

General Description

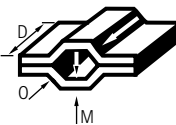
- ▶ Honeycomb filters serve as ventilation panels with shielding effect. Depending on application, filters can be a honeycomb filter or a mesh metal filter. Preferred is a perforated aluminium filter assembled into a corresponding frame. The perforation gives a better shielding due to extended contact between the wave formed sheets creating the honeycomb cells. To extend the performance further, it is possible to use 2 pieces honeycomb in half thickness turned by 90° around one another and again assembled into corresponding standard frames. If a spraywater protection is needed or air must flow in a certain direction, the honeycomb will be cut to angles of 30°, 45° oder 60° towards horizontal. Honeycomb and frame consist of the same material to minimize electromagnetic corrosion. Aluminium chromated or tin plated comes as standard.
- ▶ The following equivalent serves as a general rule for the electrical field-shielding:
 - $A = 27,3 \cdot (D/O)$, where is:
 - A = Shielding in dB
 - D = Depth of cell
 - O = Largest opening diameter
- ▶ Low-cost version: The miter cut profile P9 is put on a honeycomb 6,35 mm and moulded to stick on the filter. The frame keeps in place by the way the profile is formed and is not welded. The surface treatment is yellow aludine. The honeycomb will be supplied with gaskey BOM-8211-2205 put into the existing groove. Optionally it can also be provided with mounting drillings in the hollow part of the profile.
- ▶ Alternatively to the honeycomb a filter with wire mesh is acceptable where shielding requirements are limited. Behind a protective grid several layers of a wave formed woven mesh arrange an airfilter. To stop fine dust as well, viscosic oil can be added to the mesh. Frame would be a U-profile or flange profile. Exact dimensions, hole pattern or threaded inserts are made at customers specifications. To ensure good contact with enclosure we suggest to integrate an BOM 8 gasket.
- ▶ Applicable in ventilation openings on shielded enclosures, containers and shelters.

Note:

- ▶ The aluminium honeycomb is also available without frame as component. The surface then is only chromated. Delivery is in pre-cuts, either rectangular or round, per customers dimensions up to max. available size.

Specifications

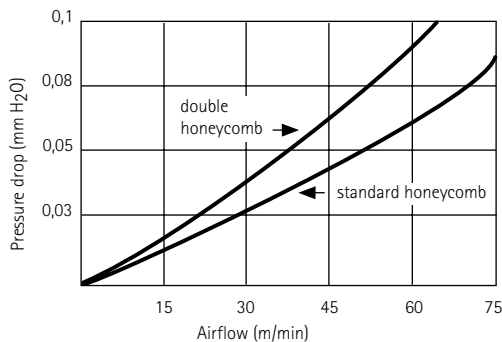
Honeycomb

Material	corrosion resistant aluminium
Surface finish	chromated, tin plated, nickel plated (when framed)
Dimensions	O = 3,18 mm O = 6,35 mm D = 6,35 and 12,7 mm D = 25,4 mm M = 0,05 mm M = 0,05 mm
	
Honeycomb compound	adhered and perforated
Honeycomb slant	90° (30°, 45°, 60° high volume only)
max. honeycomb size	approx. 2000 X 1000 mm without compound

Frame

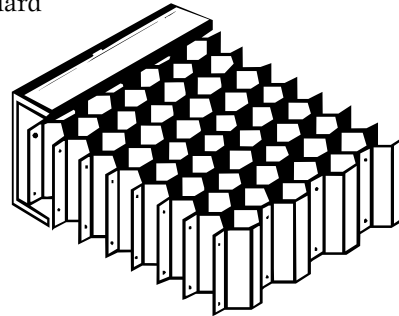
Material	ALMgSi 0,5, DIN 1725/48		
Surface finish	chromated MIL-G-5541	tin plated MIL-G-10727	nickel plated
Dimensions	generally limitation by surface treatment: 600 X 700 mm P1,P2,P6,P7: approx. 600 X 600 mm without holes approx. 600 X 480 mm with holes P3,P4,P5,P8: approx. 980 X 760 mm without holes approx. 740 x 480 mm with holes		
Mech. tolerances	up to 200 mm: ± 0,4 mm > 200 - 600 mm: ± 0,8 mm > 600 mm: ± 1,6 mm		

Airflow Aluminium

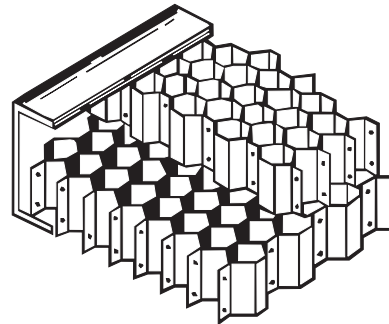


Construction Honeycomb

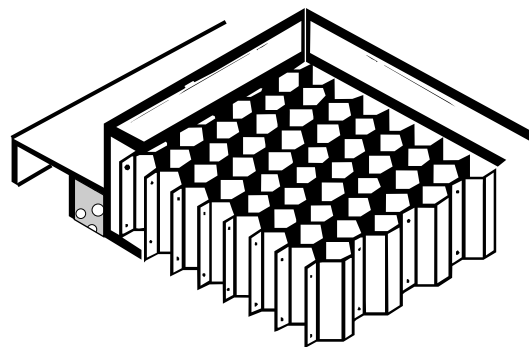
► Standard



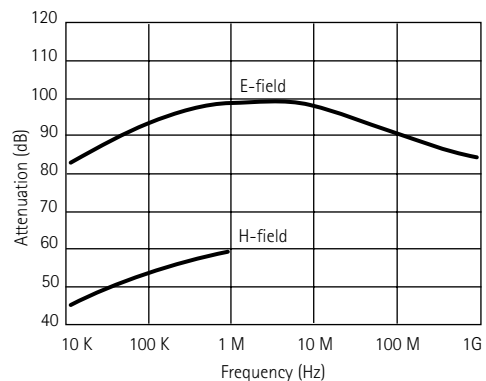
► Double honeycomb



► Low-cost version

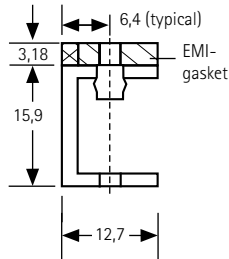


Shielding Performance

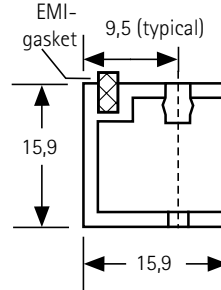


**Construction
Frames**

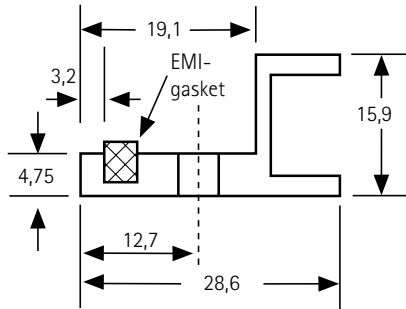
► Type P 1



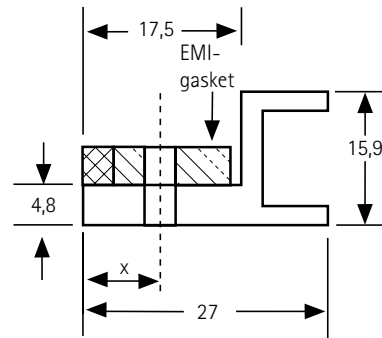
► Type P 2



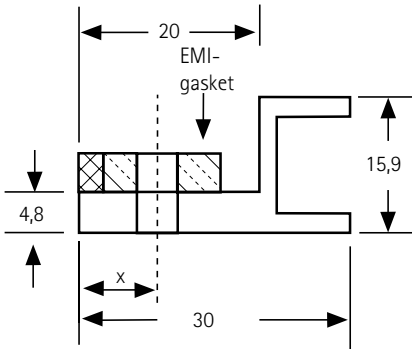
► Type P 3



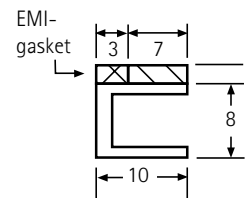
► Type P 4



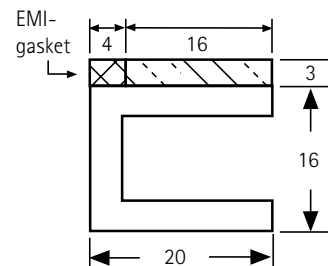
► Type P 5



► Type P 6



► Type P 7



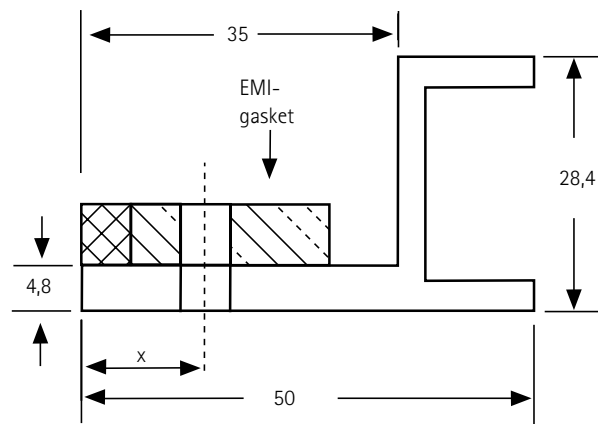
Note:

x = Dimensions can be advised from customer

Tolerances Frame Profiles

► All dimensions: ± 0,25 mm

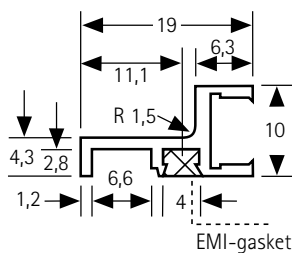
► Type P 8



Note:

x = Dimensions can be advised from customer

► Type P 9



Mounting

All standard alu-honeycomb filters will be delivered without mounting holes. Optionally mounting holes or threaded rivet inserts are possible.

EMI gasket

All shown EMI gaskets are optionally, except for frame P9 where it is already integrated. Recommended gasket for frame P2 and P3:

BOM-70xx-0212 (2,36 x 4,75 mm)

Ordering Information

- Each vent panel is made according to customers specification, so no standard ordering code is given. A universal tool for framing ensures a cost effective production. With the order confirmation a part number will be assigned which is also valid for re-ordering.