BOX TECH

BOX Pressure Vents

For Outdoor and Portable Electronics

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We balance the trade-offs between unparalleled airflow performance and greater reliability for your devices

With the technology developing，outdoor and portable electronics can be found everywhere in our life. In providing us convenient life at the same time, they also take the challenges of different harsh environments while facing the risk of failure; our mission is to supporting outdoor and portable electronics long service life, increasing reliability, and preventing deformations that could cause failure.

Box utilizes its our design and engineering team with their professional perception and knowledge on the expanded polytetrafluoroethylene (ePTFE) market to deliver the most guaranteed pressure venting products which extensively protect your outdoor and portable electronics devices by perfectly balancing the trade-offs between unparalleled airflow performance and greater reliability for your devices.

Our pressure vents are engineered for maximum airflow at the required level of ingress protection – optimizing venting material, venting size, free volume and target equalization time to provide the best pressure equalization solutions 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.

Outdoor Applications

- Heavy duty equipment
- Sensors
- Marine equipment
- Outdoor lighting
- Rugged vehicles
- Home application
- Solar power
- Network cameras
- Telecom infrastructure

Portable Electronics Applications

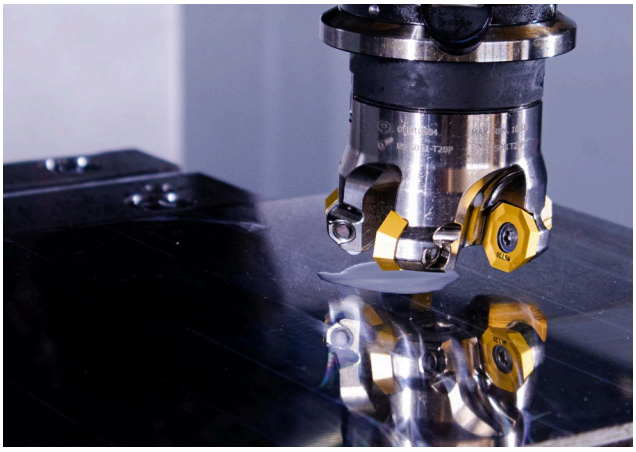
- Waterproof mobile phones
- Waterproof cameras
- Waterproof Bluetooth handsets
- Waterproof tablets and notebooks
- Wearable devices
- Industrial scanners
- Two-way radios
- Smart home appliances

Meeting Demands for Water Resistance Without Sacrificing pressure Quality

BOX TECH is a world-leading technology company who owns a professional team to deeply understand on pressure field. In order to enable sufficient transmission of sound to portable electronics, apertures are usually designed on devices. However, the design is always followed by the risk of liquid entering the devices, which brings pressure performance and quality problem. BOX pressure Vents, engineered 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 pressure 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 portable electronics needs to be integrated 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

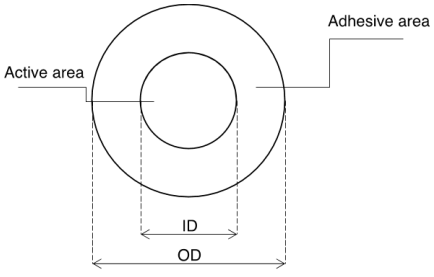
Series/ Characteristics	BMA01-L	BMA02-L	BMA03-L	BMA05-L
IP rating (IEC60529&ISO2810)	IP67; IP68 (2.5m water@30mins)	IP67; IP68 (2m water@30mins)	IP67; IP68 (6m water@30mins)	IP67; IP68 (2m water@30mins)
Typical airflow (ml/min/cm² @7kpa)	2000	3000	1500	4000
Materials	ePTFE			
Materials color	White			
Support material	PET/PI			
Adhesive type	Acrylic/Silicone			
Adhesive Temp. Resistance (IEC60028-2-1)	-40°C to 85°C			
Environmental Compliance	RoHS / Reach Compliance			

Standard Parts

Application	Dimension(mm)		
	Inner	Outer	Reference thickness
pressure sensitive component	1.5	3.0	0.26
	1.6	4.2	0.31
	2.0	5.0	0.31
	3.0	6.0	0.36
	5.0	8.0	0.36

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

Vent Design



A: Support layers
B: ePTFE membrane
C: Adhesive

Product Information

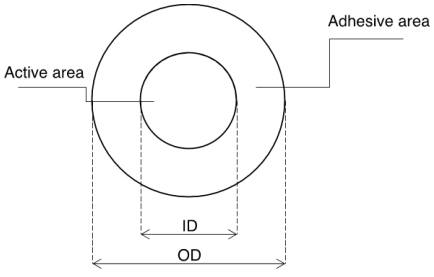
Series/ Characteristics	BMA05	BMA06	BMA07-L	BMA08-L
IP rating (IEC60529&ISO2810)	IP67; IP68 (2m water@30mins)	IP67; IP68 (12m water@30mins)	IP67; IP68 (2m water@30mins)	IPX4
Typical airflow (ml/min/cm² @7kpa)	18000	1400	1000	40000
Materials	ePTFE			
Materials color	White		Blue	Black
Support material	PET/PI			
Adhesive type	Acrylic/Silicone			
Adhesive Temp. Resistance (IEC60028-2-1)	-40°C to 85°C			
Environmental Compliance	RoHS / Reach Compliance			

Standard Parts

Application	Dimension(mm)		
	Inner	Outer	Reference thickness
pressure sensitive component	1.5	3.0	0.26
	1.6	4.2	0.31
	2.0	5.0	0.31
	3.0	6.0	0.36
	5.0	8.0	0.36

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

Vent Design



A: Support layers
B: ePTFE membrane
C: Adhesive

Product Information

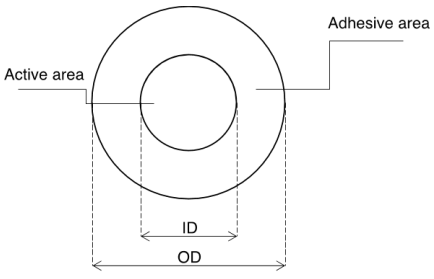
Series/ Characteristics	BMA15-L	BMA18-L	BMA25-L	BMA27-L
IP rating (IEC60529&ISO2810)	IP67; IP68 (50m water@30mins)	IP67; IP68 (50m water@10mins)	IP67; IP68 (1m water@30mins)	IP67; IP68 (2m water@30mins)
Typical airflow (ml/min/cm² @7kpa)	40	100	4200	600
Materials	ePTFE			
Materials color	White		Black	Black
Membrane Characteristics	hydrophbic		Hydrophobic&Oleophobic	
Adhesive type	Acrylic/Silicone			
Adhesive Temp. Resistance (IEC60028-2-1)	-40°C to 85°C			
Environmental Compliance	RoHS / Reach Compliance			

Standard Parts

Application	Dimension(mm)		
	Inner	Outer	Reference thickness
pressure sensitive component	1.5	3.0	0.26
	1.6	4.2	0.31
	2.0	5.0	0.31
	3.0	6.0	0.36
	5.0	8.0	0.36

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

Vent Design



A: Support layers
B: ePTFE membrane
C: Adhesive

Contact Us

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