 | 4 - | 10 |
| | KEL 16 4 with V2A screws | 42164.200 | 4 - | 10 |
|  | KEL 16 2 | 42162 | - 2 | 10 |
| | KEL 16 2 with V2A screws | 42162.200 | - 2 | 10 |

Product Description

Centrally split cable entry system for routing cables with connectors, providing an IP54 / up to UL type 12 rating. The slit grommet matching the cable diameter is placed around the cable and inserted into the cable entry frame. Either a cut-out of 36 mm or 46 mm in height can be chosen depending on the cables being routed. The split cable entry frame KEL 16 matches exactly the cut-out dimensions of 16-pin standard industrial connectors. A flat rubber gasket is included in the shipment.

Advantages & Benefits

- Warranty on pre-terminated cables remains
- Retrofits, repairs and maintenance can be done much more easily and quickly
- High cable density, wide variety of grommets
- Strain relief according to EN 62444
- High stability, vibration resistant

Specifications

| | |
|-----------------------|--|
| Material | Polyamide (PA) |
| Flame class | UL94-Vo |
| IP rating | IP54, with gasket and correct selection of cable grommets (certified acc. to EN 60529) |
| UL type rating | UL type 12 (acc. to UL 50E) |
| Operating temperature | - 40°C to + 140°C (static) - 40°F to + 284°F (static) |
| Properties | Halogen-free, silicone-free |
| Cut-out dimensions | 36/46 × 86 mm / 1.378/1.811 x 3.386" / Page 218 - 219 |
| Frame depth | 17 mm / 0.669" |

Accessories

| | |
|--------------------------|-----------|
| Cable grommets | 48 - 52 |
| KEL-SNAP Mounting frames | 31 |
| KEL-EMC Grounding mounts | 138 - 140 |
| KDR Gland plates | 164 - 177 |
| FP Flange plates | 178 - 183 |
| ST Plugs | 53 |

KEL 10

Cable Entry Frames



Slit KT grommets



V2A anti-corrosive

Also available with stainless steel screws (V2A).



Also available with threaded bushings.

Product Description

Centrally split cable entry system for routing cables with connectors, providing an IP54 / up to UL type 12 rating. The slit grommet matching the cable diameter is placed around the cable and inserted into the cable entry frame. Either a cut-out of 36 mm or 46 mm in height can be chosen depending on the cables being routed. The split cable entry frame KEL 10 matches exactly the cut-out dimensions of 10-pin standard industrial connectors. A flat rubber gasket is included in the shipment.

Advantages & Benefits

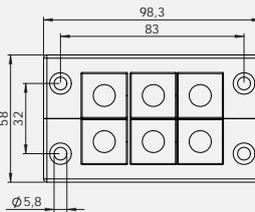
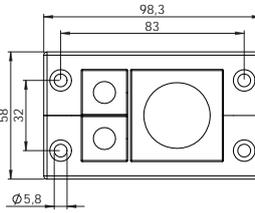
- Warranty on pre-terminated cables remains
- Retrofits, repairs and maintenance can be done much more easily and quickly
- High cable density, wide variety of grommets
- Strain relief according to EN 62444
- High stability, vibration resistant

Specifications

| | |
|-----------------------|--|
| Material | Polyamide (PA) |
| Flame class | UL94-Vo |
| IP rating | IP54, with gasket and correct selection of cable grommets (certified acc. to EN 60529) |
| UL type rating | UL type 12 (acc. to UL 50E) |
| Operating temperature | - 40°C to + 140°C (static) - 40°F to + 284°F (static) |
| Properties | Halogen-free, silicone-free |
| Cut-out dimensions | 36/46 × 65 mm / 1.378/1.811 x 2.559 " / Page 218 - 219 |
| Frame depth | 17 mm / 0.669 " |

Accessories

| | |
|--------------------------|-----------|
| Cable grommets | 48 - 52 |
| KEL-SNAP Mounting frames | 31 |
| KEL-EMC Grounding mounts | 138 - 140 |
| ST Plugs | 53 |

| Description | Type | Order No. | Grommets small large | PU |
|--|--------------------------|-----------|------------------------|----|
|  | KEL 10 6 | 42216 | 6 - | 10 |
| | KEL 10 6 with V2A screws | 42216.200 | 6 - | 10 |
|  | KEL 10 3 | 42212 | 2 1 | 10 |
| | KEL 10 3 with V2A screws | 42212.200 | 2 1 | 10 |

KEL-B Cable Entry Frames



Slit KT grommets



V2A
anti-corrosive

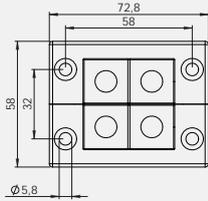
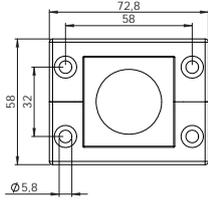
Also available with stainless steel screws (V2A).



Also available with threaded bushings.



1.11

| Description | Type | Order No. | Grommets small large | PU |
|---|---------------------------|-----------|---------------------------|----|
|  | KEL-B4 | 42204 | 4 - | 10 |
| | KEL-B4 with V2A screws | 42204.200 | 4 - | 10 |
|  | KEL-B1 | 42206 | - 1 | 10 |
| | KEL-B1 with V2A screws | 42206.200 | - 1 | 10 |

Product Description

Centrally split cable entry system for routing cables with connectors, providing an IP54 / up to UL type 12 rating. The slit grommet matching the cable diameter is placed around the cable and inserted into the cable entry frame. Either a cut-out of 36 mm or 46 mm in height can be chosen depending on the cables being routed. The split cable entry frame KEL-B matches exactly the cut-out dimensions of 46 × 46 mm measuring instruments. A flat rubber gasket is included in the shipment.

Advantages & Benefits

- Warranty on pre-terminated cables remains
- Retrofits, repairs and maintenance can be done much more easily and quickly
- Space saving shape
- Small cut-out, high cable density
- Strain relief according to EN 62444
- High stability, vibration resistant

Specifications

| | |
|-----------------------|--|
| Material | Polyamide (PA) |
| Flame class | UL94-Vo |
| IP rating | IP54, with gasket and correct selection of cable grommets (certified acc. to EN 60529) |
| UL type rating | UL type 12 (acc. to UL 50E) |
| Operating temperature | - 40°C to + 140°C (static) - 40°F to + 284°F (static) |
| Properties | Halogen-free, silicone-free |
| Cut-out dimensions | 46 × 46 mm / 1.811 x 1.811 " / Page 218 - 219 |
| Frame depth | 17 mm / 0.669 " |

Accessories

| | |
|--------------------------|-----------|
| Cable grommets | 48 - 52 |
| KEL-SNAP Mounting frames | 31 |
| KEL-EMC Grounding mounts | 138 - 140 |
| FP Flange plates | 178 - 183 |
| ST Plugs | 53 |

KEL 24-E

Extended Cable Entry Frames



IP54



Also available with stainless steel screws (V2A).



Also available with threaded bushings.

Product Description

The cable entry frame KEL 24-E offers a larger frame size for routing a greater amount of cables, pipes or conduits.

The KEL24-E series are KEL 24 frames extended with an additional middle frame for routing additional cables. Thus allowing a quick, easy and cost effective routing solution for up to 60 cables.

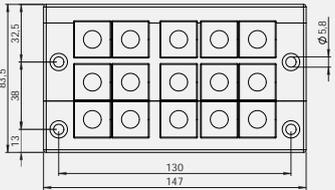
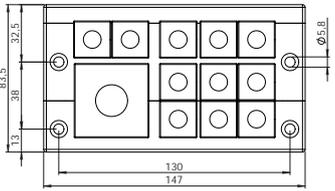
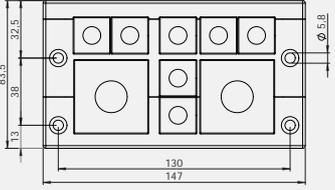
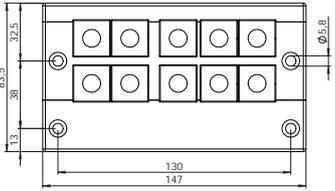
A flat rubber gasket is included in the shipment.

Advantages & Benefits

- Warranty on pre-terminated cables remains
- Retrofits, repairs and maintenance can be done much more easily and quickly
- High cable density
- Strain relief according to EN 62444
- High stability, vibration resistant

Specifications

| | |
|-----------------------|--|
| Material | Polyamide (PA) |
| Flame class | UL94-Vo |
| IP Rating | IP54, with gasket and correct selection of cable grommets (certified acc. to EN 60529) |
| Operating temperature | - 40°C to + 140°C (static) - 40°F to + 284°F (static) |
| Properties | Halogen-free, silicone-free |
| Cut-out dimensions | 66 × 112 mm / 2.598 x 4.409 / Page 218 - 219 |
| Frame depth | 17 mm / 0.669 " |

| Description | Type | Order No. | Grommets small large | PU |
|--|-----------------------------|-----------|------------------------|----|
|  | KEL 24 15-E | 42209 | 15 - | 1 |
| | KEL 24 15-E with V2A screws | 42209.200 | 15 - | 1 |
|  | KEL 24 12-E | 42208 | 11 1 | 1 |
| | KEL 24 12-E with V2A screws | 42208.200 | 11 1 | 1 |
|  | KEL 24 9-E | 42207 | 7 2 | 1 |
| | KEL 24 9-E with V2A screws | 42207.200 | 7 2 | 1 |
|  | KEL 24 10-E | 49056 | 10 - | 1 |
| | KEL 24 10-E with V2A screws | 49056.200 | 10 - | 1 |

Accessories

| | |
|--------------------------|-----------|
| KEL-SNAP Mounting frames | 31 |
| Cable grommets | 48 - 52 |
| KEL-EMC Grounding mounts | 138 - 140 |
| ST Plugs | 53 |

KEL 24-MT

Extended Cable Entry Frames



V2A anti-corrosive
Also available with stainless steel screws (V2A).

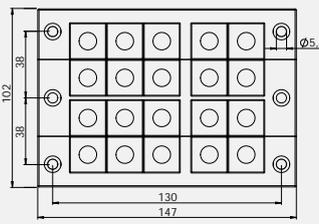
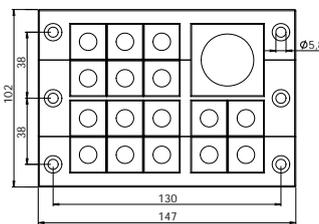
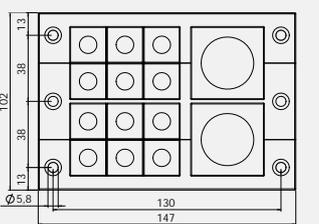
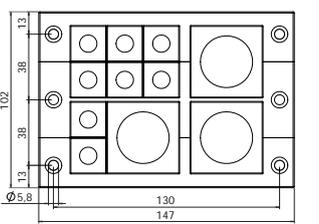
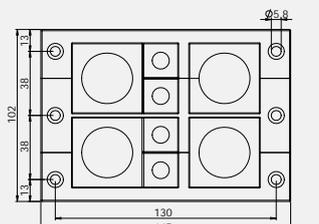


Also available with threaded bushings.



IP54

1.11

| Description | Type | Order No. | Grommets small large | PU |
|---|------------------------------|-----------|------------------------|----|
|  | KEL 24 20-MT | 42232 | 20 - | 1 |
| | KEL 24 20-MT with V2A screws | 42232.200 | 20 - | 1 |
|  | KEL 24 17-MT | 42224 | 16 1 | 1 |
| | KEL 24 17-MT with V2A screws | 42224.200 | 16 1 | 1 |
|  | KEL 24 14-MT | 42225 | 12 2 | 1 |
| | KEL 24 14-MT with V2A screws | 42225.200 | 12 2 | 1 |
|  | KEL 24 11-MT | 42222 | 8 3 | 1 |
| | KEL 24 11-MT with V2A screws | 42222.200 | 8 3 | 1 |
|  | KEL 24 8-MT | 42221 | 4 4 | 1 |
| | KEL 24 8-MT with V2A screws | 42221.200 | 4 4 | 1 |

Product Description

The cable entry frame KEL 24-MT provides additional cable routing possibilities.

The KEL 24-MT series are KEL frames extended with an additional middle frame for routing additional cables. Thus allowing the quick, easy and cost effective routing solution for up to 80 cables.

A flat rubber gasket is included in the shipment.

Advantages & Benefits

- Warranty on pre-terminated cables remains
- Retrofits, repairs and maintenance can be done much more easily and quickly
- High cable density
- Strain relief according to EN 62444
- High stability, vibration resistant

Specifications

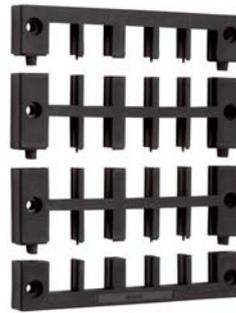
| | |
|-----------------------|--|
| Material | Polyamide (PA) |
| Flame class | UL94-Vo |
| IP Rating | IP54, with gasket and correct selection of the cable grommets (certified acc. to EN 60529) |
| Operating temperature | - 40°C to + 140°C (static) - 40°F to + 284°F (static) |
| Properties | Halogen-free, silicone-free |
| Cut-out dimensions | 82 × 112 mm / 3.228 × 4.409 " |
| Frame depth | Page 218 - 219 17 mm / 0.669 " |

Accessories

| | |
|--------------------------|-----------|
| KEL-SNAP Mounting frames | 31 |
| Cable grommets | 48 - 52 |
| KEL-EMC Grounding mounts | 138 - 140 |
| ST Plugs | 53 |

KEL 24-2MT

Extended Cable Entry Frames



V2A anti-corrosive
Also available with stainless steel screws (V2A).



Also available with threaded bushings.

Product Description

The KEL 24-2MT is our largest frame providing the ability to route and seal up to 120 cables.

The cable entry frames KEL 24-2MT series are KEL frames extended with two additional middle frames for routing additional cables. Thus allowing the quick, easy and cost effective routing solution for up to 120 cables. A flat rubber gasket is included in the shipment.

Advantages & Benefits

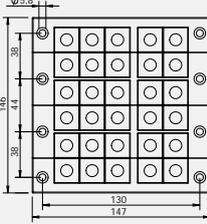
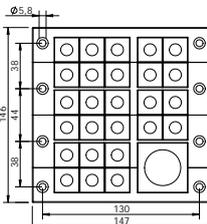
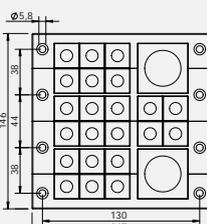
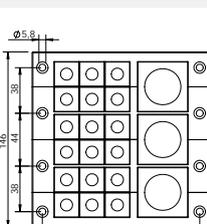
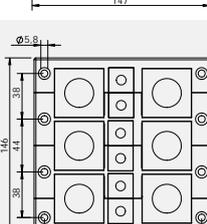
- Warranty on pre-terminated cables remains
- Retrofits, repairs and maintenance can be done much more easily and quickly
- High cable density
- Strain relief according to EN 62444
- High stability, vibration resistant

Specifications

| | |
|-----------------------|--|
| Material | Polyamide (PA) |
| Flame class | UL94-Vo |
| IP Rating | IP54, with gasket and correct selection of the cable grommets (certified acc. to EN 60529) |
| Operating temperature | - 40°C to + 140°C (static) - 40°F to + 284°F (static) |
| Properties | Halogen-free, silicone-free |
| Cut-out dimensions | 126 × 112 mm / 4.961 × 4.409 " / Page 218 - 219 |
| Frame depth | 17 mm / 0.669 " |

Accessories

| | |
|--------------------------|-----------|
| Cable grommets | 48 - 52 |
| KEL-EMC Grounding mounts | 138 - 140 |
| ST Plugs | 53 |

| Description | Type | Order No. | Grommets small large | PU |
|---|-------------------------------|-----------|------------------------|----|
|  | KEL 24 30-2MT | 42234 | 30 - | 1 |
| | KEL 24 30-2MT with V2A screws | 42234.200 | 30 - | 1 |
|  | KEL 24 27-2MT | 42233 | 26 1 | 1 |
| | KEL 24 27-2MT with V2A screws | 42233.200 | 26 1 | 1 |
|  | KEL 24 24-2MT | 42227 | 22 2 | 1 |
| | KEL 24 24-2MT with V2A screws | 42227.200 | 22 2 | 1 |
|  | KEL 24 21-2MT | 42226 | 18 3 | 1 |
| | KEL 24 21-2MT with V2A screws | 42226.200 | 18 3 | 1 |
|  | KEL 24 12-2MT | 42223 | 6 6 | 1 |
| | KEL 24 12-2MT with V2A screws | 42223.200 | 6 6 | 1 |

KEL 16-E

Extended Cable Entry Frames



V2A anti-corrosive

Also available with stainless steel screws (V2A).

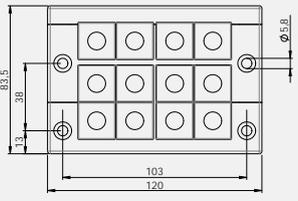
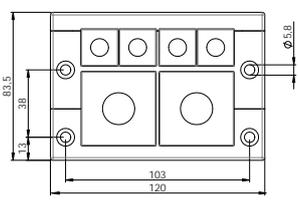


Also available with threaded bushings.



IP54

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| Description | Type | Order No. | Grommets small large | PU |
|---|-----------------------------|-----------|------------------------|----|
|  | KEL 16 12-E | 42141 | 12 - | 1 |
| | KEL 16 12-E with V2A screws | 42141.200 | 12 - | 1 |
|  | KEL 16 6-E | 42140 | 4 2 | 1 |
| | KEL 16 6-E with V2A screws | 42140.200 | 4 2 | 1 |

Product Description

The cable entry frame KEL 16-E offers a larger frame size for routing a greater amount of cables, pipes or conduits.

The KEL16-E series are KEL 16 frames extended with an additional middle frame for routing additional cables. Thus allowing a quick, easy and cost effective routing solution for up to 48 cables. A flat rubber gasket is included in the shipment.

Advantages & Benefits

- Warranty on pre-terminated cables remains
- Retrofits, repairs and maintenance can be done much more easily and quickly
- High cable density
- Strain relief according to EN 62444
- High stability, vibration resistant

Specifications

| | |
|-----------------------|--|
| Material | Polyamide (PA) |
| Flame class | UL94-Vo |
| IP Rating | IP54, with gasket and correct selection of cable grommets (certified acc. to EN 60529) |
| Operating temperature | - 40°C to + 140°C (static) - 40°F to + 284°F (static) |
| Properties | Halogen-free, silicone-free |
| Cut-out dimensions | 66 x 86 mm / 2.598 x 3.386 " |
| Frame depth | 17 mm / 0.669 " |

Accessories

| | |
|--------------------------|-----------|
| Cable grommets | 48 - 52 |
| KEL-EMC Grounding mounts | 138 - 140 |
| ST Plugs | 53 |

KEL 16-MT

Extended Cable Entry Frames



IP54



V2A anti-corrosive
Also available with stainless steel screws (V2A).



Also available with threaded bushings.

Product Description

The cable entry frame KEL 16-MT provides additional cable routing possibilities.

The KEL 16-MT series are KEL 16 frames extended with an additional middle frame for routing additional cables. Thus allowing the quick, easy and cost effective routing solution for up to 64 cables. A flat rubber gasket is included in the shipment.

Advantages & Benefits

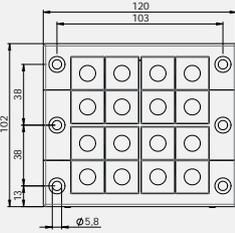
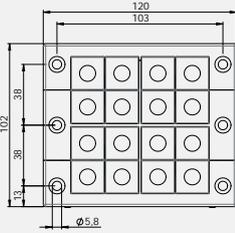
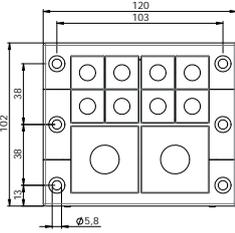
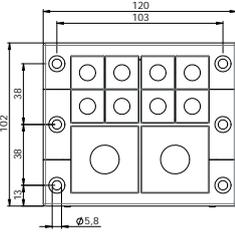
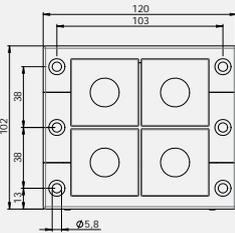
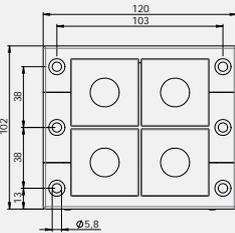
- Warranty on pre-terminated cables remains
- Retrofits, repairs and maintenance can be done much more easily and quickly
- High cable density
- Strain relief according to EN 62444
- High stability, vibration resistant

Specifications

| | |
|-----------------------|--|
| Material | Polyamide (PA) |
| Flame class | UL94-Vo |
| IP Rating | IP54, with gasket and correct selection of the grommets (certified acc. to EN 60529) |
| Operating temperature | - 40°C to + 140°C (static) - 40°F to + 284°F (static) |
| Properties | Halogen-free, silicone-free |
| Cut-out dimensions | 82 × 86 mm / 3.228 × 3.386 " |
| Frame depth | 17 mm / 0.669 " |

Accessories

| | |
|--------------------------|-----------|
| Cable grommets | 48 - 52 |
| KEL-EMC Grounding mounts | 138 - 140 |
| ST Plugs | 53 |

| Description | Type | Order No. | Grommets small large | PU |
|---|------------------------------|-----------|------------------------|----|
|  | KEL 16 16-MT | 42145 | 16 - | 1 |
|  | KEL 16 16-MT with V2A screws | 42145.200 | 16 - | 1 |
|  | KEL 16 10-MT | 42144 | 8 2 | 1 |
|  | KEL 16 10-MT with V2A screws | 42144.200 | 8 2 | 1 |
|  | KEL 16 4-MT | 42143 | - 4 | 1 |
|  | KEL 16 4-MT with V2A screws | 42143.200 | - 4 | 1 |

KEL 16-2MT

Extended Cable Entry Frames



V2A anti-corrosive

Also available with stainless steel screws (V2A).

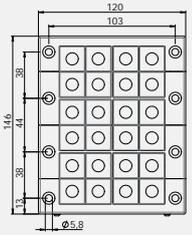
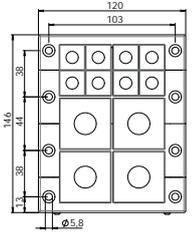
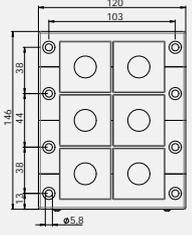


Also available with threaded bushings.



IP54

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| Description | Type | Order No. | Grommets small large | PU |
|---|-------------------------------|-----------|---------------------------|----|
|  | KEL 16 24-2MT | 42149 | 24 - | 1 |
| | KEL 16 24-2MT with V2A screws | 42149.200 | 24 - | 1 |
|  | KEL 16 12-2MT | 42148 | 8 4 | 1 |
| | KEL 16 12-2MT with V2A screws | 42148.200 | 8 4 | 1 |
|  | KEL 16 6-2MT | 42147 | - 6 | 1 |
| | KEL 16 6-2MT with V2A screws | 42147.200 | - 6 | 1 |

Product Description

The KEL 16-2MT is our largest frame providing the ability to route and seal up to 96 cables.

The cable entry frames KEL 16-2MT series are KEL 16 frames extended with two additional middle frames for routing additional cables. Thus allowing the quick, easy and cost effective routing solution for up to 96 cables. A flat rubber gasket is included in the shipment.

Advantages & Benefits

- Warranty on pre-terminated cables remains
- Retrofits, repairs and maintenance can be done much more easily and quickly
- High cable density
- Strain relief according to EN 62444
- High stability, vibration resistant

Specifications

| | |
|-----------------------|--|
| Material | Polyamide (PA) |
| Flame class | UL94-V0 |
| IP Rating | IP54, with gasket and correct selection of the cable grommets (certified acc. to EN 60529) |
| Operating temperature | - 40°C to + 140°C (static) - 40°F to + 284°F (static) |
| Properties | Halogen-free, silicone-free |
| Cut-out dimensions | 126 × 86 mm / 4.961 × 3.386 " |
| Frame depth | 17 mm / 0.669 " |

Accessories

| | |
|--------------------------|-----------|
| Cable grommets | 48 - 52 |
| KEL-EMC Grounding mounts | 138 - 140 |
| ST Plugs | 53 |

KEL-FG-A

Flange Enclosures for Cable Entry



Slit KT grommets

Product Description

The cable entry frames KEL-FG-A are suited for installation, sealing and strain relief of cables with connectors and conduits at an angle of 90° to the panel, enclosure or machine wall. The KEL-FG-A frame matches exactly the cut-out dimensions for 24-pin standard industrial connectors. A flat rubber gasket is included in the shipment.

Advantages & Benefits

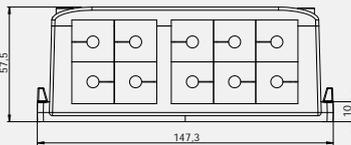
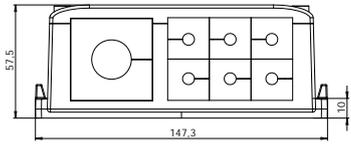
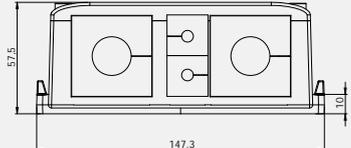
- Installation at an angle of 90° to the wall
- Mechanical protection of cable directly at the place of entry
- Protection against water spray and drips
- Warranty on pre-terminated cables remains
- Strain relief according to EN 62444
- High stability, vibration resistant

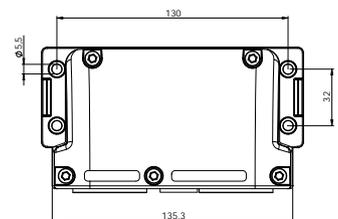
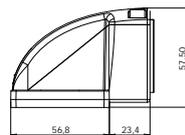
Specifications

| | |
|-----------------------|---|
| Material | Polyamide (PA) |
| Flame class | UL94-V0 |
| IP Rating | IP54, with gasket and correct selection of the cable grommets |
| Operating temperature | - 40°C to + 140°C (static) - 40°F to + 284°F (static) |
| Properties | Halogen-free, silicone-free |
| Cut-out dimensions | 36 × 112 mm / 1.378 × 4.409 ", Page 218 - 219 |

Accessories

| | |
|--------------------------|-----------|
| Cable grommets | 48 - 52 |
| KEL-SNAP Mounting frames | 31 |
| KEL-EMC Grounding mounts | 138 - 140 |
| ST Plugs | 53 |

| Description | Type | Order No. | Grommets small large | PU |
|--|----------------------------|-----------|------------------------|----|
|  | KEL-FG-A10 | 42320 | 10 - | 1 |
| | KEL-FG-A10 with V2A screws | 42320.200 | 10 - | 1 |
|  | KEL-FG-A7 | 42322 | 6 1 | 1 |
| | KEL-FG-A7 with V2A screws | 42322.200 | 6 1 | 1 |
|  | KEL-FG-A4 | 42324 | 2 2 | 1 |
| | KEL-FG-A4 with V2A screws | 42324.200 | 2 2 | 1 |



KEL-FG-B

Flange Enclosures for Cable Entry



V2A
anti-corrosive



Slit KT grommets

Also available with stainless steel screws (V2A).



1.11

| Description | Type | Order No. | Grommets small large | PU |
|-------------|------------------------------|-----------|---------------------------|----|
| | KEL-FG-B4 | 42330 | 4 - | 1 |
| | KEL-FG-B4 with V2A screws | 42330.200 | 4 - | 1 |
| | KEL-FG-B1 | 42332 | - 1 | 1 |
| | KEL-FG-B1 with V2A screws | 42332.200 | - 1 | 1 |
| | | | | |
| | | | | |

Product Description

The cable entry frames KEL-FG-B are suited for installation, sealing and strain relief of cables with connectors and conduits at an angle of 90° to the panel, enclosure or machine wall. A flat rubber gasket is included in the shipment.

Advantages & Benefits

- Installation at an angle of 90° to the wall
- Mechanical protection of cable directly at the place of entry
- Protection against water spray and drips
- Warranty on pre-terminated cables remains
- Space saving shape
- Strain relief according to EN 62444
- High stability, vibration resistant

Specifications

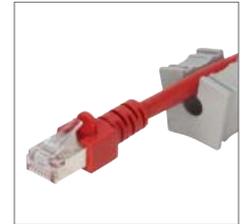
| | |
|-----------------------|---|
| Material | Polyamide (PA) |
| Flame class | UL94-Vo |
| IP Rating | IP54, with gasket and correct selection of the cable grommets |
| Operating temperature | - 40°C to + 140°C (static) - 40°F to + 284°F (static) |
| Properties | Halogen-free, silicone-free |
| Cut-out dimensions | 46 x 36 mm / 1.811 x 1.378", Page 218 - 219 |

Accessories

| | |
|--------------------------|-----------|
| Cable grommets | 48 - 52 |
| KEL-EMC Grounding mounts | 138 - 140 |
| ST Plugs | 53 |

KEL-FG-E

Flange Enclosures for Cable Entry



Slit KT grommets

Product Description

The cable entry frames KEL-FG-E are suited for installation, sealing and strain relief of cables with connectors and conduits at an angle of 90° to the panel, enclosure or machine wall.

The KEL-FG-E version is particularly suited for flat connectors. The small frame is ideal for applications with limited space. A flat rubber gasket is included in the shipment.

Advantages & Benefits

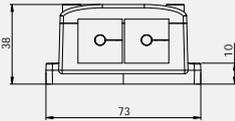
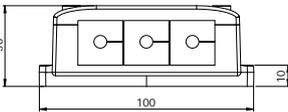
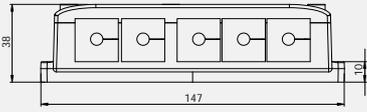
- Installation at an angle of 90° to the wall
- Mechanical protection of cable directly at the place of entry
- Protection against water spray and drips
- Warranty on pre-terminated cables remains
- Space saving shape
- Optimal for D-Sub connectors
- Strain relief according to EN 62444
- High stability, vibration resistant

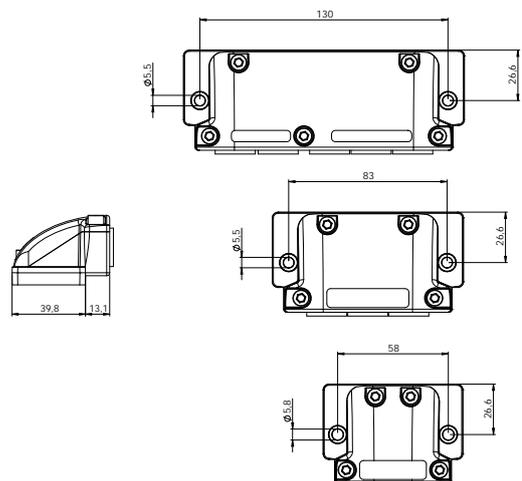
Specifications

| | |
|-----------------------|--|
| Material | Polyamide (PA) |
| Flame class | UL94-Vo |
| IP Rating | IP54, with gasket and correct selection of the cable grommets |
| Operating temperature | - 40°C to + 140°C (static) - 40°F to + 284°F (static) |
| Properties | Halogen-free, silicone-free |
| Cut-out dimensions | E2: 43 × 24 mm / 1.693 × 0.945 " E3: 65 × 24 mm / 2.56 × 0.945 " E5: 112 × 24 mm / 4.409 × 0.945 " |

Accessories

| | |
|--------------------------|-----------|
| Cable grommets | 48 - 52 |
| KEL-EMC Grounding mounts | 138 - 140 |
| ST Plugs | 53 |

| Description | Type | Order No. | Grommets small large | PU |
|--|---------------------------|-----------|------------------------|----|
|  | KEL-FG-E2 | 42333 | 2 - | 5 |
| | KEL-FG-E2 with V2A screws | 42333.200 | 2 - | 5 |
|  | KEL-FG-E3 | 42334 | 3 - | 5 |
| | KEL-FG-E3 with V2A screws | 42334.200 | 3 - | 5 |
|  | KEL-FG-E5 | 42336 | 5 - | 5 |
| | KEL-FG-E5 with V2A screws | 42336.200 | 5 - | 5 |



KEL-SNAP

Mounting Frames



Integrated circular sealing (IP54)



Blank plate BPK-SNAP, see page 186



1.11

1.21

| Description | Type | Order No. | Fits for | Cut-out [mm] | PU |
|-------------|----------------|-----------|--|--------------------------------|----|
| | KEL-SNAP-B | 42038 | KEL-B KEL-U-B KEL-QUICK-B | 46 x 38 1.811 x 1.496 " | 10 |
| | KEL-SNAP 10 | 42039 | KEL 10 KEL-U 10 KEL-QUICK 10 | 46 x 65 1.811 x 2.56 " | 10 |
| | KEL-SNAP 16 | 42040 | KEL 16 KEL-U 16 KEL-QUICK 16 | 46 x 85 1.811 x 3.346 " | 10 |
| | KEL-SNAP 24 | 42042 | KEL 24 KEL-U 24 KEL-FG-A KEL-QUICK 24 | 46 x 112 1.811 x 4.409 " | 10 |
| | KEL-SNAP 24-E | 42044 | KEL 24-E | 71 x 112 2.795 x 4.409 " | 1 |
| | KEL-SNAP 24-MT | 42046 | KEL 24-MT | 89 x 112 3.504 x 4.409 " | 1 |

Product Description

The patented KEL-SNAP frame provides a quick assembly of the KEL / KEL-U / KEL-QUICK system when necessary. Control panels, enclosures or machines can be equipped with the KEL-SNAP frame at delivery, allowing a simple push in of the KEL frame when routing the cables and conduits. Perfect for enclosures that are maintenance intensive or for an install at a later date.

A cut-out of 46 mm also can be chosen instead of 36 mm. Thus prefabricated multi-pin connectors can be used.

Advantages & Benefits

- Upon disassembly (e.g. maintenance) screwing and unscrewing of KEL-frame is not necessary
- Previously assembled KEL frames are quickly and easily attached
- Integrated gasket
- Mounting template identical to KEL frame (except KEL-SNAP-B)

Specifications

| | |
|-----------------------|-----------------------------------|
| Material | Polyamide (PA) |
| Flame class | UL94-V0 |
| IP rating | IP54 (certified acc. to EN 60529) |
| UL type rating | UL type 12 (acc. to UL 50E) |
| Operating temperature | - 40°C to + 140°C (static) |
| temperature | - 40°F to + 284°F (static) |
| Properties | Halogen-free, silicone-free |
| Cut-out dimensions | See Page 218 - 219 |

Accessories

| | |
|------------------------------|-----------|
| KEL Cable entry frames | 18 - 27 |
| KEL-U Cable entry frames | 8 - 14 |
| KEL-FG Flange enclosure | 28 - 30 |
| KEL-QUICK Cable entry frames | 56 - 57 |
| MP Module plates | 174 - 175 |
| BPK-SNAP Blank plates | 186 |
| ST Plugs | 53 |

KEL-FL

Cable Entry Frames for Flat Cables



IP54



1.11

Product Description

The KEL-FL range enables simple, fast and flexible cable routing and sealing of flat wires, e.g. in elevator construction.

Innovative construction of the grommets compensates for manufacturing inconsistencies in flat cables. Split KT grommets can be utilized to additionally route round cables with connectors. A flat rubber gasket is included in the shipment.

Advantages & Benefits

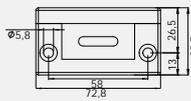
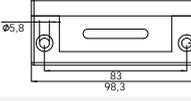
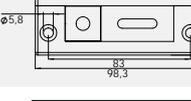
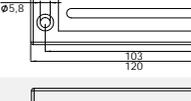
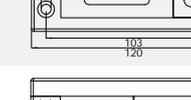
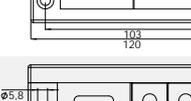
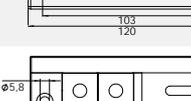
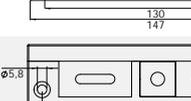
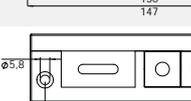
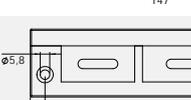
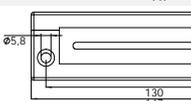
- Routing of flat cables in combination with pre-terminated round cables by using a single KEL-FL cable entry frame
- Space saving shape

Specifications

| | |
|-----------------------|---|
| Material | Polyamide (PA) |
| Flame class | UL94-Vo |
| IP Rating | IP54, with gasket and correct selection of the cable grommets |
| Operating temperature | - 40°C to + 140°C (static) - 40°F to + 284°F (static) |
| Properties | Halogen-free, silicone-free |
| Mounting template | See Page 218 - 219 |
| Frame depth | 17 mm |

Accessories

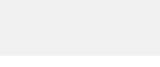
| | |
|-----------------------------------|-----------|
| KT Cable grommets, small | 48 - 49 |
| KTMB/KT-DPF Cable grommets, small | 51 |
| FT Cable grommets, flat | 33 |
| KEL-EMC Grounding mounts | 138 - 140 |
| ST Plugs | 53 |

| Description | Type | Order No. | Cut-out [mm] | Grommets KT FT | PU |
|---|----------|-----------|----------------------------|----------------------|----|
|  | KEL-FL A | 46100 | 43 × 24 1.693 × 0.945" | 0 × KT 1 × FT-1 | 10 |
|  | KEL-FL B | 46105 | 65 × 24 2.56 × 0.945" | 0 × KT 1 × FT-2 | 10 |
|  | KEL-FL C | 46110 | 65 × 24 2.56 × 0.945" | 1 × KT 1 × FT-1 | 10 |
|  | KEL-FL D | 46115 | 86 × 24 3.386 × 0.945" | 0 × KT 1 × FT-3 | 10 |
|  | KEL-FL E | 46120 | 86 × 24 3.386 × 0.945" | 1 × KT 1 × FT-2 | 10 |
|  | KEL-FL F | 46125 | 86 × 24 3.386 × 0.945" | 0 × KT 2 × FT-1 | 10 |
|  | KEL-FL G | 46130 | 86 × 24 3.386 × 0.945" | 2 × KT 1 × FT-1 | 10 |
|  | KEL-FL H | 46135 | 112 × 24 4.409 × 0.945" | 2 × KT 1 × FT-2 | 10 |
|  | KEL-FL I | 46140 | 112 × 24 4.409 × 0.945" | 1 × KT 2 × FT-1 | 10 |
|  | KEL-FL J | 46145 | 112 × 24 4.409 × 0.945" | 3 × KT 1 × FT-1 | 10 |
|  | KEL-FL K | 46150 | 112 × 24 4.409 × 0.945" | 1 × FT-1 1 × FT-2 | 10 |
|  | KEL-FL L | 46155 | 112 × 24 4.409 × 0.945" | 1 × FT-4 | 10 |

FT Grommets for Flat Cables



1.11

| Description | Type | Order No. | Clamping range | PU |
|---|--------|-----------|--|----|
|  | FT-1 0 | 46201 | Blank grommet | 5 |
|  | FT-1 A | 46210 | Width: 19 - 23 mm / 0.748 - 0.906 " Thickness: 5.5 - 6 mm / 0.217 - 0.236 " | 5 |
| | FT-1 B | 46211 | Width: 28 - 33 mm / 1.102 - 1.299 " Thickness: 5.5 - 6 mm / 0.217 - 0.236 " | 5 |
| | FT-1 C | 46212 | Width: 24 - 30 mm / 0.945 - 1.811 " Thickness: 8.5 - 9 mm / 0.335 - 0.354 " | 5 |
|  | FT-1 E | 46214 | Width: 19 - 24 mm / 0.748 - 0.945 " Thickness: 6.5 - 7 mm / 0.256 - 0.276 " | 5 |
|  | FT-1 F | 46215 | Width: 28 - 33 mm / 1.102 - 1.299 " Thickness: 9 - 9.5 mm / 0.354 - 0.374 " | 5 |
|  | FT-2 0 | 46202 | Blank grommet | 5 |
|  | FT-2 A | 46250 | Width: 32.5 - 38 mm / 1.28 - 1.496 " Thickness: 5 - 5.5 mm / 0.197 - 0.217 " | 5 |
| | FT-2 B | 46251 | Width: 45 - 50.5 mm / 1.772 - 1.988 " Thickness: 6 - 6.5 mm / 0.236 - 0.256 " | 5 |
| | FT-2 C | 46252 | Width: 47 - 52 mm / 1.85 - 2.047 " Thickness: 9.5 - 10 mm / 0.374 - 0.394 " | 5 |
| | FT-2 F | 46255 | Width: 38 - 43 mm / 1.496 - 1.693 " Thickness: 12.5 - 13 mm / 0.492 - 0.512 " | 5 |
| | FT-2 G | 46256 | Width: 49 - 54 mm / 1.929 - 2.126 " Thickness: 5 - 6 mm / 0.197 - 0.236 " | 5 |
| | FT-3 0 | 46203 | Blank grommet | 5 |
|  | FT-3 A | 46300 | Width: 72 - 77 mm / 2.835 - 3.032 " Thickness: 5 - 5.5 mm / 0.197 - 0.217 " | 5 |
|  | FT-4 0 | 46204 | Blank grommet | 5 |
| | FT-4 A | 46330 | Width: 85 - 99 mm / 3.346 - 3.898 " Thickness: 4.2 - 5.2 mm / 0.165 - 0.205 " | 5 |

Product Description

FT grommets are used to route flat cables, e.g. in elevator construction. Suitable for cable entry frames KEL-FL.

Innovative construction of the grommets compensates for manufacturing inconsistencies in flat cables.

Advantages & Benefits

- Routing of flat cables with various dimensions

Specifications

| | |
|-----------------------|---|
| Material | Elastomer |
| Flame class | UL94-Vo |
| IP Rating | IP54 |
| Operating temperature | - 40°C to + 90°C (static) - 40°F to + 194°F (static) |
| Properties | Halogen-free, silicone-free |

Compatible with

KEL-FL Cable entry frames 32

KEL 183 | KEL 183-E

Cable Entry Frames for Supply Cables



IP54



Product Description

The split cable entry frame KEL 183 enables the user to route cables and tubes with a diameter of up to 75 mm (depending on the frame type) and to seal them in accordance with IP54 / up to UL type 12.

For cables up to 35 mm the cable grommets KT can be used. With these split cable grommets, pre-terminated cables can be routed.

For cables up to 75 mm we have created the grommets KTMB for KEL 183. Those are not split and have a defined area for pushing the cable through.

A flat rubber gasket is included in the shipment.

Advantages & Benefits

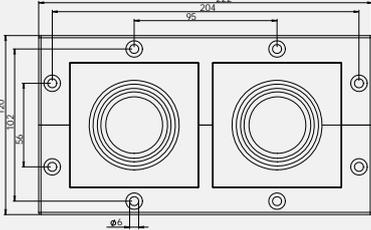
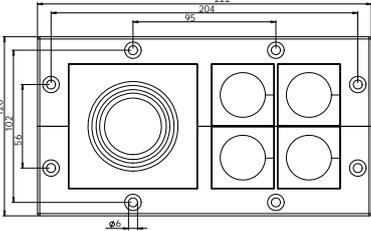
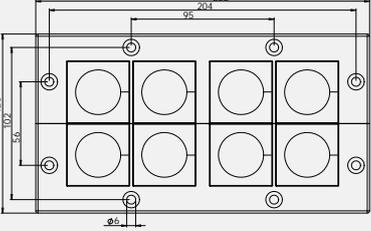
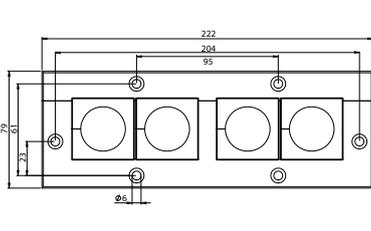
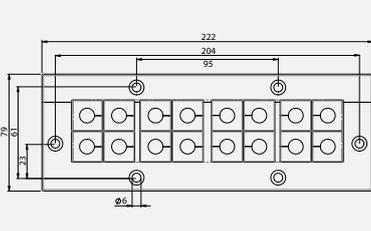
- Installation of cables up to 75 mm
- Grommets allow rigid cables to be properly positioned and oriented during the installation process.
- Retrofits, repairs and maintenance can be done much more easily and quickly

Specifications

| | |
|-----------------------|--|
| Material | Polyamide (PA) |
| Flame class | UL94-Vo |
| IP rating | IP54 with gasket and correct selection of the cables |
| UL type rating | UL type 12 (acc. to UL 50E) |
| Operating temperature | - 40°C to + 140°C (static) - 40°F to + 284°F (static) |
| Properties | Halogen-free, silicone-free |
| Cut-out dimensions | See page 218 - 219 |
| Frame depth | 17 mm / 0.669 " |

Accessories

| | |
|--------------------------|-----------|
| KTMB 183 Cable grommets | 35 |
| Cable grommets | 48 - 52 |
| KEL-EMC Grounding mounts | 138 - 140 |
| ST Plugs | 53 |

| Description | Type | Order No. | Grommets KT KT 183 KT large | PU |
|--|-----------------------------|-----------|-------------------------------|----|
|  | KEL 183 2 | 47200 | 2 - | 1 |
|  | KEL 183 2 with V2A screws | 47200.200 | 2 - | 1 |
|  | KEL 183 5 | 47220 | 1 4 | 1 |
|  | KEL 183 5 with V2A screws | 47220.200 | 1 4 | 1 |
|  | KEL 183 8 | 47240 | - 8 | 1 |
|  | KEL 183 8 with V2A screws | 47240.200 | - 8 | 1 |
| | KEL 183-E4 | 47250 | - 4 | 1 |
| | KEL 183-E4 with V2A screws | 47250.200 | - 4 | 1 |
| | KEL 183-E16 | 47255 | 16 KT small | 1 |
| | KEL 183-E16 with V2A screws | 47255.200 | 16 KT small | 1 |

KTMB 183

Grommets for KEL 183



| Type | Order No. | Clamping range | PU |
|--------|-----------|-------------------------------|----|
| KTMB-O | 41410 | Blank grommet | 1 |
| KTMB-P | 41415 | 34 - 44 mm 1.339 - 1.732 " | 1 |
| KTMB-Q | 41420 | 44 - 54 mm 1.732 - 2.126 " | 1 |
| KTMB-R | 41425 | 54 - 64 mm 2.126 - 2.513 " | 1 |
| KTMB-S | 41430 | 64 - 75 mm 2.513 - 2.953 " | 1 |

Product Description

The grommets KTMB-P to KTMB-S are suitable for cable diameters up to 75 mm. These grommets can be used with the KEL 183 cable entry frames.

These multi-range grommets are not split and have a defined area for pushing the cable through.

The blank grommet KTMB-O can accept cable sizes within a specified range. The membrane of the KTMB-O can be pierced or cut (cable diameter minus 10 mm) for cables up to 55mm in diameter.

Specifications

| | |
|-----------------------|---|
| Material | Elastomer |
| Flame class | UL94-Vo |
| IP rating | IP54 |
| UL type rating | UL type 12 (acc. to UL 50E) |
| Operating temperature | - 40°C to + 90°C (static) - 40°F to + 194°F (static) |
| Properties | Halogen-free, silicone-free |

Compatible with

KEL 183 Cable entry frames 34

KEL-JUMBO

Cable Entry Frames for Supply Cables



IP54



V2A anti-corrosive

Also available with stainless steel screws (V2A).

Product Description

The KEL-JUMBO cable entry system for installation of cables and conduits with a diameter of up to 65 mm, especially suited for supply cables.

The innovative grommet design with the flex-membrane provides flexing and adjustment of the position for larger and more rigid cables.

We recommend round cut-outs, which can be made using standard punching tools.

Suggested cut-out: cable diameter +15 - 20%. A flat rubber gasket is included in the shipment.

Advantages & Benefits

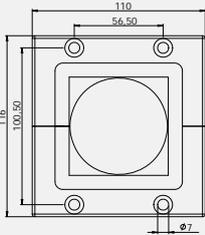
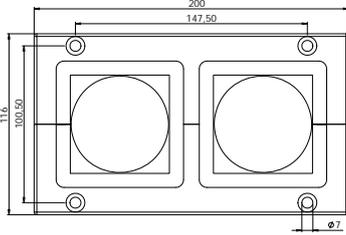
- Installation of cables up to 65 mm
- KTF grommets allow flexing and adjustment of the cable position
- Retrofitting and maintenance can be carried out easily and quickly
- Strain relief according to EN 62444

Specifications

| | |
|-----------------------|--|
| Material | Polyamide (PA) |
| Flame class | UL94-Vo |
| IP rating | IP54 |
| UL type rating | UL type 12 (acc. to UL 50E) |
| Operating temperature | - 40°C to + 140°C (static) - 40°F to + 284°F (static) |
| Properties | Halogen-free, silicone-free |
| Cut-out dimensions | Round, cable diameter +15% |
| Frame depth | 35 mm / 1.378 " |

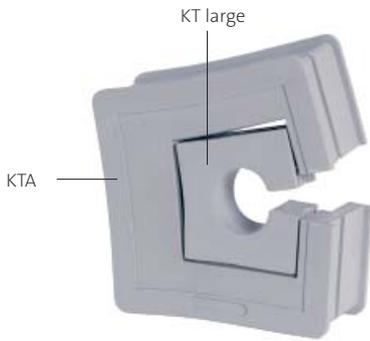
Accessories

| | |
|-------------------------|-----------|
| KTF Cable grommets | 37 |
| KDR-ESR Gland plates | 164 - 167 |
| KDR2 Split Gland plates | 168 - 169 |
| MP Module plates | 174 - 175 |

| Description | Type | Order No. | Dimensions length width height | PU |
|--|-----------------------------|-----------|--|----|
|  | KEL-JUMBO 1 | 42360 | 110 × 116 × 35 mm 4.331 x 4.567 x 1.378 " | 1 |
| | KEL-JUMBO 1 with V2A screws | 42360.200 | 110 × 116 × 35 mm 4.331 x 4.567 x 1.378 " | 1 |
|  | KEL-JUMBO 2 | 42350 | 200 × 116 × 35 mm 7.874 x 4.567 x 1.378 " | 1 |
| | KEL-JUMBO 2 with V2A screws | 42350.200 | 200 × 116 × 35 mm 7.874 x 4.567 x 1.378 " | 1 |

KTF

Grommets for KEL-JUMBO



1.11

| Type | Order No. | Clamping range | PU |
|--------|-----------|-------------------------------|----|
| KTF 00 | 42371 | Blank grommet | 1 |
| KTA | 42370 | Adapter grommet for KT large | 1 |
| KTF 34 | 42376 | 33 - 36 mm 1.299 - 1.417 " | 1 |
| KTF 38 | 42379 | 37 - 40 mm 1.457 - 1.575 " | 1 |
| KTF 42 | 42382 | 41 - 44 mm 1.614 - 1.732 " | 1 |
| KTF 46 | 42385 | 45 - 48 mm 1.772 - 1.89 " | 1 |
| KTF 50 | 42388 | 48 - 52 mm 1.89 - 2.047 " | 1 |
| KTF 54 | 42391 | 53 - 56 mm 2.087 - 2.205 " | 1 |
| KTF 58 | 42394 | 56 - 60 mm 2.205 - 2.362 " | 1 |
| KTF 62 | 42397 | 61 - 65 mm 2.402 - 2.559 " | 1 |

Product Description

The grommets KTF are suitable for cable diameters up to 65 mm.

Suitable for KEL-JUMBO cable entry frames.

Cables with a comparatively smaller diameter can be utilized with KEL-JUMBO frames by using an adapter grommet.

Specifications

| | |
|-----------------------|---|
| Material | Elastomer |
| Flame class | UL94-Vo |
| IP rating | IP54 |
| UL type rating | UL type 12 (acc. to UL 50E) |
| Operating temperature | - 40°C to + 90°C (static) - 40°F to + 194°F (static) |
| Properties | Halogen-free, silicone-free |

Compatible with

KEL-JUMBO Cable entry frames 36

Accessories

KT Cable grommets, large 50

1.12 Split Cord Grips for the KT Grommet System



By using split cord grips by icotek cables with or without connectors or complete cable harnesses with diameters from 1 to 35 mm can be quickly routed into enclosures, cabinets or machines and be sealed with up to IP66/IP68 / UL type 4X rated ingress protection.

The split system of the KVT cord grips enables quick and easy assembly which is great for retrofitting and maintenance. The cable is placed into the slit grommet which is set into one of the gland halves. Depending on the size of the cord grip one, two or four separate grommets can be installed. The two gland halves can be easily snapped together without the need of tools. The routed lines are securely sealed and held inside the grommets. To mount the cord grips either snap it into the round metric standard cut-out (sizes available from M20 to M80) or screw it with a hexagonal locknut. The mounting method is dependent on the model type.

Product Range



NEW ▶



Split cord grips
M25 - M63, for cable diameters up to 35 mm

KVT-ER

40 - 41



Split cord grips | UL type 12
M20 - M80, for cable diameters up to 35 mm

KVT / KVT 80 / KVT-SNAP / KVT-W90

42 - 46



Grommets and plugs | UL types 4X / 12
for cables with/without connectors,
cable diameter range 1 - 35 mm

KT small / KT large / KT-DPF / KTMB / DT /
ST / KT ServiceBox

47 - 53

KVT-ER

Split Cord Grips



Certified protection class IP65/IP66/IP67/IP68



Slit KT grommets

Product Description

KVT-ER are split cord grips for routing and sealing cables with and without connectors, conduits or pneumatic hoses with diameters from 1 to 16 mm (KT 1 - 15) and 16 to 35 mm (KT 16 - 34).

Due to the injected gasket and if single-hole grommets are used, the KVT-ER provides certified protection ratings IP65/IP66/IP67/IP68.

The KVT-ER sizes are based on metric standard cut-outs M25, M32, M50 and M63. Hexagonal locknuts are included in the shipment.

For assembly, we recommend to tighten the cover lid screws with max. 2 N m.

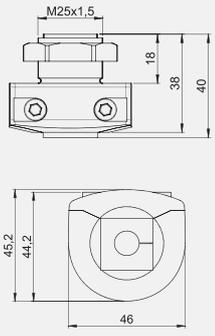
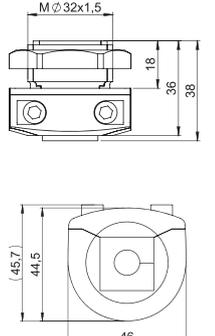
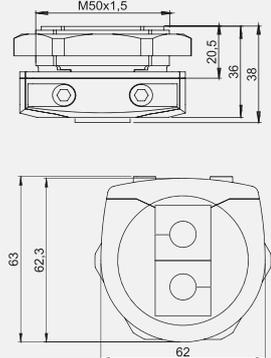
Locknuts

Locknuts with special cut-outs are available separately.



KGM-SUB-D9 fits D-Sub 9 connectors
(Required wall cut-out: \varnothing 36 mm / 1.417", PU: 10)
■ Order No. 45106

KGM-SUB-D25 fits SUB-D25 connectors
(Required wall cut-out: \varnothing 50 - 54 mm / 1.969 - 2.126", PU:10)
■ Order No. 45110

| Description | Type | Order No. | Grommets KT small large | Thread Thread length | PU |
|---|-------------|-----------|------------------------------|---------------------------------------|----|
|  | KVT-ER 25* | 45450 | 1 - | M25 x 1.5 Length: 18 mm / 0.709" | 10 |
|  | KVT-ER 32 | 45452 | 1 - | M32 x 1.5 Length: 18 mm / 0.709" | 10 |
|  | KVT-ER 50 2 | 45454 | 2 - | M50 x 1.5 Length: 20.5 mm / 0.709" | 5 |

* Max. cable diameter of 15 mm / 0.591"

KVT-ER Split Cord Grips



Injected elastomer gasket



Slit KT grommets



1.12

| Description | Type | Order No. | Grommets KT small large | Thread Thread length | PU |
|-------------|-------------|-----------|------------------------------|--|----|
| | KVT-ER 63 1 | 45455 | - 1 | M63 x 1.5 Length: 20.5 mm / 0.807 " | 5 |
| | KVT-ER 63 4 | 45456 | 4 - | M63 x 1.5 Length: 20.5 mm / 0.807 " | 5 |

Advantages & benefits

- Certified protection class IP65/IP66/IP67/IP68 according to EN 60529
- Very high strain relief according to EN 62444
- Warranty of pre-terminated cables remains
- Retrofits, repairs and maintenance can be done easily and quickly
- High cable density
- Suitable for metric cut-outs
- Hexagonal nut included in the delivery
- Anti-corrosive V2A stainless steel screws
- Very robust housing, vibration resistant
- Modern design

Specifications

| | |
|-----------------------|---|
| Material | Frame: Polypropylene (PP) Injected gasket: Elastomer |
| Flame class | UL94-Vo, self-extinguishing |
| IP rating | IP65/IP66/IP67/IP68, if correctly assembled with single grommets (certified acc. to EN 60529) |
| Operating temperature | - 40°C to + 110°C (static) - 40° F to + 230° F (static) |
| Properties | Halogen-free, silicone-free |
| Cut-out dimension | Metric sizes |

Accessories

| | |
|-------------------|-----------|
| KT Cable grommets | 48 - 50 |
| KVT-EMC Brackets | 141 |
| Locknuts | 188 - 189 |
| ST Plugs | 53 |

KVT

Split Cord Grips



IP54



Product Description

KVT is a circular split frame for quick and easy installation and sealing of cables with connectors or complete cable harnesses.

Polyamide locknuts as well as a sealing ring are included in the shipment.

For routing D-Sub, DVI or PROFIBUS connectors in combination with the split cord grips KVT, special locknuts with cut-outs are required.

Locknuts

Locknuts with special cut-outs are available separately. The cut-out dimensions are listed on page 189.



KGM-SUB-D9 fits D-Sub 9 connectors
(Required wall cut-out: \varnothing 36 mm / 1.417", PU: 10)
 Order No. 45105 Order No. 45106

KGM-PB fits DVI and PROFIBUS connectors
(Required wall cut-out: \varnothing 42 mm / 1.654", PU: 10)
 Order No. 45107 Order No. 45109

KGM-SUB-D25 fits SUB-D25 connectors (Required wall cut-out: \varnothing 50 - 54 mm / 1.969 - 2.126", PU: 10)
 Order No. 45108 Order No. 45110



Type GMT: Split locknut, p. 188

| Description | Type | Order No | Grommets small large | Thread Thread length | PU |
|-------------|------------------------|---|---------------------------|-------------------------------------|----|
| | KVT 20** | <input type="checkbox"/> 45034 <input checked="" type="checkbox"/> 45024 | 1 - | M20 × 1.5 Length: 14 mm / 0.551" | 10 |
| | KVT 25*** | <input type="checkbox"/> 45035 <input checked="" type="checkbox"/> 45025 | 1 - | M25 × 1.5 Length: 14 mm / 0.551" | 10 |
| | KVT 32 | <input type="checkbox"/> 45036 <input checked="" type="checkbox"/> 45026 | 1 - | M32 × 1.5 Length: 14 mm / 0.551" | 10 |
| | KVT 32 + KGM-SUB-D9 | <input type="checkbox"/> 45037 <input checked="" type="checkbox"/> 45027 | 1 - | M32 × 1.5 Length: 14 mm / 0.551" | 10 |
| | KVT 40 | <input type="checkbox"/> 45203 <input checked="" type="checkbox"/> 45028 | 1 - | M40 × 1.5 Length: 14 mm / 0.551" | 10 |
| | KVT 40 + KGM-PB | <input type="checkbox"/> 45205 <input checked="" type="checkbox"/> 45029 | 1 - | M40 × 1.5 Length: 14 mm / 0.551" | 10 |

* Only valid for gray product types ** Max. cable diameter of 11 mm | *** Max. cable diameter of 15 mm / 0.591"

KVT

Split Cord Grips



1.12

| Description | Type | Order.No. | Grommets small large | Thread Thread length | PU |
|-------------|---------------------------|--------------------|---------------------------|--|----|
| | KVT 50 2 | ■ 45204 ■ 45030 | 2 - | M50 x 1.5 Length: 14 mm / 0.551" | 5 |
| | KVT 50 2 + KGM-SUB-D25 | ■ 45206 ■ 45031 | 2 - | M50 x 1.5 Length: 14 mm / 0.551" | 5 |
| | KVT 63 1 | ■ 45212 ■ 45112 | - 1 | M63 x 1.5 Length: 14 mm / 0.551" | 5 |
| | KVT 63 4 | ■ 45215 ■ 45115 | 4 - | M63 x 1.5 Length: 14 mm / 0.551" | 5 |

* Only valid for gray product types

Advantages & Benefits

- Insertion of pre-terminated cables
- Warranty on pre-terminated cables remains
- Retrofits, repairs and maintenance can be done much more easily and quickly
- High cable density, wide variety of grommets
- Suitable for metric cut-outs
- Locknut is included



Specifications

| | |
|-----------------------|--|
| Material | Polycarbonate (PC) |
| Color | ■ gray (similar RAL 7035) ■ black |
| Flame class | UL94-Vo |
| IP rating | IP54, with gasket and correct selection of the cable grommets (certified acc. to EN 60529) |
| UL type rating | UL type 12 (acc. to UL 50E) |
| Operating temperature | - 30°C to + 100°C (static) - 22°F to + 212°F (static) |
| Properties | Halogen-free, silicone-free |
| Cut-out dimension | Metric sizes |

Accessories

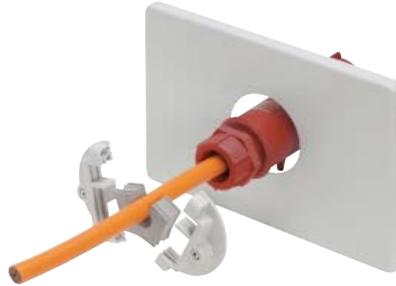
| | |
|------------------|-----------|
| Cable grommets | 48 - 52 |
| KVT-EMC Brackets | 141 |
| Locknuts | 188 - 189 |
| ST Plugs | 53 |

KVT 80

Split Cord Grips for Front Mounting



IP54



Product Description

The KVT 80 split cord grips are designed for routing and sealing cables with connectors. By assembling the two frame halves with the screws provided, the grommets provide sufficient pressure on the routed cables to obtain a high degree of strain relief. The KVT 80 can be fitted to a wall thickness from 1.5 mm to 10 mm. A flat rubber gasket is included in the shipment.

Advantages & Benefits

- Insertion of pre-terminated cables
- Warranty on pre-terminated cables remains
- Retrofits, repairs and maintenance can be done quickly
- High cable density, wide variety of grommets
- Fast and easy assembly from the front side
- Strain relief according to EN 62444

Notes

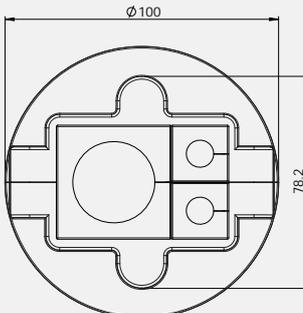
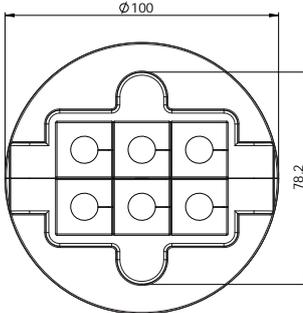
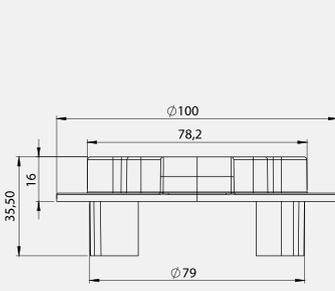
When mounting the KVT 80 on sheet metal, we recommend the following torque values:
 1.5 mm sheet = 1 N m | 2 - 10 mm sheet = 1.5 N m

Specifications

| | |
|-----------------------|--|
| Material | Polycarbonate (PC) |
| Color | <input type="checkbox"/> gray (similar RAL 7035) <input type="checkbox"/> black |
| Flame class | UL94-Vo |
| IP rating | IP54, with gasket and correct selection of the cable grommets (certified acc. to EN 60529) |
| UL type rating | UL type 12 (acc. to UL 50E) |
| Operating temperature | - 30°C to + 100°C (static) - 22°F to + 212°F (static) |
| Properties | Halogen-free, silicone-free |
| Cut-out dimension | 80 mm in diameter |

Accessories

| | |
|----------------|---------|
| Cable grommets | 48 - 52 |
| ST Plugs | 53 |

| Description | Type | Order No. | Grommets KT small large | PU |
|--|----------|--|---------------------------|----|
|  | KVT 80 3 | <input type="checkbox"/> 45236 <input type="checkbox"/> 45239 | 2 1 | 1 |
|  | KVT 80 6 | <input type="checkbox"/> 45237 <input type="checkbox"/> 45238 | 6 - | 1 |
|  | | | | |

*Only valid for gray product types

KVT-SNAP

Split Pluggable Cord Grips


IP54

1.12

| Description | Type | Order No. | Grommets small large | Thread Thread length | PU |
|-------------|---------------|--|---------------------------|---|----|
| | KVT-SNAP 32 | 45130 | 1 - | M32 × 1.5 Length: 11 mm / 0.443 " | 10 |
| | KVT-SNAP 40 | 45134 | 1 - | M40 × 1.5 Length: 11 mm / 0.443 " | 10 |
| | KVT-SNAP 63 4 | 45152 | 4 - | M63 × 1.5 Length: 11 mm / 0.443 " | 5 |
| | KVT-SNAP 63 1 | 45154 | - 1 | M63 × 1.5 Length: 11 mm / 0.443 " | 5 |
| | KGM 32 | <input type="checkbox"/> 52275 <input type="checkbox"/> 52285 | PA | M32 × 1.5 | 10 |
| | KGM 40 | <input type="checkbox"/> 52276 <input type="checkbox"/> 52286 | PA | M40 × 1.5 | 10 |
| | KGM 63 | <input type="checkbox"/> 52278 <input type="checkbox"/> 52288 | PA | M63 × 1.5 | 5 |

Product Description

KVT is a circular split frame for quick and easy installation of cables with connectors or complete cable harnesses.

By using the model KVT-SNAP, cables can be routed through thick walls (> 5 mm) e.g. into cast junction boxes without the use of tools. Polyamide locknuts as well as a sealing ring are included in the shipment.

Assembly

- The snap ring is screwed into metric thread or tapped into the cut-out (it can also be fastened with a locknut)
- Once the snap ring is affixed to the housing the equipped KVT is simply pushed into it. Fast and easy installation!

Specifications

| | |
|-----------------------|---|
| Material | Polycarbonate (PC) |
| Color | gray (similar RAL 7035) |
| Flame class | UL94-V0 |
| IP Rating | <input type="checkbox"/> IP54, with gasket and correct selection of the cable grommets (certified acc. to EN 60529) |
| Operating temperature | - 30°C to + 100°C (static) - 22°F to + 212°F (static) |
| Properties | Halogen-free, silicone-free |
| Cut-out dimension | Metric cut-outs |

Accessories

| | |
|------------------|-----------|
| Cable grommets | 48 - 52 |
| KVT-EMC Brackets | 141 |
| KGM Locknuts | 188 - 189 |
| ST Plugs | 53 |

* Only valid for gray product types

KVT-W90

Split Cord Grips



1.12

Product Description

The split KVT-W90 cord grips are used to insert and seal pre-terminated cables and conduits at a 90° angle.

In particular, the KVT 50-W90 is perfectly suited to hold corrugated or smooth hoses. A large number of cable entry grommets is available to the user.

Polyamide locknuts as well as a sealing ring are included in the shipment. Split locknuts can be ordered separately.

Advantages & Benefits

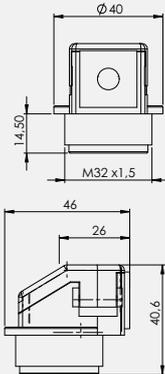
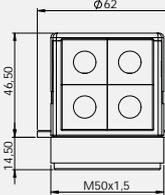
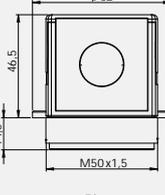
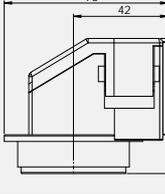
- Installation at an angle of 90° to the enclosure
- Insertion of pre-terminated cables and conduits
- Warranty on pre-terminated cables remains
- Suitable for metric cut-outs

Specifications

| | |
|-----------------------|---|
| Material | Polycarbonate (PC) |
| Color | <input type="checkbox"/> gray (similar RAL 7035) <input checked="" type="checkbox"/> black |
| Flame class | UL94-V0 |
| IP Rating | IP54, with gasket and correct selection of the cable grommets (certified acc. to EN 60529) |
| Operating temperature | - 30°C to + 100°C (static) - 22°F to + 212°F (static) |
| Properties | Halogen-free, silicone-free |
| Cut-out dimension | Metric cut-outs |

Accessories

| | |
|------------------|-----------|
| Cable grommets | 48 - 52 |
| KVT-EMC Brackets | 141 |
| KGM Locknuts | 188 - 189 |
| ST Plugs | 53 |

| Description | Type | Order No. with locknut | Grommets small large | Thread Thread length | PU |
|---|--------------|---|------------------------|---------------------------------------|----|
|  | KVT 32-W90 | <input type="checkbox"/> 45404 <input checked="" type="checkbox"/> 45406 | 1 - | M32 x 1.5 Length: 115 mm / 0.453 " | 10 |
|  | GMT 32 | <input checked="" type="checkbox"/> 31120 | - | M32 x 1.5 | 10 |
|  | KVT 50 4-W90 | <input type="checkbox"/> 45424 <input checked="" type="checkbox"/> 45426 | 4 - | M50 x 1.5 Length: 115 mm / 0.453 " | 5 |
|  | KVT 50 1-W90 | <input type="checkbox"/> 45414 <input checked="" type="checkbox"/> 45416 | - 1 | M50 x 1.5 Length: 115 mm / 0.453 " | 5 |
|  | GMT 50 | <input checked="" type="checkbox"/> 31140 | - | M50 x 1.5 | 10 |

*Only valid for gray product types

KT ServiceBox

Service Box for Cable Grommets



1.1



Product Description

Convenient - everything available right away!

The KT ServiceBox is perfect for installations and service calls. It ensures your KT grommets are readily available.

Order No. 88001

Content*

Cable grommets, small:

- 110 KT for cables 1 - 17 mm
- 10 BTK blank grommets
- 10 KTMB multi-range grommets
- 2 KT-DPF mutli-range grommets
- 8 KT-ASI for ASI-Bus cables

Cable grommets, large:

- 25 KT for cables 16 - 35 mm
- 4 BTG blank grommets / ATG adapter grommets
- 3 KTMB multi-range grommets
- 2 DT multi-membrane grommets
- 2 KT-DPF multi-range grommets

Accessories:

- 2 KEL-U cable entry frames
- 1 KVT split cord grip
- 1 KZL strain relief plate

- 1 Cable template

* Subject to alterations

KMS Cable Template



The correct size of the KT grommets can easily be determined by using the cable template (material: stainless steel V2A).

- Determining the diameter of the cable using the cable template
- Selecting the KT grommets according to the data on the cable template

Cable templates can also be ordered separately. **Order-No. 39800**

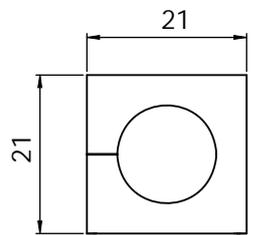
KT

Grommets, small, single



1.1

IP54 IP66 IP68



Product Description

Cable grommets KT small are used with the cable entry frames & cord grips of product groups 1.11 & 1.12.

The model range KT small is designed for cable diameters from 1 to 17 mm.

Assembly Note

When installing the grommets, the flat side should be facing the middle of the frame. This allows the flat sides of adjacent grommets to match up and provide a secure seal.

Pressure Compensation Element PCE 12

Pressure compensation element PCE 12 to avoid water condensation in highly sealed enclosures. For use in cable grommets KT 12 in combination with cable entry frames KEL-ER or cord grips KVT-ER.



| Description | Type | Order No gray | Order No black | Clamping range | PU |
|--------------------------------------|-------------------|---------------|----------------|------------------------------|----|
| | BTK | 41251 | 41351 | Blank grommet | 10 |
| BTK | KT 1 | 39941 | 39943 | 1 - 2 mm / 0.039 - 0.079 " | 10 |
| | KT 2 | 39934 | 41302 | 2 - 3 mm / 0.079 - 0.118 " | 10 |
| | KT 3 | 41203 | 41303 | 3 - 4 mm / 0.118 - 0.157 " | 10 |
| | KT 4 | 41204 | 41304 | 4 - 5 mm / 0.157 - 0.197 " | 10 |
| | KT 5 | 41205 | 41305 | 5 - 6 mm / 0.197 - 0.236 " | 10 |
| KT round | KT 6 | 41206 | 41306 | 6 - 7 mm / 0.236 - 0.276 " | 10 |
| | KT 7 | 41207 | 41307 | 7 - 8 mm / 0.276 - 0.315 " | 10 |
| | KT 8 | 41208 | 41308 | 8 - 9 mm / 0.315 - 0.354 " | 10 |
| | KT 9 | 41209 | 41309 | 9 - 10 mm / 0.354 - 0.394 " | 10 |
| | KT 10 | 41210 | 41310 | 10 - 11 mm / 0.394 - 0.433 " | 10 |
| | KT 11 | 41211 | 41311 | 11 - 12 mm / 0.433 - 0.472 " | 10 |
| | KT 12 | 41212 | 41312 | 12 - 13 mm / 0.472 - 0.511 " | 10 |
| | KT 13 | 41213 | 41313 | 13 - 14 mm / 0.511 - 0.551 " | 10 |
| | KT 14 | 41214 | 41314 | 14 - 15 mm / 0.551 - 0.591 " | 10 |
| | KT 15 | 41215 | 41315 | 15 - 16 mm / 0.591 - 0.63 " | 10 |
| | KTs 16 | 39901 | 39912 | 16 mm / 0.63 " | 10 |
| | KTs 17 | 39900 | 39913 | 17 mm / 0.669 " | 10 |
| Pressure compensation element PCE 12 | | | | | |
| NEW | PCE 12 with KT 12 | 99192 | 99194 | - | 5 |
| NEW | PCE 12 | 99190 | | - | 5 |

*Only valid for gray product types



IP54

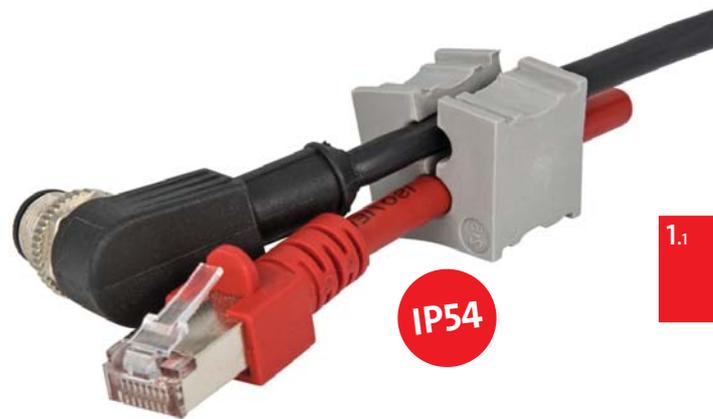


RoHS compliant

Made in Germany



KT Grommets, small, multi & Special Grommets



1.1

| Description | Type | Order No gray | Order No black | Clamping range | PU |
|-------------|------------|---------------|----------------|------------------------------------|----|
| KT 2 x | KT 2 1 | 39942 | 39944 | 2× ø 1 mm / 0.003 " | 10 |
| | KT 2 2 | 39935 | 39936 | 2× ø 2 mm / 0.079 " | 10 |
| | KT 2 3 | 39939 | 39940 | 2× ø 3 mm / 0.118 " | 10 |
| | KT 2 4 | 39906 | 39907 | 2× ø 4 mm / 0.157 " | 10 |
| KT 4 x | KT 2 5 | 41200 | 39904 | 2× ø 5 mm / 0.197 " | 10 |
| | KT 2 6 | 41201 | 39905 | 2× ø 6 mm / 0.236 " | 10 |
| | KT 2 7 | 41202 | 39916 | 2× ø 7 mm / 0.276 " | 10 |
| | KT 2 8 | 39917 | 39918 | 2× ø 8 mm / 0.315 " | 10 |
| KT ASI2 rI | KT 4 2 | 39937 | 39938 | 4× ø 2 mm / 0.079 " | 10 |
| | KT 4 3 | 39914 | 39915 | 4× ø 3 mm / 0.118 " | 10 |
| | KT 4 4 | 39909 | 39911 | 4× ø 4 mm / 0.157 " | 10 |
| KT ASI2 II | KT 4 5 | 39908 | 39910 | 4× ø 5 mm / 0.197 " | 10 |
| | KT 4 6 | 39932 | 39933 | 4× ø 6 mm / 0.236 " | 10 |
| KT oval | KT-ASI | 39902 | 39903 | 1 ASI-cable | 10 |
| | KT-ASI2 rI | 39922 | 39924 | 2 ASI-cables | 10 |
| | KT-ASI2 II | 39921 | 39923 | 2 ASI-cables | 10 |
| KT S1 | KT oval | 39930 | - | approx. 8 × 4 mm / 0.315 x 0.157 " | 10 |
| | KT tele | 39931 | - | | 10 |
| KT tele1 | KT tele | 39929 | - | Telephone cable | 10 |
| KT tele2 | KT tele1 | 41257 | - | Data cable RJ12 | 10 |
| | KT tele2 | 41258 | - | Data cable RJ10 / RJ45 | 10 |

*Only valid for gray product types

Specifications KT gray

Material: Elastomer
 Flame class: UL94-Vo
 IP rating: KT round, single: up to IP66/IP68
 KT round, multi: IP54
 KT special, multi: IP54
 UL type rating: up to UL type 4X (acc. to UL 50E)
 Operating temperature: - 40°C to + 90°C (static)
 - 40°F to + 194°F (static)
 Properties: Halogen-free, silicone-free

Specifications KT black

Material: Elastomer
 Flame class: UL94-HB
 IP rating: KT round, single: up to IP66/IP68
 KT round, multi: IP54
 KT special, multi: IP54
 Operating temperature: - 30°C to + 90°C (static)
 - 22°F to + 194°F (static)
 Properties: Higher chemical resistance

Specifications PCE 12

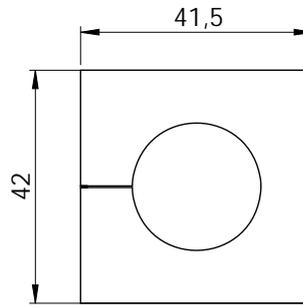
Material: Polyamide 6
 Membrane: Polyacrylate
 IP rating: IP65
 Operating temperature: - 30°C to + 90°C (static)
 - 22°F to + 194°F (static)
 Air flow: ΔP = 1 psi, min. 50 l/h

Accessories

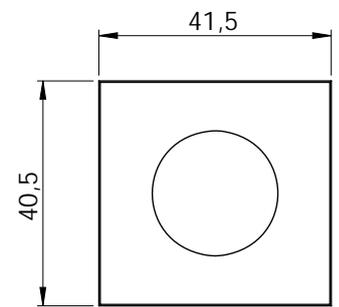
ST Plugs 53

KT

Grommets, large



KT / KT-DPF large



KTMB large

Product Description

Cable grommets KT large accept a wide range of cable diameters from 16 to 35 mm. They are used with the cable entry frames & cord grips of product groups 1.11 & 1.12.

ATG adapter grommets provide the possibility to hold a small KT grommet to reduce the clamping range down to 1 mm.

Specifications KT gray

Material Elastomer
Flame class UL94-Vo
IP rating KT round, single: up to IP66/IP68
 ATG/BTG: IP54
UL type rating up to UL type 4X (acc. to UL 50E)
Operating temperature - 40°C to + 90°C (static)
 - 40°F to + 194°F (static)
Properties Halogen-free, silicone-free

Specifications KT black

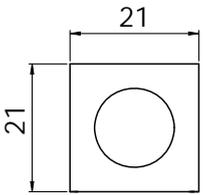
Material Elastomer
Flame class UL94-HB
IP rating KT round, single: up to IP66/IP68
 ATG/BTG: IP54
Operating temperature - 30°C to + 90°C (static)
 - 22°F to + 194°F (static)
Properties Higher chemical resistance

| Description | Type | Order No. gray | Order No. black | Clamping range | PU |
|---|-------|----------------|-----------------------------|---|----|
|  | ATG | 41253 | 41353 | Adapter grommet | 10 |
|  | BTG | 41252 | 41352 | Blank grommet or 5 - 20 mm / 0.197 - 0.787" | 10 |
|  | KT 16 | 41216 | 41316 | 16 - 17 mm / 0.63 - 0.669" | 10 |
| | KT 17 | 41217 | 41317 | 17 - 18 mm / 0.669 - 0.709" | 10 |
| | KT 18 | 41218 | 41318 | 18 - 19 mm / 0.709 - 0.748" | 10 |
| | KT 19 | 41219 | 41319 | 19 - 20 mm / 0.748 - 0.787" | 10 |
| | KT 20 | 41220 | 41320 | 20 - 21 mm / 0.787 - 0.827" | 10 |
| | KT 21 | 41221 | 41321 | 21 - 22 mm / 0.827 - 0.866" | 10 |
| | KT 22 | 41222 | 41322 | 22 - 23 mm / 0.866 - 0.906" | 10 |
| | KT 23 | 41223 | 41323 | 23 - 24 mm / 0.906 - 0.945" | 10 |
| | KT 24 | 41224 | 41324 | 24 - 25 mm / 0.945 - 0.984" | 10 |
| | KT 25 | 41225 | 41325 | 25 - 26 mm / 0.984 - 1.024" | 10 |
| | KT 26 | 41226 | 41326 | 26 - 27 mm / 1.024 - 1.063" | 10 |
| | KT 27 | 41227 | 41327 | 27 - 28 mm / 1.063 - 1.102" | 10 |
| | KT 28 | 41228 | 41328 | 28 - 29 mm / 1.102 - 1.142" | 10 |
| | KT 29 | 41229 | 41329 | 29 - 30 mm / 1.142 - 1.181" | 10 |
| | KT 30 | 41230 | 41330 | 30 - 31 mm / 1.181 - 1.22" | 10 |
| | KT 31 | 41231 | 41331 | 31 - 32 mm / 1.22 - 1.26" | 10 |
| | KT 32 | 41232 | 41332 | 32 - 33 mm / 1.26 - 1.299" | 10 |
| KT 33 | 41233 | 41333 | 33 - 34 mm / 1.299 - 1.339" | 10 | |
| KT 34 | 41234 | 41334 | 34 - 35 mm / 1.339 - 1.378" | 10 | |

*Only valid for gray product types

KT-DPF | KTMB

Grommets, Multi-Range



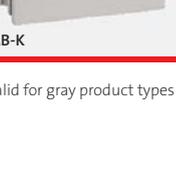
KT-DPF / KTMB small



KT-DPF-B



1.1

| Description | Type | Order No. | Size KT | Clamping range | PU |
|---|--------------------|-----------|-------------------------------|----------------|----------|
|  KT-DPF-A | ■ 41260 ■ 41360 | KT small | 3 - 12 mm 0.118 - 0.472 " | 10 | |
| | | | | | KT-DPF-B |
|  KT-DPF-C | ■ 41262 ■ 41362 | KT large | 14 - 26 mm 0.551 - 1.024 " | 10 | |
| | | | | | KTMB-A |
|  KTMB-D | ■ 41434 ■ 41436 | KT small | 4 - 7.5 mm / 0.157 - 0.295 " | 10 | |
| | | | | | KTMB-C |
|  Cross section KTMB | ■ 41438 ■ 41440 | KT small | 9.5 - 13 mm / 0.374 - 0.512 " | 10 | |
| | | | | | KTMB-D |
|  KTMB-E | ■ 41460 ■ 41465 | KT large | 13 - 16 mm / 0.512 - 0.63 " | 10 | |
| | | | | | KTMB-G |
|  KTMB-H | ■ 41470 ■ 41475 | KT large | 18 - 23 mm / 0.709 - 0.906 " | 10 | |
| | | | | | KTMB-I |
|  KTMB-J | ■ 41480 | KT large | 28 - 33 mm / 1.102 - 1.299 " | 10 | |
| | | | | | KTMB-K |

Product Description

The KT-DPF / KTMB grommets accept a wide range of cable diameters. A great benefit when the exact cable diameter is not known in advance. The KTMB grommets are not split and therefore only usable for cables without connectors. Cutting of KT-DPF grommets: Cable diameter less 20%.

Specifications gray

| | |
|-----------------------|-----------------------------|
| Material | Elastomer |
| Flame class | UL94-Vo |
| IP rating | IP54 |
| UL type rating | UL type 12 (acc. to UL 50E) |
| Operating temperature | - 40°C to + 90°C (static) |
| Properties | - 40°F to + 194°F (static) |
| | Halogen-free, silicone-free |

Specifications black

| | |
|-----------------------|----------------------------|
| Material | Elastomer |
| Flame class | UL94-HB |
| IP rating | IP54 |
| Operating temperature | - 30°C to + 90°C (static) |
| Properties | - 22°F to + 194°F (static) |
| | Higher chemical resistance |

KMS Cable Template

The correct size of the KT grommets can easily be determined by using the stainless steel cable template.

- Determining the diameter of the cable
- Selecting the KT grommets according to the data on the cable template

Order No. 39800



*Only valid for gray product types

DT Membrane Cable Grommets



1.1

Product Description

The DT cable grommets are designed for cables without preassembled connectors. A large number of cables can be routed utilizing minimal space.

DT 1 - DT 5 grommets are designed to fit in KT large grommet spaces. DT 7 & DT 8 grommets are designed to fit in KT small grommet spaces.

The DT grommets are also perfectly suitable for the assembly of subsequently terminated cable harnesses.

Advantages & Benefits

- Combination of routing pre-terminated cables and cables without connectors with one cable entry frame
- Enables subassembly of cable harnesses
- High cable density

Specifications

| | |
|-----------------------|---|
| Material | Elastomer |
| Flame class | UL94-Vo |
| IP rating | IP54 |
| UL type rating | UL type 12 (acc. to UL 50E) |
| Operating temperature | - 40°C to + 90°C (static) - 40°F to + 194°F (static) |
| Properties | Halogen-free, silicone-free |

Accessories

ST-B Plugs 85

| Description | Type | Order No. | Number of cables | PU |
|-------------|------|------------------|---|----|
| | DT 1 | 41500 | 12× max. 6.5 mm / 0.256 " 2× max. 12.2 mm / 0.48 " | 10 |
| | DT 2 | 41510 | 16× max. 7.1 mm / 0.28 " | 10 |
| | DT 3 | 41520 | 4× max. 6.5 mm / 0.256 " 3× max. 9.5 mm / 0.374 " 3× max. 11.3 mm / 0.445 " | 10 |
| | DT 4 | 41530 | 9× max. 9.5 mm / 0.374 " | 10 |
| | DT 5 | NEW 41540 | 4× max. 14.5 mm / 0.571 " 1× max. 9.5 mm / 0.374 " | 10 |
| | DT 7 | NEW 41550 | 4× max. 6 mm / 0.236 " | 10 |
| | DT 8 | NEW 41552 | 2× max. 7 mm / 0.276 " 2× max. 4 mm / 0.157 " | 10 |

ST Plugs for Cable Grommets



1.1

1.2

| Description | Type | Order No. | Diameter D | Length L | PU |
|-------------|-------|-----------|-----------------|-----------------|----|
| | ST 1 | 42900 | 1 mm / 0.039 " | 25 mm / 0.984 " | 25 |
| | ST 2 | 42909 | 2 mm / 0.078 " | 25 mm / 0.984 " | 25 |
| | ST 3 | 42901 | 3 mm / 0.118 " | 25 mm / 0.984 " | 25 |
| | ST 4 | 42908 | 4 mm / 0.157 " | 25 mm / 0.984 " | 25 |
| | ST 5 | 42906 | 5 mm / 0.197 " | 25 mm / 0.984 " | 25 |
| | ST 6 | 42903 | 6 mm / 0.236 " | 25 mm / 0.984 " | 25 |
| | ST 7 | 42905 | 7 mm / 0.276 " | 25 mm / 0.984 " | 25 |
| | ST 8 | 42899 | 8 mm / 0.315 " | 20 mm / 0.787 " | 25 |
| | ST 9 | 42897 | 9 mm / 0.354 " | 20 mm / 0.787 " | 25 |
| | ST 10 | 42895 | 10 mm / 0.394 " | 20 mm / 0.787 " | 25 |
| | ST 11 | 42893 | 11 mm / 0.433 " | 20 mm / 0.787 " | 25 |
| | ST 12 | 42891 | 12 mm / 0.472 " | 20 mm / 0.787 " | 25 |
| | ST 13 | 42889 | 13 mm / 0.512 " | 20 mm / 0.787 " | 25 |
| | ST 14 | 42887 | 14 mm / 0.551 " | 20 mm / 0.787 " | 25 |
| | ST 15 | 42885 | 15 mm / 0.591 " | 20 mm / 0.787 " | 25 |
| | ST 16 | 42883 | 16 mm / 0.63 " | 20 mm / 0.787 " | 25 |
| | ST 17 | 42881 | 17 mm / 0.669 " | 20 mm / 0.787 " | 25 |
| ST ASI | 42877 | - | 25 mm / 0.984 " | 25 | |

Product Description

Plugs are used to close either KT or QT grommets which are not equipped with cables. IP ratings of the grommets remain.

Perfect for applications where cables have been removed or might be routed at a later stage.

Advantages & Benefits

- Sealing unused cable grommets

Specifications

| | |
|-----------------------|--|
| Material | Polyamide (PA), white |
| Flame class | UL94-Vo |
| IP rating | IP rating of grommets remains |
| UL type rating | UL type 12 (acc. to UL 50E) |
| Operating temperature | - 40°C to + 120°C - 40°F to + 248°F |
| Properties | Halogen-free, silicone-free |

Compatible with

| | |
|-------------------|---------|
| KT Cable grommets | 48 - 50 |
| QT Cable grommets | 66 |

1.21 Split Cable Entry Frames for the QT Grommet System



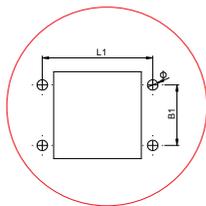
With the new version of the compact, split cable entry system KEL-QUICK icotek released a highly efficient and cost-effective possibility for pass-through and IP54 sealing of cables with or without connectors, conduits and pneumatic hoses.

Slit cable grommets of the QT series are used for routing lines with diameters of 1 - 15 mm within the KEL-QUICK. In addition, there are multi-hole grommets for up to 4 lines per slot and special grommets e.g. for ASI cables.

The cable entry system KEL-QUICK is an outstanding alternative to cable glands. Especially for applications that do not necessarily require standard-compliant strain relief acc. to EN 62444, the KEL-QUICK is the perfect solution.

After equipping the frame with the cables or hoses, the cover lid of the KEL-QUICK is simply snapped onto the frame. A fast and easy assembly is the biggest benefit when using the QUICK series - and when used with the KEL-SNAP frame, mounting without the need of tools is possible.

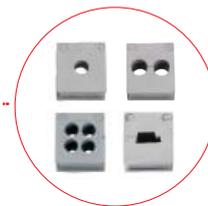
1.21



Cut-outs according to industrial standard dimensions



Warranty on pre-terminated cables remains



High cable density, wide variety



Fast and easy assembly

Split system

Product Range



KEL-QUICK



KEL-QUICK-E

Chapter Content 1.21



Split cable entry frames
for cable diameters up to 15 mm

KEL-QUICK 24 / KEL-QUICK 16 /
KEL-QUICK 10 / KEL-QUICK-B

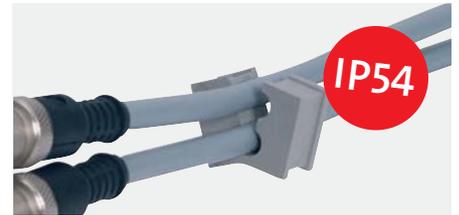
56



Split cable entry frames, single row
for cable diameters up to 15 mm

KEL-QUICK-E5 / KEL-QUICK-E4 /
KEL-QUICK-E3 / KEL-QUICK-E2

57



Grommets
for cables with/without connectors,
cable diameter range 1 - 15 mm

QT / QT ServiceBox

66 - 67

KEL-QUICK

Cable Entry Frames for Quick Assembly



Cover lid is simply snapped onto the frame.



Tool-free mounting with KEL-SNAP frame.



Slit QT grommets

Product Description

The KEL-QUICK range is a compact system to route and seal pre-terminated cables as well as conduits or pneumatic hoses utilising split QT grommets. After populating the entry frame with QT grommets and cables, the cover lid is snapped onto the frame without using tools. The KEL-QUICK frames match exactly the cut-out dimensions for 24-, 16- and 10-pin standard industrial connectors. The KEL-QUICK-B matches cut-out dimensions of 36x46 mm. KEL-QUICK frames can either be screw mounted or simply snapped into the KEL-SNAP frame. A flat rubber gasket is included in the shipment.

Advantages & Benefits

- Fast and easy assembly and when used with the KEL-SNAP frame, mounting without tools possible
- Warranty on pre-terminated cables remains
- Retrofits, repairs and maintenance can be done much more easily and quickly
- High cable density, wide variety of grommets

Specifications

| | |
|-----------------------|---|
| Material | Polyamide (PA) |
| Flame class | UL94-V0 |
| IP Rating | IP54, with gasket and correct selection of the cable grommets |
| Operating temperature | - 40°C to + 140°C (static) - 40°F to + 284°F (static) |
| Properties | Halogen-free, silicone-free |
| Mounting template | See Page 218 - 219 |
| Frame depth | 17 mm / 0.669 " |

Accessories

| | |
|--------------------------|-----------|
| QT Cable grommets | 66 |
| KEL-SNAP Mounting frames | 31 |
| KEL-EMC Grounding mounts | 138 - 140 |
| KDR Gland plates | 164 - 177 |
| FP Flange plates | 178 - 183 |
| MP Module plates | 174 - 175 |
| ST Plugs | 53 |

| Description | Type | Order No. | Cut-out [mm] | Grommets | PU |
|-------------|-----------------|-----------|----------------------------------|----------|----|
| | KEL-QUICK 24 10 | 42410 | 36 × 112 / 1.378 x 4.409 " | 10 QT | 10 |
| | KEL-QUICK 16 8 | 42418 | 36 × 86 / 1.378 x 3.386 " | 8 QT | 10 |
| | KEL-QUICK 10 6 | 42420 | 36 × 65 / 1.378 x 2.56 " | 6 QT | 10 |
| | KEL-QUICK-B4 | 42434 | 36 × 46 / 1.378 x 1.811 " | 4 QT | 10 |

KEL-QUICK-E

Cable Entry Frames for Quick Assembly



Cover lid is simply snapped onto the frame.



Slit QT grommets



| Description | Type | Order No. | Cut-out [mm] | Grommets | PU |
|-------------|--------------|-----------|----------------------------------|----------|----|
| | KEL-QUICK-E5 | 42424 | 24 × 112 / 0.945 × 4.409 " | 5 QT | 10 |
| | KEL-QUICK-E4 | 42423 | 24 × 86 / 0.945 × 3.386 " | 4 QT | 10 |
| | KEL-QUICK-E3 | 42422 | 24 × 65 / 0.945 × 2.56 " | 3 QT | 10 |
| | KEL-QUICK-E2 | 42421 | 24 × 43 / 0.945 × 1.693 " | 2 QT | 10 |

Product Description

The KEL-QUICK-E range is a compact single row system to route and seal pre-terminated cables as well as conduits or pneumatic hoses utilizing split QT grommets. The KEL-QUICK-E version is particularly suited for flat connectors. The small frame is ideal for applications with limited space.

After populating the entry frame with QT grommets and cables, the cover lid is snapped onto the frame without using tools. A flat rubber gasket is included in the shipment.

Advantages & Benefits

- Fast and easy assembly by locking the frame without tools
- Warranty on pre-terminated cables remains
- Retrofits, repairs and maintenance can be done much more easily and quickly
- High cable density, wide variety of grommets

Specifications

| | |
|-----------------------|---|
| Material | Polyamide (PA) |
| Flame class | UL94-Vo |
| IP Rating | IP54, with gasket and correct selection of the cable grommets |
| Operating temperature | - 40°C to + 140°C (static) - 40°F to + 284°F (static) |
| Properties | Halogen-free, silicone-free |
| Mounting template | See Page 218 - 219 |
| Frame depth | 17 mm / 0.669 " |

Accessories

| | |
|--------------------------|-----------|
| QT Cable grommets | 66 |
| KEL-EMC Grounding mounts | 138 - 140 |
| ST Plugs | 53 |

1.22 Split Cord Grips for the QT Grommet System

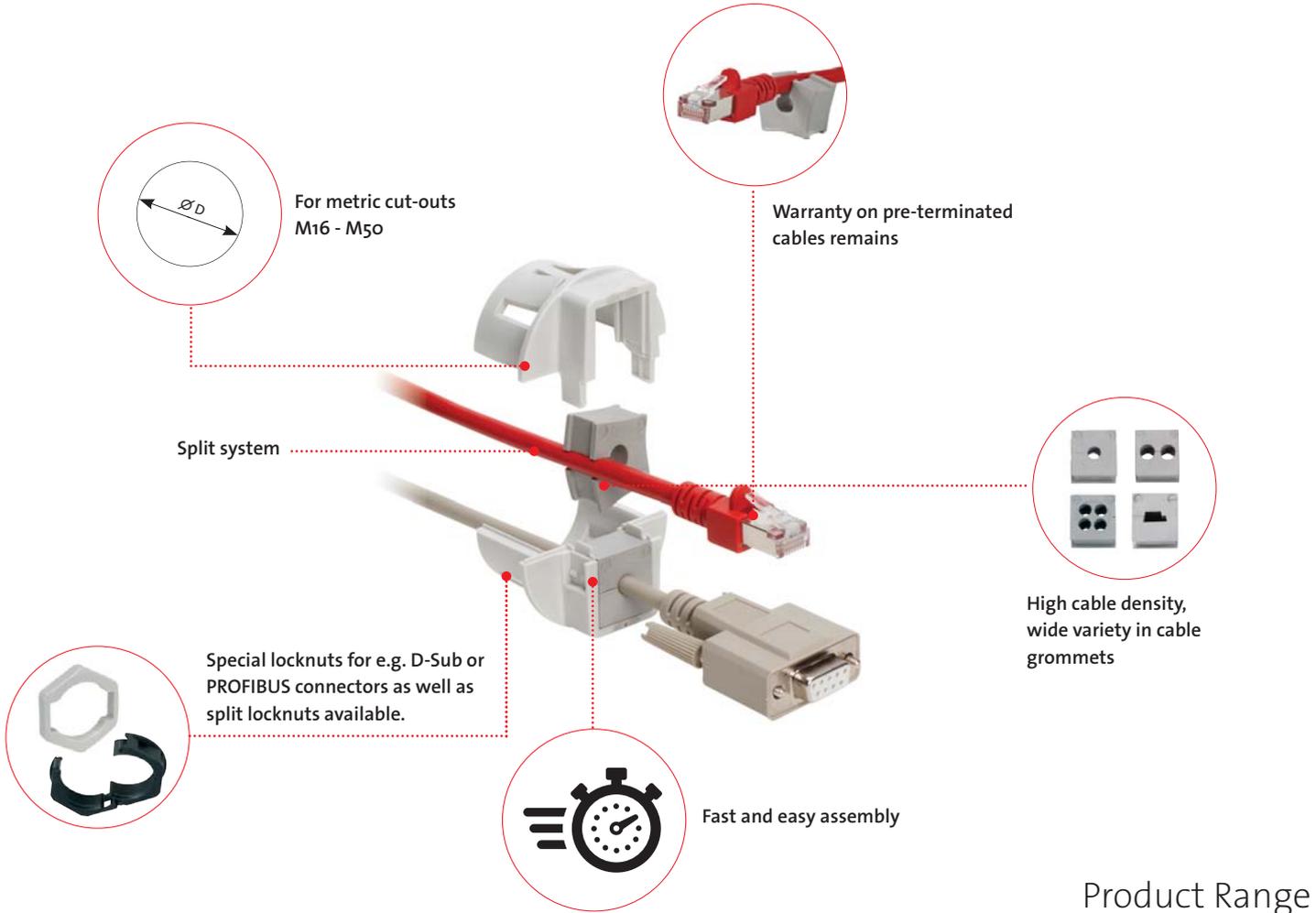


By using split QVT cord grips by icotek cables with or without connectors or complete cable harnesses with diameters from 1 to 15 mm can be quickly routed into enclosures, cabinets or machines and be sealed with IP54 rated ingress protection.

gland halves can be easily snapped together without the need of tools. The routed lines are securely sealed and held inside the grommets. To mount the cord grips either snap it into the round metric standard cut-out (sizes available from M16 to M50) or screw it with a hexagonal locknut. The mounting method is dependent on the model type.

The split system of the QVT cord grips enables quick and easy assembly which is great for retrofitting and maintenance. The cable is placed into the slit grommet which is set into one of the gland halves. Depending on the size of the cord grip one, two or four separate grommets can be installed. The two

1.22



Product Range



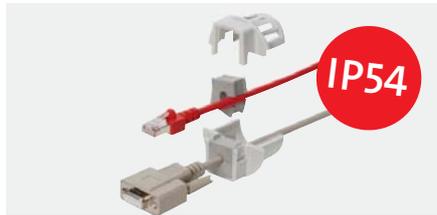
Chapter Content 1.22



Split cord grips
M16 - M50, for cable diameters up to 15 mm

QVT

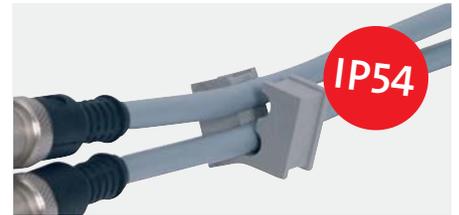
60



Split pluggable cord grips
M20 - M40, for cable diameters up to 15 mm

QVT-CLICK

61



Grommets
for cables with/without connectors,
cable diameter range 1 - 15 mm

QT / QT ServiceBox

66 - 67

1.22

QVT

Split Cord Grips



Product Description

QVT is a circular split frame for quick and easy installation of pre-terminated cables or complete cable harnesses. Because of its extremely compact design, the QVT range is especially suitable for small machines, devices and instruments.

Polyamide locknuts as well as a sealing ring are included in the shipment.

Advantages & Benefits

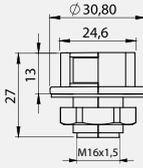
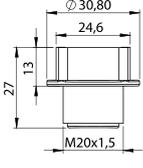
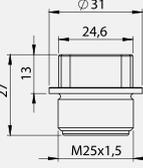
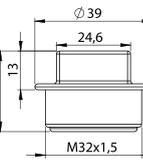
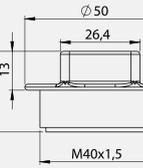
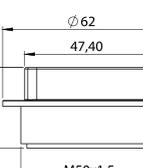
- Compact design
- Routing of pre-terminated cables
- Warranty on pre-terminated cables remains
- Retrofits, repairs and maintenance can be done much more easily and quickly
- Suitable for metric hole sizes
- Locknut is included

Specifications

| | |
|-----------------------|---|
| Material | Polycarbonate (PC) |
| Color | gray (similar RAL 7035) |
| Flame class | UL94-Vo |
| IP Rating | IP54, with gasket and correct selection of the cable grommets |
| Operating temperature | - 30°C to + 100°C (static) - 22°F to + 212°F (static) |
| Properties | Halogen-free, silicone-free |
| Cut-out dimension | Metric sizes |

Accessories

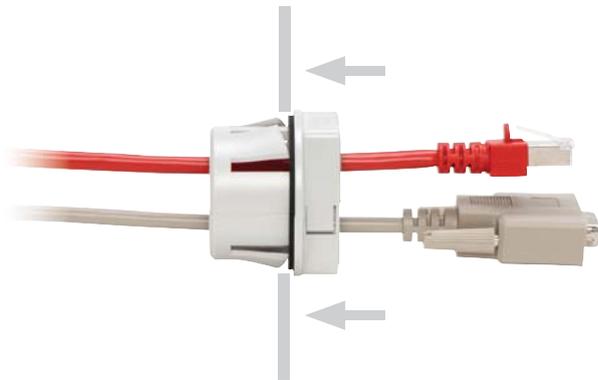
| | |
|-------------------|-----------|
| QT Cable grommets | 66 |
| KVT-EMC Brackets | 141 |
| KGM Locknuts | 188 - 189 |
| ST Plugs | 53 |

| Description | Type | Order No. | Cable Grommets | Thread Thread length | PU |
|---|----------|-----------|----------------|--------------------------------------|----|
|  | QVT 16* | 45692 | 1 × QT | M16 × 1.5 Length: 13 mm / 0.512 " | 10 |
|  | QVT 20 | 45695 | 1 × QT | M20 × 1.5 Length: 13 mm / 0.512 " | 10 |
|  | QVT 25 | 45702 | 1 × QT | M25 × 1.5 Length: 13 mm / 0.512 " | 10 |
|  | QVT 32 | 45711 | 1 × QT | M32 × 1.5 Length: 13 mm / 0.512 " | 10 |
|  | QVT 40 2 | 45715 | 2 × QT | M40 × 1.5 Length: 13 mm / 0.512 " | 10 |
|  | QVT 50 4 | 45722 | 4 × QT | M50 × 1.5 Length: 13 mm / 0.512 " | 10 |

* Max. cable diameter of 10 mm / 0.394 "

QVT-CLICK

Split Pluggable Cord Grips



1.22

| Description | Type | Order No. | Cable Grommets | Cut-out* diameter | PU |
|-------------|----------------|-----------|----------------|-------------------|----|
| | QVT-CLICK 25 | 45730 | 1 × QT | 25.5 mm / 1.004 " | 10 |
| | QVT-CLICK 32 | 45732 | 1 × QT | 32.5 mm / 1.28 " | 10 |
| | QVT-CLICK 40 2 | 45734 | 2 × QT | 40.5 mm / 1.594 " | 10 |
| | QVT-CLICK Tool | 61435 | Mounting tool | | 1 |

*Please consider any paint layers or powder coatings!

Product Description

QVT-CLICK is a circular split frame for quick and easy installation of pre-terminated cables or complete cable harnesses. The QVT-CLICK can be assembled without tools from the front side of the enclosure wall. Because of its extremely compact design, the QVT-CLICK range is especially suitable for small machines, devices and instruments. A sealing ring is included in the shipment.

The QVT-CLICK Tool for quick and easy mounting.

Order No. 61435 (PU: 1)



Advantages & Benefits

- Fast and easy mounting from the front side
- Compact design
- Routing of pre-terminated cables
- Retrofits, repairs and maintenance can be done much more easily and quickly
- Warranty on pre-terminated cables remains
- Fast and easy assembly
- For wall thickness 1.5 - 2.5 mm

Specifications

| | |
|-----------------------|---|
| Material | Polycarbonate (PC) |
| Color | gray (similar RAL 7035) |
| Flame class | UL94-V0 |
| IP Rating | IP54, with gasket and correct selection of the cable grommets |
| Operating temperature | - 30°C to + 100°C (static) - 22°F to + 212°F (static) |
| Properties | Halogen-free, silicone-free |

Accessories

| | |
|-------------------|-----------------|
| QT Cable grommets | 66 |
| QVT-CLICK Tool | Order No. 61435 |
| ST Plugs | 53 |

1.23 Split Cable Entry Plates for the QT Grommet System



KEL-QTA are puggable and split IP54 cable entry plates for wall thicknesses from 1,5 to 4 mm. icotek offers several versions for rectangular standard cut-outs as well as for round metric cut-outs. The QTA system offers a large size variety.

Slit cable grommets of the QT series are used for routing pre-connectorized lines with diameters of 1 - 15 mm within the KEL-QTA. In addition, there are multi-hole grommets for up to 4 lines per slot and special grommets e.g. for ASI cables.

KEL-QTA enable cable routing with or without preassembled connectors. Some types offer a combination of membranes for cable pass-through and the QT grommet system.

1.23

For metric cut-outs M20 - M50

Warranty on pre-terminated cables remains

Split system

High cable density, wide variety in cable grommets

Fast and easy assembly

Cut-outs according to industrial standard dimensions

Product Range



KEL-QTA 24/10/-B

KEL-QTA 32/50

KEL-QTE 20

Chapter Content 1.23



Split cable entry plates
pluggable, for cable diameters up to 15 mm

KEL-QTA 24 / KEL-QTA 10 / KEL-QTA-B /
KEL-QTA round

64



Split cable entry plates
pluggable, for cable diameters up to 5.2 mm

KEL-QTE

65



Grommets
for cables with/without connectors,
cable diameter range 1 - 15 mm

QT / QT ServiceBox

66 - 67

KEL-QTA

Split Cable Entry Plates



Product Description

The KEL-QTA easily routes pre-terminated cables, multi-conductors, hoses or conduits without using any tools for assembly.

Advantages & Benefits

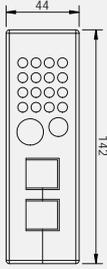
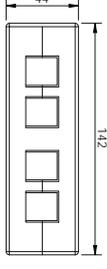
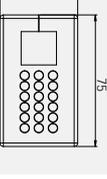
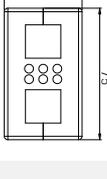
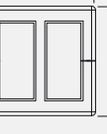
- Quick assembly without tools
- High cable density by using multi-position grommets
- Simple assembly and disassembly in case of change or service
- Routing of cables with and without connectors in a high density
- Suitable for standard industrial connector cut-outs

Specifications

| | |
|-----------------------|---|
| Material | Elastomer |
| Flame class | UL94-V0 |
| IP Rating | IP54, with correct selection of the cable grommets QT |
| Operating temperature | - 40°C to + 90°C (static) - 40°F to + 194°F (static) |
| Properties | Halogen-free, silicone-free |
| Frame depth | 17 mm / 0.669 " |
| Type A: | For wall thickness 1.5 - 2.5 mm / 0.059 - 0.098 " |
| Type B: | For wall thickness 2.8 - 4 mm / 0.11 - 0.157 " |

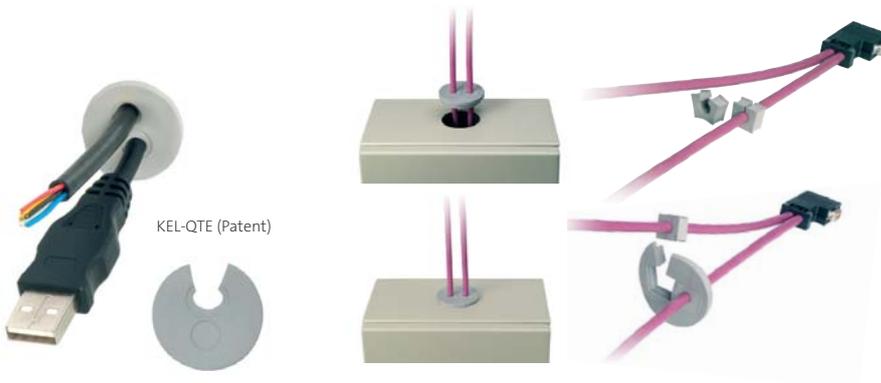
Accessories

| | |
|-------------------|-----------|
| QT Cable grommets | 66 |
| ST-B Plugs | 85 |
| FP Flange plates | 178 - 183 |

| Description | Type | Order No. Type A | Order No. Type B | Cut-out [mm] | Cables | PU |
|---|---------------------|------------------|------------------|----------------------------|---|----|
|  | KEL-QTA 24 2 -DP 18 | 43642 | 43643 | 112 x 36 / 4.409 x 1.378 " | pre-terminated 2x 1 - 15 mm / 0.039 - 0.591 " without connector 16x max. 7 mm / 0.276 " 1x max. 12 mm / 0.472 " 1x max. 16 mm / 0.63 " | 10 |
|  | KEL-QTA 24 4 | 43644 | 43645 | 112 x 36 / 4.409 x 1.378 " | pre-terminated 4x 1 - 15 mm / 0.039 - 0.591 " | 10 |
|  | KEL-QTA 10 1 -DP 18 | 43655 | 43658 | 65 x 36 / 2.56 x 1.378 " | pre-terminated 1x 1 - 15 mm / 0.039 - 0.591 " without connector 18x max. 5 mm / 0.197 " | 10 |
|  | KEL-QTA 10 2 -DP 6 | 43656 | 43659 | 65 x 36 / 2.56 x 1.378 " | pre-terminated 2x 1 - 15 mm / 0.039 - 0.591 " without connector 6x max. 5 mm / 0.197 " | 10 |
|  | KEL-QTA-B4 | 43660 | - | 46 x 46 / 1.811 x 1.811 " | pre-terminated 4x 1 - 15 mm / 0.039 - 0.591 " | 10 |

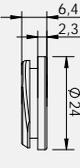
KEL-QTA | KEL-QTE

Split Cable Entry Plates



IP54

1.23

| Description | Type | Order No. Type A | Order No. Type B | Cut-out [mm] | Cables | | PU |
|---|----------------|------------------|------------------|--------------|---|--------------------------------|----|
| | | | | | pre-terminated | non-pre-term. | |
|  | KEL-QTA 32 | 43632 | 43636 | ø 32 | 1x 1 - 15 mm / 0.039 - 0.591 " | - | 10 |
|  | KEL-QTA 50 | 43622 | 43626 | ø 50 | 2x 1 - 15 mm / 0.039 - 0.591 " | - | 10 |
|  | KEL-QTE 20 2.5 | 43412 | - | ø 20 | 1x 2.6 - 3.2 mm / 0.102 - 0.126 " | 1x max. 5.2 mm / | 10 |
|  | KEL-QTE 20 3 | 43413 | - | ø 20 | 1x 3.1 - 3.8 mm / 0.122 - 0.15 " | 1x max. 5.2 mm / 0.205 " | 10 |
|  | KEL-QTE 20 4 | 43414 | - | ø 20 | 1x 3.8 - 4.8 mm / 0.15 - 0.189 " | 1x max. 5.2 mm / 0.205 " | 10 |
|  | KEL-QTE 20 5 | 43415 | - | ø 20 | 1x 4.7 - 5.6 mm / 0.185 - 0.22 " | 1x max. 5.2 mm / 0.205 " | 10 |

Product Description

The KEL-QTA easily routes pre-terminated cables, multi-conductors, hoses or conduits without using any tools for assembly.

Advantages & Benefits

- Fast and easy assembly without tools
- Increased cable density by using multi-position grommets
- Simple assembly and disassembly in case of change or service
- Routing of cables with and without connectors in a high density

Specifications

| | |
|-----------------------|--|
| Material | Elastomer |
| Flame class | UL94-Vo |
| IP Rating (QTA) | IP54, with correct selection of the cable grommets (QT single) |
| Operating temperature | - 40°C to + 90°C (static) - 40°F to + 194°F (static) |
| Properties | Halogen-free, silicone-free |
| Cut-out dimension | Metric sizes |

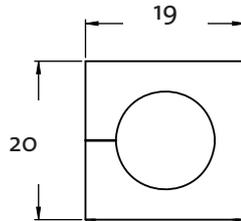
- Type A: For wall thickness 1.5 - 2.5 mm / 0.059 - 0.098 "
- Type B: For wall thickness 2.8 - 4 mm / 0.11 - 0.157 "

Accessories

| | |
|-------------------|----|
| QT Cable grommets | 66 |
| ST Plugs | 53 |

QT

Cable Grommets



1.2

Product Description

The QT range supports cable diameters from 1 to 15 mm. They are used with cable entry frames and cord grips of product groups 1.21, 1.22 & 1.23.

Assembly Note

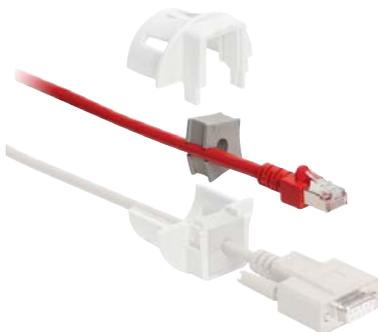
When installing the grommets, the flat side should be facing the middle of the frame. This allows the flat sides of adjacent grommets to match up and provide a secure seal.

Specifications

| | |
|-----------------------|---|
| Material | Elastomer |
| Flame class | UL94-Vo |
| IP Rating | IP54 |
| Operating temperature | - 40°C to + 90°C (static) - 40°F to + 194°F (static) |
| Properties | Halogen-free, silicone-free |

Accessories

ST Plugs 53



Grommet QT in combination with QVT-CLICK

| Description | Type | Order No. gray | Clamping range | PU |
|-------------|----------|----------------|------------------------------|----|
| QT B | QT B | 42540 | Blank grommet | 10 |
| | QT 1 | 42501 | 1 - 2 mm / 0.039 - 0.079 " | 10 |
| | QT 2 | 42502 | 2 - 3 mm / 0.079 - 0.118 " | 10 |
| QT | QT 3 | 42503 | 3 - 4 mm / 0.118 - 0.157 " | 10 |
| | QT 4 | 42504 | 4 - 5 mm / 0.157 - 0.197 " | 10 |
| | QT 5 | 42505 | 5 - 6 mm / 0.197 - 0.236 " | 10 |
| | QT 6 | 42506 | 6 - 7 mm / 0.236 - 0.276 " | 10 |
| | QT 7 | 42507 | 7 - 8 mm / 0.276 - 0.315 " | 10 |
| | QT 8 | 42508 | 8 - 9 mm / 0.315 - 0.354 " | 10 |
| | QT 9 | 42509 | 9 - 10 mm / 0.354 - 0.394 " | 10 |
| | QT 10 | 42510 | 10 - 11 mm / 0.394 - 0.433 " | 10 |
| | QT 11 | 42511 | 11 - 12 mm / 0.433 - 0.472 " | 10 |
| QT-ASI | QT 12 | 42512 | 12 - 13 mm / 0.472 - 0.512 " | 10 |
| | QT 13 | 42513 | 13 - 14 mm / 0.512 - 0.551 " | 10 |
| | QT 14 | 42514 | 14 - 15 mm / 0.551 - 0.591 " | 10 |
| | QT-ASI 1 | 42573 | 1x ASI-cable | 10 |
| | QT-ASI 2 | 42574 | 2x ASI-cable | 10 |
| QT tele | QT tele | 42575 | Telephone cable | 10 |
| | QT 2 3 | 42566 | 2x ø 3 mm / 0.118 " | 10 |
| | QT 2 4 | 42568 | 2x ø 4 mm / 0.157 " | 10 |
| | QT 2 5 | 42570 | 2x ø 5 mm / 0.197 " | 10 |
| QT 2 x | QT 2 5.5 | 42571 | 2x ø 5.5 mm / 0.217 " | 10 |
| | QT 2 6 | 42572 | 2x ø 6 mm / 0.236 " | 10 |
| | QT 2 6.5 | 42576 | 2x ø 6.5 mm / 0.256 " | 10 |
| | QT 2 7 | 42578 | 2x ø 7 mm / 0.276 " | 10 |
| | QT 4 3 | 42580 | 4x ø 3 mm / 0.118 " | 10 |
| QT 4 x | QT 4 4 | 42582 | 4x ø 4 mm / 0.157 " | 10 |
| | QT 4 4.5 | 42583 | 4x ø 4.5 mm / 0.177 " | 10 |
| | QT 4 5 | 42584 | 4x ø 5 mm / 0.197 " | 10 |
| | QT 4 5.5 | 42585 | 4x ø 5.5 mm / 0.217 " | 10 |
| | QT 4 6 | 42586 | 4x ø 6 mm / 0.236 " | 10 |

QT ServiceBox

Service Box for Cable Grommets



1.2

Product Description

Convenient - everything available right away!

The QT ServiceBox is perfect for installations and service calls. It ensures your QT grommets are readily available.

Order No. 88005

Content*

Cable grommets:

- 210 QT for cables 1 - 15 mm / 0.039 - 0.591 "
- 10 QTB blank grommets

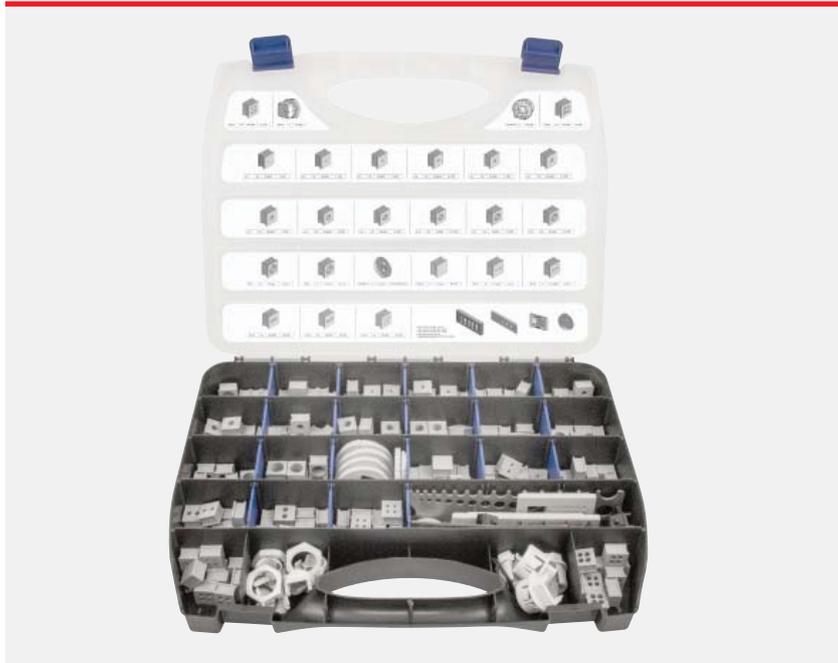
Cable entry components:

- 5 KEL-QTA 50 A cable entry plates
- 1 KEL-QTA 32 A cable entry plate
- 1 KEL-QTA 24|2-DP 18 A cable entry plate
- 1 KEL-QTA 10|1-DP 18 A cable entry plate
- 1 KEL-QUICK 24|10 cable entry frame
- 1 QVT 25 split cable gland
- 1 QVT-CLICK 32 split cable gland

Accessories:

- 1 Cable template

* Subject to alterations



KMS Cable Template



The correct size of the QT grommets can easily be determined by using the cable template (material: stainless steel V2A).

- Determining the diameter of the cable using the cable template
- Selecting the QT grommets according to the data on the cable template

Cable templates can also be ordered separately. **Order-No. 39800**

KEL-BES

Brush Plate for Cable Pass-Through



Suitable for control panel construction ...



... as well as for energy and building technology

1.3

Product Description

Cable entry frames KEL-BES for routing cables into server racks, control panels and electrical enclosures. KEL-BES is also an ideal solution for entry and exit of cables that are routed inside raised floors, e.g. in computer centers. The brush plates can either be mounted via screws or via expanding rivets.

The KEL-BES frames match exactly the cut-out dimensions for 10-, 16- or 24-pin standard industrial connectors.

Advantages & Benefits

- Fast and easy assembly (optional without screws)
- Versatile utilization
- Allows reduced airflow while filtering out dust, hair and larger particulate matter
- Visual screening
- Protects cables against wear due to sharp edges of the cut-out

Specifications

Material **Frame, rectangular: Polyamide (PA) (Flame class UL94-V0)**
 Brushes: Polyamide (PA)
 Brush profile: carbon steel, zinc plated

Operating temperature **- 20°C to + 90°C**
 - 4°F to + 194°F

Properties **Halogen-free, silicone-free**

Frame depth **10 mm / 0.394"**

Accessories

KEL-EMC-PF Cable collectors 139

| Description | Type | Order No. | Cut-out | PU |
|-------------|------------------|-----------|--|-----|
| | KEL-BES 24 | 51515 | 36 x 112 mm / 1.378 x 4.409" | 10 |
| | KEL-BES 16 | 51510 | 36 x 86 mm / 1.378 x 3.386" | 10 |
| | KEL-BES 10 | 51505 | 36 x 65 mm / 1.378 x 2.56" | 10 |
| | Expanding rivets | 99153 | For wall thickness 1-4 mm / 0.039 - 0.157" | 100 |

KEL-BES-S

Split Brush Plate for Cable Pass-Through



Screw mounting or mounting via expanding rivets possible.



Round version with M50 thread for locknut or snap-in mounting.



| Description | Type | Order No. | Cut-out | PU |
|-------------|--|-----------|---|-----|
| | KEL-BES-S 24 | 51522 | 36 x 112 mm 1.378 x 4.409 " | 10 |
| | NEW KEL-BES-S 24 with expanding rivets | 51522.002 | 36 x 112 mm 1.378 x 4.409 " | 10 |
| | KEL-BES-S 16 | 51521 | 36 x 86 mm 1.378 x 3.386 " | 10 |
| | NEW KEL-BES-S 16 with expanding rivets | 51521.002 | 36 x 86 mm 1.378 x 3.386 " | 10 |
| | KEL-BES-S 10 | 51520 | 36 x 65 mm 1.378 x 2.559 " | 10 |
| | NEW KEL-BES-S 10 with expanding rivets | 51520.002 | 36 x 65 mm 1.378 x 2.559 " | 10 |
| | Expanding rivets | 99153 | For wall thickness 1-4 mm / 0.039 - 0.157 " | 100 |
| | KEL-BES-S 50 | 51540 | M50 x 1.5 Snap-in function for wall thickness 1 - 2.5 mm / 0.039 - 0.098 " | 10 |
| | | | | |
| | KEL-BES-S 32 | 51538 | M32 x 1.5 Snap-in function for wall thickness 1 - 2.5 mm / 0.039 - 0.098 " | 10 |
| | | | | |

Product Description

Split brush plates KEL-BES-S for routing cables into server racks, control panels and electrical enclosures. The brush plates can either be mounted via screws or via expanding rivets. Due to the split frame the KEL-BES-S can also be subsequently installed around the routed cables. The KEL-BES-S frames match exactly the cut-out dimensions for 10-, 16- or 24-pin standard industrial connectors.

For round metric cut-outs M32/M50 icotek offers the split KEL-BES-S 32/50. It can be either directly snapped into the cut-out or screwed with a locknut.

Advantages & Benefits

- Fast and easy assembly (optional without screws)
- Subsequent assembly possible
- Versatile utilization
- Allows reduced airflow while filtering out dust, hair and larger particulate matter
- Visual screening
- Protects cables against wear due to sharp edges of the cut-out

Specifications

| | |
|-----------------------|--|
| Material | Frame, rectangular: Polyamide (PA) Frame, round: Polycarbonate (PC) (Flame class UL94-V0) Brushes: Polyamide (PA) Brush profile: carbon steel, zinc plated |
| Operating temperature | - 20°C to + 90°C - 4°F to + 194°F |
| Properties | Halogen-free, silicone-free |
| Frame depth | 10 mm / 0.394 " |

Accessories

KEL-EMC-PF Cable collectors 139