

VENTSHIELD | Thin Attenuation Vent Panels VT Shielding

Our VT Shielding thin vent panels can be custom manufactured from expanded aluminium, woven aluminium or expanded Monel. When selecting the material, airflow should be considered along with the attenuation requirements.

VT thin vent panels are effectively slimmer versions of the VF air filters but with different filtration media. The VT Shielding comprises two basic types referred to as A & B.

VT(A) panels incorporate an expanded aluminium mesh which is crimped into an aluminium extrusion frame. The VT(A) style offers excellent dust filtration and RF shielding performance but considerably restricted airflow.

VT(B) vents incorporate either a woven aluminium or expanded Monel foil crimped into an aluminium extrusion.

Applications:

Thin vent panels are designed for enclosures or racks where RF attenuation and protection from the ingress of foreign bodies is required but space is at a premium.

Expanded aluminium mesh panels are nominally 6.0mm thick inside a 4.8mm thick frame and provide attenuation levels considerably higher than the woven aluminium & expanded Monel foil types which have a very small effect on airflow but offer less shielding effectiveness.

All three shielding materials have very different properties and their airflow characteristics are a function of size, positioning, application and airflow source / volume. We suggest that a sample of the materials is requested for customer testing before specifications are finalised - please ask our sales office.

Performance: Typical Attenuation dB

FREQUENCY	FIELD	TYPE VT (A)	TYPE VT (B1)	TYPE VT (B2)
10KHz	H	25	10	10
100KHz	H	45	25	18
1MHz	H	58	35	36
1MHz	E	>100	93	>100
10MHz	E	>100	95	>100
100MHz	E	>100	97	>100
1GHz	P	73	54	45
10GHz	P	54	18	18

Note VT(B1) media is woven aluminium 0.5mm @ 16 OPI (openings per inch)
VT(B2) media is expanded Monel mesh 0.5mm @ 12 OPI

Tolerances:

Overall dimensions ±0.8mm
Fixing holes/fasteners ±0.5mm
with jigs ±0.2mm

How to order:

Specify: Series - Frame Style - Vent Media - Overall Size -
Number of Fixings - Fixing Type/Size

Where possible please provide a detailed drawing.

Example:

VT(A)-TV2-05-2320-2320-12-T/H(M4) specifies a thin vent utilising expanded and crimped aluminium alloy media within a TV2 frame with 12 size M4 through fixing holes. The gasket should be specified as shown in the gasket materials sections of the website & catalogue.

SERIES	FRAME STYLE	VENT MEDIA	OVERALL SIZE	FIXINGS (NO.)	FIXING TYPE
VT(A)	TV1 or TV2	05=Expanded Aluminium 06=Woven Aluminium	xxxx-xxxx	xx	xx
VT(B)	TV3	07=Expanded Monel			

/PMBUP115
60W
.BMEPO5SBEF1BSL5IF
BVTfXbz.BMEPO
\$+

5
XXXXQQUDPVL
&TBMFQQUDPMBUPDPN