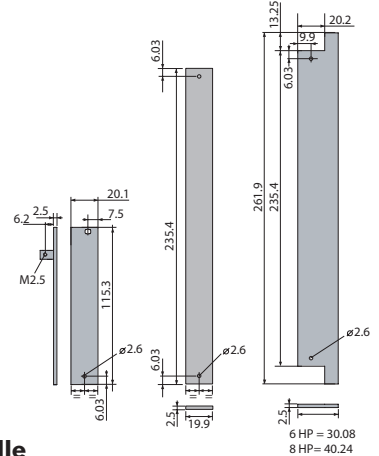


1: Unibox 14

1.6.12 Front Panel with Cutout for IEC Ejector Handle

- Aluminium 2.5 mm, clear anodised (non-conductive)
- PCB mounting lugs are formed on the rear face of the panel (only 3 U-Version)
- No PCB fixing screws on the front face of the panel, leaving more space for silk screening and mounting front panel components
- Suitable for all sub racks and cases
- 3 U front panels prepared for one handle
- 6 U front panels prepared for two handles
- **Scope of delivery:**
 - Front panel, clear anodised
- Front panel screws see 2.1.2.1 (for 3 U-Version only)
- IEC ejector handles, see 2.1.2.2



2.1.2 Front Panel with Cutout for IEC Ejector Handle

Width	B		Part-No. 3 U	Part-No. 6 U
	mm	inch		
4 HP	20.0	0.79	26N304-51	21N604-51
6 HP	30.2	1.19		21N606-51
8 HP	40.3	1.59		21N608-51

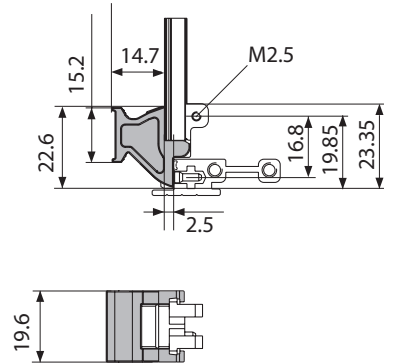
2.1.2.1 Front Panel Screws (for 3 U-Version only)

- Set of 10 screws
- With screw retainer
- Front panel 3 U = 1 screw

Description	Part-No. 10 pcs.
Torx screws M2.5 x 11.3, size T8, with plastic screw retainer	63K159
Rounded head screws recessed M2.5 x 11.3, with plastic screw retainer	63-159

1.6.12.2 Ergonomic Ejector Handles acc. to IEC

- Simple assembly of plug-in units
- Allows trouble-free extraction of electronic units with multi-pole connectors
- Main features in one part: card holder, ejector handle and centring pin
- Reset spring for safe insertion
- One version for top and bottom only
- Handle is injection moulded, glass-reinforced plastic, UL94 V-0
- Card holder is zinc die-cast, nickel plated
- Reset spring is stainless steel
- **Scope of delivery:**
 - Ejector handle
 - Assembly material (screws M2.5 for fixing of card holder/printed board/front panel)
- Front panel with special cutouts have to be ordered separately

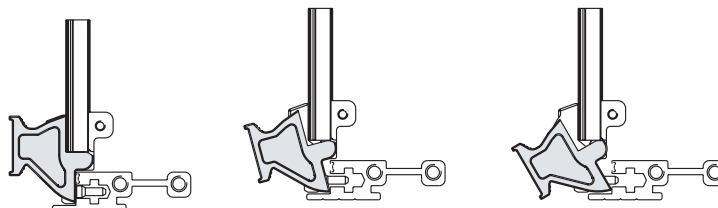


2.1.2.2 Ejector Handle acc. to IEC

Description	Part-No.
Ejector handle black	81-233
Ejector handle grey	81-234

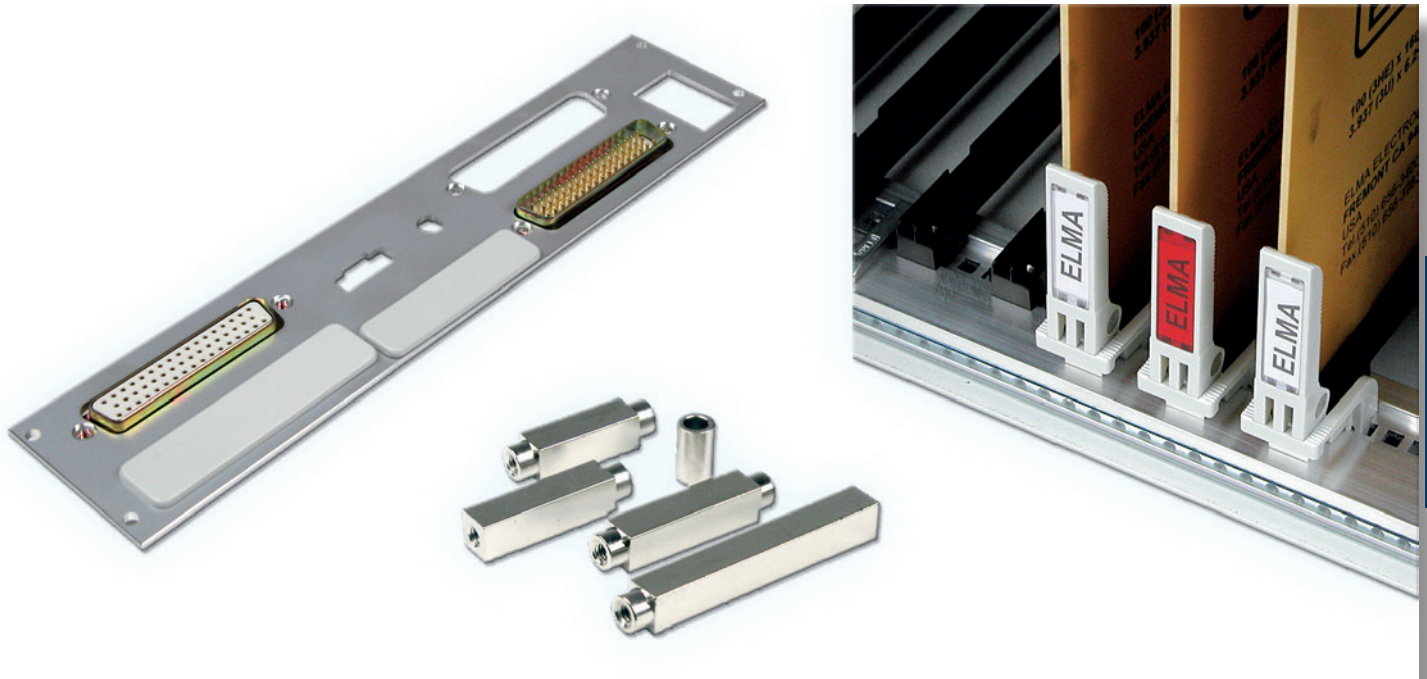
Extraction process:

Rest position Extraction End position



Label

Description	Part-No.
1 sheet A4 of 220 labels	81-031



1.6.13 Card Locks and Card Handles

- The card lock is easily mounted onto the upper or lower front profile
- When the PCB is pushed home, it is automatically locked into position
- The card eject mechanism can be attached to the top or bottom front edge of the PCB and is used in conjunction with the card lock
- The lever action ensures smooth and jerk-free card removal, especially useful when multi-pole connectors are being used
- Transparent windows in different colours and self-adhesive labels set into the front face of the eject mechanism make card identification easy
- The card lock and eject mechanism does not inhibit the use of front panels
- For recessed cards, a special card lock is available, suitable for use with profile 66-144
- **Scope of delivery:**
 - Card locks, eject mechanisms, windows and labels



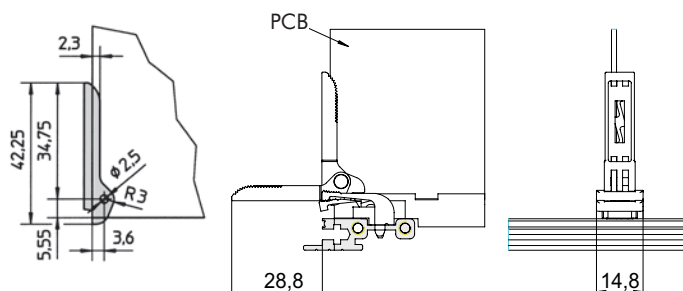
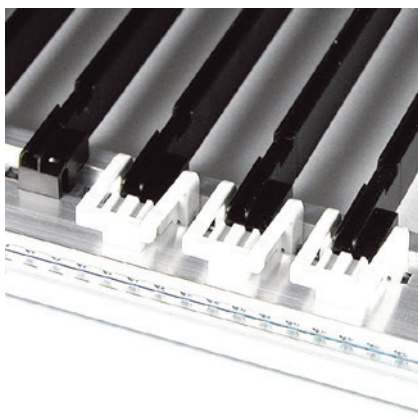
1.6.13.1 Card Locks, Card Injector/Ejector Handles

Description	Colour	Part-No.	
		1 pc.	10 pcs.
Card ejector handles		-	63-151
Card locks		61-126	63-153
Card locks to 66-144		61-144	63-163
Transparent window	Clear	-	63-155-1
	Red	-	63-155-4

- Other colours (yellow, green, blue, orange) upon request

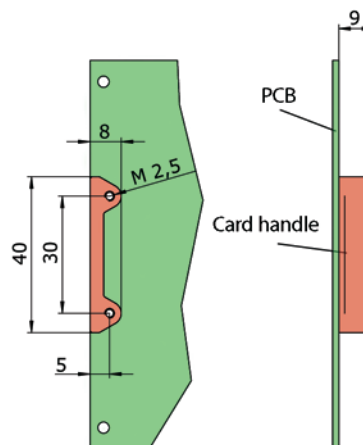
1.6.13.2 Labels

Description	Part-No.
1 sheet A4 of 105	63-161



1.6.13.3 Card Handles

- Coloured, transparent handles which will accept labels facilitate the handling and identification of PCBs
- **Scope of delivery:**
 - 1 card handle
- Two screws M2.5 x 5 are needed per handle and have to be ordered separately



1.6.13.3 Card Handles

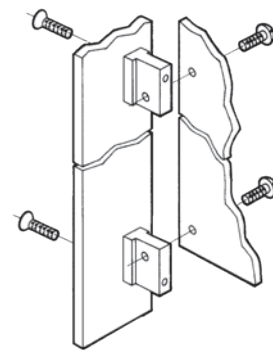
Description	Colour	Part-No.
Card handle	clear	1091-51
	red	1091-54
Cylindrical screw M2.5 x 5		5571-05
Torx cylinder head screw M2.5 x 5, size T8		5470-07

- Other colours (blue, yellow, green, orange) upon request



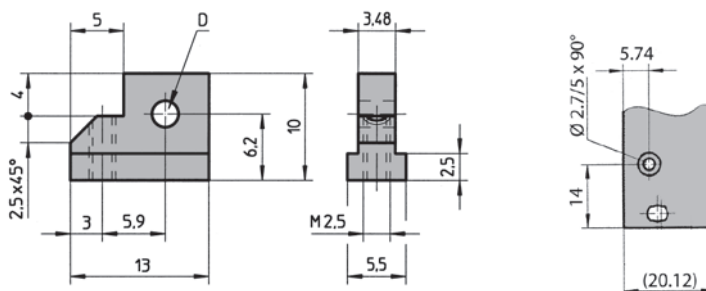
1.6.14 Card Holder acc. to IEC Standard

- By using the zinc die-cast card holder, flat front panels can be connected to a PC card to form a plug-in unit to IEC 60297
- The card can be mounted both in the standard position and offset 1 HP (5.08 mm)
- For better positioning of 6 U cards, there is a card holder centre piece made of nylon (see 1.6.15)
- The injector-/ejector handle can be used with the card holder
- **Scope of delivery:**
 - 1 card holder
- Assembly material see 1.6.14.3



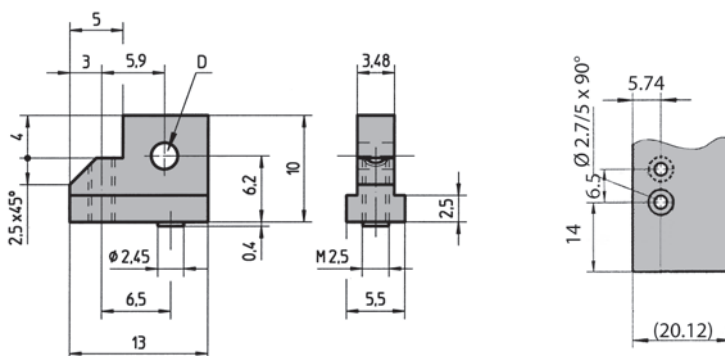
1.6.14.1 Card Holder without Swivel Stop

Description	Application	D	Part-No.
Card holder without swivel stop	Without injector/ejector handle	M2.5	61-156
Card holder without swivel stop	With injector/ejector handle	Ø 2.5	61-155



1.6.14.2 Card Holder with Swivel Stop

Description	Application	D	Part-No.
Card holder with swivel stop	Without injector/ejector handle	M2.5	61-156-01
Card holder with swivel stop	With injector/ejector handle	Ø 2.5	61-155-01



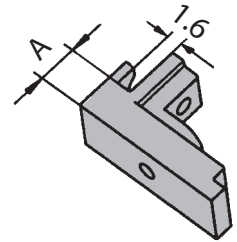
1.6.14.3 Assembly Material

Description	Application	Part-No.
Cross recessed countersunk screw M2.5 x 8	For card holder	5322-08
Torx countersunk screw M2.5 x 8, size T8	For card holder	5470-21
Slotted pan head screw M2.5 x 6	For printed board	5571-06
Torx cylinder head screw M2.5 x 6, size T8	For printed board	5470-04



1.6.15 Middle Part

- Usable for all front panels
- For positioning and fixing of 6 U and 9 U card circuit
- Card thickness 1.6 mm
- Self-adhesive, can optionally be screwed onto front panel and printed board
- Material: Plastic black UL94 V-0
- **Scope of delivery:**
 - Plastic middle part
- Assembly material, see 1.6.15.1



1.6.15 Middle Part

For Front Panels out of	A		Part-No.
	mm	inch	
Aluminium 2.5 mm	2.5	0.10	61-960

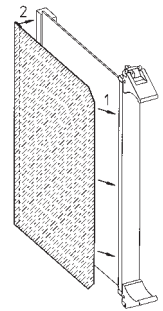
1.6.15.1 Assembly Material

Description	Part-No.
PT-countersunk, 2.5 x 6	5534-06



1.6.16 Protective Cover for 6 U Printed Board

1. Slide protective cover between front panel and printed board
2. Press adhesive tape on protective cover through pins of connectors to attach onto printed board



1.6.16 Protective Cover for 6 U Printed Board

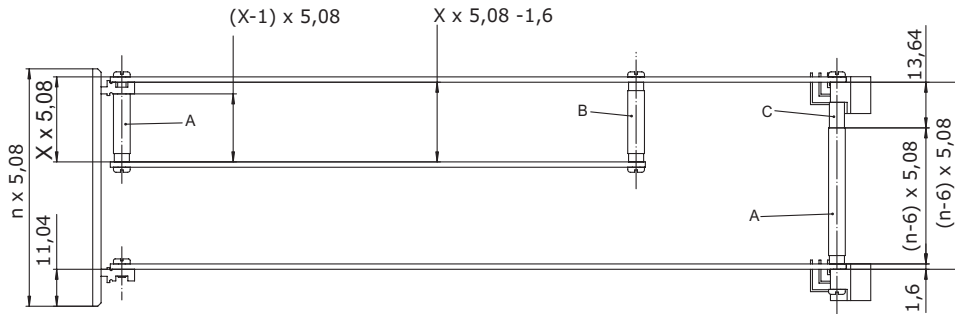
- Material: Polyester film mat, thickness 0.2 mm, UL94 VTM-2
- Mechanical protection of soldering side

For Card Depth		Part-No.
mm	inch	
160	6.30	81-010-02



1.6.17 Spacers

- Four-sided, nickel-plated brass spacers with M2.5 internal threads at both ends
- Using these spacers, additional PCBs may be mounted at a horizontal pitch of 5.08 mm
- Mounting plate is 1.5 mm galvanized steel with mounting holes corresponding to PCBs conforming to IEC 60297



- $n * 5.08$ = theoretical width of front panel
- $x * 5.08$ = distance of printed PCBs
- n = multiple of the 5.08 pitch of the selected front panel
- x = selected multiple of the 5.08 pitch for the distance of printed PCBs

1.6.17.1 Spacers Series A

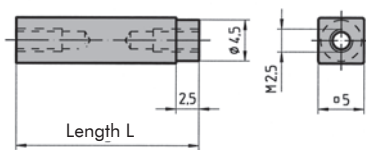
- Use between PCB mounting lugs and PCBs
- Gives 5.08 mm pitch

Length L		Part-No.
mm	inch	
10.16	0.40	61-300
15.24	0.60	61-301
20.32	0.80	61-302

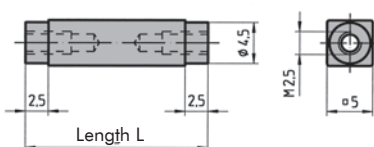
Other lengths available on request.



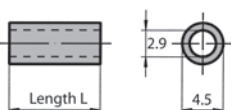
Series A



Series B



Series C



1.6.17.2 Spacers Series B

- Use between two PCBs
- Gives 5.08 mm pitch

Length L		Part-No.
mm	inch	
13.64	0.53	61-320
18.72	0.73	61-321
23.80	0.93	61-322

1.6.17.3 Spacers Series C

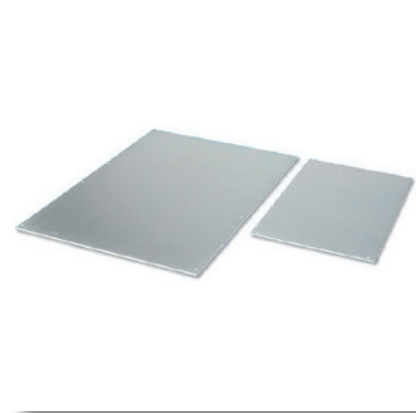
- Use between a PCB with connector and a second PCB

Length L		Part-No.
mm	inch	
7.64	0.30	61-340

1: Unibox 14

1.6.18 Mounting Plates

- Dimensions identical to eurocard dimensions
- 1.5 mm galvanized sheet steel
- **Scope of delivery:**
 - 1 mounting plate
- Assembly material, see below



1.6.18 Mounting Plates

Height	Dimensions	Part-No.
3 U	100 x 160 mm (3.93" x 6.29")	61-350
6 U	233.35 x 160 mm (9.18" x 6.29")	61-351

Assembly Material

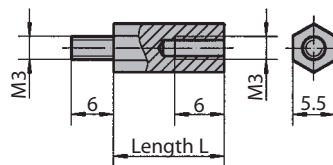
Description	Part-No.
Screws recessed M2.5 x 5	5571-05

1.6.19 Hexagonal Spacers M3 Thread

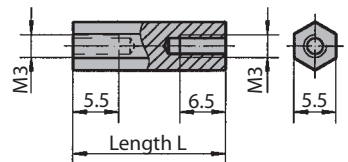
- Galvanised steel
- Ideal for use as supports or spacers
- **Scope of delivery:**
 - 1 spacer



1922-0x



1923-0x



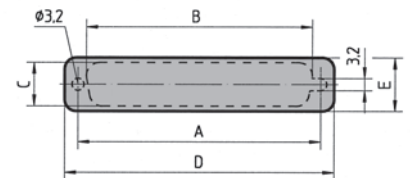
1.6.19 Hexagonal Spacers, M3 Thread

Length L		Part-No.
mm	inch	
10	0.39	1922-01
15	0.59	1922-02
30	1.18	1922-05
40	1.57	1922-07

Length L		Part-No.
mm	inch	
8.5	0.33	1923-01
13.5	0.53	1923-02

1.6.20 Covering Caps

- The caps, fit openings for D-Sub connectors and can be fitted without special tools
- Material: ABS grey UL94 HB
- **Scope of delivery:**
 - Plastic covering caps

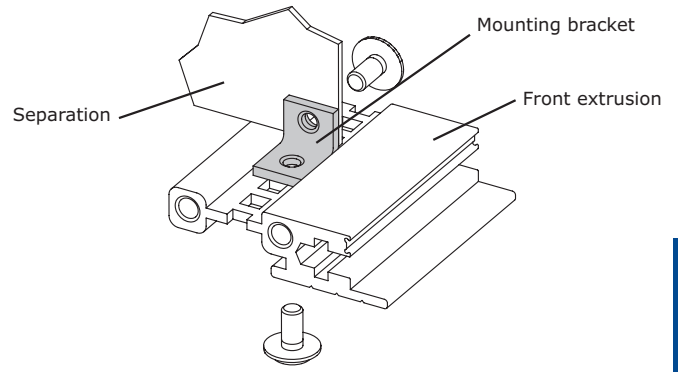


1.6.20 Covering Caps

Opening	A	B	C	D	E	Part-No.
	mm	mm	mm	mm	mm	
DB9 9-pole	25.0	20.5	11.4	32.0	14.0	61-920
DB15 15-pole	33.3	28.8	11.4	40.3	14.0	61-921
DB25 25-pole	47.0	42.5	11.4	54.0	14.0	61-922
DB37 37-pole	63.5	59.1	11.4	70.5	14.0	61-923

1.6.21 Mounting Bracket

- Assembly of a separation
- Separations are manufactured as required by the customer
- Sheet steel
- **Scope of delivery:**
 - 1 mounting bracket
- Assembly material, see below

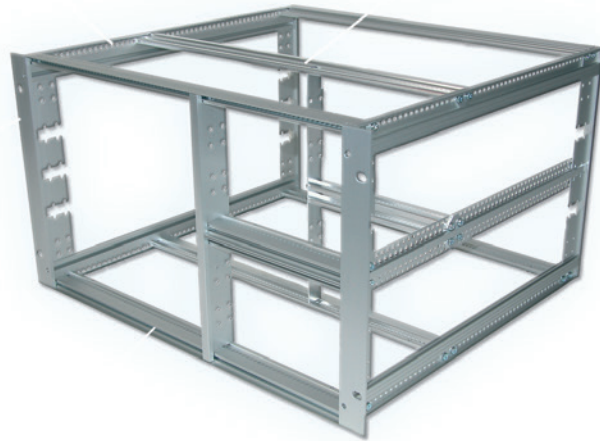


1.6.21 Mounting Bracket

Description	Part-No.
Mounting brackets	61-416

Assembly Material

Description	Part-No.
Rounded head screws cross recessed M3 x 6	5335-06
Rounded head screws Torx M3 x 6, size T10	5473-01

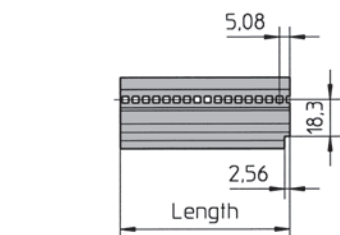
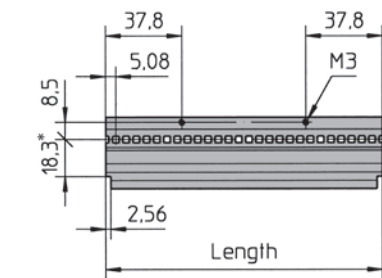
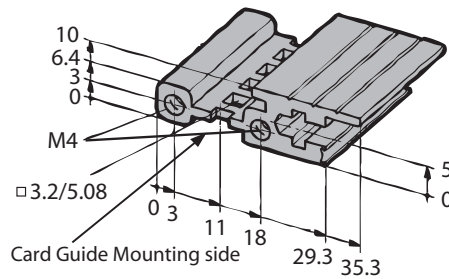


1.7 Extrusions

1.7.1 Front Extrusions

1.7.1.1 Front Extrusion 66-111, IEC

- For sub rack and cases front
- **Scope of delivery:**
 - 1 front extrusion without assembly material



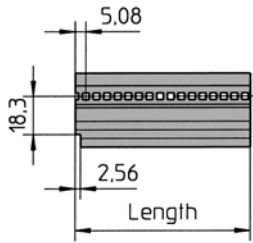
Standard version

Length for HP	Length		Part-No. clear anodised	black anodised	clear passivated	raw
	mm	inch				
21	111.8	4.40	66-111-26			
28	147.3	5.80	66-111-25			
32	167.6	6.80	66-111-62			
42	218.4	8.60	66-111-60		66-111-75	
63	325.1	12.80	66-111-61		66-111-76	
81	416.6	16.40	66-111-22		66-111-77	
84	431.8	17.00	66-111-23	66-111-56	66-111-78	66-111-28
	1350.0	53.15				66-111-19

Note: Throughout the catalogue all EMC parts are highlighted in yellow

Height divider right

Length for HP	Length		Part-No. anodised
	mm	inch	
8.5	43.18	1.70	66-111-71
12.5	63.82	2.54	66-111-72



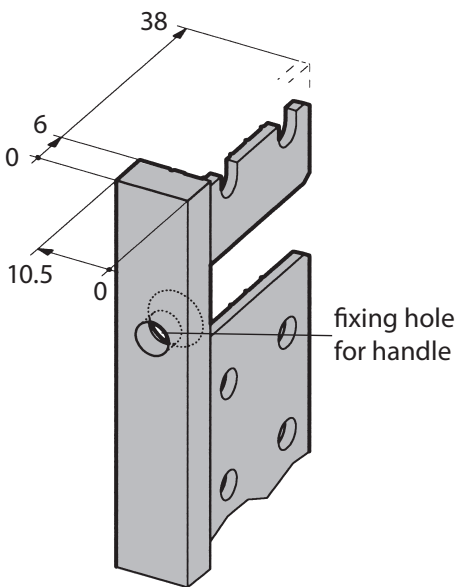
Height divider left

Length for HP	mm		Part-No. anodised
	mm	inch	
8.5	43.18	1.70	66-111-81
12.5	63.82	2.54	66-111-82

1.7.2 Height Extrusions

1.7.2.1 Height Extrusion 66-173

- Height extrusion for Unibox 14
- Slim version with or without fixing hole for handle
- **Scope of delivery:**
 - 1 height extrusion without assembly material

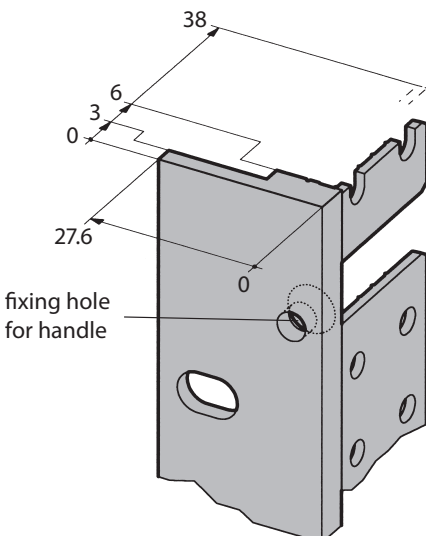


1.7.2.1 Height Extrusion 66-173

Length for U	mm		Part-No. clear anodised fixing hole for handle	
	mm	inch	without	with
2	88.1	3.46	66-173-20	66-173-21
3	132.5	5.20	66-173-22	66-173-23
4	177.0	6.96	66-173-24	66-173-25
5	221.5	8.72	66-173-26	66-173-27
6	265.9	10.46	66-173-28	66-173-29

1.7.2.2 Height Extrusion 66-179

- With or without fixing hole for handle
- 19" height extrusion for Unibox 14 / 84 HP
- **Scope of delivery:**
 - 1 height extrusion without assembly material



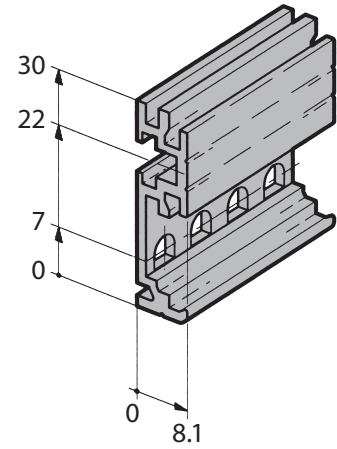
1.7.2.2 Height Extrusion 66-179

Length for U	mm		Part-No. clear anodised fixing hole for handle	
	mm	inch	without	with
2	88.1	3.46	66-179-22	66-179-32
3	132.5	5.20	66-179-23	66-179-33
4	177.0	6.96	66-179-24	66-179-34
5	221.5	8.72	66-179-25	66-179-35
6	265.9	10.46	66-179-26	66-179-36
7	310.3	12.20	66-179-27	66-179-37
8	354.8	13.96	66-179-28	66-179-38
9	399.2	15.71	66-179-29	66-179-39

1.7.3 Depth Extrusions

1.7.3.1 Depth Extrusion 66-177

- Depth extrusion for universal sub rack Unibox 14
- **Scope of delivery:**
 - 1 depth extrusion without assembly material

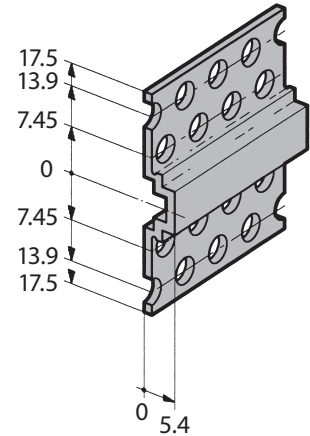


1.7.3.1 Depth Extrusion 66-177

Length		Part-No. clear
232.6	9.15	66-177-21
292.6	11.51	66-177-22
352.6	13.55	66-177-23
412.6	16.24	66-177-24
532.6	20.96	66-177-26

1.7.3.2 Depth Divider Extrusion 66-176

- Depth divider extrusion for universal sub rack Unibox 14
- **Scope of delivery:**
 - 1 depth extrusion without assembly material



1.7.3.2 Depth Divider Extrusion 66-176

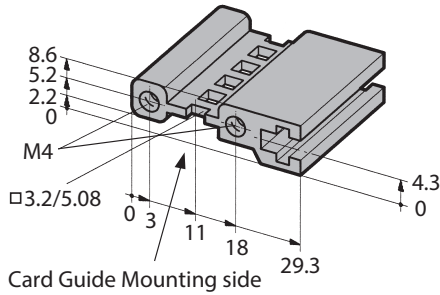
Length		Part-No. clear passivated
mm	inch	
292	11.49	66-176-22
412	16.22	66-176-24
532	20.94	66-176-26

Note: Throughout the catalogue all EMC parts are highlighted in yellow

1.7.4 Internal Extrusions

1.7.4.1 Standard Internal Extrusion 66-144

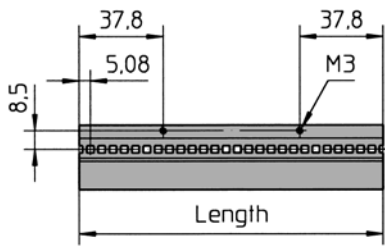
- Standard extrusion for mounting supplementary edge connector extrusions in sub racks and cases
- **Scope of delivery:**
 - 1 internal extrusion without assembly material



1.7.4.1 Standard Internal Extrusion 66-144

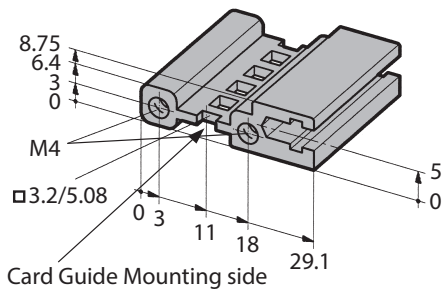
Length for HP	mm	inch	Part-No.	
			clear passivated	raw
42	218.4	8.60	66-144-60	-
63	325.1	12.80	66-144-61	-
81	416.6	16.40	66-144-22	-
84	431.8	17.00	66-144-23	-
	1350.0	53.14	-	66-144-19

Note: Throughout the catalogue all EMC parts are highlighted in yellow



1.7.4.2 Internal Extrusion 66-193 for Insulated Backplane Mounting

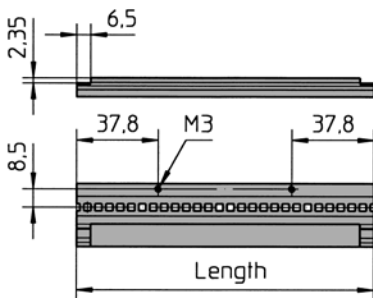
- For mounting backplanes in sub racks, grooved to accept 1.8 x 5 mm tapped strips
- To use with insulation strips 66-901
- **Scope of delivery:**
 - 1 internal extrusion without assembly material



1.7.4.2 Internal Extrusion 66-193 for Use of Insulating Strip

Length for HP	mm	inch	Part-No.
			clear passivated
81	416.6	16.40	66-193-24
84	431.8	17.00	66-193-25

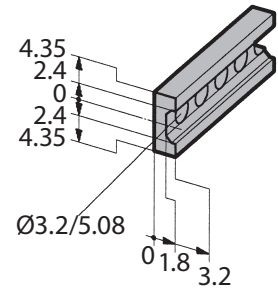
Note: Throughout the catalogue all EMC parts are highlighted in yellow



1: Unibox 14

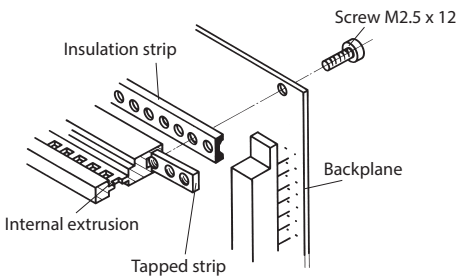
1.7.4.3 Insulating Strips 66-901

- Plastic grey
- In use with extrusions 66-112, 66-192, 66-193, 66-288



1.7.4.3 Insulating Strips 66-901

Length for HP	Length		Part-No.
	mm	inch	
42	216.44	8.52	66-901-20
63	323.12	12.72	66-901-21
81	414.56	16.32	66-901-22
84	429.80	16.92	66-901-23

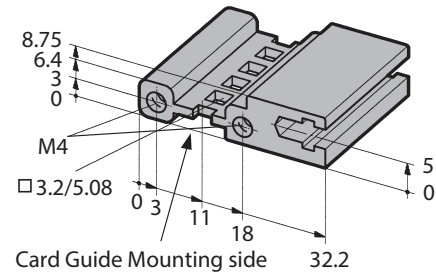


Mounting with Insulation Strips

Part	Part-No.
Screw to insulation extrusion	5325-12

1.7.4.4 Internal Extrusion 66-194 for Conductive Backplane Mounting

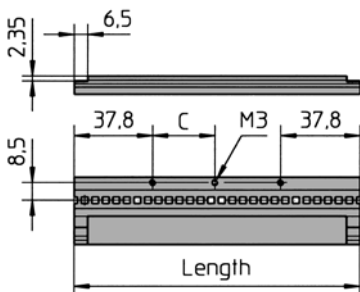
- For mounting backplanes without an insulating strip
- Grooved to accept 1.8 x 5 mm tapped strips
- **Scope of delivery:**
 - 1 internal extrusion without assembly material



1.7.4.4 Internal Extrusion 66-194 without Use of Insulating Strip

Length for HP	Length		Holes n x C	Part-No. clear passivated
	mm	inch		
81	416.6	16.40	2 x 170.48	66-194-24
84	431.8	17.00	2 x 178.1	66-194-25

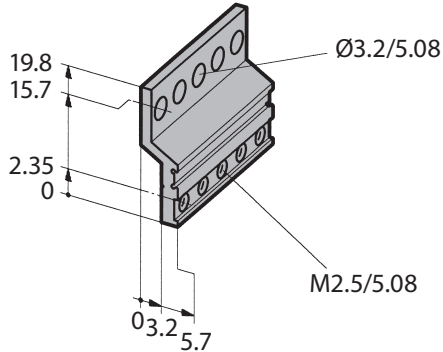
Note: Throughout the catalogue all EMC parts are highlighted in yellow



1.7.5 Edge Connector Extrusions

1.7.5.1 Edge Connector Extrusion 66-145

- Supplementary edge connector extrusion for IEC 60603-2 connectors
- Matches 66-144, 66-133 and 66-124
- **Scope of delivery:**
 - 1 supplementary edge connector extrusion without assembly material



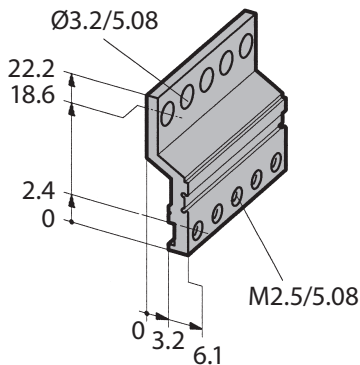
1.7.5.1 Edge Connector Extrusion 66-145

Length for HP	mm	inch	Part-No.	
			clear passivated	raw
8	40.6	1.59	66-145-40	
18	91.4	3.59	66-145-41	
28	142.2	5.60	66-145-42	
42	213.4	8.40	66-145-63	
63	320.0	12.60	66-145-65	
81	411.5	16.20	66-145-22	
84	426.7	16.80	66-145-52	
	1350.0	53.14		66-145-19

Note: Throughout the catalogue all EMC parts are highlighted in yellow

1.7.5.2 Edge Connector Extrusion 66-147

- Supplementary edge connector extrusion for IEC 60603-2
- Matches 66-112, 66-192 and 66-193
- **Scope of delivery:**
 - 1 supplementary edge connector extrusion without assembly material



1.7.5.2 Edge Connector Extrusion 66-147

Length for HP	mm	inch	Part-No.	
			clear passivated	raw
8	40.6	1.59	66-147-40	
18	91.4	3.59	66-147-41	
28	142.2	5.60	66-147-42	
42	213.4	8.40	66-147-63	
63	320.0	12.60	66-147-65	
81	411.5	16.20	66-147-22	
84	426.7	16.80	66-147-52	
	1350.0	53.14		66-147-19

Note: Throughout the catalogue all EMC parts are highlighted in yellow

B



Source: Ibak, Germany

