

Vertiv™ Knürr® Cable Management

Features

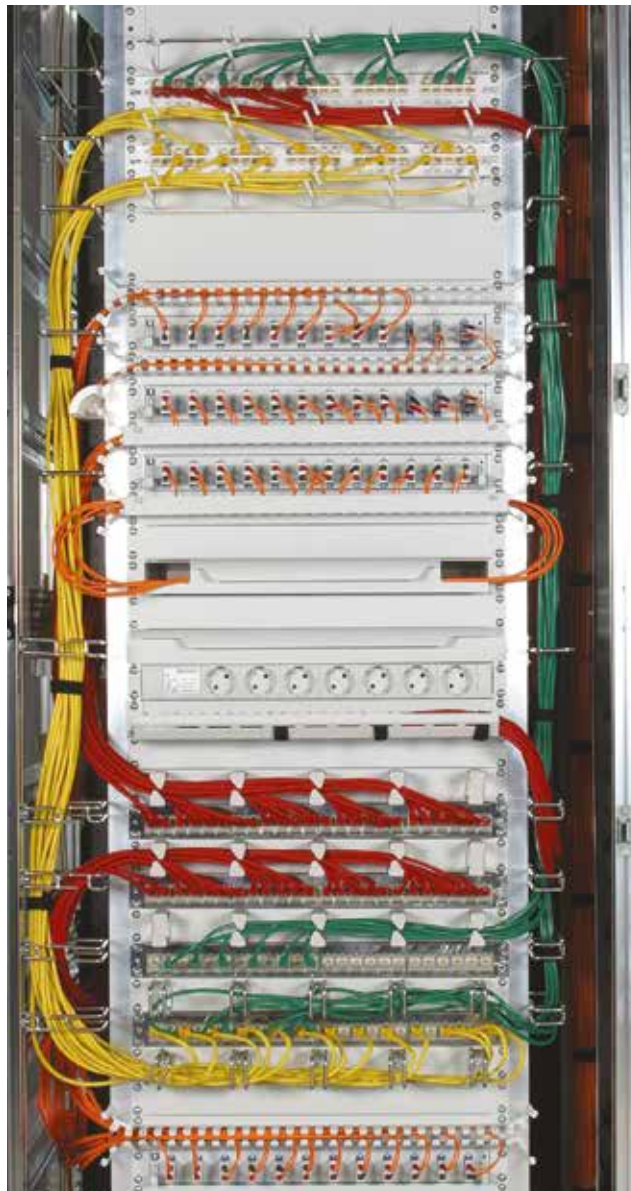
- Allows for prescribed cable radii.
- Components are easy to secure and use.
- Components feature addition functions.
- Extensive use of reusable Velcro strips precludes cable strain.
- No blockage of airflow within the rack.

Global networking is continuing to grow, meaning users are in need of an intelligent cable management solution.

To meet this demand, Vertiv Knürr offers a range of products and solutions for server racks, active and passive network racks, as well as special racks.

Our range not only allows you to quickly and easily set up and dismantle racks, it also makes it much simpler to troubleshoot problems in your systems and expand your systems. Our cable management components are all based on a number of key principles: Simple and self-explanatory operation, versatile application options, a clear structure, and a cost-efficient design.

Thanks to the Vertiv Knürr cable management system, your rack will be equipped for the future and will save you time and money for the long term.





MEC20064

Vertiv™ Knürr® Cable Management Terminology

Laying cables involves ensuring that mechanical stresses are completely avoided.

■ Bending load

The bending radii may never fall below the values provided by the cable manufacturer in the respective data sheets. Where excessive bending occurs, the cables' electrical properties are impaired, and transmission bandwidths and ranges are adversely affected. If manufacturer specifications are not available, then the following rule of thumb applies: loose cabling should be at least 15 times the external cable diameter and fixed cabling at least 10 times the external cable diameter.

■ Buckling load

Extreme bending loads can cause the cable to break.

■ Tensile load

This is determined solely by the copper cross-section of the conductor, as all other materials are too soft. The cable may not be exposed to stress exceeding 50 N/mm² (Cu cross-section) as this causes the conductors to stretch which reduces the cross-section. If higher "pulling" forces are required, cables with additional strain-reduction elements must be used.

■ Compressive stress

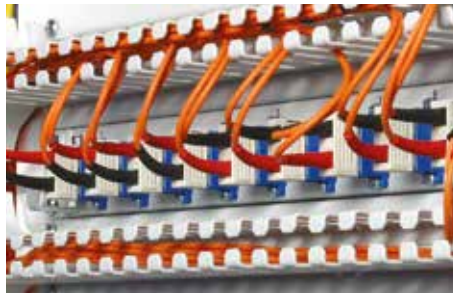
Compressive stress is caused by loads bearing down from above, fixed clamping or sharp cable kinking and must always be avoided, as otherwise the "loose" cable structure changes and electrical transmission properties are impaired.

■ Torque strains (twisting)

Cables must never be subjected to torque strains, as they cause cable elements to shift and change their position relative to each other, thereby impairing transmission properties.



MEC20084



MEC20086

Vertiv™ Knürr® Cable Management Proper Usage

- Various components for fiberglass and copper cables – especially fastening options such as Velcro and cable bundling using different colored strips – guarantee transparent cable management, providing an optimal starting point for both intelligent network expansion and ideal service convenience. (1)
- Special attention has been paid to ensuring that all cable management components can be fastened with Velcro strips which eliminate cable strain and can be reused at any time. Velcro cable ties also aid the installation technician as they are easily manageable, using pinch-free cable bundling. (2)
- Excess cable is stored separately from the patch fields while remaining easily accessible. Copper cable excess can be stored separately from fiber glass excess within the Knürr rack systems: the copper cables are stored on the side while the more sensitive fiberglass cables are stored in a drawer at the front. (3)
- A closer look at the individual products reveals their outstanding versatility. The cable-routing multifunctional brace, for example, not only provides the option of routing cables both horizontally and vertically using Velcro or cable ties, but additionally allows numerous components to be mounted with screws and caged nuts. These caged nuts can also be shifted in a slot with room for play, so that every mounting dimension is accommodated. (4)



1. MEC20082



2. MEC20070



3. MEC20099

Vertiv™ Knürr® Cable Management

Overhead Cabling

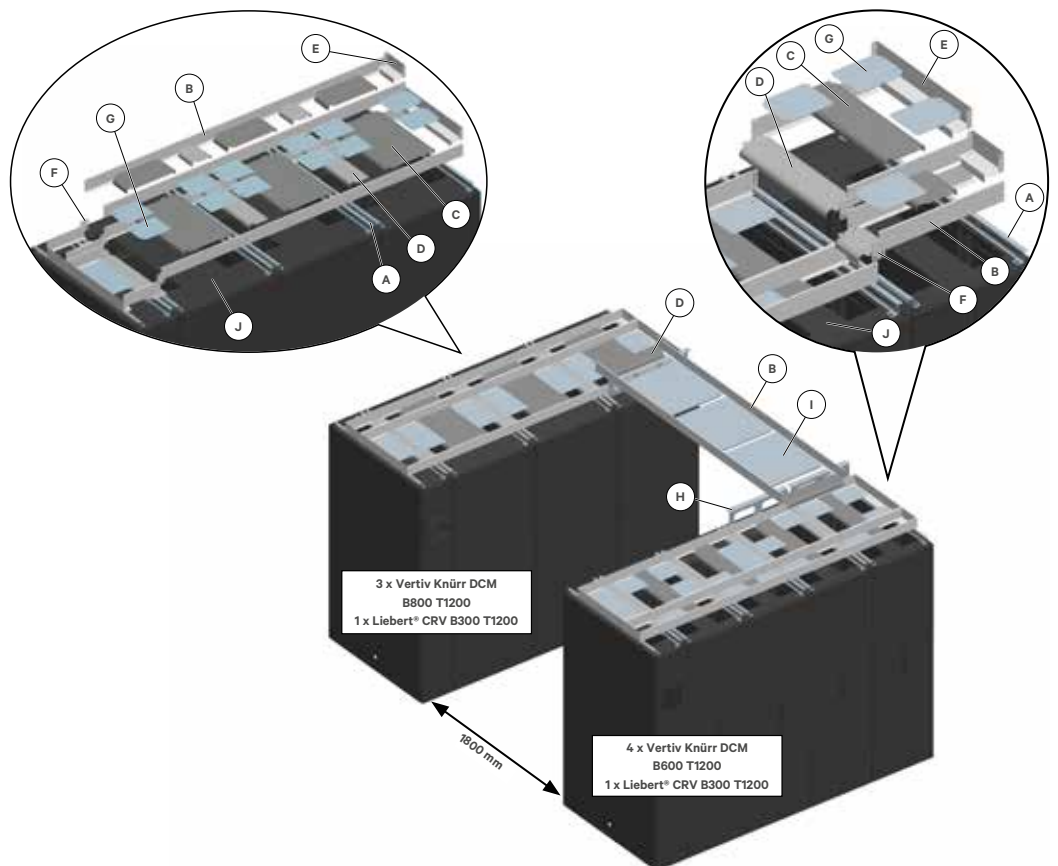
Features

- Modular, extremely flexible.
- Robust construction.
- Includes integrated radius for cable entry into rack.
- New cover panel with lateral cable entry.
- Selection of cable throughs and mesh cable trays.
- Suitable for Vertiv Knürr DCM and Vertiv Knürr MIR.
- Includes Vertiv SmartAisle™ enclosure.
- Various combinations possible.

Vertiv's Overhead Cabling Solution

The Vertiv Knürr overhead cable management system is a complete, modular system which offers a variety of cable-tray installment options. The components are very flexible and can be installed on site or modified with ease, to accommodate cable-management requirements that differ from rack to rack. This extremely sturdy and robust system can withstand high stress levels and is suitable for any application. Combined with other items from the Knürr cable-management product range, it provides a comprehensive solution that delivers proper cable bend radii.

Example of Overhead Configuration



Legend

- A** Support bracket
- B** Mounting bracket
- C** Center panel insert
- D** Transitional cover
- E** End panel insert
- F** Connecting panel insert
- G** Cover plate
- H** Support bracket cross-cabling
- I** Cover cross-cabling
- J** New cover panel with lateral cable entry

Configuration Assistant

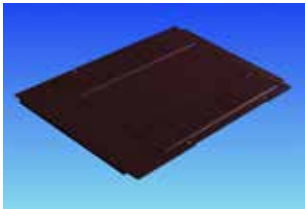
Sample Order	Name	Item	
- Left rack suite	Vertiv Knürr DCM B800 T1200	3	01147.722.8
	New cover panel with lateral cable entry (J)	3	01147.579.8
	Liebert® CRV B300 T1200	1	CR0302XXX-XXXXXX
	Support bracket (A)	4	05.045.005.X
	Mounting bracket (B)	2	05.045.011.X
		2	05.045.015.X
	Center panel insert (C)	3	05.045.023.X
		3	05.045.024.X
	Transitional cover (D)	3	05.045.031.X
		3	05.045.032.X
	End panel insert (E)	1	05.045.041.X
		1	05.045.042.X
	Connecting panel insert (F)	1	05.045.045.X
	Cover plate (G)	2	05.045.047.X
- Right rack suite	Vertiv Knürr DCM B800 T1200	4	01147.714.8
	New cover panel with lateral cable entry (J)	4	01147.574.8
	Liebert® CRV B300 T1200	1	CR0302XXX-XXXXXX
	Support bracket (A)	4	05.045.005.X
	Mounting bracket (B)	2	05.045.011.X
		8	05.045.012.X
	Center panel insert (C)	4	05.045.021.X
		4	05.045.022.X
	Transitional cover (D)	4	05.045.031.X
		4	05.045.032.X
	End panel insert (E)	1	05.045.041.X
		1	05.045.042.X
	Connecting panel insert (F)	2	05.045.045.X
	Cover plate (G)	2	05.045.047.X
- Cross-cabling	Support bracket (H)	1	05.045.052.X
		1	05.045.053.X
	Mounting bracket (B)	1	05.045.015.X
	Transitional cover (D)	2	05.045.032.X
	Cover (I)	1	05.045.057.X

Required Data for Overhead Cabling	Example
- Width of racks in the rack suite (300, 600 or 800 mm)	Rack width (W) = 800 mm
- Depth of racks in the rack suite (1000 to 1200 mm)	Rack depth (D) = 1200 mm
- Number of racks in one rack suite	
- Aisle width (Standard dimensions 1200 and 1800 mm ± 50 mm) – for cross-cabling	Aisle width (AW) = 1800 mm
- Color light-grey RAL 7035 or dark-grey RAL 7021	Dark-grey RAL 7021

Prerequisites for Overhead Cabling

J

Cover panel with lateral cable entry



DCM20079

- With lateral cable entry on both sides (sliding plates).
- For orderly cable management with in the rack.
- Optional brush strips.

■ **Material**

- Sheet steel, 1.5 mm.

■ **Finish / Color**

- Final digit of order number .1: powder-coated, RAL 7035.
- Final digit of order number .8: powder-coated, RAL 7021.

■ **Scope of delivery**

- 1 Deckel mit seitlicher Kabeleinführung.
- Montagematerial.

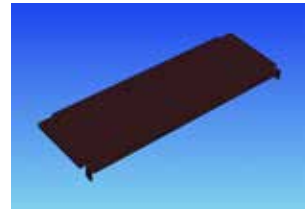
■ **How supplied**

- In sets.

W _{Rack}	D _{Rack}	For rack type	Order No.	UP
600	1000	MIR2 / DCM	01.147.572.X	1 unit
600	1100	MIR2 / DCM	01.147.573.X	1 unit
600	1200	MIR2 / DCM	01.147.574.X	1 unit
800	1000	MIR2 / DCM	01.147.577.X	1 unit
800	1100	MIR2 / DCM	01.147.578.X	1 unit
800	1200	MIR2 / DCM	01.147.579.X	1 unit

K

MIR2 / DCM cover panel short



DCM20081

- For covering the front overhead area; the rest remains open.
- Facilitates unobstructed cable entry inside the rack.

■ **Material**

- Sheet steel, 1.5 mm.

■ **Finish / Color**

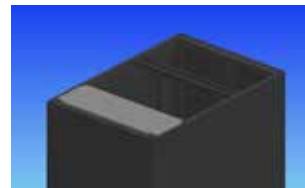
- Powder-coated texture, RAL 7021, dark-grey.

■ **Scope of delivery**

- 1 x cover panel, short.
- 1 x Mounting kit.

■ **How supplied**

- In sets.



DCM20080

W _{Rack}	L	For rack type	Order No.	UP
600	250	MIR2 / DCM	01.147.268.8	1 unit
800	250	MIR2 / DCM	01.147.269.8	1 unit

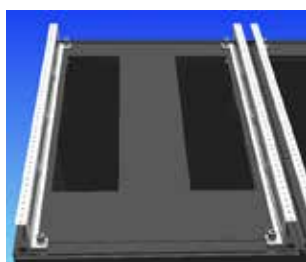
Dimensions in mm:				Conversion:	
W = Width	h = Installation height	U = Standard rack unit	kg = Weight	1 mm = 0.03937 inch	
H = Height	d = Insertion depth	(1 U = 44.45 mm)		1 kg = 2.2046 pounds	
D = Depth	L = Length	UP = Packaging unit			

A

Support bracket



MEC20200



MEC20201

- Secures corner piece at the top of the rack.
- Quick and easy mounting.
- Suitable for both MIR2 and DCM racks.
- Includes screw for securing the mounting brackets, transitional cover and end panel inserts.

- **Material**
 - Sheet steel 2.0 mm.

- **Finish**
 - Final digit of order number .1: powder-coated, RAL 7035 light-grey.
 - Final digit of order number .8: powder-coated, RAL 7021 dark-grey.

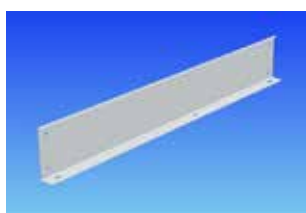
- **Scope of delivery**
 - 2 x support brackets.
 - 1 x Mounting kit.

- **How supplied**
 - In sets.

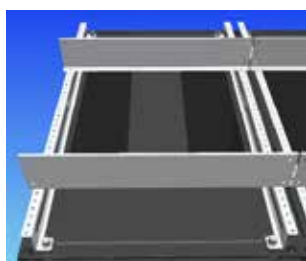
H	D _{Rack}	For rack type	Order No.	UP
44	1000	MIR2 / DCM	05.045.003.X	1 set
44	1100	MIR2 / DCM	05.045.004.X	1 set
44	1200	MIR2 / DCM	05.045.005.X	1 set

B

Mounting brackets



MEC20202



MEC20203

- Secured on support bracket.
- Quick and easy mounting.
- Separate cable trays.

- **Material**
 - Sheet steel 1.0 mm.

- **Finish**
 - Final digit of order number .1: powder-coated, RAL 7035 light-grey.
 - Final digit of order number .8: powder-coated, RAL 7021 dark-grey.

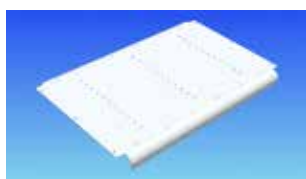
- **Scope of delivery**
 - 2 x mounting brackets.
 - 1 x Mounting kit.

- **How supplied**
 - In sets.

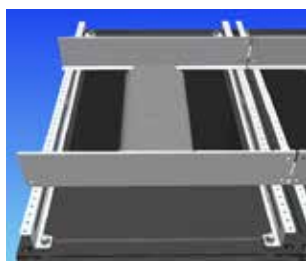
W / L	H	For rack type	Order No.	UP
300	90	MIR2 / DCM	05.045.011.X	1 set
600	90	MIR2 / DCM	05.045.012.X	1 set
800	90	MIR2 / DCM	05.045.013.X	1 set
2400	90	MIR2 / DCM	05.045.015.X	1 set
3000	90	MIR2 / DCM	05.045.016.X	1 set

C

Center panel insert



MEC20205



MEC20204

- Secured on mounting bracket.
- Quick and easy mounting.
- With 25 mm radius for bending the cables.

- **Material**
 - Sheet steel, 1.5 mm.

- **Finish**
 - Final digit of order number .1: powder-coated, RAL 7035 light-grey.
 - Final digit of order number .8: powder-coated, RAL 7021 dark-grey.

- **Scope of delivery**
 - 1 x center panel insert.
 - 1 x Mounting kit.

- **How supplied**
 - In sets.

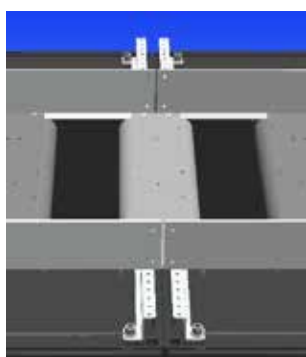
W / L	W _{Rack}	R	For rack type	Order No.	UP
200	600	25	MIR2 / DCM	05.045.021.X	1 set
600	600	25	MIR2 / DCM	05.045.022.X	1 set
200	800	25	MIR2 / DCM	05.045.023.X	1 set
600	800	25	MIR2 / DCM	05.045.024.X	1 set

D

Transitional cover from rack to rack



MEC20206



MEC20212

- Secured on support bracket.
- Quick and easy mounting.
- With 25 mm radius for bending the cables.

- **Material**
 - Sheet steel, 1.5 mm.

- **Finish**
 - Final digit of order number .1: powder-coated, RAL 7035 light-grey.
 - Final digit of order number .8: powder-coated, RAL 7021 dark-grey.

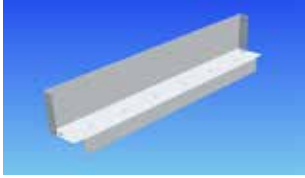
- **Scope of delivery**
 - 1 x transitional cover.
 - 1 x Mounting kit.

- **How supplied**
 - In sets.

W / L	R	For rack type	Order No.	UP
200	25	MIR2 / DCM	05.045.031.X	1 set
600	25	MIR2 / DCM	05.045.032.X	1 set

E

End panel insert



MEC20207

- Secured on support bracket.
- Quick and easy mounting.
- Completes cable trays.

Material

- Sheet steel 1.0 mm.

Finish

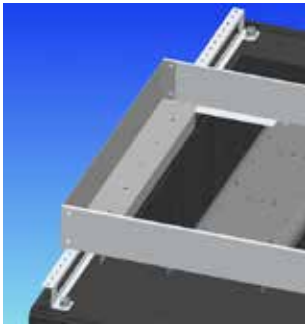
- Final digit of order number .1: powder-coated, RAL 7035 light-grey.
- Final digit of order number .8: powder-coated, RAL 7021 dark-grey.

Scope of delivery

- 2 x end panel inserts.
- 1 x Mounting kit.

How supplied

- In sets.



MEC20214

W / L	For rack type	Order No.	UP
200	MIR2 / DCM	05.045.041.X	1 set
600	MIR2 / DCM	05.045.042.X	1 set

F

Connecting panel insert



MEC20208

- For joining mounting brackets.
- Quick and easy mounting.

Material

- Sheet steel, 1.5 mm.

Finish

- Final digit of order number .1: powder-coated, RAL 7035 light-grey.
- Final digit of order number .8: powder-coated, RAL 7021 dark-grey.

Scope of delivery

- 10 x connecting panel inserts.
- 1 x Mounting kit.

How supplied

- In sets.



MEC20213

W	H	For rack type	Order No.	UP
64	86	MIR2 / DCM	05.045.045.X	1 set

G

Cover plate



MEC20209

- For covering the space between the center panel inserts and transitional covers.
- Quick and easy mounting.

Material

- Sheet steel 1.0 mm.

Finish

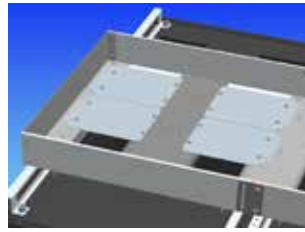
- Final digit of order number .1: powder-coated, RAL 7035 light-grey.
- Final digit of order number .8: powder-coated, RAL 7021 dark-grey.

Scope of delivery

- 10 x cover plates.
- 1 x Mounting kit.

How supplied

- In sets.



MEC20215

L	W	For rack type	Order No.	UP
229	183	MIR2 / DCM	05.045.047.X	1 set

Option

Mesh cable tray



MEC20218

- Secured on support bracket.
- Quick and easy mounting.

Material

- Round steel, d = 4.5 mm.

Finish

- Zinc-passivated.

Scope of delivery

- 1 x mesh cable tray.
- 1 x Mounting kit.

How supplied

- In sets.

B	L	H	For rack type	Order No.	UP
200	3000	54	MIR2 / DCM	05.045.061.9	1 set
600	3000	54	MIR2 / DCM	05.045.062.9	1 set

Dimensions in mm:

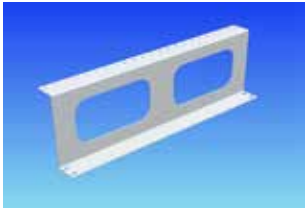
W = Width	h = Installation height	U = Standard rack unit	kg = Weight
H = Height	d = Insertion depth	(1 U = 44.45 mm)	
D = Depth	L = Length	UP = Packaging unit	

Conversion:

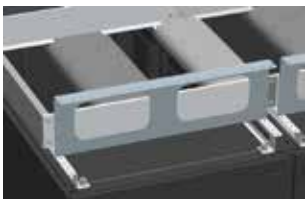
1 mm = 0.03937 inch
1 kg = 2.2046 pounds

H

Support bracket Cross-cabling



MEC20210



MEC20216

- For cable management at the top between rack suites.
- Quick and easy mounting.
- Includes screw for securing the mounting brackets, transitional covers and cover plates.

Material

- Sheet steel 2.0 mm.

Finish

- Final digit of order number .1: powder-coated, RAL 7035 light-grey.
- Final digit of order number .8: powder-coated, RAL 7021 dark-grey.

Scope of delivery

- 2 x support brackets, cross-cabling.
- 1 x Mounting kit.

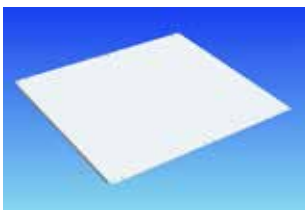
How supplied

- In sets.

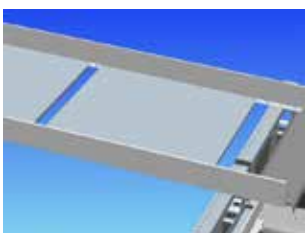
H	W _{Rack}	For rack type	Order No.	UP
166	600	MIR2 / DCM	05.045.052.X	1 set
166	800	MIR2 / DCM	05.045.053.X	1 set

I

Cross-cabling Cover



MEC20211



MEC20217

- Provides support for cables and covers the space between the rack suites.
- Secured on mounting bracket.
- Quick and easy mounting.

Material

- Sheet steel 1.0 mm.

Finish

- Final digit of order number .1: powder-coated, RAL 7035 light-grey.
- Final digit of order number .8: powder-coated, RAL 7021 dark-grey.

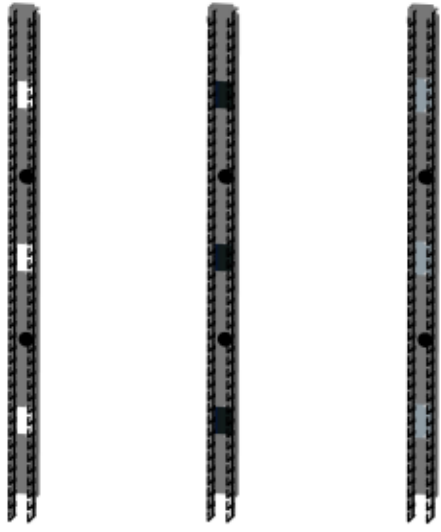
Scope of delivery

- 5 x cover plates.
- 1 x Mounting kit.

How supplied

- In sets.

L	W	For rack type	Order No.	UP
200	200	MIR2 / DCM	05.045.055.X	1 set
200	600	MIR2 / DCM	05.045.056.X	1 set
600	600	MIR2 / DCM	05.045.057.X	1 set



Type 1

Type 2

Type 3

Vertiv™ Knürr® Cable Management

■ Features

- Organized cabling of jumper cables.
- Suitable depends on the model, for 19" Vertiv Knürr, DCM® and MIR2® Racks.
- Also available optionally as cold/warm partitioning.
- Cutouts for cabling from front to back.
- Lightweight plastic construction of the cable fingers ensures durability and simple installation (clip-on).
- Distance between fingers provides sufficient space for all patch cords.
- Rounded edges on the fingers protect cables against damage.

Cable manager models

■ Type 1: Standard (open cutouts).

■ Type 2: Version with brush strips in cutouts for cable routing towards the rear.

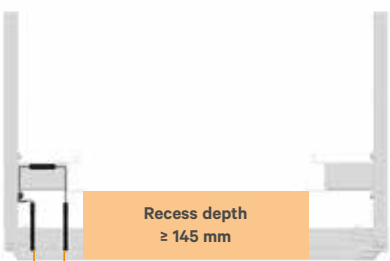
■ Type 3: Version with sheet-steel cover plates in cutouts as part of the cold/warm partitioning.

Technical data and required recess depths

Vertiv Knürr DCM



Recess depth
≥ 145 mm



60 mm

Recess depth
≥ 145 mm

Vertiv Knürr DCM



Recess depth
≥ 280 mm



93 mm

On Request

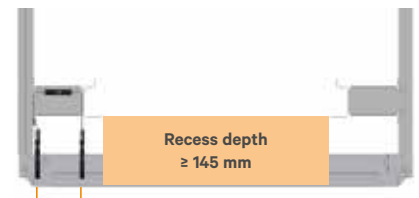
Recess depth
≥ 280 mm

81 mm

Vertiv Knürr MIR2



Recess depth
≥ 145 mm



81 mm

Recess depth
≥ 145 mm

Vertiv™ Knürr® DCM cable manager, vertical



DCM2018



DCM2019

Description

- **Left and right models (2 cable managers) included in the delivery.**
- Ideal for organizing cabling of jumper cables (copper and fiber optic cables).
- Retrofitting is possible.
- Prepared for full cold/warm partitioning.
- Cable fingers can be easily installed (clipped on).
- Cabling towards the rear through rubber bushings or cutouts.
- **Can be used for recess depths from 145 mm.**

Material / Finish

- Cable duct: Sheet steel, 2.0 mm.
- Final digit of order number .1: powder-coated, RAL 7035 light-grey.
- Final digit of order number .8: powder-coated, RAL 7021 dark-grey.
- Cable fingers: Polyamide (UL 94 V-0), black.

Scope of delivery

- 1 x cable duct, left.
- 1 x cable duct, right.
- 4 x rows with cable fingers.
- 4 x rubber bushings.
- 1 x Mounting kit.

How supplied

- In pairs (cable fingers unassembled).

Remarks

- Only for DCM Rack.

W _{Rack}	H _{Rack}	U	Recess depth	Cutout size	Order No.	UP
800	2000	42	Starting from 145 mm	66 x 100 mm	05.045.102.X	1 pair
800	2200	47	Starting from 145 mm	66 x 100 mm	05.045.103.X	1 pair



DCM20120



DCM20121

DCM cover panel for vertical cable manager

- **For only 1 cable manager, i. e., 2 kits required for B800 rack.**
- Covers the vertical cable manager.
- Tool-less fastening – clips onto cable finger.
- Can be swiveled on both sides and removed completely.

Material / Finish

- Cover: sheet steel, 2.0 mm.
- Final digit of order number .1: powder-coated, RAL 7035 light-grey.
- Final digit of order number .8: powder-coated, RAL 7021 dark-grey.
- Clip: polyamide (UL 94 V-0), black.

Scope of delivery

- 2 x covers.
- 8 x clips.

How supplied

- In sets (clips pre-assembled).

W	H	U	Order No.	UP
58	927	42	05.045.112.X	1 set
58	1038	47	05.045.113.X	1 set



DCM20117

DCM/MIR2 kit for air partitioning for vertical cable manager

- **Suitable for DCM and MIR2 racks.**
- Separates the cold and hot areas within the rack.
- Prevents hot-spots (air recirculation).

Material / Finish

- Bottom plate, cover plate: sheet steel, 1.0 mm.
- Final digit of order number .1: powder-coated, RAL 7035 light-grey.
- Final digit of order number .8: powder-coated, RAL 7021 dark-grey.
- High-density foam: PUR foam (UL94 HF-1).

Scope of delivery

- 1 x bottom plate.
- 6 x Steel plate cover plates (extension to Type3) for cable routing.
- 1 x Foam element, side.
- 1 x Foam element, top.
- 1 x Mounting kit.

How supplied

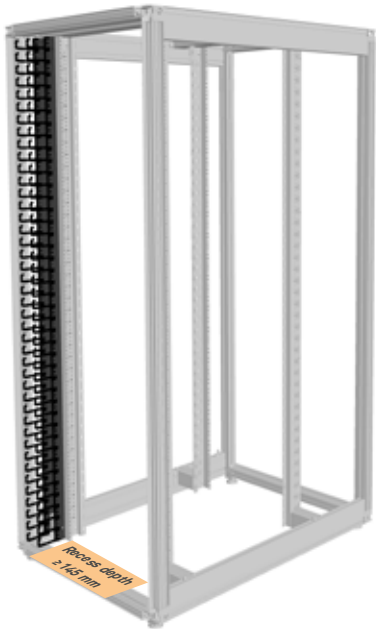
- In sets.

Remarks

- For DCM and MIR2 Rack.

W _{Rack}	U	Order No.	UP
800	42 and 47	05.045.132.X	1 set

Vertiv™ Knürr® MIR2 – Cable Manager, Vertical



Left and right models (2 cable managers) included in the delivery.

- Ideal for organizing cabling of jumper cables (copper and fiber optic cables).
- Retrofitting is possible.
- Prepared for full cold/warm partitioning.
- Cable fingers can be easily installed (clipped on).
- Cabling towards the rear through rubber bushings or cutouts.

Can be used for recess depths from 145 mm.

Material / Finish

- Cable duct: Sheet steel, 2.0 mm.
Final digit of order number .1:
powder-coated, RAL 7035 light-grey.
Final digit of order number .8:
powder-coated, RAL 7021 dark-grey.
- Cable fingers: Polyamide (UL 94 V-0), black.

Standard inclusion

- 1 x cable duct, left.
- 1 x cable duct, right.
- 4 x rows with cable fingers.
- 4 x rubber bushings.
- 1 x Mounting kit.

Delivery

- In pairs (cable fingers unassembled).

Note

- For MIR2 only.
- Only front mountable.

W Rac	H Rac	D	U	Recess depth	Cutout size	Order No.	Up
800	2000	42		Starting from 145 mm	81 x 100 mm	05.045.152.x	1 pair
800	2200	47		Starting from 145 mm	81 x 100 mm	05.045.153.x	1 pair

Vertiv Knürr MIR2 – Cover Panel for Vertical Cable Manager



DCM20120



DCM20121

For only 1 cable manager, i. e., 2 kits required for B800 rack.

- Covers the vertical cable manager.
- Tool-less fastening – clips onto cable finger.
- Can be swiveled on both sides and removed completely.

Material / Finish

- Cover: sheet steel, 2.0 mm.
Final digit of order number .1:
powder-coated, RAL 7035 light-grey.
Final digit of order number .8:
powder-coated, RAL 7021 dark-grey.
- Clip: polyamide (UL 94 V-0), black.

Standard inclusion

- 2 x covers.
- 8 x clips.

Delivery

- In sets (clips pre-assembled).

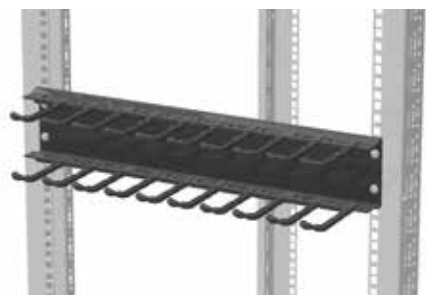
Note

- For MIR2 only.

W	H	D	U	Order No.	Up
79	916	42		05.045.114.x	1 set
79	1027	47		05.045.115.x	1 set



DCM2012



DCM2014

MIR2® / DCM 19" cable manager, horizontal

Description

- 1 U and 2 U models.
- For organized cabling of jumper cables (copper and fiber optic cables).
- Front-mounting on 19" extrusions.
- Cable fingers can be easily installed (clipped on).
- **Can be used for recess depths from 145 mm.**

Scope of delivery

- 1 x cable duct.
- 2 x rows with cable fingers.
- 1 x Mounting kit.

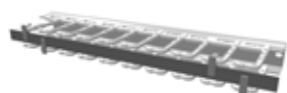
How supplied

- In sets (cable fingers unassembled).

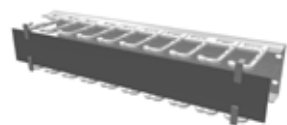
Material / Finish

- Cable duct: sheet steel, 2.0 mm.
- Final digit of order number .1: powder-coated, RAL 7035 light-grey.
- Final digit of order number .8: powder-coated, RAL 7021 dark-grey.
- Cable fingers: polyamide (UL 94 V-0), black.

W	U	Recess depth	Order No.	UP
483	1	Starting from 145 mm	05.045.120.X	1 unit
483	2	Starting from 145 mm	05.045.122.X	1 unit



DCM2013



DCM2015

MIR2 / DCM Cover for 19" horizontal cable manager

- Covers the horizontal cable managers.
- Tool-less fastening – clips onto cable finger.
- Can be swiveled on both sides and removed completely.

Material / Finish

- Cover: sheet steel, 2.0 mm.
- Final digit of order number .1: powder-coated, RAL 7035 light-grey.
- Final digit of order number .8: powder-coated, RAL 7021 dark-grey.
- Clip: polyamide (UL 94 V-0), black.

Scope of delivery

- 1 x cover.
- 4 x clips.

How supplied

- In sets (clips pre-assembled).

W	H	U	Order No.	UP
483	20	1	05.045.121.X	1 set
483	65	2	05.045.123.X	1 set



MIR20093

MIR2 / DCM Brush strips for vertical cable manager (Typ2)

- Upgrade kit for vertical cable manager for routing cables toward the rear (for extension to Typ 2).
- Inserted in openings in cable duct (1 pair of brushes per opening).

Scope of delivery

- 3 x pairs of brushes (length: 99 mm).

How supplied

- In sets.



DCM2012

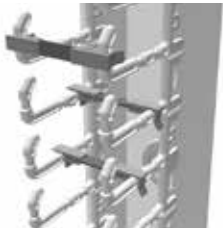
L	for cutouts	Order No.	UP
99	66 x100 mm	05.045.130.9	1 set

Dimensions in mm:

W = Width	h = Installation height	U = Standard rack unit	kg = Weight
H = Height	d = Insertion depth	(1 U = 44.45 mm)	
D = Depth	L = Length	UP = Packaging unit	

Conversion:

1 mm = 0.03937 inch
1 kg = 2.2046 pounds



DCM20116

DCM kit for cascading; vertical cable manager

- Separates individual cable groups.
- Tool-less fastening – clips onto cable finger.
- Protects the cables and can be used for labeling.

Material / Finish

- Cascade: sheet steel, 2.0 mm.
- Powder-coated texture, RAL 7021 dark-grey.
- Clip: polyamide (UL 94 V-0), black.

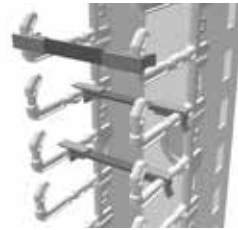
Scope of delivery

- 10 x cascades.
- 20 x clips.

How supplied

- In sets (clips pre-assembled).

W	H	Order No.	UP
55	10	05.045.136.8	1 set



MIR20454

MIR2 kit for cascading; vertical cable manager

- For separating individual cable groups.
- Tool-less fastening – clips onto cable finger.
- Protects the cables and can be used for labeling.

Material / Finish

- Cascade: sheet steel, 2.0 mm. Powder-coated texture, RAL 7021 dark-grey.
- Clip: polyamide (UL 94 V-0), black.

Scope of delivery

- 10 x cascades.
- 20 x clips.

How supplied

- In sets (clips pre-assembled).

W	H	Order No.	UP
76	10	05.045.137.8	1 set



MEC00110

Type 1

19" cable routing board 1 U

- For orderly cable routing.
- Enables safe and secure cable routing of copper and fiberglass cables.

Material / Finish

- Type 1: Front plate, sheet steel, 1.5 mm, powder coated.
- Type 2: Front plate, sheet steel, 1.0 mm, powder coated.

Color

- Final digit of order number .1: RAL 7035, light grey.
- Final digit of order number .8: RAL 7021 dark-grey.

External dimensions

- Cable routing:
- Type 1: 55 x 22 mm, plastic.
- Type 2: 95 x 32 mm, steel.

Scope of delivery

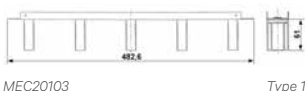
- 1 x 19" front plate.
- 5 x cable routers.

How supplied

- Pre-assembled

Note

Please also order mounting material for front plates.



MEC20103

Type 1



MEC20104

Type 2

W	U	Jumpering space	Model	Order No.	UP
483	1	from 80 mm	Type 1	05.040.111.1	1 unit
483	1	from 80 mm	Type 1	05.040.111.X	1 unit
483	1	from 123 mm	Type 2	01.117.144.X	1 unit



MEC20041

19" cable routing board, flexible, 1 U

- For orderly cable routing.
- Enables safe and secure cable routing of copper and fiberglass cables.

Material / Finish

- Front plate, sheet steel, 1.5 mm, powder coated.
- Cable routing bracket, round steel, d = 5 mm, zinc-passivated.

Color

- Final digit of order number .1: RAL 7035, light grey.
- Final digit of order number .8: RAL 7021 dark-grey.

External dimensions

- Cable routers (a x b):
- 1 U: 82 x 43 mm.
- 2 U: 102 x 82 mm.

Scope of delivery

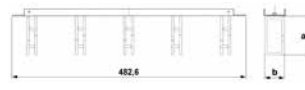
- 1 x front plate.
- 5 x cable routing boards.

How supplied

- Pre-assembled.

Note

Please also order mounting material for front plates.



MEC20102

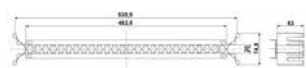


MEC20076

W	U	Jumpering space	Model	Order No.	UP
483	1	from 100 mm	Type 1	05.040.100.X	1 unit
483	2	from 120 mm	Type 2	05.040.101.X	1 unit



MEC20081



MEC20105



MEC20058

Fiber optic cable routing panel 1 U

- For orderly cable routing.
- Enables safe and secure cable routing of fiber optic cables.
- Optionally with cover plates to protect the cables and can be used for labeling.

Material / Finish

- Fiber optic cable routing panel: Sheet steel 1,5mm, powder-coated texture.
- Cover Accessories: Aluminium 2,5mm, powder-coated texture.

Color

- Final digit of order number .1: RAL 7035, light grey.
- Final digit of order number .8: RAL 7021 dark-grey.

Scope of delivery

- 1 x 19" cable routing board.

How supplied

- Single items.

Note

Please also order mounting material for front plates and cover.
Not suitable for rack widths of 600 mm and 700 mm (asymmetrical).

W	U	Model	Order No.	UP
483	1	Cable routing board	05.040.050.1	1 unit
483	1	Cable routing board	05.040.050.X	1 unit
		Accessories: cover	05.040.051.X	1 unit



MEC20049

19" cable through

- For organized cable management at the 19" front plate.
- Mounting possible on front plates.
- Cables can be fastened with Velcro.

Material / Finish

- Sheet steel, 1,5 mm, powder-coated texture.

Color

- Final digit of order number .1: RAL 7035, light grey.
- Final digit of order number .8: RAL 7021 dark-grey.

Scope of delivery

- 1 x cable through.

How supplied

- Single items.

Note

Please also order mounting material for front plates and Velcro rolls.

W	D	U	Order No.	UP
483	100	1	05.040.055.X	1 unit



MEC20224

Cable trough

- For orderly cable management in the MIR2 and DCM racks.
- Cables secured with Velcro strips or cable ties.
- 9 mm slit width for securing various parts to caged nuts.

Material / Finish

- Sheet steel, 1,5 mm, zinc passivated, powder-coated.

Color

- Final digit of order number .1: RAL 7035 light grey.
- Final digit of order number .8: RAL 7021, dark-grey.

Scope of delivery

- 1 x cable trough.
- 1 x Mounting kit.

How supplied

- In sets.

Note

If required, please also order Velcro rolls.



MEC20067

H	w	Model	Order No.	UP
2000	100	For MIR2 and DCM racks	05.040.251.X	1 set
2200	100	For MIR2 and DCM racks	05.040.252.X	1 set
2000	150	For MIR2 and DCM racks	05.040.254.X	1 set
2200	150	For MIR2 and DCM racks	05.040.255.X	1 set
2000	200	For MIR2 and DCM racks	05.040.257.X	1 set
2200	200	For MIR2 and DCM racks	05.040.258.X	1 set



MEC00114

Cable clamping bar

- Clips onto the C extrusion rail.

Material

- Polyamide, black.

Scope of delivery

- 1 set of 10 cable clamping bars.

How supplied

- In sets.

Order No.	UP
01.130.869.9	10 units

- assemble to order (shipped within 5 working days).
Caution: In case of larger orders, delivery times may increase.

Dimensions in mm:				Conversion:	
W = Width	h = Installation height	U = Standard rack unit	kg = Weight	1 mm = 0.03937 inch	
H = Height	d = Insertion depth	(1 U = 44.45 mm)		1 kg = 2.2046 pounds	
D = Depth	L = Length	UP = Packaging unit			



MIR00096

U clamp

- Reduces cabling strain and permits individual routing of cables and lines.
- Clamping range, 8–64 mm.

Material

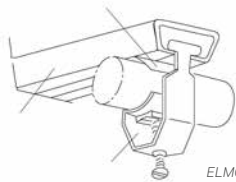
- Steel / plastic.

Scope of delivery

- 25 x U clamps.
- 25 x clamping saddles.

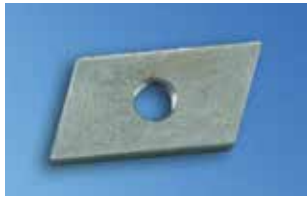
How supplied

- In sets.



ELM00086

Clamping range	Order No.	UP
8–12 mm	05.040.150.9	1 unit
12–16 mm	05.040.151.9	1 unit
16–22 mm	05.040.152.9	1 unit
22–28 mm	05.040.154.9	1 unit
34–40 mm	05.040.155.9	1 unit
46–52 mm	05.040.157.9	1 unit



MEC20051

M5 threaded plate

- Used with C extrusion rails.

Material / Finish

- Flat rolled steel, 4,0 mm, zinc passivated.

Scope of delivery

- 20 x threaded plates.

How supplied

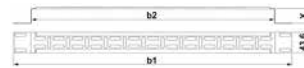
- In sets.

Order No.	UP
05.040.077.9	1 set



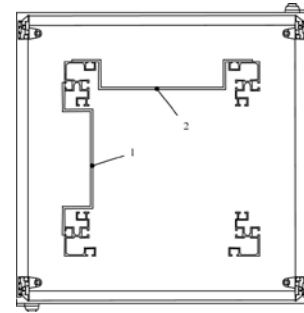
MEC20136

Type 1



MEC20120

Type 1



MIR00094

Assembly crossbar

- Cable management with Velcro strips.
- Universal mounting option for installation accessories, socket strips, telecommunication installation units, mounting panels, etc.
- For side and cross installation.

Material / Finish

- Sheet steel 1,5 mm, powder-coated texture.

Color

- Final digit of order number .1: RAL 7035 light-grey.
- Final digit of order number .8: RAL 7021 dark-grey.

Scope of delivery

- 1 x assembly crossbar.

How supplied

- Single items.

Note

- Please also order the appropriate mounting material.

W/d	U	w1	w2	X	Type	Model	Order No.	UP
19"	1	482	442,6	815	1	Pos. 2: MIR2 / DCM / Smaract	05.040.018.X	1 unit



MEC20042

Cable through between the racks

- For orderly cable routing between linked racks, adjacent racks.
- Velcro strips can be used for fastening.

Material / Finish

- Sheet steel, 1,5 mm.
- Powder-coated texture, RAL 7035 light-grey.

Scope of delivery

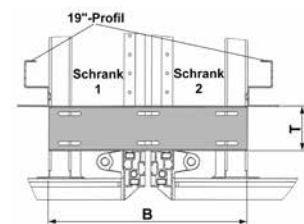
- 1 x cable through.
- 1 x Mounting kit.

How supplied

- In sets.

Note

- Please also order Velcro rolls.



MEC20119

W	D	Order No.	UP
265	60	05.040.058.1	1 unit



MEC20047

FOC 19" excess cable drawer, 1 U

- For storing excess fiber optic cable.
- Pull-out.
- Cables can be fastened with Velcro.

- **Material / Finish**
 - Sheet steel, 1.5 mm.

- **Color**
 - Final digit of order number .1: RAL 7035 light-grey.
 - Final digit of order number .8: RAL 7021 dark-grey.

- **Scope of delivery**
 - 1 x unit.
 - 1 x drawer.

- **How supplied**
 - In sets.

- **Note**
 - Please also order mounting material for front plates and Velcro rolls.



MEC20099

W	H	D	Order No.	UP
483	44	350	05.040.047.X	1 set



MEC20044

Excess fiber optic cable storage

- For orderly cable routing of Fiber optic cables in Miracel rack (from B 800 mm).
- For storing excess cable.

- **Material / Finish**
 - Base plate: powder-coated texture.
 - Cable routing head: polyamide, black.

- **Color**
 - Final digit of order number .1: RAL 7035 light-grey.
 - Final digit of order number .8: RAL 7021 dark-grey.

- **Scope of delivery**
 - 1 x base plate.
 - 1 x cable routing head.
 - 1 x Mounting kit.

- **How supplied**
 - In sets.



MEC20146

U	Order No.	UP
2	05.040.041.X	1 set

P - assemble to order (shipped within 5 working days).
Caution: In case of larger orders, delivery times may increase.



MEC20038

Universal cable routing bracket

- Used for extrusion distance (from front) 123 mm and 73 mm.
- For organized cable management.
- Open version, no threading.
- Mounting on the external side of the 19" extrusion.
- Any installation position selectable.

- **Material**
 - Round steel, d = 6 mm.

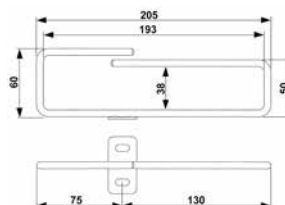
- **Finish**
 - Zinc-passivated.

- **Scope of delivery**
 - 4 x cable routing brackets.
 - 1 x Mounting kit.

- **How supplied**
 - In sets.



MEC20072



MEC20106

W _{Rack}	For rack type	Order No.	UP
from 800	MIR2 / DCM	05.040.220.9	4 Stk P



MEC20039

Square cable routing bracket

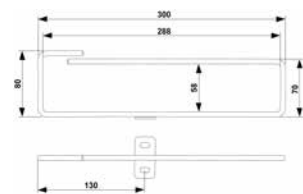
- For orderly cable management.
- Open version, no threading.
- Mounted on the external side of the 19" extrusion.
- Any installation position selectable.
- For high cable density.

- **Material**
 - Round steel, d = 6 mm.

- **Finish**
 - Zinc-passivated.

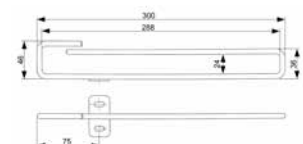
- **Scope of delivery**
 - 4 x square cable routing brackets.
 - 1 x Mounting kit.

- **How supplied**
 - In sets.



MEC20107

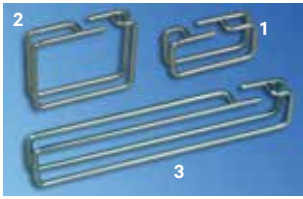
Type 1



MEC20116

Type 2

W _{Rack}	Type	For rack type	Order No.	UP
from 800	Type 1	MIR2 / DCM	05.040.221.9	4 units P
from 700	Type 2	MIR2 / DCM	05.040.222.9	4 units
600	Type 2	Smaract	05.040.222.9	4 units



MEC20035

MIR2/DCM Cable routing bracket, flexible

- Enables flexible and organized cable routing.
- Can be easily installed in various positions within the rack.
- Open version, no threading.

Material
- Round steel, d = 5 mm.

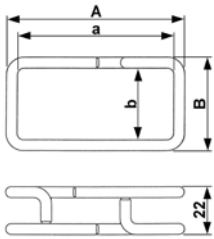
Finish
- Zinc-passivated.

Scope of delivery
- 10 x cable routing brackets.
- 1 x Mounting kit.

How supplied
- In sets.



MEC20065



MEC20108

A	a	W	w	Model	Order No.	UP
82	72	43	33	Fig.1	05.040.231.9	10 units
222	212	30	20	Fig.3	05.040.232.9	10 units
102	92	82	72	Fig.2	05.040.233.9	10 units P



ELM00117

Square cable routing bracket

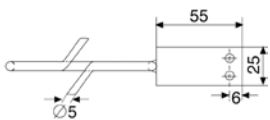
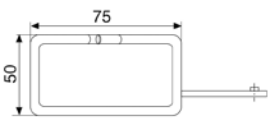
- For organized cable management.
- Open version, no threading.
- Mounted on the external lateral T-slot of the 19" extrusion.
- Any installation position selectable.

Material
- Round steel, d = 5 mm.

Finish
- Zinc-passivated.

Scope of delivery
- 4 x cable routing brackets.
- 1 x Mounting kit.

How supplied
- In sets.



ELM00106

For rack type	Order No.	UP
DoubleProRack	05.040.226.9	4 units



MIR00564

Cable routing bracket

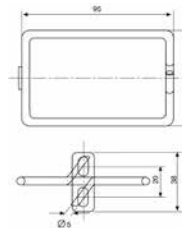
- For organized cable management.
- Open version, no threading.

Material/Oberfläche
- Round steel, d = 5 mm.

Finish
- Zinc-passivated.

Scope of delivery
- 4 x cable routing brackets.
- 1 x Mounting kit.

How supplied
- In sets.



MEC00122

Model	For rack type	Order No.	UP
95 x 60	MIR2 / DCM	05.040.225.9	4 units



ELM00028

Section support bracket

- Ideal for vertical routing and reducing cabling strain.
- Open version, no threading.
- Mounted on the external lateral T-slot of the 19" extrusion.
- Any installation position selectable.
- From rack width 600 mm.

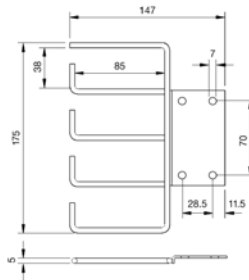
Material / Finish
- Round steel, d = 5 mm, zinc-passivated.

Scope of delivery
- 2 x section support brackets.

How supplied
- In sets.

Note
Please also order the appropriate mounting material.

Z56-1/FH



ELM00029

Model	Order No.	UP
MIR2 / DCM / Smaract / DPR	01.117.033.7	2 units P

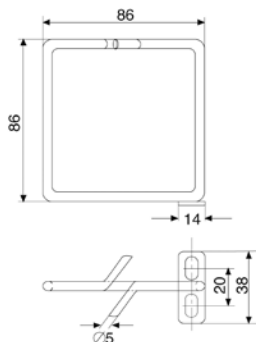
Dimensions in mm:				Conversion:
W = Width	h = Installation height	U = Standard rack unit	kg = Weight	1 mm = 0.03937 inch
H = Height	d = Insertion depth	(1 U = 44.45 mm)		1 kg = 2.2046 pounds
D = Depth	L = Length	UP = Packaging unit		



MIR00183

Cable routing bracket, square

- For organized cable management.
- Open version, no threading.
- Mounted on the external lateral T-slot of the 19" extrusion.
- Any installation position selectable.
- From rack width 800 mm.



ELM00057

Material

- Zinc-passivated, Zn 10c, white.

Scope of delivery

- 4 x vertical cable routing brackets.
- 1 x Mounting kit.

How supplied

- In sets.

W _{Rack}	Model	For rack type	Order No.	UP
from 800	86 x 86	Miracel 2 / DCM	05.040.224.9	4 units



ELM20008

Cable routing ring

- For organized cable management.
- Open version, no threading.
- Secured on the T-slots of the vertical extrusions.
- Any installation position selectable.

Material / Finish

- PA 6, GF 15, black, UL 94-HB.

Scope of delivery

- 5 x cable routing rings.
- 1 x Mounting kit.

How supplied

- In sets.



ELM20007

Model	For rack type	Order No.	UP
54 x 118 mm	MIR2 / DCM / Smaract	01.312.207.9	5 units



MEC20185

Quick-Strip ties for T-slot Tool-less mounting

- Quick tool-less securing.
- For bundling cables.
- Can be unfastened and reused.
- For organized cable management.
- Can be fitted into T-slots in any position.

Material

- Polyethylene and nylon.
- F.R.T., UL-94 HB.

Color

- Black.

Scope of delivery

- 10 x Quick-Strip Velcro ties.

How supplied

- In sets.



MEC20186

For rack type	Order No.	UP
MIR2 / DCM	00.218.506.0	1 set



MEC20187

Quick-Clamp plastic cable routing bracket for T-slot mounting without tools

- Quick tool-less securing.
- For organized cable management.
- Open version, no threading.
- Secures T-slots in any position.

Material

- Nylon.
- F.R.T., UL-94 HB.

Color

- Black.

Scope of delivery

- 10 x plastic cable routing brackets.

How supplied

- In sets.

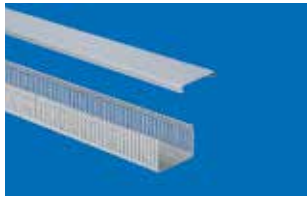


MEC20188

For rack type	Order No.	UP
MIR2 / DCM	00.218.505.0	1 set

- assemble to order (shipped within 5 working days).
Caution: In case of larger orders, delivery times may increase.

Dimensions in mm:				Conversion:
W = Width	h = Installation height	U = Standard rack unit	kg = Weight	1 mm = 0.03937 inch
H = Height	d = Insertion depth	(1 U = 44.45 mm)		1 kg = 2.2046 pounds
D = Depth	L = Length	UP = Packaging unit		



ELM00004

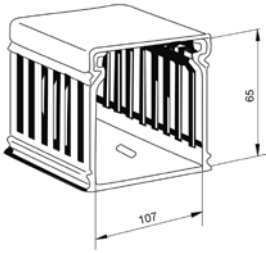
Cable duct

- Ideal for organized and covered cable management of jumper cables.

■ **Material**
- Hard PVC.

■ **Finish**
- Stone-grey RAL 7030.

■ **Scope of delivery**
- 1 x cable duct with cover.
- 1 x Mounting kit.



ELM00052

L	Order No.	UP
2000	01.117.098.3	1 unit



MEC20158

Cable routing ring

- For organized cable management.
- Dimensions:
Exterior 61 mm x 42.5 mm.
Interior 52 mm x 23 mm.

■ **Material / Finish**
- Cable support: PPO, similar to RAL 7035 light-grey.
- Soft rubber extrusion: EPDM, similar to RAL 7021 dark-grey.

■ **Scope of delivery**
- 10 x cable routers

■ **How supplied**
- In sets.

■ **Note**
Please also order the appropriate mounting material.

Model	Order No.	UP
Screw-on	05.040.113.9	10 units



MEC20048

Velcro rolls (by the meter)

- For strain-free fastening and bundling of Cu and fiber optic cables.
- Velcro rolls can be cut to any required length.

■ **Material / Color**
- Black, One-Wrap fastener.
- F.R.T., UL 94-V2.
- Blue: One-Wrap fastener.

■ **Scope of delivery**
- 1 meter or 25 meter Velcro rolls.

■ **How supplied**
Sold by the meter.



MEC20147

W	L	Model	Order No.	UP
16	1000	Black	05.040.060.9	1 meter
16	1000	Blue	05.040.061.9	1 meter
16	25000	Black	05.040.065.9	25 meters
16	25000	Blue	05.040.066.9	25 meters



ELM00049

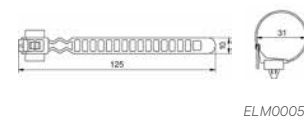
Cable band clip

- For organized cable management.
- For securing harnesses and cables with large cross sections.
- Quick and easy mounting.
- Clips into T-slots in any position.
- Includes releasable clip.

■ **Material**
- PA 6.6, black, UL 94-V0.

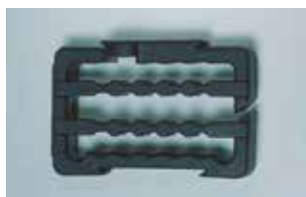
■ **Scope of delivery**
- 20 units.

■ **How supplied**
- In sets.



ELM00050

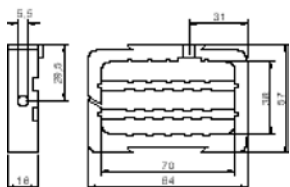
Order No.	UP
01.240.548.9	20 units



MEC20048

Cable clamping frame

- For organized cable management.
- Open version, no threading.
- Cross-section for cable routing, variable with removable routing ribs.
- Can be expanded by adding on further cable clamping frames.
- Mounting options: lengthwise or across the width.



MEC20147

Material

- Polypropylene, black.

Scope of delivery

- 1 x cable clamping frame.
- 1 x Mounting kit.

How supplied

- In sets.

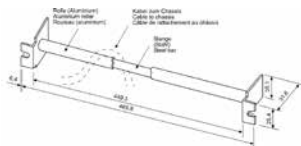
Order No.	UP
01.113.153.9	1 unit



TEL00034

Cable support bar

- For 19" racks and enclosures.
- Reduces the cable load on slot-in.
- Orders cabling.
- Prevents cable-slack.



TEL00051

Material

- Sheet steel, 1.5 mm.

Scope of delivery

- 1 x cable support bar.

Order No.	UP
05.043.327.9	1 unit

Dimensions in mm:

W = Width	h = Installation height	U = Standard rack unit	kg = Weight
H = Height	d = Insertion depth (1U = 44.45 mm)		
D = Depth	L = Length	UP = Packaging unit	

Conversion:

1 mm	= 0.03937 inch
1 kg	= 2.2046 pounds