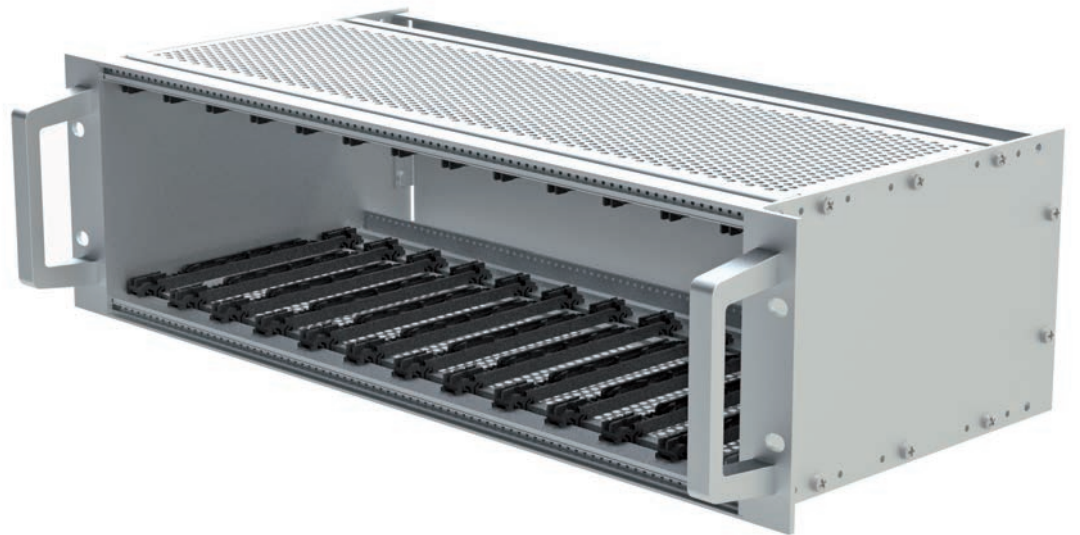


# #01 POLYRACKTECH-GROUP SERIES 30

// Product information

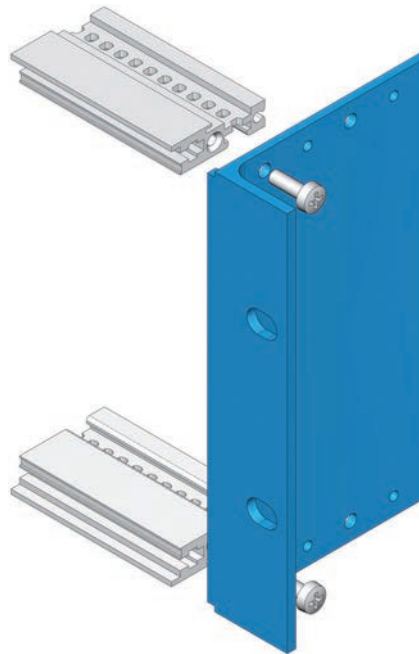


# //02 19" SUBRACKS SERIES 30

## // Basic units

### Basic units

The 19" subrack Series 75 is available as standard and EMC versions, either with or without handle holes. The extruded side plates and horizontal rails in the standard basic units are made of anodized aluminum, cutting edges raw. All parts in the EMC versions are clear anodized. Further configurations can be created by individual combination of the appropriate components.

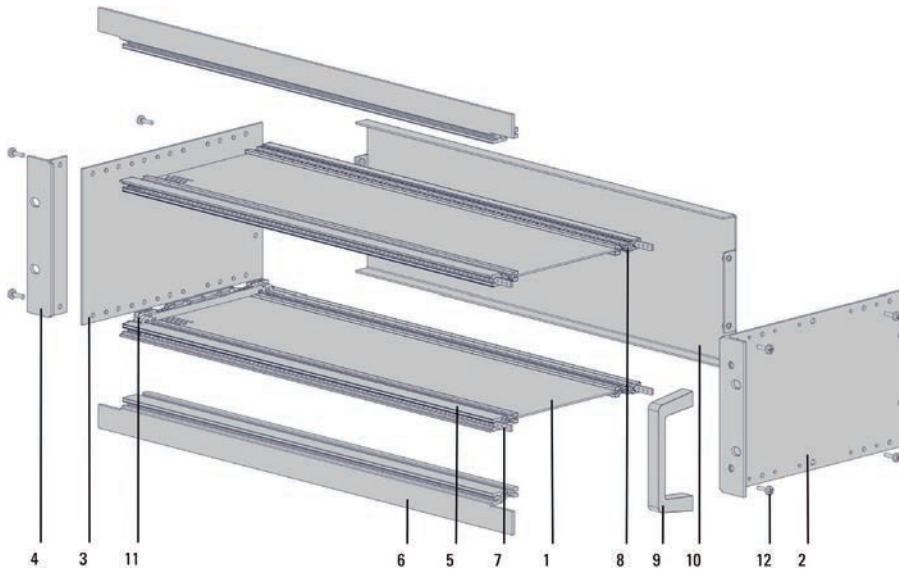


### Features of the basic units

One piece extruded side plate

# //02 19" SUBRACKS SERIES 30

// Configuration example



## // Configuration example

The drawing shows a typical configuration of a 19" subrack series 30 in 3 U

- 1 Cover
- 2 Side panel with integrated mounting brackets, 1-piece variant
- 3 Extruded side plates 2-piece variant
- 4 Mounting brackets, separate in connection with side plates 2-piece variant
- 5 Front rail, rear
- 6 Front rail for panel mounting (optional)
- 7 Threaded inserts
- 8 Rear rail
- 9 Handle - Future, Series 30
- 10 Rear panel
- 11 Card guide
- 12 Mounting of horizontal rails

Series 30 subracks are individually selected and configured via an extensive range of individual parts. The individual parts must be ordered separately.

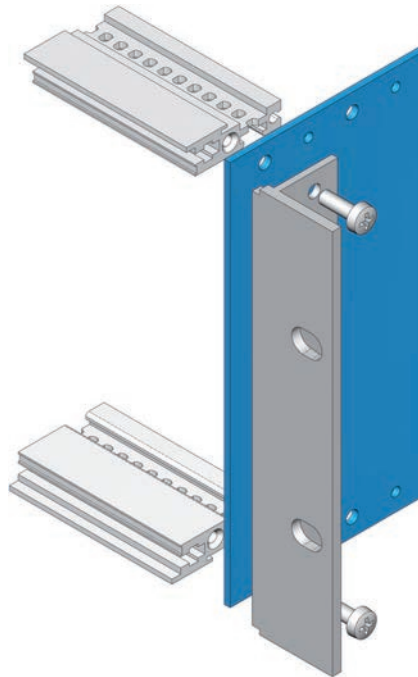
# //02 19" SUBRACKS SERIES 30

## // Basic units

### Basic units

The 19" subracks Series 77 are available as standard and EMC versions, with or without handle holes. The extruded side plates, mounting brackets and horizontal rails in the standard basic unit are made of anodized aluminum, cutting edges raw. All parts in the EMC versions are clear anodized.

Further configurations as well as configurations in 9 U height can be created by individual combination of the appropriate components.



### Features of the basic units

Side plate with separate mounting bracket

# //02 19" SUBRACKS SERIES 30

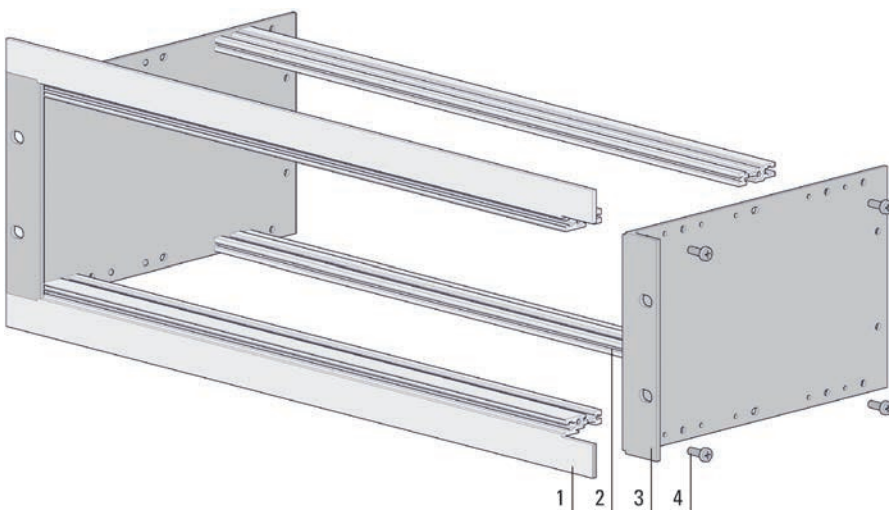
// Basic units

## Basic units

Series 76 basic units are made in anodized aluminum (cutting edges raw).

## Features of the basic units

Horizontal front rail

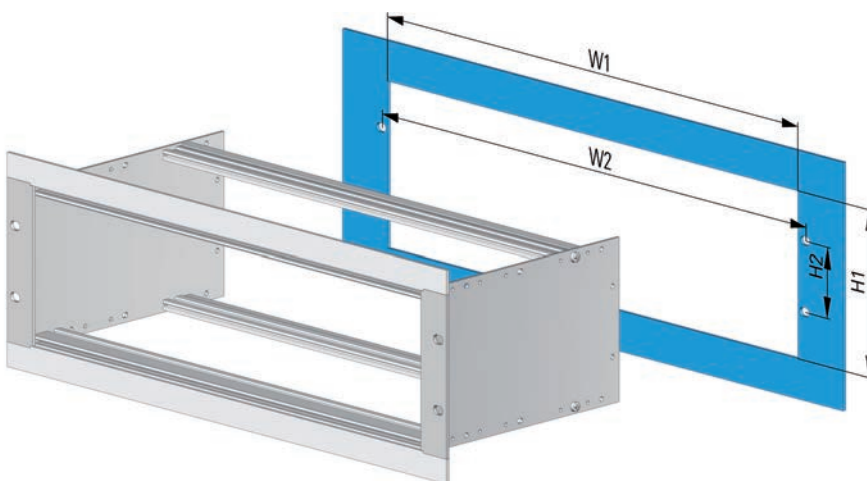


- 1 Panel front rail
- 2 Rear rail
- 3 Extruded side plate
- 4 Assembly components

## Panel cut-out

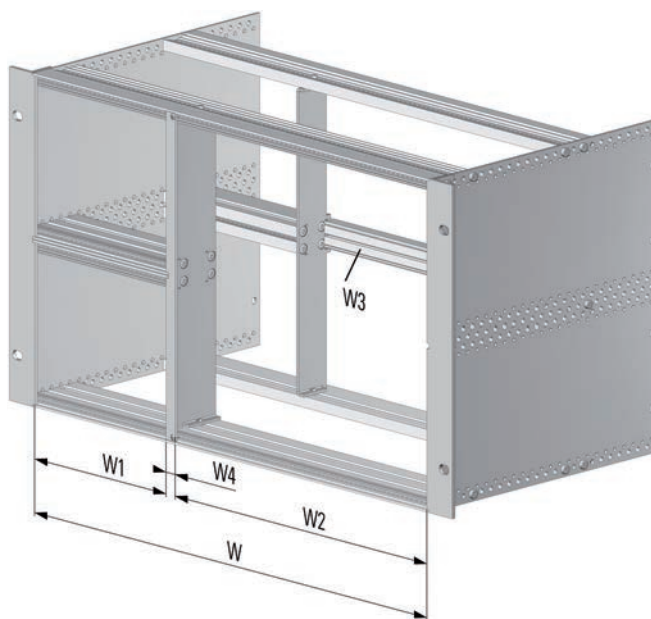
### Mounting dimensions (mm)

Height	3 U
Width	84 HP
H1	135.0 mm
H2	57.1 mm
W1	451.0 mm
W2	465.0 mm



# //02 19" SUBRACKS SERIES 30

// Split vertical PCB mount



## Conversion kit for mixed assemblies 1 x 6 U/2 x 3 U

### Product information

If both single (3 U) and double (6 U) Eurocards are to be used, the card cage must be adjusted accordingly.

Together with you we develop the best possible technical and cost-effective solution. Please do not hesitate to contact us. We will be happy to assist you.

### Calculation and planning example

Usable width  $W = 84$  HP

In 3 U section:  
Usable width  $W1$

In 6 U section:  
Usable width  $W2$

Horizontal rail length  $W3 = W - W1 \times 5.08 - 2.5$  mm

$W4 = 2$  HP

### Note

- Individual assemblies upon request.  
Please use planning example above as a guideline.

# //02 19" SUBRACKS SERIES 30

// Conversion kit for horizontal PCB mount

## Conversion kit for horizontal PCB mount

### Product information

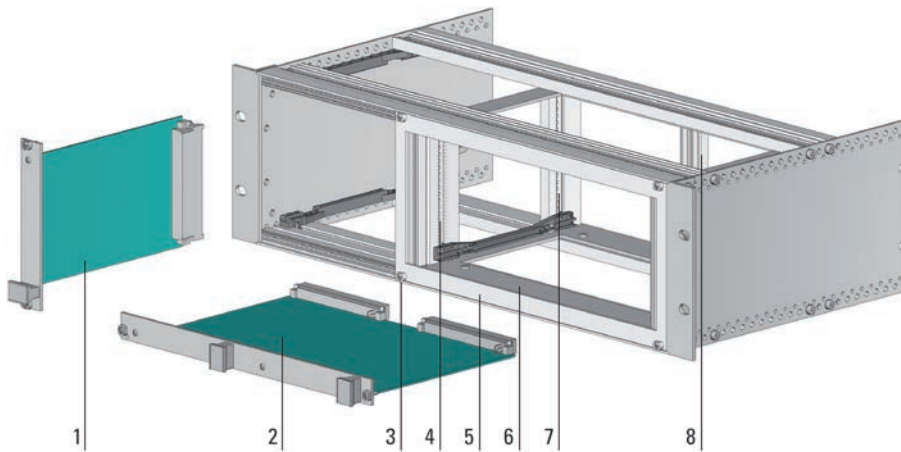
For horizontal PCB mounting of double Eurocards in 3 U subracks or cases.

### Specifications

Mounting dimensions according to IEC 60297-3-101

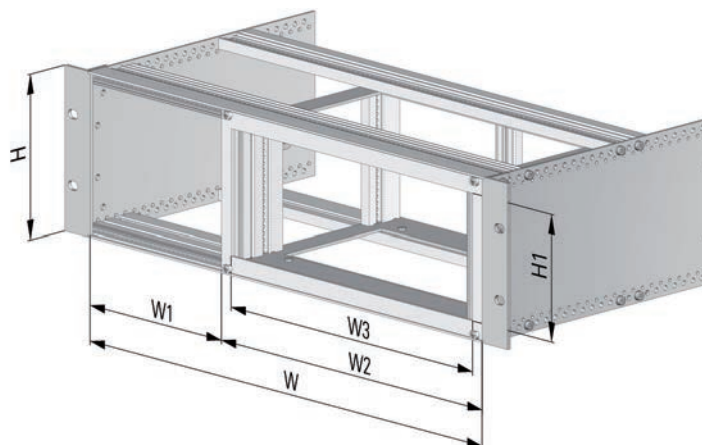
### Configuration example

The diagram shows a typical horizontal PCB mount configuration of a 19" subrack.



- 1 Single euroboard
- 2 Double euroboard
- 3 Assembly kit
- 4 Front rail
- 5 Front bezel\*
- 6 Frame top/bottom
- 7 Rear rail
- 8 Center rail

The parts marked \* are not included in the standard scope of delivery of a basic unit.

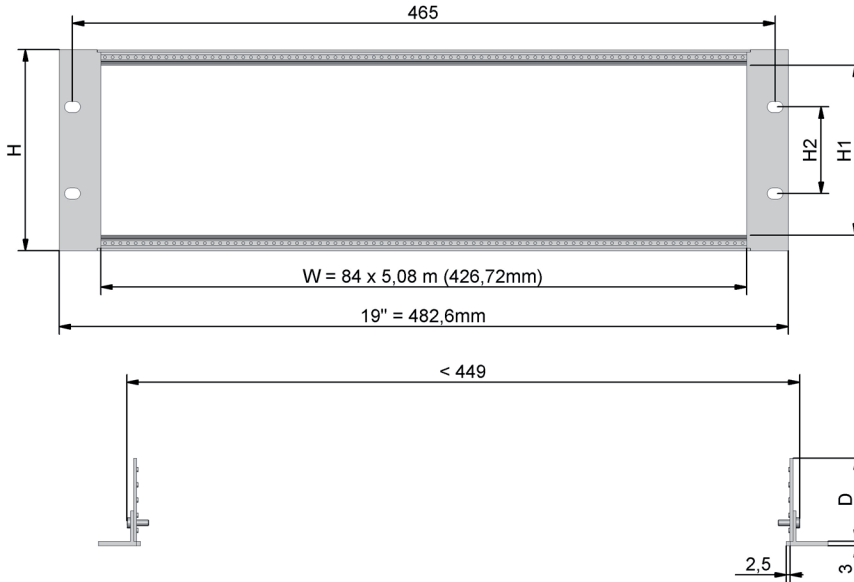


### Mounting dimensions

H	3 U
H1	20 HP = 101.6 mm
W	84 HP
W1	28 HP
W2	56 HP = 284.1 mm
W3	6 U = 262.7 mm

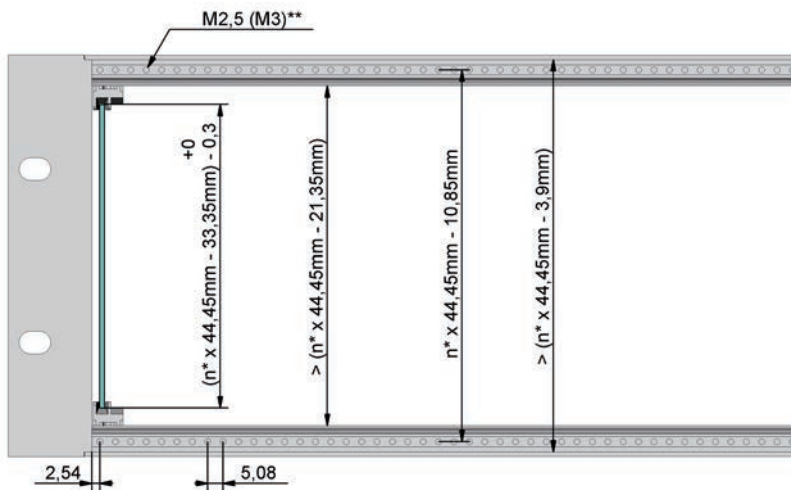
# //02 19" SUBRACKS SERIES 30

## // General Information



Mounting dimensions (mm)

	H	H1	H2
1 U	= 43.6	≤ 23.1	= 31.7
2 U	= 88.1	≤ 67.5	= 76.2
3 U	= 132.5	≤ 112.0	= 57.1
4 U	= 177.0	≤ 156.45	= 101.6
6 U	= 265.9	≤ 245.35	= 190.5



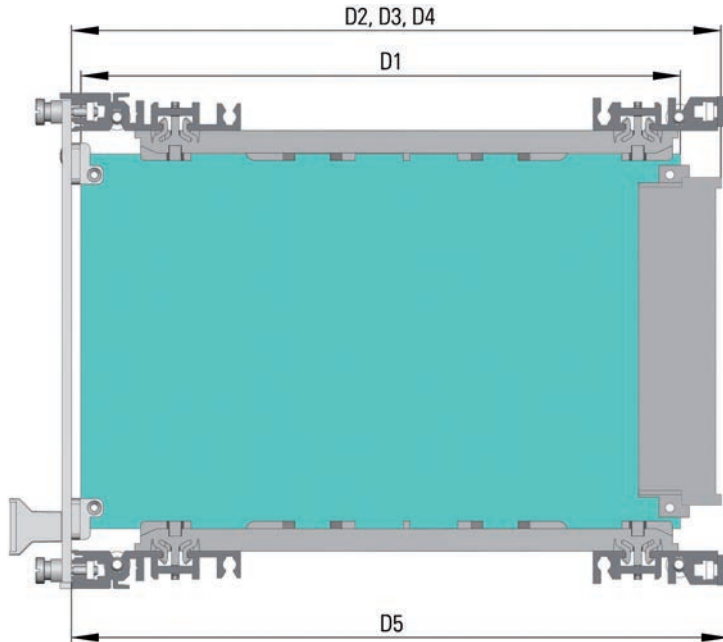
\* (U)

\*\* Mounting holes for front panels



# //02 19" SUBRACKS SERIES 30

## // General Information

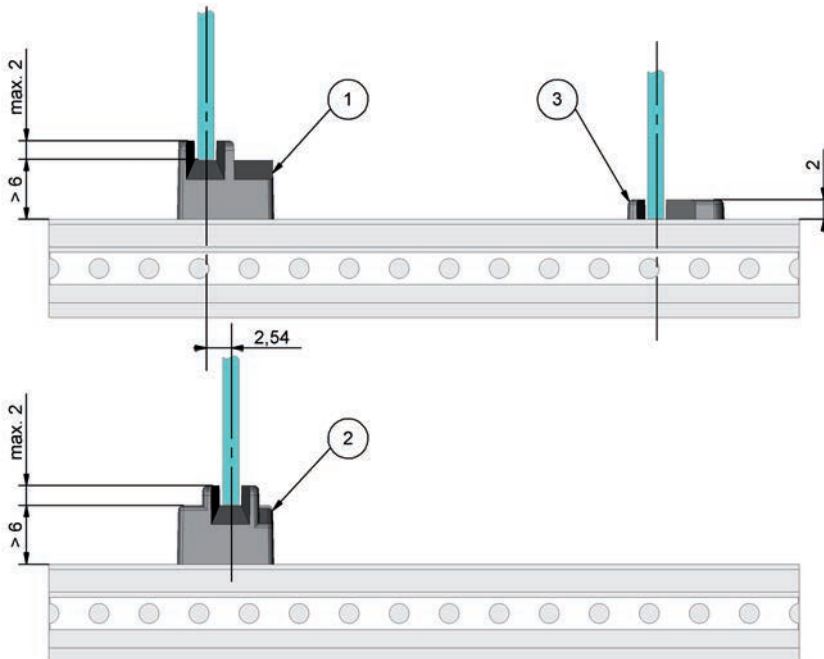


Dimensions for plug-in modules (mm)

D1*	D2 ± 0.4**	D3 ± 0.4***	D4 ± 0.4****
80.00	89.93	91.93	91.74
100.00	109.93	111.93	111.74
160.00	169.93	171.93	171.74
220.00	229.93	231.93	231.74
280.00	289.93	291.93	291.74

- \* Board depth
- \*\* Plug-in depth for connector IEC 60603-2, Type B, C, D and IEC 61076-4-113
- \*\*\* Plug-in depth for connector IEC 60603-2, Type F, G, H
- \*\*\*\* Plug-in depth for connector IEC 61076-4-101

$D5 = D1 + 15.5 \text{ mm}$



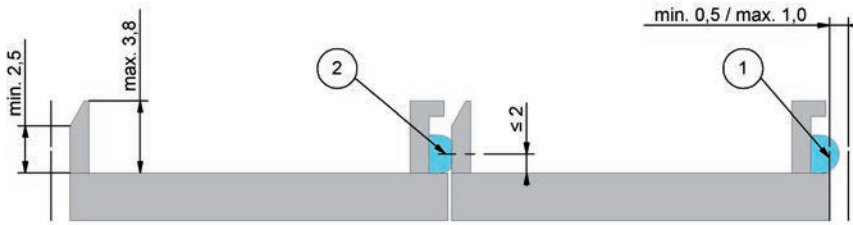
Card guides – front view

- 1 Card guide standard
- 2 Card guide 2.54 mm recessed
- 3 Card guide 4.4 " (111.7 mm)

Slot width 2 mm or 2.4 mm, respectively

# //02 19" SUBRACKS SERIES 30

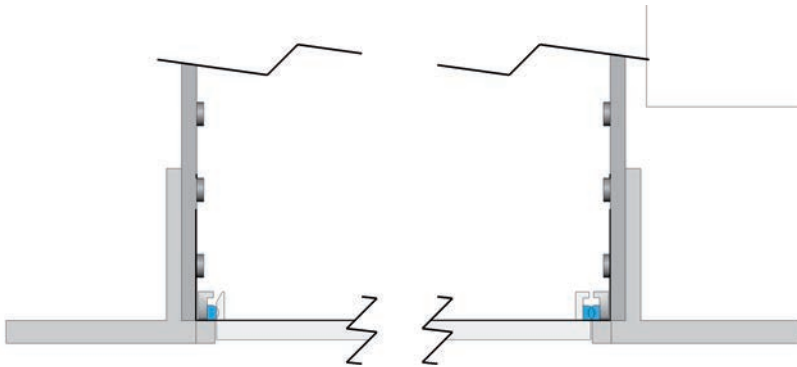
## // General Information



**Shielding concept EMC Fabric – front panel**  
Standards for contact points (contact surface) are specified in IEEE 1101.10.

The diagram shows extracts from the IEEE 1101.10 specification in relation to EMC fabric

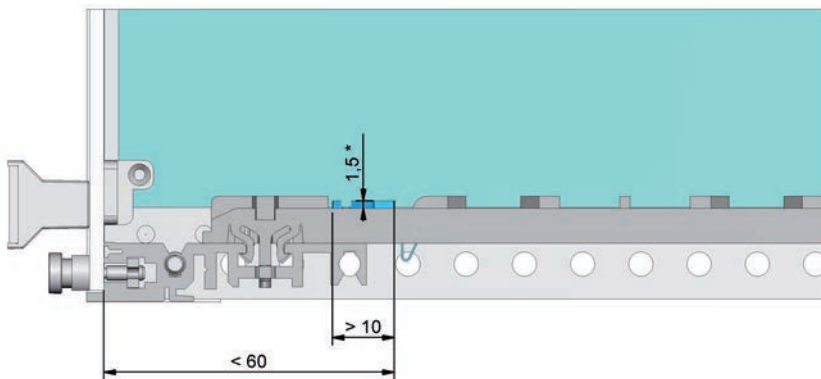
- 1 Not compressed EMC Fabric
- 2 Compressed EMC Fabric



### ESD contact area

The electrostatic discharge is via a contact clip, which is clipped into the front of the guide rail. To ensure proper functioning, the ESD clip must have contact with the grounded section of the subrack as well as the conductive section of the board.

\*ESD contact area



### // Manufacturing tolerances

In general, parts tolerances are subject to the POLYRACK factory specifications, with the following exceptions:

Extrusions comply with  
DIN EN 12020-1

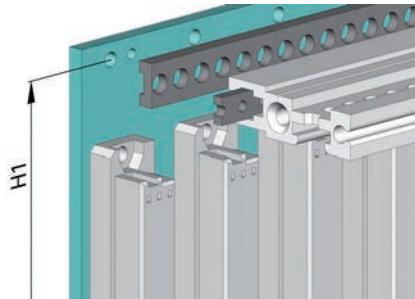
Punched parts comply with  
DIN ISO 6930-1/6930-2 and DIN 6932

# //02 19" SUBRACKS SERIES 30

## // General Information

### // Basic units

There is a choice of four different basic units, depending on the application:



#### Basic unit B

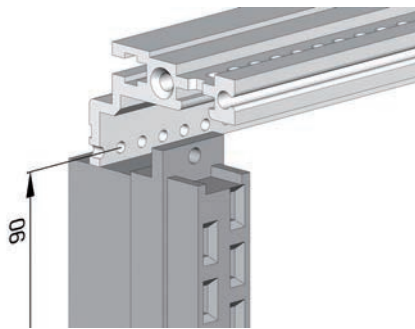
For indirect mounting of backplanes using an isolating strip or for Z-rail

The dimensions for mounting the backplane are calculated as follows:

$$H1 = n \times U - 10.85 \text{ mm}$$

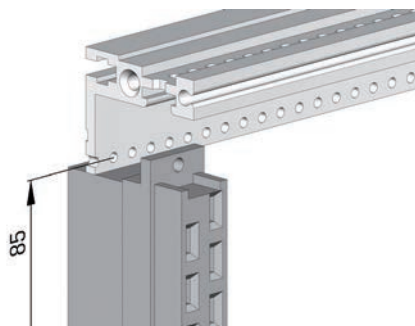
Calculation example for 3 U:

$$H1 = 3 \times 44.45 \text{ mm} - 10.85 \text{ mm} = 122.5 \text{ mm}$$



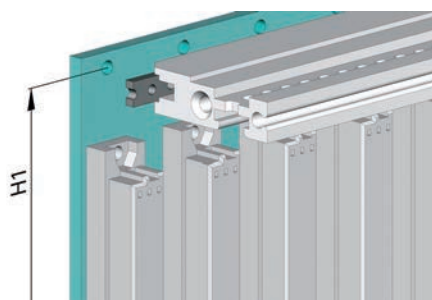
#### Basic unit C

With integrated Z-rail for connectors according to IEC 60603-2



#### Basic unit D

With integrated Z-rail for connectors according to IEC 60603-1



#### Basic unit E

For direct mounting of backplanes without isolating strips or for perforated rails. Rail width + 3 mm in comparison to basic unit

The dimensions for mounting the backplane are calculated as follows:

$$H1 = n \times U - 10.85 \text{ mm}$$

Calculation example for 3 U:

$$H1 = 3 \times 44.45 \text{ mm} - 10.85 \text{ mm} = 122.5 \text{ mm}$$