

# KEL-ER-BS cable entry frames with fire penetration seals (EN 45545-3)

for cables with connectors / IP66 / UL Type 12/4X\*



icotek cable entry frames with fire penetration seals, approved for use in [railway technology](#) (meeting the standards EN 45545-2, EN 45545-3 and EN 1363-1).

Split cable entry system for routing and sealing cables with connectors, providing an IP66 / UL type 12/4X\* rating and strain relief for cable diameters from 1 to 16 mm (single-hole grommets KT 1 - 15) and 16 to 35 mm (single-hole grommets KT 16 - 34).

The cable entry system is easy to install. [Cable grommets](#) are placed into compartments and are securely fixed to the frame during assembly.

The KEL-ER-BS frame matches exactly the cut-out dimensions for 10-, 16- and 24-pin standard industrial connectors. The KEL-ER-B-BS frame matches exactly the cut-out dimensions of 46 x 46 mm measuring instruments. The single-row version KEL-ER-E-BS 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.

The intumescent (foaming) IFPS fire penetration seals which are mounted at the backside of the cable entry components consist of expandable graphite and increase their volume by a multiple in case of a fire.

This creates a barrier which prevents a penetration of flames and high heat from one room into another for the longest possible period.

\*4X for indoor use only

IP54

UL TYPE 4X\*

UV ISO 4892-2A

IP55

RoHS compliant

IP64

HL3 EN 45545-2

REACH COMPLIANCE

IP65

E45 E130 EN 45545-3

Made in Germany

IP66

EN 61373

UL TYPE 12

ECOLAB certified

## Specifications

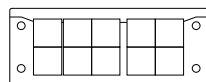
<b>IP rating (EN 60529)</b>	IP54, IP55, IP64, IP65, IP66
<b>UL Type (UL 50E)</b>	UL Type 12, UL Type 4X*
<b>Material</b>	Polyamide
<b>Flame class</b>	UL94-V0, self-extinguishing
<b>Operating temperature</b>	-40 C° to 140 C°
<b>Properties</b>	silicone free, halogen free, intumescent (foaming), anti-corrosive (V2A versions)
<b>Mounting options</b>	Screw type mounting

## Advantages & benefits

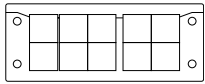
- Approved for use in railway technology (EN 45545-2, EN 45545-3, EN 1363-1 and EN 61373)
- Only one fire penetration seal per cable entry component required
- High classifications E45 / EI30
- Warranty on pre-terminated cables remains
- Retrofits, repairs and maintenance can be done much more easily and quickly
- High cable density, wide variety of grommets
- Strain relief according to EN 62444
- High stability, vibration resistant
- Space-saving shape
- Perfect for routing D-Sub connectors

## Product types & sizes

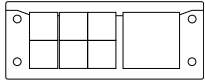
### KEL-ER 24|10-BS



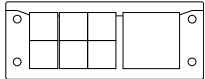
Part No.	<b>99300.006</b>	Height	<b>17 mm</b>
EAN	<b>4251269318467</b>	Mounting height	<b>17 mm</b>
Package quantity	<b>5</b>	Cut-out size	<b>112 x 36 mm</b>
For max. no. of cables	<b>10</b>	No. of screw holes	<b>4</b>
Max. cable diameter	<b>16 mm</b>	Diam. of screw holes	<b>5,8 mm</b>
Length	<b>147 mm</b>	Screw material	<b>Mild steel, galvanically zinc plated</b>
Width	<b>58 mm</b>	Suitable for grommets	<b>10 x KT small</b>

**KEL-ER 24|10-BS V2A**

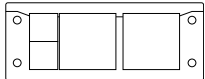
Part No.	<b>99300.206</b>	Height	<b>17 mm</b>
EAN	<b>4251269318818</b>	Mounting height	<b>17 mm</b>
Package quantity	<b>5</b>	Cut-out size	<b>112 × 36 mm</b>
For max. no. of cables	<b>10</b>	No. of screw holes	<b>4</b>
Max. cable diameter	<b>16 mm</b>	Diam. of screw holes	<b>5,8 mm</b>
Length	<b>147 mm</b>	Screw material	<b>Stainless steel (V2A)</b>
Width	<b>58 mm</b>	Suitable for grommets	<b>10 x KT small</b>

**KEL-ER 24|7-BS**

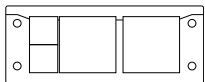
Part No.	<b>99300.005</b>	Height	<b>17 mm</b>
EAN	<b>4251269318450</b>	Mounting height	<b>17 mm</b>
Package quantity	<b>5</b>	Cut-out size	<b>112 × 36 mm</b>
For max. no. of cables	<b>7</b>	No. of screw holes	<b>4</b>
Max. cable diameter	<b>35 mm</b>	Diam. of screw holes	<b>5,8 mm</b>
Length	<b>147 mm</b>	Screw material	<b>Mild steel, galvanically zinc plated</b>
Width	<b>58 mm</b>	Suitable for grommets	<b>6 x KT small 1 x KT large</b>

**KEL-ER 24|7-BS V2A**

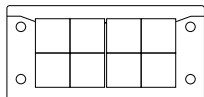
Part No.	<b>99300.205</b>	Height	<b>17 mm</b>
EAN	<b>4251269318801</b>	Mounting height	<b>17 mm</b>
Package quantity	<b>5</b>	Cut-out size	<b>112 × 36 mm</b>
For max. no. of cables	<b>7</b>	No. of screw holes	<b>4</b>
Max. cable diameter	<b>35 mm</b>	Diam. of screw holes	<b>5,8 mm</b>
Length	<b>147 mm</b>	Screw material	<b>Stainless steel (V2A)</b>
Width	<b>58 mm</b>	Suitable for grommets	<b>6 x KT small 1 x KT large</b>

**KEL-ER 24|4-BS**

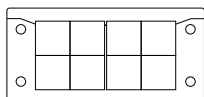
Part No.	<b>99300.004</b>	Height	<b>17 mm</b>
EAN	<b>4251269318443</b>	Mounting height	<b>17 mm</b>
Package quantity	<b>5</b>	Cut-out size	<b>112 × 36 mm</b>
For max. no. of cables	<b>4</b>	No. of screw holes	<b>4</b>
Max. cable diameter	<b>35 mm</b>	Diam. of screw holes	<b>5,8 mm</b>
Length	<b>147 mm</b>	Screw material	<b>Mild steel, galvanically zinc plated</b>
Width	<b>58 mm</b>	Suitable for grommets	<b>2 x KT small 2 x KT large</b>

**KEL-ER 24|4-BS V2A**

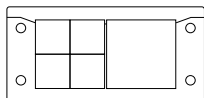
Part No.	<b>99300.204</b>	Height	<b>17 mm</b>
EAN	<b>4251269318795</b>	Mounting height	<b>17 mm</b>
Package quantity	<b>5</b>	Cut-out size	<b>112 × 36 mm</b>
For max. no. of cables	<b>4</b>	No. of screw holes	<b>4</b>
Max. cable diameter	<b>35 mm</b>	Diam. of screw holes	<b>5,8 mm</b>
Length	<b>147 mm</b>	Screw material	<b>Stainless steel (V2A)</b>
Width	<b>58 mm</b>	Suitable for grommets	<b>2 x KT small 2 x KT large</b>

**KEL-ER 16|8-BS**

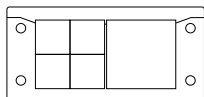
Part No.	<b>99301.006</b>	Height	<b>17 mm</b>
EAN	<b>4251269318528</b>	Mounting height	<b>17 mm</b>
Package quantity	<b>5</b>	Cut-out size	<b>86 × 36 mm</b>
For max. no. of cables	<b>8</b>	No. of screw holes	<b>4</b>
Max. cable diameter	<b>16 mm</b>	Diam. of screw holes	<b>5,8 mm</b>
Length	<b>120 mm</b>	Screw material	<b>Mild steel, galvanically zinc plated</b>
Width	<b>58 mm</b>	Suitable for grommets	<b>8 x KT small</b>

**KEL-ER 16|8-BS V2A**

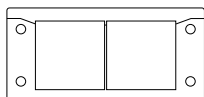
Part No.	<b>99301.206</b>	Height	<b>17 mm</b>
EAN	<b>4251269318870</b>	Mounting height	<b>17 mm</b>
Package quantity	<b>5</b>	Cut-out size	<b>86 × 36 mm</b>
For max. no. of cables	<b>8</b>	No. of screw holes	<b>4</b>
Max. cable diameter	<b>16 mm</b>	Diam. of screw holes	<b>5,8 mm</b>
Length	<b>120 mm</b>	Screw material	<b>Stainless steel (V2A)</b>
Width	<b>58 mm</b>	Suitable for grommets	<b>8 x KT small</b>

**KEL-ER 16|5-BS**

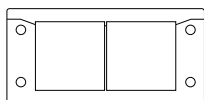
Part No.	<b>99301.005</b>	Height	<b>17 mm</b>
EAN	<b>4251269318511</b>	Mounting height	<b>17 mm</b>
Package quantity	<b>5</b>	Cut-out size	<b>86 × 36 mm</b>
For max. no. of cables	<b>5</b>	No. of screw holes	<b>4</b>
Max. cable diameter	<b>35 mm</b>	Diam. of screw holes	<b>5,8 mm</b>
Length	<b>120 mm</b>	Screw material	<b>Mild steel, galvanically zinc plated</b>
Width	<b>58 mm</b>	Suitable for grommets	<b>4 x KT small 1 x KT large</b>

**KEL-ER 16|5-BS V2A**

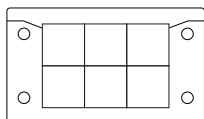
Part No.	<b>99301.205</b>	Height	<b>17 mm</b>
EAN	<b>4251269318863</b>	Mounting height	<b>17 mm</b>
Package quantity	<b>5</b>	Cut-out size	<b>86 × 36 mm</b>
For max. no. of cables	<b>5</b>	No. of screw holes	<b>4</b>
Max. cable diameter	<b>35 mm</b>	Diam. of screw holes	<b>5,8 mm</b>
Length	<b>120 mm</b>	Screw material	<b>Stainless steel (V2A)</b>
Width	<b>58 mm</b>	Suitable for grommets	<b>4 x KT small 1 x KT large</b>

**KEL-ER 16|2-BS**

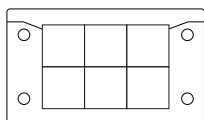
Part No.	<b>99301.004</b>	Height	<b>17 mm</b>
EAN	<b>4251269318504</b>	Mounting height	<b>17 mm</b>
Package quantity	<b>5</b>	Cut-out size	<b>86 × 36 mm</b>
For max. no. of cables	<b>2</b>	No. of screw holes	<b>4</b>
Max. cable diameter	<b>35 mm</b>	Diam. of screw holes	<b>5,8 mm</b>
Length	<b>120 mm</b>	Screw material	<b>Mild steel, galvanically zinc plated</b>
Width	<b>58 mm</b>	Suitable for grommets	<b>2 x KT large</b>

**KEL-ER 16|2-BS V2A**

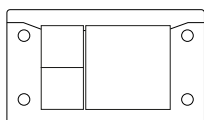
Part No.	<b>99301.204</b>	Height	<b>17 mm</b>
EAN	<b>4251269318856</b>	Mounting height	<b>17 mm</b>
Package quantity	<b>5</b>	Cut-out size	<b>86 × 36 mm</b>
For max. no. of cables	<b>2</b>	No. of screw holes	<b>4</b>
Max. cable diameter	<b>35 mm</b>	Diam. of screw holes	<b>5,8 mm</b>
Length	<b>120 mm</b>	Screw material	<b>Stainless steel (V2A)</b>
Width	<b>58 mm</b>	Suitable for grommets	<b>2 x KT large</b>

**KEL-ER 10|6-BS**

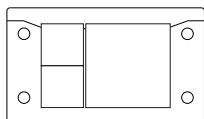
Part No.	<b>99306.003</b>	Height	<b>17 mm</b>
EAN	<b>4251269320668</b>	Mounting height	<b>17 mm</b>
Package quantity	<b>5</b>	Cut-out size	<b>65 × 36 mm</b>
For max. no. of cables	<b>6</b>	No. of screw holes	<b>4</b>
Max. cable diameter	<b>16 mm</b>	Diam. of screw holes	<b>5,8 mm</b>
Length	<b>98 mm</b>	Screw material	<b>Mild steel, galvanically zinc plated</b>
Width	<b>58 mm</b>	Suitable for grommets	<b>6 x KT small</b>

**KEL-ER 10|6-BS V2A**

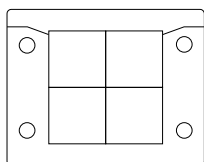
Part No.	<b>99306.203</b>	Height	<b>17 mm</b>
EAN	<b>4251269321948</b>	Mounting height	<b>17 mm</b>
Package quantity	<b>5</b>	Cut-out size	<b>65 × 36 mm</b>
For max. no. of cables	<b>6</b>	No. of screw holes	<b>4</b>
Max. cable diameter	<b>16 mm</b>	Diam. of screw holes	<b>5,8 mm</b>
Length	<b>98 mm</b>	Screw material	<b>Stainless steel (V2A)</b>
Width	<b>58 mm</b>	Suitable for grommets	<b>6 x KT small</b>

**KEL-ER 10|3-BS**

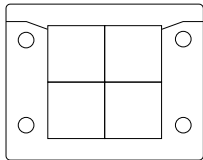
Part No.	<b>99306.004</b>	Height	<b>17 mm</b>
EAN	<b>4251269320675</b>	Mounting height	<b>17 mm</b>
Package quantity	<b>5</b>	Cut-out size	<b>65 × 36 mm</b>
For max. no. of cables	<b>3</b>	No. of screw holes	<b>4</b>
Max. cable diameter	<b>35 mm</b>	Diam. of screw holes	<b>5,8 mm</b>
Length	<b>98 mm</b>	Screw material	<b>Mild steel, galvanically zinc plated</b>
Width	<b>58 mm</b>	Suitable for grommets	<b>2 x KT small</b> <b>1 x KT large</b>

**KEL-ER 10|3-BS V2A**

Part No.	<b>99306.204</b>	Height	<b>17 mm</b>
EAN	<b>4251269321955</b>	Mounting height	<b>17 mm</b>
Package quantity	<b>5</b>	Cut-out size	<b>65 × 36 mm</b>
For max. no. of cables	<b>3</b>	No. of screw holes	<b>4</b>
Max. cable diameter	<b>35 mm</b>	Diam. of screw holes	<b>5,8 mm</b>
Length	<b>98 mm</b>	Screw material	<b>Stainless steel (V2A)</b>
Width	<b>58 mm</b>	Suitable for grommets	<b>2 x KT small</b> <b>1 x KT large</b>

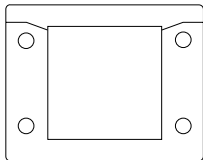
**KEL-ER-B4-BS**

Part No.	<b>99305.004</b>	Height	<b>17 mm</b>
EAN	<b>4251269320637</b>	Mounting height	<b>17 mm</b>
Package quantity	<b>5</b>	Cut-out size	<b>46 × 46 mm</b>
For max. no. of cables	<b>4</b>	No. of screw holes	<b>4</b>
Max. cable diameter	<b>16 mm</b>	Diam. of screw holes	<b>5,8 mm</b>
Length	<b>73 mm</b>	Screw material	<b>Mild steel, galvanically zinc plated</b>
Width	<b>58 mm</b>	Suitable for grommets	<b>4 x KT small</b>

**KEL-ER-B4-BS V2A**

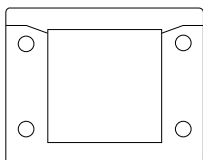
Part No. **99305.204**  
 EAN **4251269321917**  
 Package quantity **5**  
 For max. no. of cables **4**  
 Max. cable diameter **16 mm**  
 Length **73 mm**  
 Width **58 mm**

Height **17 mm**  
 Mounting height **17 mm**  
 Cut-out size **46 × 46 mm**  
 No. of screw holes **4**  
 Diam. of screw holes **5,8 mm**  
 Screw material **Stainless steel (V2A)**  
 Suitable for grommets **4 x KT small**

**KEL-ER-B1-BS**

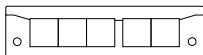
Part No. **99305.003**  
 EAN **4251269320620**  
 Package quantity **5**  
 For max. no. of cables **1**  
 Max. cable diameter **35 mm**  
 Length **73 mm**  
 Width **58 mm**

Height **17 mm**  
 Mounting height **17 mm**  
 Cut-out size **46 × 46 mm**  
 No. of screw holes **4**  
 Diam. of screw holes **5,8 mm**  
 Screw material **Mild steel, galvanically zinc plated**  
 Suitable for grommets **1 x KT large  
0 x KT small**

**KEL-ER-B1-BS V2A**

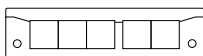
Part No. **99305.203**  
 EAN **4251269321900**  
 Package quantity **5**  
 For max. no. of cables **1**  
 Max. cable diameter **35 mm**  
 Length **73 mm**  
 Width **58 mm**

Height **17 mm**  
 Mounting height **17 mm**  
 Cut-out size **46 × 46 mm**  
 No. of screw holes **4**  
 Diam. of screw holes **5,8 mm**  
 Screw material **Stainless steel (V2A)**  
 Suitable for grommets **1 x KT large  
0 x KT small**

**KEL-ER-E5-BS**

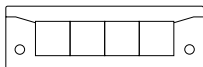
Part No. **99302.002**  
 EAN **4251269318542**  
 Package quantity **5**  
 For max. no. of cables **5**  
 Max. cable diameter **16 mm**  
 Length **147 mm**  
 Width **39 mm**

Height **17 mm**  
 Mounting height **17 mm**  
 Cut-out size **112 × 24 mm**  
 No. of screw holes **2**  
 Diam. of screw holes **5,8 mm**  
 Screw material **Mild steel, galvanically zinc plated**  
 Suitable for grommets **5 x KT small**

**KEL-ER-E5-BS V2A**

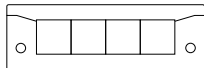
Part No. **99302.202**  
 EAN **4251269318894**  
 Package quantity **5**  
 For max. no. of cables **5**  
 Max. cable diameter **16 mm**  
 Length **147 mm**  
 Width **39 mm**

Height **17 mm**  
 Mounting height **17 mm**  
 Cut-out size **112 × 24 mm**  
 No. of screw holes **2**  
 Diam. of screw holes **5,8 mm**  
 Screw material **Stainless steel (V2A)**  
 Suitable for grommets **5 x KT small**

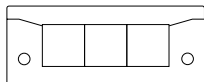
**KEL-ER-E4-BS**

Part No. **99309.002**  
 EAN **4251269321801**  
 Package quantity **5**  
 For max. no. of cables **4**  
 Max. cable diameter **16 mm**  
 Length **120 mm**  
 Width **39 mm**

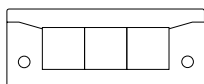
Height **17 mm**  
 Mounting height **17 mm**  
 Cut-out size **86 × 24 mm**  
 No. of screw holes **2**  
 Diam. of screw holes **5,8 mm**  
 Screw material **Mild steel, galvanically zinc plated**  
 Suitable for grommets **4 x KT small**

**KEL-ER-E4-BS V2A**

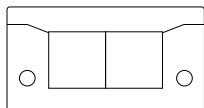
Part No.	<b>99309.202</b>	Height	<b>17 mm</b>
EAN	<b>4251269321825</b>	Mounting height	<b>17 mm</b>
Package quantity	<b>5</b>	Cut-out size	<b>86 × 24 mm</b>
For max. no. of cables	<b>4</b>	No. of screw holes	<b>2</b>
Max. cable diameter	<b>16 mm</b>	Diam. of screw holes	<b>5,8 mm</b>
Length	<b>120 mm</b>	Screw material	<b>Stainless steel (V2A)</b>
Width	<b>39 mm</b>	Suitable for grommets	<b>4 x KT small</b>

**KEL-ER-E3-BS**

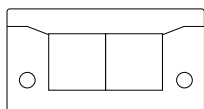
Part No.	<b>99308.002</b>	Height	<b>17 mm</b>
EAN	<b>4251269321764</b>	Mounting height	<b>17 mm</b>
Package quantity	<b>5</b>	Cut-out size	<b>65 × 24 mm</b>
For max. no. of cables	<b>3</b>	No. of screw holes	<b>2</b>
Max. cable diameter	<b>16 mm</b>	Diam. of screw holes	<b>5,8 mm</b>
Length	<b>98 mm</b>	Screw material	<b>Mild steel, galvanically zinc plated</b>
Width	<b>39 mm</b>	Suitable for grommets	<b>3 x KT small</b>

**KEL-ER-E3-BS V2A**

Part No.	<b>99308.202</b>	Height	<b>17 mm</b>
EAN	<b>4251269321788</b>	Mounting height	<b>17 mm</b>
Package quantity	<b>5</b>	Cut-out size	<b>65 × 24 mm</b>
For max. no. of cables	<b>3</b>	No. of screw holes	<b>2</b>
Max. cable diameter	<b>16 mm</b>	Diam. of screw holes	<b>5,8 mm</b>
Length	<b>98 mm</b>	Screw material	<b>Stainless steel (V2A)</b>
Width	<b>39 mm</b>	Suitable for grommets	<b>3 x KT small</b>

**KEL-ER-E2-BS**

Part No.	<b>99307.002</b>	Height	<b>17 mm</b>
EAN	<b>4251269321726</b>	Mounting height	<b>17 mm</b>
Package quantity	<b>5</b>	Cut-out size	<b>43 × 24 mm</b>
For max. no. of cables	<b>2</b>	No. of screw holes	<b>2</b>
Max. cable diameter	<b>16 mm</b>	Diam. of screw holes	<b>5,8 mm</b>
Length	<b>73 mm</b>	Screw material	<b>Mild steel, galvanically zinc plated</b>
Width	<b>39 mm</b>	Suitable for grommets	<b>2 x KT small</b>

**KEL-ER-E2-BS V2A**

Part No.	<b>99307.202</b>	Height	<b>17 mm</b>
EAN	<b>4251269321740</b>	Mounting height	<b>17 mm</b>
Package quantity	<b>5</b>	Cut-out size	<b>43 × 24 mm</b>
For max. no. of cables	<b>2</b>	No. of screw holes	<b>2</b>
Max. cable diameter	<b>16 mm</b>	Diam. of screw holes	<b>5,8 mm</b>
Length	<b>73 mm</b>	Screw material	<b>Stainless steel (V2A)</b>
Width	<b>39 mm</b>	Suitable for grommets	<b>2 x KT small</b>