# Product group 2

Cable entry systems for entering non pre-terminated cables

#### **Product description**



#### At a glance ...

Even when entering standard cables Icotek offers a wide range of products that offer a lot of advantages in comparison to conventional cable glands.

The compact, slim and innovative design of the Icotek system offers a professional appearance and in many applications good strain relief.

Especially suitable for applications where a lot of cables have to be entered into a small space.





#### Benefits ...

#### 1. High packing density

The cable entry plates KEL-DPZ and KEL-DP offer the opportunity to enter a large amount of cables through a small space.

#### 2. Fast and easy assembly

The installation of cables is done by pushing the cables through the thin, pierceable membrane.

#### 3. No new punch out tools needed

The KEL-DP range matches exactly the drilling templates, as well as cut outs according to the standard dimensions for multi pole connectors (for example from Harting, Wieland).

Depending on the product a high sealing rate up to IP 66 can be achieved.

Due to the large variety of designs and sizes available, there's a solution for every application.

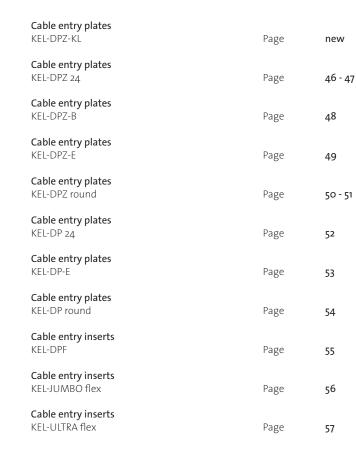
#### 6. Customized solutions

If you can't find what you need in our standard product offering, custom solutions are available upon request.

# Product group 2

Cable entry systems for routing non pre-terminated cables

# Chapter content





#### **KEL-DPZ-KL**

# Cable entry plates



#### Product description

The Cable Entry System KEL-DPZ-KL is designed for routing up to 72 standard cables (without connectors). The KEL-DPZ products are a cost saving alternative to traditional cable glands.

Either push the cable through the thin membrane or simply put a small slit in the thin membrane and push the cable through. Once the cable is through the membrane, it is immediately sealed and strain relieved. ST Plugs can be used for sealing pierced membranes if cables are removed. The KEL-DPZ-KL matches on terminal boxes KL from Rittal.

## Advantages

- Space saving shape
- Dual sealing of cables according to IP 65
- High packing density
- Assembly within seconds

## Specification

Material Support: Steel, zinc-plated

> molded with elastomer Sealing plate: Elastomer

Flame class UL-94 Vo, self-extinguishing

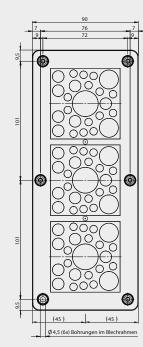
Protection class

- 40°C to + 90°C (static) Temperature Properties halogen-free, silicone-free

Cut-out dimensions 192 x 62 mm

#### Zubehörteile

Inserts Page 29



Description

7 9	90 76 7 72 9
16	
	(45)
	Ø 4,5 (6x) Bohrungen im Blechrahmen
	<del> </del>

42x 3.2 - 6.5 mm 21x 5.0 - 10.2 mm 6x 9.0 - 16.2 mm 3× 16 - 22 mm

**Number of** 

Order No.

43675

Туре

KEL-DPZ-KL72

5

PU

# KEL - DPZ 24

# Cable entry plates





Gasket on the front.



Gasket and strain relief on the back.

## Product description

KEL-DPZ entry plates are designed to route and seal standard cables (from 3.2mm – 22mm in diameter) in limited space.

Simply push standard cables through the thin membrane and it's immediately sealed (IP65 / IP66) and strain relieved.

The KEL-DPZ series consists of four different versions. The size DPZ 24 matches exactly the cut-out dimensions of 24-pole standard industrial connectors (pages 46 - 47).

For applications with limited space the new KEL-DPZ-B and KEL-DPZ-E series are ideal. Despite its compact outer dimensions, up to 25 cables from 3.2 to 22 mm can be routed (pages 48 - 49).

The round versions of the KEL-DPZ series have a thread to fit in metric cut-outs from M<sub>3</sub>2 to M<sub>6</sub>3. Thus cut-outs for standard metric cable glands can be used (pages 50 - 51).

The assembly of the KEL-DPZ with cables or pneumatic hoses can be done within seconds. Simply put a small slit in the thin membrane and push the cable through.

ST Plugs (page 29) can be used for sealing pierced membranes if cables are removed.

Description	Туре	Order No.	Number of cables	PU	
147 130 $\Theta$ $\Theta$ $\Theta$ $\Theta$ $\Theta$ $\Theta$ $\Theta$ $\Theta$ $\Theta$ $\Theta$	KEL - DPZ 24   14	43700	10× 3.2 - 6.5 mm 4× 16 - 22 mm	10	
147 130 $\oplus$ $\oplus$ $\oplus$ $\oplus$ $\oplus$ $\oplus$ $\oplus$ $\oplus$	KEL - DPZ 24   15	43720	15× 7.2 - 12 mm	10	
147 130 $\Theta$ $\Theta$ $\Theta$ $\Theta$ $\Theta$	KEL - DPZ 24   16	43725	8× 3.2 - 6.5 mm 4× 5.0 - 9.7 mm 2× 9.0 - 16.2 mm 2× 16 - 22 mm	10	
147 130 © 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	KEL - DPZ 24   17	43705	6x 3.2 - 6.5 mm 6x 5.0 - 10.2 mm 5x 9.0 - 16.2 mm	10	

# KEL - DPZ 24 Cable entry plates



Туре	Order No.	Number of cables	PU	Description
KEL - DPZ 24   25	43710	12x 3.2 - 6.5 mm 7x 4.8 - 9.7 mm 6x 7.5 - 12.0 mm	10	3 N
KEL - DPZ 24   32	43730	3× 7.5 - 12.0 mm 8× 5.0 - 10.2 mm 21× 3.2 - 6.5 mm	10	3 8
KEL - DPZ 24   42	43715	42x 3.2 - 6.5 mm	10	147 130 0000000000000000000000000000000000

#### Advantages

- Assembly within seconds
- High packing density
- Dual sealing of cables according to IP 65
- Automatic seal and strain relief for the cable

#### Specification

Material Frame: Polyamide

Sealing plate: Elastomer

Flame class UL-94 Vo, self-extinguishing

Protection class IP 65

Temperature - 40°C to + 90°C (static) Properties halogen-free, silicone-free Cut-out dimensions 35 x 112 mm / page 124 | 125

#### Accessories

Plugs Page 29 FP Flanged plates Page 106 | 111

#### KEL - DPZ - B

# Cable entry plates



#### Product description

The KEL-DPZ-B entry plates are designed for routing standard cables (without connectors) .

With an area of only 46 x 46 mm, up to 25 cables can be easily routed and sealed according to IP65.

Simply put a small slit in the thin membrane and push the cable through. Once the cable is through the membrane, it is immediately sealed and strain relieved.

ST Plugs (page 29) can be used for sealing pierced membranes if cables are removed.

## Advantages

- Space saving shape
- Dual sealing of cables according to IP 66
- High packing density
- Assembly within seconds

## Specification

Material Frame: Polyamide

Sealing plate: Elastomer

Flame class UL-94 Vo, self-extinguishing

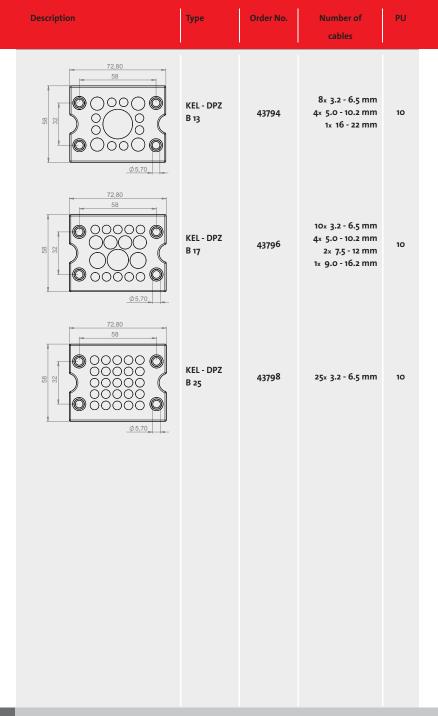
Protection class IP 66

Temperature - 40°C to + 90°C (static)
Properties halogen-free, silicone-free

Cut-out dimensions 46 x 46 mm

#### Accessories

FP Flanged plates Page 106 | 111



# **KEL - DPZ - E**Cable entry plates



Description	Туре	Order No.	Number of cables	PU	
147 130 • • • • • • • • • • • • • • • • • • •	KEL - DPZ - E 112   7	43780	7× 7.5 - 12 mm	10	Product description  KEL-DPZ-E is designed for routing standard cables (without connectors).
147 130 © 000 0000 000 0	KEL - DPZ - E 112   21	43790	21x 3.2 - 6.5 mm	10	With an area of only 18 x 112 mm, up to 21 cables can be easily routed and sealed according to IP66.  Simply put a small slit in the thin membrane and push the cable through. Once the cable is through the membrane, it is immediately sealed and strain relieved.
					ST Plugs (page 29) can be used for sealing pierced membranes if cables are removed.
					Advantages  Space saving shape Dual sealing of cables according to IP 66 High packing density Assembly within seconds
					Specification  Material Frame: Polyamide Sealing plate: Elastomer Flame class UL-94 Vo, self-extinguis Protection class IP 66 Temperature -40°C to +90°C (static) Properties halogen-free, silicone-fr

#### KEL - DPZ round

# Cable entry plates









Gasket and strain relief on the back.

#### Product description

KEL-DPZ entry plates are designed to route and seal standard cables (from 3.2mm – 22mm in diameter) in limited space.

Simply push standard cables through the thin membrane and it's immediately sealed (IP65 / IP66) and strain relieved.

The KEL-DPZ series consists of four different versions. The size DPZ 24 matches exactly the cut-out dimensions of 24-pole standard industrial connectors (pages 46 - 47).

For applications with limited space the new KEL-DPZ-B and KEL-DPZ-E series are ideal. Despite its compact outer dimensions, up to 25 cables from 3.2 to 22 mm can be routed (pages 48 - 49).

The round versions of the KEL-DPZ series have a thread to fit in metric cut-outs from M32 to M63. Thus cut-outs for standard metric cable glands can be used (pages 50 - 51).

The assembly of the KEL-DPZ with cables or pneumatic hoses can be done within seconds. Simply put a small slit in the thin membrane and push the cable through.

ST Plugs (page 29) can be used for sealing pierced membranes if cables are removed.

Ту	pe	Order No.	Number of cables	Thread metric	External diameter	Exceeds cut-out	PU	
	EL - DPZ   4	43732	3× 3.2 - 6.5 mm 1× 7.2 - 12.5 mm	M 32	44 mm	8.o mm	10	
	EL - DPZ     7	43734	7× 3.2 - 6.5 mm	M 32	44 mm	8.o mm	10	
	EL - DPZ D   8	43741	4× 3.2 - 6.5 mm 4× 5.0 - 10.2 mm	M 40	52 mm	8.o mm	10	
	EL - DPZ D   8	43750	5× 5.0 - 10.2 mm 3× 7.2 - 12.5 mm	M 50	62 mm	8.o mm	10	
	EL - DPZ 0   10	43751	7× 3.2 - 6.5 mm 2× 5.0 - 10.2 mm 1× 16.0 - 22.2 mm	M 50	62 mm	8.o mm	10	
	EL - DPZ 0   12	43752	4× 3.2 - 6.5 mm 8× 5.0 - 10.2 mm	M 50	62 mm	8.o mm	10	
	EL - DPZ 0   19	43758	19× 3.2 - 6.5 mm	M 50	62 mm	8.o mm	10	

# KEL - DPZ round Cable entry plates







۸ ط، ۵	+	~ ~ ~
Adva	IILd	262

- Assembly within seconds
- High packing density
- Dual sealing of cables according IP 66
- Automatic seal and strain relief for the cable
- Suitable for standard or metric cut-outs
- Polyamide locknuts are included in the shipment

# Specification

Thread frame: Polyamide Material

Sealing plate: Elastomer

Flame class UL-94 Vo, self-extinguishing

Protection class IP 66

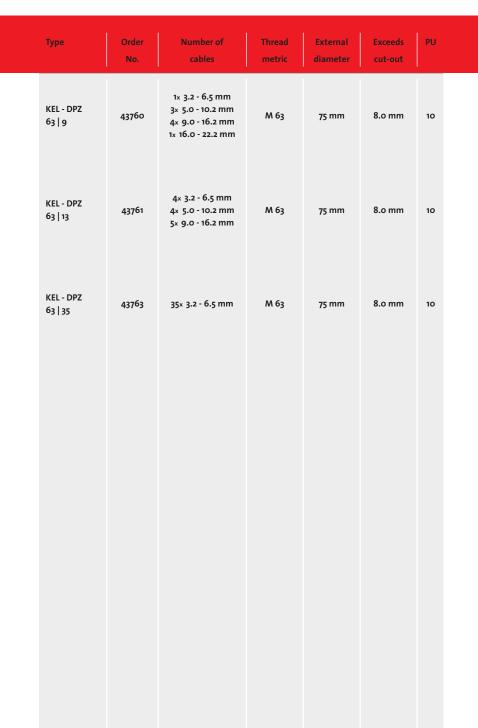
Temperature - 40°C to + 90°C (static) Properties halogen-free, silicone-free

Thread length 14 mm

Cut-out dim. metric standard sizes

#### Accessories

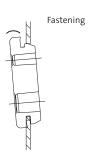
FP Flanged plates Page 108 | 109 MP Module plates Page 112



# KEL - DP 24

# Cable entry plates





## Product description

KEL-DP entry plates are designed for routing standard cables (without connectors). The KEL-DP products are a cost saving alternative to traditional cable glands. Either push the cable through the thin membrane or simply put a small slit in the thin membrane and push the cable through. Once the cable is through the membrane, it is immediately sealed. ST Plugs (page 29) can be used for sealing pierced membranes if cables are removed. A special fixing rib ensures a centered fit in the cut-outs.

## Advantages

- Quick and easy assembly, no tools required
- High packing density
- Cost-effective
- For wall-thickness up to 1.5 4.0 mm

## Specification

Material Elastomer

Flame class UL-94 Vo, self-extinguishing

Protection class IP 64

Temperature - 40°C to + 90°C (static)
Properties halogen-free, silicone-free

Cut-out dimensions 36 x 112 mm

Type A: for wall thickness 1.5 - 2.5 mm
Type B: for wall thickness 2.8 - 4.0 mm

#### Accessories

FP Flanged plates Page 106 | 111 KDR1 Base plates Page 113

Description	Туре	Order No. Type A	Order No. Type B	Number of cables	PU	
3 000000	KEL - DP 24   14	43512	43522	14x max. 12.1 mm	10	
3	KEL - DP 24   17	43514	435 <sup>2</sup> 3	5x max. 10.5 mm 12x max. 12.6 mm	10	
142 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	KEL - DP 24   19	43516	43524	12x max. 6.5 mm 7x max. 12.1 mm	10	
3	KEL - DP 24   26	43518	43525	16x max. 6.5 mm 4x max. 12.1 mm 4x max. 16.1 mm 2x ASI-Leitungen	10	
142	KEL - DP 24   48	43519	43526	48x max. 6.5 mm	10	
3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	KEL - DP 24   50	43520	43527	33x max. 5.3 mm 9x max. 6.4 mm 8x max. 8.3 mm	10	

# **KEL - DP - E**Cable entry plates



Туре	Order No.	Cut-out mm	Number of cables	PU	Description
KEL - DP-E 46   7	43585	46 x 18	5x max. 8.3 mm 2x max. 6.5 mm	10	62
KEL - DP-E 46   9	43587	46 x 18	8x max. 6.5 mm 1x max. 12.1 mm	10	62
KEL - DP-E 86   13	43581	86 x 18	11x max. 8.3 mm 2x max. 6.5 mm	10	102
KEL - DP-E 86   17	43583	86 x 18	16x max. 6.5 mm 1x max. 12.1 mm	10	102
KEL - DP-E 112   16	43576	112 x 18	4x max. 6.5 mm 11x max. 8.3 mm 1x max. 12.1 mm	10	128 .
KEL - DP-E 112   21	43578	112 X 18	16x max. 6.5 mm 4x max. 8.3 mm 1x max. 12.1 mm	10	128
KEL - DP-S 69   8	43591	69 x 10 Edge radii R2	8x max. 7.5 mm	10	79

#### Product description

KEL-DP-E entry plates are designed for routing standard cables (without connectors). The KEL-DP-E products are a cost saving alternative to traditional cable glands. Either push the cable through the thin membrane or simply put a small slit in the thin membrane and push the cable through. Once the cable is through the membrane, it is immediately sealed.

ST Plugs (page 29) can be used for sealing pierced membranes if cables are removed. A special fixing rib ensures a centered fit in the cut-outs.

## Advantages

- Quick and easy assembly, no tools required
- High packing density
- Cost-effective
- For wall-thickness up to 1.5 2.5 mm

## Specification

Material Elastomer

Flame class **UL-94 Vo, self-extinguishing** 

Protection class IP 64

Temperature - 40°C to + 90°C (static)
Properties halogen-free, silicone-free

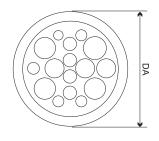
#### KEL - DP round

# Cable entry plates





Туре



Order No.

Number of

Order No.



Cut-out

External

## Product description

KEL-DP entry plates are designed for routing standard cables (without connectors). The KEL-DP products are a cost saving alternative to traditional cable glands. Either push the cable through the thin membrane or simply put a small slit in the thin membrane and push the cable through. Once the cable is through the membrane, it is immediately sealed. ST Plugs (page 29) can be used for sealing pierced membranes if cables are removed. A special fixing rib ensures a centered fit in the cut-outs.

## Advantages

- Quick and easy assembly, no tools required
- High packing density
- Cost-effective
- For wall thickness up to 1.5 4.0 mm

## Specification

Material Flame class Protection class Temperature Properties Cut-out dimensions	Elastomer UL-94 Vo, self-extinguishing IP 65 - 40°C to + 90°C (static) halogen-free, silicone-free metric standard sizes
Type A:	for wall thickness 1.5 - 2.5 mm
Type B:	for wall thickness 2.8 - 4.0 mm

#### Accessories

KEL-AD Cap f	or attachment	Page 42
housing		

FP Flanged plates Page 108 | 109

ا	.jpc.n	.5600			u.u		
KEL - DP 25   4	43533	-	4x max. 8.0 mm	ø 25	32 mm	10	
KEL - DP 25   6	43531	-	4x max. 5.2 mm 2x max. 9.4 mm	ø 25	32 mm	10	
KEL - DP 32   10	43532	43560	6x max. 5.2 mm 2x max. 6.4 mm 2x max. 9.4 mm	ø 32	38 mm	10	
KEL - DP 50   9	43554	43568	5x max. 7.0 mm 4x max. 18 mm	ø 50	60 mm	10	
KEL - DP 50   11	43555	43569	7x max. 7.2 mm 3x max. 11.2 mm 1x max. 22.5 mm	ø 50	60 mm	10	
KEL - DP 50   12	43551	43562	10x max. 9.2 mm 2x max. 11.2 mm	ø 50	60 mm	10	
KEL - DP 50   16	43550	43564	4x max. 5.3 mm 5x max. 6.3 mm 3x max. 9.5 mm 4x max. 11.3 mm	ø 50	60 mm	10	
KEL - DP 50   18	43553	43567	5x max. 5.3 mm 5x max. 6.3 mm 4x max. 7.2 mm 2x max. 6.0 mm	ø 50	6o mm	10	
KEL - DP 50   20	43552	43566	16x max. 6.3 mm 4x max. 9.3 mm	ø 50	60 mm	10	
KEL - DP 50   35	43556	43570	35x max. 5.2 mm	ø 50	6o mm	10	



# **KEL-DPF** Cable entry inserts



#### Product description

PU

The KEL-DPF was developed particulary for routing supply cables into the switch cabinet.

Due to the flexibility and unique pyramid shape, cable entry and positioning is much easier compared to using conventional cable glands.

#### Cutting of DPF inserts:

- Cable diameter less 5 mm
- The corresponding diameters are marked on the insert

#### Advantages

- Assembly within seconds
- It is possible to install rigid cables at angles
- Suitable for standard or metric cut-outs
- Polyamide locknuts are included in the shipment

#### Specification

Thread frame: Polyamide Material Pyramid: Elastomer Flame class UL-94 Vo, self-extinguishing Protection class Temperature - 40°C to + 90°C (static) Properties halogen-free, silicone-free Thread length 14 mm Cut-out dimensions metric standard sizes

#### Accessories

MP Module plates Page 112

#### 2

#### **KEL-JUMBO flex**

# Cable entry inserts





## Product description

The KEL-JUMBO flex is a flexible cable entry system for standard cables with a diameter range from 27 - 68 mm.

They are ideal for the routing supply cables into the switch cabinets.

#### Cutting of KEL-JUMBO flex inserts:

- Cable diameter less 5 mm
- The corresponding diameters are marked on the insert

## Advantages

- Assembly within seconds
- Inserts allow dynamic and flexible movement of rigid cables
- Small installation dimensions (88 x 88 mm)

#### Specification

Material Frame: Polyamide

Inserts: Elastomer

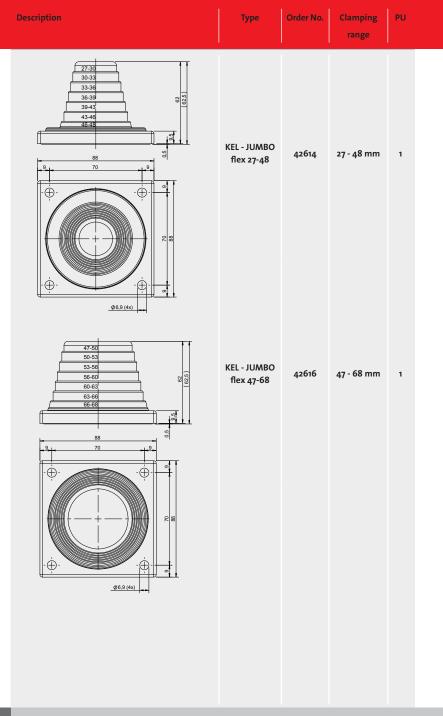
Flame class UL-94 Vo, self-extinguishing

Protection class IP 54

Temperature - 40°C to + 90°C (static)
Properties halogen-free, silicone-free
Cut-out dimensions round, ø-cable + 20%

#### Accessories

MP Module plates Page 112 BP Blind plates Page 114



# **KEL - ULTRA flex**Cable entry inserts



Туре	Order No.	Sealing range	PU	
KEL-ULTRA flex 1 incl. Fixing screws	42630	25 - max. 90 mm cable diameter	1	
KEL-ULTRA flex 2 incl. Fixing screws	42631	75 - max. 115 mm cable diameter	1	

#### Product description

The product line KEL-ULTRA flex is designed as a cable entry system for power supply cables or any cable or conduit that is difficult to manage. The KEL-ULTRA flex comes in two sizes and is good for routing and sealing cables and conduits with a diameter from 25 to 115 mm. Inserting large, thick cables is easier than using standard cable glands due to the high flexibility of the KEL-Ultra Flex elastomer pyramide.

After inserting the cable or conduit, the KEL-ULTRA flex is quickly and easily mounted with the metal ring and screws. The metal ring enables a circular fixing and sealing of the insert at the enclosure wall. The metal ring is supplied with each KEL-ULTRA flex.

#### Advantages

- Assembly within seconds
- Inserts allow dynamic and flexible movement of rigid cables
- Protection class IP66

#### Specification

Flame class

Material Insert: Elastomer

Fixing metal ring: Steel, zinc-plated

Blind plate: Steel, zinc-plated UL-94 Vo, self-extinguishing IP 66 (when fastened with 8 screws)

Protection class
Temperature
Properties
Properties
Protection class
IP 66 (when fastened with a control of the control of the

Cut-out dimension ø-cable + 30%,

max. ø 140mm

#### Accessories

MP Module plates Page 112
BP Blind plate Page 115