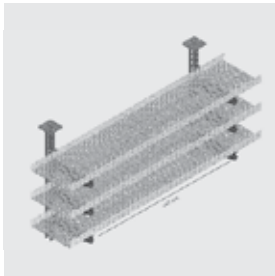


7

Fire-resistant systems



Standard supporting constructions



Non-standard supporting constructions



Accessories

STANDARD SUPPORTING CONSTRUCTION**▶ CABLE TRAYS**

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NON-STANDARD SUPPORTING CONSTRUCTION**▶ CABLE TRAYS**

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▶ CABLE LADDERS

KLLIBS60	Cable ladder interlocking ends (BS)	486
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▶ MOUNTING SYSTEMS

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HDBSKLEM	Clamp for fixing of threaded rod (BS)	489
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HSMES	Single ceiling profile	491
DKBS	Double bracket (BS)	491
MPCL41.21	Clippable assembly profile	492
HDHSLECL	Single ceiling profile clippable	492
CLHS	Snap-in adapter for HDHSLECL	493
HDVS41.45	Assembly accessory	493
TIM	Threaded rod (DIN 975)	494
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ASSEMBLY ACCESSORIES**▶ ACCESSORIES**

B	Bolt (DIN 933)	506
M	Nut (DIN 934)	506
VM6334	Coupling nut (DIN 6334)	506
VM	Toothed round head bolt / flange nut	507
VMK	Round head square neck bolt / flange nut	507
GM41	Sliding nut for supporting profile	507
RO	Giant washer (DIN 125-1 A)	508

INTRODUCTION

The safety of people in case of fire can only be guaranteed if all the necessary safety installations remain operational. Cable support systems with preservation of functionality maintain their supporting function in case of fire and thereby contribute to the continuing operation of an installation. Until the European standard is published, VERGOKAN uses, the DIN 4102-12 Standard to test and certify the preservation of functionality of its installations.

DIN 4102-12

The DIN Standard 4102 part 12 defines the requirements and testing method for fire resistance of electric cable support systems required to maintain its integrity. The standard, limited to 1KV, specifies 3 categories of functional maintenance as follows: E30, E60 and E90. These categories designate the period of time for which the integrity of the installation is maintained. To determine which installations must have functional integrity in case of fire, we refer to local regulations.

IMPLEMENTATION

Cable support systems with functional integrity are tested for one configuration, which may be altered under certain conditions as long as the functional integrity of the cables isn't negatively influenced by the installation.

Permitted deviations are:

- The load per metre and/or the support distance may be reduced;
- The width of the trays/ladders and brackets may be reduced;
- The number of trays/ladders may be reduced;
- The horizontal distance between the trays and the ladders may be adapted;
- The material gauges may be increased;
- A setup may be horizontally or vertically offset, as long as the offset sections are adequately supported to prevent buckling or shearing;
- Any certified soffit fixed support system may also be used for wall mounting;
- A partition may be added to separate the cables with functional integrity from other cables;
- A bolted connection may be replaced by a welded connection.

STANDARD SUPPORTING CONSTRUCTION

The supporting constructions described in DIN Standard 4102 part 12 are also named cable independent supporting constructions. According to the regulations in Germany, all the cables with functional integrity according to DIN Standard 4102 part 12 are applicable to these constructions.

These constructions satisfy the following conditions:

- Support distance $\leq 1200\text{mm}$
- Material gauge of the trays/ladder walls $\geq 1,5\text{mm}$
- Height of the trays/ladders = 60mm
- Width of the ladders $\leq 400\text{mm}$
- Width of the trays $\leq 300\text{mm}$ (perforation rate 15 \pm 5%)
- Rung distance of the ladders $\leq 150\text{mm}$
- The extent of the arm is supported by a threaded rod fixed to the soffit
- The load is $\leq 10\text{kg/lm}$ for cable trays and $\leq 20\text{kg/lm}$ for cable ladders

Standard supporting constructions are tested according to DIN Standard 4102 part 12 and certified with "GS" certificates (Gutachterlichen Stellungnahme). These certificates can be found on our website.

NON-STANDARD SUPPORTING CONSTRUCTION

These are supporting constructions that don't comply with the conditions for standard supporting constructions. Non-standard supporting constructions are also tested in accordance with DIN Standard 4102 part 12. According to the German regulation, these supporting constructions are cable specific. That means that in these constructions, the cables with functional integrity must be of the same type and brand as specified in the ABP certificate (Allgemeines Bauaufsichtliches Prüfzeugnis).

DIN Standard 4102 part 12 is a German standard. Non-German test institutes can also be accredited to test according to this standard. However, our experience is that the German market doesn't recognise certificates issued by these non-German institutes. Please verify what the regulations are in your market.

FAQ

Are there any restrictions regarding the installation of supporting constructions with functional integrity below ground?

Answer: No, as long as the construction to be installed matches the functional integrity requirements.

Which anchors/plugs should be used?

Answer: Certificated plugs or anchors with preservation of functionality that at least matches that of the supporting construction. These may be loaded to a maximum of 500N.

How many levels can I mount on a ceiling profile?

Answer: That depends on the relevant certificate. Normally one may assume that the maximum tensile stress and maximum bending moment on the ceiling profile may not be larger than the certificated setup.

May I lay cables without functional integrity onto an installation with functional integrity?

Answer: Yes, as long as the cables with functional integrity are not influenced negatively. For example, the cables with and without functional integrity must be separated by a partition.

May I use coated cable trays or ladders with functional integrity?

Answer: The authorised use of coating on a cable tray needs to be specifically mentioned in the certificate. The most recent certificates obtained by Vergokan authorise the use of coatings. Consult your Vergokan contact to establish which certificates are applicable.

May I use a galvanised supporting construction?

Answer: Yes, it's also specifically mentioned in the certificate.

May I use a supporting construction in stainless steel?

Answer: Yes, as long as the load performance and other dimensions (such as material gauge) remains the same. Consult your Vergokan contact to establish which stainless steel products may be used.

May one use intersections, bends and tees in constructions with functional integrity?

Answer: Accessories are allowed as long as they are supported directly before and after each piece.

May I fit a cover onto a supporting construction with functional integrity?

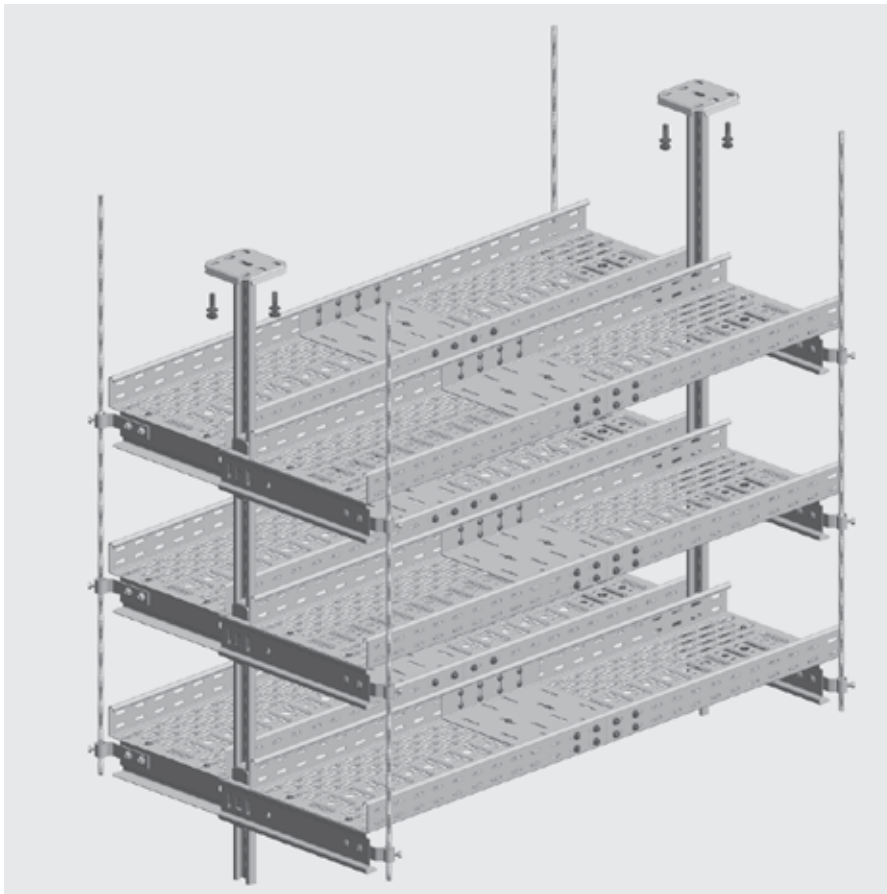
Answer: A cover may have a negative impact on the cables in case of fire. A cover needs to be specifically tested and included in the certificate. Vergokan has not yet carried out tests with covers.

May I use a vertical installation with functional integrity in an open space (away from a wall)?

Answer: No, vertical installations must be fixed onto a wall.

For further questions, please contact our technical advisers.

7 Fire-resistant systems







Standard supporting constructions

SELECTION TABLES FOR FIRE-RESISTANT SYSTEMS

1. Standard supporting constructions


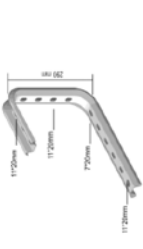

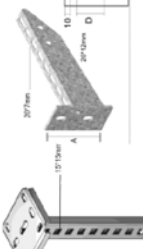
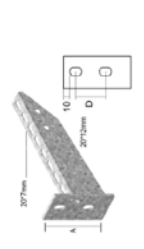
applicable with all DIN 4102-12 certified cables

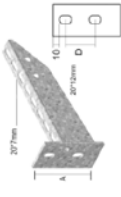
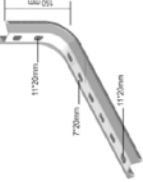
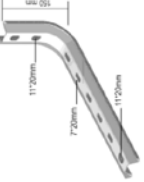

		Conditions	Standard supporting constructions (nr 1 - nr 14)
Constructions with cable tray 	KBS60	<ul style="list-style-type: none"> - Gauge = 1,5 mm - Max. width = 300 mm - Max. load (F) = 10 kg/m - Max. support distance (L) ≤ 1200 mm - Max. 3 levels - Percentage of perforations in the cable tray = 14 - 18% - Ends of the brackets are to be supported by a threaded rod 	<ol style="list-style-type: none"> 1. Fixing with threaded rod : <ul style="list-style-type: none"> - Fixing to the ceiling (nr 1 - nr 3) - Fixing to the wall (nr 4 - nr 7) 2. Fixing with double threaded rod : <ul style="list-style-type: none"> - Fixing to the ceiling (nr 8)
Constructions with cable ladder 	KLBS60	<ul style="list-style-type: none"> - Gauge = 1,5 mm - Max. width = 400 mm - Max. load (F) = 20 kg/m - Max. support distance (L) ≤ 1200 mm - Max. rung distance = 150 mm - Max. 3 levels - Ends of the brackets are to be supported by a threaded rod 	<ol style="list-style-type: none"> 1. Fixing with threaded rod : <ul style="list-style-type: none"> - Fixing to the ceiling (nr 11) - Fixing to the wall (nr 12 - nr 13)
Vertical fixing 	KL60	<ul style="list-style-type: none"> - Max. width = 400 mm - Max. load (F) = 20 kg/m - Max. height ≤ 3500 mm - Max. support distance (L) ≤ 1200 mm - Use solid supporting blocks every 3500 mm 	Fixing to the wall (nr 12)
Cable clamps 	DR15.30	<ul style="list-style-type: none"> - Max. support distance (L) without clamp support = 300 mm - The distance between 2 concrete anchors is max. 250 mm. 	<ul style="list-style-type: none"> - Fixing to the ceiling and to the wall (nr 13) - Horizontal wall fixing (nr 14)

SELECTION TABLES FOR FIRE-RESISTANT SYSTEMS

1. Standard supporting constructions

applicable with all DIN 4102-12 certified cables

		Conditions	Standard supporting constructions (nr 1 - nr 8)	
<p>KBS60</p>  <p>Constructions with cable tray KBS60</p>	<p>- Gauge = 1,5 mm - Max. width = 300 mm - Max. load (F) = 10 kg/m - Max. support distance (L) ≤ 1200 mm - Max. 3 levels - Percentages of perforations in the cable tray = 14 - 18% - Ends of the brackets are to be supported by a threaded rod</p>	<p>1. Fixing with threaded rod : - Fixing to the ceiling (nr 1 - nr 3) - Fixing to the wall (nr 4 - nr 7)</p> <p>2. Fixing with double threaded rod : - Fixing to the ceiling (nr 8)</p>		
	<p>1. Fixing with threaded rod</p>			
<p>Nr 1 : Fixing to the ceiling</p> 	<p>Code Certificate GS 3305/9930 - 2 Mu : F = 10 kg/m, L = 1200 mm, Max. 2 levels, Variant 3, Annexes 8, 9, 13 KBS60.100 - 300.150 KPBST100 - 300 VMK6.10 Concrete anchor M 12 + VOMEGA</p>	<p>To fix with : KPBST100 - 300 VMK6.10 Concrete anchor M 12 + VOMEGA</p>	<p>Amount 1 12 - 18 1 + 1</p> <p>Remark KPBST100 : 12; KPBST150 : 16; KPBST200 - 300 : 18</p>	<p>Class E 30 - E 90</p>
<p>Nr 2 : Fixing to the ceiling</p> 	<p>Code Certificate GS 3305/9930 - 2 Mu : F = 10 kg/m, L = 1200 mm, Max. 3 levels, Variant 2, Annexes 4-7, 13 KBS60.100 - 300.150 KPBST100 - 300 VMK6.10 HDS/LECL300 - 1200 Concrete anchor M 12 VM4.40 HDBSKLEM TIM8 - 10 - 12 M 8 - 10 - 12 VMK6.10</p>	<p>To fix with : KPBST100 - 300 VMK6.10 Concrete anchor M 12 VM4.40 M 8 - 10 - 12 VMK6.10</p>	<p>Amount 1 12 - 18 2 2 1 1 2</p> <p>Remark KPBST100 : 12; KPBST150 : 16; KPBST200 - 300 : 18 For symmetrical fixing : M 12 For symmetrical fixing : B12.50 + CRO12 + M12 1 level : M 8; 2 levels : M 10; 3 levels : M 12 Fixing of the cable tray onto KCLEBS</p>	<p>Class E 30 - E 90</p>
<p>Nr 3 : Fixing to the ceiling</p> 	<p>Code Certificate GS 3305/9930 - 2 Mu : F = 10 kg/m, L = 1200 mm, Max. 3 levels, Variant 1, Annexes 1-3, 7, 13 KBS60.100 - 300.150 KPBST100 - 300 VMK6.10 HDS/LECL300 - 1200 Concrete anchor M 10 B10.40 + CRO10 + M10 HDBSKLEM TIM8 - 10 - 12 M 8 - 10 - 12 VMK6.10</p>	<p>To fix with : KPBST100 - 300 VMK6.10 Concrete anchor M 10 B10.40 + CRO10 + M10 M 8 - 10 - 12 VMK6.10</p>	<p>Amount 1 12 - 18 2 2 + 4 + 2 1 2</p> <p>Remark KPBST100 : 12; KPBST150 : 16; KPBST200 - 300 : 18 For symmetrical fixing : M 12 For symmetrical fixing : B12.50 + CRO12 + M12 1 level : M 8; 2 levels : M 10; 3 levels : M 12 Fixing of the cable tray onto HDWK</p>	<p>Class E 30 - E 90</p>
<p>Nr 4 : Fixing to the wall (45°)</p> 	<p>Code Certificate GS 3305/9930 - 2 Mu : F = 10 kg/m, L = 1200 mm, Max. 1 level, Variant 1, Annexes 11, 13 KBS60.100 - 300.150 KPBST100 - 300 VMK6.10 HDS/LECL300 - 1200 Concrete anchor M 10 HDBSKLEM TIM10 M10 + CRO10 HDVS41.45 Concrete anchor M 12 HDVS41.45 B12.50 + RO12 + M12 VMK6.10</p>	<p>To fix with : KPBST100 - 300 VMK6.10 Concrete anchor M 10 M10 + CRO10 Concrete anchor M 12 B12.50 + RO12 + M12 VMK6.10</p>	<p>Amount 1 12 - 18 2 2 6 + 4 1 1 + 2 + 1 2</p> <p>Remark KPBST100 : 12; KPBST150 : 16; KPBST200 - 300 : 18 For fixing to the wall 45° Fixing HDVS41.45 onto HDWK Fixing of the cable tray onto HDWK</p>	<p>Class E 30 - E 90</p>

Nr 6 : Fixing to the wall (90°)	Code	To fix with :	Amount	Remark	Class
	Certificate GS 3305/9930 – 2 Mu : F = 10 kg/m, L = 1200 mm, Max. 3 levels, Variant 1, Annexes 11, 13				
	KBS60.100 - 300.150	KPBS100 - 300	1		
	KPBS100 - 300	VMK6.10	12 - 18	KPBS100 : 12; KPBS150 : 16; KPBS200 - 300 : 18	
	HDWK100-300	Concrete anchor M 10	2		
	HDBSKLEM		1		
	TIM10 - 12	Concrete anchor M 10 - 12	1	1 level : M 10; 2-3 levels : M 12	E 30 - E 90
KBS60.100 - 300.150	VMK6.10	2	Fixing of the cable tray onto HDWK		
	Nr 6 : Fixing to the wall (45°)				
	Code				
	Certificate GS 3305/9930 – 2 Mu : F = 10 kg/m, L = 1200 mm, Max. 1 level, Variant 2, Annexes 12-13				
	KBS60.100 - 300.150	KPBS100 - 300	1		
	KPBS100 - 300	VMK6.10	12 - 18	KPBS100 : 12; KPBS150 : 16; KPBS200 - 300 : 18	
	LOMEGA150.100 - 400	Concrete anchor M 10 + VOMEGA	2 + 1		
	TIM10	M10 + CRO10	6 + 4	Fixing TIM onto HDVS41.45	E 30 - E 90
	HDVS41.45	Concrete anchor M 12	1	For fixing to the wall 45°	
	HDVS41.45	B10.20 + RO10 + M10	1 + 2 + 1	Fixing HDVS41.45 onto LOMEGA	
	KBS60.100 - 300.150	VMK6.10	2	Fixing of the cable tray onto LOMEGA	
	Nr 7 : Fixing to the wall (90°)				
	Code				
	Certificate GS 3305/9930 – 2 Mu : F = 10 kg/m, L = 1200 mm, Max. 3 levels, Variant 2, Annexes 12-13				
	KBS60.100 - 300.150	KPBS100 - 300	1		
	KPBS100 - 300	VMK6.10	12 - 18	KPBS100 : 12; KPBS150 : 16; KPBS200 - 300 : 18	
	LOMEGA150.100 - 400	Concrete anchor M 10 + VOMEGA	2 + 1		
	TIM10 - 12	Concrete anchor M 10 - 12	1	1 level : M 10; 2-3 levels : M 12	E 30 - E 90
	TIM10 - 12	M10 - 12 + CRO10 - 12	2 + 2	Fixing TIM onto LOMEGA	
	KBS60.100 - 300.150	VMK6.10	2	Fixing of the cable tray onto LOMEGA	
		Nr 8 : Fixing to the ceiling			
Code					
Certificate GS 3305/9930 – 2 Mu : F = 10 kg/m, L = 1200 mm, Max. 3 levels, Variant 6, Annexes 24/983/2010: 10					
KBS60.100 - 300.150		KPBS100 - 300	1		
KPBS100 - 300		VMK6.10	12 - 18	KPBS100 : 12; KPBS150 : 16; KPBS200 - 300 : 18	
TIM8 - 10 - 12		Concrete anchor M 8 - 10 - 12	2	1 level : M 8; 2 levels : M 10; 3 levels : M 12	E 30 - E 90
MPCL41.21.150	MB - 10 - 12 + RO8 - 10 - 12	4	1 level : M 8; 2 levels : M 10; 3 levels : M 12		
KBS60.100 - 300.150	VMK6.10 + CRO6	2 + 2	Fixing of the cable tray onto MPCL		

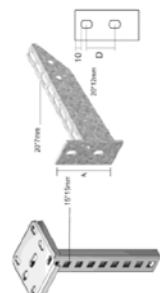

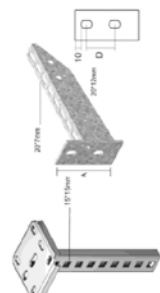
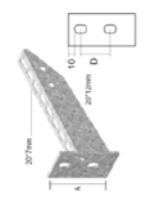
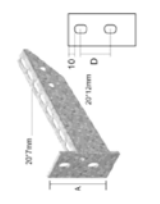
2. Fixing with double threaded rod

- Install with certified concrete anchors
- The quantities of products required is based on the smallest construction (1 level + asymmetrical).

SELECTION TABLES FOR FIRE-RESISTANT SYSTEMS

1. Standard supporting constructions

applicable with all DIN 4102-12 certified cables

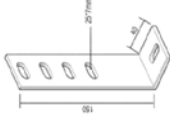





		Conditions	Standard supporting constructions (nr 9 - nr 11)																																														
<p>Constructions with cable ladder KLBS60</p> 	<p>KLBS60</p> 	<ul style="list-style-type: none"> - Gauge = 1,5 mm - Max. width = 400 mm - Max. load (F) = 20 kg/m - Max. support distance (L) ≤ 1200 mm - Max. rung distance = 150 mm - Max. 3 levels - Ends of the brackets are to be supported by a threaded rod 	<p>1. Fixing with threaded rod :</p> <ul style="list-style-type: none"> - Fixing to the ceiling (nr 11) - Fixing to the wall (nr 12 - nr 13) 																																														
			<p>1. Fixing with threaded rod</p> <p>Nr 9 : Fixing to the ceiling</p> 	<p>To fix with :</p> <p>Certificate GS 3305/9930 – 1 Mu : F = 20 kg/m, L = 1200 mm, Max. 3 levels, Variant 1, Annexes 1, 2, 6, 12</p> <table border="1"> <thead> <tr> <th>Code</th> <th>Amount</th> <th>Remark</th> <th>Class</th> </tr> </thead> <tbody> <tr> <td>KLBS60 200 - 400</td> <td>1</td> <td>CPBSKL200 - 400</td> <td></td> </tr> <tr> <td>CPBSKL200 - 400</td> <td>20</td> <td>VMK6.10</td> <td></td> </tr> <tr> <td>HDHSECL300 - 1200</td> <td>2</td> <td>Concrete anchor M 12</td> <td></td> </tr> <tr> <td>HDWK200 - 400</td> <td>2 + 4 + 2</td> <td>B10.40 + CRO10 + M10</td> <td>E 30 - E 90</td> </tr> <tr> <td>HDBSKLEM</td> <td>1</td> <td></td> <td></td> </tr> <tr> <td>TIM12</td> <td>1</td> <td>Concrete anchor M 12</td> <td></td> </tr> <tr> <td>KLBS60 200 - 400</td> <td>2</td> <td>BK</td> <td></td> </tr> <tr> <td></td> <td></td> <td>Fixing of the cable ladder onto HDWK</td> <td></td> </tr> </tbody> </table>	Code	Amount	Remark	Class	KLBS60 200 - 400	1	CPBSKL200 - 400		CPBSKL200 - 400	20	VMK6.10		HDHSECL300 - 1200	2	Concrete anchor M 12		HDWK200 - 400	2 + 4 + 2	B10.40 + CRO10 + M10	E 30 - E 90	HDBSKLEM	1			TIM12	1	Concrete anchor M 12		KLBS60 200 - 400	2	BK				Fixing of the cable ladder onto HDWK										
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TIM12	1	Concrete anchor M 12																																															
KLBS60 200 - 400	2	BK																																															
		Fixing of the cable ladder onto HDWK																																															
<p>1. Fixing with threaded rod</p> <p>Nr 10 : Fixing to the wall (45°)</p> 	<p>To fix with :</p> <p>Certificate GS 3305/9930 – 1 Mu : F = 20 kg/m, L = 1200 mm, Max. 1 level, Variant 1, Annexes 10, 12</p> <table border="1"> <thead> <tr> <th>Code</th> <th>Amount</th> <th>Remark</th> <th>Class</th> </tr> </thead> <tbody> <tr> <td>KLBS60 200 - 400</td> <td>1</td> <td>CPBSKL200 - 400</td> <td></td> </tr> <tr> <td>CPBSKL200 - 400</td> <td>20</td> <td>VMK6.10</td> <td></td> </tr> <tr> <td>HDWK200-400</td> <td>2</td> <td>Concrete anchor M 10</td> <td></td> </tr> <tr> <td>HDBSKLEM</td> <td>1</td> <td></td> <td></td> </tr> <tr> <td>TIM10</td> <td>6 + 4</td> <td>M10 + GRO10</td> <td></td> </tr> <tr> <td>HDVS41.45</td> <td>1</td> <td>Concrete anchor M 12</td> <td></td> </tr> <tr> <td>HDVS41.45</td> <td>1 + 2 + 1</td> <td>B12.20 + RO12 + M12</td> <td></td> </tr> <tr> <td>KLBS60 200 - 400</td> <td>2</td> <td>BK</td> <td></td> </tr> <tr> <td></td> <td></td> <td>For fixing to the wall 45°</td> <td></td> </tr> <tr> <td></td> <td></td> <td>Fixing HDVS41.45 onto HDWK</td> <td></td> </tr> <tr> <td></td> <td></td> <td>Fixing of the cable ladder onto HDWK</td> <td></td> </tr> </tbody> </table>	Code	Amount	Remark	Class	KLBS60 200 - 400	1	CPBSKL200 - 400		CPBSKL200 - 400	20	VMK6.10		HDWK200-400	2	Concrete anchor M 10		HDBSKLEM	1			TIM10	6 + 4	M10 + GRO10		HDVS41.45	1	Concrete anchor M 12		HDVS41.45	1 + 2 + 1	B12.20 + RO12 + M12		KLBS60 200 - 400	2	BK				For fixing to the wall 45°				Fixing HDVS41.45 onto HDWK				Fixing of the cable ladder onto HDWK	
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HDVS41.45	1	Concrete anchor M 12																																															
HDVS41.45	1 + 2 + 1	B12.20 + RO12 + M12																																															
KLBS60 200 - 400	2	BK																																															
		For fixing to the wall 45°																																															
		Fixing HDVS41.45 onto HDWK																																															
		Fixing of the cable ladder onto HDWK																																															
<p>Nr 11 : Fixing to the wall (90°)</p> 	<p>To fix with :</p> <p>Certificate GS 3305/9930 – 1 Mu : F = 20 kg/m, L = 1200 mm, Max. 1 level, Variant 1, Annexes 10, 12</p> <table border="1"> <thead> <tr> <th>Code</th> <th>Amount</th> <th>Remark</th> <th>Class</th> </tr> </thead> <tbody> <tr> <td>KLBS60 200 - 400</td> <td>1</td> <td>CPBSKL200 - 400</td> <td></td> </tr> <tr> <td>CPBSKL200 - 400</td> <td>20</td> <td>VMK6.10</td> <td></td> </tr> <tr> <td>HDWK200-400</td> <td>2</td> <td>Concrete anchor M 10</td> <td></td> </tr> <tr> <td>HDBSKLEM</td> <td>1</td> <td></td> <td></td> </tr> <tr> <td>TIM10</td> <td>1</td> <td>Concrete anchor M 10</td> <td></td> </tr> <tr> <td>KLBS60 200 - 400</td> <td>2</td> <td>BK</td> <td></td> </tr> <tr> <td></td> <td></td> <td>Fixing of the cable ladder onto HDWK</td> <td></td> </tr> </tbody> </table>	Code	Amount	Remark	Class	KLBS60 200 - 400	1	CPBSKL200 - 400		CPBSKL200 - 400	20	VMK6.10		HDWK200-400	2	Concrete anchor M 10		HDBSKLEM	1			TIM10	1	Concrete anchor M 10		KLBS60 200 - 400	2	BK				Fixing of the cable ladder onto HDWK																	
Code	Amount	Remark	Class																																														
KLBS60 200 - 400	1	CPBSKL200 - 400																																															
CPBSKL200 - 400	20	VMK6.10																																															
HDWK200-400	2	Concrete anchor M 10																																															
HDBSKLEM	1																																																
TIM10	1	Concrete anchor M 10																																															
KLBS60 200 - 400	2	BK																																															
		Fixing of the cable ladder onto HDWK																																															

- Install with certified concrete anchors
 - The quantities of products required is based on the smallest construction (1 level + asymmetrical).

SELECTION TABLES FOR FIRE-RESISTANT SYSTEMS

1. Standard supporting constructions

applicable with all DIN 4102-12 certified cables

		Conditions	Standard supporting constructions (nr 12 - nr 14)	
Nr 12 : Fixing to the wall 	KL60 Vertical fixing with cable ladder 	- Max. width = 400 mm - Max. load (F) = 20 kg/m - Max. height ≤ 3500 mm - Max. support distance (L) ≤ 1200 mm - Use solid supporting blocks every 3500 mm	Fixing to the wall (nr 12)	Class E 30 - E 90
Nr 13 : Fixing 	DR15.30 Fixing with cable clamps 	- Max. support distance (L) without clamp support = 300 mm - The distance between 2 concrete anchors is max. 250 mm.	- Fixing to the ceiling and to the wall (nr 13) - Horizontal wall fixing (nr 14)	Class E 30 - E 90
Nr 14 : Fixing 	DR15.30 Fixing with cable clamps 	- Max. support distance (L) without clamp support = 300 mm - The distance between 2 concrete anchors is max. 250 mm.	- Fixing to the ceiling and to the wall (nr 13) - Horizontal wall fixing (nr 14)	Class E 30 - E 90

- Install with certified concrete anchors
 - The quantities of products required is based on the smallest construction (1 level + asymmetrical).

KBS60

Perforated cable tray



Max. load	10 daN
Standard finish	Pre-galvanised
Optional finish HD	Hot-dip galvanised
Optional finish PE	Coating

HD	Reference	↑ mm	↔ mm	→ ← mm	↔ mm	kg/m	📦	Stock	Unit
HD	KBS60.100.150	60	100	1.50	3000	2.350	60	X	m
HD	KBS60.150.150	60	150	1.50	3000	2.830	30	X	m
HD	KBS60.200.150	60	200	1.50	3000	3.320	30	X	m
HD	KBS60.300.150	60	300	1.50	3000	4.300	30	X	m

The technical information for this product can be found at the end of this chapter.

KPBS

Joiner for Cable tray (BS)



For joining of KBS60.

Standard finish	Pre-galvanised
Optional finish HD	Hot-dip galvanised

HD	Reference	↑ mm	↔ mm	→ ← mm	↔ mm	kg/ piece	📦	Stock	Unit
HD	KPBS100	55	96		-	0.550	1	X	piece
HD	KPBS150	55	146		-	0.670	1	X	piece
HD	KPBS200	55	196		-	0.850	1	X	piece
HD	KPBS300	55	296		-	1.100	1	X	piece

Fix with:

HD	VMK6.10	-	-	M6	-	0.009	100	X	piece
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Use all perforations.

KLBS60

Cable ladder KL (BS)



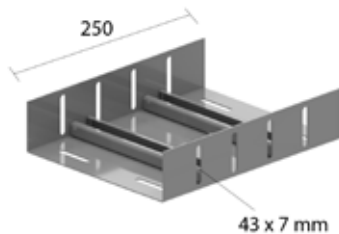
Side walls : L-profile
C-rungs

Usable inner height	45 mm
Rung distance	100 mm
Max. load	20 daN
Standard finish	Pre-galvanised

HD	Reference	↑ mm	↔ mm	→ ← mm	↔ mm	kg/m	📦	Stock	Unit
-	KLBS60.200	60	200		3000	2.760	24		m
-	KLBS60.300	60	300		3000	3.360	24		m
-	KLBS60.400	60	400		3000	3.860	24		m

KPBSKL

Joiner for cable ladder (BS)



Standard finish	Pre-galvanised
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HD	Reference	↑ mm	↔ mm	→ ← mm	↔ mm	kg/ piece	📦	Stock	Unit
-	KPBSKL200	55	196		-	1.100	1		piece
-	KPBSKL300	55	296		-	1.450	1		piece
-	KPBSKL400	55	396		-	1.850	1		piece

Fix with:

HD	Reference	↑ mm	↔ mm	→ ← mm	↔ mm	kg/ piece	📦	Stock	Unit
HD	VMK6.10	-	-	M6	-	0.009	100	X	piece

BK

Fixing clamp



For fixing of the cable ladder KLBS on the wall bracket.
Two pieces per bracket.

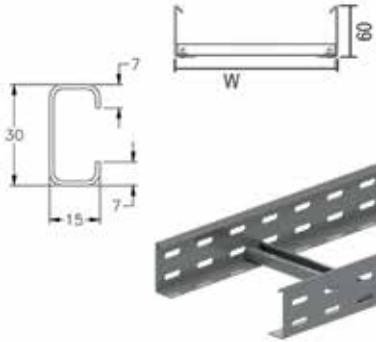
Standard finish	Pre-galvanised
Optional finish HD	Hot-dip galvanised
Optional finish PE	Coating

HD	Reference	↑ mm	↔ mm	→ ← mm	↔ mm	kg/ piece	📦	Stock	Unit
HD	BK	-			-	0.020	50	X	piece

To order per full packaging.
Included: Bolt B6.20, nut RM6 and VFKG30.

KL60

Cable ladder



Can only be used for vertical mounting
Side walls : perforated L-profile
C-rungs

Usable inner height	45 mm
Rung distance	300 mm
Standard finish	Pre-galvanised
Optional finish HD	Hot-dip galvanised
Optional finish PE	Coating

HD	Reference	↓ mm	↔ mm	↔ mm	↔ mm	kg/m	📦	Stock	Unit
HD	KL60.200	60	200		3000	2.370	24	X	m
HD	KL60.300	60	300		3000	2.570	24	X	m
HD	KL60.400	60	400		3000	2.770	24	X	m

Fix with:									
HD	LVBS60	51	200	-	-	0.120	12	X	piece

LVBS60

Joiner for vertical cable ladder (BS)



Only for vertical mounting
For joining of KL60

Standard finish	Pre-galvanised
Optional finish HD	Hot-dip galvanised

HD	Reference	↓ mm	↔ mm	↔ mm	↔ mm	kg/ piece	📦	Stock	Unit
HD	LVBS60	51	200		-	0.120	12	X	piece

Fix with:									
HD	VMK6.10	-	-	M6	-	0.009	100	X	piece

To order per full packaging.

HDAB35.110

Stand-off bracket



Used for vertical mounting of the cable ladder.

Standard finish	Hot-dip galvanised
Optional finish PE	Duplex system

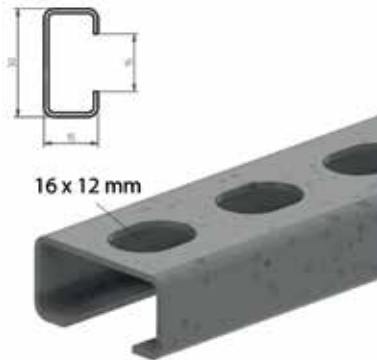
Reference	↓ mm	↔ mm	↔ mm	↔ mm	kg/ piece	📦	Stock	Unit
HDAB35.110	150	40		-	0.210	20	X	piece

Fix with:									
HD	VM6.20	-	-	M6	20	0.009	100	X	piece

To order per full packaging.

DR15.30

Supporting profile



For wall and ceiling constructions

Standard finish	Pre-galvanised
Optional finish HD	Hot-dip galvanised
Optional finish PE	Coating

HD	Reference	↑ mm	↔ mm	→ ← mm	↔ mm	kg/ piece	📦	Stock	Unit
HD	DR100	15	30		100	0.060	10	X	piece
HD	DR150	15	30		150	0.080	10	X	piece
HD	DR200	15	30		200	0.110	10	X	piece
HD	DR250	15	30		250	0.130	10	X	piece
HD	DR300	15	30		300	0.160	10	X	piece
HD	DR350	15	30		350	0.190	10	X	piece
HD	DR15.30.2000	15	30		2000	0.600	2		m

Max. support distance = 300 mm.

Use of cable clamps, type H.

Applicable with all DIN 4102-12 certified cables.

Fixing to the ceiling or wall with certified concrete anchors.

Distance between the anchors max. 250 mm.

DATWYLER.WUM

Support Vertical Cable Installation



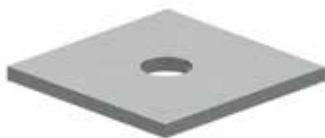
Effective support measure for vertical installation to be used at intervals of up to 3.5 m with DR15.30 rail and cable clamps HDH1. Meandering cable laying is not necessary.

Complies with the DIN4102-12 norm Fire resistance.

HD	Reference	↑ mm	↔ mm	→ ← mm	↔ mm	kg/ piece	📦	Stock	Unit
-	WUM300.E90	200	470		185	0.300	1		piece
-	WUM400.E90	200	570		185	0.400	1		piece
-	WUM500.E90	200	670		185	0.470	1		piece

SYBS

Stop for Y cable clamp (BS)



Standard finish	Pre-galvanised
Optional finish HD	Hot-dip galvanised

HD	Reference	↑ mm	↔ mm	→ ← mm	↔ mm	kg/ piece	📦	Stock	Unit
HD	SYBS	-	30	2.00	30	0.014	50	X	piece

To order per full packaging.

HDH1

Cable clamp



Applicable in case of C-rungs 15x30.

Standard finish

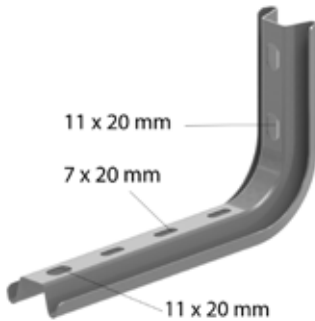
Hot-dip galvanised

Reference	↑ mm	↔ mm	→ ← mm	↔↔ mm	kg/ piece	📦	Stock	Unit
HDY1198	-	12		-	0.030	50	X	piece
HDY1199	-	16		-	0.030	50	X	piece
HDY1200	-	20		-	0.040	50	X	piece
HDY1201	-	24		-	0.040	50	X	piece
HDY1202	-	28		-	0.040	50	X	piece
HDY1203	-	32		-	0.060	50	X	piece
HDY1204	-	36		-	0.070	50	X	piece
HDY1205	-	40		-	0.080	50	X	piece
HDY1206	-	44		-	0.090	50	X	piece
HDY1207	-	48		-	0.100	50	X	piece
HDY1208	-	52		-	0.100	50	X	piece
HDY1209	-	56		-	0.110	50	X	piece
HDY1210	-	60		-	0.140	50	X	piece
HDY1211	-	64		-	0.160	50	X	piece
HDY1212	-	70		-	0.160	50	X	piece

To order per full packaging.
Max. 1 cable per cable clamp

LOMEGA150

Bracket / Ceiling profile



Standard finish

Pre-galvanised

Optional finish HD

Hot-dip galvanised

HD	Reference	↑ mm	↔ mm	→ ← mm	↔↔ mm	kg/ piece	📦	Stock	Unit
HD	LOMEGA150.100	145	145		-	0.300	12	X	piece
HD	LOMEGA150.150	145	195		-	0.320	12	X	piece
HD	LOMEGA150.200	145	245		-	0.340	12	X	piece
HD	LOMEGA150.250	145	295		-	0.450	12	X	piece
HD	LOMEGA150.300	145	345		-	0.490	12	X	piece
HD	LOMEGA150.400	145	445		-	0.540	6	X	piece

Fix with:

HD	B10.30	-	-	M10	30	0.027	100	X	piece
HD	CRO10	-	-	M10	-	0.012	100	X	piece
HD	M10	-	-	M10	-	0.010	100	X	piece

The technical information for this product can be found at the end of this chapter.

To order per full packaging.

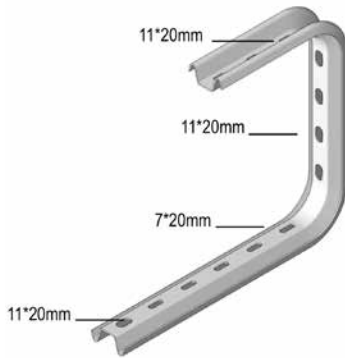
Ends held up through a threaded rod TIM.

Use the VOMEGA to avoid compression of the profile.

When ordering, add 100 mm to the width. E.g. KBS 300 mm: use LOMEGA150.400.

COMEGA290

Open suspension bracket



Standard finish

Pre-galvanised

HD	Reference	↑ mm	↔ mm	→ ← mm	↔ mm	kg/ piece	📦	Stock	Unit
-	COMEGA290.150	290	195		-	0.560	12	X	piece
-	COMEGA290.200	290	245		-	0.620	12	X	piece
-	COMEGA290.250	290	295		-	0.760	6	X	piece
-	COMEGA290.300	290	345		-	0.820	6	X	piece
-	COMEGA290.400	290	445		-	0.930	6	X	piece

To order per full packaging.

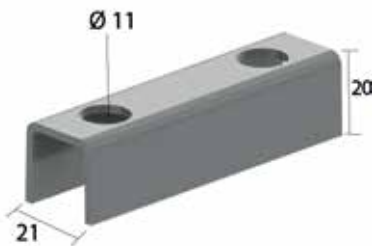
Ends held up by threaded rod TIM10.

Use the VOMEGA to avoid compression of the profile.

When ordering, add 100 mm to the width. E.g. KBS 300 mm: use COMEGA290.400.

VOMEGA

Joining piece



Standard finish

Pre-galvanised

Optional finish HD

Hot-dip galvanised

Optional finish PE

Coating

HD	Reference	↑ mm	↔ mm	→ ← mm	↔ mm	kg/ piece	📦	Stock	Unit
HD	VOMEGA	-			-	0.060	24	X	piece

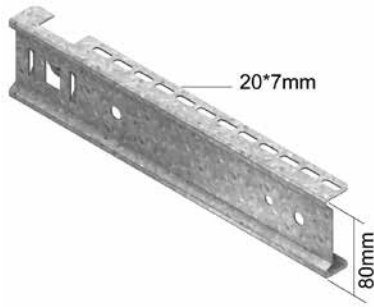
The technical information for this product can be found at the end of this chapter.

To order per full packaging.

For wall mounting 1 piece, for double mounting 2 pieces, back to back.

KCLBS

Click-on bracket (BS)



Standard finish

Pre-galvanised

HD	Reference	↓ mm	↔ mm	→ ← mm	↔ mm	kg/ piece	⊞	Stock	Unit
-	KCLBS100	80	180		-	0.220	48		piece
-	KCLBS200	80	280		-	0.350	48		piece
-	KCLBS300	80	380		-	0.470	24		piece
-	KCLBS400	80	480		-	0.750	24		piece
Fix with:									
-	VM4.40	-	-	M4	40	0.005	100	X	piece

The technical information for this product can be found at the end of this chapter.

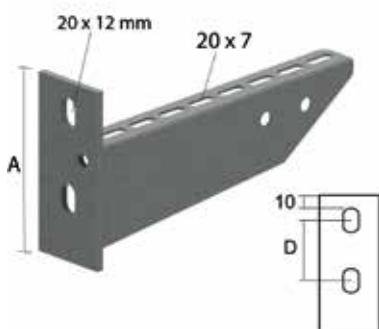
Completely clipsable, secured with VM4.40.

Use CLHS for symmetrical mounting.

Clamp for fixing of threaded rod (HDBSKLEM) to order separately.

HDWK

Welded bracket



Standard finish

Hot-dip galvanised

Reference	↑ mm	↔ mm	→ ← mm	↔ mm	kg/ piece	📦	Stock	Unit
HDWK100	106	117		-	0.300	12	X	piece
HDWK150	112	167		-	0.360	12	X	piece
HDWK200	116	217		-	0.430	12	X	piece
HDWK250	120	267		-	0.530	12	X	piece
HDWK300	125	317		-	0.730	12	X	piece
HDWK400	134	417		-	0.880	6	X	piece
Fix with:								
HD B10.40	-	-	M10	40	0.033	100	X	piece
HD CRO10	-	-	M10	-	0.012	100	X	piece
HD M10	-	-	M10	-	0.010	100	X	piece

The technical information for this product can be found at the end of this chapter.

To order per full packaging.

For symmetrical mounting, use HDB12.50 + HDCRO12 + HDM12.

HDBSKLEM

Clamp for fixing of threaded rod (BS)



Very fast securing of the threaded rod TIM, using a clamping bolt. Applicable on HDWK and KCLBS.

Standard finish

Hot-dip galvanised

Reference	↑ mm	↔ mm	→ ← mm	↔ mm	kg/ piece	📦	Stock	Unit
HDBSKLEM	25	125		-	0.120	20	X	piece

To order per full packaging.

Ends held up through threaded rod TIM.

No additional bolts and nuts needed.

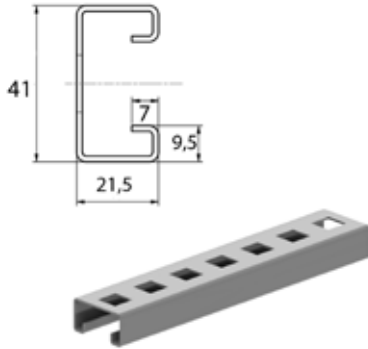
Threaded rod can be mounted in 1 continuous length.

Diameter of the threaded rod TIM not of influence.

Clamping bolt to be tightened with angular momentum of 10 Nm.

MPCL41.21

Clippable assembly profile



Standard finish

Pre-galvanised

HD	Reference	↓ mm	↔ mm	→ ← mm	↔ mm	kg/ piece	📦	Stock	Unit
-	MPCL41.21.150.200	41	21	1.50	210	0.240	10	X	piece
-	MPCL41.21.150.300	41	21	1.50	300	0.340	10	X	piece
-	MPCL41.21.150.400	41	21	1.50	420	0.480	10	X	piece
-	MPCL41.21.150.500	41	21	1.50	510	0.580	10	X	piece
Fix with:									
HD	M8	-	-	M8	-	0.005	100	X	piece
HD	M10	-	-	M10	-	0.010	100	X	piece
HD	M12	-	-	M12	-	0.017	100	X	piece
HD	RO8	-	-	M8	-	0.002	100	X	piece
HD	RO10	-	-	M10	-	0.004	100	X	piece
HD	RO12	-	-	M12	-	0.006	100	X	piece

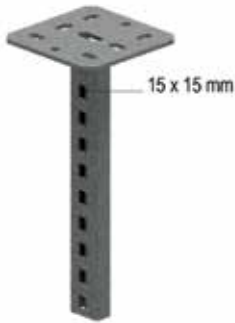
To order per full packaging.

To be fixed with 2 threaded rods to the ceiling:

- TIM8 + nut M8 + CRO8
- TIM10 + nut M10 + RO10
- TIM12 + nut M12 + RO12

HDHSLECL

Single ceiling profile clippable



Ceiling profile: HDMP41.21
Welded headplate of 120 x 120 mm

Max. load	1000 daN
Standard finish	Hot-dip galvanised
Optional finish PE	Duplex system

Reference	↑ mm	↔ mm	→ ← mm	↔ mm	kg/ piece	📦	Stock	Unit
HDHSLECL300	300			-	0.850	1	X	piece
HDHSLECL400	-			420	1.010	1	X	piece
HDHSLECL500	510			-	1.130	1	X	piece
HDHSLECL600	-			600	1.230	1	X	piece
HDHSLECL800	-			810	1.450	1	X	piece
HDHSLECL1000	1020			-	1.750	1	X	piece
HDHSLECL1200	-			1200	1.950	1	X	piece

The technical information for this product can be found at the end of this chapter.

Also applicable for double mounting.

Fixed with 2 anchoring bolts.

For symmetrical mounting, to fix with 2 anchoring bolts M12.

CLHS

Adapter for HDHSLECL



For symmetrical mounting of KCLBS

Standard finish	Pre-galvanised
-----------------	----------------

HD	Reference	↑ mm	↔ mm	→ ← mm	↔ mm	kg/ piece	📦	Stock	Unit
-	CLHS	-			-	0.120	24	X	piece

To order per full packaging.

HDVS41.45

Assembly accessory



To be used when mounting the threaded rod to the wall.

Standard finish Hot-dip galvanised

Reference	↑ mm	↔ mm	→ ← mm	↔ mm	kg/ piece	📦	Stock	Unit
HDVS41.45	-	40	3.00	-	0.100	12	X	piece

The technical information for this product can be found at the end of this chapter.
To order per full packaging.

TIM

Threaded rod (DIN 975)



Standard finish Electro zinc-plated

Optional finish HD Hot-dip galvanised

Reference	Max. load (in daN)
TIM8	550
TIM10	900
TIM12	1300

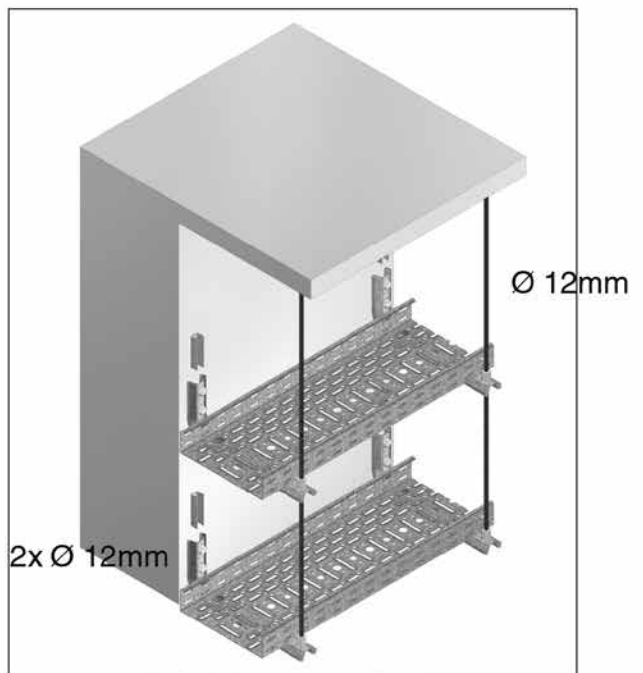
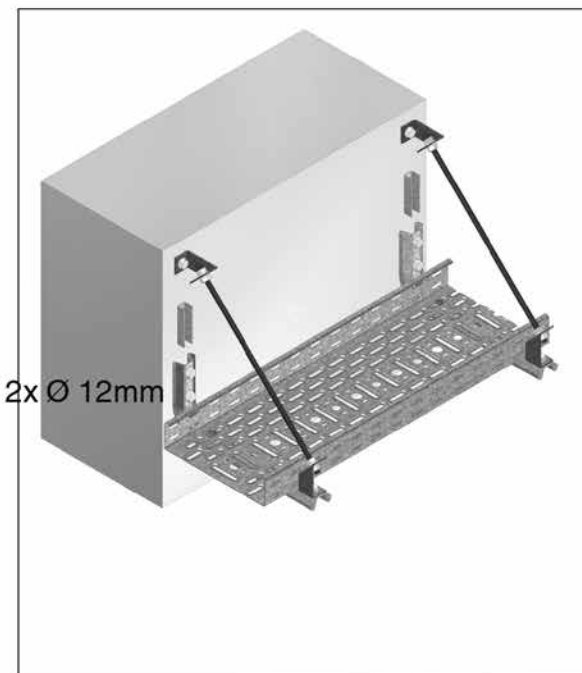
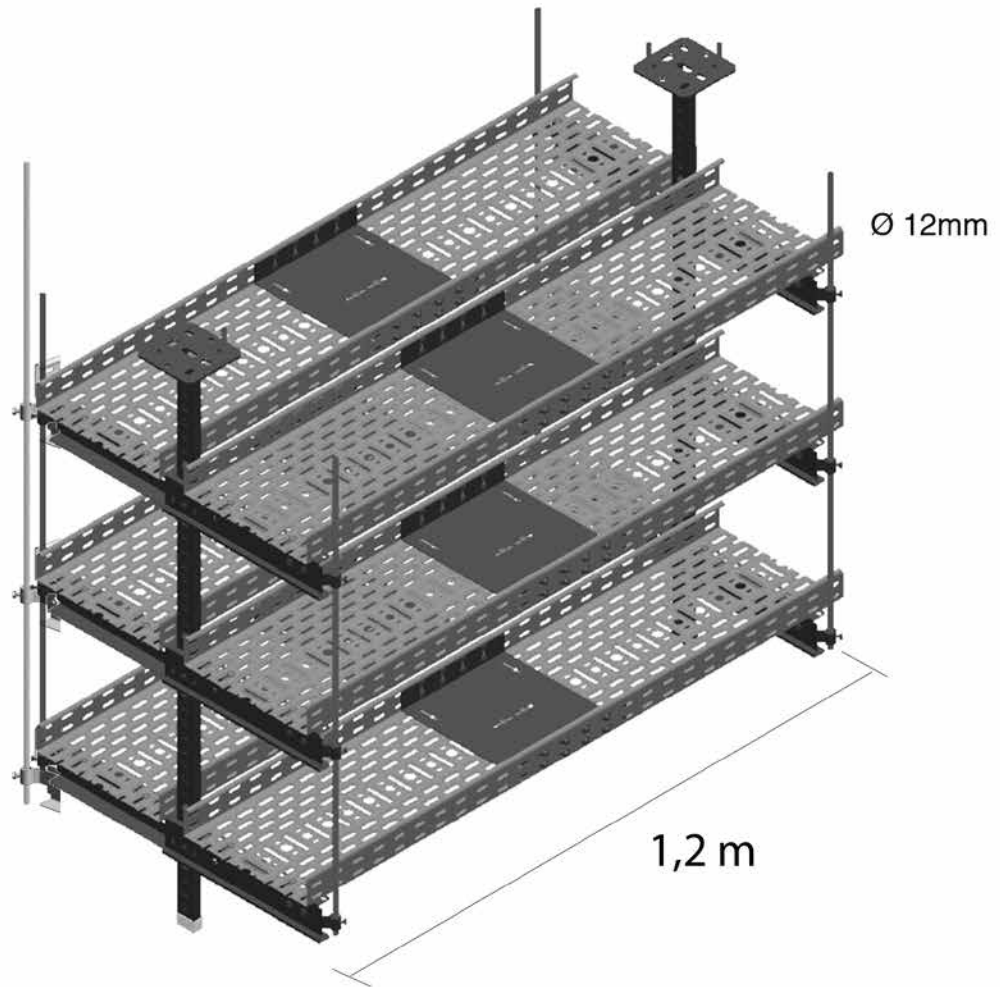
HD	Reference	↑ mm	↔ mm	→ ← mm	↔ mm	kg/m	📦	Stock	Unit
HD	TIM8	-		M8	2000	0.319	50	X	m
HD	TIM10	-		M10	2000	0.500	50	X	m
HD	TIM12	-		M12	2000	0.725	30	X	m

Fix with:

HD	M8	-	-	M8	-	0.005	100	X	piece
HD	M10	-	-	M10	-	0.010	100	X	piece
HD	M12	-	-	M12	-	0.017	100	X	piece
HD	RO8	-	-	M8	-	0.002	100	X	piece
HD	RO10	-	-	M10	-	0.004	100	X	piece
HD	RO12	-	-	M12	-	0.006	100	X	piece

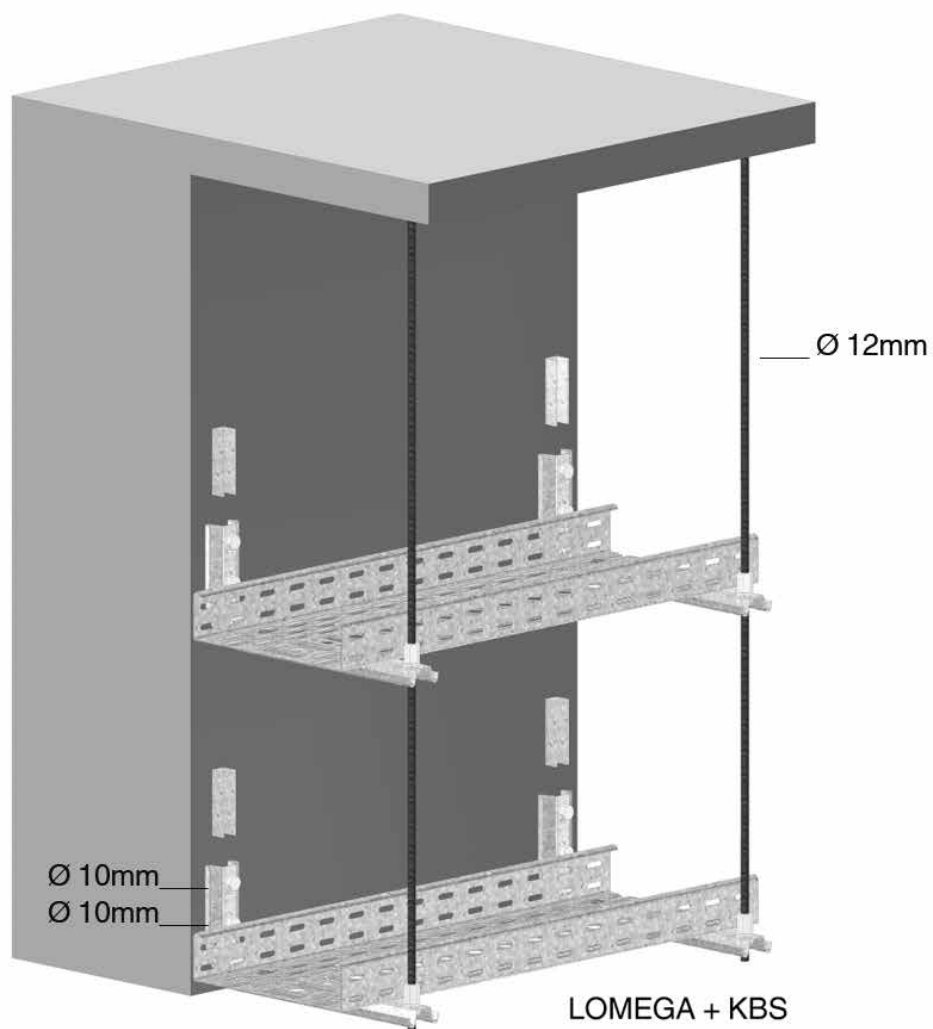
KBS60

Technical information



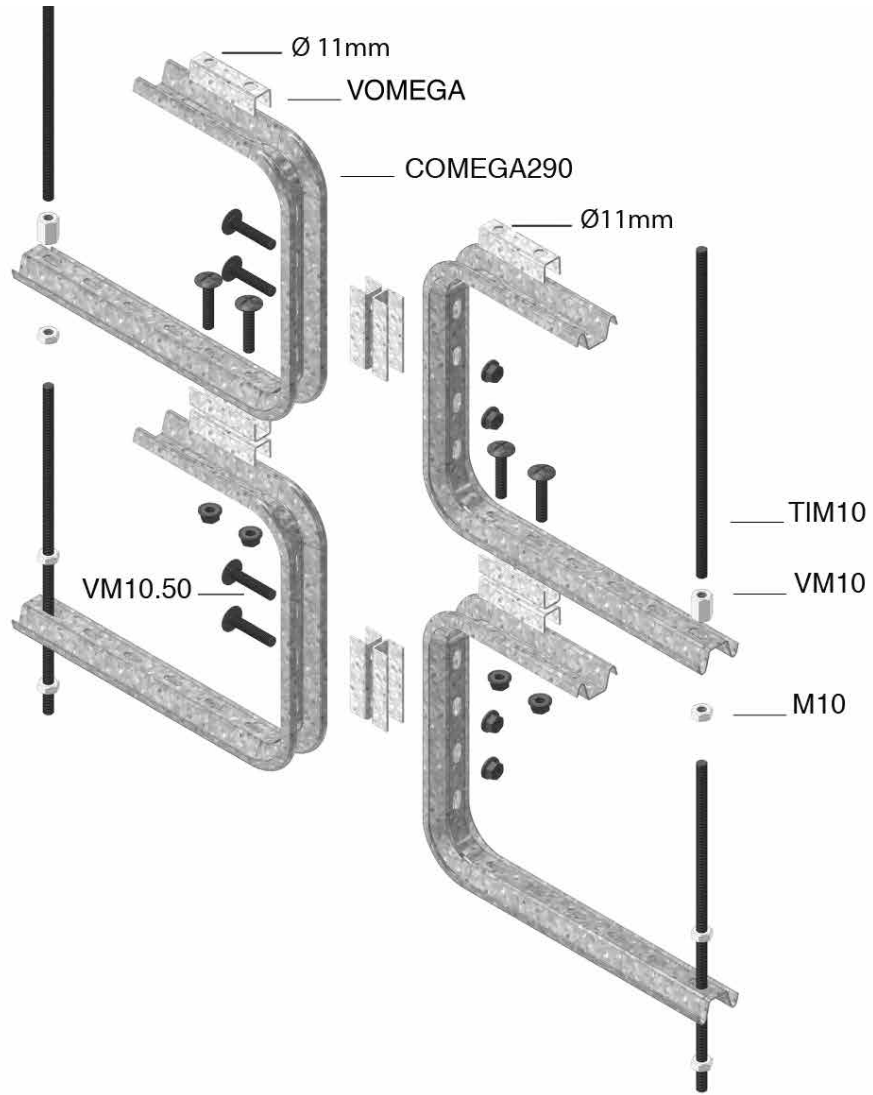
LOMEGA150

Technical information



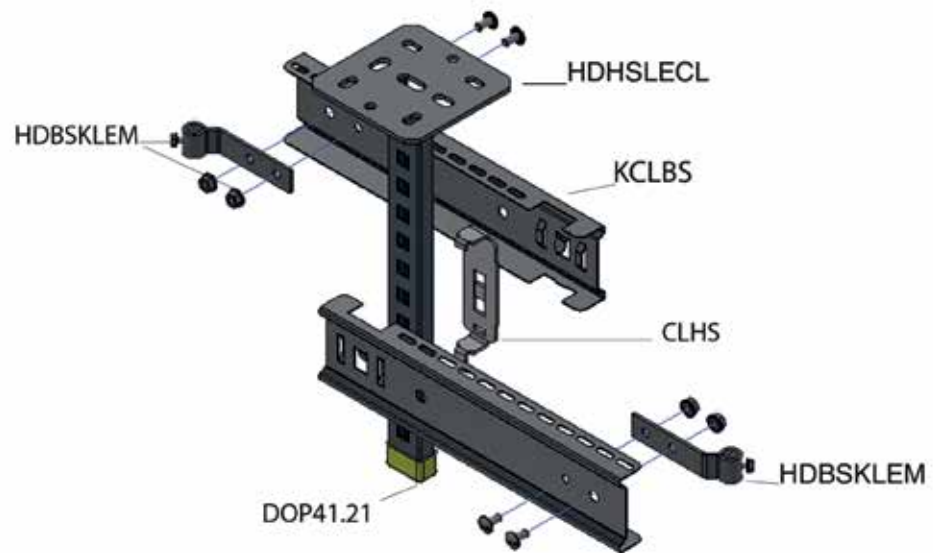
VOMEGA

Technical information



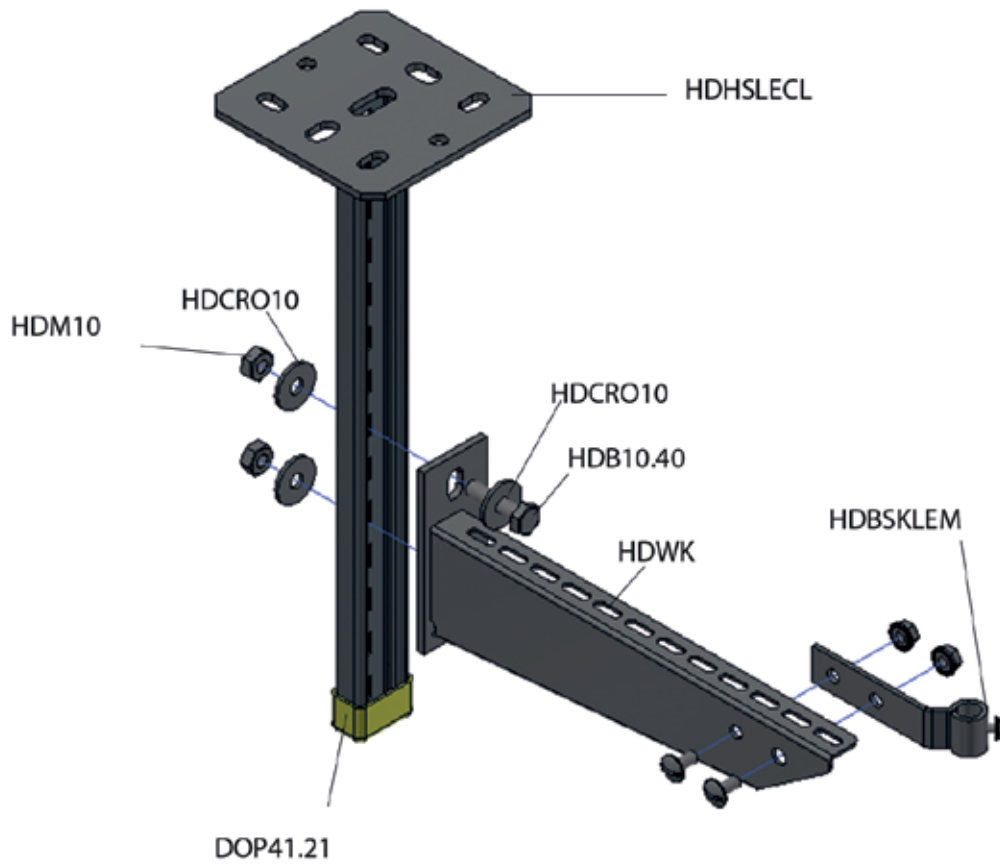
KCLBS

Technical information



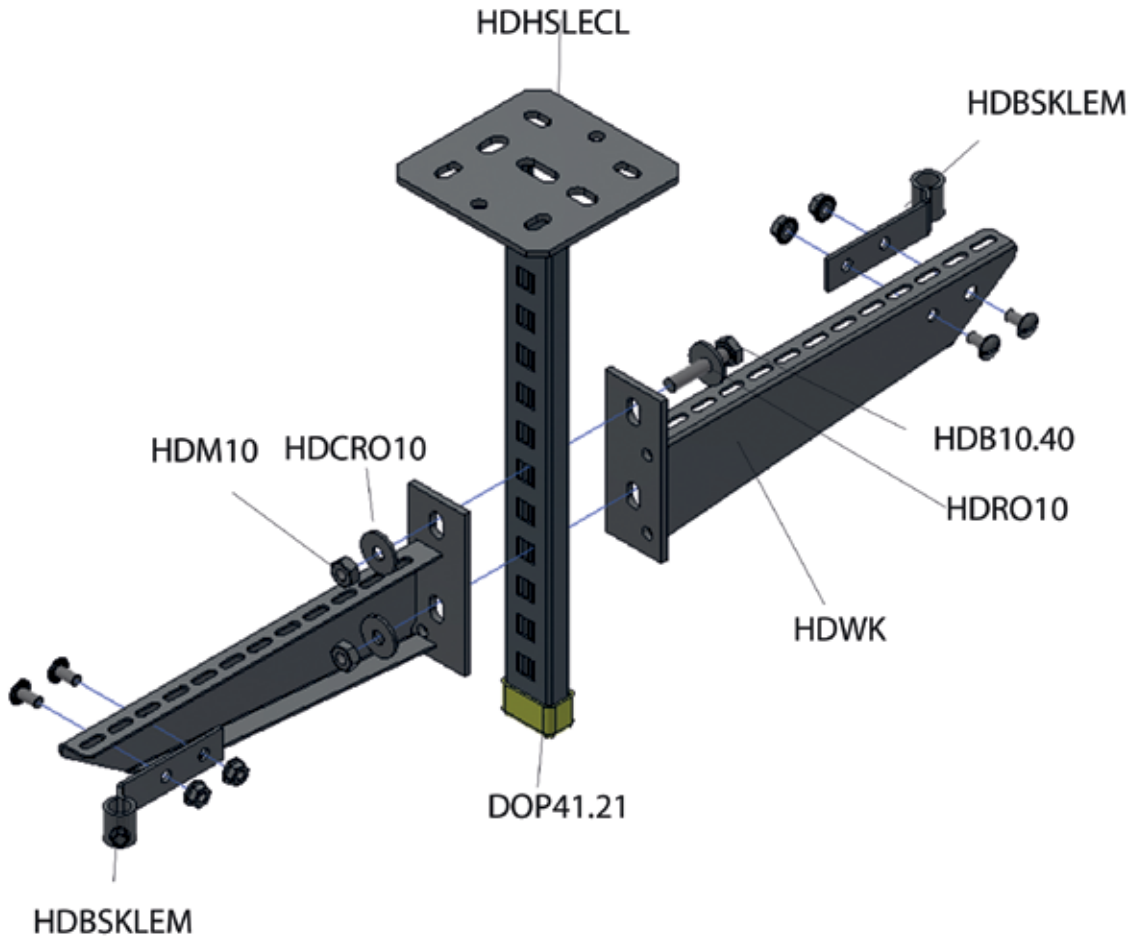
HDWK

Technical information



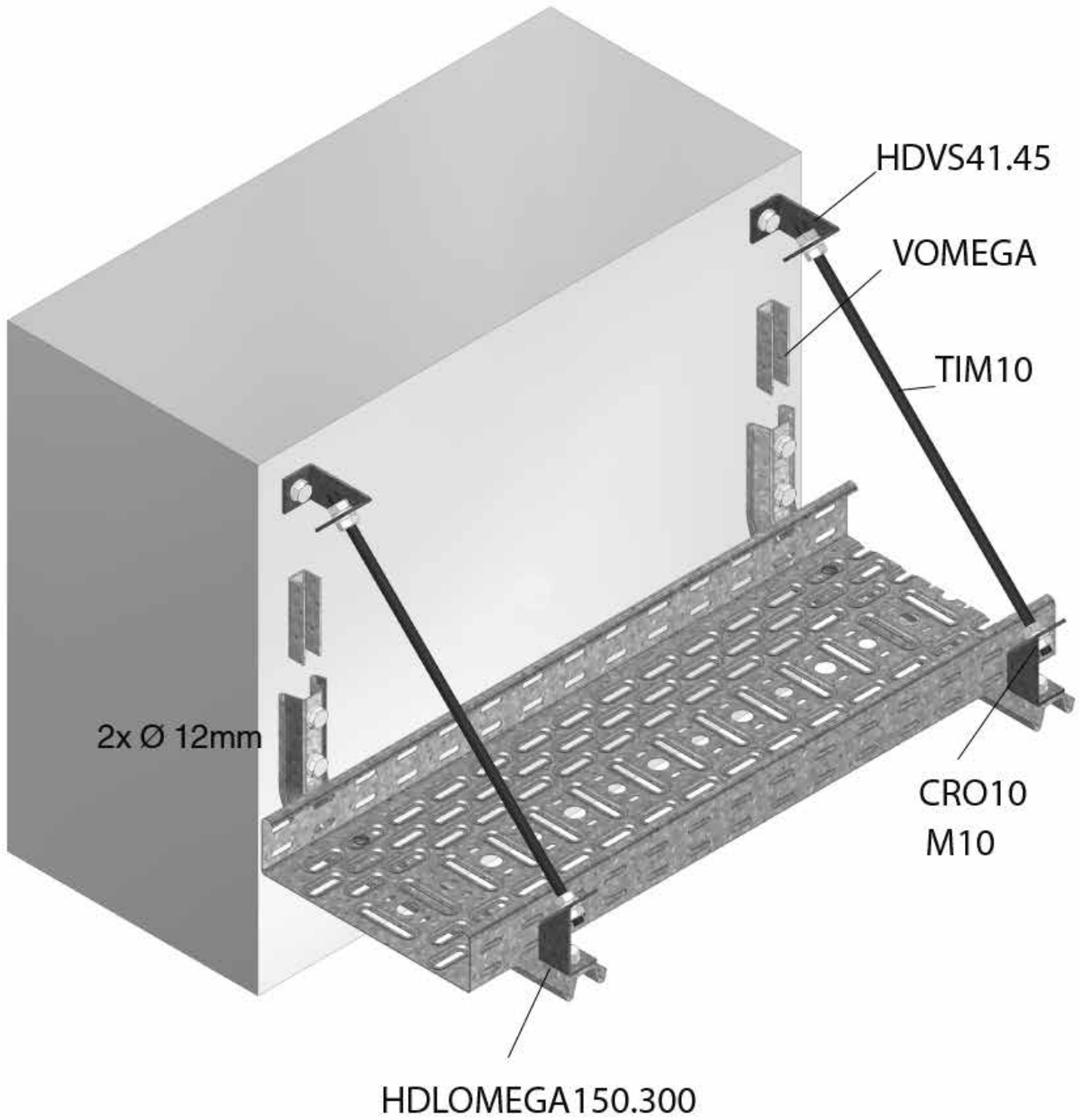
HDHSLECL

Technical information

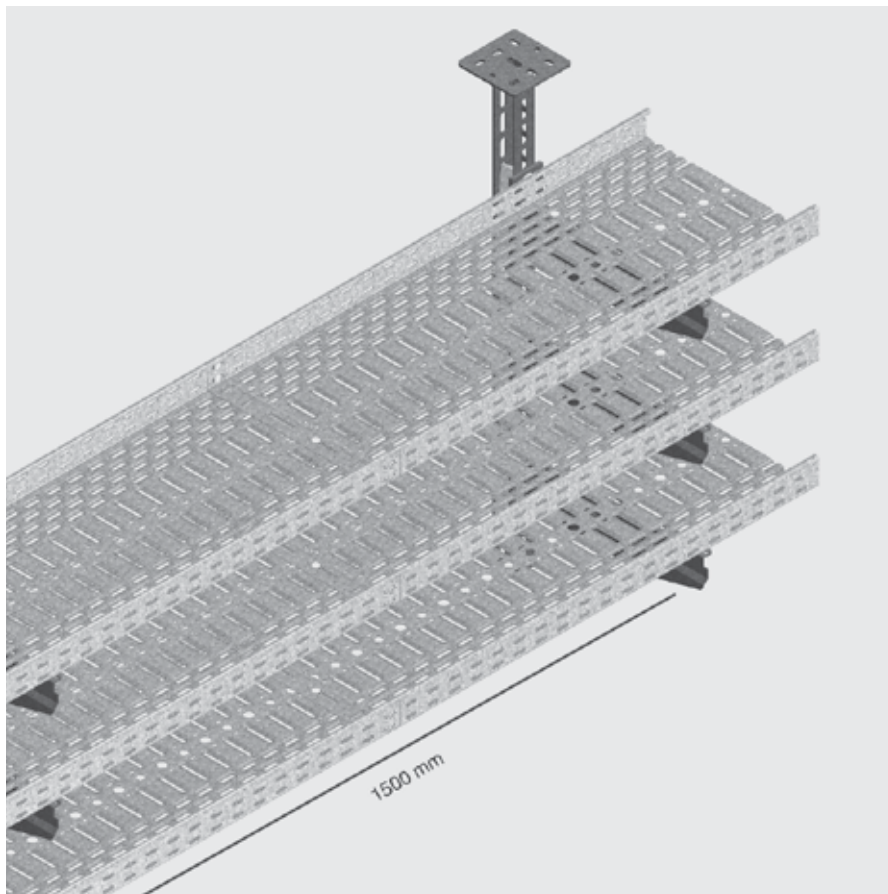


HDVS41.45

Technical information






7 Fire-resistant systems



Non-standard supporting constructions



SELECTION TABLES FOR FIRE-RESISTANT SYSTEMS

2. Non-standard supporting constructions





		Conditions	Non-standard supporting constructions (nr 1 - nr 13)
<p>Constructions with cable tray</p> 	<p>KBSI60</p>	<ul style="list-style-type: none"> - Gauge = 0,75 mm - 1,00 mm - Max. width = 400 mm - Max. load (F) = 20 Kg/m - Max. support distance (L) ≤ 1500 mm - Max. 3 - Tested with Dätwyler, Prysman, Prakab and Faber cables 	<ol style="list-style-type: none"> 1. Fixing without threaded rod : <ul style="list-style-type: none"> - Fixing to the ceiling (nr 1 - nr 2) - Fixing to the wall (nr 3 - nr 4) 2. Fixing without threaded rod : <ul style="list-style-type: none"> - Fixing to the ceiling (nr 7 - nr 9) - Fixing to the wall (nr 10)
		<ul style="list-style-type: none"> - Gauge = 0,75 mm - Max. width = 300 mm - Max. load (F) = 20 Kg/m - Max. support distance (L) ≤ 1500 mm - Max. 3 ; Max. 2 - Tested with Eupen, Dätwyler and Leoni Studer cables 	<ol style="list-style-type: none"> 3. Fixing with threaded rod : <ul style="list-style-type: none"> - Fixing to the ceiling (nr 12) - Fixing to the wall (nr 13) 4. Fixing with double threaded rod (nr 14)
<p>Constructions with cable tray</p> 	<p>KBSCL60</p>	<ul style="list-style-type: none"> - Gauge = 0,75 mm - Max. width = 300 mm - Max. load (F) = 20 Kg/m - Max. support distance (L) ≤ 1500 mm - Max. 3 levels - Tested with Eupen, Dätwyler and Leoni Studer cables 	<ol style="list-style-type: none"> 2. Fixing without threaded rod : <ul style="list-style-type: none"> - Fixing to the ceiling (nr 5 - nr 6) - Fixing to the wall (nr 11)
<p>Constructions with cable ladder</p> 	<p>KLLIBS60</p>	<ul style="list-style-type: none"> - Max. width = 400 mm - Max. load (F) = 30 Kg/m - Max. support distance (L) ≤ 1500 mm - Max. rung distance = 150 mm - Max. 3 - Additional support at the end of the brackets - Max. height ≤ 3500 mm - Use solid supporting blocks every 3500 mm - Tested with Eupen cables 	<ol style="list-style-type: none"> 1. Fixing with additional support : <ul style="list-style-type: none"> - Fixing to the ceiling (nr 15) - Fixing to the wall (nr 16) 2. Vertical fixing : <ul style="list-style-type: none"> - Fixing to the wall (nr 17)

SELECTION TABLES FOR FIRE-RESISTANT SYSTEMS

2. Non-standard supporting constructions

	Conditions	Non-standard supporting constructions (nr 1 - nr 10)
Constructions with cable tray KBSI60 	<ul style="list-style-type: none"> - Gauge = 0,75 mm - 1,25 mm - Max. width = 300 mm - 400 mm - Max. load (F) = 20 kg/m - Max. support distance (L) ≤ 1200 mm - 1500 mm - Max. 3 	<ol style="list-style-type: none"> 1. Fixing without threaded rod : - Fixing to the ceiling (nr 1 - nr 2) - Fixing to the wall (nr 3 - nr 4) 2. Fixing without threaded rod : - Fixing to the ceiling (nr 7 - nr 9) - Fixing to the wall (nr 10) 3. Fixing with threaded rod : - Fixing to the ceiling (nr 12) - Fixing to the wall (nr 13) 4. Fixing with double threaded rod (nr 14)
Constructions with cable tray KBSC160 	<ul style="list-style-type: none"> - Gauge = 0,75 mm - 1,00mm - Max. width = 75 mm - 300 mm - Max. load (F) = 20 kg/m - Max. support distance (L) ≤ 1200 mm - 1500 mm - Max. 3 	<ol style="list-style-type: none"> 2. Fixing without threaded rod : - Fixing to the ceiling (nr 7 - nr 9) - Fixing to the wall (nr 10)









1. Fixing without threaded rod

Nr 1 : Fixing to the ceiling	To fix with :	Amount	Remark	Class
	Code Certificate FIRES-JR-057-16-NURE : DIN 4102-12:1998-11, F = 20 kg/m, L = 1500 mm, Max. 3.			
	KBSI60, 100 - 300, 075	5		E 30 - E 90
	HCHSMU50, 300 - 1500	2 + 2		
	HOWKM100 - 300	1	HOTSU50 = Spacer HCHSMU50 (incl. bolts and nuts)	
	KBSI60, 100 - 300, 075	2	Fixing of the cable tray onto HDWKM	
Certificate FIRES-JR-055-16-NURE: STN 92 0205/2014, Certificate FIRES-JR-056-16-NURE: ZP-27/2008, Certificate FIRES-JR-065-16-NURE: CSN 73 0895				
	Code Certificate FIRES-JR-051-16-NURE, FIRES-JR-054-16-NURE, FIRES-JR-060-16-NURE, FIRES-JR-063-16-NURE & FIRES-JR-066-16-NURE : DIN 4102-12:1998-11, F = 20 kg/m, L = 1500 mm, Max. 3			
	KBSI60, 100 - 400, 100	5		E 30 - E 90
	HCHSMU50, 300 - 1500	2 + 2		
	HOWKM100 - 400	1	HOTSU50 = Spacer HCHSMU50 (incl. bolts and nuts)	
	KBSI60, 100 - 400, 100	2	Fixing of the cable tray onto HDWKM	
Certificate STN 92 0205/2014, ZP-27/2008 & CSN 73 0895				
	Code Certificate FIRES-JR-057-16-NURE : DIN 4102-12:1998-11, F = 20 kg/m, L = 1500 mm			
	KBSI60, 100 - 300, 075	5		E 30 - E 90
	HCHSMU50, 300 - 1500	1 + 1		
	HOWKM100 - 300	2		
	KBSI60, 100 - 300, 075	2	Fixing of the cable tray onto HDWKM	
Certificate FIRES-JR-055-16-NURE: STN 92 0205/2014, Certificate FIRES-JR-056-16-NURE: ZP-27/2008, Certificate FIRES-JR-065-16-NURE: CSN 73 0895				
	Code Certificate FIRES-JR-051-16-NURE, FIRES-JR-054-16-NURE, FIRES-JR-060-16-NURE, FIRES-JR-063-16-NURE & FIRES-JR-066-16-NURE : DIN 4102-12:1998-11, F = 20 kg/m, L = 1500 mm, Max. 3			
	KBSI60, 100 - 400, 100	5		E 30 - E 90
	HCHSMU50, 300 - 1500	1 + 1		
	HOWKM100 - 400	2		
	KBSI60, 100 - 400, 100	2	Fixing of the cable tray onto HDWKM	
Certificate STN 92 0205/2014, ZP-27/2008 & CSN 73 0895				

Tested with Daitwyler, Prysmian, Prakab and Faber cables

2. Fixing without threaded rod

Tested with Eupen, Dätwyler and Leoni Studer cables

Nr 5 : Fixing to the ceiling		To fix with :		Amount		Remark		Class	
		Certificate MPA-E XX : F = 20 kg/m, L = 1500 mm, Variant TBC, Annexes TBC. Contacter Vergokan voor de laatste update / Contacter Vergokan pour les dernières informations							
		VMK6.10 Concrete anchor M 10 + RO10		5 2 + 2				E 30 - E 90	
		B10.80 + CRO10 + M10		1 + 2 + 1		Fixing of the cable tray onto HDWKM			
		VMK6.10		2					
		VMK6.10 Concrete anchor M 12 + RO12		5 2 + 2				E 30 - E 90	
		B10.80 + CRO10 + M10		1 + 2 + 1		Fixing of the cable tray onto DKBS / Fixation du KBSSCL60 sur DKBS			
		VMK6.10		2					
		VMK6.10 Concrete anchor M 10 + RO10		5 2 + 2				E 30 - E 90	
		B10.80 + CRO10 + M10		1 + 2 + 1		Fixing of the cable tray onto HDWKM			
		VMK6.10		2					
		VMK6.10 Concrete anchor M 12 + RO12		5 2 + 2				E 30 - E 90	
		B10.80 + CRO10 + M10		1 + 2 + 1		Fixing of the cable tray onto DKBS			
		VMK6.10		2					
		VMK6.10 Concrete anchor M 10 + RO10		5 2 + 2				E 30 - E 90	
		B10.80 + CRO10 + M10		1 + 2 + 1		Fixing of the cable tray onto DKBS			
		VMK6.10		2					
		VMK6.10 Concrete anchor M 10 + RO10		5 2 + 2				E 30 - E 90	
		B10.80 + CRO10 + M10		1 + 2 + 1		Fixing of the cable tray onto HDWKM			
		VMK6.10		2					
		VMK6.10 Concrete anchor M 12 + RO12		5 2 + 2				E 30 - E 90	
		B10.80 + CRO10 + M10		1 + 2 + 1		Fixing of the cable tray onto HDWKM			
		VMK6.10		2					
		VMK6.10 Concrete anchor M 10 + RO10		5 2 + 2				E 30 - E 90	
		B10.80 + CRO10 + M10		1 + 2 + 1		Fixing of the cable tray onto DKBS			
		VMK6.10		2					
		VMK6.10 Concrete anchor M 10 + RO10		5 2 + 2				E 30 - E 90	
		B10.80 + CRO10 + M10		1 + 2 + 1		Fixing of the cable tray onto HDWKM			
		VMK6.10		2					
		VMK6.10 Concrete anchor M 12 + RO12		5 2 + 2				E 30 - E 90	
		B10.80 + CRO10 + M10		1 + 2 + 1		Fixing of the cable tray onto HDWKM			
		VMK6.10		2					
		VMK6.10 Concrete anchor M 10 + RO10		5 2 + 2				E 30 - E 90	
		B10.80 + CRO10 + M10		1 + 2 + 1		Fixing of the cable tray onto DKBS			
		VMK6.10		2					
		VMK6.10 Concrete anchor M 10 + RO10		5 2 + 2				E 30 - E 90	
		B10.80 + CRO10 + M10		1 + 2 + 1		Fixing of the cable tray onto HDWKM			
		VMK6.10		2					
		VMK6.10 Concrete anchor M 12 + RO12		5 2 + 2				E 30 - E 90	
		B10.80 + CRO10 + M10		1 + 2 + 1		Fixing of the cable tray onto HDWKM			
		VMK6.10		2					
		VMK6.10 Concrete anchor M 10 + RO10		5 2 + 2				E 30 - E 90	
		B10.80 + CRO10 + M10		1 + 2 + 1		Fixing of the cable tray onto DKBS			
		VMK6.10		2					
		VMK6.10 Concrete anchor M 10 + RO10		5 2 + 2				E 30 - E 90	
		B10.80 + CRO10 + M10		1 + 2 + 1		Fixing of the cable tray onto HDWKM			
		VMK6.10		2					
		VMK6.10 Concrete anchor M 12 + RO12		5 2 + 2				E 30 - E 90	
		B10.80 + CRO10 + M10		1 + 2 + 1		Fixing of the cable tray onto HDWKM			
		VMK6.10		2					
		VMK6.10 Concrete anchor M 10 + RO10		5 2 + 2				E 30 - E 90	
		B10.80 + CRO10 + M10		1 + 2 + 1		Fixing of the cable tray onto HDWKM			
		VMK6.10		2					
		VMK6.10 Concrete anchor M 12 + RO12		5 2 + 2				E 30 - E 90	
		B10.80 + CRO10 + M10		1 + 2 + 1		Fixing of the cable tray onto HDWKM			
		VMK6.10		2					
		VMK6.10 Concrete anchor M 10 + RO10		5 2 + 2				E 30 - E 90	
		B10.80 + CRO10 + M10		1 + 2 + 1		Fixing of the cable tray onto HDWKM			
		VMK6.10		2					
		VMK6.10 Concrete anchor M 12 + RO12		5 2 + 2				E 30 - E 90	
		B10.80 + CRO10 + M10		1 + 2 + 1		Fixing of the cable tray onto HDWKM			
		VMK6.10		2					
		VMK6.10 Concrete anchor M 10 + RO10		5 2 + 2				E 30 - E 90	
		B10.80 + CRO10 + M10		1 + 2 + 1		Fixing of the cable tray onto HDWKM			
		VMK6.10		2					
		VMK6.10 Concrete anchor M 12 + RO12		5 2 + 2				E 30 - E 90	
		B10.80 + CRO10 + M10		1 + 2 + 1		Fixing of the cable tray onto HDWKM			
		VMK6.10		2					
		VMK6.10 Concrete anchor M 10 + RO10		5 2 + 2				E 30 - E 90	
		B10.80 + CRO10 + M10		1 + 2 + 1		Fixing of the cable tray onto HDWKM			
		VMK6.10		2					
		VMK6.10 Concrete anchor M 12 + RO12		5 2 + 2				E 30 - E 90	
		B10.80 + CRO10 + M10		1 + 2 + 1		Fixing of the cable tray onto HDWKM			
		VMK6.10		2					
		VMK6.10 Concrete anchor M 10 + RO10		5 2 + 2				E 30 - E 90	
		B10.80 + CRO10 + M10		1 + 2 + 1		Fixing of the cable tray onto HDWKM			
		VMK6.10		2					
		VMK6.10 Concrete anchor M 12 + RO12		5 2 + 2				E 30 - E 90	
		B10.80 + CRO10 + M10		1 + 2 + 1		Fixing of the cable tray onto HDWKM			
		VMK6.10		2					

3. Fixing with threaded rod

these constructions are tested with Dätwyler cables

Code	To fix with :	Amount	Remark	Class
Nr 12 : Fixing to the ceiling	To fix with : F = 20 kg/m, L = 1500 mm, Max. 2 levels, Nr 2.1.2.1, Annexes 2	6 - 8		
Certificate ABP 3321/380/10 MPA BS : F = 20 kg/m, L = 1500 mm, Max. 2 levels, Nr 2.1.2.1, Annexes 2	VMMK6.10	6 - 8	KBSI60.075 - 200 - 6; KBSI60.300 - 400 - 8	
KBSI60.075 - 300 - 125	Concrete anchor M 12	2		
HDHSLCCL300 - 1200	B10.40 + CRO10 + M10	1 + 2 + 1	For symmetrical fixing : B12.50 + CRO12 + M12	E 30 - E 90
HDWK100 - 300				
HD6SKLEM	Concrete anchor M 10 - 12	1		
TIM10 - 12	VMMK6.10	2	Fixing of the cable tray onto HDWK	
KBSI60.075 - 300 - 125				
Nr 13 : Fixing to the wall (90°)	To fix with : F = 20 kg/m, L = 1500 mm, Max. 2 levels, Nr 2.1.2.2, Annexes 10	Amount	Remark	Class
Certificate ABP 3321/380/10 MPA BS : F = 20 kg/m, L = 1500 mm, Max. 2 levels, Nr 2.1.2.2, Annexes 10	VMMK6.10	6		
KBSI60.075 - 400 - 100	Concrete anchor M 10	1		
HDWK100 - 400	Concrete anchor M 10 - 12	1		
HD6SKLEM	VMMK6.10	2	Fixing of the cable tray onto HDWK	
TIM10 - 12				
KBSI60.075 - 400 - 100				

4. Fixing with double threaded rod

these constructions are tested with Dätwyler cables


Code	To fix with :	Amount	Remark	Class
Nr 14 : Fixing to the ceiling	To fix with : F = 20 kg/m, L = 1200 mm, Max. 3 levels, Nr 2.1.2.3, Annexes 11	Amount	Remark	Class
Certificate ABP 3321/380/10 MPA BS : F = 20 kg/m, L = 1200 mm, Max. 3 levels, Nr 2.1.2.3, Annexes 11	VMMK6.10	5		
KBSI60.075 - 400 - 100	Concrete anchor M 8 - 10 - 12	2	1 level : M 8; 2 levels : M 10; 3 levels : M 12	
TIM8 - 10 - 12	M8 - 10 - 12 + RO8 - 10 - 12	4	1 level : M 8; 2 levels : M 10; 3 levels : M 12	E 30 - E 90
MPC/L41.21.150	VMMK6.10 + CRO6	2	Fixing of the cable tray onto MPCL	
KBSI60.075 - 400 - 100				

- Install with certified concrete anchors
- The quantities of products required is based on the smallest construction (1 level + asymmetrical).

SELECTION TABLES FOR FIRE-RESISTANT SYSTEMS

2. Non-standard supporting constructions

these constructions are tested with Eupen cables

		Conditions	Standard supporting constructions (nr 11 - nr 13)
<p>KLLIBS60</p> <p>Constructions with cable ladder KLLIBS60</p> 	<p>KLLIBS60</p> <ul style="list-style-type: none"> - Max. width = 400 mm - Max. load (F) = 30 kg/m - Max. support distance (L) ≤ 1500 mm - Max. rung distance = 150 mm - Max. 3 - Additional support at the end of the brackets - Max. height ≤ 3500 mm - Use solid supporting blocks every 3r90 mm - Tested with Eupen cables 	<p>1. Fixing with additional support :</p> <ul style="list-style-type: none"> - Fixing to the ceiling (nr 12) - Fixing to the wall (nr 13) <p>2. Vertical fixing :</p> <ul style="list-style-type: none"> - Fixing to the wall (nr 14) 	

1. Fixing with additional support

Code	To fix with :	Amount	Remark	Class
Certificate ABP MPA-E-14-007 : F = 30 kg/m, L = 1500 mm, Max. 3 , Variant a, Annexes 2/7				
KLLIBS60.150 - 400	VMK6.10	4		E 30 - E 90
HSMES200 - 1000	Concrete anchor M 10	4		
HDWK150 - 400	B10.30 + CRO10 + GM41M10	1 + 1 + 1	Fixing HDWK onto HSMES	
QL6		1	Fixing HDWK to LBS	
LBS60.200 - 1500	QL8	1	Fixing LBS to VS41.05	
VS41.05	Concrete anchor M 10	1		
KLLIBS60.150 - 400	KLLBK25	2	Fixing of the cable ladder onto HDWK	
Nr 12 : Fixing to the ceiling				
Certificate ABP MPA-E-14-007 : F = 30 kg/m, L = 1500 mm, Max. 3 levels, Variant a, Annexes 2/7				
KLLIBS60.150 - 400	VMK6.10	4		E 30 - E 90
HDWK150 - 400	Concrete anchor M 10 + CRO10	1 + 1 + 1		
QL6		1	Fixing HDWK to LBS	
LBS60.200 - 1500	QL8	1	Fixing LBS to VS41.05	
VS41.05	Concrete anchor M 10	1		
KLLIBS60.150 - 400	KLLBK25	2	Fixing of the cable ladder onto HDWK	
Nr 13 : Fixing to the wall (90°)				
Certificate ABP MPA-E-14-007 : F = 30 kg/m, L = 1500 mm, Max. 3 levels, Variant a, Annexes 2/7				
KLLIBS60.150 - 400	VMK6.10	4		E 30 - E 90
HDWK150 - 400	Concrete anchor M 10 + CRO10	1 + 1 + 1		
QL6		1	Fixing HDWK to LBS	
LBS60.200 - 1500	QL8	1	Fixing LBS to VS41.05	
VS41.05	Concrete anchor M 10	1		
KLLIBS60.150 - 400	KLLBK25	2	Fixing of the cable ladder onto HDWK	

2. Vertical fixing

Code	To fix with :	Amount	Remark	Class
Certificate ABP MPA-E-14-007 : F = 30 kg/m, L = 1500 mm, Variant a, Annexes 3/7				
KLLIBS60.150 - 400	VMK6.10	4		E 30 - E 90
HDAB35.110	VM6.20	1	Fixing KLLIBS to HDAB35.110	
HDAB35.110	Concrete anchor M 8	4	To fix to the wall	
Cable clamps, type H		1	Per 2 rungs	

- Install with certified concrete anchors
- The quantities of products required is based on the smallest construction (1 level + asymmetrical).

KBSI60

Cable tray with interlocking ends



Interlocking ends
Alternative perforations
Return flanges

Standard finish	Pre-galvanised
Optional finish HD	Hot-dip galvanised
Optional finish PE	Coating

HD	Reference	↑ mm	↔ mm	→ ← mm	↔ mm	kg/m	📦	Stock	Unit
HD	KBSI60.075.100	60	75	1.00	3000	1.400	60	X	m
	- KBSI60.075.125	60	75	1.25	3000	1.750	60	X	m
HD	KBSI60.100.075	60	100	0.75	3000	1.170	60	X	m
HD	KBSI60.100.100	60	100	1.00	3000	1.560	60	X	m
	- KBSI60.100.125	60	100	1.25	3000	1.950	60	X	m
HD	KBSI60.150.075	60	150	0.75	3000	1.420	30	X	m
HD	KBSI60.150.100	60	150	1.00	3000	1.890	30	X	m
	- KBSI60.150.125	60	150	1.25	3000	2.360	30	X	m
HD	KBSI60.200.075	60	200	0.75	3000	1.660	30	X	m
HD	KBSI60.200.100	60	200	1.00	3000	2.220	30	X	m
	- KBSI60.200.125	60	200	1.25	3000	2.770	30	X	m
HD	KBSI60.300.075	60	300	0.75	3000	2.150	30	X	m
HD	KBSI60.300.100	60	300	1.00	3000	2.870	30	X	m
	- KBSI60.300.125	60	300	1.25	3000	3.580	30	X	m
HD	KBSI60.400.100	60	400	1.00	3000	3.520	30	X	m

Fix with:

HD	VMK6.10	-	-	M6	-	0.009	100	X	piece
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The technical information for this product can be found at the end of this chapter.

KBSC60

Cable Tray Clickable



Clicking ends
Alternative perforations
Return flanges

Standard finish	Pre-galvanised
Optional finish HD	Hot-dip galvanised
Optional finish PE	Coating

HD	Reference	↓ mm	↔ mm	↔ mm	↔ mm	kg/m	⊞	Stock	Unit
HD	KBSC60.075.075	60	75	0.75	3000	1.032	60	X	m
HD	KBSC60.075.100	60	75	1.00	3000	1.324	60	X	m
HD	KBSC60.100.075	60	100	0.75	3000	1.200	60	X	m
HD	KBSC60.100.100	60	100	1.00	3000	1.535	60	X	m
HD	KBSC60.150.075	60	150	0.75	3000	1.462	30	X	m
HD	KBSC60.150.100	60	150	1.00	3000	1.869	30	X	m
HD	KBSC60.200.075	60	200	0.75	3000	1.723	30	X	m
HD	KBSC60.200.100	60	200	1.00	3000	2.199	30	X	m
HD	KBSC60.300.075	60	300	0.75	3000	2.234	30	X	m
HD	KBSC60.300.100	60	300	1.00	3000	2.853	30	X	m

The technical information for this product can be found at the end of this chapter.

NEW

Our KBSC cable tray is now available in zinc magnesium (ZM). Thanks to its unique chemical composition zinc magnesium offers a better resistance against corrosion than standard hot-dipped steel.

For widths 500 and 600: see KBSI.

Other lengths upon request: min. 1.80 m / max. 6 m in 150 mm steps.

FEATURES

- Clickable.
- The simplest jointing system, with a single movement.
- Rapid - Just click and ready for the next joint. Immediate alignment at the same time.
- Strong - As strong as a bolted joint.
- Reliable - Maximum load with snap-fit joint. Multiple jointing options available.
- Cost-effective - Working faster results in immediate time and cost savings.
- High standard - Wide and complete range of accessories available.

Etched perforations for:

- better stability
- extra load-bearing capacity
- better cooling

Longitudinal and transverse perforations for:

- better fixing to the support
- convenient cable bundling

Equipotential bonding available by 1. snap-fit joint, 2. bolted joint, 3. push-through lip in the bottom and 4. lateral fitting lip for earth conductor.

TECHNICAL INFORMATION

Perforation pattern varies according to width.

Transverse perforation as from 200 mm width.

16 mm dia. and 20.4 mm dia. openings to be provided for fitting a gland.

SLIS60 snap-in partition to suit width as from 75 mm every 50 mm in the width direction.

Can be secured with VM6.10 or KBVCL as an option.

KLLIBS60

Cable ladder interlocking ends (BS)



Usable inner height 44 mm

Rung distance 150 mm

Standard finish Pre-galvanised

Optional finish HD Hot-dip galvanised

HD	Reference	↕ mm	↔ mm	↔ mm	↔ mm	kg/m	📦	Stock	Unit
HD	KLLIBS60.150	60	150	1.00	3000	2.166	30		m
HD	KLLIBS60.200	60	200	1.00	3000	2.286	30		m
HD	KLLIBS60.300	60	300	1.00	3000	2.516	30		m
HD	KLLIBS60.400	60	400	1.00	3000	2.752	30		m

The technical information for this product can be found at the end of this chapter.

LBS

Strip (BS)



Standard finish

Pre-galvanised

Optional finish HD

Hot-dip galvanised

HD	Reference	↑ mm	↔ mm	→ ← mm	↔ mm	kg/ piece	📦	Stock	Unit
HD	LBS60.200	-	60		200	0.260	1	X	piece
HD	LBS60.300	-	60		300	0.390	1	X	piece
HD	LBS60.400	-	60		400	0.520	1	X	piece
HD	LBS60.500	-	60		500	0.660	1	X	piece
HD	LBS60.600	-	60		600	0.790	1	X	piece
HD	LBS60.800	-	60		800	1.050	1	X	piece
HD	LBS60.1000	-	60		1000	1.310	1	X	piece
HD	LBS60.1200	-	60		1200	1.570	5	X	piece
HD	LBS60.1500	-	60		1500	1.970	5	X	piece

The technical information for this product can be found at the end of this chapter.

QL

Quick link with screw cap



Standard finish

Electro zinc-plated

Optional finish HD

Hot-dip galvanised

HD	Reference	↑ mm	↔ mm	→ ← mm	↔ mm	kg/ piece	📦	Stock	Unit
HD	QL6	-		6.00	-	0.040	20	X	piece
HD	QL8	-		8.00	-	0.080	20	X	piece

To order per full packaging.

- QL6: for fixing console to LBS.
- QL8: for fixing LBS to VS41.05.

HDVS41

Assembly accessory



Standard finish

Hot-dip galvanised

Optional finish PE

Duplex system

Reference	↑ mm	↔ mm	→ ← mm	↔ mm	kg/ piece	📦	Stock	Unit
HDVS41.05	-	40	5.00	-	0.130	24	X	piece

To order per full packaging.

HDVS41.41 / HDVS41.42: Bolt B10.40 included.

HDAB35.110

Stand-off bracket



Used for vertical mounting of the cable ladder.

Standard finish

Hot-dip galvanised

Optional finish PE

Duplex system

Reference	↑ mm	↔ mm	→ ← mm	↔ mm	kg/ piece	📦	Stock	Unit
HDAB35.110	150	40		-	0.210	20	X	piece

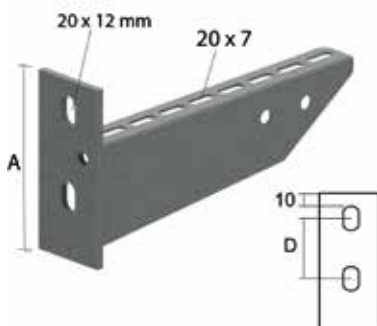
Fix with:

HD VM6.20	-	-	M6	20	0.009	100	X	piece
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To order per full packaging.

HDWK

Welded bracket



Standard finish

Hot-dip galvanised

Optional finish PE

Duplex system

Reference	↑ mm	↔ mm	→ ← mm	↔ mm	kg/ piece	📦	Stock	Unit
HDWK100	106	117		-	0.300	12	X	piece
HDWK150	112	167		-	0.360	12	X	piece
HDWK200	116	217		-	0.430	12	X	piece
HDWK250	120	267		-	0.530	12	X	piece
HDWK300	125	317		-	0.730	12	X	piece
HDWK400	134	417		-	0.880	6	X	piece

Fix with:

HD B10.40	-	-	M10	40	0.033	100	X	piece
HD CRO10	-	-	M10	-	0.012	100	X	piece
HD M10	-	-	M10	-	0.010	100	X	piece

The technical information for this product can be found at the end of this chapter.

To order per full packaging.

For symmetrical mounting, use HDB12.50 + HDCRO12 + HDM12.

HDBSKLEM

Clamp for fixing of threaded rod (BS)



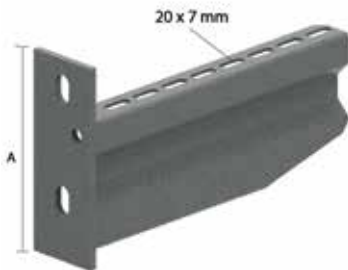
Very fast securing of the threaded rod TIM, using a clamping bold. Applicable on HDWK and KCLBS.

	Standard finish				Hot-dip galvanised				
Reference	↕ mm	↔ mm	→ ← mm	↔ mm	kg/ piece	📦	Stock	Unit	
HDBSKLEM	25	125		-	0.120	20	X	piece	

To order per full packaging.
 Ends held up through threaded rod TIM.
 No additional bolts and nuts needed.
 Threaded rod can be mounted in 1 continuous length.
 Diameter of the threaded rod TIM not of influence.
 Clamping bolt to be tightened with angular momentum of 10 Nm.

HDWKM

Heavy welded bracket



For direct fixing on the wall and also for fixing on the ceiling profile

	Standard finish				Hot-dip galvanised				
Reference	↕ mm	↔ mm	→ ← mm	↔ mm	kg/ piece	📦	Stock	Unit	
HDWKM100	125	125		-	0.450	12	X	piece	
HDWKM200	134	225		-	0.650	12	X	piece	
HDWKM300	175	325		-	1.377	6	X	piece	
HDWKM400	175	425		-	1.696	6	X	piece	

To order per full packaging.

HDHSMU50

Ceiling profile medium heavy



Max. load 2100 daN

Standard finish Hot-dip galvanised

Reference	↑ mm	↔ mm	→ ← mm	↔ mm	kg/ piece	📦	Stock	Unit
HDHSMU50.200				200	0.940	1	X	piece
HDHSMU50.300				300	1.160	1	X	piece
HDHSMU50.400				400	1.380	1	X	piece
HDHSMU50.500				500	1.610	1	X	piece
HDHSMU50.600				600	1.830	1	X	piece
HDHSMU50.800				800	2.270	1	X	piece
HDHSMU50.1000				1000	2.710	1	X	piece
HDHSMU50.1200				1200	3.150	1	X	piece
HDHSMU50.1500				1500	3.820	1	X	piece

The technical information for this product can be found at the end of this chapter.

HDTSU50

Spacer for HDHSMU50



Standard finish zinc magnesium

Reference	↑ mm	↔ mm	→ ← mm	↔ mm	kg/ piece	📦	Stock	Unit
HDTSU50	-			-	0.223	12	X	piece

To order per full packaging.

Included: bolt HDB10.80, HDCRO10 and nuts HDM10.

HSMES

Single ceiling profile



Ceiling profile: MP41.41S
Welded headplate: 120x120 mm

Max. load	1800 daN
Standard finish	Electro zinc-plated
Optional finish HD	Hot-dip galvanised
Optional finish PE	Coating

HD	Reference	↓ mm	↔ mm	↔ mm	↔ mm	kg/ piece	📦	Stock	Unit
HD	HSMES200				200	1.020	20	X	piece
HD	HSMES300				300	1.280	1	X	piece
HD	HSMES400				400	1.530	1	X	piece
HD	HSMES500				500	1.790	1	X	piece
HD	HSMES600				600	2.050	1	X	piece
HD	HSMES800				800	2.570	1	X	piece
HD	HSMES1000				1000	3.090	1	X	piece

The technical information for this product can be found at the end of this chapter.

Also applicable for double mounting.

Op request: until HSMES1500.

DKBS

Double bracket (BS)



For fixing to ceiling profile HSMES.

Standard finish	Pre-galvanised
Optional finish HD	Hot-dip galvanised

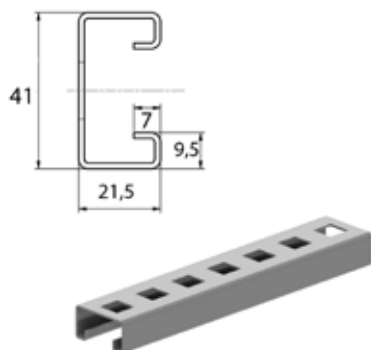
HD	Reference	↓ mm	↔ mm	↔ mm	↔ mm	kg/ piece	📦	Stock	Unit
HD	DKBS100	82	291		-	0.860	12	X	piece
HD	DKBS150	82	391		-	1.170	6	X	piece
HD	DKBS200	82	491		-	1.470	6	X	piece
HD	DKBS250	82	591		-	1.780	6	X	piece
HD	DKBS300	82	691		-	2.090	6	X	piece

The technical information for this product can be found at the end of this chapter.

To order per full packaging.

MPCL41.21

Clippable assembly profile



Standard finish

Pre-galvanised

HD	Reference	↑ mm	↔ mm	→ ← mm	↔ mm	kg/ piece	📦	Stock	Unit
-	MPCL41.21.150.200	41	21	1.50	210	0.240	10	X	piece
-	MPCL41.21.150.300	41	21	1.50	300	0.340	10	X	piece
-	MPCL41.21.150.400	41	21	1.50	420	0.480	10	X	piece
-	MPCL41.21.150.500	41	21	1.50	510	0.580	10	X	piece
-	MPCL41.21.150.600	41	21	1.50	600	0.680	10	X	piece
-	MPCL41.21.150.800	41	21	1.50	810	0.920	10	X	piece
-	MPCL41.21.150.3	41	21	1.50	3000	1.150	3	X	m

Fix with:

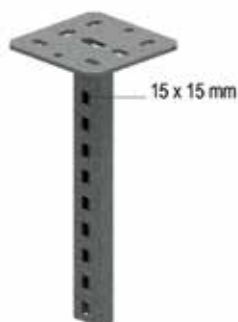
HD M8	-	-	M8	-	0.005	100	X	piece
HD M10	-	-	M10	-	0.010	100	X	piece
HD M12	-	-	M12	-	0.017	100	X	piece
HD RO8	-	-	M8	-	0.002	100	X	piece
HD RO10	-	-	M10	-	0.004	100	X	piece
HD RO12	-	-	M12	-	0.006	100	X	piece

The technical information for this product can be found at the end of this chapter.

To order per full packaging.

HDHSLECL

Single ceiling profile clippable



Ceiling profile: HDMP41.21

Welded headplate of 120 x 120 mm

Max. load

1000 daN

Standard finish

Hot-dip galvanised

Reference	↑ mm	↔ mm	→ ← mm	↔ mm	kg/ piece	📦	Stock	Unit
HDHSLECL300				300	0.850	1	X	piece
HDHSLECL400				420	1.010	1	X	piece
HDHSLECL500				510	1.130	1	X	piece
HDHSLECL600				600	1.230	1	X	piece
HDHSLECL800				810	1.450	1	X	piece
HDHSLECL1000				1020	1.750	1	X	piece
HDHSLECL1200				1200	1.950	1	X	piece

Also applicable for double mounting.

Fixed with 2 anchoring bolts.

For symmetrical mounting, to fix with 2 anchoring bolts M12.

CLHS

Snap-in adapter for HDHSLECL



For symmetrical mounting of KCLBS

Standard finish

Pre-galvanised

HD	Reference	↕ mm	↔ mm	↔ mm	↔ mm	kg/ piece	📦	Stock	Unit
-	CLHS	-			-	0.120	24	X	piece

To order per full packaging.

HDVS41.45

Assembly accessory



To be used when mounting the threaded rod to the wall.

Standard finish

Hot-dip galvanised

Reference	↕ mm	↔ mm	↔ mm	↔ mm	kg/ piece	📦	Stock	Unit
HDVS41.45	-	40	3.00	-	0.100	12	X	piece

To order per full packaging.

TIM

Threaded rod (DIN 975)



Standard finish

Electro zinc-plated

Optional finish HD

Hot-dip galvanised

Reference	Max. load (in daN)
TIM8	550
TIM10	900
TIM12	1300

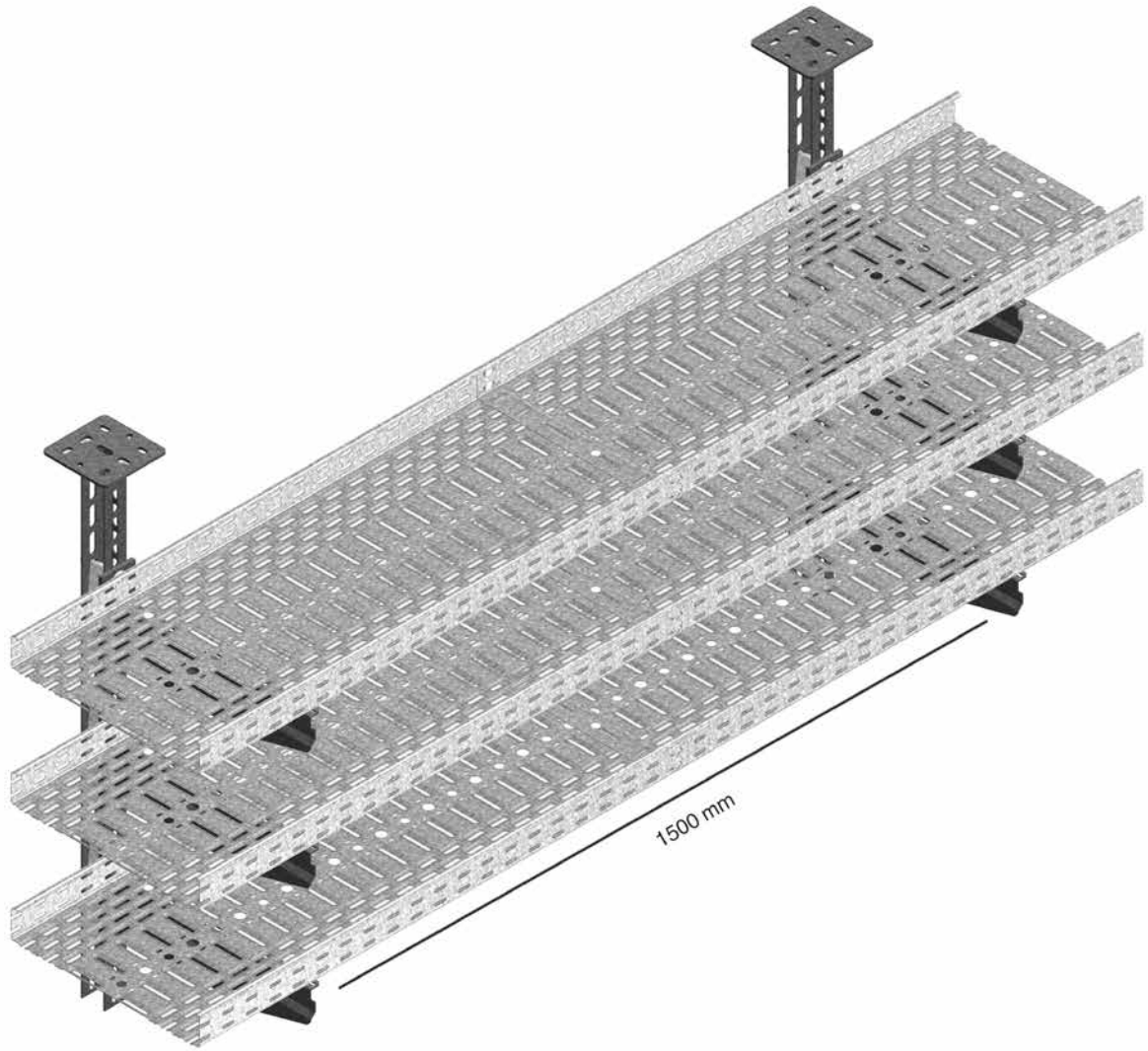
HD	Reference	↑ mm	↔ mm	→ ← mm	↔ mm	kg/m	📦	Stock	Unit
HD	TIM8	-	-	M8	2000	0.319	50	X	m
HD	TIM10	-	-	M10	2000	0.500	50	X	m
HD	TIM12	-	-	M12	2000	0.725	30	X	m

Fix with:

HD	M8	-	-	M8	-	0.005	100	X	piece
HD	M10	-	-	M10	-	0.010	100	X	piece
HD	M12	-	-	M12	-	0.017	100	X	piece
HD	RO8	-	-	M8	-	0.002	100	X	piece
HD	RO10	-	-	M10	-	0.004	100	X	piece
HD	RO12	-	-	M12	-	0.006	100	X	piece

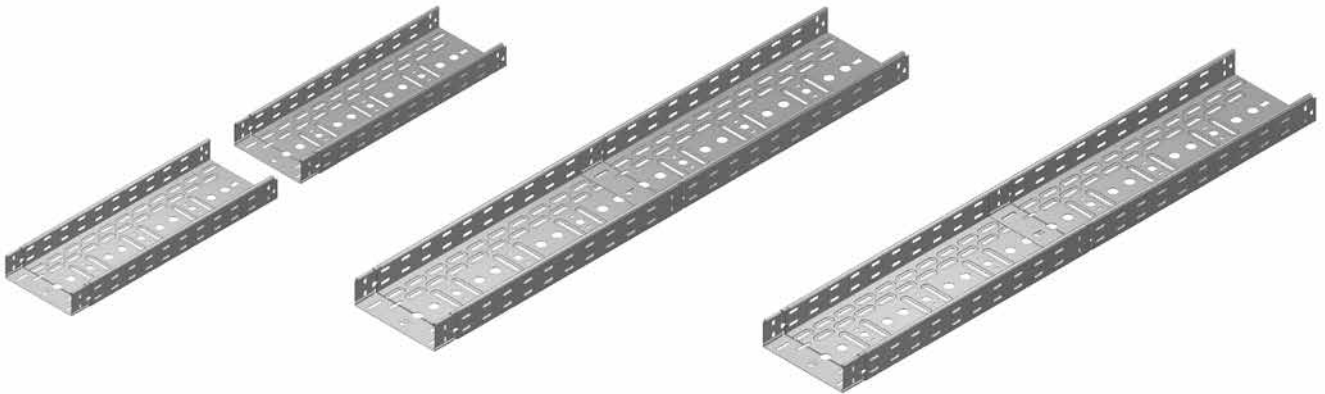
KBSI60

Technical information



KBSCCL60

Technical information



How do you proceed ?

Very simple:

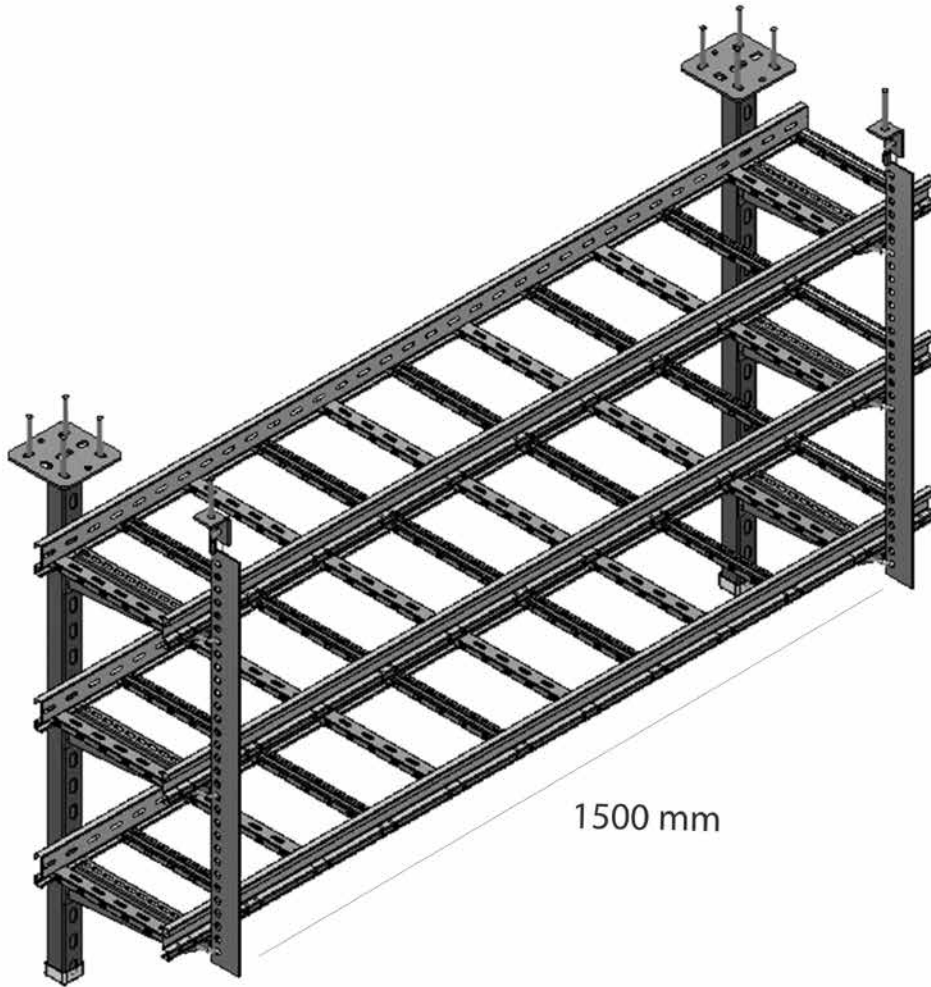
1. Slide two lengths into each other until you hear a click.
2. Optional: Snap in KBVCL clips or VMK6.10 for extra stability and safe locking.
3. Finished!

This system offers you various advantages :

1. Lower cost price.
2. Faster mounting just by clicking.
3. No bolts and nuts required.
4. Fixing with clips.
5. Earthing.
6. Easier fixing thanks to alternative perforations.
7. Better stability thanks to embedded perforations.
8. Better aeration of the cables thanks to embedded perforations.
9. Integrated cable protection thanks to overlapping ends.
10. Smooth finishing touch.

KLLIBS60

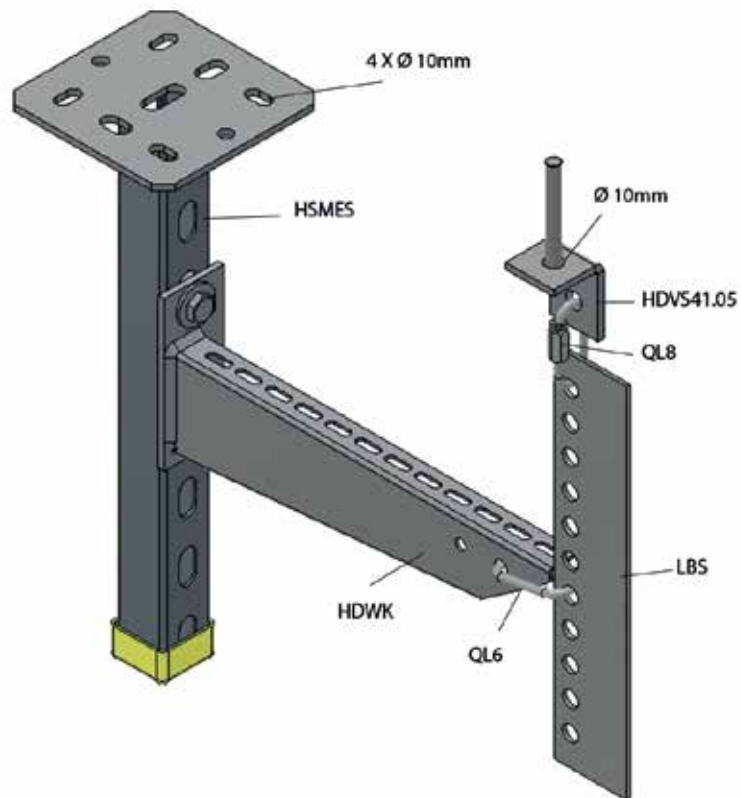
Technical information



1500 mm

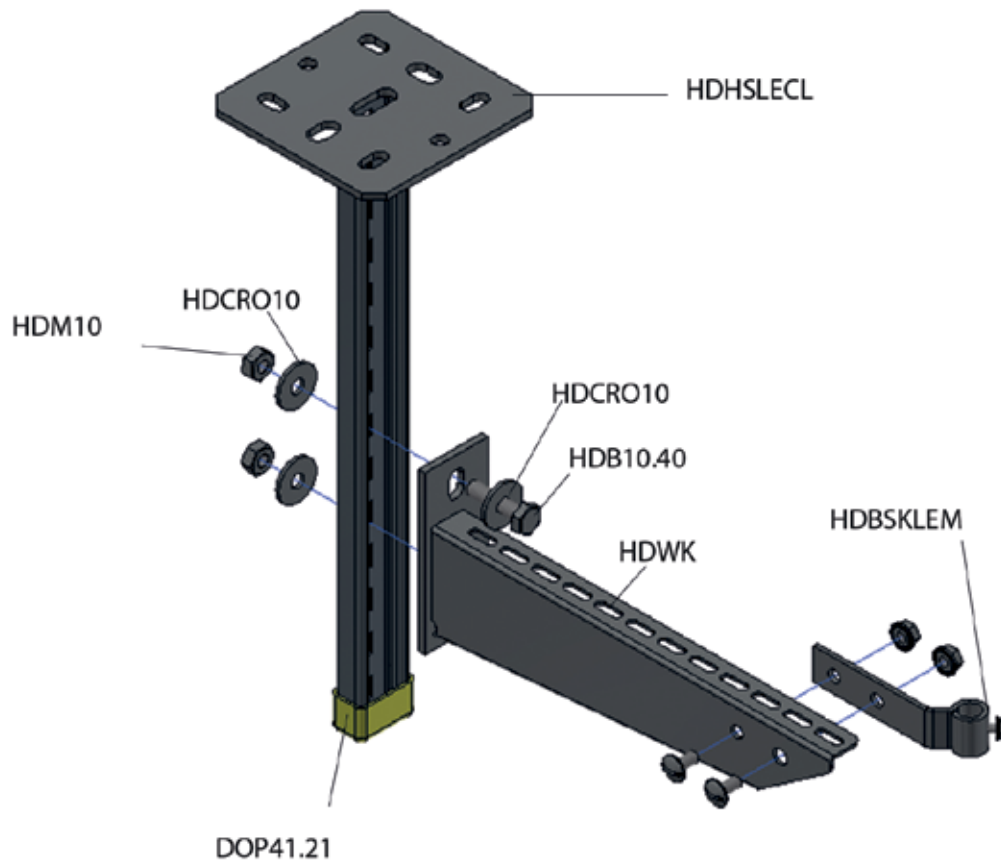
LBS

Technical information



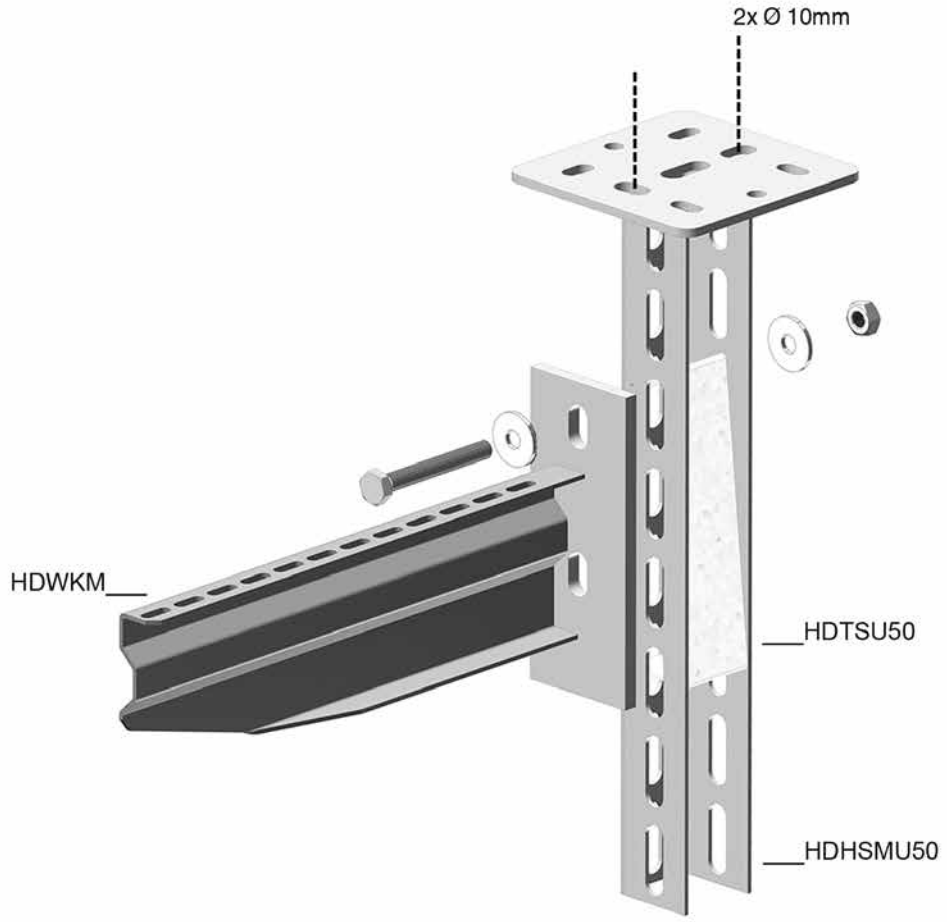
HDWK

Technical information



HDHSMU50

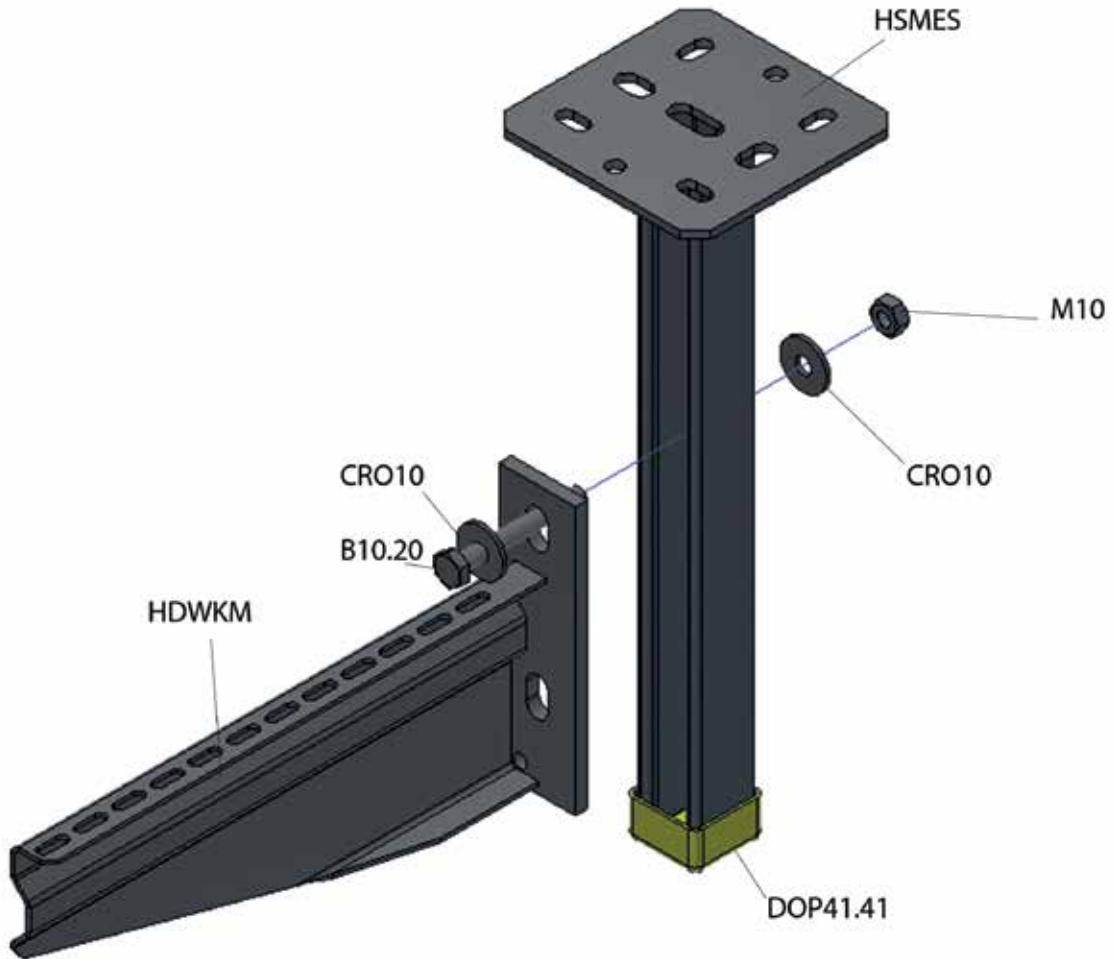
Technical information



HSMES

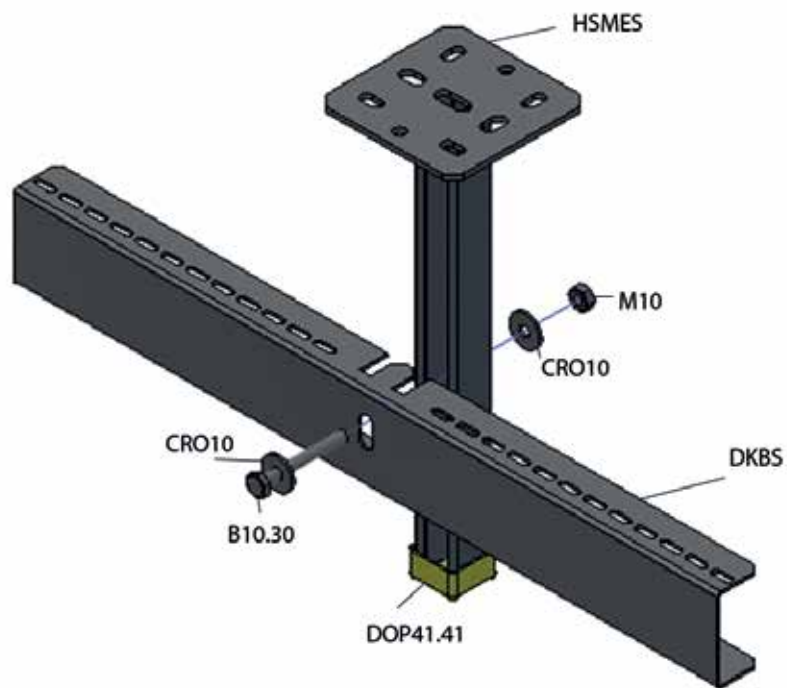
Technical information

For KBSCL & KBSI



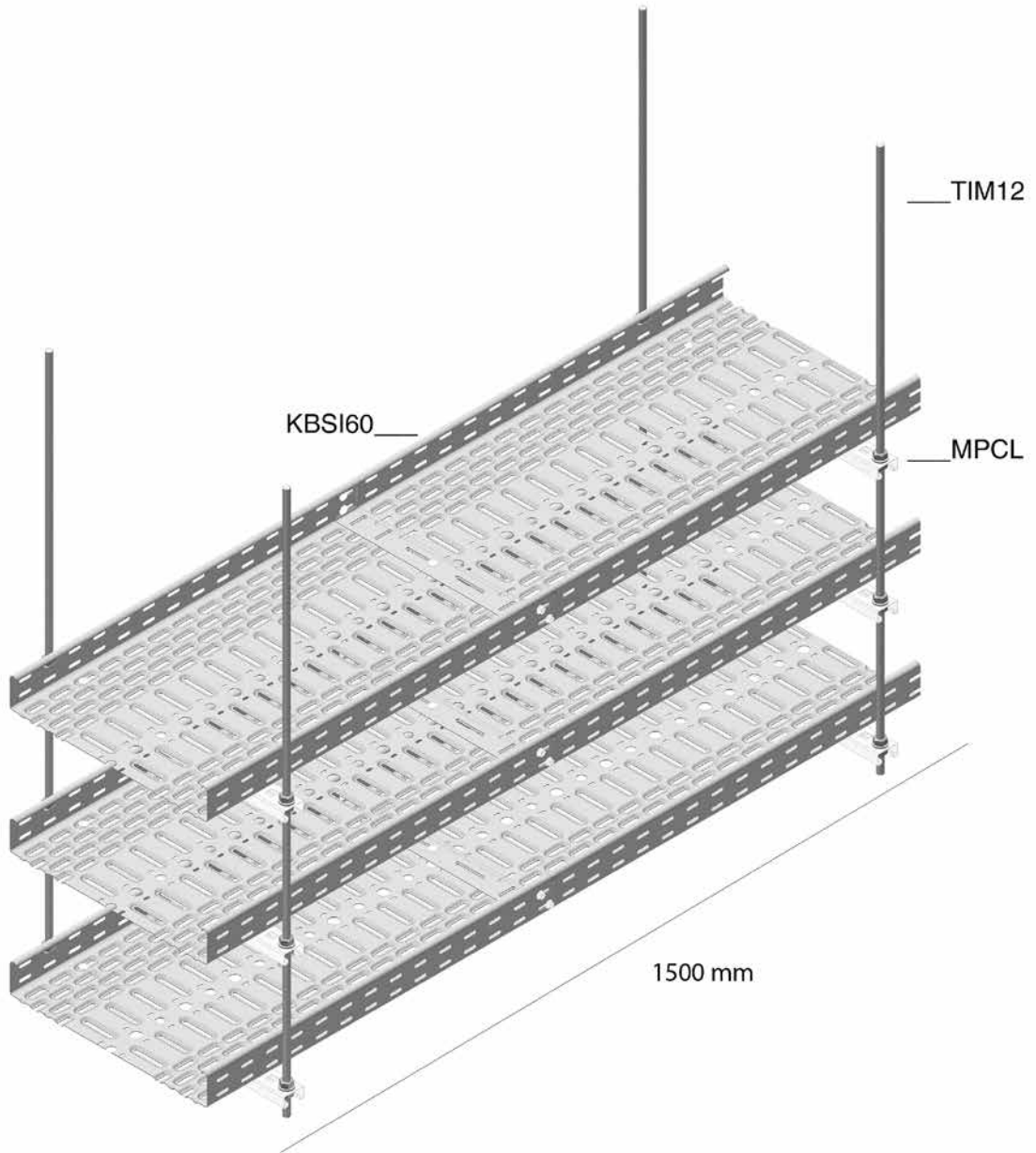
DKBS

Technical information

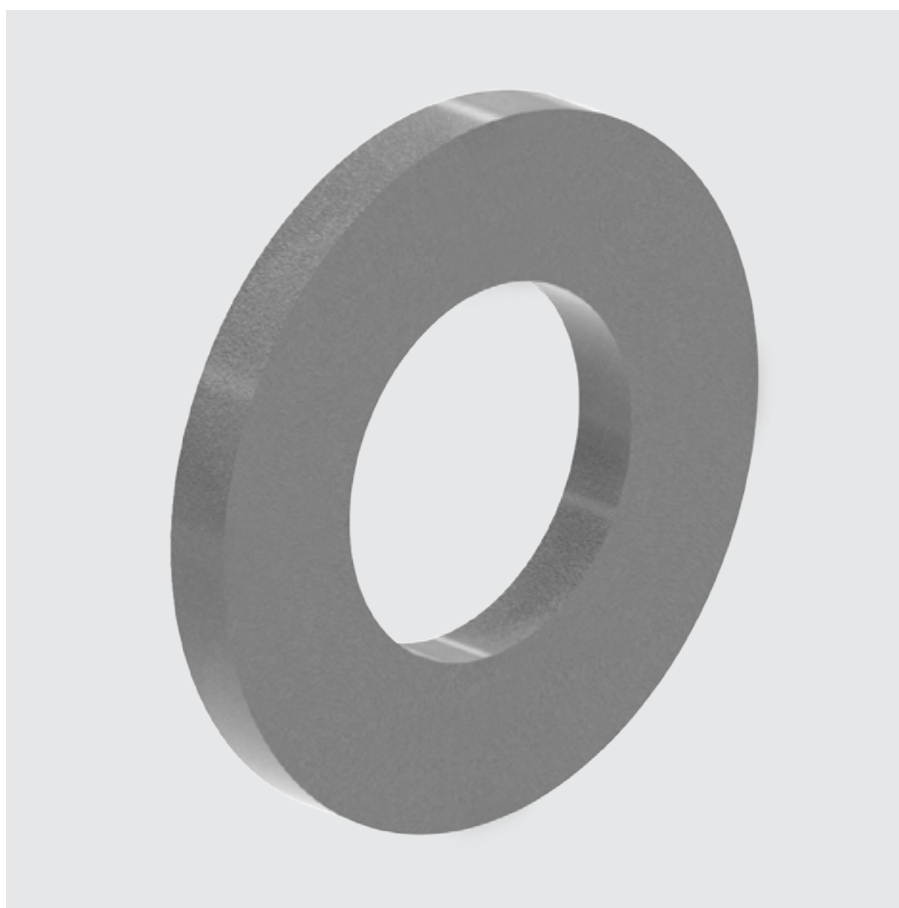


MPCL41.21

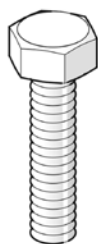
Technical information



7 Fire-resistant systems



Accessories

B**Bolt (DIN 933)**

Standard finish

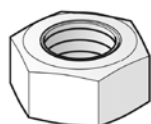
Electro zinc-plated

Optional finish HD

Hot-dip galvanised

HD	Reference	↑ mm	↔ mm	→ ← mm	↔ mm	kg/ piece	📦	Stock	Unit
HD	B10.20	-		M10	20	0.021	100	X	piece
HD	B10.30	-		M10	30	0.027	100	X	piece
HD	B10.40	-		M10	40	0.033	100	X	piece
HD	B10.80	-		M10	80	0.053	100	X	piece
HD	B12.50	-		M12	50	0.058	100	X	piece

To order per full packaging.

M**Nut (DIN 934)**

Standard finish

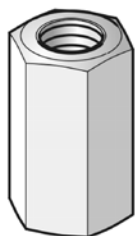
Electro zinc-plated

Optional finish HD

Hot-dip galvanised

HD	Reference	↑ mm	↔ mm	→ ← mm	↔ mm	kg/ piece	📦	Stock	Unit
HD	M8	-		M8	-	0.005	100	X	piece
HD	M10	-		M10	-	0.010	100	X	piece
HD	M12	-		M12	-	0.017	100	X	piece

To order per full packaging.

VM6334**Coupling nut (DIN 6334)**

Standard finish

Electro zinc-plated

HD	Reference	↑ mm	↔ mm	→ ← mm	↔ mm	kg/ piece	📦	Stock	Unit
-	VM8	24		M8	-	0.021	50	X	piece
-	VM10	30		M10	-	0.042	50	X	piece
-	VM12	36		M12	-	0.059	50	X	piece

To order per full packaging.

VM

Toothed round head bolt / flange nut



Standard finish

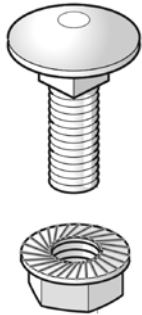
Electro zinc-plated

HD	Reference	↓ mm	↔ mm	↗ mm	↔ mm	kg/ piece	📦	Stock	Unit
-	VM4.40	-		M4	40	0.005	100	X	piece
HD	VM6.10	-		M6	10	0.008	100	X	piece
HD	VM6.20	-		M6	20	0.009	100	X	piece
-	VM10.50	-		M10	50	0.041	100	X	piece

To order per full packaging.
According to DIN 50 961.

VMK

Round head square neck bolt / flange nut



Standard finish

Electro zinc-plated

Optional finish HD

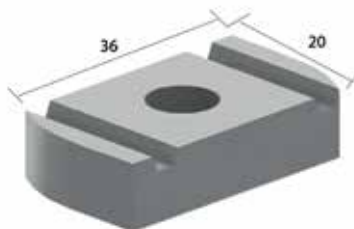
Hot-dip galvanised

HD	Reference	↓ mm	↔ mm	↗ mm	↔ mm	kg/ piece	📦	Stock	Unit
HD	VMK6.10	-		M6	-	0.009	100	X	piece

To order per full packaging.

GM41

Sliding nut for supporting profile



For stepless fixing of the brackets on the ceiling profiles.

Standard finish

Electro zinc-plated

Optional finish HD

Hot-dip galvanised

HD	Reference	↓ mm	↔ mm	↗ mm	↔ mm	kg/ piece	📦	Stock	Unit
HD	GM41M10	-		M10	-	0.040	50	X	piece

To order per full packaging.

RO

Giant washer (DIN 125-1 A)



Standard finish

Electro zinc-plated

Optional finish HD

Hot-dip galvanised

HD	Reference	↑ mm	↔ mm	→ ← mm	↔ mm	kg/ piece	📦	Stock	Unit
HD	RO8	-		M8	-	0.002	100	X	piece
HD	RO10	-		M10	-	0.004	100	X	piece
HD	RO12	-		M12	-	0.006	100	X	piece

To order per full packaging.

CRO

Flat giant washer (DIN 9021)



Standard finish

Electro zinc-plated

Optional finish HD

Hot-dip galvanised

HD	Reference	↑ mm	↔ mm	→ ← mm	↔ mm	kg/ piece	📦	Stock	Unit
HD	CRO8	-		M8	-	0.006	100	X	piece
HD	CRO10	-		M10	-	0.012	100	X	piece
HD	CRO12	-		M12	-	0.027	100	X	piece

To order per full packaging.