Single Parts
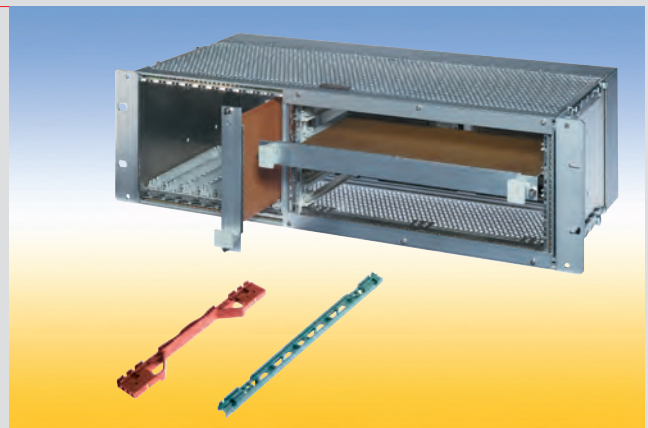
√ Side Panels
√ Flanges
√ Closing Profiles
√ Handle
√ Side Panel Extender
√ Side Panel Connector
√ Horizontal Rails
√ Cover Plates
√ Rear Covers
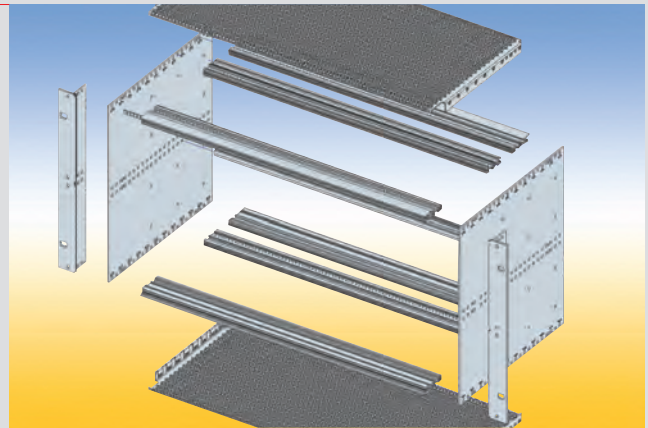
Configurations

√ Subrack Divider
√ Partition Wall
√ Labelling Rail, Locking Rail, Label Strip
√ Threaded Strips
√ Z-Rail A, Mounting Rail B
√ Card Guide and Accessories

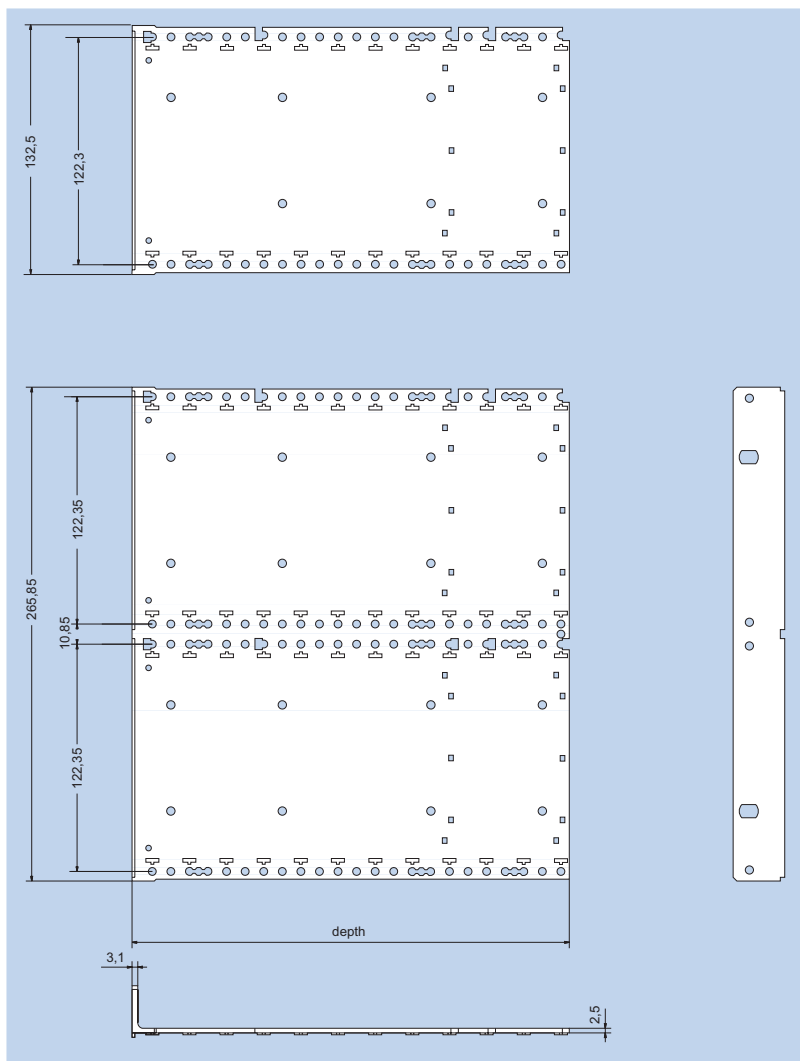## Front Panels and Handles

√ Blind Front Panels
√ Front Panels with Handle
√ Front Panels with Ejector Handle
√ Front Panels with IEEE-Handle
√ Plastic Front Panels

Side Panel Fi

for subrack *FLEXIBLE Fi* and *InterRail* (not for *InterRail SNCF*)

Side Panel Fi (flange integrated)
The side panel and the flange are extruded in one piece.

Material:	aluminum, extruded
Finish:	colorless anodized or passivated

Side Panel Fi TOX (flange clinched)
Side panel made of aluminum sheet is connected to the extruded flange RFI by clinching (toxen®). There is one TOX® point per height unit (U).

Finish:	flange passivated / side panel blank, seawater resistant

Ordering details

	nom. height [U]	nom. depth [mm]	depth [mm]	anodized order no. **409**	passivated order no. **409**	passivated/blank order no. **409**
Side panel Fi - 3 - 160	3	160	175.4	085001	110248	-
Side panel Fi - 3 - 220	3	220	235.4	085002	110234	-
Side panel Fi TOX - 3 - 280	3	280	295.4	-	-	182910
Side panel Fi - 6 - 160	6	160	175.4	085095	110201	-
Side panel Fi - 6 - 220	6	220	235.4	085096	110238	-
Side panel Fi TOX - 6 - 280	6	280	295.4	-	-	182911

Accessories

Hexagonal cupped point head screw M 4 x 16, Torx T 20

For assembly of the side panel to the horizontal rails.

Minimumm order quantity 100 pieces

order no.: **409052156**

Accessories

Self tapping hexagonal cupped point head screw M 4 x 16, Torx T 20

For assembly of the side panel to the horizontal rails.

Minimumm order quantity 100 pieces
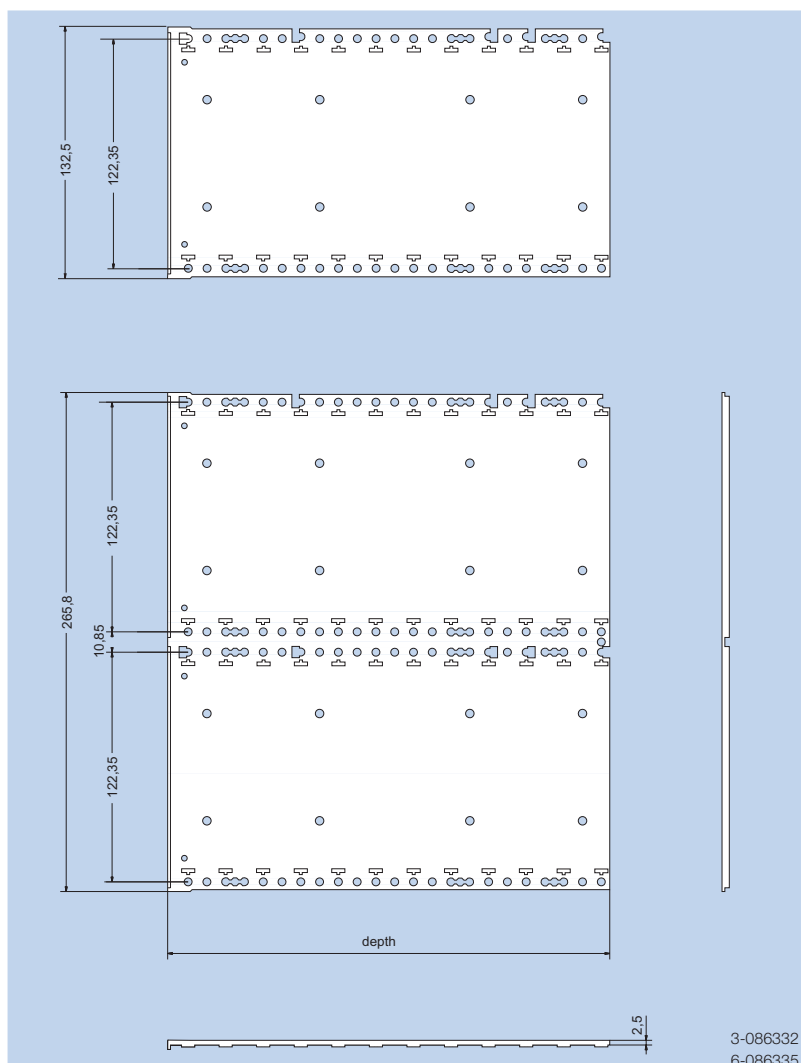
order no.: **409087639**

This catalog contains stock and standard parts. Other products and sizes on request.

for subrack *FLEXIBLE Fs*

Side Panel Fs (flange seperate)

Material:	aluminum, extruded
Finish:	passivated

3-086332
6-086335

Ordering details

	nom. height [U]	nom. depth [mm]	depth [mm]	order no. 409
Side panel Fs - 3 - 160	3	160	174.2	106750
Side panel Fs - 3 - 220	3	220	234.2	086333
Side panel Fs - 3 - 280	3	280	294.2	086334
Side panel Fs - 6 - 160	6	160	174.2	097286
Side panel Fs - 6 - 220	6	220	234.2	086336
Side panel Fs - 6 - 280	6	280	294.2	086337

Accessories

**Hexagonal cupped point head screw
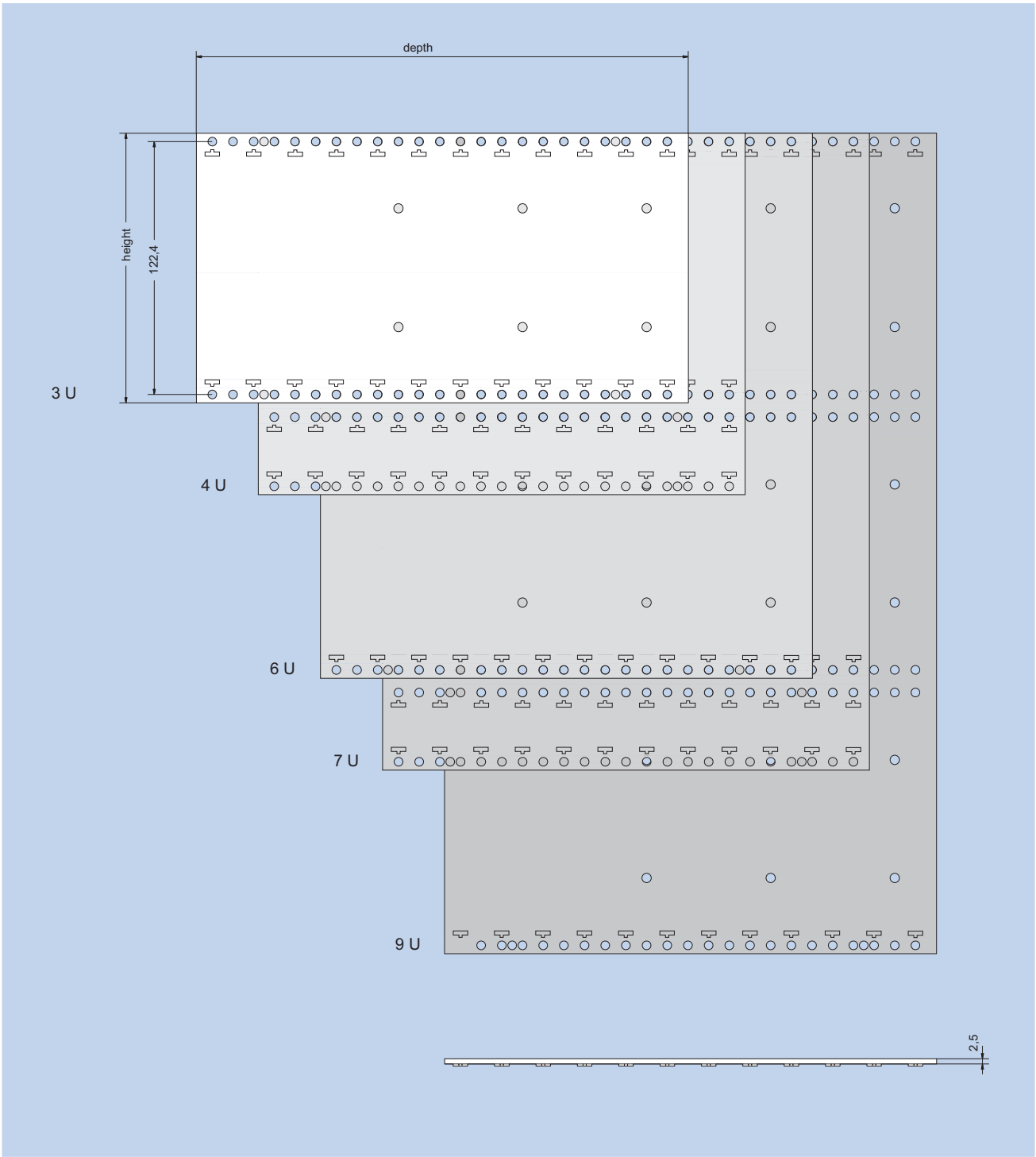M 4 x 16, Torx T 20**

For assembly of the side panel to the
horizontal rails.

Minimumm order quantity 100 pieces

order no.: **409052156**

Side Panel RFI without Flange

3 U

4 U

6 U

7 U

9 U

depth

height

122,4

2,5

for subrack *RFI-SHIELDED*

Side Panel RFI without flange

Material: aluminum, 2.5 mm thick
Finish: blank, seawater resistant

Ordering details

	nom. height [U]	height [mm]	nom. depth [mm]	depth [mm]	order no. 409
Side panel RFI - 3 - 160	3	130.50	160	177.9	114240
Side panel RFI - 3 - 220	3	130.50	220	237.9	114241
Side panel RFI - 3 - 240	3	130.50	240	257.9	161173
Side panel RFI - 3 - 260	3	130.50	260	277.9	161174
Side panel RFI - 3 - 280	3	130.50	280	297.9	114242
Side panel RFI - 3 - 340	3	130.50	340	357.9	114243
Side panel RFI - 4 - 280	4	174.95	280	297.9	112872
Side panel RFI - 4 - 460	4	174.95	460	477.9	112876
Side panel RFI - 6 - 160	6	263.85	160	177.9	114758
Side panel RFI - 6 - 220	6	263.85	220	237.9	114759
Side panel RFI - 6 - 240	6	263.85	240	257.9	161188
Side panel RFI - 6 - 260	6	263.85	260	277.9	161189
Side panel RFI - 6 - 280	6	263.85	280	297.9	114760
Side panel RFI - 6 - 340	6	263.85	340	357.9	114762
Side panel RFI - 6 - 460	6	263.85	460	477.9	114766
Side panel RFI - 7 - 240	7	308.30	240	257.9	161193
Side panel RFI - 9 - 220	9	397.20	220	237.9	161155
Side panel RFI - 9 - 280	9	397.20	280	297.9	161156
Side panel RFI - 9 - 340	9	397.20	340	357.9	161157
Side panel RFI - 9 - 460	9	397.20	460	477.9	161160

Subrack Accessories

Accessories

|	order no. 409
For assembly of the side panel to the pr Minimumm order quantity 100 pieces	
Hexagon cupped point head screw M 4 x 16 Torx T 20	052156
For assembly of the middle pro led rail by using an outside xed cover plate. Minimum order quantity 10 pieces	
Hexagon head screw	116769

Side Panel *InterRail® SNCF*

for subrack *InterRail SNCF*

Side Panel *InterRail SNCF*

Material:	aluminum, extruded
Finish:	passivated

3-107718
6-105601
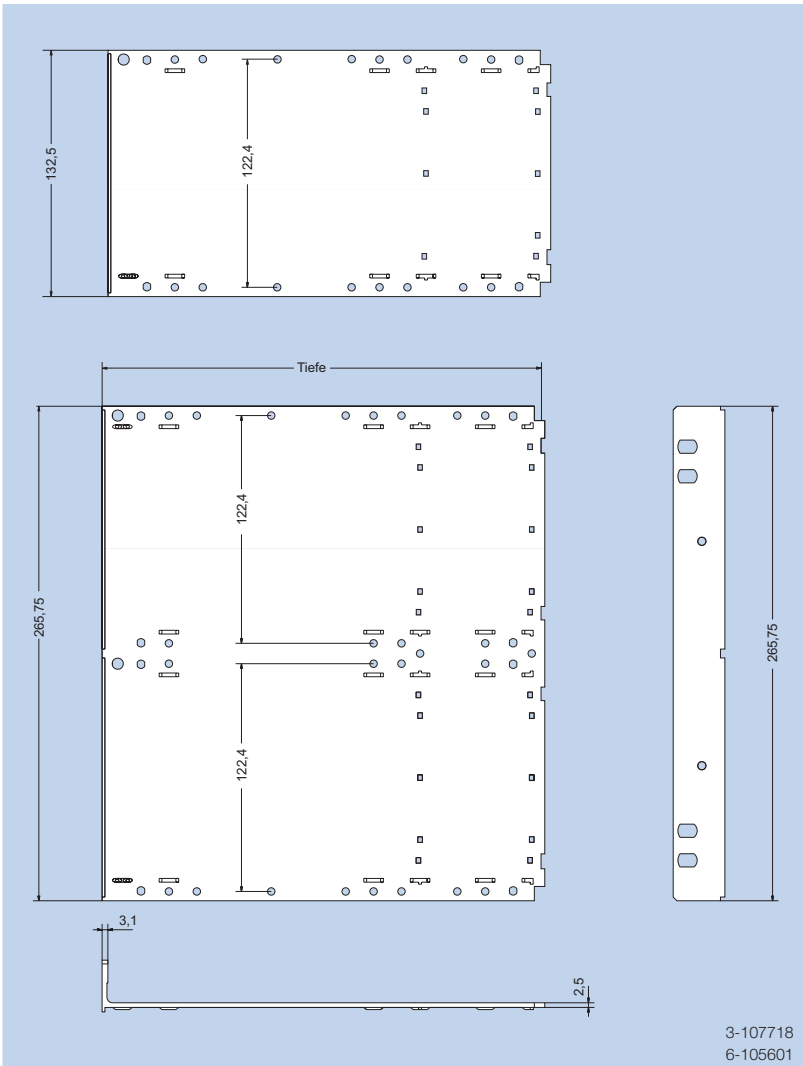
Ordering details

	nom. height [U]	nom. depth [mm]	depth [mm]	order no. 409
Side panel *InterRail - SNCF - 3 - 220*	3	220	237.9	**107719**
Side panel *InterRail - SNCF - 6 - 220*	6	220	237.9	**105602**

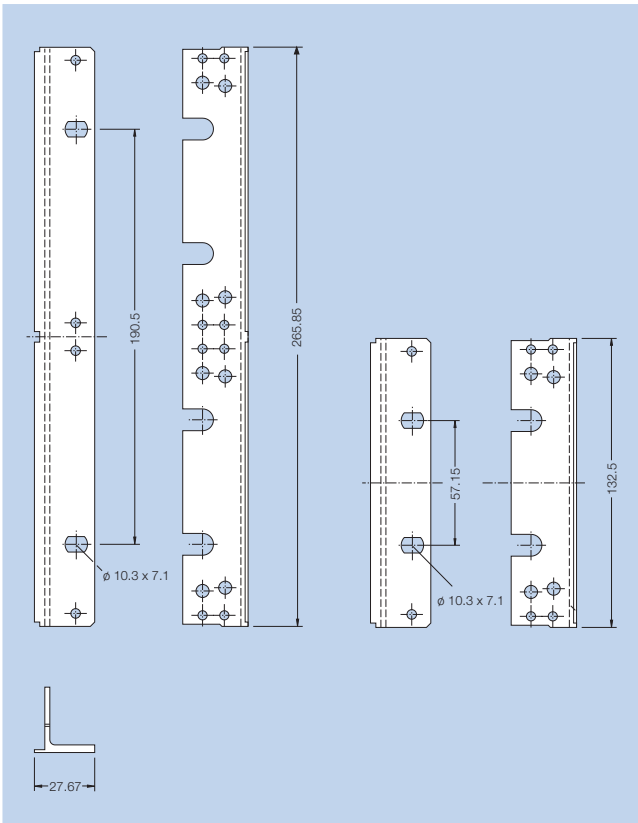## Accessories

**Self tapping hexagonal cupped point head screw
M 4 x 16, Torx T 20**

For assembly of the side panel to the horizontal rails.

Minimumm order quantity 100 pieces

order no.: **409087639**

This catalog contains stock and standard parts. Other products and sizes on request.
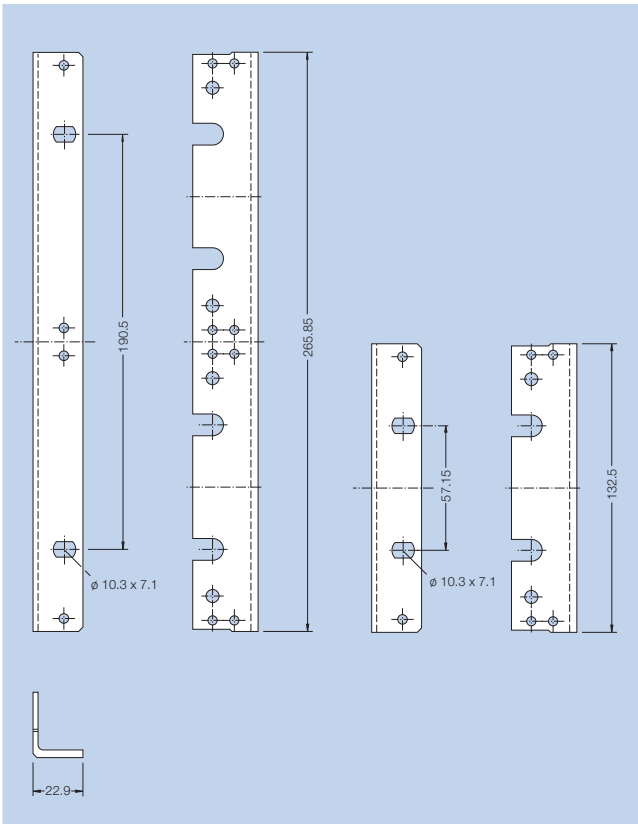
for subrack *FLEXIBLE Fs*

Flange F

The flange can be mounted to the side panel by means of the mounting screws for the horizontal rails.

Material: aluminum, extruded
Finish: anodized

Ordering details

	order no. 409
Flange F - 3 U	086787
Flange F - 6 U	086791

Flange without Nose

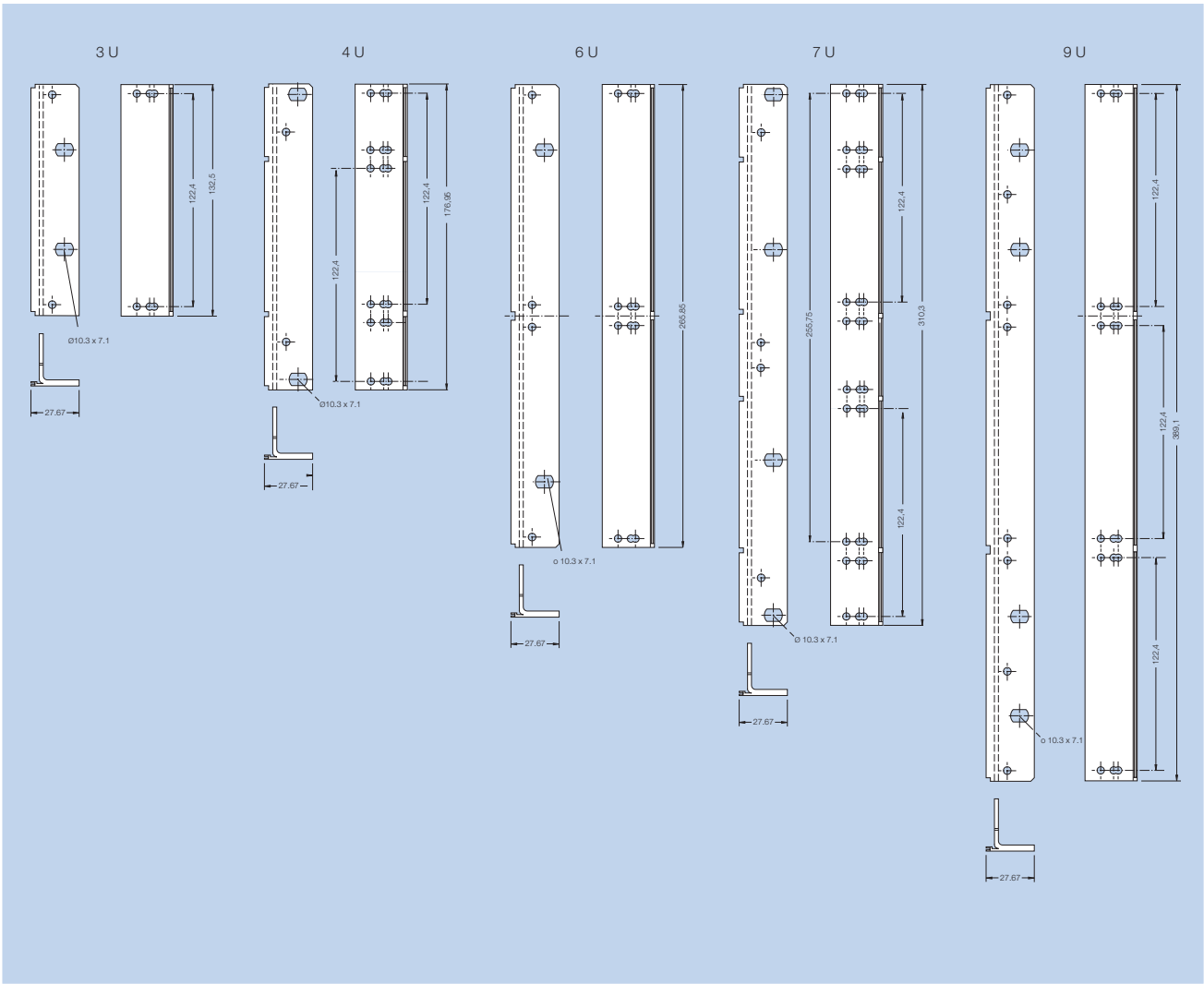This flange can be mounted at various depth on the side panel grid.

Material: aluminum, extruded
Finish: anodized

Ordering details

	order no. 409
Flange without nose - 3 U	087802
Flange without nose - 6 U	087824

Flange RFI

for subrack *RFI-SHIELDED*

Flange RFI
The flange can be mounted to the side panel by means of the mounting screws for the horizontal rails.
With slits in the side edges for insertion of RFI springs.

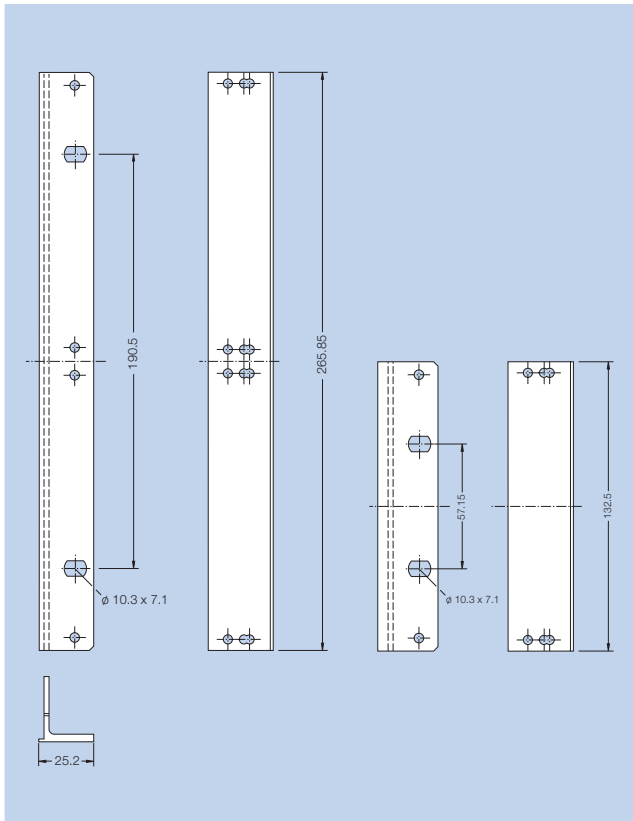**Material:** aluminum, extruded
Finish: passivated

Ordering details

	nom. height [U]	order no. 409
Flange RFI - 3	3	**112202**
Flange RFI - 4	4	**114612**
Flange RFI - 6	6	**112205**
Flange RFI - 7	7	**114618**
Flange RFI - 9	9	**112234**

Accessories

	order no. 409
RFI-spring F3 - 2 U	**112386**
RFI-spring F3 - 3 U	**111636**
RFI-spring F3 - 4 U	**112387**
RFI-spring F3 - 6 U	**111637**

This catalog contains stock and standard parts. Other products and sizes on request.

Flange RFI - FP

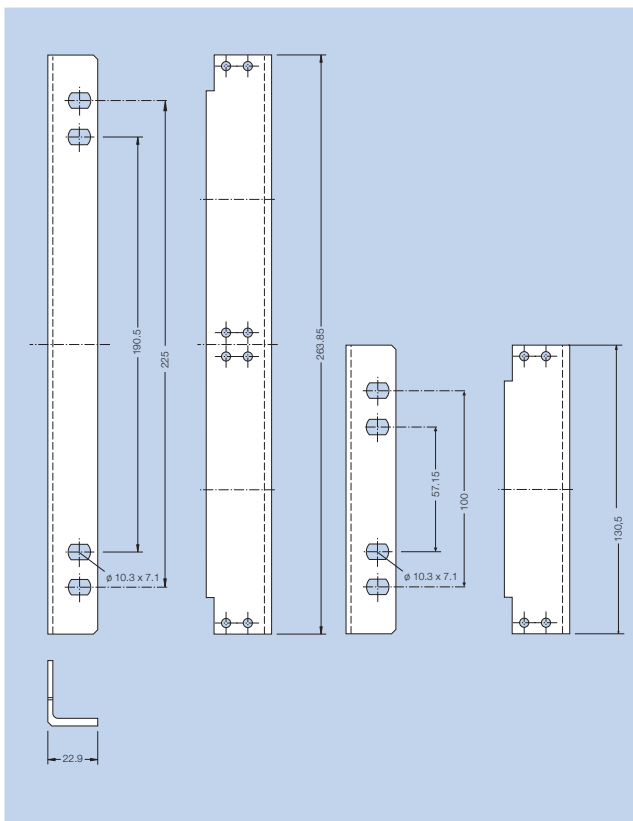This flange is suitable for mounting of a continous front panel of 85 HP and a hinged front panel of 85 HP in a subrack. The flange will be mounted to the side panel by means of the mounting screws for the horizontal rails.

Material: aluminum, extruded
Finish: passivated

Ordering details

	order no. 409
Flange RFI - FP - 3 U	114708
Flange RFI - FP - 6 U	114715

Flange for Wall Mounting

For mounting of a subrack on a wall.

Material: aluminum
Finish: blank, seawater resistant

Ordering details

	order no. 409
Flange for wall mounting - 3 U	161110
Flange for wall mounting - 6 U	161113

Closing Profiles F and RFI -F3
Handle
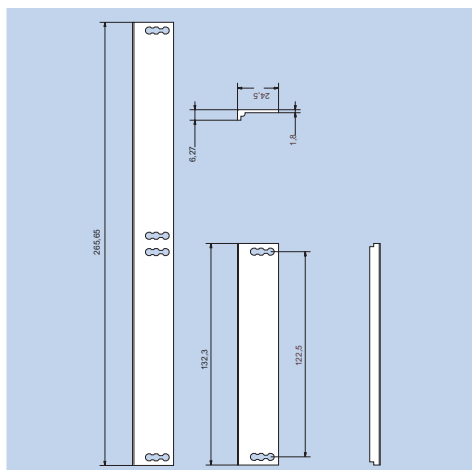
Closing Profile F

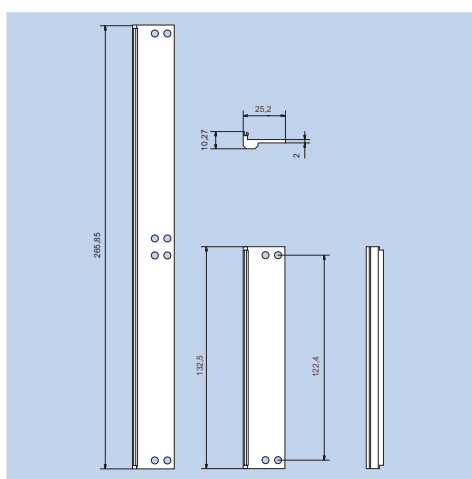For covering the slit between front panel and side panel.

The closing profile will be mounted to the side panel by means of the mounting screws for the horizontal rails.

Material: aluminum, extruded
Finish: anodized

Ordering details

	order no. 409
Closing profile F - 3 U	085695
Closing profile F - 6 U	085696

Closing Profile RFI -F3

For covering the slit between front panel and side panel.

The closing profile will be mounted to the side panel by means of the mounting screws for the horizontal rails.

With slits for insertion of RFI-springs.
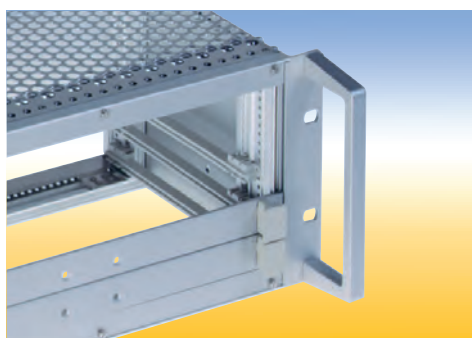
Material: aluminum, extruded
Finish: passivated

Ordering details

	order no. 409
Closing profile RFI - F3 - 3 U	122131
Closing profile RFI - F3 - 6 U	118374

Accessories

	order no. 409
RFI-spring F3 - 3 U	111636
RFI-spring F3 - 6 U	111637

Handle

Material: aluminum
Finish: anodized

Ordering details

	order no. 409
Handle -3 U	040419
Handle -6 U	040420

Accessories
Counter sunk screw M4 x 10, Torx
Minimumm order quantity 100 pieces

order no.: 409105789

Mounting parts for fastening a subrack into a housing

Screw retrainer M6
Color: black
Material: POM
Minimum order quantity 10 pieces

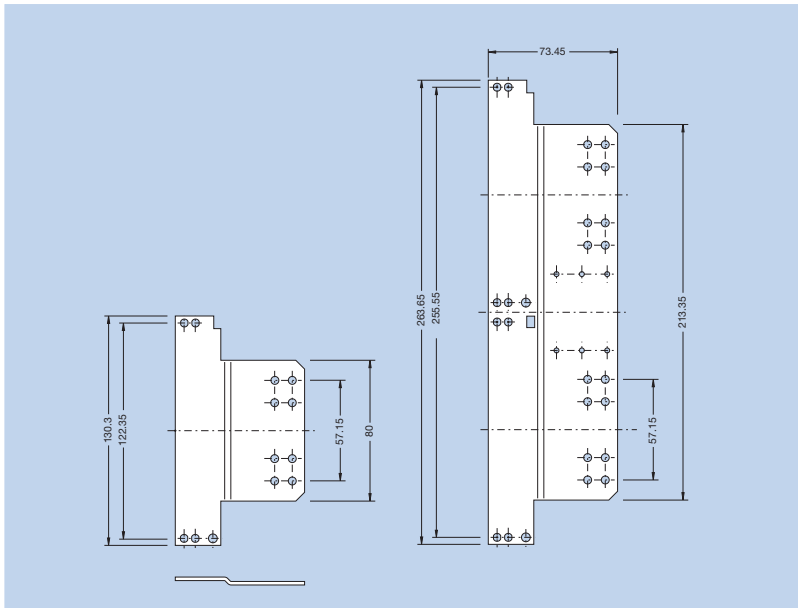| order no.: 409074387 |
|---|

Oval head screw
M6 x 16 DIN 7985
steel, nickel plated
Minimum order quantity 10 pieces

order no.: 409013919

This catalog contains stock and standard parts. Other products and sizes on request.
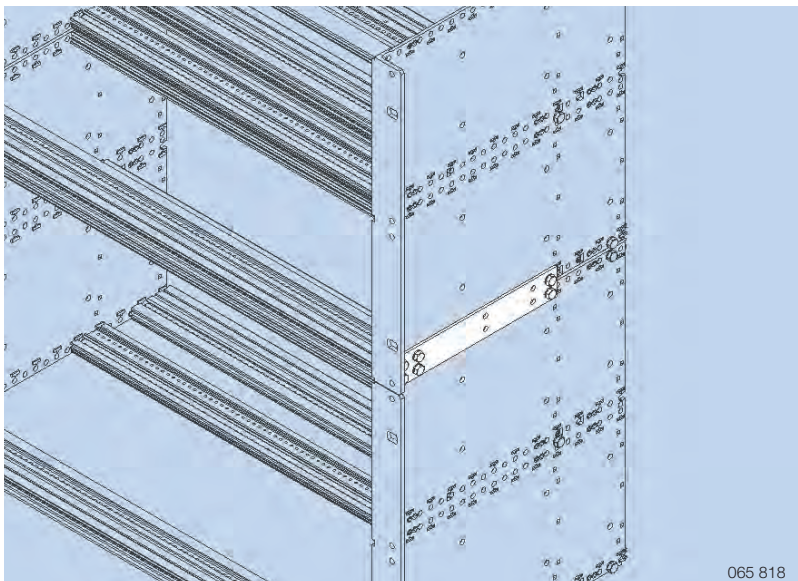
Side Panel Extender, Side Panel Connector

Side Panel Extender

Elongate a side panel about 60 mm to obtain a larger cabling space.
The side panel extender is mounted to the side panel by means of the mounting screws for the horizontal rails.

Material: aluminum, 2 mm thick
Finish: passivated

Ordering details

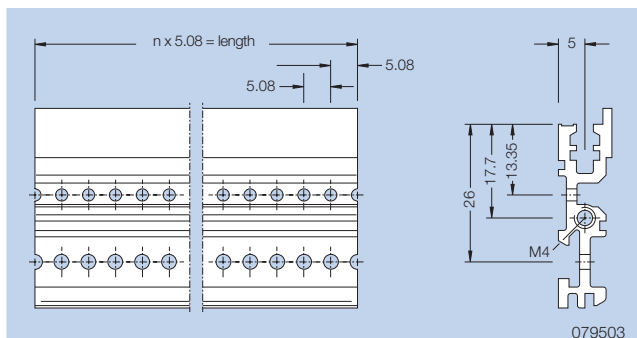|	order no. **409**
Side panel extender 3 U	087820
Side panel extender 6 U	087821

065 818

Side Panel Connector

Join two subracks, one above the other. The side panel connector is mounted to the side panels by means of the mounting screws for the horizontal rails. (nom. depth 160 mm).

Material: aluminum, 2 mm thick
Finish: blank

order no.: **409065819**

Horizontal Rails

079503

for subrack *FLEXIBLE Fi*
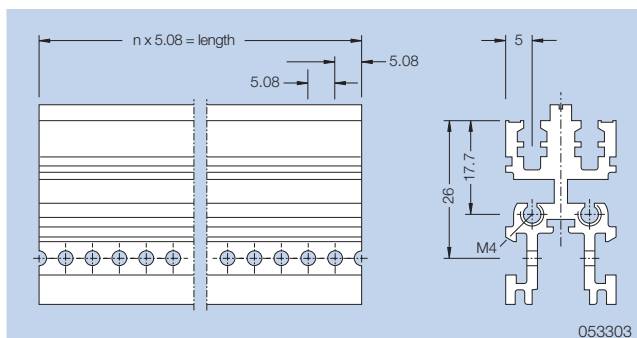
Front Profile VE1
(also rear profile by using a front panel on the rear).

Material: aluminum
Finish: anodized

Ordering details

	nom. width [HP]	length [mm]	order no. **409**
Front profile VE1	21	106.68	079521
Front profile VE1	43	218.44	079543
Front profile VE1	85	431.80	079585

053303

for subrack *FLEXIBLE, RFI-SHIELDED* and *InterRail*
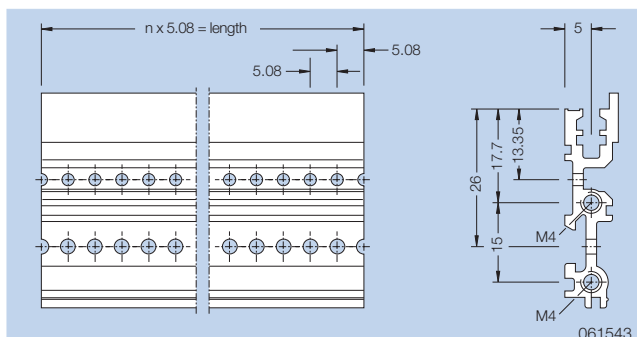
Front Profile 2xVE1
For partition e.g. 6 U subracks into two fields of 3 U.

Material: aluminum
Finish: passivated

Ordering details

	nom. width [HP]	length [mm]	order no. **409**
Front profile 2xVE1	21	106.68	053321
Front profile 2xVE1	29	147.32	053329
Front profile 2xVE1	43	218.44	053343
Front profile 2xVE1	85	431.80	053385

061543

for subrack *FLEXIBLE*

Front Profile VE12
With 2 tapped holes.

Material: aluminum
Finish: passivated

Ordering details

	nom. width [HP]	length [mm]	order no. **409**
Front profile VE12	43	218.44	062043
Front profile VE12	85	431.80	062085

This catalog contains stock and standard parts. Other products and sizes on request.
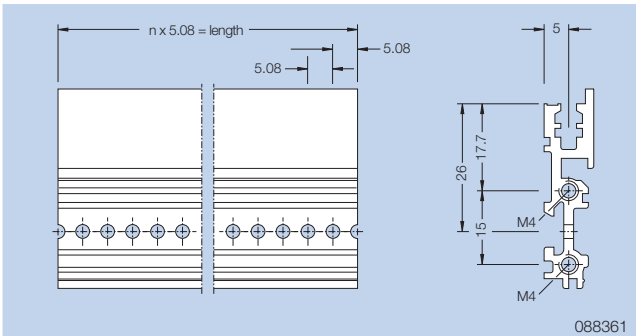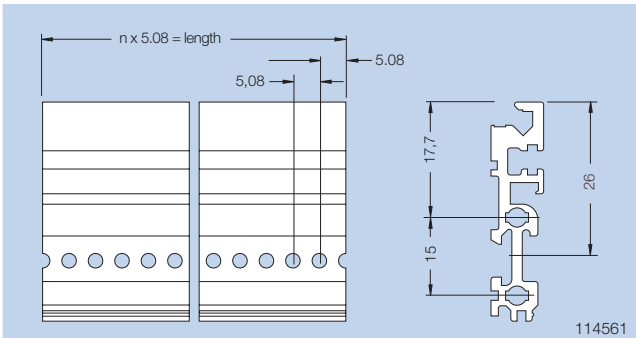
for subrack *RFI-SHIELDED*

Front Profile V12-RFI
(also rear profile by using a front panel on the rear).
With retainer for RFI-spring A2

Material: aluminum
Finish: passivated

Ordering details

	nom. width [HP]	length [mm]	order no. **409**
Front profile V12-RFI	43	218.44	090799
Front profile V12-RFI	85	431.80	088365

for subrack *RFI-SHIELDED*

Front Profile V12-SFP-RFI
For adapting a plug in front panel.

Material: aluminum
Finish: passivated

Ordering details

	nom. width [HP]	length [mm]	order no. **409**
Front profile V12-SFP-RFI	85	431.80	114562
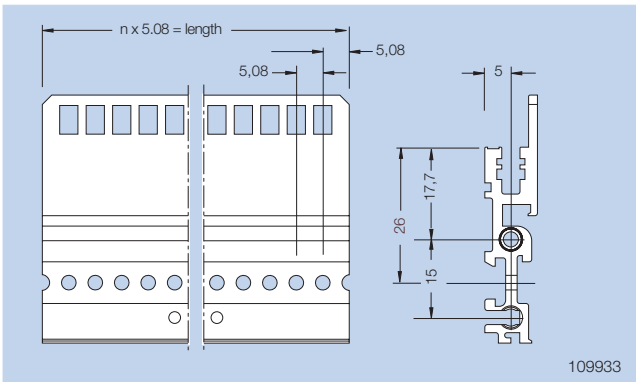
for subrack *RFI-SHIELDED* and *InterRail*

Front Profile V12-IEEE
With grid holes for IEEE handle.

Material: aluminum
Finish: passivated

Ordering details

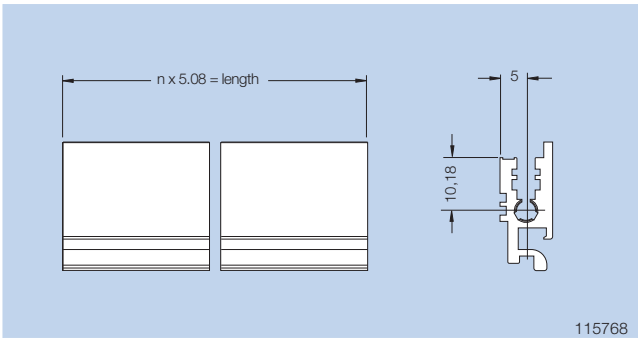|	nom. width [HP]	length [mm]	order no. **409**
Front profile V12-IEEE-RFI	43	218.44	111182
Front profile V12-IEEE-RFI	85	431.80	109934

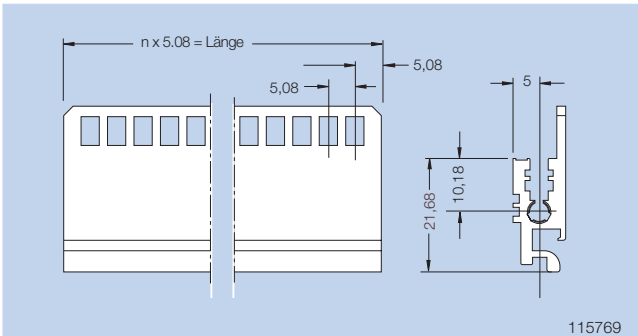# Horizontal Rails

115768

for subrack *InterRail*

Front Profile V1-HUCK
For subrack Rear I/O.

Material: aluminum
Finish: passivated

Ordering details

	nom. width [HP]	length [mm]	order no. **409**
Front profile V1-HUCK	43	218.44	**116588**
Front profile V1-HUCK	85	431.80	**115823**

115769

for subrack *RFI-SHIELDED* and *InterRail*

Front Profile V1-HUCK-IEEE
For subrack Rear I/O subrack. With grid holes for IEEE handle. Strengthened version.

Material: aluminum
Finish: passivated

Ordering details

	nom. width [HP]	length [mm]	order no. **409**
Front profile V1-HUCK-IEEE	43	218.44	**116507**
Front profile V1-HUCK-IEEE	85	431.80	**115824**
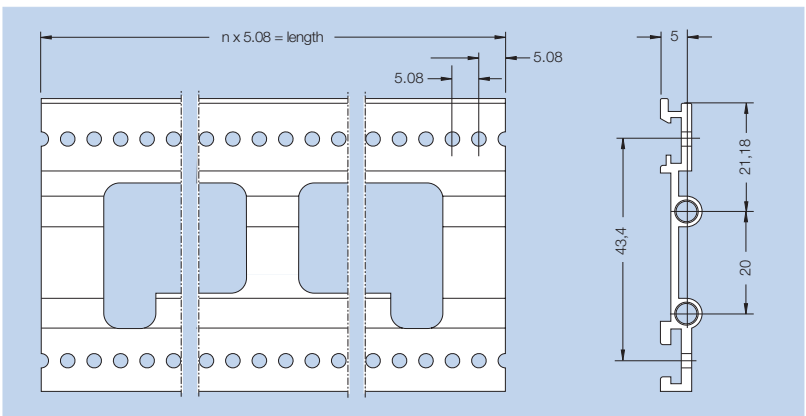
for subrack *RFI-SHIELDED* and *InterRail*

Support Profile
For insertion of card guides in subrack Rear I/O.

Material: aluminum
Finish: blank

Ordering details

	nom. width [HP]	length [mm]	order no. **409**
Support profile	43	218.44	**122421**
Support profile	85	431.80	**115771**

This catalog contains stock and standard parts. Other products and sizes on request.

106101
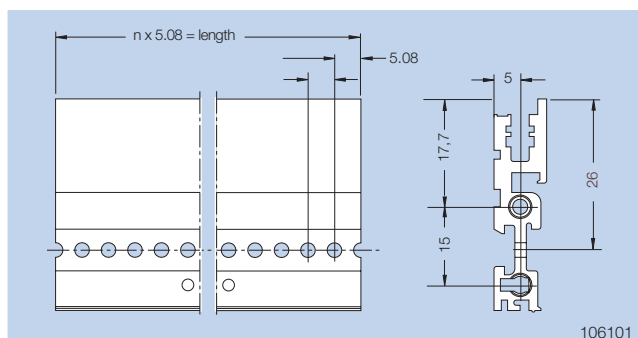
for subrack *RFI-SHIELDED* and *InterRail*

Front Profile V12-S-RFI
(also rear profile by using a front panel on the rear).
Strengthened version.

Material: aluminum
Finish: passivated

Ordering details

	nom. width [HP]	length [mm]	order no. **409**
Front profile V12-S-RFI	37	187.96	106102
Front profile V12-S-RFI	43	218.44	116586
Front profile V12-S-RFI	85	431.80	106103

047403
092601
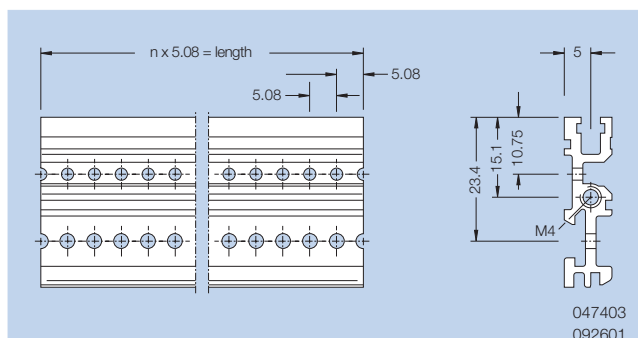
for subrack *FLEXIBLE* and *RFI-SHIELDED*

Rear Profile HE1
(type *alpha*).
Material: aluminum
Finish: anodized or passivated

Ordering details

	nom. width [HP]	length [mm]	anodized order no. **409**	passivated order no. **409**
Rear profile HE1	21	106.68	047421	161245
Rear profile HE1	43	218.44	047443	104994
Rear profile HE1	85	431.80	047485	092602

082205
049701
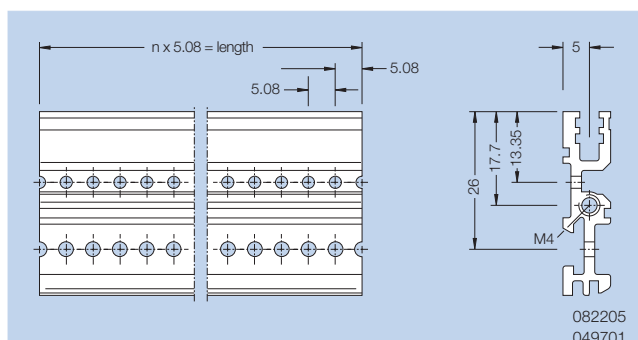
for subrack *FLEXIBLE* and *RFI-SHIELDED*

Rear Profile HE2
(type *delta*).
Material: aluminum
Finish: anodized or passivated

Ordering details

	nom. width [HP]	length [mm]	anodized order no. **409**	passivated order no. **409**
Rear profile HE2	21	106.68	049721	082121
Rear profile HE2	43	218.44	049743	082143
Rear profile HE2	85	431.80	049785	082185

Horizontal Rails

087476
078948

for subrack *FLEXIBLE*

Rear Profile HZE
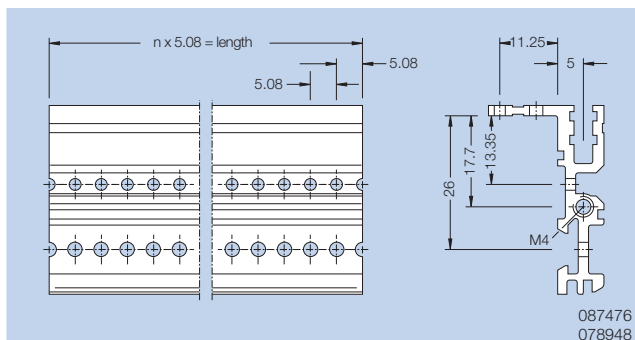(type *beta*) with integrated connector attachment.

Material: aluminum
Finish: anodized or passivated

Ordering details

	nom. width [HP]	length [mm]	anodized order no. 409	passivated order no. 409
Rear profile HZE	21	106.68	047221	108061
Rear profile HZE	43	218.44	047243	104030
Rear profile HZE	85	431.80	047285	087475

109935
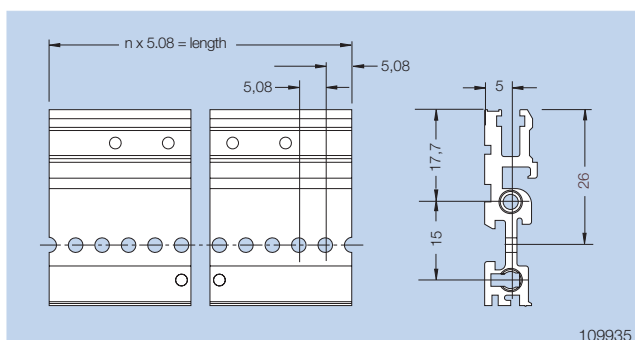
for subrack *RFI-SHIELDED* and *InterRail*

Rear Profile H22-RFI for scew on rear cover
(type *delta*) For use with a rear cover.

Material: aluminum
Finish: passivated

Ordering details

	nom. width [HP]	length [mm]	order no. 409
Rear profile H22-RFI for screw on rear cover	43	218.44	109 937
Rear profile H22-RFI for screw on rear cover	85	431.80	108 246

107840
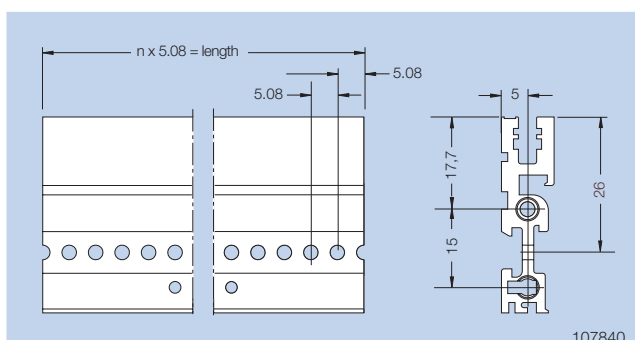
for subrack *InterRail*

Rear Profile H22-S-RFI
(type *delta*). Strengthened version.

Material: aluminum
Finish: passivated

Ordering details

	nom. width [HP]	length [mm]	order no. 409
Rear profile H22-S-RFI	37	187,95	107721
Rear profile H22-S-RFI	43	218.44	107841
Rear profile H22-S-RFI	85	431.80	107842

This catalog contains stock and standard parts. Other products and sizes on request.

049703
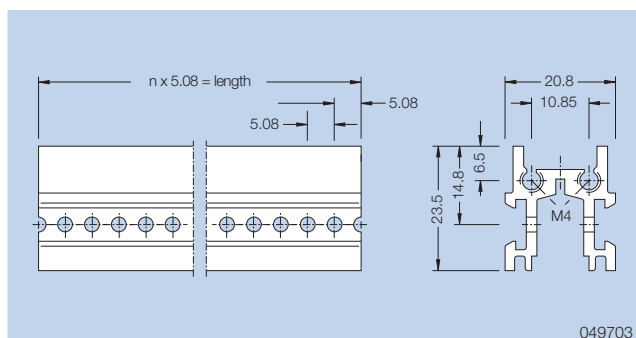
for subrack *FLEXIBLE* and *RFI-SHIELDED*

Rear Profile 2xHK
For partition, e.g. 6 U subracks into two fields of 3 U.

Material: aluminum
Finish: anodized

Ordering details

	nom. width [HP]	length [mm]	order no. **409**
Rear profile 2xHK	21	106.68	050121
Rear profile 2xHK	29	147,32	050129
Rear profile 2xHK	43	218.44	050143
Rear profile 2xHK	85	431.80	050185

108280

for subrack *InterRail*

Rear Profile H12-S
(type *alpha*) Strengthened version.

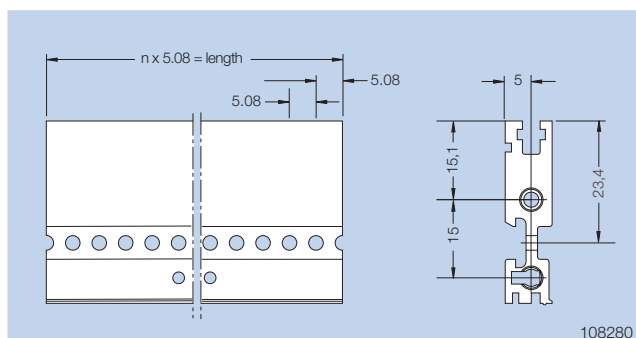**Material:** aluminum

Finish: passivated

Ordering details

	nom. width [HP]	length [mm]	order no. **409**
Rear profile H12-S	37	187.96	108987
Rear profile H12-S	43	218.44	121519
Rear profile H12-S	85	431.80	108988

E047803
C092501
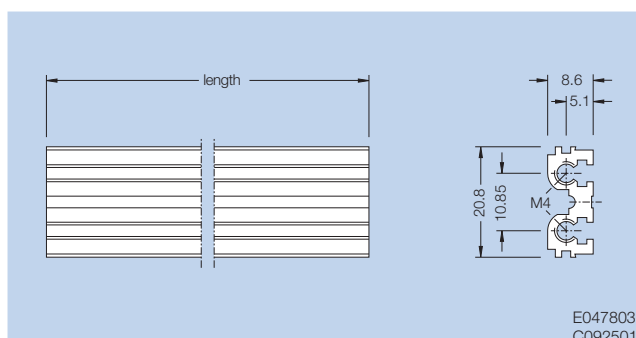
for subrack *FLEXIBLE* and *RFI-SHIELDED*

Center Profile ME1
(type alpha) Mounted in the rear of a 6 U subrack .

Material: aluminum
Finish: anodized or passivated

Ordering details

	nom. width [HP]	length [mm]	anodized order no. **409**	passivated order no. **409**
Center profile ME1	21	106.68	047821	161059
Center profile ME1	43	218.44	047843	115042
Center profile ME1	85	431.80	047885	092502

Subrack Accessories

Horizontal Rails

049702
091248

for subrack *FLEXIBLE* and *RFI-SHIELDED*

Center Profile ME2
(type delta) Mounted in the rear of a 6 U subrack.

Material: aluminum
Finish: anodized or passivated

Ordering details

	nom. width [HP]	length [mm]	anodized order no. 409	passivated order no. 409
Center profile ME2	21	106.68	049921	115701
Center profile ME2	43	218.44	049943	111199
Center profile ME2	85	431.80	049985	093548

047603
108007
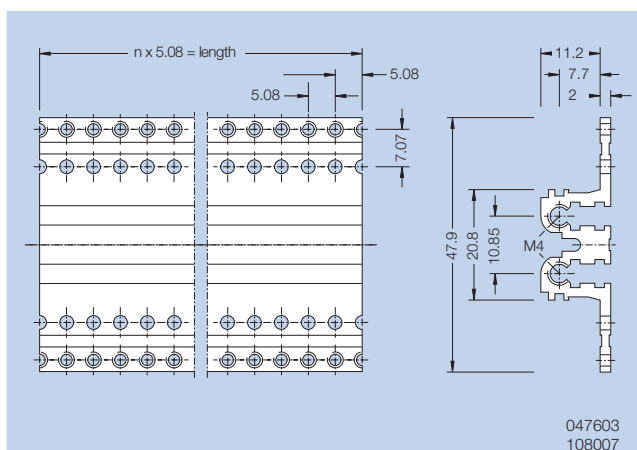
for subrack *FLEXIBLE* and *RFI-SHIELDED*

Center Profile MZE
(type beta) Mounted in the rear of a 6 U subrack, with integrated connector attachment.

Material: aluminum
Finish: anodized or passivated

Ordering details

	nom. width [HP]	length [mm]	anodized order no. 409	passivated order no. 409
Center profile MZE	21	106.68	047621	122377
Center profile MZE	43	218.44	047643	122378
Center profile MZE	85	431.80	047685	108008

This catalog contains stock and standard parts. Other products and sizes on request.
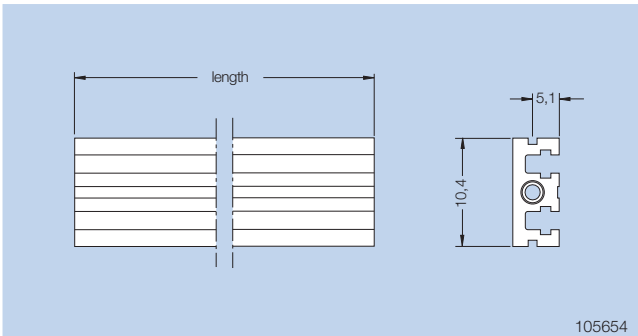
for subrack *InterRail*

Center Profile M1-S
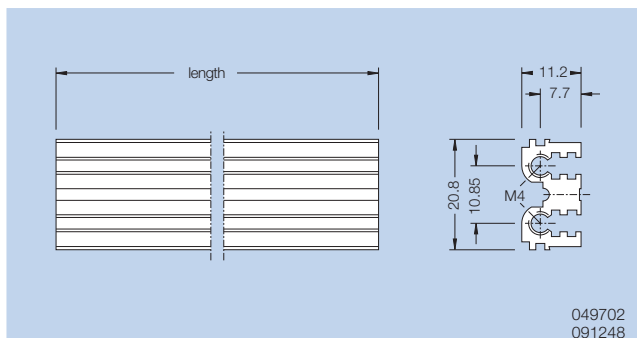
(type alpha) Mounted in the rear of a 6 U subrack.
Strengthened version.

Material: aluminum
Finish: passivated

105654

Ordering details

	nom. width [HP]	length [mm]	order no. 409
Center profile M1-S	37	187.96	105655
Center profile M1-S	43	218.44	122379
Center profile M1-S	85	431.80	105656
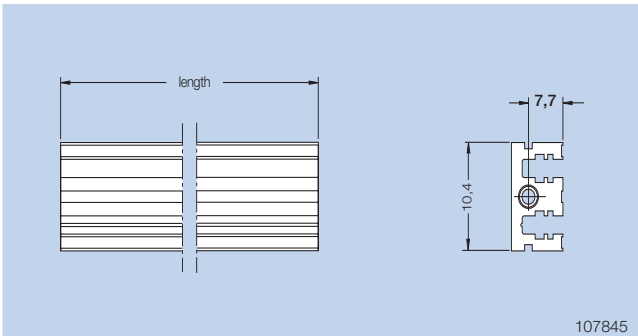
for subrack *InterRail*

Center Profile M2-S

(type delta) Mounted in the rear of a 6 U subrack.
Strengthened version.

Material: aluminum
Finish: passivated

107845

Ordering details

	nom. width [HP]	length [mm]	order no. 409
Center profile M2-S	37	187.96	107722
Center profile M2-S	43	218.44	107846
Center profile M2-S	85	431.80	107847

Accessories

	order no. 409
For contact between pr ont panel	
RFI-spring P2 - 42 HP	106546
RFI-spring P2 - 84 HP	106547
For contact between pr	
RFI-spring A2 - 42 HP	090800
RFI-spring A2 - 84 HP	085011

Subrack Accessories

Cover Plates

079009
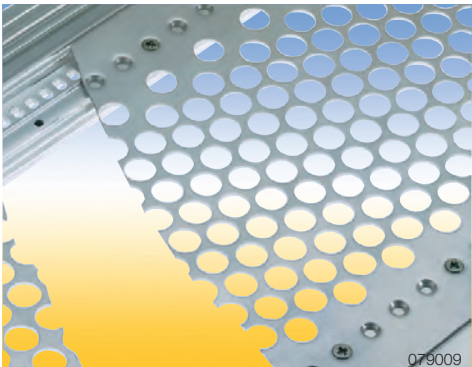
Accessories

Self tapping counter sunk scrrew M 2.5x10

Minimumm order quantity 100 pieces

order no.: **409105790**

for subrack *FLEXIBLE*

Cover Plate F, screw on
Hole diameter 8.0 mm.
The cover plate is mounted on the horizontal rails with self tapping countersunk screws at special holes

Material: aluminum, 1 mm thick
Finish: blank, seawater resistant

Ordering details

	nom. width [HP]	nom. depth [mm]	order no. 409
Cover plate F, screw on	84	160	079184
Cover plate F, screw on	84	220	079284
Cover plate F, screw on	84	280	079384

048049

for subrack *FLEXIBLE Fi*

Cover Plate Fi, slide-in
Hole diameter 8.5 mm
The cover plate slides in special slots in the profiles.

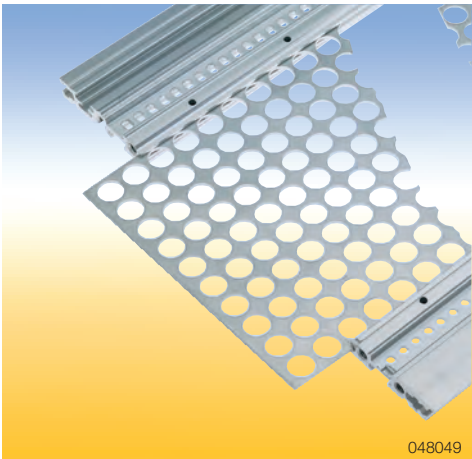**Material:** aluminum, 1.5 mm thick
Finish: blank, seawater resistant

Ordering details

	nom. width [HP]	length [mm]	order no. 409
Cover plate Fi, slide-in	84	160	048684
Cover plate Fi, slide-in	84	220	048784

099881

for subrack *FLEXIBLE Fs*

Cover Plate Fs, slide-in
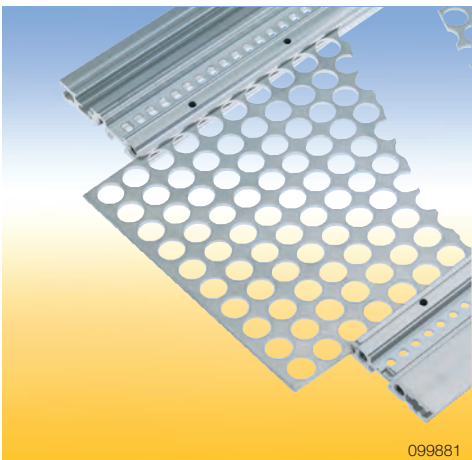Hole diameter 8.5 mm.
The cover plate slides in special slots in the profiles.

Material: aluminum, 1.5 mm thick
Finish: blank, seawater resistant

Ordering details

	nom. width [HP]	length [mm]	order no. 409
Cover plate Fs, slide-in	84	160	099883

This catalog contains stock and standard parts. Other products and sizes on request.

for subrack *RFI-SHIELDED* and *InterRail*

Cover Plate, inside

Hole diameter 4 / 5.2 x 4 mm. The cover plate is mounted with self tapping counter sunk screws on the inside of the side panels. Additionally the cover plate is secured to the horizontal rails by clips.

Material: aluminum, 1 mm thick
Finish: passivated, seawater resistant

Ordering details

	nom. width [HP]	nom. depth [mm]	order no. 409
Cover plate, inside	84	160	115270
Cover plate, inside	84	220	116603

	nom. width [HP]	PCB depth/ nom. depth [mm]	order no. 409
Cover plate, inside	84	160 / 220	121329
Cover plate, inside	84	160 / 280	122549
Cover plate, inside	84	220 / 280	122550

Accessories

	order no. 409
For assembling the cover plate to the side panel. Minimum order quantity 100 pieces	
Self tapping counter sunk screw M 2.5 x 6	067624
For assembling the cover plate to the horizontal rails. Minimum order quantity 10 pieces	
Clip	115224

for subrack *RFI-SHIELDED*

048049

Cover Plate, outside

Hole diameter 4 / 5.2 x 4 mm. The cover plate will be mounted with self tapping counter sunk screws outside of the side panels. Additionally the cover plate is secured to the horizontal rails by clips.

Material: aluminum, 1 mm thick
Finish: blank, seawater resistant

Ordering details

	nom. width [HP]	nom. depth [mm]	order no. 409
Cover plate, outside	84	240	161104
Cover plate, outside	84	260	161105
Cover plate, outside	84	340	115540
Cover plate, outside	84	460	115542

Accessories

	order no. 409
For assembling the cover plate to the side panel. Minimum order quantity 100 pieces	
Self tapping counter sunk screw M 4.7 x 6.5	111184
For assembling the cover plate to the horizontal rails. Minimum order quantity 10 pieces	
Clip	115224

Cover Plates,
Rear Cover

099881
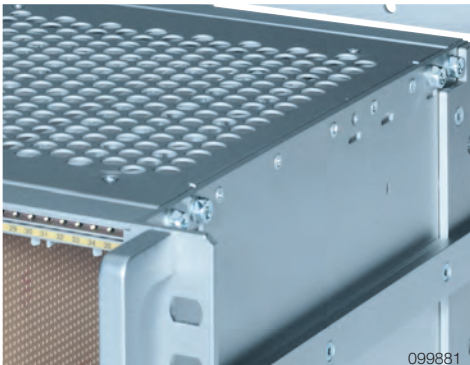
for subrack *InterRail*

Cover Plate *InterRail*
Hole diameter 8.0 mm.
The cover plate is mounted with self tapping counter sunk screws at the side panels and at the horizontal rails.

Material: aluminum, 1 mm thick
Finish: blank, seawater resistant

Ordering details

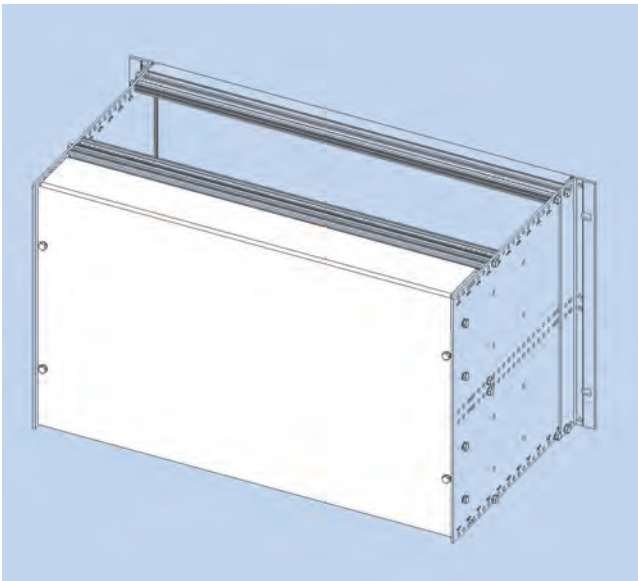|	nom. width [HP]	nom. depth [mm]	order no. 409
Cover plate *InterRail*	84	160	107906
Cover plate *InterRail*	84	220	107905
Cover plate *InterRail*	36	220	107723

Accessories

Self tapping counter sunk screw M 2.5 x 6

Minimumm order quantity 100 pieces

order no.: **409067624**

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for subrack *FLEXIBLE*

Rear Cover F 84 HP

Technische Daten

Material	Rear cover:	aluminum:
	Holding angle:	steel
Finish	Rear cover:	passivated
	Holding angle:	galvanized, passivated

Delivery:
Unassembled as single parts or as kit.

Ordering details

	nom. height [U]	height [mm]	order no. 409
Rear cover F	3	125.0	088190
Rear cover F	6	258.5	089244

Delivery kit rear cover F 84 HP

	3 U Stück	6 U Stück
Rear cover 84 HP	1	1
Holding angle	2	4
Mounting parts	1	1

This catalog contains stock and standard parts. Other products and sizes on request.
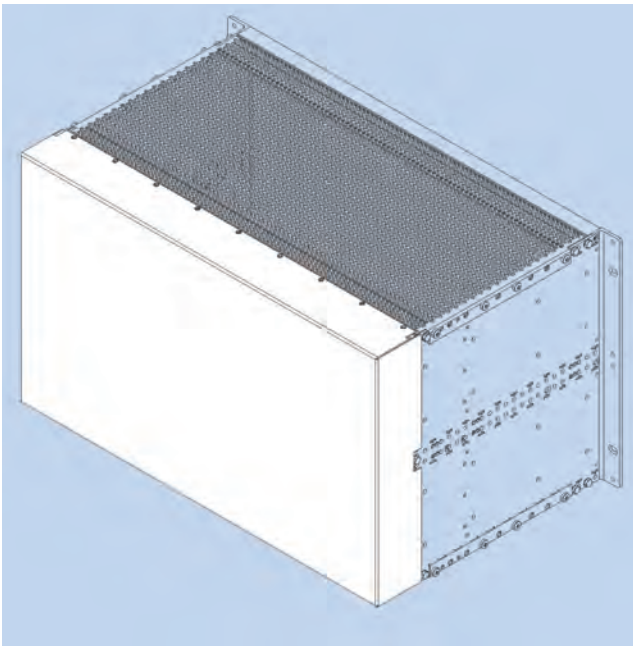
Rear Cover RFI 84 HP
Protective wiring rear cover for RFI shielded enclosure.

Material: aluminum, 1 mm thick
Finish: passivated

Delivery:
Unassembled as single parts or as kit.

Delivery:
1 rear cover 84 HP
2 RFI-spring U2 (4 for 6 U)
Mounting parts

Ordering details kit rear cover RFI 84 HP

	nom. height [U]	height [mm]	order no. 409
Rear Cover RFI	3	125.0	115898
Rear Cover RFI	6	258.5	115899
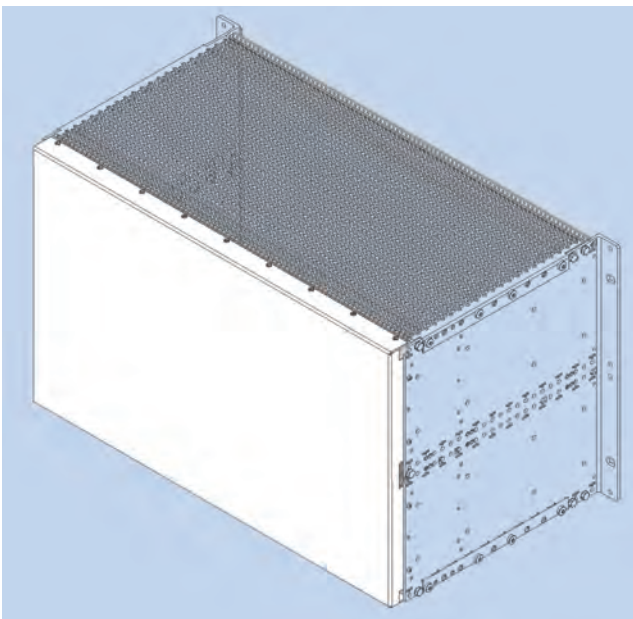
Rear Cover RFI 84 HP, inside
Protective wiring rear cover for RFI shielded enclosure.

Material: aluminum, 1 mm thick
Finish: passivated

Ordering details rear cover RFI 84 HP, inside

	nom. height [U]	height [mm]	order no. 409
Rear Cover RFI	3	133.15	108875
Rear Cover RFI	6	266.5	108876

Accessories

	order no. 409
For assembling the rear cover to the pr der quantity 100 pieces	
Counter sunk screw M 2.5 x 6	067624
For assembling the rear cover to the side panel. Minimumm order quantity 100 pieces	
Self tapping Taptite screw M 2.5 x 6	082239

Subrack Accessories

Subrack Divider

for subrack *FLEXIBLE* and *RFI-SHIELDED*

Subrack Divider Kit
2 x 3 U - 42 HP and 6 U - 40 HP
The divider separates a 6 U subrack into a field for 6 U PCB's and 2 fields of 3 U.

Finish: passivated

Delivery:
1 double front profile
   2xVE1-43 HP passivated
1 double rear profile
   2xHK-43 HP anodized
2 divider strips
Mounting parts

order no.: **409082063**
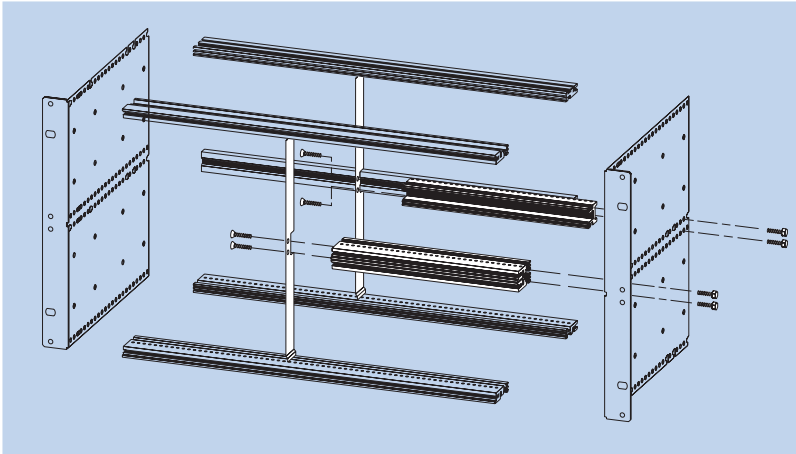
Assembly:
The short horizontal rails are assembled to the side panel. The dividing strip is inserted into the horizontal rail groove, fixed with a rotating motion and mounted on the short horizontal rails.

Positioning note:
For optimum use of available space in the subrack, PCB's of 6 U should be mounted left, and the 3 U on the right. In this case the dividing strip requires only 1 HP, otherwise 2 HP for the necessary air and leakage paths.

Single Parts

Blind Front Panel for Subrack Divider
For covering of the divider strip. Optional with RFI-springs for a RFI shielded front.

Material: aluminum
Finish: passivated
Dimensions: 2 HP x 6 U

order no.: **409116319**

Accessories

	order no. 409
RFI-spring F3 - 3 U	**111112**
RFI-spring F3 - 6 U	**111116**

Needed 1 x 6 U and 2 x 3 U RFI-springs

For assembly of the front panel to the horizontal rail
Minimum order quantity 100 pieces

Pan head screw M 2.5 x 11.3	**101917**

Counterbore for screw M4
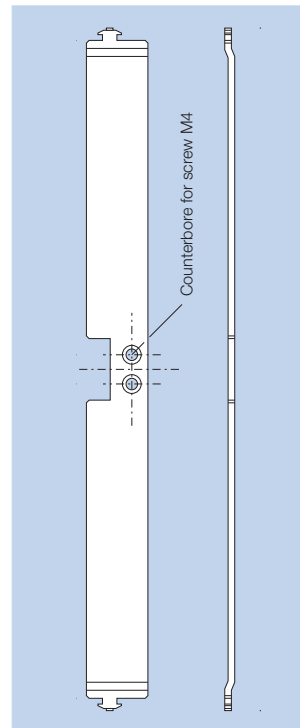
Divider Strip

Material: aluminum
                passivated
Dimensions: 6 U

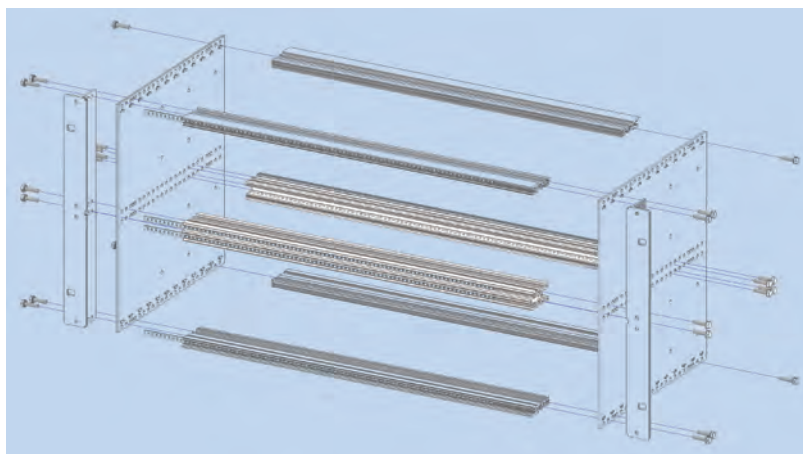order no.: **409078942**

Accessories
Counter sunk screw
M 4 x 16
For assembly of the divider strip to the horizontal rail:

Minimum order quantity 100 pieces

order no.: **409107342**

This catalog contains stock and standard parts. Other products and sizes on request.

for subrack *FLEXIBLE* and *RFI-SHIELDED*

Subrack Divider Kit 2 x 3 U - 84 HP
For partitioning a 6 U subrack in 2 x 3 U.

Delivery:
1 double front profile
   2xVE1 - 85HP colorless passivated 1
double rear profile
   2xHK - 85HP anodized
Mounting parts

order no.: **409166270**

Horizontal Mounting Frame
20 HP for horizontal mounting of 6 U
PCB's in 3 U subracks.
The horizontal mounting frame needs
52 HP in the width.
For 84 HP subracks are available
Placed right:
52 HP for horizontal mounting frame,
32 HP for 3 U-PCB's
Placed left:
52 HP for horizontal mounting frame,
1 HP for air and leakage paths,
31 HP for 3 U-PCB's.

Ordering details for horizontal mounting frame kits

		nom. depth [mm]	type *alpha* order no. **409**	type *beta* order no. **409**	type *delta* order no. **409**
6 U	anodized	user-	069047	064947	064687
6 U RFI	passivated	160	161161	-	161165
6 U RFI	passivated	220	161162	-	161166

Accessories
Threaded strip 20 x M 2.5

order no.: **409131688**

Partition Wall, Separating Wall
Wall and Door Installation Profiles

Partition Wall

For partitioning of a subrack part.
The partition wall 6 U can also be used as a RFI
shielded subrack divider in 6 U and 2x3 U parts.

Delivery:
1 partition wall
1 front panel 2 HP
Mounting parts

Accessories

	3 U order no. **409**	6 U order no. **409**
Shielding kit	**116416**	**116418**
consists of:	pieces	pieces
RFI-spring F3 - 3 U	2	2
RFI-spring F3 - 6 U	-	1
RFI-spring M - P1	1	2
Clamping plate	1	2
Mounting parts	1	1

Ordering details kit

	nom. depth 160 mm order no. **409**	nom. depth 220 mm order no. **409**
Partition wall 3 U	**116333**	**116334**
Partition wall 6 U	**116335**	**116336**
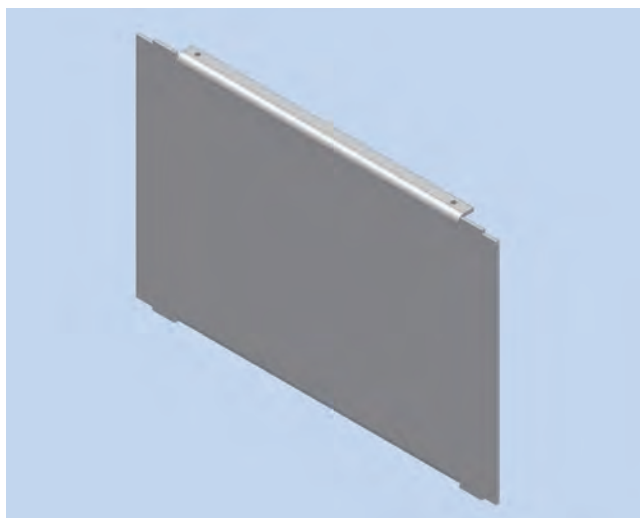
Separating Wall

Material: aluminum
Finish: blank

Delivery: 1 separating wall
Mounting parts

Ordering details kit

	nom. depth 160 mm order no. **409**	nom. depth 220 mm order no. **409**
Separating wall 3 U	**122648**	**122649**
Separating wall 6 U	**122650**	**122651**

for subrack *FLEXIBLE Fs*, *RFI-SHIELDED* and *InterRail*

Wall and Door Installation Profile Kit

For mounting subracks in a door, switch panel etc.
The installation profiles are mounted to the side panel by means of
the mounting screws to the horizontal rails.

Material: aluminum
Finish: anodized

Delivery:
2 wall installation profiles

Ordering details kit

	order no. **409**
Wall installation profile 42 HP	**108045**
Wall installation profile 84 HP	**108012**

This catalog contains stock and standard parts. Other products and sizes on request.
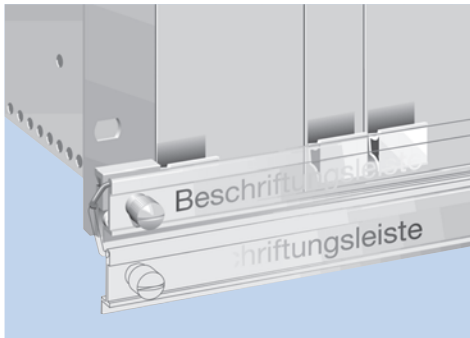
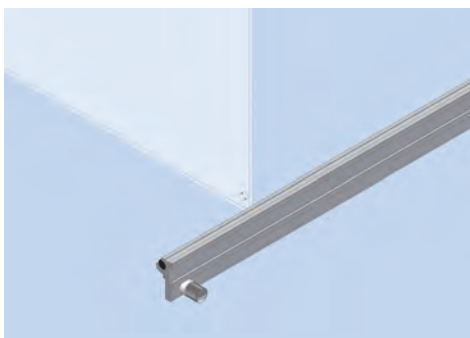### for subrack *FLEXIBLE Fs*, *RFI-SHIELDED*, *InterRail*

Labelling Rail 84 HP
This hinged labelling rail is mounted on the subrack flanges. Normally, it is placed in front of the front panels. For ejecting a PCB, the rail is turned down.

order no.: **409121941**	**Delivery:**
	1 labelling rail
	2 mounting flanges
	2 hinge brackets
	Mounting parts

Locking Rail 84 HP
For locking of PCB's without front panels.
The locking rail is mounted at the horizontal rail in front of the PCB's.
A labeling strip can be insert into a groove.

order no.: **409120790**	**Delivery:**
	1 locking rail
	1 rubber
	Mounting parts

Label Strip
Self adhesive. For identifying PCB slots in the subrack. The PCB slot number can be read through the hole in the front panel.
Note:
The label strip cannot be read while using the RFI spring P2.
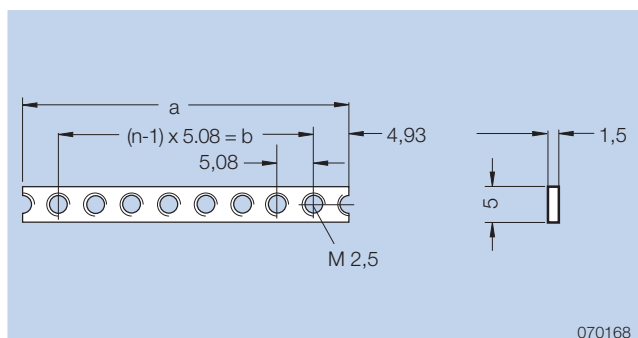
Material: PC/PE-foil
Color: yellow/black

Delivery
Minimum purchase: 18 pieces on a papersheet.

Ordering details kit

|	order no. **409**
Label strip 01 - 84	024738
Label strip 84 - 01	024740

Threaded Strips

070168

Threaded Strip M 2.5

For attaching the front panels and assembly parts
at the wiring field.

Material: steel
Finish: galvanized, passivated

Ordering details threaded strip M 2.5

n = number of threads	a [mm]	b [mm]	order no. 409
20	106.38	96.52	131688
21	111.46	101.60	130883
28	147.02	137.16	131701
32	167.34	157.48	131548
36	187.66	177.80	103777
42	218.14	207.28	100843
84	431.50	421.64	091255

034636
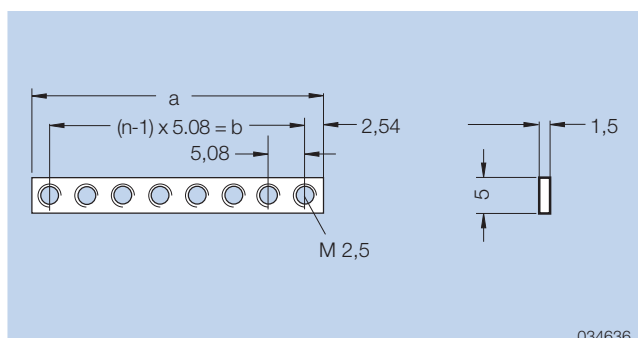
Threaded Strip M 2.5 addable

This threaded strip could be added to other strips
and the space between the holes always adds
up 5.08 mm.

Material: steel
Finish: galvanized, passivated

Ordering details threaded strip M 2.5 addable

n = number of threads	a [mm]	b [mm]	order no. 409
10	50.80	45.72	131836
20	101.60	96.52	131845
28	142.24	137.16	106751
42	213.36	207.28	131813
84	426.72	421.64	131478

118606
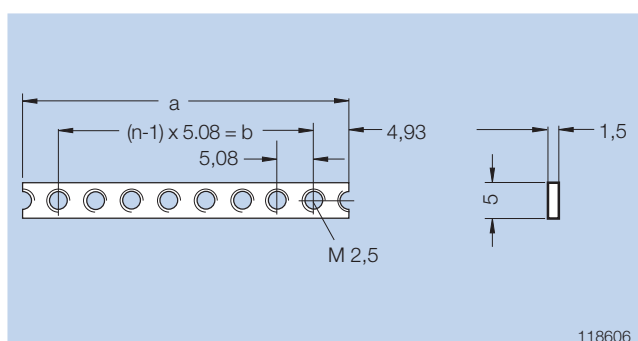
Threaded Strip M 2.5 - stainless steel

For attaching the front panels and assembly parts
at the wiring field
This threaded strip is for nonmagnetic applications.

Material: stainless steel
Finish: blank

Ordering details threaded strip M 2.5 - stainless steel

n = number of threads	a [mm]	b [mm]	order no. 409
84	431.50	421.64	118608

037257
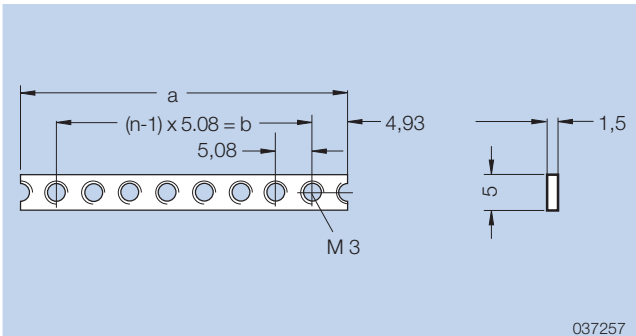
Threaded Strip M 3

Material: steel
Finish: galvanized, passivated

Ordering details threaded strip M 3

n = number of threads	a [mm]	b [mm]	order no. 409
84	431.50	421.64	130890

037256
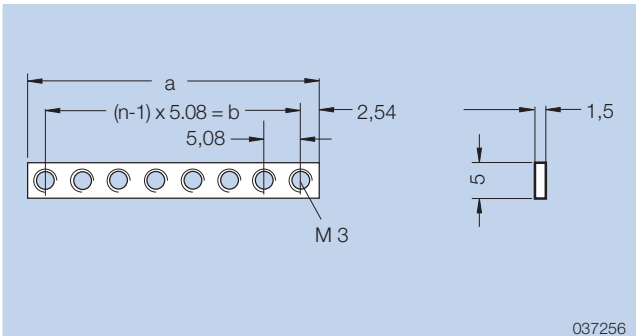
Threaded Strip M 3 addable

Material: steel
Finish: galvanized, passivated

Ordering details threaded strip M 3 addable

n = number of threads	a [mm]	b [mm]	order no. 409
84	426.72	421.64	132038

Z-Rail A,
Mounting Rail B

023521

Accessories

Mounting parts for assembling the Z-rail A:
for 84 HP Z-rail, 5 places suggested.

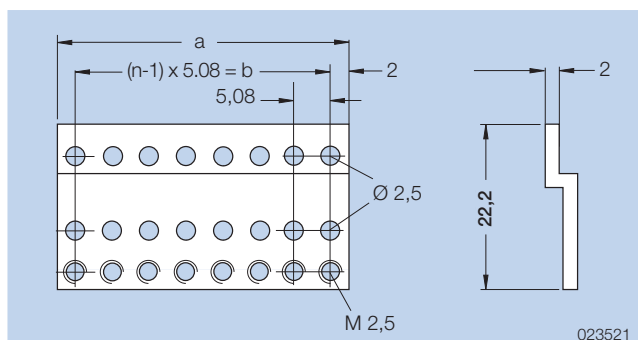Minimum order quantity 100 pieces

	order no. 409
Oval head screw M 2.5 x 8 ISO 7045	094602
Washer 2.7	013911
Fitting bolt M 2.5 x 6.5 (for connectors)	032708

Z-Rail A tapped M 2.5
For mounting connectors in accordance to IEC 60603/
DIN 41 612 in subracks type *alpha*.
Mounted on the rear profile.

Material: aluminum
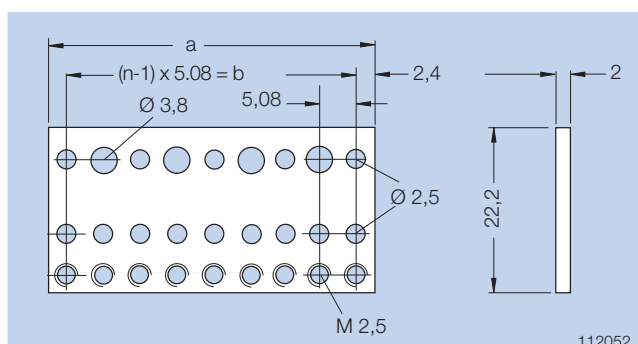**Finish:** passivated

Ordering details Z-rail A tapped M 2.5

n [HP]	a [mm]	b [mm]	Order no. 409
22	110.68	106.68	024361
42	212.28	208.28	024380
84	426.44	421.64	026586

112052

Accessories

Mounting parts for assembling the mounting rail B:
for 84 HP Z-rail, 5 places suggested.

Minimum order quantity 100 pieces

	order no. 409
Washer 2.7	013911
Fitting bolt M 2.5 x 6.5 (for connectors)	032708
for type alpha	
Oval head screw M 2.5 x 12 ISO 7045	094604
for type delta	
Oval head screw M 2.5 x 8 ISO 7045	094602

Mounting Rail B tapped M 2.5
For mounting connectors in accordance to IEC 60603/
DIN 41 612.

For mounting at the rear profile on subracks *type alpha*
with insulating strip and insulating bushings.

For mounting at the rear profile on subracks *type delta*.

Material: aluminum
Finish: blank

Ordering details mounting rail B tapped M 2.5

n [HP]	a [mm]	b [mm]	order no. 409
42	212.28	208.28	112054
84	426.44	421.64	112055

This catalog contains stock and standard parts. Other products and sizes on request.

Insulating Strip

For insulated mounting of wiring supports, e. g. of the mounting rail B.
Mounted between horizontal rail and wiring support.

Technical data

Material	PPO / PC
Continous temperature	– 40 °C up to + 105 °C
Fire protection class	UL 94 V–1
Color	gray

Ordering details

	length [HP]	order no. **409**
Insulating strip-40	40	**061541**
Insulating strip-84	84	**051981**

Insulating Bushing 2.6

For use together with mounting rail B and insulating strip.

Technical data

Material	PC
Continous temperature	– 40 °C up to + 115 °C
Fire protection class	UL 94 V–0
Color	transparent

order no.: **409018055**

Card Guide ECONOMY
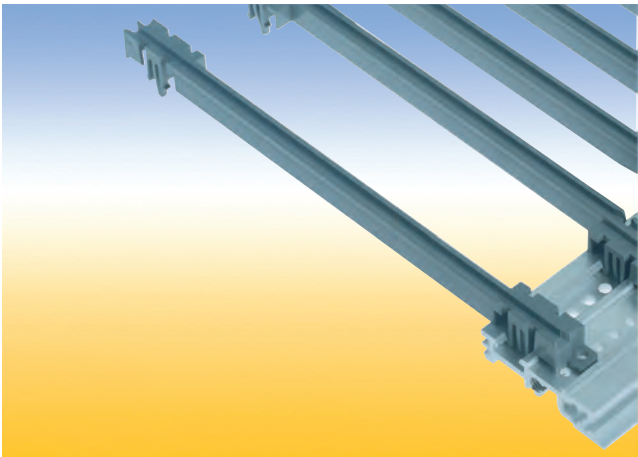
for subrack *FLEXIBLE*

Card Guide ECONOMY
An inexpensive snap-in card guide that can also be secured to the horizontal rails with self tapping screws.

Technical data

Material	PC
Color	gray
Continous temperature	– 40 °C up to + 115 °C
Fire protection class	UL 94 V–0

Ordering details

	nom. length [mm]	PCB thickness [mm]	order no. 409
Card guide ECONOMY	160	1.6	108173
Card guide ECONOMY	220	1.6	047601

Accessories

Self tapping oval head screw M 2.5 x 5
For assembling the card guides to the horizontal rails

Minimum order quantity 100 pieces

order no.: **409039691**

This catalog contains stock and standard parts. Other products and sizes on request.

Card Guide UNIVERSAL
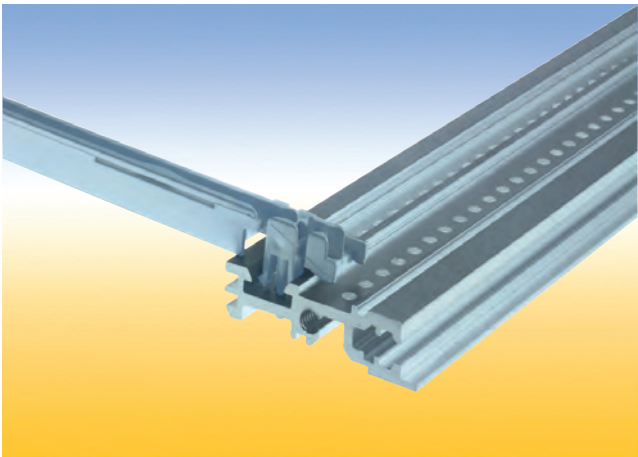
Card Guide UNIVERSAL
This is an all-purpose card guide with provision for a spring to contact front panels.

Technical data

Material	PC
Color	gray
Continous temperature	– 40 °C up to + 115 °C
Fire protection class	UL 94 V–0

Ordering details

	nom. length [mm]	PCB thickness [mm]	order no. 409
Card guide UNIVERSAL	160	1.6 - 2.0	061468
Card guide UNIVERSAL	220	1.6 - 2.0	061469
Card guide UNIVERSAL	280	1.6 - 2.0	061526

Accessories

Grounding contact for front panels

order no.: **409058102**

Card Guide
with integrated push and pull assist
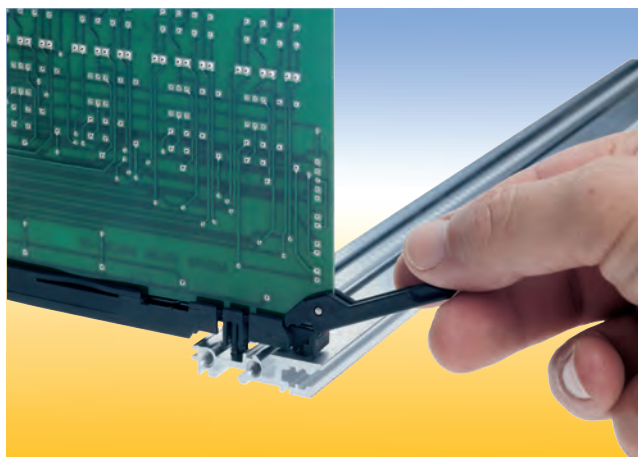
Card Guide with integrated push and pull assist
This special card guide with an integral small lever aids in the handling of PCB's with high pin plug in connectors.
The lever is supported by the walls of a special guide chamber when the board is pulled out or pushed in.
It is suitable for a spring to contact a track near the PCB edge.
This card guides are snap-in and can be secured with screws.

Delivery:
1 card guide top
1 card guide buttom

Technical data

Material	card guide: PBT lever: PPO grooved pin: steel, blank
Color	black
Continous temperature	– 40 °C up to + 130 °C
Fire protection class	UL 94 V–0

Ordering details kit
card guide with integrated push and pull assist

	nom. length [mm]	PCB thickness [mm]	order no. 409
Card guide 160	160	1.6	112453
Card guide 220	220	1.6	112454
Lever with grooved pin	-	1.6	111157

For a card guide kit needed 2 levers

Accessories

	Order no. 409
PCB track contact PROFIL	103358

For assembling the card guides to the horizontal rails. Minimum order quantity 100 pieces

Oval head screw M 2.5 x 12	094604
Hexagonal nut M 2.5	013938
Washer 2.7	013911

This catalog contains stock and standard parts. Other products and sizes on request.
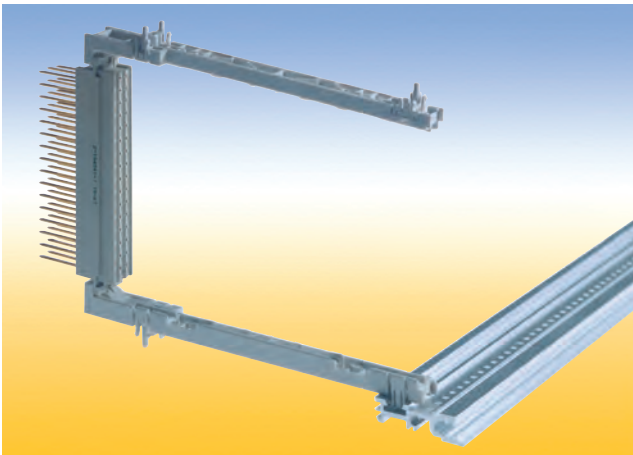
Card Guide CONN
For easy screwless snap-on mounting of connectors accordance to IEC 60603/ DIN 41 612.
With a provision for a spring to contact front panels and for contacting a track near the PCB edge.
This snap-in card guides can als be secured with screws.

Delivery:
1 card guide CONN top
1 card guide CONN bottom

Technical data

Material	nom. length 160: PC nom. length 220: PBT
Color	gray
Continous temperature	Lexan: – 40 °C up to + 115 °C PBT: – 40 °C up to + 130 °C
Fire protection class	UL 94 V–0

Ordering details kit card guide CONN

	nom. length [mm]	PCB thickness [mm]	order no. 409
Card guide CONN	160	1.6	083091
Card guide CONN	220	1.6 - 2.4	116200

Accessories

	order no. 409
Grounding contact for front panels	058102
PCB track contact PROFIL	103358

For assembling the card guides to the horizontal rails. Minimum order quantity 100 pieces

Oval head screw M 2.5 x 12	094604
Hexagonal nut M 2.5	013938
Washer 2.7	013911

Card Guide VIB

Card Guide VIB
New model with improved flammability properties in accordance with EN45545-2 and low halogen content.
Lattice construction for heavy mechanical loads.
With a provision for a spring to contact front panels and for contacting a track near the PCB edge.
Card guides can additionally be fixed with screw and nut for increased shock and vibration requirement. Exception: Nominal length 280 always needs to be fixed by screws.

Technical data

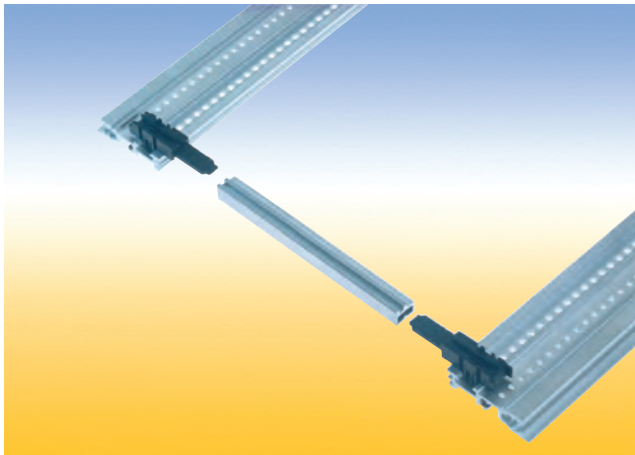| Material	PC glass fiber reinforced
Color	black
Continous temperature	up to + 125 °C
Fire protection class	UL 94 V–0
Halogen content	halogen free (IEC 61249-2-21)
Fire protection on railway vehicles (DIN EN 45545-2) R22, R23, R24	HL3

Two versions:

1. Without nut: Can be added subsequently in the existing hexagonal molding.

2. With nut: For assembly to the horizontal rail by oval head screws M 2.5 x 12.

Ordering details card guide VIB

nom. length [mm]	PCB thickness [mm]	snap-in	1. without nut order no. 409	2. with nut order no. 409
80	1.6 - 2.4	yes	140967	-
80	1.6 - 2.4	yes	140968	-
100	1.6	yes	140964	140993
160	1.6	yes	140986	141001
160	2.0	yes	140987	141002
160	2.4	yes	140965	140994
220	1.6	yes	140969	140996
220	2.4	yes	140970	140997
280	1.6	-	-	140998

Accessories

	order no. 409
Grounding contact for front panels	058102
PCB track contact PROFIL	103358

For assembling the card guides to the horizontal rails. Minimum order quantity 100 pieces

Oval head screw M 2.5 x 12	094604
Hexagonal nut M 2.5	013938
Washer 2.7	013911

This catalog contains stock and standard parts. Other products and sizes on request.

Card Guide VARIO

This is a length variable card guide constructed from 3 pieces. The center piece can be cut to any length. With a provision for a spring to contact front panels. These snap-in end pieces can also be secured with screws.

Two versions:
1. With pressed-in nut M 2.5
for assembly to the horizontal rail with oval head screws M 2.5 x 12

2. Without a nut, but one can be added in the existing hexagonal molding.

Technical data

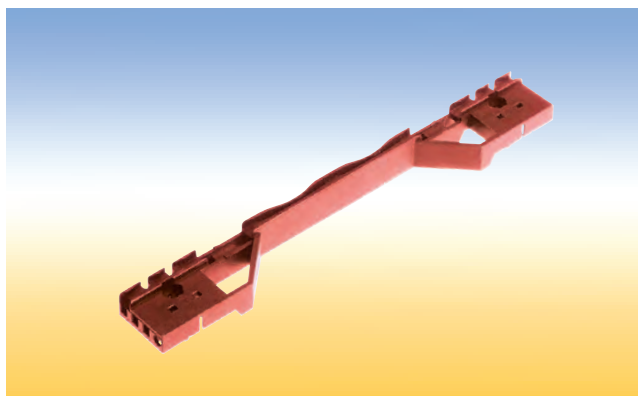|	
Material	end pieces: PPO center piece: aluminum or PPO
Color	end pieces: black center piece: black, silver
Continous temperature	– 40 °C up to + 105 °C
Fire protection class	UL 94 V–1

Ordering details card guide VARIO

	length [mm]	PCB thickness [mm]	order no. 409
Pair of end pieces			
with nut M 2.5	-	1.6	061086
without nut	-	1.6	061051
with nut M 2.5	-	2.4	061088
without nut	-	2.4	061052
center piece			
plastic	1000	1.6	061061
aluminum	1000	1.6	061059
plastic	1000	2.4	061062
aluminum	1000	2.4	061060

Accessories

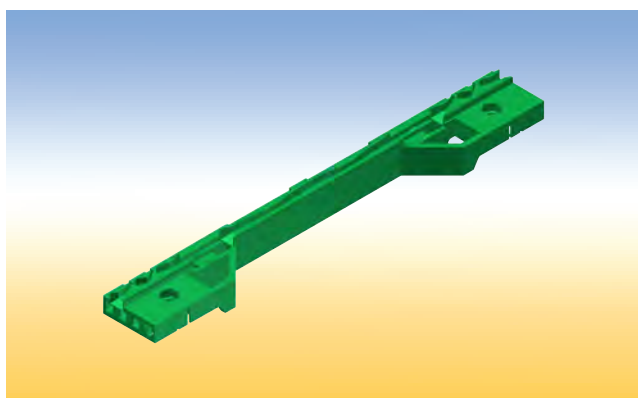|	order no. 409
Grounding contact for front panels	058102

For assembling the card guides to the horizontal rails. Minimum order quantity 100 pieces

Oval head screw M 2.5 x 12	094604
Hexagonal nut M 2.5	013938
Washer 2.7	013911

Card Guide IEEE and
Card Guide IEEE with 1/2 HP lateral offset

Card Guide IEEE

This card guide is in accordance to specification IEEE 1101.10.

The required coding of the IEEE is integrated in the card guide head.

With provision for the IEEE contact spring for grounding of the alignment-pins of the PCB's front panel. Also with a provision for contacting a track near the PCB edge. This snap-in card guides can be secured with screws.

Technical data

Material	PBT
Color	black or red
Continous temperature	– 40 °C up to + 115 °C
Fire protection class	UL 94 V–0

Ordering details for card guide IEEE

color	nom. length [mm]	PCB thickness [mm]	order no. 409
black	160	1.6 - 2.4	113400
black	220	1.6 - 2.4	131973
red	160	1.6 - 2.4	116440

Card Guide IEEE with 1/2 HP lateral offset

This card guide is also in accordance to specification IEEE 1101.10.

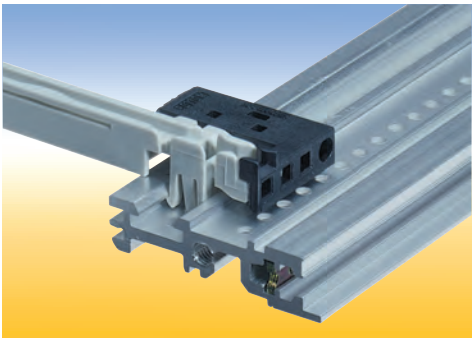For CompactPCI-power supplies and for Plug-in units fitted with SMD.

With provision for the IEEE contact spring for grounding of the alignment-pins of the PCB's front panel.

Also with a provision for contacting a track near the PCB edge.

This card guide is secured with screws.

Technical data

Material	PBT
Color	green
Continous temperature	– 40 °C up to + 115 °C
Fire protection class	UL 94 V–0

Ordering details for card guide IEEE with 1/2 HP lateral offset

color	nom. length [mm]	PCB thickness [mm]	order no. 409
green	160	1.6 - 2.4	130889

Accessories for Card Guide IEEE

	order no. 409
contact spring IEEE	113450
coding pin IEEE gray	113713
coding pin IEEE red	116442
PCB track contact PROFIL	103358

For assembling the card guides to the horizontal rails. Minimum order quantity 100 pieces

Lens head screw M 2.5 x 12	094604
Hexagonal nut M 2.5	013938
Washer 2.7	013911

This catalog contains stock and standard parts. Other products and sizes on request.

Accessories for Card Guides

Subrack Accessories

for card guide UNIVERSAL, CONN, VIB and VARIO

Coding Head IEEE
Snapped on the head of standard card guides to comply to the requirements of the specification IEEE 1101.10
Functions:
1. Holding the IEEE contact spring for grounding the alignment pins of the front panel.
2. Adapting the IEEE coding pin.
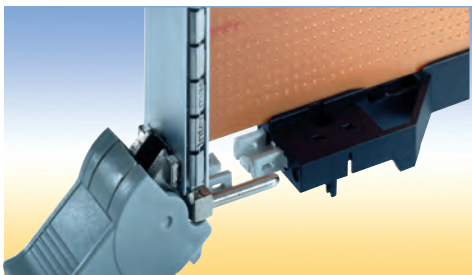3. Guiding the 1.6 to 2.4 mm thick PCB.

Technical data

Material	PC
Color	black, red
Fire protection class	UL 94 V–0

Ordering details kit

	order no. 409
coding head IEEE - black	113905
coding head IEEE - red	116441

Delivery:
1 coding head IEEE top
1 coding head IEEE bottom

Contact Spring IEEE
Snapped into the IEEE card guide or IEEE coding head to ground the alignment pin of the front panel.

Material: tin-bronze

order no.: **409113450**

Coding Pin IEEE
Snapped into the IEEE card guide or IEEE coding head.

Technical data

Material	PC
Fire protection class	UL 94 V–0

Ordering details

	order no. 409
coding pin IEEE - gray	113713
coding pin IEEE - red	116442

This catalog contains stock and standard parts. Other products and sizes on request.
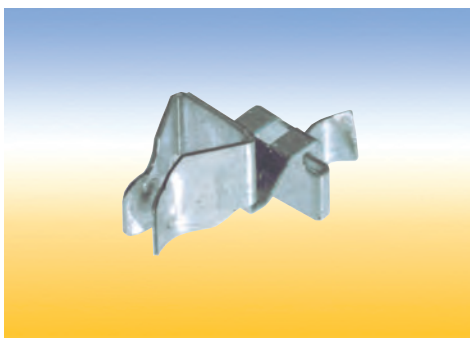
Accessories for Card Guides

PCB Track Contact PROFIL

Snapped into a card guide, connecting a PCB's edge to the horizontal rail of a subrack.

Technical data

Material	tin-bronze
Finish	tin-plated
Fire protection class	UL 94 V–0

order no.: **409103358**

Grounding Contact for Front Panels

For premating grounding. In connection with front connector with male contact.

Material: tin-bronze
tin-plated

order no.: **409058102**

Accessories

Front connector with male contact

	order no. **409**
top	**107728**
bottom	**107727**

Cover for Ventilation Openings

Snapping into the horizontal rails. Covers the ventilation openings between card guides.

Material: plastic
Fire protection class: UL 94 V-0

Ordering details

	nom. length [mm]	order no. 409
Front connector with male contact 4 HP	160	**106530**
Front connector with male contact 4 HP	220	**106531**

PCB Lead-In

For easy lead-in of the PCB into the card guide.

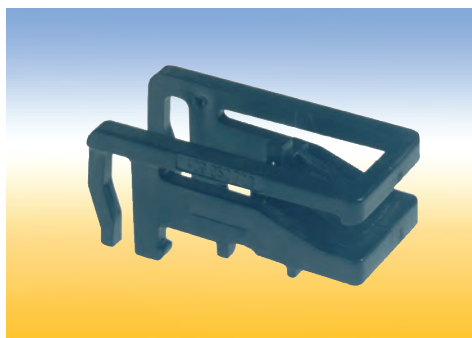### Technical data

Material	PC, 10% fiber glass reinforced
Color	gray, similar RAL 7044
Fire protection class	UL 94 V–0

Delivery:
1 PCB lead-in top
1 PCB lead-in bottom

order no.: **409092785**

This catalog contains stock and standard parts. Other products and sizes on request.

PCB Locking Spring, plastic
Secures PCB without front panels.

Technical data

Material	PC
Color	black
Fire protection class	UL 94 V–0

order no.: **409052720**

PCB Locking Device Kit
Secures PCB's without front panels. Used for easy locking and ejecting of PCB's

Technical data

Material	handle: PBT pin: steel
Color	black
Fire protection class	UL 94 V–0

Delivery
Kit, unassembled

Delivery:
2 handles
2 pins
2 PCB locking springs

Ordering details kit

	order no. **409**
PCB locking device 1.6	068698
PCB locking device 2.4	102297