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

for cables with connecotrs / IP54 / UL Type 12

IP54 | UL TYPE 12 | cULus | HL3 EN 45545-2 | E45 EI30 EN 45545-3 | EN 61373 | ECOLAB certified | UV ISO 4892-2A | RoHS compliant | REACH COMPLIANCE | Made in Germany

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

Split cable entry system for routing cables with connectors providing an IP54 / UL type 12 rating. Routing, sealing and providing strain relief for cable diameters from 1 to 35 mm. 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-U-BS frame matches exactly the cut-out dimensions for 10-, 16- and 24-pin standard industrial connectors. The KEL-U-B-BS frame matches exactly the cut-out dimensions of 46 × 46 mm measuring instruments. The single-row version KEL-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.

## Specifications

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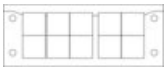
|---|---|
| **IP rating (EN 60529)** | IP54 |
| **UL Type (UL 50E)** | UL Type 12 |
| **Material** | Polyamide |
| **Flame class** | UL94-V0, self-extinguishing |
| **Operating temperature** | -40 C° to 140 C° |
| **Properties** | silicone free, intumescent (foaming), halogen free |
| **Mounting options** | 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
- Greatly increased cable density when using double or quadruple grommets
- 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
- Space-saving shape
- Perfect for routing D-Sub connectors

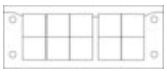
## Product types & sizes

**KEL-U 24|10-BS**



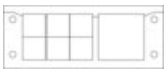
| | | | |
|---|---|---|---|
| Part No. | **99300.003** | Height | **17 mm** |
| EAN | **4251269318436** | Mounting height | **17 mm** |
| PU | **5** | Cut-out size | **112 × 36 mm** |
| For max. no. of cables | **40** | No. of screw holes | **4** |
| Max. cable diameter | **17 mm** | Diam. of screw holes | **5,8 mm** |
| Length | **147 mm** | Screw material | **Stahl, galvanisch verzinkt** |
| Width | **58 mm** | Suitable for grommets | **10 x KT small** |

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



| | | | |
|---|---|---|---|
| Part No. | **99300.203** | Height | **17 mm** |
| EAN | **4251269318788** | Mounting height | **17 mm** |
| PU | **5** | Cut-out size | **112 × 36 mm** |
| For max. no. of cables | **40** | No. of screw holes | **4** |
| Max. cable diameter | **17 mm** | Diam. of screw holes | **5,8 mm** |
| Length | **147 mm** | Screw material | **Edelstahl V2A** |
| Width | **58 mm** | Suitable for grommets | **10 x KT small** |

**KEL-U 24|7-BS**



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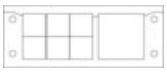
|---|---|---|---|
| Part No. | **99300.002** | Height | **17 mm** |
| EAN | **4251269318429** | Mounting height | **17 mm** |
| PU | **5** | Cut-out size | **112 × 36 mm** |
| For max. no. of cables | **25** | No. of screw holes | **4** |
| Max. cable diameter | **35 mm** | Diam. of screw holes | **5,8 mm** |
| Length | **147 mm** | Screw material | **Stahl, galvanisch verzinkt** |
| Width | **58 mm** | Suitable for grommets | **6 x KT small**<br>**1 x KT large** |

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



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|---|---|---|---|
| Part No. | **99300.202** | Height | **17 mm** |
| EAN | **4251269318771** | Mounting height | **17 mm** |
| PU | **5** | Cut-out size | **112 × 36 mm** |
| For max. no. of cables | **25** | No. of screw holes | **4** |
| Max. cable diameter | **35 mm** | Diam. of screw holes | **5,8 mm** |
| Length | **147 mm** | Screw material | **Edelstahl V2A** |
| Width | **58 mm** | Suitable for grommets | **6 x KT small**<br>**1 x KT large** |

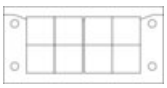
**KEL-U 24|4-BS**

| | | | |
|---|---|---|---|
| Part No. | **99300.001** | Height | **17 mm** |
| EAN | **4251269318412** | Mounting height | **17 mm** |
| PU | **5** | Cut-out size | **112 × 36 mm** |
| For max. no. of cables | **10** | No. of screw holes | **4** |
| Max. cable diameter | **35 mm** | Diam. of screw holes | **5,8 mm** |
| Length | **147 mm** | Screw material | **Stahl, galvanisch verzinkt** |
| Width | **58 mm** | Suitable for grommets | **2 x KT small**<br>**2 x KT large** |

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

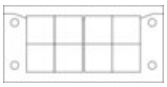
| | | | |
|---|---|---|---|
| Part No. | **99300.201** | Height | **17 mm** |
| EAN | **4251269318764** | Mounting height | **17 mm** |
| PU | **5** | Cut-out size | **112 × 36 mm** |
| For max. no. of cables | **10** | No. of screw holes | **4** |
| Max. cable diameter | **35 mm** | Diam. of screw holes | **5,8 mm** |
| Length | **147 mm** | Screw material | **Edelstahl V2A** |
| Width | **58 mm** | Suitable for grommets | **2 x KT small**<br>**2 x KT large** |

**KEL-U 16|8-BS**



| | | | |
|---|---|---|---|
| Part No. | **99301.003** | Height | **17 mm** |
| EAN | **4251269318498** | Mounting height | **17 mm** |
| PU | **5** | Cut-out size | **86 × 36 mm** |
| For max. no. of cables | **32** | No. of screw holes | **4** |
| Max. cable diameter | **17 mm** | Diam. of screw holes | **5,8 mm** |
| Length | **120 mm** | Screw material | **Stahl, galvanisch verzinkt** |
| Width | **58 mm** | Suitable for grommets | **8 x KT small** |

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



| | | | |
|---|---|---|---|
| Part No. | **99301.203** | Height | **17 mm** |
| EAN | **4251269318849** | Mounting height | **17 mm** |
| PU | **5** | Cut-out size | **86 × 36 mm** |
| For max. no. of cables | **32** | No. of screw holes | **4** |
| Max. cable diameter | **17 mm** | Diam. of screw holes | **5,8 mm** |
| Length | **120 mm** | Screw material | **Edelstahl V2A** |
| Width | **58 mm** | Suitable for grommets | **8 x KT small** |

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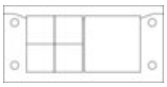
**KEL-U 16|5-BS**



| | | | |
|---|---|---|---|
| Part No. | **99301.002** | Height | **17 mm** |
| EAN | **4251269318481** | Mounting height | **17 mm** |
| PU | **5** | Cut-out size | **86 × 36 mm** |
| For max. no. of cables | **17** | No. of screw holes | **4** |
| Max. cable diameter | **35 mm** | Diam. of screw holes | **5,8 mm** |
| Length | **120 mm** | Screw material | **Stahl, galvanisch verzinkt** |
| Width | **58 mm** | Suitable for grommets | **4 x KT small** |
| | | | **1 x KT large** |

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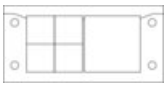
**KEL-U 16|5-BS V2A**



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|---|---|---|---|
| Part No. | **99301.202** | Height | **17 mm** |
| EAN | **4251269318832** | Mounting height | **17 mm** |
| PU | **5** | Cut-out size | **86 × 36 mm** |
| For max. no. of cables | **17** | No. of screw holes | **4** |
| Max. cable diameter | **35 mm** | Diam. of screw holes | **5,8 mm** |
| Length | **120 mm** | Screw material | **Edelstahl V2A** |
| Width | **58 mm** | Suitable for grommets | **4 x KT small** |
| | | | **1 x KT large** |

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**KEL-U 16|2-BS**

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|---|---|---|---|
| Part No. | **99301.001** | Height | **17 mm** |
| EAN | **4251269318474** | Mounting height | **17 mm** |
| PU | **5** | Cut-out size | **86 × 36 mm** |
| For max. no. of cables | **2** | No. of screw holes | **4** |
| Max. cable diameter | **35 mm** | Diam. of screw holes | **5,8 mm** |
| Length | **120 mm** | Screw material | **Stahl, galvanisch verzinkt** |
| Width | **58 mm** | Suitable for grommets | **2 x KT large** |

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

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|---|---|---|---|
| Part No. | **99301.201** | Height | **17 mm** |
| EAN | **4251269318825** | Mounting height | **17 mm** |
| PU | **5** | Cut-out size | **86 × 36 mm** |
| For max. no. of cables | **2** | No. of screw holes | **4** |
| Max. cable diameter | **35 mm** | Diam. of screw holes | **5,8 mm** |
| Length | **120 mm** | Screw material | **Edelstahl V2A** |
| Width | **58 mm** | Suitable for grommets | **2 x KT large** |
| | | | **0 x KT small** |

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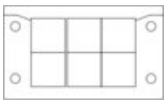
**KEL-U 10|6-BS**



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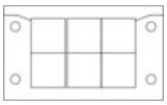
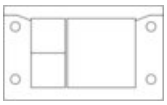
|---|---|---|---|
| Part No. | **99306.001** | Height | **17 mm** |
| EAN | **4251269320644** | Mounting height | **17 mm** |
| PU | **5** | Cut-out size | **65 × 36 mm** |
| For max. no. of cables | **24** | No. of screw holes | **4** |
| Max. cable diameter | **17 mm** | Diam. of screw holes | **5,8 mm** |
| Length | **98 mm** | Screw material | **Stahl, galvanisch verzinkt** |
| Width | **58 mm** | Suitable for grommets | **6 x KT small** |

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



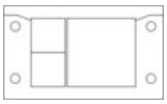
| | | | |
|---|---|---|---|
| Part No. | **99306.201** | Height | **17 mm** |
| EAN | **4251269321924** | Mounting height | **17 mm** |
| PU | **5** | Cut-out size | **65 × 36 mm** |
| For max. no. of cables | **24** | No. of screw holes | **4** |
| Max. cable diameter | **17 mm** | Diam. of screw holes | **5,8 mm** |
| Length | **98 mm** | Screw material | **Edelstahl V2A** |
| Width | **58 mm** | Suitable for grommets | **6 x KT small** |

**KEL-U 10|3-BS**



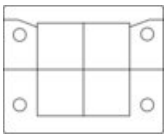
| | | | |
|---|---|---|---|
| Part No. | **99306.002** | Height | **17 mm** |
| EAN | **4251269320651** | Mounting height | **17 mm** |
| PU | **5** | Cut-out size | **65 × 36 mm** |
| For max. no. of cables | **9** | No. of screw holes | **4** |
| Max. cable diameter | **35 mm** | Diam. of screw holes | **5,8 mm** |
| Length | **98 mm** | Screw material | **Stahl, galvanisch verzinkt** |
| Width | **58 mm** | Suitable for grommets | **2 x KT small**<br>**1 x KT large** |

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



| | | | |
|---|---|---|---|
| Part No. | **99306.202** | Height | **17 mm** |
| EAN | **4251269321931** | Mounting height | **17 mm** |
| PU | **5** | Cut-out size | **65 × 36 mm** |
| For max. no. of cables | **9** | No. of screw holes | **4** |
| Max. cable diameter | **35 mm** | Diam. of screw holes | **5,8 mm** |
| Length | **98 mm** | Screw material | **Edelstahl V2A** |
| Width | **58 mm** | Suitable for grommets | **2 x KT small**<br>**1 x KT large** |

**KEL-U-B4-BS**



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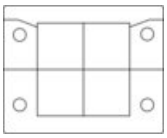
|---|---|---|---|
| Part No. | **99305.002** | Height | **17 mm** |
| EAN | **4251269320613** | Mounting height | **17 mm** |
| PU | **5** | Cut-out size | **46 × 46 mm** |
| For max. no. of cables | **16** | No. of screw holes | **4** |
| Max. cable diameter | **17 mm** | Diam. of screw holes | **5,8 mm** |
| Length | **73 mm** | Screw material | **Stahl, galvanisch verzinkt** |
| Width | **58 mm** | Suitable for grommets | **4 x KT small** |

**KEL-U-B4-BS V2A**



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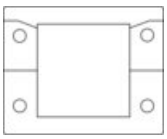
|---|---|---|---|
| Part No. | **99305.202** | Height | **17 mm** |
| EAN | **4251269321894** | Mounting height | **17 mm** |
| PU | **5** | Cut-out size | **46 × 46 mm** |
| For max. no. of cables | **16** | No. of screw holes | **4** |
| Max. cable diameter | **17 mm** | Diam. of screw holes | **5,8 mm** |
| Length | **73 mm** | Screw material | **Edelstahl V2A** |
| Width | **58 mm** | Suitable for grommets | **4 x KT small** |

**KEL-U-B1-BS**



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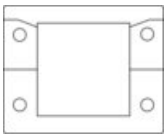
|---|---|---|---|
| Part No. | **99305.001** | Height | **17 mm** |
| EAN | **4251269320606** | Mounting height | **17 mm** |
| PU | **5** | Cut-out size | **46 × 46 mm** |
| For max. no. of cables | **1** | No. of screw holes | **4** |
| Max. cable diameter | **35 mm** | Diam. of screw holes | **5,8 mm** |
| Length | **73 mm** | Screw material | **Stahl, galvanisch verzinkt** |
| Width | **58 mm** | Suitable for grommets | **1 x KT large**<br>**0 x KT small** |

**KEL-U-B1-BS V2A**



| | | | |
|---|---|---|---|
| Part No. | **99305.201** | Height | **17 mm** |
| EAN | **4251269321887** | Mounting height | **17 mm** |
| PU | **5** | Cut-out size | **46 × 46 mm** |
| For max. no. of cables | **1** | No. of screw holes | **4** |
| Max. cable diameter | **35 mm** | Diam. of screw holes | **5,8 mm** |
| Length | **73 mm** | Screw material | **Edelstahl V2A** |
| Width | **58 mm** | Suitable for grommets | **1 x KT large**<br>**0 x KT small** |

**KEL-E5-BS**

| | | | |
|---|---|---|---|
| Part No. | **99302.001** | Height | **17 mm** |
| EAN | **4251269318535** | Mounting height | **17 mm** |
| PU | **5** | Cut-out size | **112 × 24 mm** |
| For max. no. of cables | **20** | No. of screw holes | **2** |
| Max. cable diameter | **17 mm** | Diam. of screw holes | **5,8 mm** |
| Length | **147 mm** | Screw material | **Stahl, galvanisch verzinkt** |
| Width | **39 mm** | Suitable for grommets | **5 x KT small**<br>**0 x KT small** |

**KEL-E5-BS V2A**

| | | | |
|---|---|---|---|
| Part No. | **99302.201** | Height | **17 mm** |
| EAN | **4251269318887** | Mounting height | **17 mm** |
| PU | **5** | Cut-out size | **112 × 24 mm** |
| For max. no. of cables | **20** | No. of screw holes | **2** |
| Max. cable diameter | **17 mm** | Diam. of screw holes | **5,8 mm** |
| Length | **147 mm** | Screw material | **Edelstahl V2A** |
| Width | **39 mm** | Suitable for grommets | **5 x KT small** |

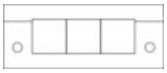
**KEL-E4-BS**

| | | | |
|---|---|---|---|
| Part No. | **99309.001** | Height | **17 mm** |
| EAN | **4251269321795** | Mounting height | **17 mm** |
| PU | **5** | Cut-out size | **86 × 24 mm** |
| For max. no. of cables | **16** | No. of screw holes | **2** |
| Max. cable diameter | **17 mm** | Diam. of screw holes | **5,8 mm** |
| Length | **120 mm** | Screw material | **Stahl, galvanisch verzinkt** |
| Width | **39 mm** | Suitable for grommets | **4 x KT small** |

**KEL-E4-BS V2A**

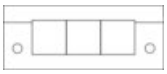
| | | | |
|---|---|---|---|
| Part No. | **99309.201** | Height | **17 mm** |
| EAN | **4251269321818** | Mounting height | **17 mm** |
| PU | **5** | Cut-out size | **86 × 24 mm** |
| For max. no. of cables | **16** | No. of screw holes | **2** |
| Max. cable diameter | **17 mm** | Diam. of screw holes | **5,8 mm** |
| Length | **120 mm** | Screw material | **Edelstahl V2A** |
| Width | **39 mm** | Suitable for grommets | **4 x KT small** |

**KEL-E3-BS**



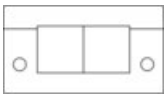
| | | | |
|---|---|---|---|
| Part No. | **99308.001** | Height | **17 mm** |
| EAN | **4251269321757** | Mounting height | **17 mm** |
| PU | **5** | Cut-out size | **65 × 24 mm** |
| For max. no. of cables | **12** | No. of screw holes | **2** |
| Max. cable diameter | **17 mm** | Diam. of screw holes | **5,8 mm** |
| Length | **98 mm** | Screw material | **Stahl, galvanisch verzinkt** |
| Width | **39 mm** | Suitable for grommets | **3 x KT small** |

**KEL-E3-BS V2A**



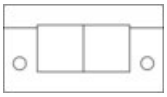
| | | | |
|---|---|---|---|
| Part No. | **99308.201** | Height | **17 mm** |
| EAN | **4251269321771** | Mounting height | **17 mm** |
| PU | **5** | Cut-out size | **65 × 24 mm** |
| For max. no. of cables | **12** | No. of screw holes | **2** |
| Max. cable diameter | **17 mm** | Diam. of screw holes | **5,8 mm** |
| Length | **98 mm** | Screw material | **Edelstahl V2A** |
| Width | **39 mm** | Suitable for grommets | **3 x KT small** |

**KEL-E2-BS**



| | | | |
|---|---|---|---|
| Part No. | **99307.001** | Height | **17 mm** |
| EAN | **4251269321719** | Mounting height | **17 mm** |
| PU | **5** | Cut-out size | **43 × 24 mm** |
| For max. no. of cables | **8** | No. of screw holes | **2** |
| Max. cable diameter | **17 mm** | Diam. of screw holes | **5,8 mm** |
| Length | **73 mm** | Screw material | **Stahl, galvanisch verzinkt** |
| Width | **39 mm** | Suitable for grommets | **2 x KT small** |

**KEL-E2-BS V2A**



| | | | |
|---|---|---|---|
| Part No. | **99307.201** | Height | **17 mm** |
| EAN | **4251269321733** | Mounting height | **17 mm** |
| PU | **5** | Cut-out size | **43 × 24 mm** |
| For max. no. of cables | **8** | No. of screw holes | **2** |
| Max. cable diameter | **17 mm** | Diam. of screw holes | **5,8 mm** |
| Length | **73 mm** | Screw material | **Edelstahl V2A** |
| Width | **39 mm** | Suitable for grommets | **2 x KT small** |