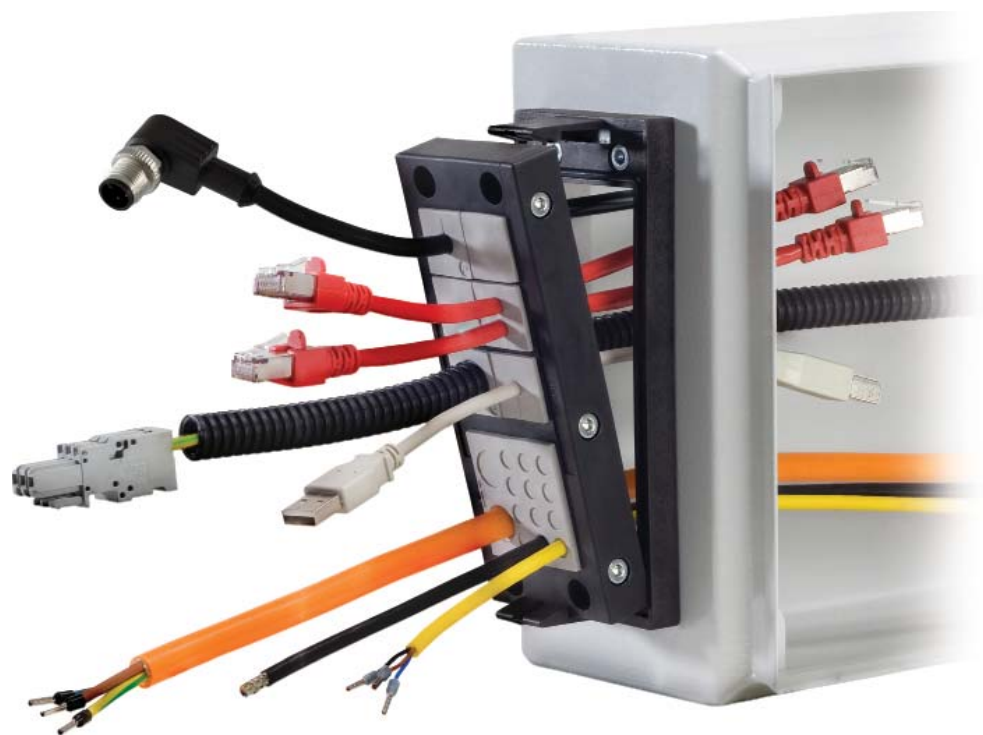


Cable Entry Systems EMC Solutions



innovative
creative
technology

Product Catalog

A Company of the icotek Group

KDR-ESR

Enclosure Base Plate with Slide Frames



KDR-ESR Assembly

Product Description

The KDR-ESR is a one-piece plate to be assembled on enclosure bases. Slide frames for the KEL cable entry frames are already preassembled.

After fitting all cables into the KEL frames, they are easily and quickly inserted into the slide frames and fixed. During maintenance, the KEL frames are removed without tools from the slide frames. Due to the combination KDR-ESR and KEL cable entry frames, a rating of IP54 is achieved (with correct selection of cable grommets). Slide frames which are no longer required, are closed with BPK-SNAP blind plates.

Advantages and Notes

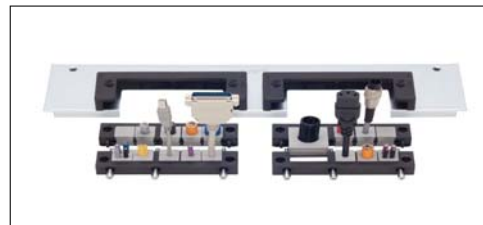
- Easy assembly and removal
- During assembly, almost the complete base of the enclosure can be used for installation of cables
- Even large connectors can be installed easily
- The base plate KDR-ESR is designed for Rittal enclosures TS8. Other sizes can be supplied on request
- No additional sheet metal work required
- Retrofitting possible without disconnecting cables. Everything can be built around the cables

Specifications

Material	Base plate: Carbon steel, zinc-plated KDR-ESR Frame: Polyamide (PA)
Flame class	UL94-Vo, self-extinguishing
Protection class	IP54, with gasket and correct selection of the cable grommets
Temperature Properties	- 40°C to + 90°C (static) Halogen free, silicone free

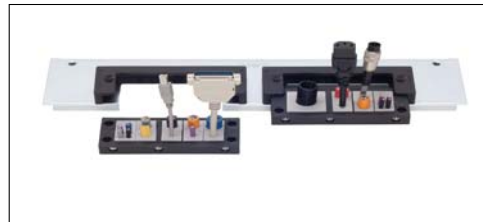
Fits with

KEL(-U) 16 / 24 Cable entry frames	6 - 19
KEL-JUMBO Cable entry frames	48
BPK-SNAP 16 / 24 Blind plates	156



1

The base plate is fixed in the enclosure base. The KEL cable entry frames are fitted.



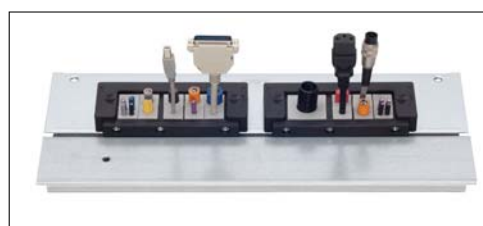
2

The KEL cable entry frames are screwed together after fitting.



3

Afterwards the KEL frames are pushed into the Slide frames and fixed with the knurled screws.

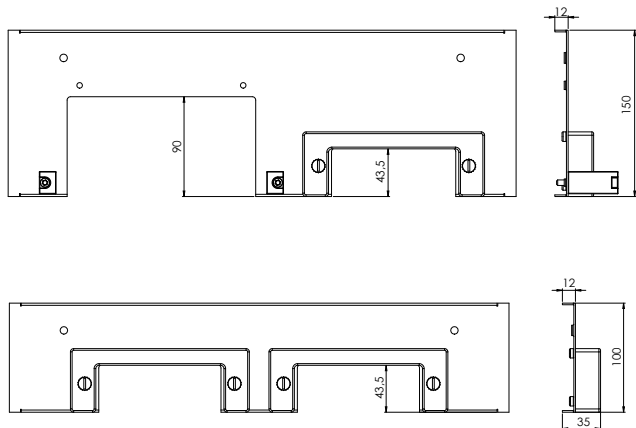


4

Finally, the middle base plate which is part of the standard enclosure, moves together with the KDR-ESR plates.

KDR-ESR

Enclosure Base Plate with Slide Frames

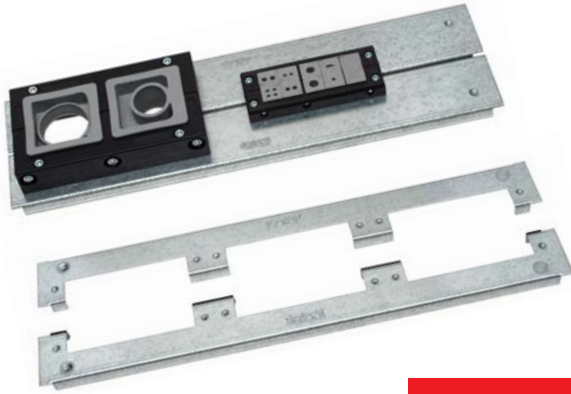


Enclosure type	Enclosure width	Total length base plate	Sight size of base plate opening	No. of possible cable entries				Order No.
				JUMBO 1	JUMBO 2	KEL(-U) 16 ...	KEL(-U) 24 ...	
TS8	600 mm	458 mm	436 mm	-	-	-	2	43079
	600 mm	458 mm	436 mm	-	1	-	1	43070
	600 mm	458 mm	436 mm	1	-	2	-	43071
TS8	800 mm	658 mm	636 mm	-	-	1	3	43080
	800 mm	658 mm	636 mm	1	-	-	3	43072
	800 mm	658 mm	636 mm	-	1	-	2	43073
TS8	1000 mm without division bar	858 mm	836 mm	-	-	-	5	43081
	1000 mm without division bar	858 mm	836 mm	1	-	-	4	43074
	1000 mm without division bar	858 mm	836 mm	-	1	-	3	43075
TS8	1000 mm with division bar	420 mm	398 mm	-	-	-	2	43082
	1000 mm with division bar	420 mm	398 mm	1	-	-	1	43076
	1000 mm with division bar	420 mm	398 mm	-	1	-	1	43077
TS8	1200 mm*	518 mm	496 mm	-	-	-	3	43083
	1200 mm*	518 mm	496 mm	1	-	-	2	43078
	1200 mm*	518 mm	496 mm	-	1	-	1	43084

* in case both fields of the enclosure are equipped, 2 complete base plates are necessary.

KDR 2

Split Enclosure Base Plates



KDR 2 Assembly

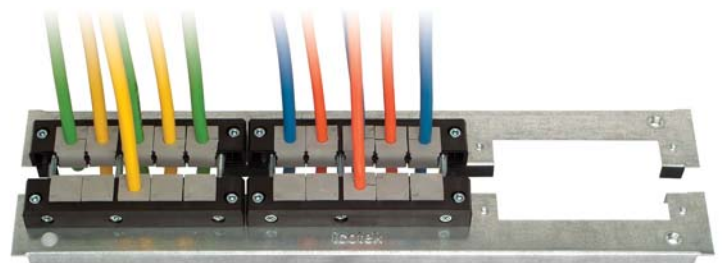
Product Description

Split, 2-part base plates KDR 2 with pre-cut holes for KEL and KEL-JUMBO cable entry systems.

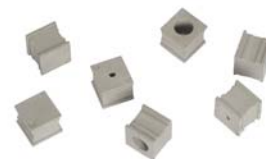
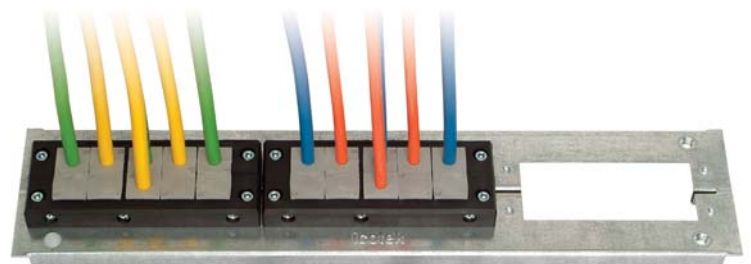
Integrated screw holes provide quick and easy installation of KEL frames.

Advantages and Notes

- During assembly, almost the complete base of the enclosure can be used for installation of cables
- Even large connectors can be installed easily
- The base plate KDR 2 is designed for Rittal enclosures TS8. Other sizes can be supplied on request
- Retrofitting possible without disconnecting of cables. All can be built around the cables.
- No additional sheet metal work required
- Cut-outs, which are no longer required, are covered with metal blind plates Type BPM



When the cable entry frames are assembled, the KDR base plates move together for a tight, secure hold of the cable entry systems.



The frame parts with grommets have to be built up before final assembly, i.e. before screwing the system together.

Screwing of the cable entry frames tightens both parts of the split base plate.

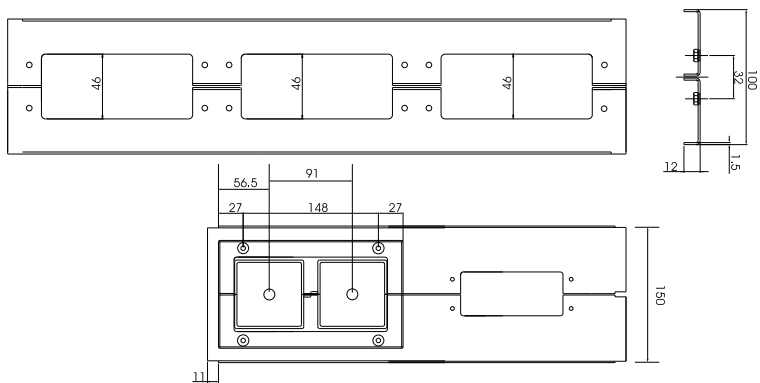
Specifications

Material **Carbon steel, zinc-plated**

Fits with

KEL 24 Cable entry frames	16
KEL-U 24 Cable entry frames	6
KEL-JUMBO Cable entry frames	48
BPM Blind plates metal	156

KDR 2 Split Enclosure Base Plates

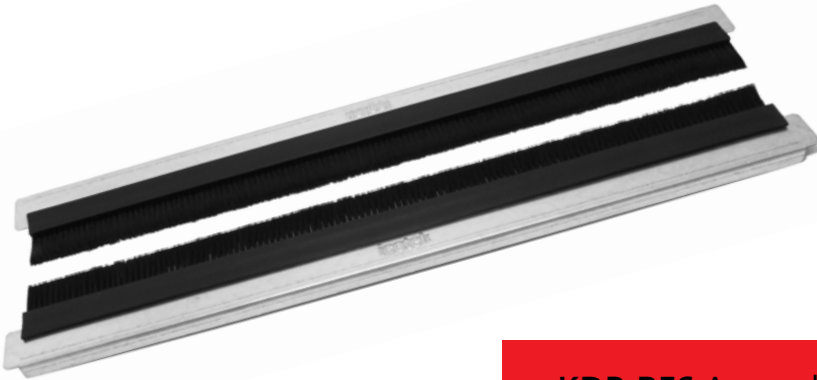


Enclosure type	Enclosure width	Total length base plate	Sight size of base plate opening	No. of possible cable entries			Order No.
				JUMBO 1	JUMBO 2	KEL(-U) 24 ...	
TS 8	600 mm	458 mm	436 mm	-	-	3	42924
				1	-	2	42953
				-	1	1	42941
TS 8	800 mm	658 mm	636 mm	-	-	4	42922
				1	-	3	42954
				-	1	2	42945
TS 8	1000 mm without division bar	858 mm	836 mm	-	-	5	42923
				1	-	4	42955
				-	1	3	42952
TS 8	1000 mm with division bar	420 mm	398 mm	-	-	2	42958
				1	-	1	42957
				-	1	1	42959
TS 8	1200 mm *	518 mm	496 mm	-	-	3	42920
				1	-	2	42956
				-	1	1	42943

* in case both fields of the control panel are equipped, 2 complete split base plates are necessary.

KDR-BES

Enclosure Base Plate with Brush Grommets



For standard cut-outs:
KEL-BES - see page 57

KDR-BES Assembly

Product Description

The new 2-piece enclosure base plates KDR-BES are supplied with preassembled brush grommets.

The base plates are installed with standard Rittal clips.

Depending on the maximum cable diameter to be routed, the 2 halves of the brush base plate are aligned further or closer to each other.

The base plates KDR-BES are perfect for protection of the enclosure interiors against rough dirt.

Advantages and Notes

- During assembly, almost the complete base of the enclosure can be used for installation of cables.
- Retrofitting possible without disconnecting cables. Everything can be built around the cables.
- The base plates KDR-BES are designed for Rittal enclosures TS8. Other sizes can be supplied on request.

Specifications

Material	Base plate: Sheet steel, zinc-plated Brush grommets: Polyamide (PA)
Temperature Properties	- 20°C to + 90°C (static) Halogen free, silicone free

Accessories

ZL Strain relief plates 80 - 84



KDR-BES

Enclosure Base Plate with Brush Grommets

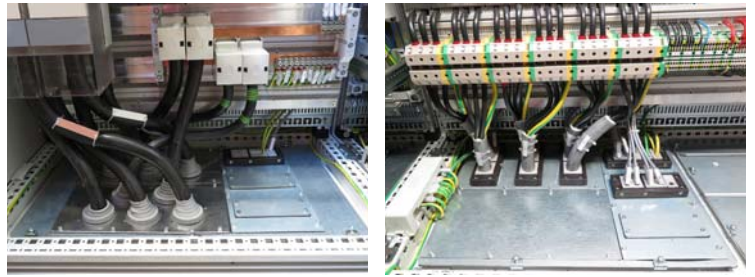


Type	Enclosure type	Enclosure width	Total length base plate	Sight size of base plate opening	Order No.
KDR-BES-TS8-600	TS8	600 mm	458 mm	436 mm	58000
KDR-BES-TS8-800	TS8	800 mm	658 mm	636 mm	58006
KDR-BES-TS8-1000	TS8	1000 mm without division bar	858 mm	836 mm	58012
KDR-BES-TS8-1200	TS8	1200 mm*	518 mm	496 mm	58018

* in case both fields of the enclosure are equipped, 2 complete base plates are necessary.

KDR-BMP

Enclosure Base Plates for Module Plates



Product description

The enclosure base plates KDR-BMP for Rittal enclosures TS8 can be used instead of the 3-piece standard base plates.

The base plates are as well installed with standard Rittal clips.

On KDR-BMP base plates, our MP Module Plates MP0-MP8 can be easily mounted and used for installation of cable entry components.

Advantages

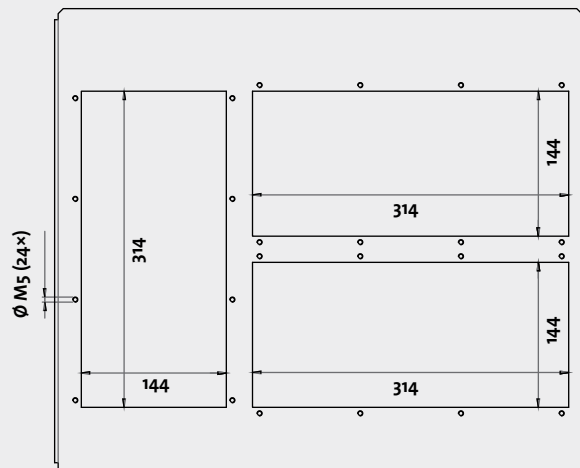
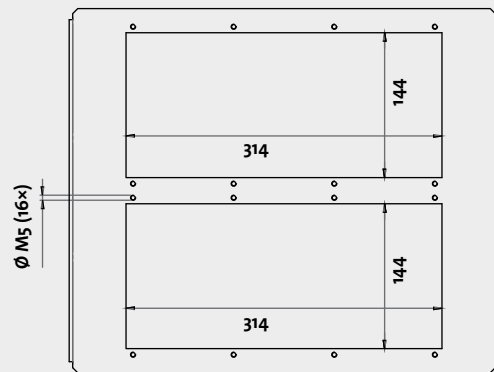
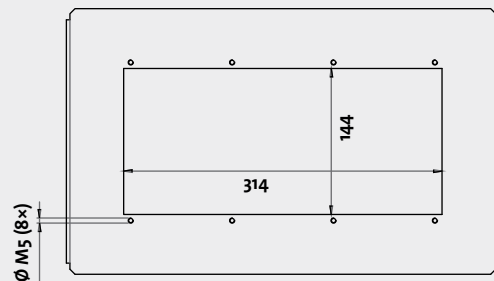
- Very simple mounting
- No sheet metal work required

Specifications

Material **Sheet steel, zinc-plated**
 Protection class **IP54, with gasket and correct selection of cable entry devices**

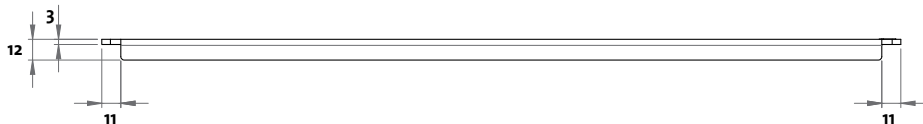
Fits with

MP Module plates 146



KDR-BMP

Enclosure Base Plates for Module Plates

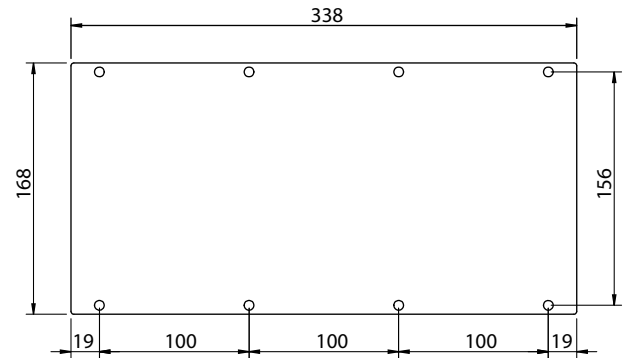


Type	Enclosure type	Enclosure width	Enclosure depth	No. of cut-outs for module plates	Order No.
KDR-BMP 600/400	TS8	600 mm	400 mm	1	43300
KDR-BMP 600/500		600 mm	500 mm	2	43302
KDR-BMP 600/600		600 mm	600 mm	2	43304
KDR-BMP 800/400	TS8	800 mm	400 mm	1	43306
KDR-BMP 800/500		800 mm	500 mm	3	43308
KDR-BMP 800/600		800 mm	600 mm	3	43310
KDR-BMP 1000/400	TS8	1000 mm with division bar	400 mm	1	43312
KDR-BMP 1000/500		1000 mm with division bar	500 mm	2	43314
KDR-BMP 1000/600		1000 mm with division bar	600 mm	2	43316
KDR-BMP 1200/400	TS8	1200 mm with division bar	400 mm	1	43318
KDR-BMP 1200/500		1200 mm with division bar	500 mm	2 × 3	43320
KDR-BMP 1200/600 for left section		1200 mm with division bar	600 mm	3	43322
KDR-BMP 1200/600 for right section		1200 mm with division bar	600 mm	3	43324

* in case both fields of the enclosure are equipped, 2 complete base plates are necessary.

MP

Module Plates



Product Description

The module plates have cut-outs for fixing the KEL range cable entry systems KEL 24, KEL-U 24, KEL-JUMBO, KEL-DPF, KEL-JUMBO flex and KEL-ULTRA flex. The module plates can be fixed on the following positions:

- Separation plates
- Closed bottom of the switch box
- Electronic enclosures by Rittal / Lohmeier

The module blind plate without cut-outs (Order No. 43882) is designed for closing unused cut-outs. This module plate can even be used for self-made cut-outs.

Module plates are supplied with a gasket.

Specifications

Material **Carbon steel, zinc-plated**
Aluminum (Order No. 43883)
Dimension **338 × 168 × 2 mm**

Fits with

KEL 24 Cable entry frames	16
KEL-U 24 Cable entry frames	6
KEL-SNAP snap frames	28 - 29
KEL-JUMBO Cable entry frames	48
KEL-DPF Cable entry grommets	75
KEL-JUMBO flex Cable entry ins.	76
KEL-ULTRA flex Cable entry ins.	77
Blind plates	154 - 156

Description	Type	Order No.	Fits with
	MP 0	43882	Module plate, blind
	MP 1	43891	3× KEL(-U) 24 x
	MP 2	43890	4× KEL(-U) 24 x
	MP 3	43886	1× KEL-JUMBO 1 1× KEL-JUMBO 2
	MP 4	43888	2× KEL-JUMBO 1
	MP 5	43887	2× KEL(-U) 24 x 1× KEL-JUMBO 1
	MP 6	43883	5× cut-out M50 for KEL-DPF or KEL-DPZ
	MP 7	43889	Cut-out 3× KEL-JUMBO flex
	MP 8	43894	Cut-out 2× KEL-ULTRA flex

MP Module Plates



MP 8 Set



MP 6 Set

Type	Order No.	Scope of delivery
MP 6 Set	43883.001	MP 6, 338 × 168 × 2 mm 5× KEL-DPF 50 1× locking screw M50
MP 8 Set	43894.001	MP 8, 338 × 168 × 2 mm 1× KEL-ULTRA flex 1× BPM-ULTRA

Product Description

KEL / BPM are preassembled in all module plate sets. The module plates can be fixed on the following positions:

- Separation plates
- Closed bottom of the switch box
- 25 mm breadboard of the switch box
- 25 mm breadboard bars (Rittal TS System)

The shipment includes a suitable gasket.

Specifications

Material	Carbon steel, zinc-plated Aluminum (Order No. 43883)
Dimension	338 × 168 × 2 mm

FP-AE

Flanged Plates for Compact Enclosures



Description

Product Description

We supply complete flanged plates FP with 112 × 36 mm cut-outs for compact enclosures of the AE series. The cut-outs, as well as the drilling template, conform to the standard cut-outs for 24-pole industrial connectors.

All flanged plates are RAL 7035 powder-coated. Please use the gaskets of the standard plates. Enclosures are supplied with gaskets and screws.

We recommend fastening the cable entry systems with a torque of 1.5 - 2.0 Nm.

Advantages

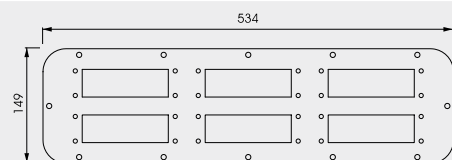
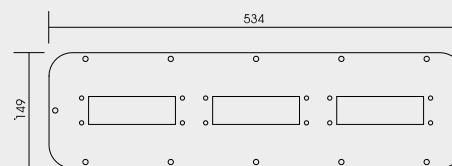
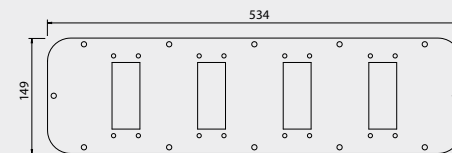
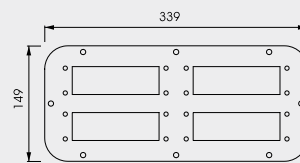
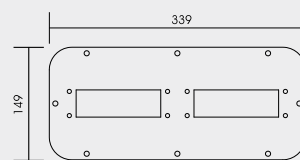
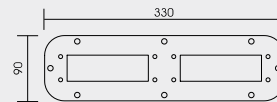
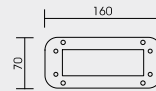
- No expensive extra sheet metal work is required
- High packing density is achieved by using KEL, KEL-U, KEL-DPZ or KEL-DP
- Reduce labor costs by using cable entry systems KEL, KEL-U, KEL-DPZ or KEL-DP compared to the assembly of conventional cable glands

Specifications

Material **Carbon steel, powder coated**

Fits with

KEL Cable entry frames	16 - 19
KEL-U Cable entry frames	6 - 14
KEL-SNAP Mounting frames	28 - 29
KEL-QTA Cable entry frames	54 - 55
KEL-DPZ Cable entry plates	62 - 63
KEL-DP Cable entry plates	70
Blind plates	154 - 156



FP-AE

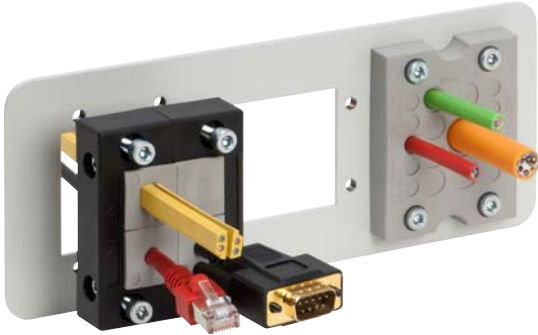
Flanged Plates for Compact Enclosures



Type	Order No. RAL 7035	Fits with: (Product Group 1)	Fits with: (Product Group 2)	Size FP	Fits with (e.g. for Rittal)
FP-AE 160 70 Version with 1 cut-out KEL 24	43836	KEL-QTA 24	KEL-DP 24	1	AE 1032 AE 1035
FP-AE-24 330 90 Version with 2 cut-outs KEL 24	43838	KEL 24 KEL-U 24 KEL-QTA 24	KEL-DPZ 24 KEL-DPU 24 KEL-DP 24	3	AE 1030 AE 1031 AE 1038 AE 1380
FP-AE-16 330 90 Version with 2 cut-outs KEL 16	43861	KEL 16 KEL-U 16		3	
FP-AE 339 149 Version with 2 cut-outs KEL 24	43840	KEL 24 KEL-U 24 KEL-SNAP 24 KEL-QTA 24	KEL-DPZ 24 KEL-DPU 24 KEL-DP 24	4	AE 1037 CS 9751.125 AE 1045 CS 9751.145 AE 1050 CS 9751.165 AE 1057 CS 9752.125 AE 1100 AE 1110 TP 6710 AE 1114 TP 6712 AE 1130 TP 6714 AE 1213 TP 6716 AE 1338 AE 1350
FP-AE 339 149 Version with 4 cut-outs KEL 24	43846	KEL 24 KEL-U 24 KEL-QTA 24	KEL-DPZ 24 KEL-DPU 24 KEL-DP 24	4	
FP-AE 534 149 Version with 4 cut-outs KEL 16	43871	KEL 16 KEL-U 16 KEL-SNAP 16		5	AE 1039 EL 1919 AE 1054 EL 1926 AE 1055 AE 1060 IN 1076.290 AE 1073 AE 1076 TP 6711 AE 1077 TP 6713 AE 1090 TP 6715 AE 1180 TP 6717 AE 1260 AE 1280 AE 1339 AE 1360 AE 1376 AE 1958
FP-AE 534 149 Version with 3 cut-outs KEL 24	43842	KEL 24 KEL-U 24 KEL-SNAP 24 KEL-QTA 24	KEL-DPZ 24 KEL-DPU 24 KEL-DP 24	5	
FP-AE 534 149 Version with 6 cut-outs KEL 24	43848	KEL 24 KEL-U 24 KEL-QTA 24	KEL-DPZ 24 KEL-DPU 24 KEL-DP 24	5	

FP-KL

Flanged Plates for Junction Boxes



Cable entry plate for Rittal KL:
KEL-DPZ-KL - see page 66

Description

Product Description

The FP flanged plates type KL, designed to fit the Rittal KL series junction boxes, are installed in combination with a cable entry system for either pre-terminated or standard cables. FP flanged plates are pre-cut, pre-drilled and painted for easy and quick installation of icotek cable routing products.

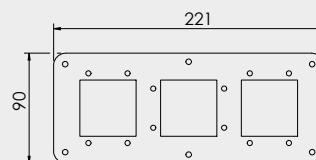
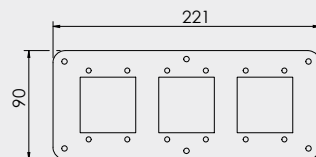
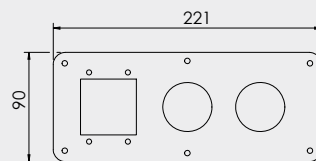
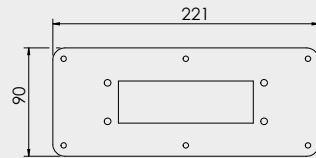
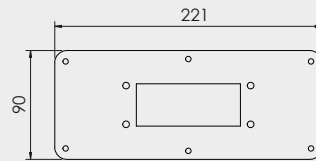
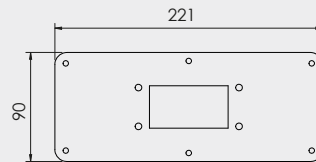
We recommend fastening the cable entry systems with a torque of 1.5 - 2.0 Nm.

Specifications

Material **Carbon steel, powder coated**

Fits with

KEL Cable entry frames	16 - 19
KEL-U Cable entry frames	6 - 14
KEL-SNAP Mounting frames	28 - 29
KEL-QTA Cable entry frames	54 - 55
KEL-DPZ Cable entry plates	62 - 63
KEL-DP Cable entry plates	70
KEL-DPF Cable entry grommets	75
Blind plates	154 - 156



FP-KL

Flanged Plates for Junction Boxes



Type	Order No. RAL 7035	Flanged plates fit with	Size FP	Fits with (e.g. for Rittal)
FP-KL 221x90 10 Version with 1 cut-out KEL 10	43853	KEL 10 KEL-U 10 KEL-SNAP 10	2	Junction boxes Type KL
FP-KL 221x90 16 Version with 1 cut-out KEL 16	43855	KEL 16 KEL-U 16 KEL-SNAP 16	2	Junction boxes Type KL
FP-KL 221x90 24 Version with 1 cut-out KEL 24	43834	KEL 24 KEL-U 24 KEL-SNAP 24 KEL-DPZ 24 KEL-DPU 24 KEL-DP 24	2	Junction boxes Type KL
FP-KL 221x90 A Version with 3 cut-outs	43852	KEL-B KEL-U-B KEL-SNAP-B KEL-DPZ-B KEL-DPZ 40 KEL-DPF 40	2	Junction boxes Type KL
FP-KL 221x90 B Version with 3 cut-outs KEL-B	43854	Use with 2× KEL-SNAP-B and 1× KEL-DPZ-B	2	Junction boxes Type KL
FP-KL 221x90 C Version with 3 cut-outs KEL-B	43856	KEL-B KEL-U-B KEL-DPZ-B	2	Junction boxes Type KL

FP-BG

Flanged Plates for Bus Enclosures



Description

Product Description

The FP flanged plates type BG, designed to fit the Rittal BG series enclosures, have up to 3 cut-outs that match the dimensions of the standard cut-outs for the 24-pole industrial connectors. These flanged plates are installed in combination with a cable entry system for either pre-terminated cables (KEL 24 or KEL-U 24) or standard cables (KEL-DPZ 24, KEL-DPU 24 or KEL-DP 24).

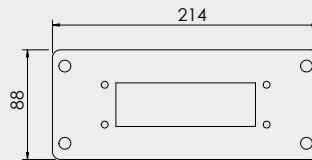
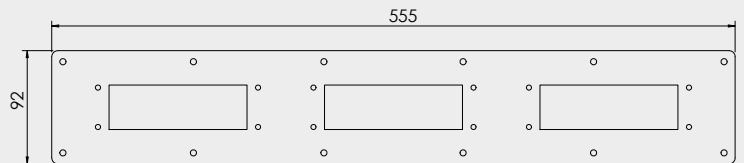
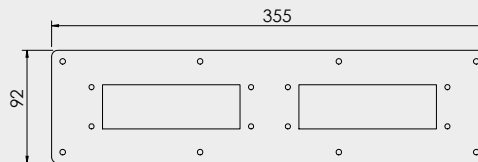
We recommend fastening the cable entry systems with a torque of 1.5 - 2.0 Nm.

Specifications

Material **Carbon steel, powder coated**

Fits with

KEL 24 Cable entry frames	16 - 19
KEL-U 24 Cable entry frames	6 - 14
KEL-SNAP Mounting frames	28 - 29
KEL-QTA Cable entry frames	54 - 55
KEL-DPZ 24 Cable entry plates	62 - 63
KEL-DP 24 Cable entry plates	70
Blind plates	154 - 156



FP-BG

Flanged Plates for Bus Enclosures



Type	Order No. RAL 7035	Flanged plates fit with	Size FP.	Fits with (e.g. for Rittal)
FP-BG 355x92 Version with 2 cut-outs KEL 24	43866	KEL 24 KEL-U 24 KEL-SNAP 24 KEL-DPZ 24 KEL-DPU 24 KEL-DP 24	-	BG 1558.510
FP-BG 555x92 Version with 3 cut-outs KEL 24	43865	KEL 24 KEL-U 24 KEL-SNAP 24 KEL-DPZ 24 KEL-DPU 24 KEL-DP 24	6	BG 1050.900 BG 1559.510 IN 1510.280
FP-FL 21 Version with 1 cut-out KEL 24	43832	KEL 24 KEL-U 24 KEL-SNAP 24 KEL-DPZ 24 KEL-DPU 24 KEL-DP 24	-	Fibox plates

BPK

Plastic Blind Plates



BPK-RF: Snap function, tool-free assembly



BPK: screwable

Product Description

BPK Blind plates seal cut-outs for standard 10-pole / 16-pole / 24-pole industrial connectors with protection class up to IP64.

Plastic blind plates are available in two different versions:

- Type BPK: Blind plates for screw connection
- Type BPK-RF A: Blind plates for snapping into metal sheet plates up to a thickness from 1.5 to 3 mm

Advantages

- Fast mounting of the blind plates BPK-RF range by snapping into the cut-out
- Integrated circular sealing (up to IP64)

Specifications

Material	Polypropylene (PP)
Flame class	UL94-V0
Protection class	BPK: IP64 BPK-RF A: IP54
Temperature Properties	- 30°C to + 140°C (static) Halogen free, silicone free

Fits with

FP Flanged plates 148 - 153

Type	Order No.	Blind plate for KEL cut-out	Dimensions	PU
BPK Blind plates for screw connection:				
BPK-B	42010	KEL-B KEL-U-B KEL-ER-B	76 × 53 mm	10
BPK 10	42015	KEL 10 KEL-U 10 KEL-ER 10	101 × 53 mm	10
BPK 16	42016	KEL 16 KEL-U 16 KEL-ER 16 KEL-QUICK 16	121 × 53 mm	10
BPK 24	42024	KEL 24 KEL-U 24 KEL-ER 24 KEL-QUICK 24	148 × 53 mm	10
BPK Blind plates for snapping into cut-outs:				
BPK-B-RF A	42010.002	KEL-B KEL-U-B	76 × 53 mm	10
BPK 10-RF A	42015.002	KEL 10 KEL-U 10	101 × 53 mm	10
BPK 16-RF A	42016.002	KEL 16 KEL-U 16 KEL-QUICK 16	121 × 53 mm	10
BPK 24-RF A	42024.002	KEL 24 KEL-U 24 KEL-QUICK 24	148 × 53 mm	10
BPK-JFX	42620	KEL-JUMBO flex	88 × 88 mm	5

BPM

Metal Blind Plates



Type	Order No.	Blind plate for KEL cut-out	Dimensions	PU
BPM-B	42013	KEL-B KEL-U-B KEL-QUICK-B	75 × 58 mm	10
BPM 6 BPM 6 V2A	42011 41991	standard 6-pole industrial connectors	90 × 52 mm	10
BPM 10 BPM 10 V2A	42014 41992	KEL 10 KEL-U 10	99 × 58 mm	10
BPM-FG B	42012	KEL-FG B	80 × 58 mm	10
BPM 16 BPM 16 V2A	42025 41994	KEL 16 KEL-U 16 KEL-QUICK 16	118 × 56 mm	10
BPM 16-E	42023	KEL 16-E	120 × 87 mm	10
BPM 16-MT	42026	KEL 16-MT	120 × 102 mm	10
BPM 16-2MT	42031	KEL 16-2MT	120 × 146 mm	10
BPM 24 BPM 24 V2A	42027 41995	KEL 24 KEL-U 24 KEL-QUICK 24	145 × 56 mm	10
BPM 24-E	42029	KEL 24-E	143 × 83 mm	10
BPM 24-MT	42028	KEL 24-MT	147 × 102 mm	1
BPM-JUMBO flex	42033	KEL-JUMBO flex	88 × 88 mm	1
BPM-JUMBO 1	42030	KEL-JUMBO 1	116 × 110 mm	1
BPM-JUMBO 2	42032	KEL-JUMBO 2	200 × 116 mm	1
BPM-ULTRA	42633	KEL-ULTRA flex	∅ 168 mm Width: 1,5 mm	1

Product Description

Blind plates to close cut-outs for standard 6-pole / 10-pole / 16-pole / 24-pole industrial connectors.

Blind plates are supplied with a gasket.

Specifications

Material Carbon steel, zinc-plated
Width 2 mm
Protection class IP54

Fits with

KDR 2 Split base plates 138 - 139
FP Flanged plates 148 - 153
MP Module plates 146 - 147

BPK-SNAP

Blind Plates for KEL-SNAP Frames



Product Description

Blind plate BPK-SNAP to close cut-outs of preassembled KEL-SNAP frames.

A snap frame can be closed, e.g. during transport to avoid entry of dust, as long as a KEL frame is not mounted.

The BPK-SNAP blind plate is simply snapped on the KEL frame. There is no tool needed to remove it.

BPK-SNAP 16 and BPK-SNAP 24 for closing cut-outs of the KEL-SNAP mounting frames and unused Slide frames of the KDR-ESR base plates.

Specifications

Material	Polyethylene (PE)
Flame class	UL94-HB
Protection class	IP54
Temperature	- 40°C to + 80°C (static)
Properties	Silicone free

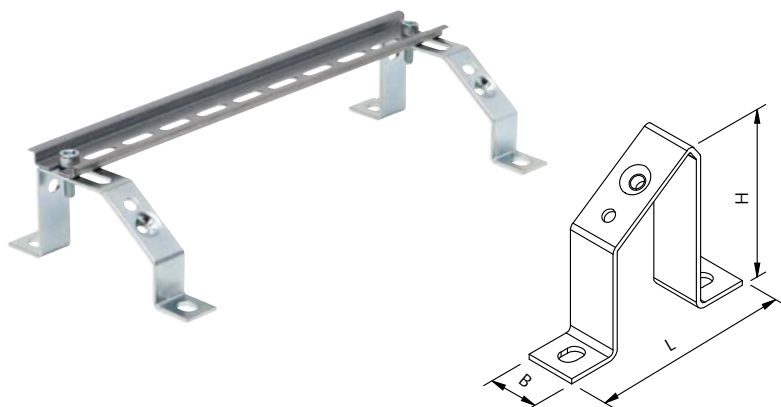
Fits with

KEL-SNAP Mounting frames	28 - 29
KDR-ESR Base plate with Slide frames	136 - 137

Type	Order No.	Blind plate fits with	Dimensions l x b x h	PU
BPK-SNAP-B	42003	KEL-SNAP-B4	58 × 72.8 × 17 mm	10
BPK-SNAP 10	42004	KEL-SNAP 10	58 × 98.3 × 17 mm	10
BPK-SNAP 16	42007	KEL-SNAP 16	58 × 120 × 17 mm	10
BPK-SNAP 24	42017	KEL-SNAP 24	58 × 147 × 17 mm	10

MF

Supports for DIN Rails and Bus Bars



Description	Type	Version	Order No. without Clip	Order No. with Clip	Dimension [L x B x H]	PU
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Type A		MF-A49	Type A	36056	36058	80 x 20 x 49 mm	10
		MF-A68	Type A	36064	36066	80 x 20 x 68 mm	10
		MF-A88	Type A	36072	36074	80 x 20 x 88 mm	10
Type B		MF-B20	Type B	36000	36002	80 x 20 x 20 mm	10
		MF-B30	Type B	36008	36010	80 x 20 x 30 mm	10
		MF-B50	Type B	36016	36018	80 x 20 x 50 mm	10
Type C		MF-B90	Type B	36024	36026	80 x 20 x 90 mm	10
		MF-C40	Type C	36032	36034	40 x 18 x 40 mm	10
Type D		MF-C53	Type C	36040	36042	40 x 18 x 53 mm	10
		MF-D49	Type D	36048	36050	120 x 20 x 49 mm	10
		Bus bar 10 x 3 mm	-	36100	-	10 x 3 x 1000 mm*	1

* Other lengths available on request

Product Description

There are 4 models of supports for mounting bus bars 10 x 3 mm or 35 mm DIN rails. Various supports are available to provide solutions for different conditions.

A mounting clip is used for fastening the bus bar to the supports. The support has M6 female screw threads to affix the mounting clip of the DIN rail with a M6 screw.

Mounting clip
Order No. 36150

Advantages

- Wide variety of supports with different sizes and designs
- Simple assembly of TS35 DIN rails and 10 x 3 mm bus bars
- Support type D provides possibility to affix 2 TS335 DIN rails

Specifications

Material Carbon steel, galvanically zinc-plated

Accessories

Bus bar Order No. 36100
Mounting clip Order No. 36150

KGM

Locknuts



Type KGM: Standard nut, plastic



Type KGM: SUB-D9, PB, SUB-D25



Type GMT: Split locknut

Product Description

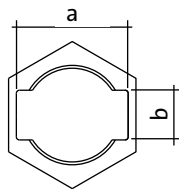
Hexagonal locknut with metric threads for attaching components together.

For routing SUB-D, DVI or PROFIBUS connectors in combination with the split cable glands KVT / QVT, special locknuts with cut-outs are required:

KGM-SUB-D9 fits D-Sub 9 connectors
(Required wall cut-out: \varnothing 36 mm)

KGM-PB fits DVI and PROFIBUS connectors
(Required wall cut-out: \varnothing 42 mm)

KGM-SUB-D25 fits SUB-D25 connectors
(Required wall cut-out: \varnothing 50 mm)



Specifications

Material	Polyamide (PA) / Polycarbonate (PC) / Brass (BR), nickel-plated
Color	<input type="checkbox"/> gray (similar RAL 7035) <input type="checkbox"/> black
Flame class	UL94-Vo, self-extinguishing
Temperature Properties	- 30°C to + 120°C Halogen free, silicone free

Fits with

KVT, KVT-SNAP, KVT-W90	
Split cable glands	31 - 36
QVT Split cable glands	52
KEL-DPZ Cable entry plates	68 - 69
KEL-DPF Cable entry grommets	75

Thread	Type	Order No.	Material	Height [mm]	Wrench size	Diagonal [mm]	Cut-out a×b [mm]	PU
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Type KGM: Standard nut, plastic

M16 × 1.5	KGM 16	<input type="checkbox"/> 52272 <input type="checkbox"/> 52283	PA	4.3	SW 22.8	28.2	-	10
M20 × 1.5	KGM 20	<input type="checkbox"/> 52273 <input type="checkbox"/> 52283	PA	7	SW 26	28.2	-	10
M25 × 1.5	KGM 25	<input type="checkbox"/> 52274 <input type="checkbox"/> 52284	PA	7	SW 32	36	-	10
M32 × 1.5	KGM 32	<input type="checkbox"/> 52275 <input type="checkbox"/> 52285	PA	7	SW 41	46	-	10
M40 × 1.5	KGM 40	<input type="checkbox"/> 52276 <input type="checkbox"/> 52286	PA	7	SW 50	56	-	10
M50 × 1.5	KGM 50	<input type="checkbox"/> 52277 <input type="checkbox"/> 52287	PA	8.6	SW 60	66	-	10
M63 × 1.5	KGM 63	<input type="checkbox"/> 52278 <input type="checkbox"/> 52288	PA	8.6	SW 75	83	-	5

Type KGM: PB, SUB-D9, SUB-D25

M32 × 1.5	KGM-SUB-D9	<input type="checkbox"/> 45105 <input type="checkbox"/> 45106	PC	7	SW 41	46	35 × 16	10
M40 × 1.5	KGM-PB	<input type="checkbox"/> 45107 <input type="checkbox"/> 45109	PC	8	SW 50	55	43 × 17	10
M50 × 1.5	KGM-SUB-D25	<input type="checkbox"/> 45108 <input type="checkbox"/> 45110	PC	8	SW 60	66	55 × 16	10

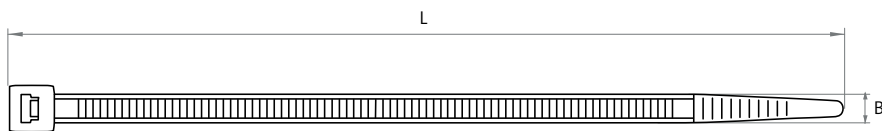
Type GMT: Split locknut

M20 × 1.5	GMT 20	<input type="checkbox"/> 31110	PA	9	SW 27	29	-	10
M25 × 1.5	GMT 25	<input type="checkbox"/> 31100	PA	9	SW 32	35	-	10
M32 × 1.5	GMT 32	<input type="checkbox"/> 31120	PA	12	SW 40	44	-	10
M50 × 1.5	GMT 50	<input type="checkbox"/> 31140	PA	15	SW 63	69	-	10

* Only valid for gray product types

KB

Cable Ties and Pliers



Type	Order No.	Length L	Width B	Bundling range	Tensile strength	PU
KB 28	■ 61225	178 mm	9 mm	28 mm	350 N	100
KB 15	□ 61115	75 mm	2.2 mm	15 mm	60 N	100
KB 20	□ 61120	98 mm	2.5 mm	20 mm	60 N	100
KB 22	□ 61125	135 mm	2.6 mm	22 mm	80 N	100
KB 25	□ 61130	140 mm	3.6 mm	25 mm	130 N	100
KB 30	□ 61135	160 mm	4.5 mm	30 mm	180 N	100
KB 45	□ 61140	178 mm	4.8 mm	45 mm	220 N	100
KB 50	□ 61145	200 mm	2.6 mm	50 mm	80 N	100
KB 55	□ 61150	200 mm	4.8 mm	50 mm	220 N	100
KB 75	□ 61155	290 mm	4.8 mm	75 mm	220 N	100
KB 100	□ 61160	360 mm	4.8 mm	100 mm	220 N	100
KB 20	■ 61215	98 mm	2.5 mm	20 mm	60 N	100
KB 25	■ 61220	140 mm	3.6 mm	25 mm	130 N	100
KB 30	■ 61230	160 mm	4.5 mm	30 mm	180 N	100
KB 45	■ 61235	178 mm	4.8 mm	45 mm	220 N	100
KB 55	■ 61240	200 mm	4.8 mm	50 mm	220 N	100
KB 75	■ 61245	290 mm	4.8 mm	75 mm	220 N	100
KB 100	■ 61250	360 mm	4.8 mm	100 mm	220 N	100
KBW 9	61300	Processing tool for cable ties				1

Product Description

Cable ties are proven utilities for economical bundling and fixing of cables, looms, tubes, conduits and many other components, e.g. for achieving strain relief.

Power cable ties KB 28 for special requirements. Bundling range max. 28 mm.
Order No. 61225

■ Specifications KB 28

Material Polyamide 12 (PA), black
 Flame class UL94-V2
 Temperature - 40°C to + 100°C
 Properties Oil- and mould-resistant

□ Specifications KB natural

Material Polyamide 6.6 (PA), natural
 Flame class UL94-V2
 Temperature - 40°C to + 100°C
 Properties Oil- and mould-resistant

■ Specifications KB black

Material Polyamide 6.6 (PA), black
 Flame class UL94-V2
 Temperature - 40°C to + 100°C
 Properties UV-resistant, particularly matching for outdoor use

KLKB / KLB

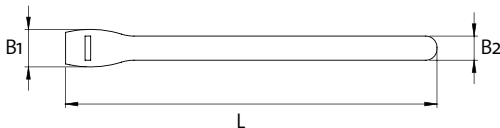
Cable Ties with Hook-and-Loop Fastener



Product Description

Cable ties with hook-and-loop fastener are a more and more common fixing mode for cables. Cable ties with hook-and-loop fastener are used instead of standard cable ties, because they can be easily closed and opened several times. The soft material is gentle on cables, especially where vibrations are present.

Cable ties with hook-and-loop fastener are available individually (KLKB) in four different sizes or as a continuous roll (KLB) in four different sizes.



Advantages

- Reusable
- Adaptable
- The cable tie material is gentle on cables, especially if there are vibrations

Specifications

Material **Polypropylene + Velours PA**
 Color **black**
 Flame class **UL94-V2**
 Temperature **-30°C to +80°C**

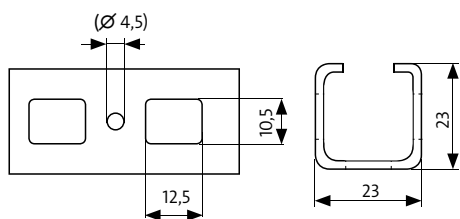
Accessories

KBH Holder for hook-and-loop fastener 161

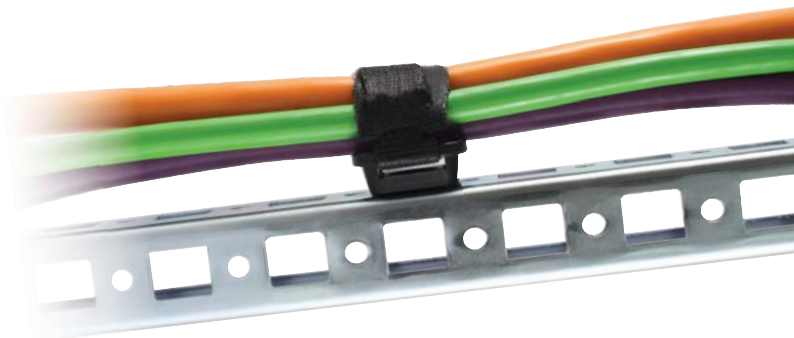
Type	Size [mm]			Order No.	PU
	L	B1	B2		
KLKB 200 × 7 bk	200	13	7	61021	100
KLKB 200 × 13 bk	200	20	13	61022	100
KLKB 230 × 13 bk	230	20	13	61023	100
KLKB 300 × 17 bk	300	25	17	61024	100
KLB 10 bk			10	61011	25 m
KLB 15 bk			15	61012	25 m
KLB 20 bk			20	61013	25 m
KLB 25 bk			25	61014	25 m

KBH

Holder for Hook-and-Loop Fastener



23 × 23 mm mounting rail



Description	Type	Order No.	fits KLKB KLB	Fits with	PU
Holder for hook-and-loop fastener, screwable					
	KBH-S	■ 61019	KLKB 200 × 7 KLKB 200 × 13 KLB 10	23 × 23 mm mounting rail	100
	KBH-SB	■ 61002	KLKB 200 × 7	universal	100
Holder for hook-and-loop fastener, pluggable					
	KBH-R	■ 61018	KLKB 200 × 7 KLKB 200 × 13 KLB 10	23 × 23 mm mounting rail	100
	KBH-RBA nc	□ 61003	KLKB 200 × 7	drill-hole Ø 6 mm	100
	KBH-RBB	■ 61004	KLKB 200 × 7	drill-hole Ø 6.5 mm	100

* Only KBH-S / KBH-R

Product Description

These holders can be used in combination with cable ties with hook-and-loop fastener KLKB and hook-and-loop tape KLB.

Large variety of holders provides unique and numerous mounting possibilities.

Advantages

- Assembly within seconds
- Secure hold
- Flexible usage

Specifications KBH-S / KBH-R

Material	Polyamide (PA)
Color	■ black
Flame class	UL94-Vo, self-extinguishing
Temperature	- 40°C to + 110°C
Properties	Halogen free, silicone free

Specifications KBH-SB / KBH-RBA

Material	Polyamide (PA)
Color	■ black (KBH-SB) □ nc (KBH-RBA)
Flame class	UL94-V2
Temperature	- 40°C to + 85°C (short-term to 110°C)

Specifications KBH-RBB

Material	Polyamide (PA)
Color	■ black
Temperature	- 40°C to + 120°C

Fits with

KLKB / KLB Cable ties with hook-and-loop fastener 160