



**Fabric-/Foil over foam gaskets** have a **polyurethane foam core** which is available in four different hardness values (32/45/70/150 kg/cm<sup>3</sup>). The foam core is covered either with conductive fabric (copper-nickel coated) or aluminium foil.

The **mtc standard portfolio** includes a large range of sizes and shapes. **Customized dimensions** can be supplied at low cost. The material can also be cut to length or modified according to individual needs.

As standard the profiles are fitted with a **non-conductive adhesive tape**. The following other options are also available:

- conductive adhesive tape
- several adhesive tapes on a single profile
- adhesive tapes with removal aid (WRL)
- small parts assembled on carrier sheet (STP)

**mtc** gaskets offer the **following properties**:

- excellent shielding effectiveness (80-90 dB @ 100 MHz-18 GHz),
- easy processing,
- high abrasion resistance,
- low surface resistance (< 0,05 Ohm).

Regarding aluminium foil over foam gaskets small deformations on the edges develop during production. However, this has no effect on the functionality of the gaskets.



Fabric over foam gaskets are optionally available in a **halogen free version**. Halogen free gaskets have the same electrical properties as standard gaskets.

Detailed information are available on request.



#### Tolerances

Width and height	Tolerance
0,5– 6,3	+/- 0,5
6,3– 10,0	+/- 0,7
10,0– 16,0	+/- 0,8
16,0– 25,0	+/- 1,0
25,0– 40,0	+/- 1,3
40,0– 63,0	+/- 1,6

Length	Tolerance
5– 150	+/- 0,8
151– 300	+/- 1,3
301– 1.200	+/- 2,5
1.201– 1.750	+/- 4,7
1.751– 2.300	+/- 6,4

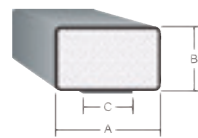


#### **Fabric-/Foil over foam gaskets** provide the following advantages:

- Short delivery time
- CuNi coated fabric (standard), other coatings and aluminium foil available
- Foam available with different hardness values
- Non-adhesive tape as standard, other options on request
- Also available in a halogen free version

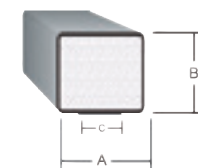
# Fabric-/Foil over Foam Gaskets

Dimensions in mm (unless otherwise stated).



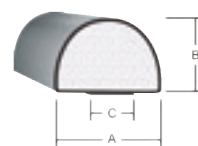
## Rectangular profiles

Dim. A	Dim. B	Dim. C	Item number
3,0–58,0	0,5–30,0	1,5–55,0	DRE-AxB



## Square profiles

Dim. A	Dim. B	Dim. C	Item number
2,0–17,0	2,0–17,0	1,5–17,0	DQU-AxB



## D-shape profiles

Dim. A	Dim. B	Dim. C	Item number
2,0–20,0	1,5–18,0	1,5–18,0	DHR-AxB



## Knife-Edge-profiles

Dim. A	Dim. B	Dim. C	Item number
8,0–11,3	2,3–2,7	2,5–6,0	DKE-AxB

- Lower side adhesive tape positioning is also available.



## P-shape profiles

Dim. A	Dim. B	Dim. C	Item number
8,0–29,0	3,0–10,0	3,0–25,0	DPT-AxB



## L-shape profiles

Dim. A	Dim. B	Dim. C	Item number
5,6	3,0	3,0	DLS-AxB



## M-shape profiles

Dim. A	Dim. B	Dim. C	Item number
12,7	9,5	5,0	DMP-AxB

Dimensions in mm (unless otherwise stated).

## Type 1



## C-shape profiles

Dimension A	Dimension B	Dimension C	Item number
6,0–10,7	3,5–9,8	2,5–5,0	DCW-AxB

- With PET insert

## Type 2



Dimension A	Dimension B	Dimension C	Item number
11,0–14,7	11,0–17,9	5,0–6,0	DCW-AxB

- Without PET insert

## Type 1



## Triangular profiles

Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Item number
9,1–10,0	2,3–3,5	2,5	2,5	2,5	DTR-AxB

## Type 2



Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Item number
10,0–12,7	3,2–4,5	2,5–3,0	2,5–4,5	2,5–3,0	DTA-AxB

- Adhesive tape D is electrically conductive.
- Optimal for use with  $\mu$ TCA & ATCA plug-in modules.

Dimensions in mm (unless otherwise stated).



- Other dimensions on request
- Fabric over foam gaskets are also available in a halogen free version
- Detailed information on our website [www.mtc.de/en](http://www.mtc.de/en)



In addition to standard EMC gaskets with foam core, **mtc** also supplies **hollow chamber-, clip-on and solid profiles** based on EPDM/rubber. These profiles are especially used in control cabinet doors.

The core of the hollow chamber and clip-on/edge protection profile is made of **expanded rubber** and is covered with **copper-nickel fabric** as standard. A (partial) coating with other metallized fabric or aluminium foil is available on request.

Hollow chamber profiles can be supplied **with or without adhesive tape**. They are also available with several adhesive tapes for special applications.

Clip-on/edge protection profiles have an **integrated loop tape** and a U-shaped section. They are extremely flexible and are installed by simply being pressed by hand on the coating edges. The profiles adhere by a clamping effect. No adhesive is required. They are weatherproof and resistant to a temperature range from approx. -25°C to approx. 80°C.

The profiles can be supplied in **any lengths** and also **on rolls**. **mtc** can provide short delivery times for clip-on/edge protection and hollow chamber profiles from the standard product range. If you require specific widths and heights or cross sections which must be produced using special tools, a minimum purchase quantity has to be kept.



**Hollow chamber-, clip-on- and EPDM-profiles provide the following advantages:**

- Short delivery time
- Rubber with CuNi coated fabric (standard), other coatings and aluminium foil available
- Hollow chamber profiles can be supplied with or without adhesive tape



Clip-on profiles

Dimension A	Dimension B	Item Number
8,0	16,0	DAU-BxA



[www](http://www.mtc.de/en)

- Other dimensions on request
- Detailed information on our website [www.mtc.de/en](http://www.mtc.de/en)

# Hollow Chamber-, Clip-on- and EPDM-Profiles

Dimensions in mm (unless otherwise stated).



In addition to EMC and ESD shielding, **protection against environmental** influences is often also required. This can be achieved by using so-called **IP/EMC gaskets (combi gaskets)**, which are mainly used in outdoor areas to protect against moisture, dirt etc.

Depending on the design situation of the housing or control cabinet there are the following possibilities to achieve an IP/EMI protection:

- use of separate gaskets for EMC and IP (Intrusion Protection) or
- use of combi gaskets

**A range of core materials** (for example EPDM, expanded rubber, NBR, etc.) in a variety of hardness values are available for IP/EMC gaskets. The core of the profile can be **partially or completely coated** with **conductive copper-nickel (CuNi) fabric** or **aluminium foil**. The gaskets are supplied **with or without adhesive tape**. Custom-specific profiles can easily be manufactured.



**Combi gaskets provide the following advantages:**

- Short delivery time
- Partially coated EMI gaskets available for combined IP- and EMI protection
- Available with adhesive tape, also several adhesive tapes possible
- CuNi coated fabric (standard), other coating and aluminium foil on request



[www](http://www.mtc.de/en)

- Other dimensions on request
- Detailed information on our website [www.mtc.de/en](http://www.mtc.de/en)

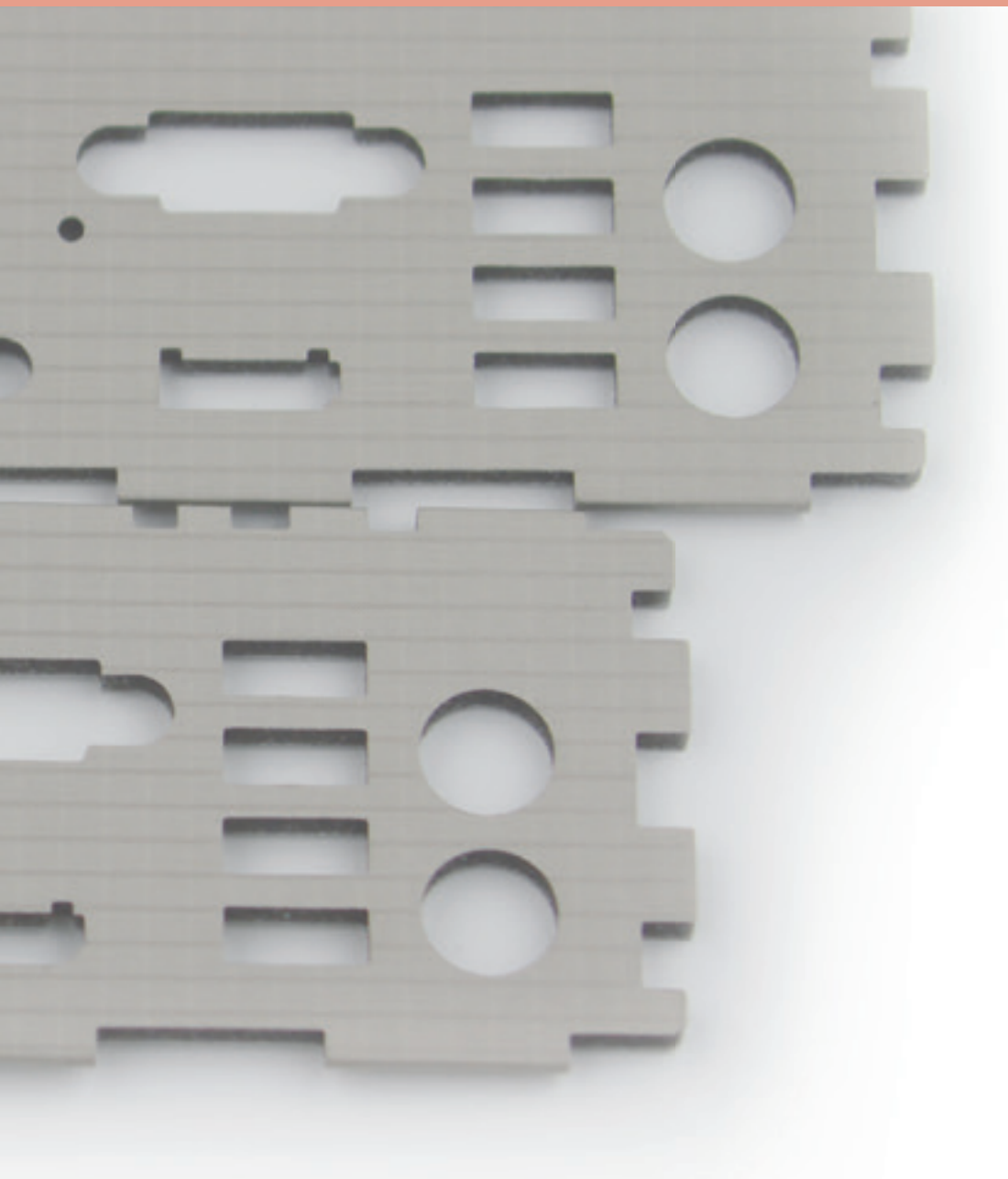


Combi gaskets

Dim. A	Dim. B	Dim. C	Item number
12,0	6,0	5,0	DKO-AxB

# IP/EMC Gaskets (Combi Gaskets)

Dimensions in mm (unless otherwise stated).



A modern and flexible production enables to process the **mtc** standard products according to your need:

- gaskets for D-Sub connectors
- gaskets for USB connectors
- gaskets for RJ-45 connectors
- gaskets for I/O connectors
- custom-specific punched parts

**Punched parts** can be supplied in a range of materials. The following **base materials** are available:

- metal-coated fabrics and fleeces
- foam covered with conductive fabric or aluminium foil
- copper- and aluminium tapes
- conductive silicone sheets
- completely conductive foam

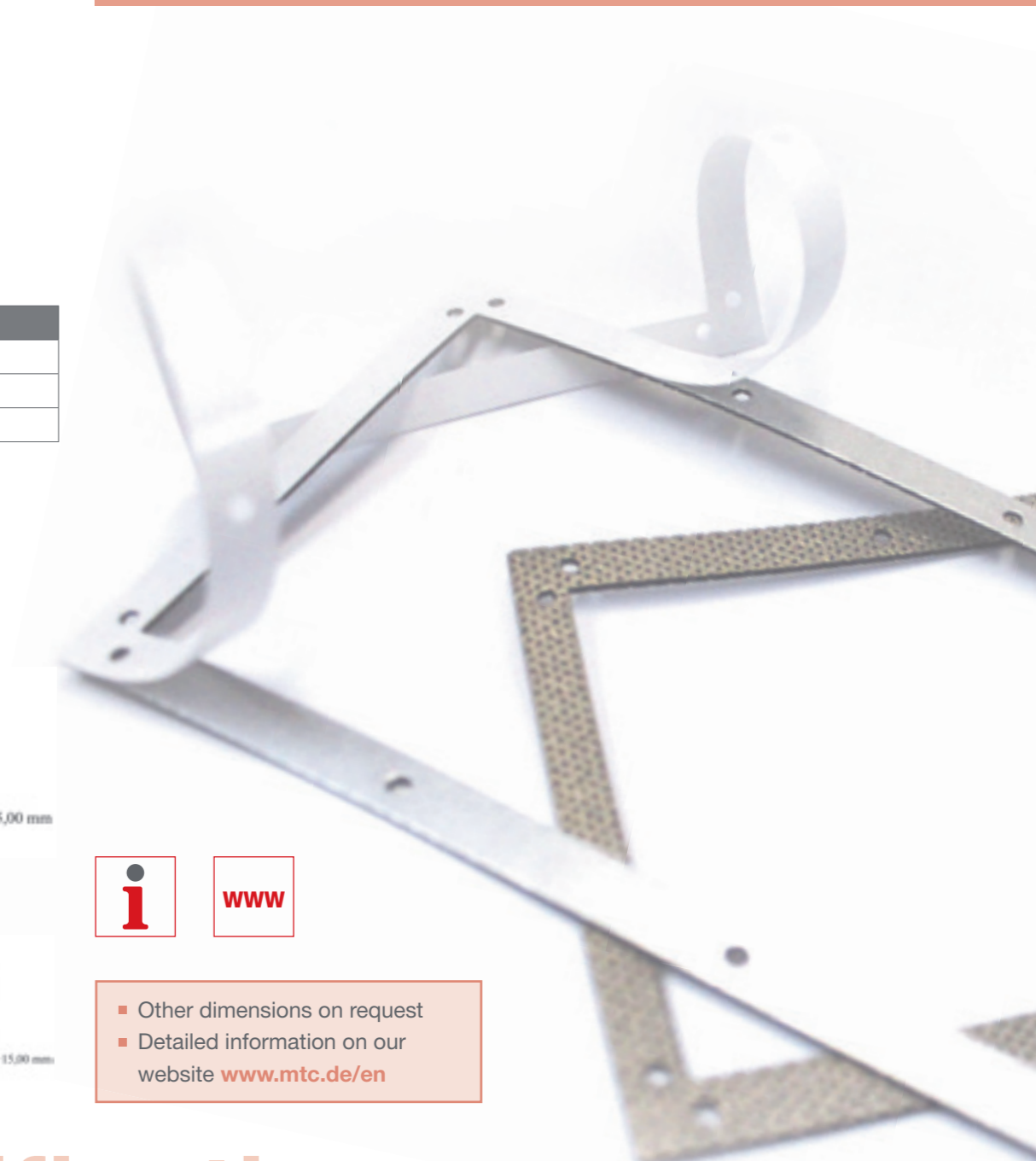
Punched parts made of **copper/aluminium tapes** are available on roll.

The distance from the edge of the hole to the edge of the gasket should be **minimum the thickness of the material**.



**Punched parts** provide the following advantages:

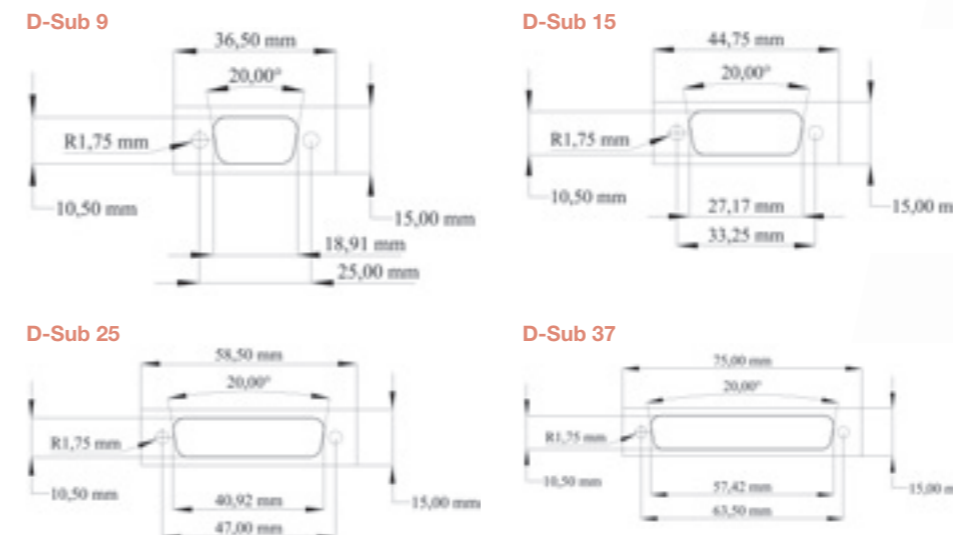
- Short delivery time
- Standard sizes for D-Sub plug connectors
- Customized sizes and cutouts available
- Tooling on the basis of CAD data or drawings
- Optimal for electronic connector panels and I/O-shields, e.g. compliant to ATX- or BTX-standard



**Tolerances**

Basic size	Tolerance
Position and shape of punching	+/- 0,5
Shape of gasket	+/- 0,5
Length < 500	+/- 1,0

**Standard gaskets for D-Sub**



- Other dimensions on request
- Detailed information on our website [www.mtc.de/en](http://www.mtc.de/en)

# Punched Parts according to customer specifications

Dimensions in mm (unless otherwise stated).



**Conductive polyolefin foam gaskets** are perforated at variable intervals before being metal coated in metal baths. This completely saturates the foam and makes it fully conductive whereby a **good conductive connection** between the top and bottom is ensured.

The seals have **excellent EMC properties** as a result of the small distance between the holes. Due to an improved Z-axis conductivity, the shielding properties can be increased to over 90 dB.

Conductive foam gaskets are available in **thicknesses from 0,3 to 1,5 mm** and can be supplied with a **copper-nickel metal coating**. They can be used in a temperature range of **approx. -10°C to approx. 80°C**.

Foam gaskets can be supplied either as **thin panels** which are ideal for shielding large areas, or as **customized stampings** for I/O shielding.

In addition to a large section of standard dimensions foam gaskets can also be offered according to **customer specifications**.

In addition, a conductive foam is available in thicknesses of 1,4 and 2,4 mm, which is **certified according to UL94 V-1**.



#### Tolerances

Basic size		Tolerances
Width		+/- 0,5
Height	0,3-1,0	+/- 0,1
	1,5	+/- 0,3

#### Conductive Foam

Width W	Thickness T	Item number
1000,0	0,3-1,5	RCF-WxT
1000,0	1,4 and 2,4	RCFH-V1-BxD



#### Conductive foam provides the following advantages:

- Flexible and inexpensive solution for contacting areas
- Available with customized cutouts
- Thickness range from 0,3 to 2,4 mm
- CuNi metallized
- Available with conductive tape



- Other dimensions on request
- Detailed information on our website [www.mtc.de/en](http://www.mtc.de/en)

# Conductive Foam