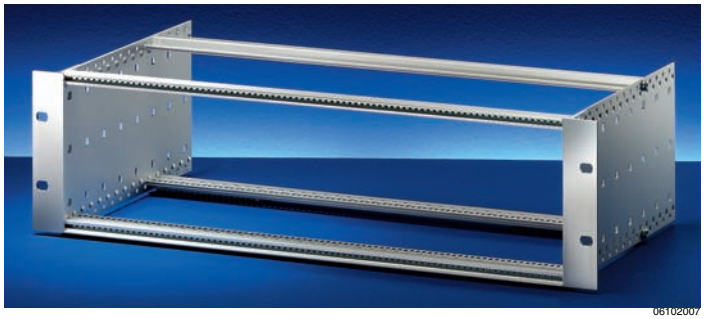
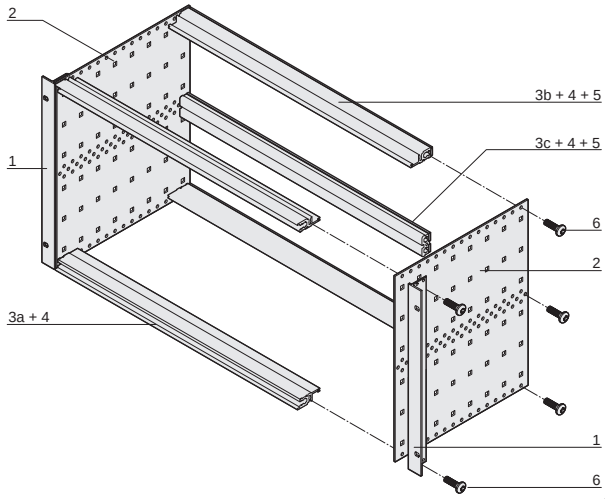
Kit, unshielded, "light", for backplane mounting

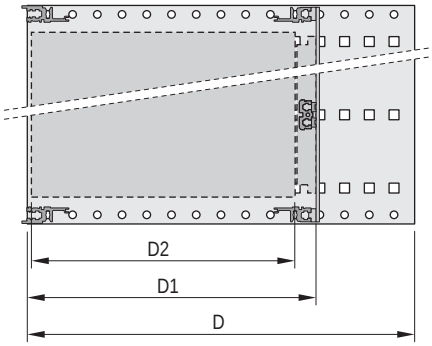


06102007



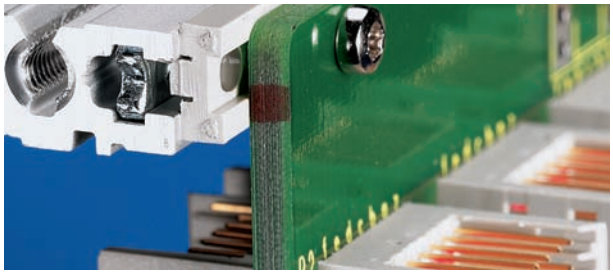
06102081

6 U



06108051

D=total depth, D1=insertion depth, D2=board depth



04400001

Rear horizontal rail with insulation strip for backplane mounting

ServicePLUS see page 6.16

- Subrack in lightweight version ("light")
- Rear horizontal rail with insulation strip for backplane mounting

Delivery comprises (kit)

Item	Qty 3 U	Qty 6 U	Description
1	2	2	19" support bracket for stainless steel EMC gasket
2	2	2	Side panel type F
3a	2	2	Front horizontal rail (L-KD)
3b	2	2	Rear horizontal rail (L-ST) for backplane mounting with insulation strip
3c	-	1	Centre horizontal rail (ST)
4	4	6	Threaded inserts, to front and rear, pre-fitted
5	2	4	Insulation strip (pre-fitted)
6	1	1	Assembly kit
7	1	1	User manual

Order Information

Height U	Width HP	Depth D mm	Depth D1 mm	Depth D2 mm	Part no.
3	84	175	175	160	**24563-131**
3	84	235	175/235	160/220	**24563-132**
3	84	295	175/235/295	160/220/280	**24563-133**
3	84	355	175/235/295/355	160/220/280/340	**24563-134**
3	84	415	175/235/295/355	160/220/280/340	**24563-135**
3	84	475	175/235/295/355	160/220/280/340	**24563-136**
6	84	175	175	160	**24563-431**
6	84	235	175/235	160/220	**24563-432**
6	84	295	175/235/295	160/220/280	**24563-433**
6	84	355	175/235/295/355	160/220/280/340	**24563-434**
6	84	415	175/235/295/355	160/220/280/340	**24563-435**
6	84	475	175/235/295/355	160/220/280/340	**24563-436**
Assembly kit, PU 8 x screw, washer, nut for assembly of subracks in a 19" case or a cabinet					**21100-435**

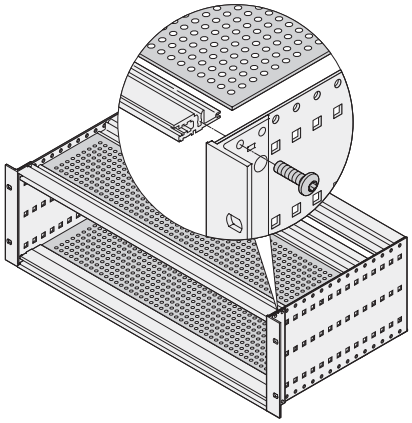
Guide rails (standard), ESD clips

Tiefe D2 mm	Qty/PU	Part no.
160	10	**24560-351**
220	10	**24560-353**
280	10	**24560-379**
340	10	**24560-380**
ESD clip for guide rails PU 50 pieces		**24560-255**

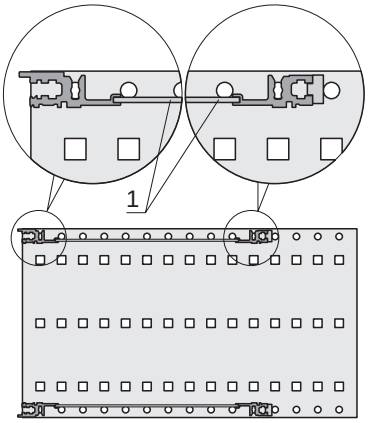
Note

- Perforated rail, cover plates and assembly kit from page 6.10
- Further accessories from page 6.57
- ServicePLUS configuration from page 6.16

Cover plates for 'light' subrack



06108077



06108058

- Mechanical cover to push into the groove of the horizontal rails type "light"
- Perforation degree 60 %

Delivery comprises

Item	Qty	Description
1	2	Cover plate, perforated aluminium plate, 1.2 mm, hole diameter 3.8 mm, untreated

Order Information

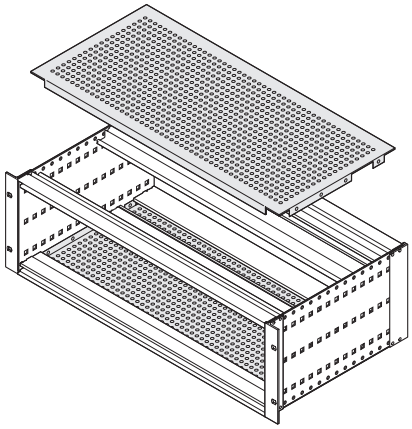
Depth D2 mm	Width HP	Qty/PU	Part no.
160	84	2	**24561-051**
220	84	2	**24561-052**

Note

- Other dimensions available on request

For further information www.schroff.biz/oneclick
oneClick search code = Part no.

Cover plates for subrack



06102084

- Mechanical cover to bolt onto the side panel
- For fitting of 160, 220 or 280 mm deep PCBs
- Suitable for all horizontal rails
- Perforation degree 58 %

Delivery comprises

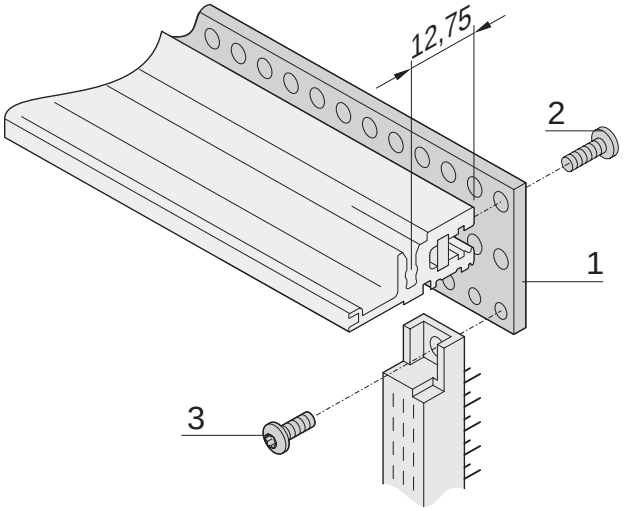
Item	Qty	Description
1	2	Cover plate, Al, 1.0 mm, hole diameter 4.0 mm, iridescent green chromated
2	16/20/32	Torx screws, 4 × 6, pentaform, self-tapping, St, zinc-plated

Order Information

Depth D2 mm	Width HP	Qty/PU	Part no.
160	84	2	**24560-078**
220	84	2	**24560-079**
280	84	2	**24560-080**
340	84	2	**24560-081**

For further information www.schroff.biz/oneclick
oneClick search code = Part no.

Perforated rail for connector EN 60603-2/DIN 41612



06708051

- Insulated mounting of connectors (EN 60603-2/DIN 41612) on subracks (e.g. connector for a power supply unit)
- Perforated rails are bolted to the subrack for connector mounting (rear horizontal rail type ST, threaded insert fitted, insulation strip)

Delivery comprises

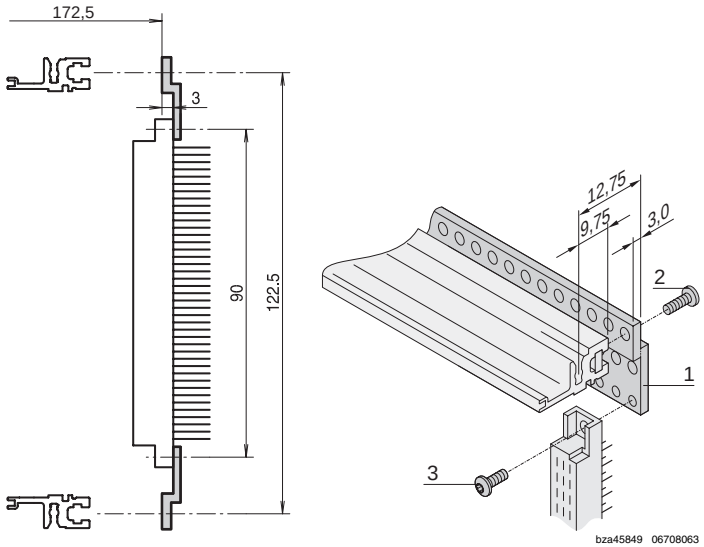
Item	Qty	Description
1	4	Perforated rail, 2 mm, Al clear passivated, mounting holes 2.8 mm, fixing for connectors M2.5

Order Information

Usable length HP	Length mm	Qty/PU	Part no.
28	142.24	4	**20822-049**
42	213.36	4	**20822-050**
60	304.8	4	**20822-047**
84	426.7	4	**20822-048**
Item 2 Torx panhead screw for fixing perforated rails to the horizontal rail, M2.5 × 10, PU 100 pieces			**24560-148**
Item 3 Torx panhead screw to fix connector to perforated rail, M2.5 × 7, PU 100 pieces			**24560-147**

■ Connectors see page 11.4

Z-rail for connector mounting



bza45849 06708063

06708063

- in accordance with EN 60603-2 (DIN 41612)

Delivery comprises

Item	Qty	Description
1	1	Z-rail, Al extrusion, anodised

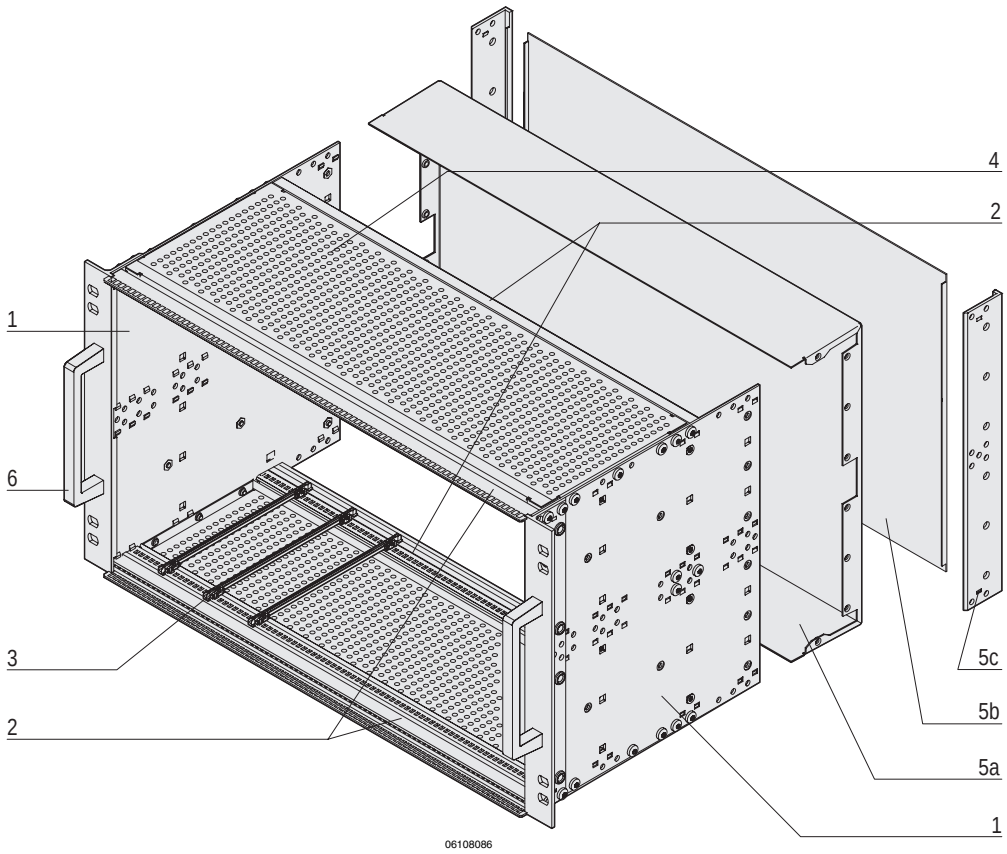
Order Information

Usable length HP	Length mm	Part no.
28	142.24	**30822-033**
40	203.2	**30822-045**
42	213.36	**30822-047**
60	304.8	**30822-065**
84	426.7	**30822-089**
Item 2 Torx panhead screw, M2.5 × 10, PU 100 pieces		**24560-147**
Item 3 Torx panhead screw, M2.5 × 7, PU 100 pieces		**24560-148**

Note

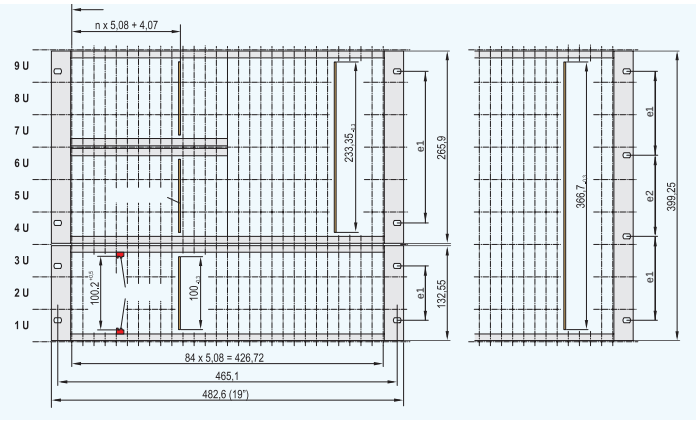
- To fix Z-rail onto horizontal rail a threaded insert is needed, see page 6.32

Overview of individual components for shielded or unshielded subracks



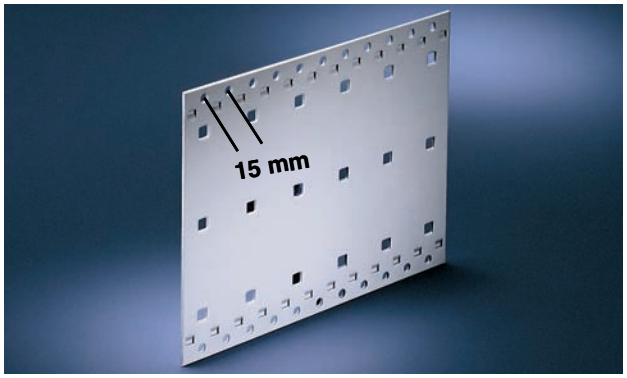
Item	Description	Description	Page
Item 1	Side panel	Establishes the height and depth of the subrack; Al, 2 mm, with universal hole positions for assembly of accessories. In three versions: The "flexible" one with separate 19" brackets as well as two others with integrated 19" brackets for "light" and "heavy" applications.	6.19
Item 2	Horizontal rail	Establishes the width of the subrack; Al extrusion, with defined hole positions for guide rails, grooves for threaded inserts, M4 thread at front, functional rail shapes, basically differing with regard to their mechanical loading capacity: “light“ (load up to 7.5 kg) and “heavy“ (load > 7.5 kg).	6.26
Item 3	Guide rails	Guide rails serve as interface between subracks and boards, for different PCB formats, are from plastic or metal, optionally codable and can, also optionally, be assembled with ESD clips to deflect electrostatic discharge.	6.34
Item 4	Cover plates	Provide mechanical protection and/or EMC shielding and are perforated.	6.42
Item 5	Rear/front	Rear hood (5a) or front panel (5b) with corner profiles (5c) as carriers for EMC seals in combination with use of shielded front panels. Note: Rear hood and corner profile cannot be fitted simultaneously.	6.46
Item 6	Handles	Handles can be mounted on the 19" brackets.	6.25
–	EMC shielding (without illustration)	Extensive component range for specific shielding of subrack according to your application.	6.51
–	Internal mounting (without illustration)	Universal assemblies, e.g. for horizontal and vertical mounting and for mounting plates.	6.57

Subrack dimensions



20304051

- Dimensions conform to international standards EC 60297-3-100, IEEE 1101.1/.10/.11; please see the Schroff Standards Summary for details
- Side panels
  - Aluminium, 2 mm
  - Round holes for mounting horizontal rails (depth grid 15 mm)
  - Impressions on the inner side of the side panel act as an anti-rotation guard and aid positioning of the horizontal rails
  - Square holes (6 x 6 mm) provide universal fixing for components such as backplane shielding; version without square holes available on request

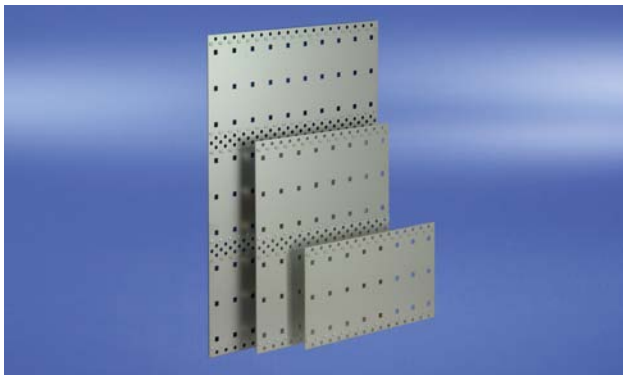


06103001

Description

Depth grid

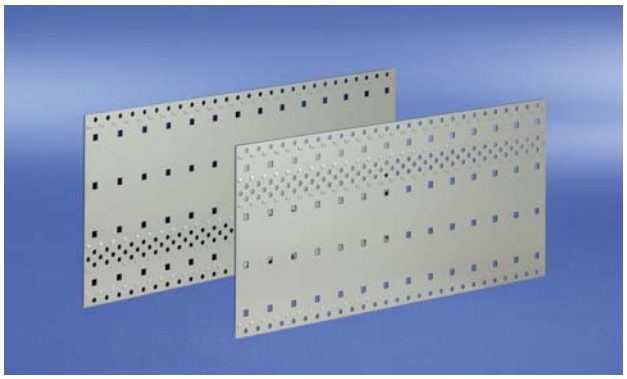
The depth grid is 15 mm, the mounting holes in the side panel are decisive for the configurability of individual components; thus any combinations of various individual parts are possible



06108008

Side panel 3 U, 6 U and 9 U

3 and 6 U side panels have the same hole positions (the 6 U is a doubling vertically of the 3 U); thus subdivisions can be made in the vertical dimension (6 U: 2 x 3 U; 9 U: 3 x 3 U)



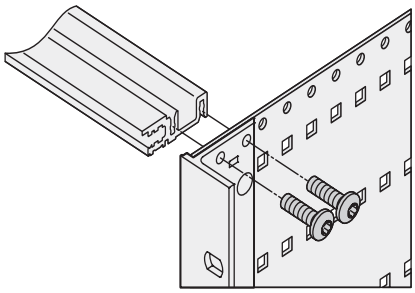
06108011

Side panel 4 U

4 U side panels have the same hole positions as 3 U and additionally 1 U (above or beneath the 3 U installation); this height allows the construction of a 3 U unit with 1 U clearance for cabling or airflow

Part number in bold face type: ready for despatch within 2 working days
Part number in normal type: ready for despatch within 10 working days

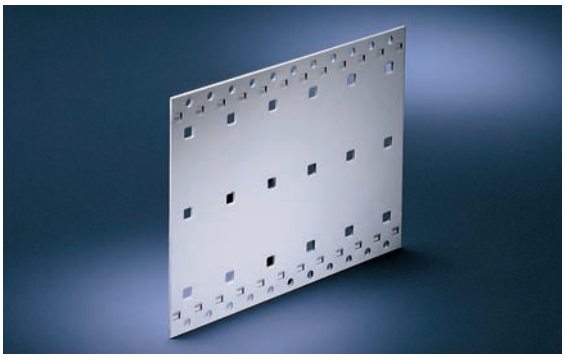
Side panels



06108062

Side panel - horizontal rail assembly

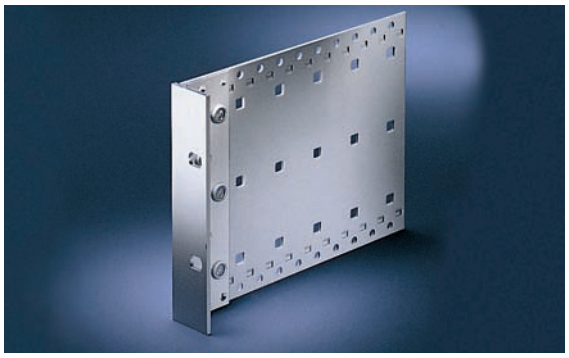
- Aluminium, 2 mm
- Holes for assembly of horizontal rails (depth grid 15 mm)
- The stampings on the internal surface of the side panels serve as anti-rotation guard and to position the horizontal rails
- Square holes (6 x 6 mm) serve for universal fixture of components like backplane shielding; version without square holes available on request
- Only one type of screw driver is needed for the assembly (Torx panhead screw, M4 x 14; torque side panel - horizontal rail 2.4 Nm; torque side panel - cover plate 1.3 Nm)
- 3 versions of the side panel:
  - **Type F = flexible**
  - **Type H = heavy**
  - **Type L = light**



06197003

Type F (flexible)

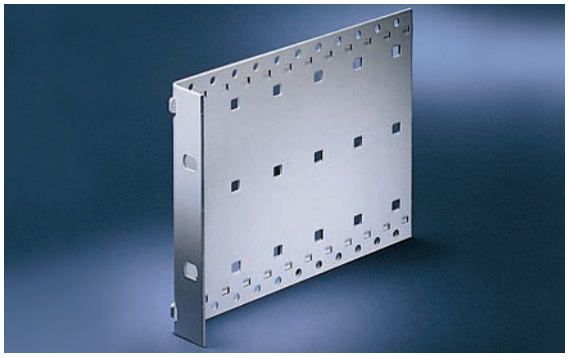
- Universal version: 19"-bracket (please order separately) can be fitted variably to front, rear or recessed
- Heights: 3, 4, 6 and 9 U
  depths: 175, 235, 275, 277.75, 295, 355, 415 and 475 mm
  other dimensions available on request
- 2 EMC shielding concepts for front/rear side:
  EMC gasketing (stainless steel or textile gaskets)



06197004

Type H (heavy)

- 19" bracket Tox-cold welded to side panel; specifically intended for demanding mechanical conditions (vibration resistance; shock and vibration requirements, e.g. IEC 61587-2)
- Heights: 3 and 6 U
  depths: 175, 235, 295 and 355 mm
  other dimensions available on request
- 2 EMC shielding concepts for front/rear side:
  EMC gasketing (stainless steel or textile gaskets)



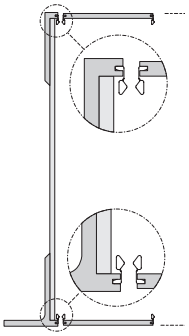
06197002

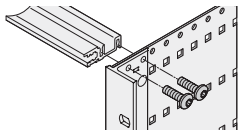
Type L (light)

- Side panel with formed 19" brackets,
  for standard applications, unshielded
- Particularly cost-effective versions
  (not suited for EMC applications)
- Heights: 3 and 6 U
  depths: 175, 235 and 295 mm
  other dimensions available on request

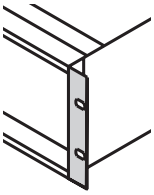
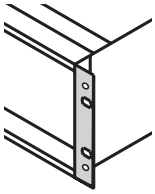
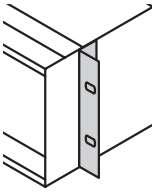
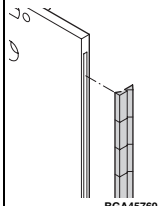
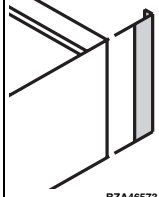
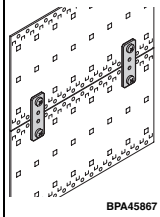
Type F Side panel type F for stainless steel EMC gasket

Order Information





06108070 06108062

Height U	Depth mm		Side panel type F	19" bracket without handle holes	19" bracket with handle holes	19" bracket depth-adjustable	EMC gasket (stainless steel)	Rear angle	Side panel connection
			06197003	 bza45819	 06106050	 06102501	 BGA45760	 BZA46573	 BPA45867
			without 19" bracket, Al, 2 mm, passivated, please order 19“ bracket and corner profile separately	with lateral grooves for EMC stainless steel gasket, Al extrusion, rear side etched, front anodised	with lateral grooves for stainless steel EMC gasket, Al extrusion, rear side etched, front anodised, please order front handles separately, see page 6.25	Al extrusion, passivated	inserted laterally into the slots of the front panel, stainless steel	Al extrusion, surface clear passivated; with lateral grooves for EMC stainless steel gasekt; rear hood cannot be mounted simultaneously	Zn die-cast, incl. assembly kit, for linking two by two side panels (above one another)
			1 piece	PU 1 pair	PU 1 pair	PU 1 pair	PU 10 pieces	PU 1 pair	PU 4 pieces
3	175		**34560-185**	**24560-197**	**24560-198**	**24560-199**	**21101-705**	**24561-198**	**21101-954**
3	235		**34560-187**						
3	275	1)	**34579-300**						
3	277.75	2)	**34579-002**						
3	295		**34560-189**						
3	355		**34560-191**						
3	415		**34560-193**						
3	475		**34560-195**						
4	175	3)	**34560-285**	**24560-297**	**24560-298**	**24560-299**	**21101-713**	**24561-298**	**21101-954**
4	235	3)	**34560-287**						
4	295	3)	**34560-289**						
4	355	3)	**34560-291**						
4	415	3)	**34560-293**						
4	475	3)	**34560-295**						
6	175		**34560-485**	**24560-497**	**24560-498**	**24560-499**	**21101-707**	**24561-498**	**21101-954**
6	235		**34560-487**						
6	275	1)	**34579-038**						
6	277.75	2)	**34579-012**						
6	295		**34560-489**						
6	355		**34560-491**						
6	415		**34560-493**						
6	475		**34560-495**						
6	970		**34560-496**						
9	175		**34560-785**	**24560-797**	**24560-798**	**24560-799**	**21101-709**	**24561-798**	**21101-954**
9	235		**34560-787**						
9	295		**34560-789**						
9	355		**34560-791**						
9	415		**34560-793**						
Screw, M4 x 14, PU 100 pieces for assembly of horizontal rails on side panels			**24560-130**	**24560-130**	**24560-130**	**24560-130**	–	**24560-130**	–

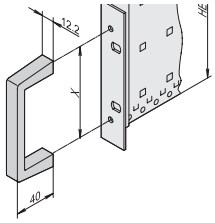
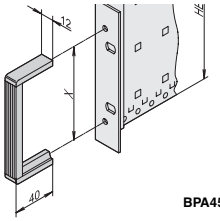
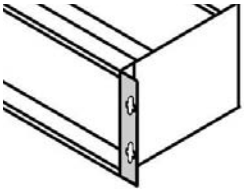
1) CompactPCI 2) VME64x 3) Grid holes of side panel 3 + 1 U

■ View of side panels 3, 4, 6, 9 U see page 6.18

Part number in bold face type: ready for despatch within 2 working days
Part number in normal type: ready for despatch within 10 working days

Front handles, wall-mounting bracket

Order Information

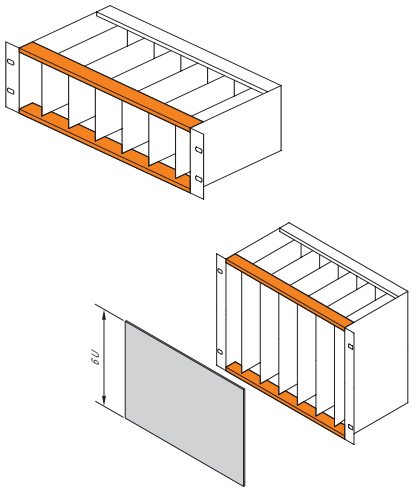
Height U	Depth mm	X mm	Front handle clear anodised 1 piece (SPQ 10)[1]	Front handle black anodised 1 piece (SPQ 10)[1]	Universal front handle 1 piece (SPQ 10)[1]	Wall-mounting bracket PU 1 pair
			 BZA42327		 BPA45855 3 parts: Al extrusion, anodised, 2 end pieces, plastic, PA, black width 12 mm, depth 40 mm	 06104063 Screw fixed on the subrack instead of the 19" bracket, Al, 2.5 mm, passivated
3	175	88.0	**10501-005**	**10501-026**	**10502-057**	**24562-197**
3	235	88.0				
3	275	88.0				
3	277.75	88.0				
3	295	88.0				
3	355	88.0				
3	415	88.0				
3	475	88.0				
4	175	133.4	**10501-018**	–	**10502-059**	**24562-297**
4	235	133.4				
4	295	133.4				
4	355	133.4				
4	415	133.4				
4	475	133.4				
6	175	235.0	**10501-008**	**10501-029**	**10502-065**	**24562-497**
6	235	235.0				
6	275	235.0				
6	277.75	235.0				
6	295	235.0				
6	355	235.0				
6	415	235.0				
6	475	235.0				
6	970	235.0				
9	175	235.0	**10501-008**	**10501-029**	**10502-065**	**24562-797**
9	235	235.0				
9	295	235.0				
9	355	235.0				
9	415	235.0				
Screw M5 x 12, PU 100 pieces			**24560-183**	**24560-183**	**24560-183**	–
Screw M5 x 12, PU 4 pieces			**24560-182**	**24560-182**	**24560-182**	–
Screw, M4 x 14, PU 100 pieces			–	–	–	**24560-130**

1) SPQ (standard pack quantity): Order number includes 1 piece, but delivery is exclusively made in standard pack quantity (SPQ); please order at least the SPQ quantity or a multiple

Front horizontal rail ("light", "heavy")

Assembly 3 U, 2 x 3 U, 6 U

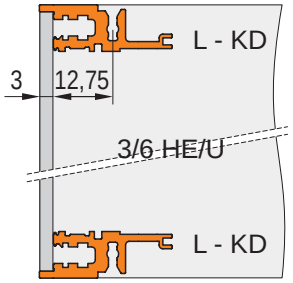
3 U/6 U



bza44980 bza44974

"light" (L)

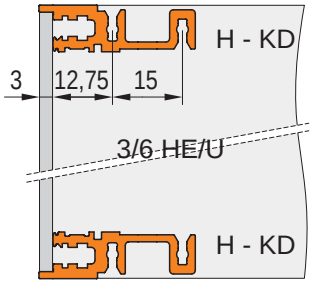
Short lip



06105060

"heavy" (H)

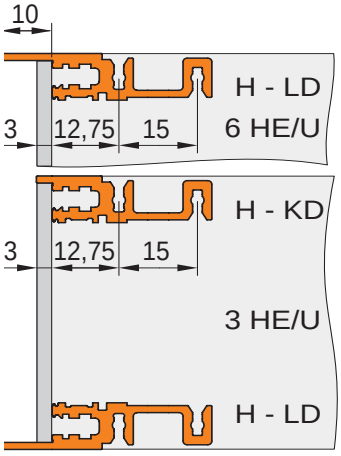
Short lip



06105061

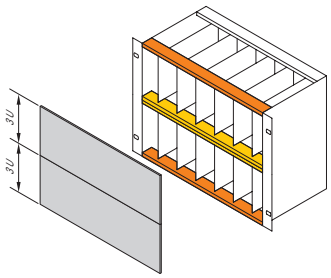
"heavy" (H)

Long lip

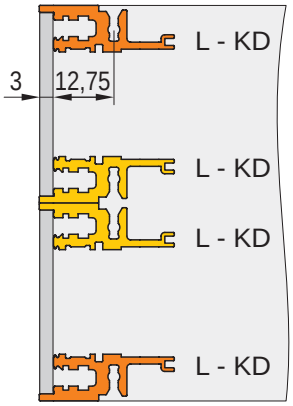


06108063

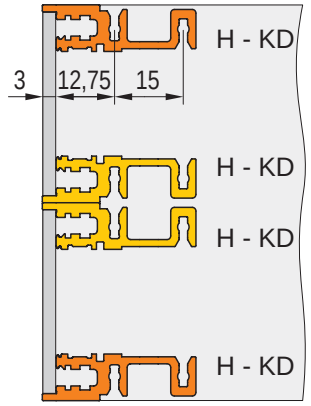
2 x 3 U



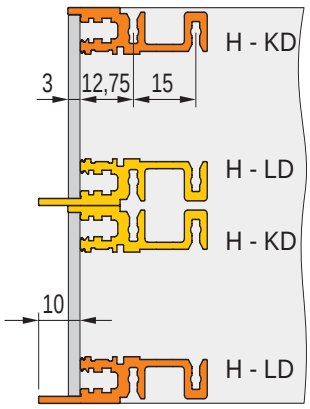
bza44972



06105062

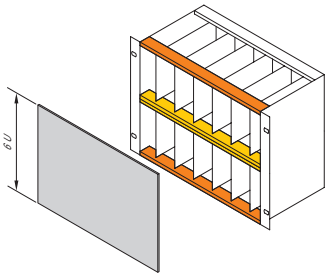


06105063

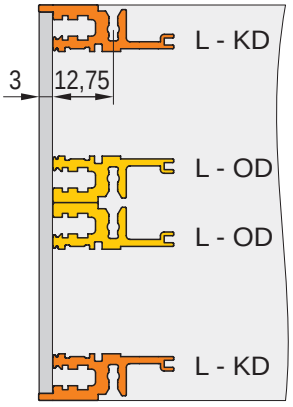


06108064

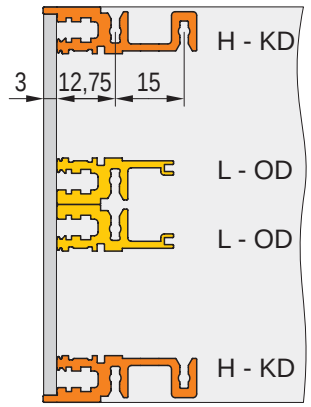
2 x 3 U, 6 U



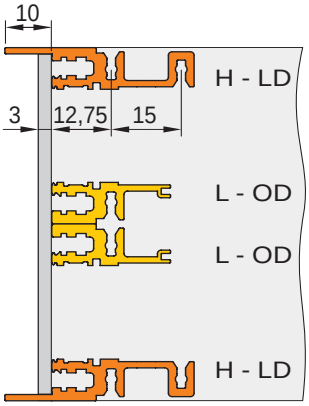
06105059



06105064



06105065



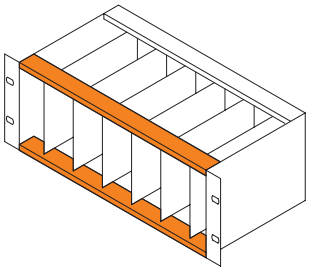
06108065

L-OD = Light - without lip, L-KD = Light - short lip, H-KD = Heavy - short lip, H-LD = Heavy - long lip

Part number in bold face type: ready for despatch within 2 working days
Part number in normal type: ready for despatch within 10 working days

Front horizontal rails

Order Information

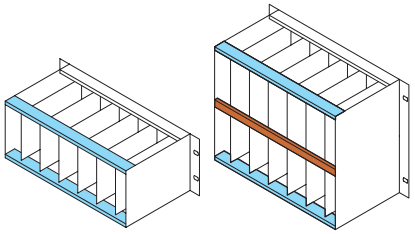
 bza44980	"light" Type L-OD without lip 06197006	"light" Type L-KD short lip 06197007	"heavy" Type H-KD short lip 06197008	With long lip to prise out/ in CompactPCI, VME64x boards "heavy" Type H-LD long lip 06197009
with HP markings from 28 HP, Al extrusion, anodised finish, conductive surface	Al extrusion, surface anodised, conductive contact surface	Al extrusion, surface anodised, conductive contact surface	Al extrusion, surface anodised, conductive contact surface	Al extrusion, surface anodised, conductive contact surface
Usable length HP / **Length mm**	**1 piece (SPQ 10)[1)]**	**1 piece (SPQ 10)[1)]**	**1 piece (SPQ 10)[1)]**	**1 piece (SPQ 10)[1)]**
20 / 106.68	**34560-020**	**34560-120**	**34560-220**	**34560-320**
28 / 147.32	**34560-028**	**34560-128**	**34560-228**	**34560-328**
40 / 208.28	**34560-040**	**34560-140**	**34560-240**	**34560-340**
42 / 218.44	**34560-042**	**34560-142**	**34560-242**	**34560-342**
63 / 325.12	**34560-063**	**34560-163**	**34560-263**	**34560-363**
84 / 431.80	**34560-084**	**34560-184**	**34560-284**	**34560-384**
– / 1000	**34560-001**	**34560-101**	**34560-201**	**34560-301**
Screw, M4 x 14, PU 100 pieces	**24560-130**	**24560-130**	**24560-130**	**24560-130**
Bolt, M4 x 10, required if guide rails are screwed to slot 1, PU 100 pieces	–	–	**24560-155**	**24560-155**
Threaded inserts see page	6.32	6.32	6.32	6.32

1) SPQ (standard pack quantity): Order number includes 1 piece, but delivery is exclusively made in standard pack quantity (SPQ); please order at least the SPQ quantity or a multiple
"light": loading capacity up to approx. 7.5 kg; "heavy": loading capacity L 7.5 kg

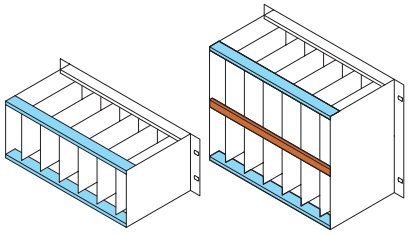
Note

- 1000 mm version without M4 thread to front, without print and notch for 19" bracket

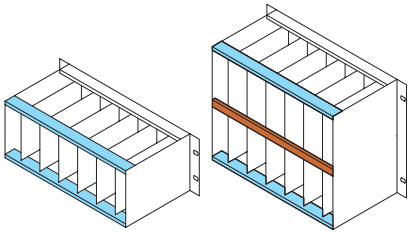
Rear horizontal rail ("light", "heavy")



Indirect backplane mounting (with insulation strips)



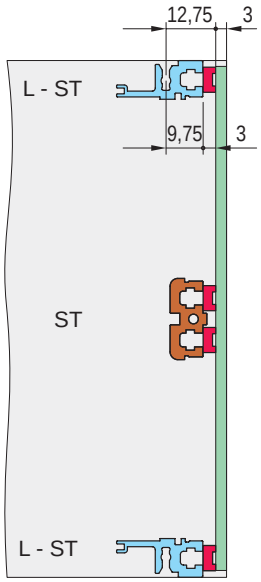
Direct backplane mounting



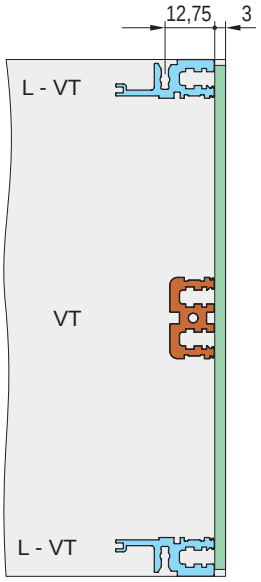
06105074 bza44981

Connector fitting with Z

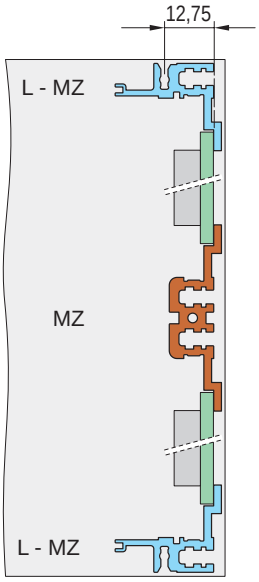
"light"



06105072

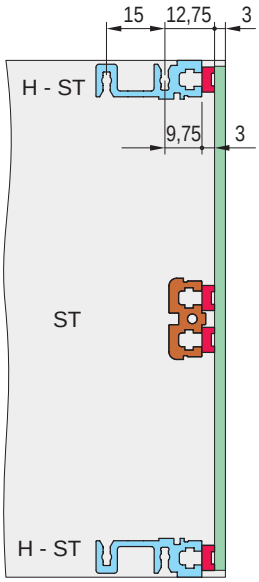


06105073

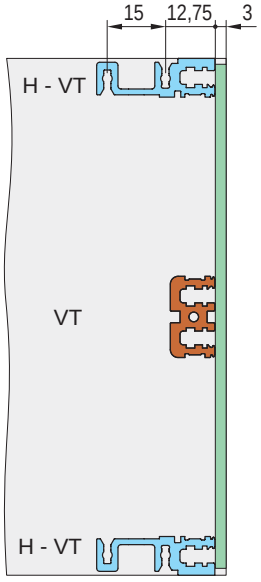


06105071

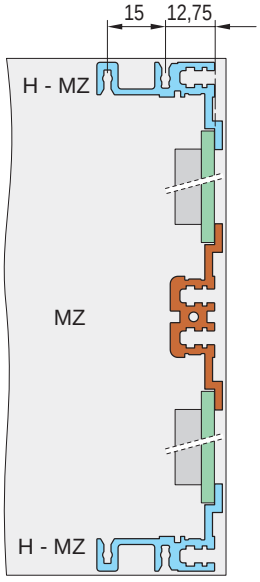
"heavy"



06108066



06108067

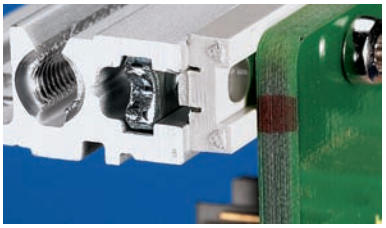


06108068

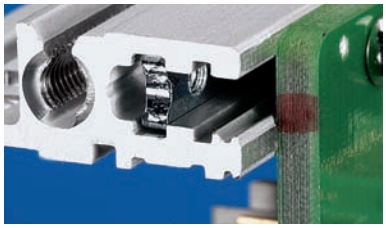
ST = standard, L = "light", H = "heavy"

VT = recessed, L = light, H = "heavy"

WZ = with z-rail, L = light, H = "heavy"



04400001



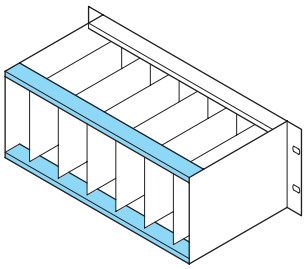
04400002

04400003

Part number in bold face type: ready for despatch within 2 working days
Part number in normal type: ready for despatch within 10 working days

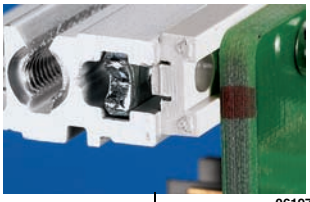
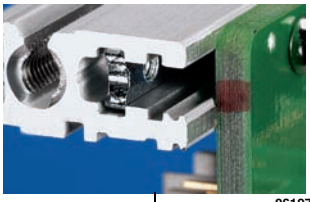
Rear horizontal rails

Order Information



06105074

With HP markings from 28 HP, Al extrusion, anodised finish, conductive surface

		For indirect backplane mounting, with insulation strip		For indirect backplane mounting		For direct mounting of connectors to EN 60603-2 (DIN 41612)	
		 06197011		 06197011		06197011	
		"light" Type L-ST standard	"heavy" Type H-ST standard	"light" Type L-VT + 3 mm	"heavy" Type H-VT + 3 mm	"light" Type L-MZ with Z-rail	"heavy" Type H-MZ with Z-rail
		06197010	06197011	BZA45782	06197009	06197014	06197015
		Al extrusion, surface anodised, conductive contact surface	Al extrusion, surface anodised, conductive contact surface	Al extrusion, surface anodised, conductive contact surface	Al extrusion, surface anodised, conductive contact surface	Al extrusion, surface anodised, conductive contact surface	Al extrusion, surface anodised, conductive contact surface
Usable length HP	**Length mm**	**1 piece (SPQ 10)[1)]**	**1 piece (SPQ 10)[1)]**	**1 piece (SPQ 10)[1)]**	**1 piece (SPQ 10)[1)]**	**1 piece (SPQ 10)[1)]**	**1 piece (SPQ 10)[1)]**
20	106.68	**34560-420**	**34560-520**	**34560-620**	**34560-720**	**34560-820**	**34560-920**
28	147.32	**34560-428**	**34560-528**	**34560-628**	**34560-728**	**34560-828**	**34560-928**
40	208.28	**34560-440**	**34560-540**	**34560-640**	**34560-740**	**34560-840**	**34560-940**
42	218.44	**34560-442**	**34560-542**	**34560-642**	**34560-742**	**34560-842**	**34560-942**
63	325.12	**34560-463**	**34560-563**	**34560-663**	**34560-763**	**34560-863**	**34560-963**
84	431.80	**34560-484**	**34560-584**	**34560-684**	**34560-784**	**34560-884**	**34560-984**
–	1000	**34560-401**	**34560-501**	**34560-601**	**34560-701**	**34560-801**	–
Screw, M4 x 14, PU 100 pieces, for assembly of horizontal rails on side panels		**24560-130**	**24560-130**	**24560-130**	**24560-130**	**24560-130**	**24560-130**
Bolt, M4 x 10, required if guide rails are screwed to slot 1, PU 100 pieces		–	**24560-155**	–	**24560-155**	–	**24560-155**
Perforated rail for connector mounting with insulation strip see page		6.33	6.33	–	–	–	–
Z-rail for connector mounting without insulation strip see page		6.33	6.33	–	–	–	–
Insulation strips see page		–	–	6.32	6.32	–	–
Threaded inserts see page		6.32	6.32	6.32	6.32	6.32	6.32

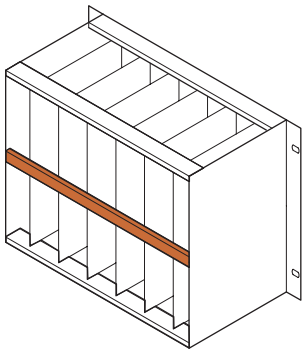
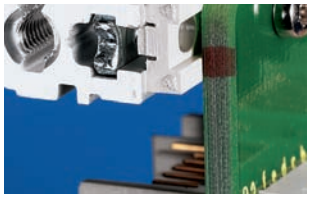
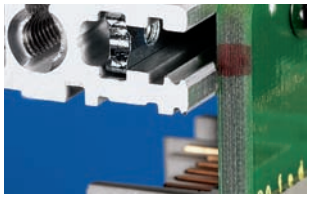
1) SPQ (standard pack quantity): Order number includes 1 piece, but delivery is exclusively made in standard pack quantity (SPQ); please order at least the SPQ quantity or a multiple
"light": loading capacity up to approx. 7.5 kg; "heavy": loading capacity L 7.5 kg

Note

■ 1000 mm version without M4 thread in end without print

Horizontal rails rear, middle

Order Information

	For indirect backplane mounting, with insulation strip	For direct backplane mounting	For direct mounting of connectors in accordance with EN 60603-2 (DIN 41612)
 06108090	 06197016	 06197017	06197018
	Type ST	**Type VT**	**Type MZ**
	06197016	06197017	06197018
	Al extrusion, finish anodised, conductive contact surface; without marking	Al extrusion, finish anodised, conductive contact surface; without marking	Al extrusion, finish anodised, conductive contact surface; without marking
Usable length HP / **Length mm**	**1 piece (SPQ 10)[1)]**	**1 piece (SPQ 10)[1)]**	**1 piece (SPQ 10)[1)]**
20 / 106.68	**34561-020**	**34561-120**	**34561-220**
28 / 147.32	**34561-028**	**34561-128**	**34561-228**
40 / 208.28	**34561-040**	**34561-140**	**34561-240**
42 / 218.44	**34561-042**	**34561-142**	**34561-242**
63 / 325.12	**34561-063**	**34561-163**	**34561-263**
84 / 431.80	**34561-084**	**34561-184**	**34561-284**
– / 1000	**34561-001**	**34561-101**	**34561-201**
Screw, M4 x 14, PU 100 pieces, for assembly of horizontal rails on side panels	**24560-130**	**24560-130**	**24560-130**
Insulation strips see page	6.32	–	–
Threaded inserts see page	6.32	6.32	6.32

1) SPQ (standard pack quantity): Order number includes 1 piece, but delivery is exclusively made in standard pack quantity (SPQ); please order at least the SPQ quantity or a multiple
"light": loading capacity up to approx. 7.5 kg; "heavy": loading capacity L 7.5 kg

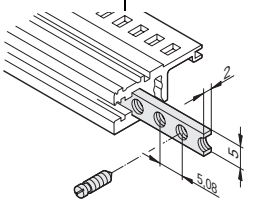
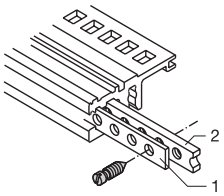
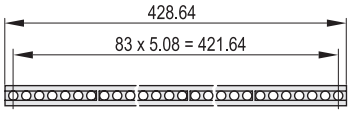
Note

- All horizontal rails without print
- 1000 mm version without M4 thread in end

Part number in bold face type: ready for despatch within 2 working days
Part number in normal type: ready for despatch within 10 working days

Threaded inserts, perforated strips, insulation strips

Order Information

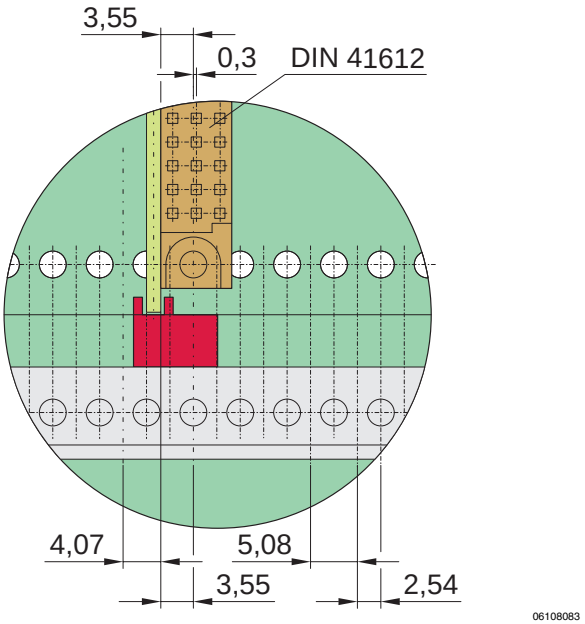
	Threaded insert			Perforated strip		Insulation strip	
	M2.5	M3		(item 1)			
	 06103056			 BZA45853		 BZ6749	
	required for assembly of front panel on horizontal rail; please use collar screw 12.3 mm, see page 6.68			for centring of shielded plug-in units, Al, 1 mm, please order grub screw for fixing separately		for insulated assembly of backplane	
	Threaded insert			**Perforated strip**		**Insulation strip**	
Usable length HP	**Length mm**	**1 piece (SPQ 10)[1)]**	**1 piece (SPQ 10)[1)]**	**Length mm**	**1 piece (SPQ 10)[1)]**	**Length mm**	**PU 10 pieces**
20	106.68	**34561-320**	–	106.48	**30845-189**	101.50	**24560-820**
28	147.32	**34561-328**	–	147.12	**30845-197**	144.20	**24560-828**
40	208.28	**34561-340**	–	208.08	**30845-209**	205.12	**24560-840**
42	218.44	**34561-342**	–	218.24	**30845-211**	210.40	**24560-842**
63	325.12	**34561-363**	–	324.92	**30845-232**	316.88	**24560-863**
84	431.80	**34561-384**	**34561-484**	431.60	**30845-253**	428.64	**24560-884**
196	1000.00	**34565-196**	–	1000.00	**34565-396**		–
Grub screw M2.5 x 8, PU 100 pieces		**21100-276**	–		–		–
Grub screw M2.5 x 9, PU 100 pieces		–	–		**21101-359**		–
Grub screw M3 x 8, PU 100 pieces		–	**21100-646**		–		–

1) SPQ (standard pack quantity): Order number includes 1 piece, but delivery is exclusively made in standard pack quantity (SPQ); please order at least the SPQ quantity or a multiple

2) Order no. includes one packing unit (PU); delivery is exclusively made in PU

Part number in bold face type: ready for despatch within 2 working days
Part number in normal type: ready for despatch within 10 working days

Guide rails

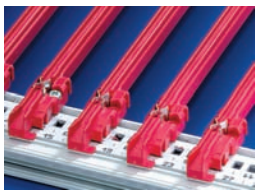


Front view: position of guide rails to connector (EN 60603-2/ DIN 41612)

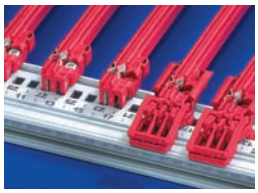
Guide rails form the interface between the subrack mechanics and the sub-assemblies (PCBs, plug-in units, frame-type plug-in units, ...).
Guide rails for standard applications are 2 HP wide. Guide rails with coding (e.g. for CompactPCI or VME64bus applications) are 4 HP wide. Groove widths are 2 mm and 2.5 mm.
The guide rails are clipped into the rectangular cut-outs of the horizontal rails. They can be additionally bolted to the horizontal rail (type H only) for higher shock and vibration requirements.
The HP marking on the horizontal rail (28 HP and above) allows the rails to be simply fitted in the correct position (position of sub-assembly = "number in viewing window" or in front of the arrow marking on the guide rails).

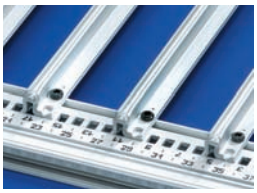
Applications for guide rails

Application

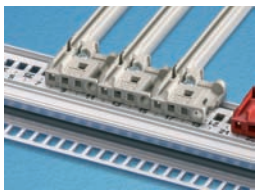

06102001

For plug-in units and frame type plug-in units (with front panels)
(type: standard)

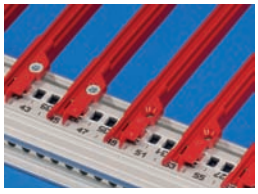

06102002


06102005

For boards without own front panel
(type: accessories or robust version)


06106004

For CompactPCI or VME64x plug-in units
(type: IEEE with coding; frame-type plug-in units may not be installed)


06104009

For drive unit plug-in units or boards of 4.4" (111.7 mm) height (type 4.4")

Accessories:
- ESD clips
- Keying/coding pegs
- PCB retainers

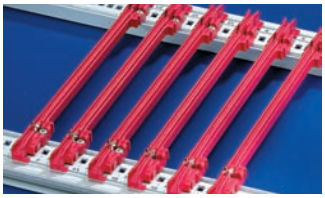
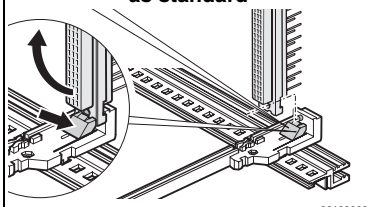
Part number in bold face type: ready for despatch within 2 working days
Part number in normal type: ready for despatch within 10 working days

Guide rails for plug-in units and modules, one-piece, groove width 2 mm and 2.5 mm

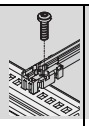
Order Information

Assembly
- can be clipped into Al extruded horizontal rails
- into 1.5 mm thick plates

Storage temperature
from -40 °C ... 130 °C

			For plug-in units and frame type plug-in units		
			Standard		DIN connector mounting as standard
			 06102002		 06102002
			up to 220 mm length, PBT, UL 94 V-0; L 280 mm length, multi-part, end piece PBT, UL 94 V-0, middle part Al extrusion	PBT, UL 94 V-0	PBT, UL 94 V-0, connector is clipped directly onto the guide rails, only suitable for euroboards 100 x 160 mm or 100 x 220 mm
Board lengths mm	**Groove width** mm	**Colour** mm	**PU 10 pieces**[2)]	**1 piece (SPQ 50)**[1)]	**PU 1 pair**
70	2	red	–	**34579-230**	–
70	2	grey	–	**34579-231**	–
160	2	red	**24560-351**	**64560-001**	**64560-074**
220	2	red	**24560-353**	**64560-002**	**64560-075**
280	2	red	**24560-379**	–	–
340	2	red	**24560-380**	–	–
160	2.5	red	–	**64560-096**	–
220	2.5	red	–	**64560-098**	–

Accessories

Retention screw, PU 100 pieces 	**24560-141**
ESD clip, PU 50 pieces	**24560-255**

1) SPQ (standard pack quantity): Order number includes 1 piece, but delivery is exclusively made in standard pack quantity (SPQ); please order at least the SPQ quantity or a multiple

2) Order no. includes one packing unit (PU); delivery is exclusively made in PU

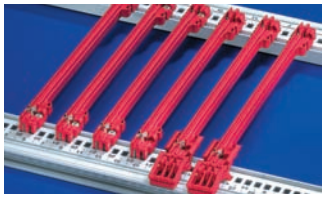
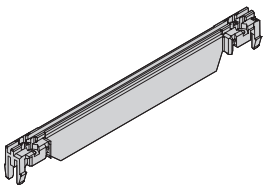
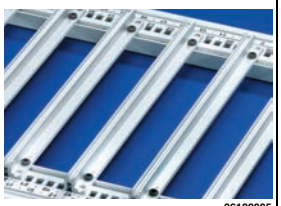
Description of accessories see from page 6.41

Guide rails type "accessories", one-piece, groove width 2 mm and 2.5 mm

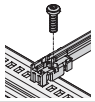
Order Information

Assembly
- can be clipped into Al extruded horizontal rails
- into1.5 mm thick plates

Storage temperature
from -40 °C ... 130 °C

Board lengths	Groove width	Colour	Giude rails type "Accessories"		"Accessories" strengthened	For heavy modules, Al extrusion, silver, robust version
			 06102002		 06102005	 06102005
			up to 220 mm length, PBT, UL 94 V-0; L 280 mm length, multi-part, end piece PBT, UL 94V-0, middle part Al extrusion		PBT, UL 94 V-0; with additional centre materials to strength guide rails	Al extrusion; is screwed to horizontal rail "heavy" with retention screws
mm	mm	mm	PU 10 pieces[2]	1 piece (SPQ 50)[1]	1 piece (SPQ 50)[1]	1 piece (SPQ 10)[1]
100	2	red	–	**64560-082**	–	–
160	2	red	**24560-373**	**64560-005**	**64560-076**	–
160	2	grey	–	**64560-055**	–	**34562-881**
220	2	red	**24560-374**	**64560-006**	**64560-078**	–
220	2	grey	–	**64560-166**	–	**34562-882**
280	2	red/silver	**24560-375**	–	**64560-080**	**34562-883**
340	2	red/silver	**24560-376**	–	–	**34562-884**
400	2	red/silver	–	–	–	**34562-885**
160	2.5	silver	–	–	–	**34564-881**
220	2.5	silver	–	–	–	**34564-882**
280	2.5	silver	–	–	–	**34564-883**
340	2.5	silver	–	–	–	**34564-884**
400	2.5	silver	–	–	–	**34564-885**

Accessories

Retention screw, PU 100 pieces 	**24560-141**	**24560-141**	**24560-141**	**24560-157**
ESD clip, PU 50 pieces	**24560-255**	**24560-255**	**24560-255**	–
Board locking, red, PU 10 pieces	**24560-377**	**24560-377**	**24560-377**	–
Board handle, red, PU 10 pieces	**24560-378**	**24560-378**	**24560-378**	–
Identification strips for board handle, red, PU 1 sheet = 438 pieces	**60817-228**	**60817-228**	**60817-228**	–
Keying/coding	see page 6.40			–

1) SPQ (standard pack quantity): Order number includes 1 piece, but delivery is exclusively made in standard pack quantity (SPQ); please order at least the SPQ quantity or a multiple

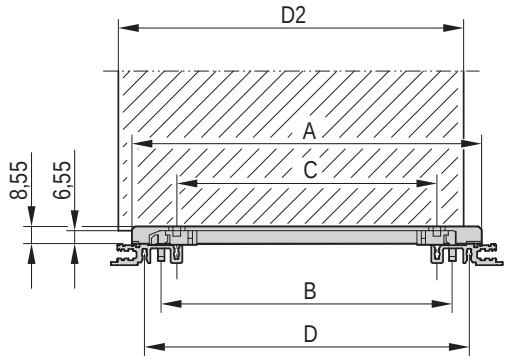
2) Order no. includes one packing unit (PU); delivery is exclusively made in PU

For description of accessories see from page 6.40

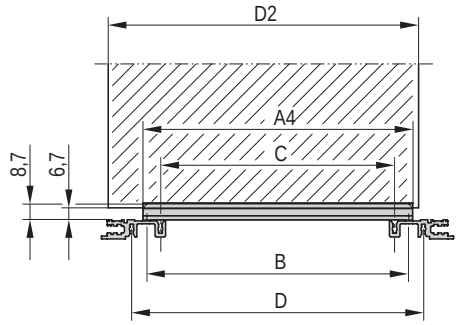
Part number in bold face type: ready for despatch within 2 working days
Part number in normal type: ready for despatch within 10 working days

Dimension drawings of guide rails

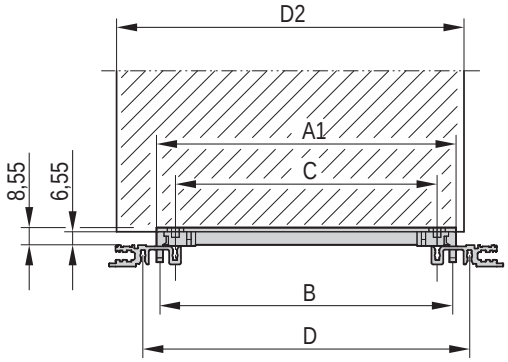
Standard



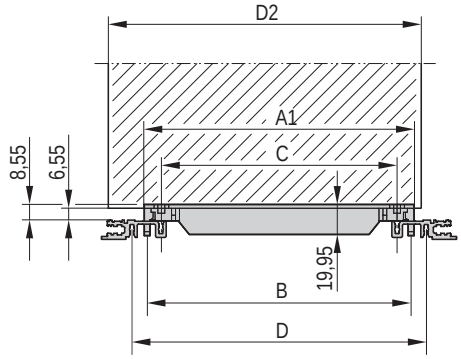
Robust version



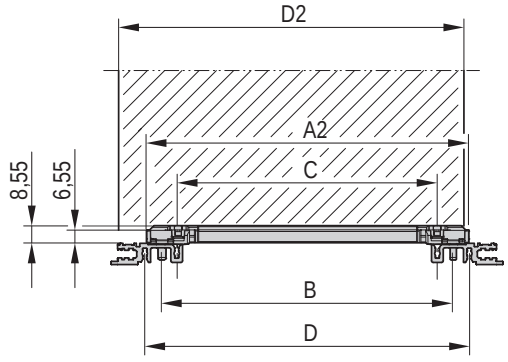
For accessories



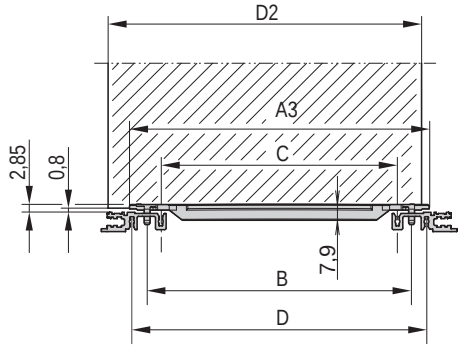
For accessories, strengthened



CompactPCI, VME64x



4.4" (111.7 mm)



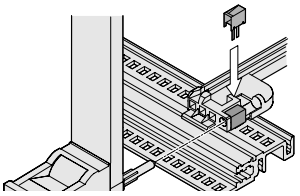
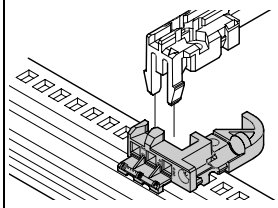
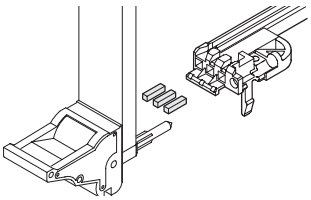
Dimensions table

Board height	Dimensions							
L	A	A1	A2	A3	A4	B	C	D
mm	mm	mm	mm	mm	mm	mm	mm	mm
70	71.5	47.9	59.39	63	49	45	30	60
100	101.5	77.9	89.39	93	79	75	60	90
160	161.5	137.9	149.39	153	139	135	120	150
220	221.5	197.9	209.39	213	199	195	180	210
280	281.5	257.9	269.39	273	259	255	240	270
340	341.5	317.9	322.39	333	319	315	300	330
400	401.5	377.9	389.39	393	379	375	360	390

A, A1, A2, A3, A4: length of rail
B: Pitch of snap-in fixing
C: Pitch of guide rail retention screws
D: Pitch of horizontal rail retention screws

Guide rail accessories

Order Information

Assembly	Colour	ESD clips, CompactPCI/VME 64 alignment pin for guide rails	Coding for subracks: Keying/coding block for guide rails "accessories"	Coding for subracks: Keying/coding for CompactPCI, VME64x handles to IEEE 1011.10 and IEC 60297-3-103
		 06103052	 06103051	 bga46316
		Spring steel, tin-plated, ESD clip, for alignment pin in accordance with IEEE; can be plugged into the guide rails with coding and into the keying/coding block; it ensures conductive contact between the alignment pin of the insertion/extraction handle (IEL or IET handle) and the horizontal rail	PBT, UL 94 V-0, keying/coding block is clipped into the horizontal rail next to the guide rails; please order keying/coding pegs separately	PC, UL 94 V0, RAL 7035; the keying/coding pegs (3 each) are inserted into the coding block or the handle
		PU 50 pieces	1 piece (SPQ 50)[1]	PU 100 pieces
At the top	red	–	**34579-232**	–
	grey	–	**34579-233**	**20817-501**
	silver	**24560-256**	–	–
At the bottom	red	–	**34579-234**	–
	grey	–	**34579-235**	**20817-501**
	silver	**24560-256**	–	–

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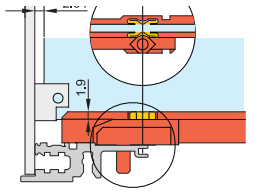
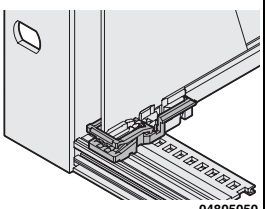
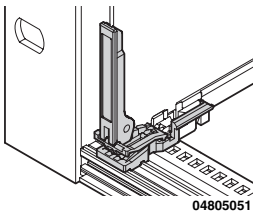
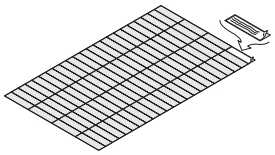
2) Order no. includes one packing unit (PU); delivery is exclusively made in PU

Part number in bold face type: ready for despatch within 2 working days
Part number in normal type: ready for despatch within 10 working days

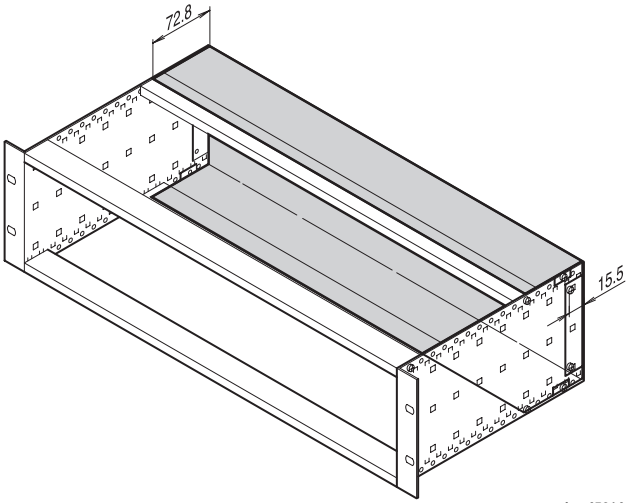
Guide rail accessories

Order Information

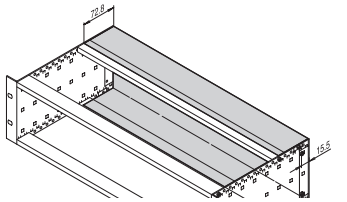
Assembly mm	Colour mm	ESD clip for guide rails  04503050 Spring steel, tin-plated, ensures conductive contact between circuit board and horizontal rail, on both the solder side and the component side PBT, UL 94 V-0 PU 50 pieces	Board retention for PCBs without front panel  04805050 PBT, UL 94 V-0, red, to fix the PCB in the subrack (also slot 1), can also be used without board handle, minimum distance 3 HP PBT, UL 94 V-0 PU 10 pieces	Board handle for board locking  04805051 PBT, UL 94 V-0, red, insertion/extraction function with connection to board locking (also slot 1), mounting directly behind front panel (upper and lower), minimum distance 3 HP PBT, UL 94 V-0 PU 10 pieces	Identification strips for board handle  06108076 Polyester film, 31 x 4 mm, self-adhesive, white/matt (1 A4 sheet contains 438 pieces) PBT, UL 94 V-0 1 piece
	red	–	**24560-377**	**24560-378**	–
above/below	silver	**24560-255**	–	–	–
	white/matt	–	–	–	**60817-228**

Rear hoods for 3 U and 6 U subracks (for stainless steel EMC gasket)

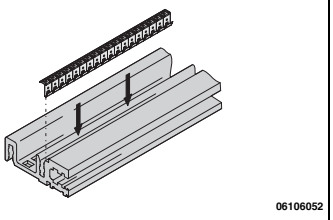
Order Information



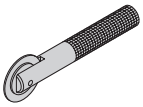
Height	Width	Rear hood	Stainless steel EMC gasket, between cover plate and horizontal rail	
U	HP	1 piece	PU 10 pieces	PU 100 pieces
3	42	**34561-750**	**24560-241**	–
3	84	**34561-752**	**24560-245**	–
6	63	**34561-763**	**24560-243**	–
6	84	**34561-764**	**24560-245**	**24560-246**
Torx panhead screw, M4 × 6, St, zinc-plated, PU 100 pieces		**24560-135**	–	
Assembly tool, for stainless steel EMC gasket (horizontal rails), 1 piece			**24560-271**	



Al, 1 mm, clear passivated; 60 mm additional side panel depth required (board depth + 60 mm); for shielding please order EMC gasket for horizontal rail separately; cannot be used simultaneously with rear corner profile



Stainless steel EMC gasket, clips into the horizontal rail and forms the contact with the cover plate; suitable for all horizontal rails



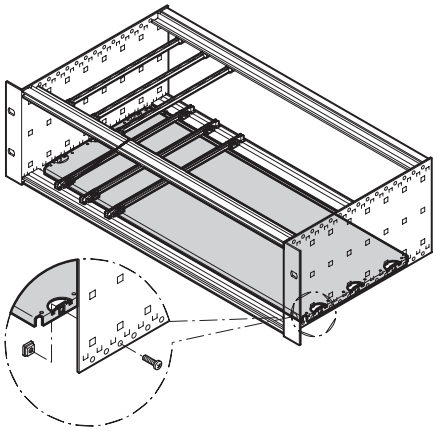
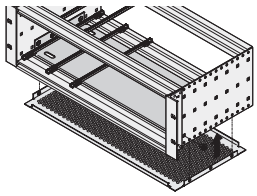
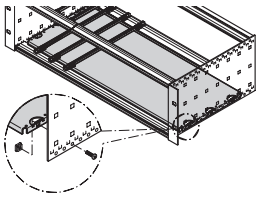
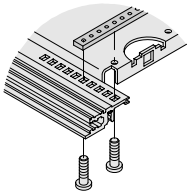
Note

■ Other dimensions of rear hood available on request

Part number in bold face type: ready for despatch within 2 working days
Part number in normal type: ready for despatch within 10 working days

Mounting plates

Order Information

			Mounting plate can be used in combination with cover plates	Mounting plate for use without cover plate	Mounting plate Assembly strips for partial widths
 bpa45875			 bza45819	 06102501	 06102501
			Al, 1.5 mm; mounting is only possible over the entire width between the side panels	Al, 1.5 mm; mounting is over the entire width; for mounting over partial width, please order fixing strips separately	St, 2 mm, zinc-plated; is bolted from front to back onto the with horizontal rails; serves to fix mounting plates
Width HP	**W mm**	**Board lengths mm**	**1 piece**	**1 piece**	**1 piece**
28	146.88	160	**34563-001**	**34562-745**	**30840-021**
28	146.88	220	**34563-009**	**34562-749**	**30840-033**
28	146.88	160	–	**34562-753**	30840-045
28	146.88	220	–	**34562-757**	**30840-057**
42	217.99	160	**34563-002**	**34562-746**	**30840-021**
42	217.99	220	**34563-014**	**34562-750**	**30840-033**
42	217.99	160	–	**34562-754**	30840-045
42	217.99	220	–	**34562-758**	**30840-057**
63	324.67	160	**34563-003**	**34562-747**	**30840-021**
63	324.67	220	**34563-019**	**34562-751**	**30840-033**
63	324.67	160	–	**34562-755**	30840-045
63	324.67	220	–	**34562-759**	**30840-057**
84	431.35	160	**34563-004**	**34562-748**	**30840-021**
84	431.35	220	**34563-024**	**34562-752**	**30840-033**
84	431.35	160	–	**34562-756**	30840-045
84	431.35	220	–	**34562-760**	**30840-057**
Assembly kit for mounting plate, PU 1 kit (Torx Countersunk screw M4 x 5, St, zinc-plated, 12 pieces; screw M4 x 6, St, zinc-plated 10 pieces; M4 square nut, St, zinc-plated, 10 pieces)			**24560-184**	**24560-184**	–
Assembly kit for assembly strips of mounting plate Torx screw M2.5 × 5, St, zinc-plated, PU 100 pieces			–	–	**24560-146**

Note

- For installation and assembly of heavy components
- In addition to the mounting plate also (EMC) cover plates can be fitted to the subrack
- The mounting plate is as wide as the subrack or the system case and is fixed to the side panels
- A guide rail can be fitted in the first and last slot position
- Guide rails 4.4" and "strengthened" cannot be used