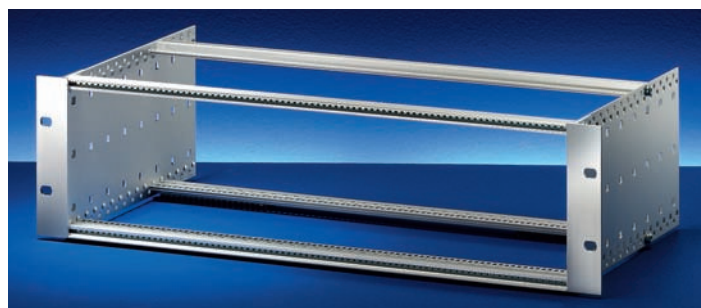
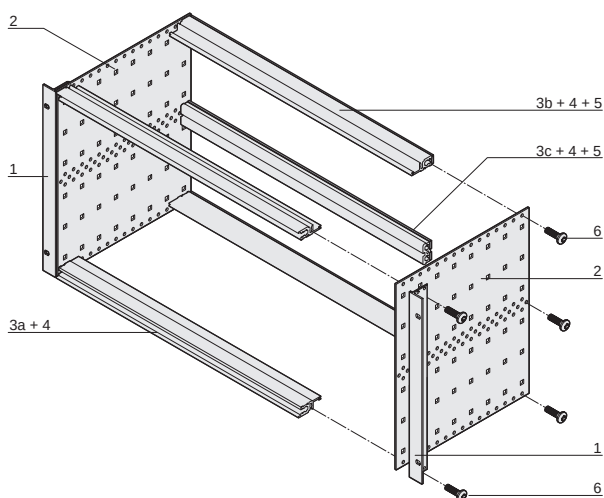


Subracks - *europac* **PRO** Kits

Kit, unshielded, "light", for backplane mounting

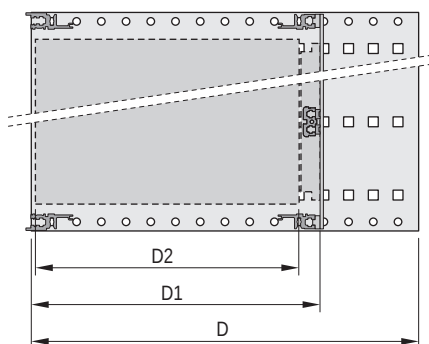


06102007

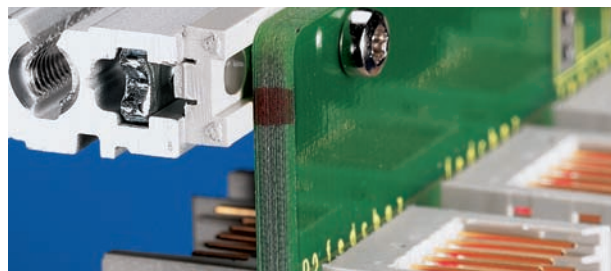


06102081

6 U



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		Description
	3 U	6 U	
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	Width	Depth	Depth D1	Depth D2	Part no.
U	HP	mm	mm	mm	
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

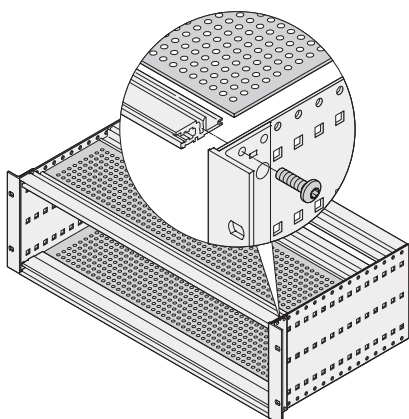
Tiefe D2	Qty/PU	Part no.
mm		
160	10	24560-351
220	10	24560-353
280	10	24560-379
340	10	24560-380
ESD clip for guide rails PU 50 pieces		24560-255

Note

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

Subracks - *europac* **PRO** Kits

Cover plates for 'light' subrack



- 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

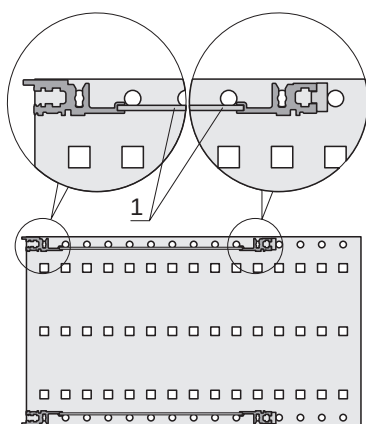
Depth D2 mm	Width HP	Qty/PU	Part no.
160	84	2	24561-051
220	84	2	24561-052

Note

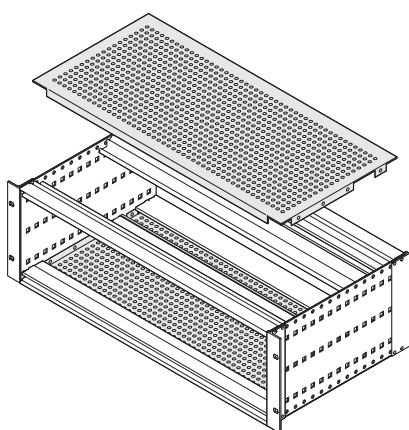
- Other dimensions available on request



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



Cover plates for subrack



- 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 x 6, pentaform, self-tapping, St, zinc-plated

Order Information

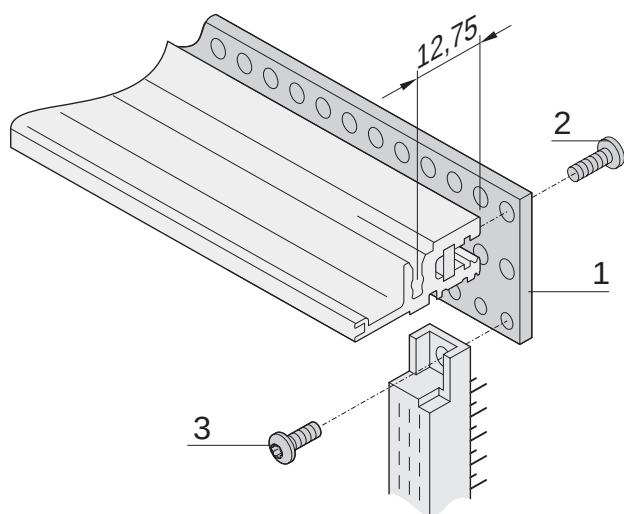
Depth D2 mm	Width HP	Qty/PU	Part no.
160	84	2	24560-078
220	84	2	24560-079
280	84	2	24560-080
340	84	2	24560-081



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

Subracks - *europac* **PRO** Kits

Perforated rail for connector EN 60603-2/DIN 41612



- 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

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

Delivery comprises

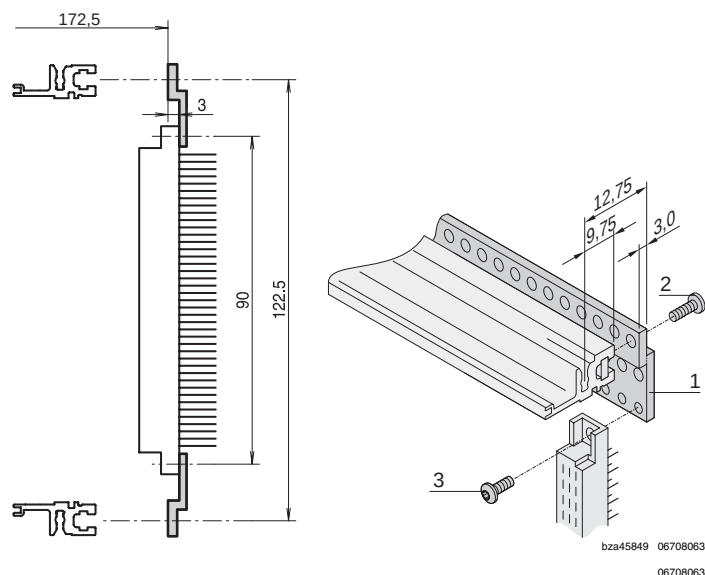
Item	Qty	Description
1	1	Z-rail, Al extrusion, anodised

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

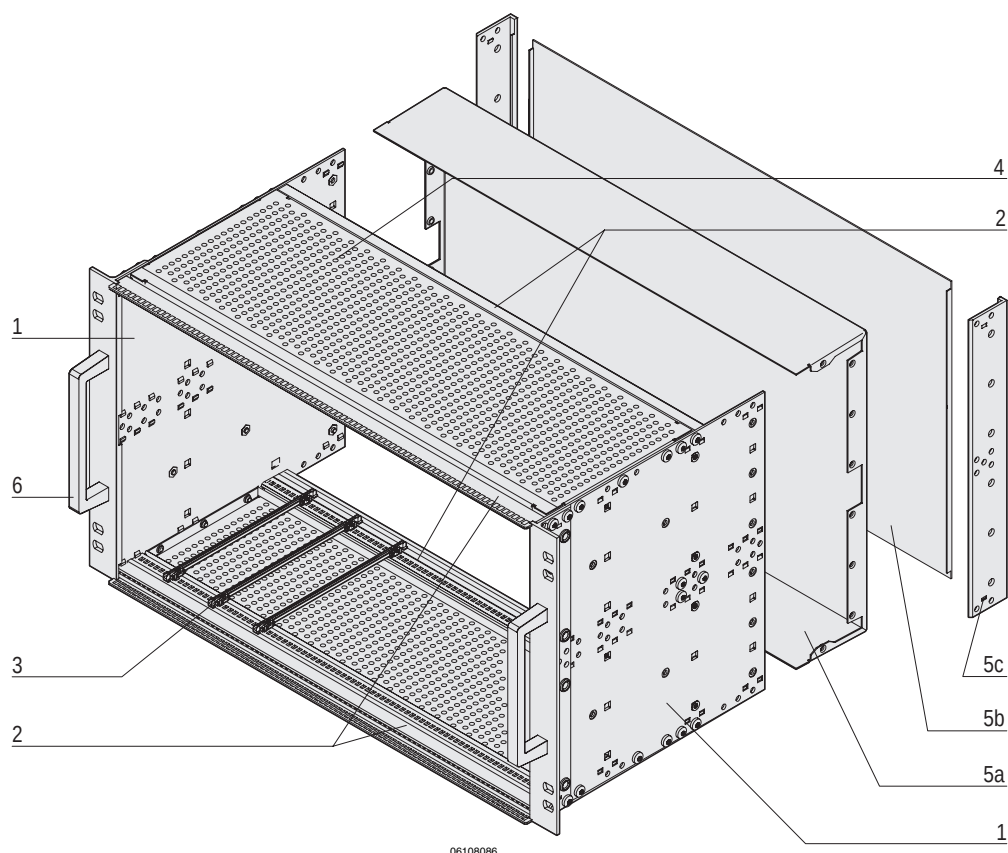
Note

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



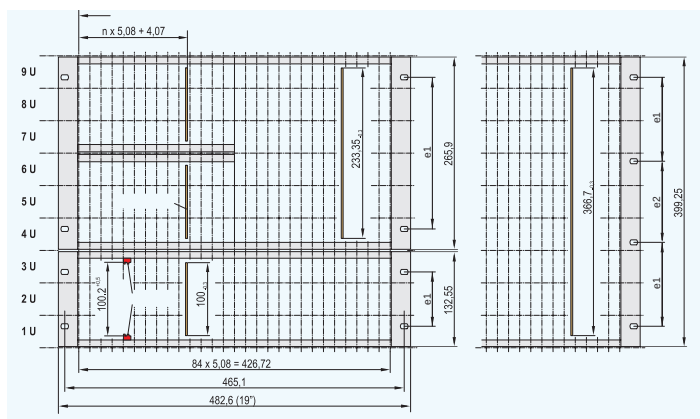
Subracks - *europac* **PRO** ServicePLUS

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



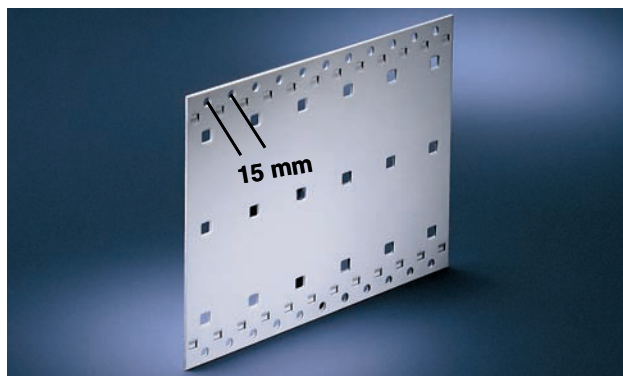
20304051

- 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

Description

Depth grid

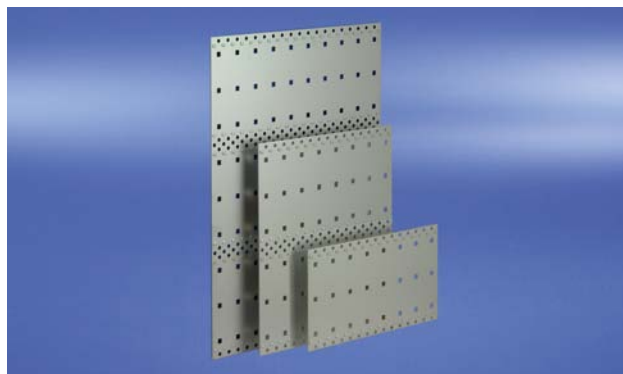
The depth grid is 15 mm, the mounting holes in the side panel are decisive for the configurability of individual components; thus any combinations of various individual parts are possible



06103001

Side panel 3 U, 6 U and 9 U

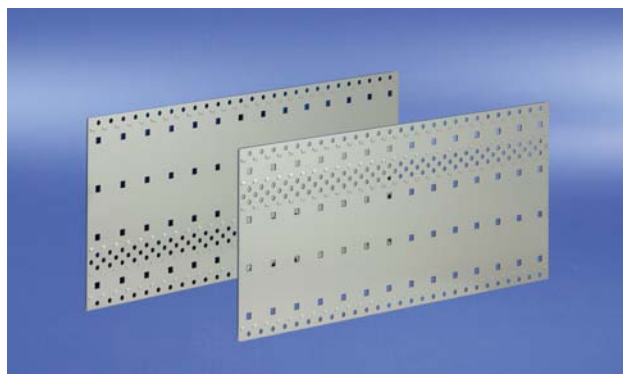
3 and 6 U side panels have the same hole positions (the 6 U is a doubling vertically of the 3 U); thus subdivisions can be made in the vertical dimension (6 U: 2 x 3 U; 9 U: 3 x 3 U)



06108008

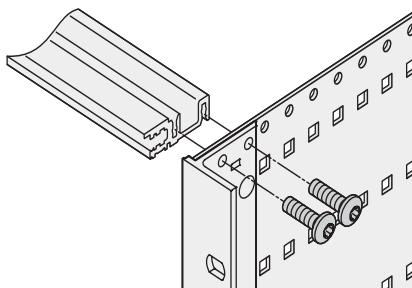
Side panel 4 U

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



06108011

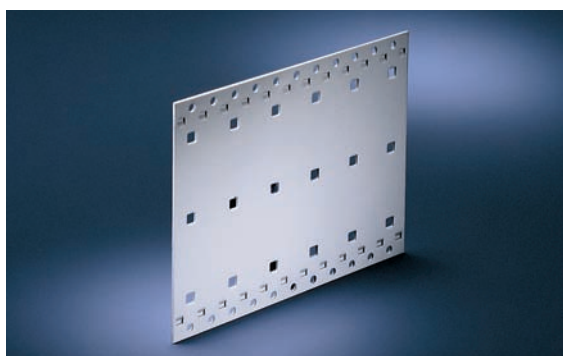
Side panels



Side panel - horizontal rail assembly

06108062

- 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)

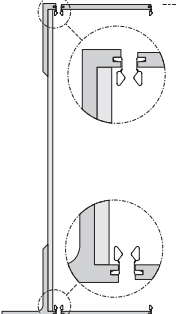
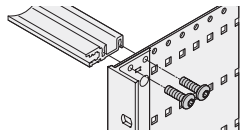
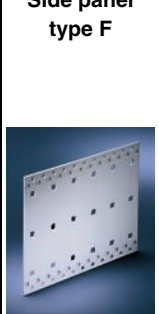
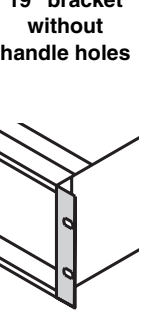
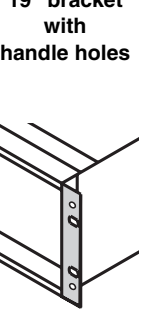
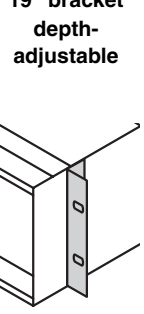
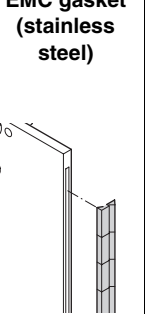
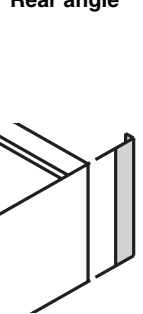
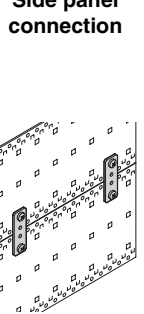
- Side panel with formed 19" brackets, for standard applications, unshielded
- Particularly cost-effective versions (not suited for EMC applications)
- Heights: 3 and 6 U
depths: 175, 235 and 295 mm
other dimensions available on request

Subracks - *europac* **PRO** ServicePLUS

Type F

Side panel type F for stainless steel EMC gasket

Order Information

  Height Depth U mm		 Side panel type F 06197003 without 19" bracket, Al, 2 mm, passivated, please order 19" bracket and corner profile separately	 19" bracket without handle holes bza45819 with lateral grooves for EMC stainless steel gasket, Al extrusion, rear side etched, front anodised	 19" bracket with handle holes 06106050 with lateral grooves for stainless steel EMC gasket, Al extrusion, rear side etched, front anodised, please order front handles separately, see page 6.25	 19" bracket depth-adjustable 06102501 Al extrusion, passivated	 EMC gasket (stainless steel) BGA45760 inserted laterally into the slots of the front panel, stainless steel	 Rear angle BZA46573 Al extrusion, surface clear passivated; with lateral grooves for EMC stainless steel gasket; rear hood cannot be mounted simultaneously	 Side panel connection BPA45867 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	—

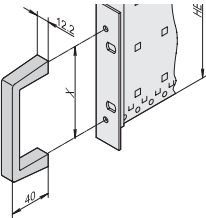
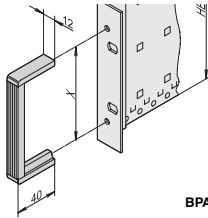
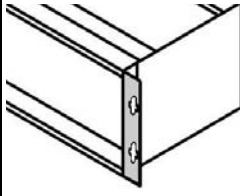
1) CompactPCI 2) VME64x 3) Grid holes of side panel 3 + 1 U

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

Subracks - *europac* **PRO** Service**PLUS**

Front handles, wall-mounting bracket

Order Information

			Front handle clear anodised black anodised		Universal front handle	Wall-mounting bracket
			 BZA42327		 BPA45855	 06104063
					3 parts: Al extrusion, anodised, 2 end pieces, plastic, PA, black width 12 mm, depth 40 mm	Screw fixed on the subrack instead of the 19" bracket, Al, 2.5 mm, passivated
Height U	Depth mm	X mm	1 piece (SPQ 10) ¹⁾	1 piece (SPQ 10) ¹⁾	1 piece (SPQ 10) ¹⁾	PU 1 pair
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	10501-018	—	10502-059	24562-297
4	175	133.4				
4	235	133.4				
4	295	133.4				
4	355	133.4				
4	415	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				
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

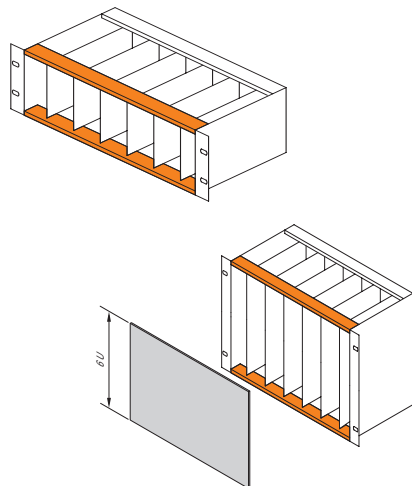
1) SPQ (standard pack quantity): Order number includes 1 piece, but delivery is exclusively made in standard pack quantity (SPQ); please order at least the SPQ quantity or a multiple

Subracks - *europac* **PRO** ServicePLUS

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

Assembly 3 U, 2 x 3 U, 6 U

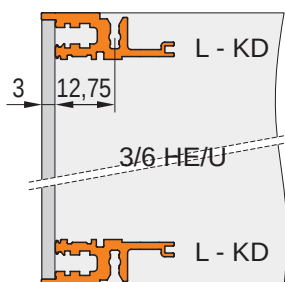
3 U/6 U



bza44980 bza44974

"light" (L)

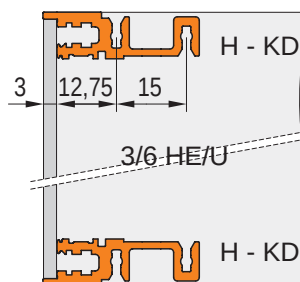
Short lip



06105060

"heavy" (H)

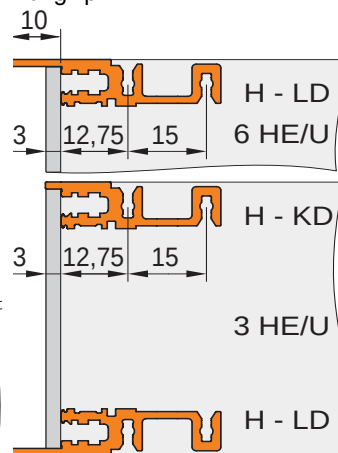
Short lip



06105061

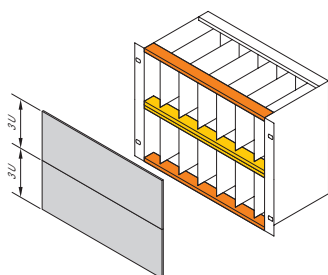
"heavy" (H)

Long lip

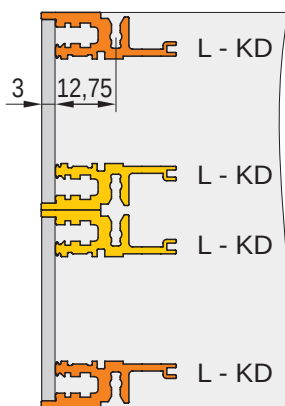


06108063

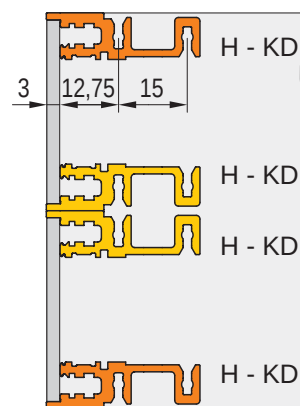
2 x 3 U



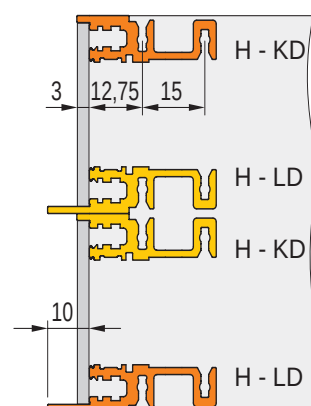
bza44972



06105062

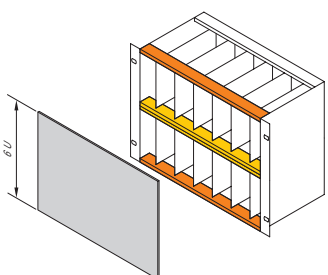


06105063

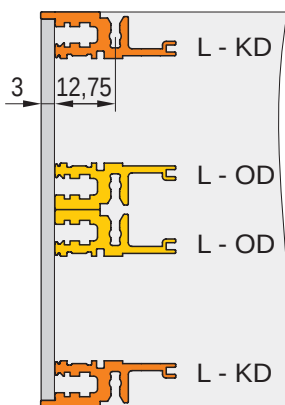


06108064

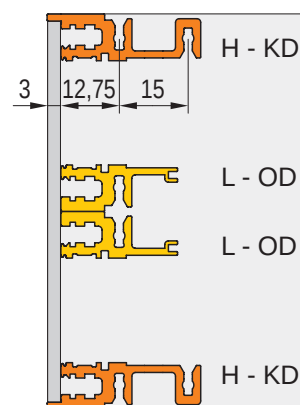
2 x 3 U, 6 U



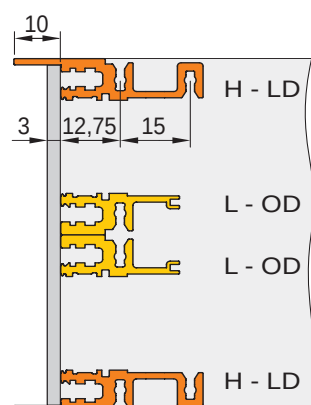
06105059



06105064



06105065



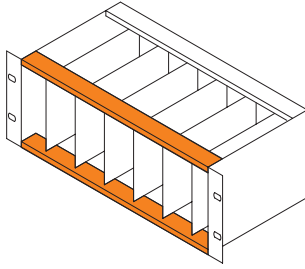
06108065

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

Subracks - *europac* **PRO** Service**PLUS**

Front horizontal rails

Order Information

 bza44980 with HP markings from 28 HP, Al extrusion, anodised finish, conductive surface		"light" Type L-OD without lip  06197006 Al extrusion, surface anodised, conductive contact surface	"light" Type L-KD short lip  06197007 Al extrusion, surface anodised, conductive contact surface	"heavy" Type H-KD short lip  06197008 Al extrusion, surface anodised, conductive contact surface	With long lip to prise out/ in CompactPCI, VME64x boards "heavy" Type H-LD long lip  06197009 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

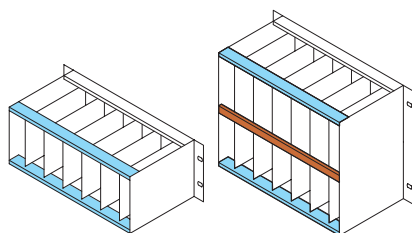
1) SPQ (standard pack quantity): Order number includes 1 piece, but delivery is exclusively made in standard pack quantity (SPQ); please order at least the SPQ quantity or a multiple

"light": loading capacity up to approx. 7.5 kg; "heavy": loading capacity L 7.5 kg

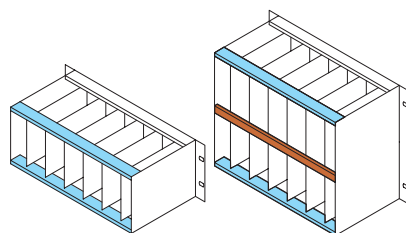
Note

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

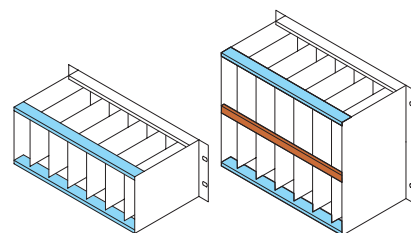
Rear horizontal rail ("light", "heavy")



Indirect backplane mounting
(with insulation strips)



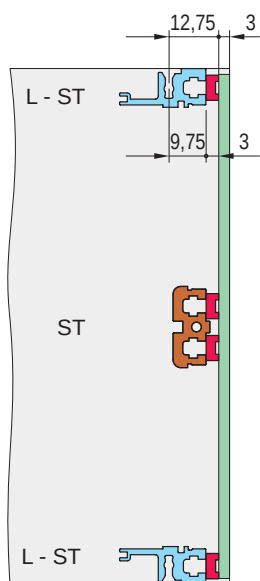
Direct backplane mounting



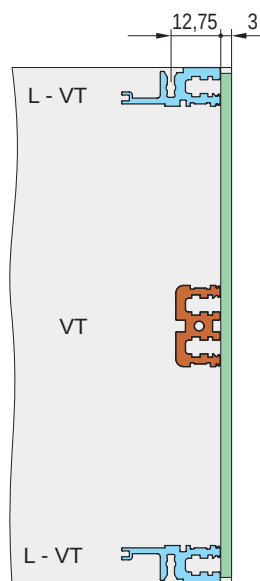
Connector fitting with Z

06105074 bza44981

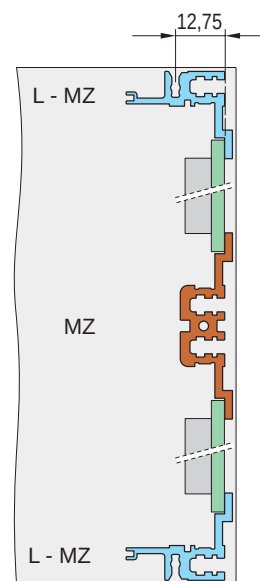
"light"



06105072

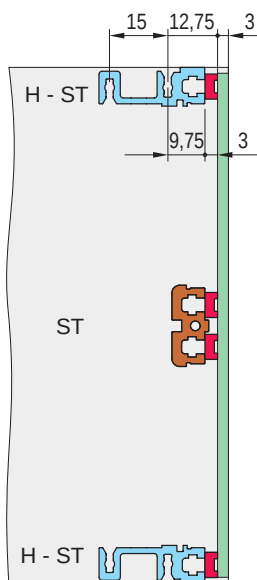


06105073

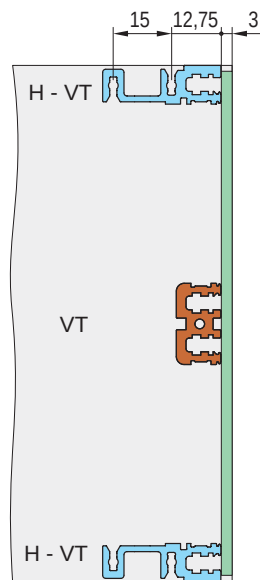


06105071

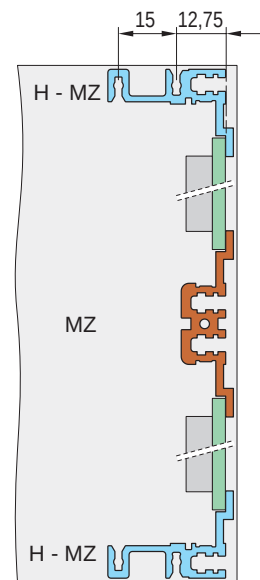
"heavy"



06108066



06108067

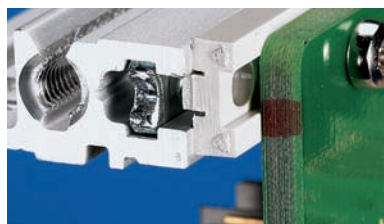


06108068

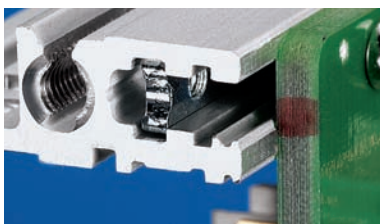
ST = standard, L = "light", H = "heavy"

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

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



04400001



04400002

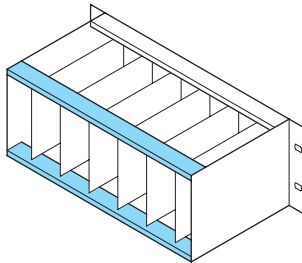


04400003

Subracks - *europac* **PRO** Service**PLUS**

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  06197011		For indirect backplane mounting  06197011		For direct mounting of connectors to EN 60603-2 (DIN 41612)  06197011	
		"light" Type L-ST standard  06197010	"heavy" Type H-ST standard  06197011	"light" Type L-VT + 3 mm  BZA45782	"heavy" Type H-VT + 3 mm  06197009	"light" Type L-MZ with Z-rail  06197014	"heavy" Type H-MZ with Z-rail  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
		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⁾
Usable length HP	Length mm						
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

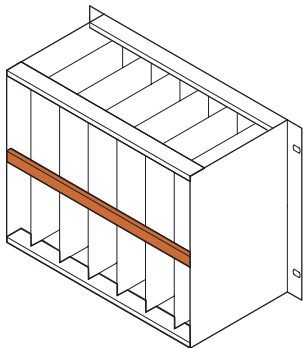
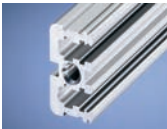
"light": loading capacity up to approx. 7.5 kg; "heavy": loading capacity L 7.5 kg

Note

- 1000 mm version without M4 thread in end without print

Horizontal rails rear, middle

Order Information

 06108090		For indirect backplane mounting, with insulation strip  06197016 Type ST  06197016 Al extrusion, finish anodised, conductive contact surface; without marking 1 piece (SPQ 10)¹⁾	For direct backplane mounting  06197017 Type VT  06197017 Al extrusion, finish anodised, conductive contact surface; without marking 1 piece (SPQ 10)¹⁾	For direct mounting of connectors in accordance with EN 60603-2 (DIN 41612)  06197018 Type MZ  06197018 Al extrusion, finish anodised, conductive contact surface; without marking 1 piece (SPQ 10)¹⁾
Usable length HP	Length mm			
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

Threaded inserts, perforated strips, insulation strips

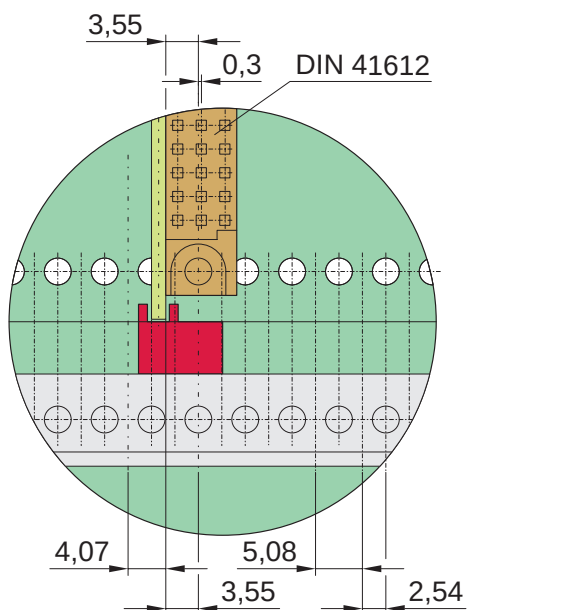
Order Information

Usable length HP	Threaded insert			Perforated strip		Insulation strip	
	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

Guide rails



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

06108083

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.

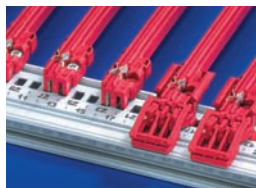
The HP marking on the horizontal rail (28 HP and above) allows the rails to be simply fitted in the correct position (position of sub-assembly = "number in viewing window" or in front of the arrow marking on the guide rails).

Applications for guide rails

Application



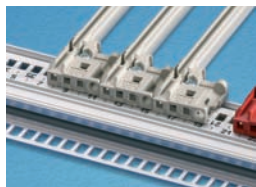
06102001



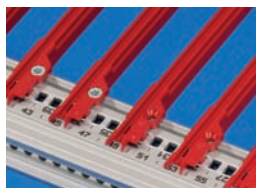
06102002



06102005



06106004



06104009

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

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

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

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

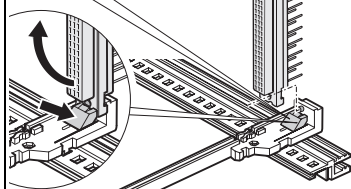
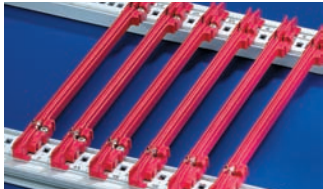
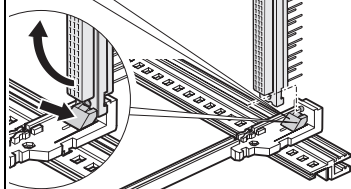
Accessories:

- ESD clips
- Keying/coding pegs
- PCB retainers

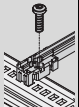
Subracks - *europac* **PRO** Service**PLUS**

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 
						
			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 pieces²⁾	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

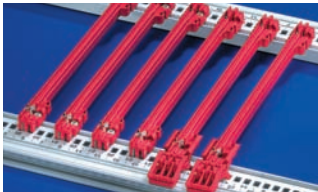
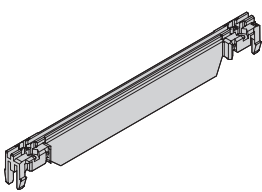
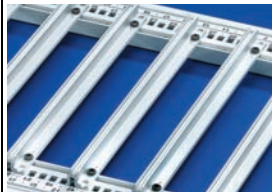
2) Order no. includes one packing unit (PU); delivery is exclusively made in PU

Description of accessories see from page 6.41

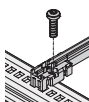
Subracks - *europac* **PRO** ServicePLUS

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 - into 1.5 mm thick plates Storage temperature from -40 °C ... 130 °C			Guide rails type			
			"Accessories"  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	"Accessories" strengthened  PBT, UL 94 V-0; with additional centre materials to strength guide rails	For heavy modules, Al extrusion, silver, robust version  Al extrusion; is screwed to horizontal rail "heavy" with retention screws	
Board lengths mm	Groove width mm	Colour 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

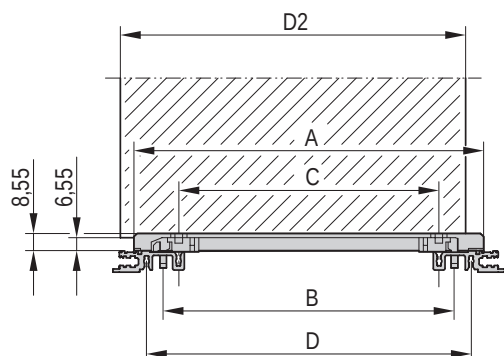
2) Order no. includes one packing unit (PU); delivery is exclusively made in PU

For description of accessories see from page 6.40

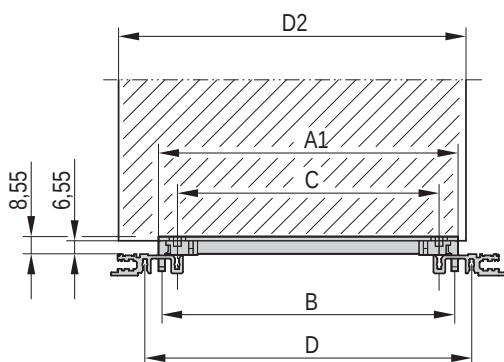
Subracks - *europac* **PRO** ServicePLUS

Dimension drawings of guide rails

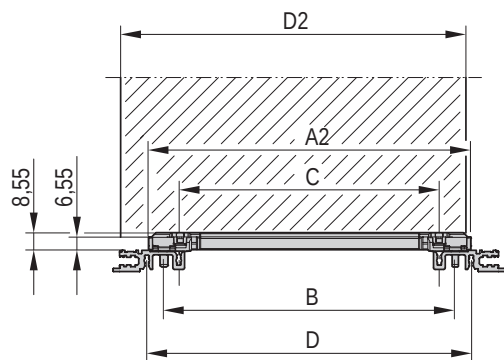
Standard



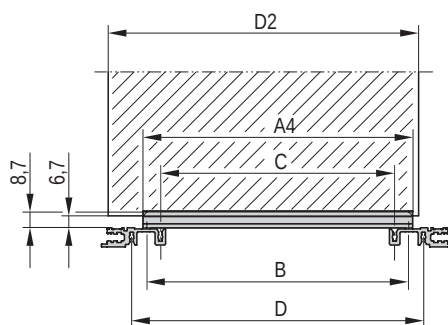
For accessories



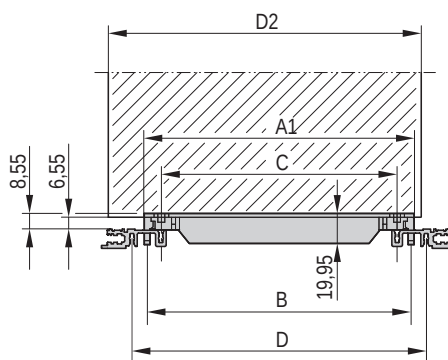
CompactPCI, VME64x



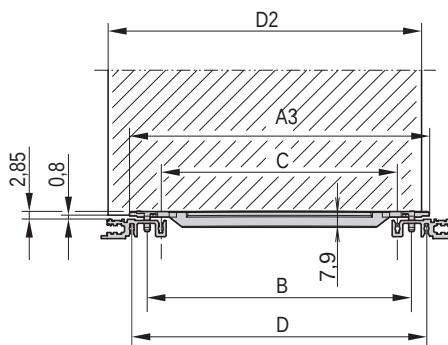
Robust version



For accessories, strengthened



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

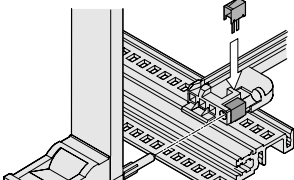
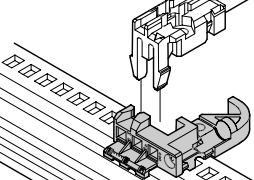
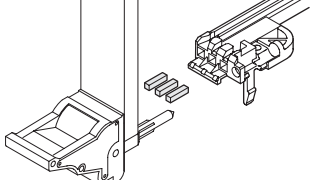
B: Pitch of snap-in fixing

C: Pitch of guide rail retention screws

D: Pitch of horizontal rail retention screws

Guide rail accessories

Order Information

		ESD clips, CompactPCI/VME 64 alignment pin for guide rails	Coding for subracks	
		 06103052 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	Keying/coding block for guide rails "accessories"  06103051 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	Keying/coding for CompactPCI, VME64x handles to IEEE 1011.10 and IEC 60297-3-103  bga46316 PC, UL 94 V0, RAL 7035; the keying/coding pegs (3 each) are inserted into the coding block or the handle
Assembly	Colour	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	—	—

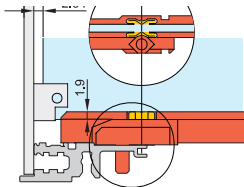
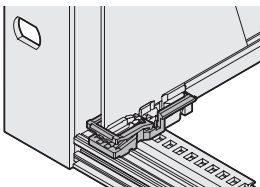
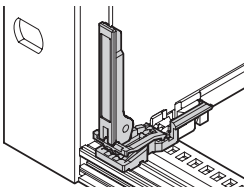
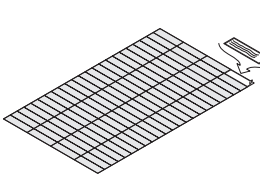
1) SPQ (standard pack quantity): Order number includes 1 piece, but delivery is exclusively made in standard pack quantity (SPQ); please order at least the SPQ quantity or a multiple

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

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Guide rail accessories

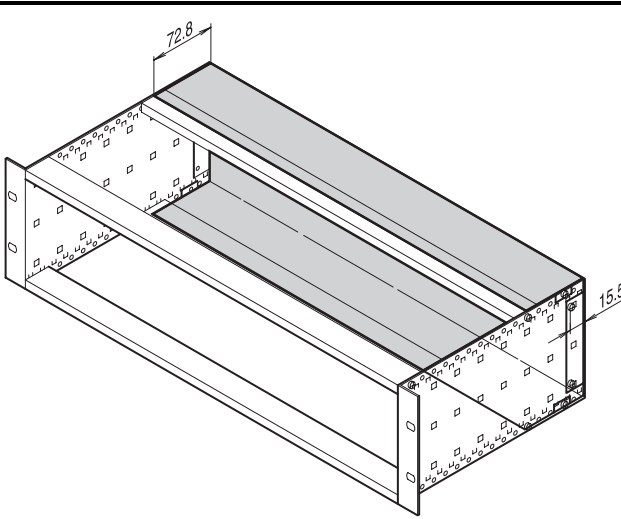
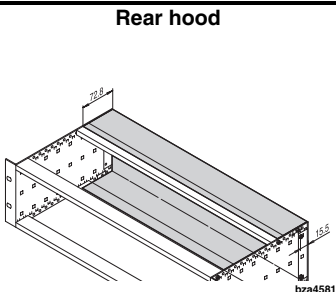
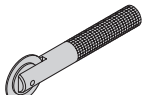
Order Information

		ESD clip for guide rails	Board retention for PCBs without front panel	Board handle for board locking	Identification strips for board handle
		 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	 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	 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	 06108076 Polyester film, 31 x 4 mm, self-adhesive, white/matt (1 A4 sheet contains 438 pieces) PBT, UL 94 V-0
Assembly mm	Colour mm	PU 50 pieces	PU 10 pieces	PU 10 pieces	1 piece
above/below	red	—	24560-377	24560-378	—
	silver	24560-255	—	—	—
	white/matt	—	—	—	60817-228

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

Order Information

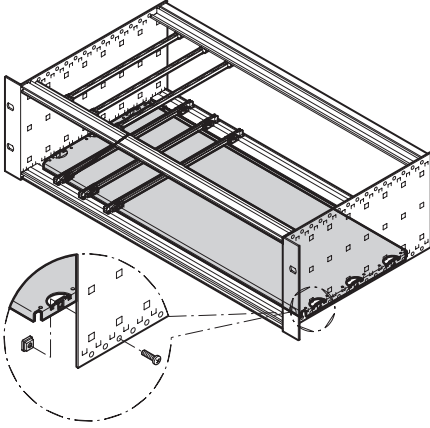
 Height U Width HP bza45814		Rear hood  Al, 1 mm, clear passivated; 60 mm additional side panel depth required (board depth + 60 mm); for shielding please order EMC gasket for horizontal rail separately; cannot be used simultaneously with rear corner profile		Stainless steel EMC gasket, between cover plate and horizontal rail  Stainless steel EMC gasket, clips into the horizontal rail and forms the contact with the cover plate; suitable for all horizontal rails			
		1 piece		PU 10 pieces		PU 100 pieces	
3		34561-750		24560-241		—	
3		34561-752		24560-245		—	
6		34561-763		24560-243		—	
6		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			

Note

- Other dimensions of rear hood available on request

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
Width HP	W mm	Board lengths mm	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
			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 x 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