BOX TECH

BOX Acoustic Vents

For Consumer Electronics

BOX Acoustic Vents

We balance the trade-offs between acoustic performance and liquid resisitance.

As the future is moving forward being more intelligent, more and more human-computer interactions will be operated into vast of complex environment which requires the portable devices to have the advanced protection. Normally, the reliable liquid resistance sacrifices in sound performance because the devices need apertures for sufficient sound transmission which can let either sound or liquid pass and lead to reliability problems.

Box utilizes its our design and engineering team with theri professional perspection and knowledge on the expanded polytetrafluoroethylene (ePTFE) market to deliver the most guaranteed acoustic venting products which extensively protect your protable electronics devices by perfectly balancing the trade-offs between their acoustic performance and the liquid resistance,

Our acoustic vents combine the latest technology to achieve a designed product that offers the ultimate in the minimum insertion loss and peak acoustic performance while even after exposure to the liquids, such as water, sweat, oil, and other liquid with lower surface tension. With cooperating to global customers, BOX TECH is uniquely qualified to solve and provide the superior venting solutions.

We protect, we box; and we are the final answer.

Applications

Waterproof mobile phones

Waterproof cameras

Waterproof bluetooth handsets

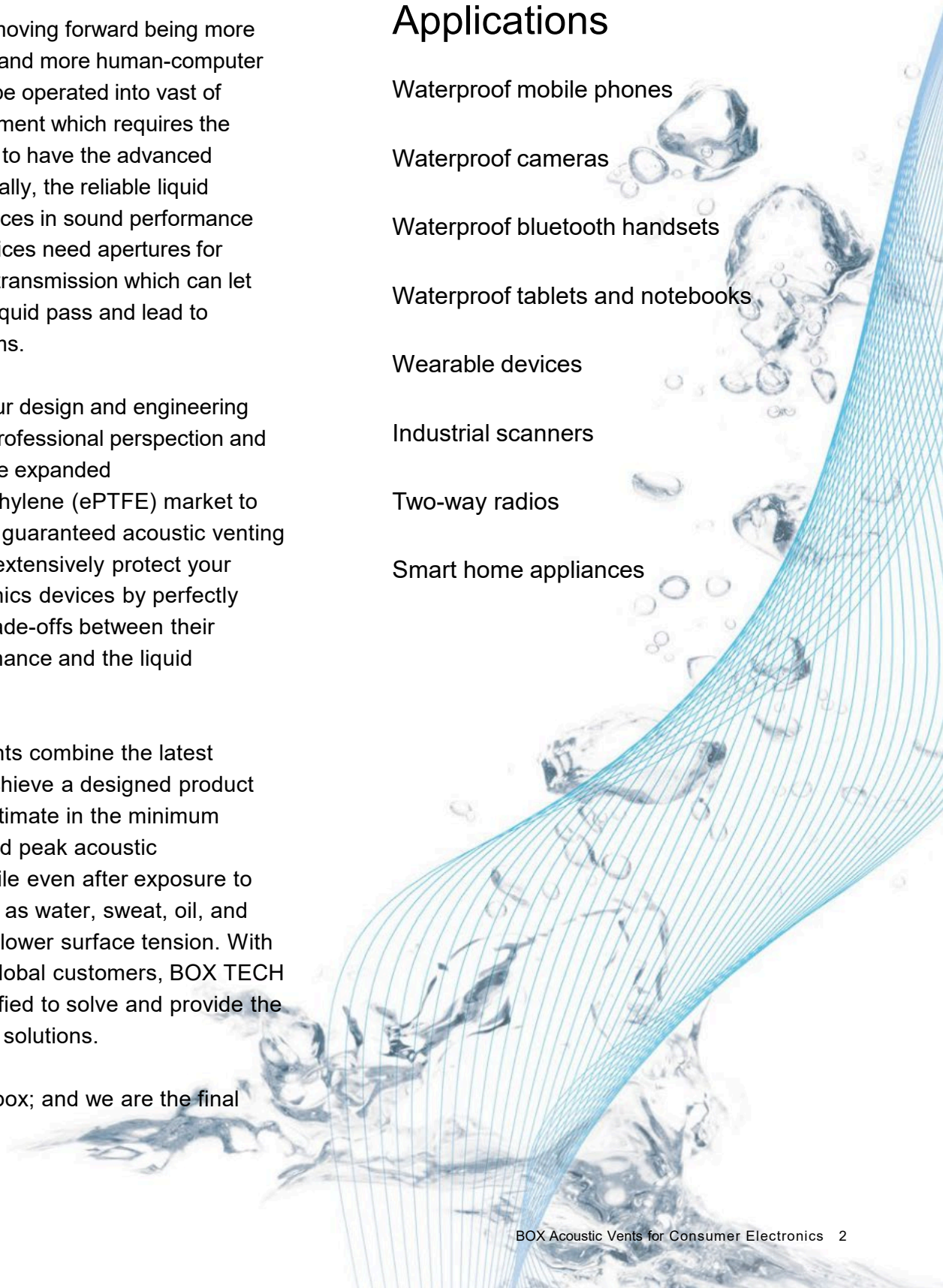
Waterproof tablets and notebooks

Wearable devices

Industrial scanners

Two-way radios

Smart home appliances

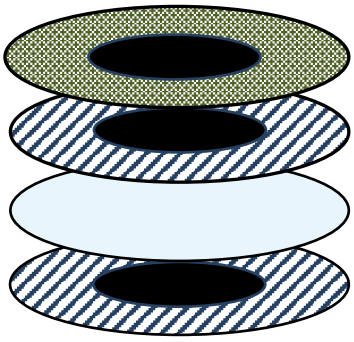


Meeting Demands for Water Resistance Without Sacrificing Acoustic Quality

BOX TECH is a world-leading technology company who owns a professional team to deeply understand on acoustic field. In order to enable sufficient transmission of sound to protable electronics, apertures are usually designed on devices. However, the design is always followed by the risk of liquid entering the devices, which brings acoustic performance and quality problem. BOX Acoustic Vents, engineerd from expanded polytetrafluoroethylene (ePTFE) can facilitate optimal transmission of both the air and sound, while functionally repelling water, sweat, cleaning solutions and other low surface tension liquids, without sacrificing acoustic performance.

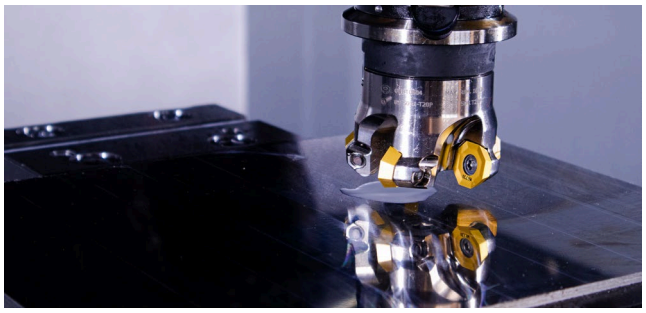
Greater Design Flexibility

The outlook is often being considered as one of the most vital factors during electronics designing. It is difficult for designers to choose a right venting product since both the outlook and sizes of venting system has been determined before engineering verification process normally. BOX's professional back-up team can provide vast range of design options no matter from venting structure to the sizes of vent, which always ensure all customer specifications to be met.



Reliable Installation

As industrial technology is moving forward, the consumer electroncis needs to be intergrated and improved which it often brings some technical issue on how to install the vent. It can bring a lot of time and money waste. However, choosing BOX will drive down valuable limited resource during development by offering the easiest and the most reliable vent installation route which can be applied on either manual or automatic process.



Product Information

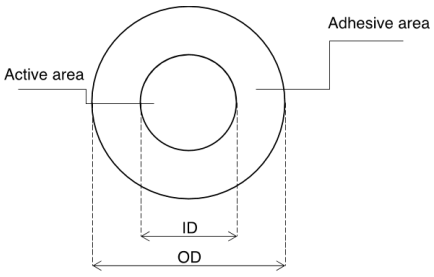
Series/ Characteristics	BMA10	BMA11	BMA12	BMA13
IP rating (IEC60529&ISO2810)	IP6x	IP6x	IP4x	IP6x
Insertion loss@1kHz(I.D. 2.0mm)	< 0.5dB	<0.5dB	<0.3dB	<0.3dB
Materials, color	PET, Black	PET, White	PET, Black	PET, Black
Thickness	50um	60um	50um	100um
Acoustic impedance (MKS Rayls)	115 Pa s/m	150 Pa s/m	25 Pa s/m	200 Pa s/m
Open area	20%	20%	45%	15%
Temp. Resistance (IEC60028-2-1)	-40°C to 105°C			
Environmental Compliance	RoHS / Reach Compliance			

Standard Parts

Application	Dimension(mm)		
	Inner	Outer	Reference thickness
Acoustic sensitive component	1.5	3.0	0.30
	1.6	4.2	0.35
	2.0	5.0	0.35
	3.0	6.0	0.40
	5.0	8.0	0.40

Reference thickness include whole stack up structure: adhesive, membrane and support layers

Vent Design



A: Support layers
B: Mesh
C: Adhesive

Contact Us

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