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

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

IP54	IP55	IP64	IP65	IP66	UL TYPE 12
UL TYPE 4X*	c **UL** us	HL3 EN 45545-2	E45 EI30 EN 45545-3	EN 61373	JAPAN RAILWAY TESTED FLAME RETARDANT
ECOLAB certified	UV ISO 4892-2A	RoHS compliant	REACH COMPLIANCE	Made in Germany	

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 × 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

Specifications

|	
IP rating (EN 60529)	IP54, IP55, IP64, IP65, IP66
UL Type (UL 50E)	UL Type 12, UL Type 4X*
Material	Polyamide
Flame class	UL94-V0, self-extinguishing
Operating temperature	-40 C° to 140 C°
Properties	silicone free, halogen free, intumescent (foaming), anti-corrosive (V2A versions)
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
- 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.	99300.006	Height	17 mm
EAN	4251269318467	Mounting height	17 mm
Package quantity	5	Cut-out size	112 × 36 mm
For max. no. of cables	10	No. of screw holes	4
Max. cable diameter	16 mm	Diam. of screw holes	5,8 mm
Length	147 mm	Screw material	Mild steel, galvanically zinc plated
Width	58 mm	Suitable for grommets	10 x KT small

KEL-ER 24|10-BS V2A
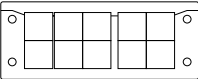
Part No.	**99300.206**	Height	**17 mm**
EAN	**4251269318818**	Mounting height	**17 mm**
Package quantity	**5**	Cut-out size	**112 × 36 mm**
For max. no. of cables	**10**	No. of screw holes	**4**
Max. cable diameter	**16 mm**	Diam. of screw holes	**5,8 mm**
Length	**147 mm**	Screw material	**Stainless steel (V2A)**
Width	**58 mm**	Suitable for grommets	**10 x KT small**

KEL-ER 24|7-BS
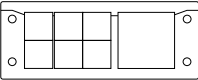
Part No.	**99300.005**	Height	**17 mm**
EAN	**4251269318450**	Mounting height	**17 mm**
Package quantity	**5**	Cut-out size	**112 × 36 mm**
For max. no. of cables	**7**	No. of screw holes	**4**
Max. cable diameter	**35 mm**	Diam. of screw holes	**5,8 mm**
Length	**147 mm**	Screw material	**Mild steel, galvanically zinc plated**
Width	**58 mm**	Suitable for grommets	**6 x KT small**
			1 x KT large

KEL-ER 24|7-BS V2A
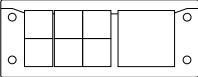
Part No.	**99300.205**	Height	**17 mm**
EAN	**4251269318801**	Mounting height	**17 mm**
Package quantity	**5**	Cut-out size	**112 × 36 mm**
For max. no. of cables	**7**	No. of screw holes	**4**
Max. cable diameter	**35 mm**	Diam. of screw holes	**5,8 mm**
Length	**147 mm**	Screw material	**Stainless steel (V2A)**
Width	**58 mm**	Suitable for grommets	**6 x KT small**
			1 x KT large

KEL-ER 24|4-BS
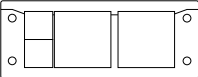
Part No.	**99300.004**	Height	**17 mm**
EAN	**4251269318443**	Mounting height	**17 mm**
Package quantity	**5**	Cut-out size	**112 × 36 mm**
For max. no. of cables	**4**	No. of screw holes	**4**
Max. cable diameter	**35 mm**	Diam. of screw holes	**5,8 mm**
Length	**147 mm**	Screw material	**Mild steel, galvanically zinc plated**
Width	**58 mm**	Suitable for grommets	**2 x KT small**
			2 x KT large

KEL-ER 24|4-BS V2A
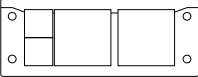
Part No.	**99300.204**	Height	**17 mm**
EAN	**4251269318795**	Mounting height	**17 mm**
Package quantity	**5**	Cut-out size	**112 × 36 mm**
For max. no. of cables	**4**	No. of screw holes	**4**
Max. cable diameter	**35 mm**	Diam. of screw holes	**5,8 mm**
Length	**147 mm**	Screw material	**Stainless steel (V2A)**
Width	**58 mm**	Suitable for grommets	**2 x KT small**
			2 x KT large

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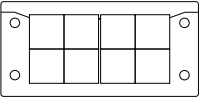
Part No.	**99301.006**	Height	**17 mm**
EAN	**4251269318528**	Mounting height	**17 mm**
Package quantity	**5**	Cut-out size	**86 × 36 mm**
For max. no. of cables	**8**	No. of screw holes	**4**
Max. cable diameter	**16 mm**	Diam. of screw holes	**5,8 mm**
Length	**120 mm**	Screw material	**Mild steel,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

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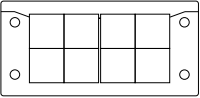
Part No.	**99301.206**	Height	**17 mm**
EAN	**4251269318870**	Mounting height	**17 mm**
Package quantity	**5**	Cut-out size	**86 × 36 mm**
For max. no. of cables	**8**	No. of screw holes	**4**
Max. cable diameter	**16 mm**	Diam. of screw holes	**5,8 mm**
Length	**120 mm**	Screw material	**Stainless steel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

KEL-ER 16|5-BS
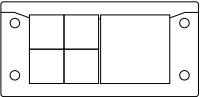
Part No.	**99301.005**	Height	**17 mm**
EAN	**4251269318511**	Mounting height	**17 mm**
Package quantity	**5**	Cut-out size	**86 × 36 mm**
For max. no. of cables	**5**	No. of screw holes	**4**
Max. cable diameter	**35 mm**	Diam. of screw holes	**5,8 mm**
Length	**120 mm**	Screw material	**Mild steel, galvanically zinc plated**
Width	**58 mm**	Suitable for grommets	**4 x KT small**
			1 x KT large

KEL-ER 16|5-BS V2A
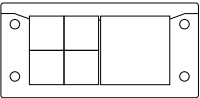
Part No.	**99301.205**	Height	**17 mm**
EAN	**4251269318863**	Mounting height	**17 mm**
Package quantity	**5**	Cut-out size	**86 × 36 mm**
For max. no. of cables	**5**	No. of screw holes	**4**
Max. cable diameter	**35 mm**	Diam. of screw holes	**5,8 mm**
Length	**120 mm**	Screw material	**Stainless steel (V2A)**
Width	**58 mm**	Suitable for grommets	**4 x KT small**
			1 x KT large

KEL-ER 16|2-BS
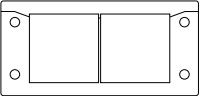
Part No.	**99301.004**	Height	**17 mm**
EAN	**4251269318504**	Mounting height	**17 mm**
Package quantity	**5**	Cut-out size	**86 × 36 mm**
For max. no. of cables	**2**	No. of screw holes	**4**
Max. cable diameter	**35 mm**	Diam. of screw holes	**5,8 mm**
Length	**120 mm**	Screw material	**Mild steel, galvanically zinc plated**
Width	**58 mm**	Suitable for grommets	**2 x KT large**

KEL-ER 16|2-BS V2A
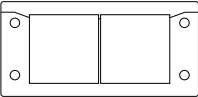
Part No.	**99301.204**	Height	**17 mm**
EAN	**4251269318856**	Mounting height	**17 mm**
Package quantity	**5**	Cut-out size	**86 × 36 mm**
For max. no. of cables	**2**	No. of screw holes	**4**
Max. cable diameter	**35 mm**	Diam. of screw holes	**5,8 mm**
Length	**120 mm**	Screw material	**Stainless steel (V2A)**
Width	**58 mm**	Suitable for grommets	**2 x KT large**

KEL-ER 10|6-BS
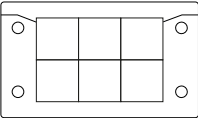
Part No.	**99306.003**	Height	**17 mm**
EAN	**4251269320668**	Mounting height	**17 mm**
Package quantity	**5**	Cut-out size	**65 × 36 mm**
For max. no. of cables	**6**	No. of screw holes	**4**
Max. cable diameter	**16 mm**	Diam. of screw holes	**5,8 mm**
Length	**98 mm**	Screw material	**Mild steel, galvanically zinc plated**
Width	**58 mm**	Suitable for grommets	**6 x KT small**

KEL-ER 10|6-BS V2A
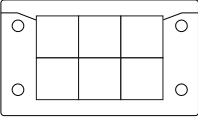
Part No.	**99306.203**	Height	**17 mm**
EAN	**4251269321948**	Mounting height	**17 mm**
Package quantity	**5**	Cut-out size	**65 × 36 mm**
For max. no. of cables	**6**	No. of screw holes	**4**
Max. cable diameter	**16 mm**	Diam. of screw holes	**5,8 mm**
Length	**98 mm**	Screw material	**Stainless steel (V2A)**
Width	**58 mm**	Suitable for grommets	**6 x KT small**

KEL-ER 10|3-BS
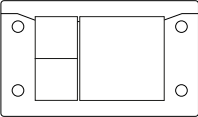
Part No.	**99306.004**	Height	**17 mm**
EAN	**4251269320675**	Mounting height	**17 mm**
Package quantity	**5**	Cut-out size	**65 × 36 mm**
For max. no. of cables	**3**	No. of screw holes	**4**
Max. cable diameter	**35 mm**	Diam. of screw holes	**5,8 mm**
Length	**98 mm**	Screw material	**Mild steel, galvanically zinc plated**
Width	**58 mm**	Suitable for grommets	**2 x KT small**
			1 x KT large

KEL-ER 10|3-BS V2A
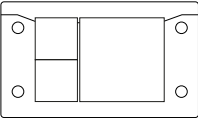
Part No.	**99306.204**	Height	**17 mm**
EAN	**4251269321955**	Mounting height	**17 mm**
Package quantity	**5**	Cut-out size	**65 × 36 mm**
For max. no. of cables	**3**	No. of screw holes	**4**
Max. cable diameter	**35 mm**	Diam. of screw holes	**5,8 mm**
Length	**98 mm**	Screw material	**Stainless steel (V2A)**
Width	**58 mm**	Suitable for grommets	**2 x KT small**
			1 x KT large

KEL-ER-B4-BS
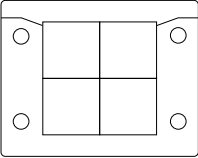
Part No.	**99305.004**	Height	**17 mm**
EAN	**4251269320637**	Mounting height	**17 mm**
Package quantity	**5**	Cut-out size	**46 × 46 mm**
For max. no. of cables	**4**	No. of screw holes	**4**
Max. cable diameter	**16 mm**	Diam. of screw holes	**5,8 mm**
Length	**73 mm**	Screw material	**Mild steel, galvanically zinc plated**
Width	**58 mm**	Suitable for grommets	**4 x KT small**

KEL-ER-B4-BS V2A

Part No.	**99305.204**	Height	**17 mm**
EAN	**4251269321917**	Mounting height	**17 mm**
Package quantity	**5**	Cut-out size	**46 × 46 mm**
For max. no. of cables	**4**	No. of screw holes	**4**
Max. cable diameter	**16 mm**	Diam. of screw holes	**5,8 mm**
Length	**73 mm**	Screw material	**Stainless steel (V2A)**
Width	**58 mm**	Suitable for grommets	**4 x KT small**

KEL-ER-B1-BS

Part No.	**99305.003**	Height	**17 mm**
EAN	**4251269320620**	Mounting height	**17 mm**
Package quantity	**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	**Mild steel, galvanically zinc plated**
Width	**58 mm**	Suitable for grommets	**1 x KT large**
			0 x KT small

KEL-ER-B1-BS V2A

Part No.	**99305.203**	Height	**17 mm**
EAN	**4251269321900**	Mounting height	**17 mm**
Package quantity	**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	**Stainless steel (V2A)**
Width	**58 mm**	Suitable for grommets	**1 x KT large**
			0 x KT small

KEL-ER-E5-BS

Part No.	**99302.002**	Height	**17 mm**
EAN	**4251269318542**	Mounting height	**17 mm**
Package quantity	**5**	Cut-out size	**112 × 24 mm**
For max. no. of cables	**5**	No. of screw holes	**2**
Max. cable diameter	**16 mm**	Diam. of screw holes	**5,8 mm**
Length	**147 mm**	Screw material	**Mild steel, galvanically zinc plated**
Width	**39 mm**	Suitable for grommets	**5 x KT small**

KEL-ER-E5-BS V2A

Part No.	**99302.202**	Height	**17 mm**
EAN	**4251269318894**	Mounting height	**17 mm**
Package quantity	**5**	Cut-out size	**112 × 24 mm**
For max. no. of cables	**5**	No. of screw holes	**2**
Max. cable diameter	**16 mm**	Diam. of screw holes	**5,8 mm**
Length	**147 mm**	Screw material	**Stainless steel (V2A)**
Width	**39 mm**	Suitable for grommets	**5 x KT small**

KEL-ER-E4-BS

Part No.	**99309.002**	Height	**17 mm**
EAN	**4251269321801**	Mounting height	**17 mm**
Package quantity	**5**	Cut-out size	**86 × 24 mm**
For max. no. of cables	**4**	No. of screw holes	**2**
Max. cable diameter	**16 mm**	Diam. of screw holes	**5,8 mm**
Length	**120 mm**	Screw material	**Mild steel, galvanically zinc plated**
Width	**39 mm**	Suitable for grommets	**4 x KT small**

KEL-ER-E4-BS V2A

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

KEL-ER-E3-BS
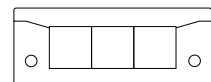
Part No.	**99308.002**	Height	**17 mm**
EAN	**4251269321764**	Mounting height	**17 mm**
Package quantity	**5**	Cut-out size	**65 × 24 mm**
For max. no. of cables	**3**	No. of screw holes	**2**
Max. cable diameter	**16 mm**	Diam. of screw holes	**5,8 mm**
Length	**98 mm**	Screw material	**Mild steel, galvanically zinc plated**
Width	**39 mm**	Suitable for grommets	**3 x KT small**

KEL-ER-E3-BS V2A

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

KEL-ER-E2-BS
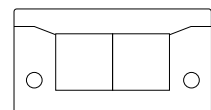
Part No.	**99307.002**	Height	**17 mm**
EAN	**4251269321726**	Mounting height	**17 mm**
Package quantity	**5**	Cut-out size	**43 × 24 mm**
For max. no. of cables	**2**	No. of screw holes	**2**
Max. cable diameter	**16 mm**	Diam. of screw holes	**5,8 mm**
Length	**73 mm**	Screw material	**Mild steel, galvanically zinc plated**
Width	**39 mm**	Suitable for grommets	**2 x KT small**

KEL-ER-E2-BS V2A
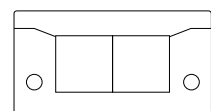
Part No.	**99307.202**	Height	**17 mm**
EAN	**4251269321740**	Mounting height	**17 mm**
Package quantity	**5**	Cut-out size	**43 × 24 mm**
For max. no. of cables	**2**	No. of screw holes	**2**
Max. cable diameter	**16 mm**	Diam. of screw holes	**5,8 mm**
Length	**73 mm**	Screw material	**Stainless steel (V2A)**
Width	**39 mm**	Suitable for grommets	**2 x KT small**

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