

PRODUCT SPECIFICATION

Product Name	Screw type explosion-proof valves
Customer Name	
Sinri P/N	SV-PN5EPV400-H30H
Customer P/N	
Issue Date	2021-11-20

Product Description

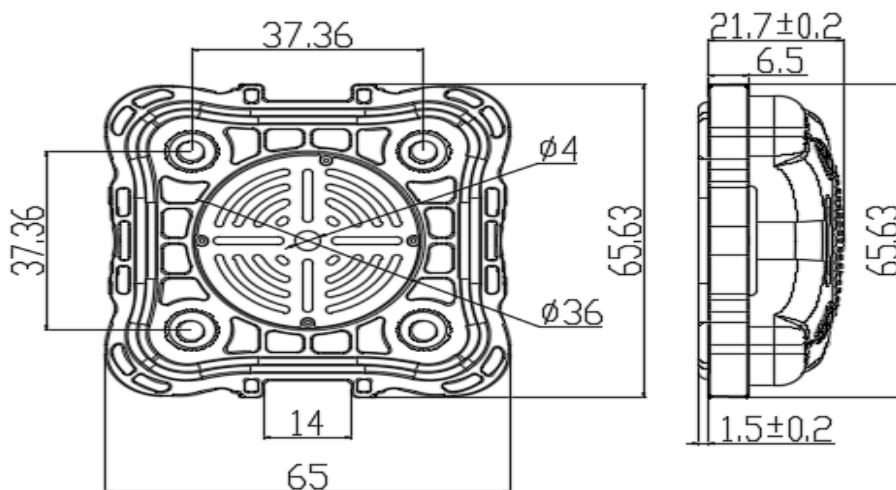
Items	Product Details
P/N	SV-PN5EPV400-H30H
Size	37.36*37.36*M5*0.8
Main material	PP+30%GF（Glass Fiber）
Membrane	E-ptfe
Color	Black
Workmanship	Injection molding welding
Seal ring	Fireproofing O-ring（silica gel）
Airflow	8.8 L/min;△p=10KPa
Burst pressure	20kpa-40kpa
Temperature	-40℃—125℃
IP Rate	IP67（IP68 can be customized）
Water Resistance	12Kpa（>1m）

Product Appearance

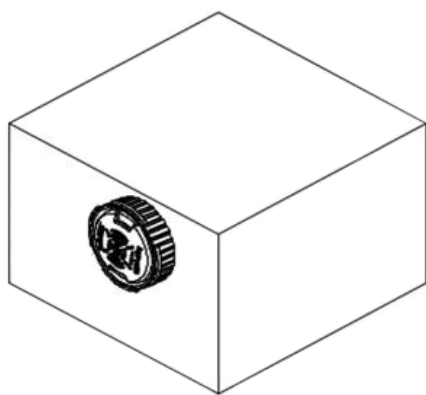


Detail Spec.

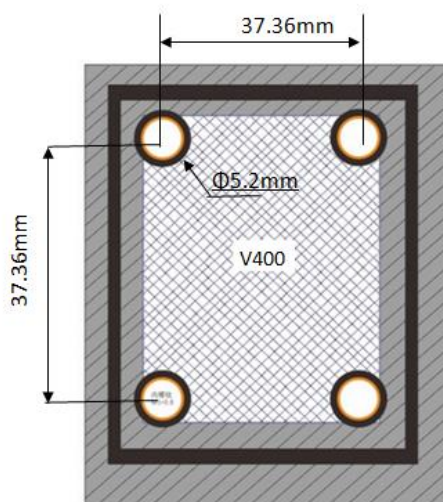
Overall dimensions: mm



Installation Suggestions



Installation drawing

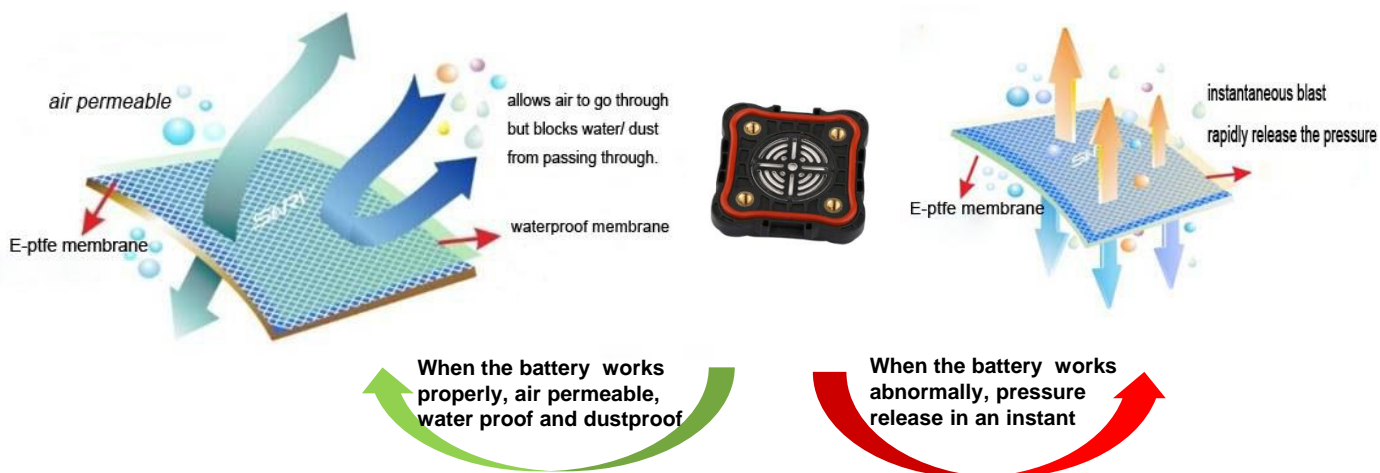


Hole size

1. Install on a vertical surface which no water or other contaminants;
2. It is suggested punching $\phi 5.2 * 37.36 * 37.36 \pm 0.1$ mm straight hole and lock with nut M5*0.8 ;
3. Mounting torque: 6N.m

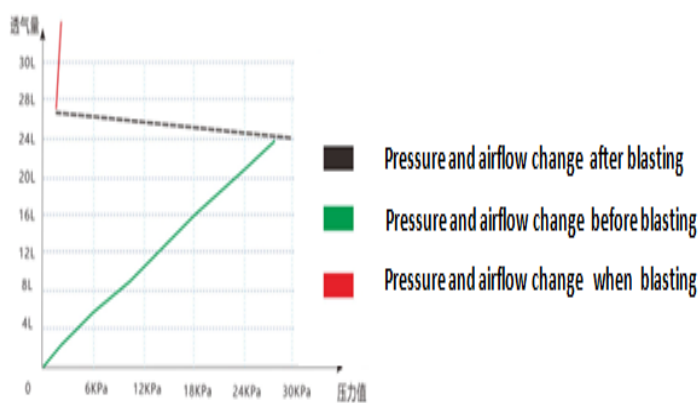
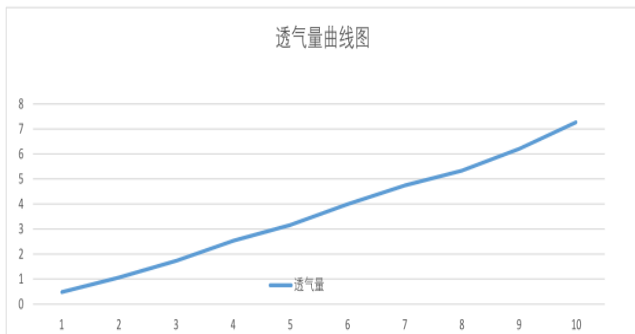
How it works

- ◆ When the battery works properly , it can equalize (internal & external) battery box pressure and resist the water from getting inside ,thus lower maintenance costs and extend electric vehicle PACK 'service life;
- ◆ When the battery works abnormally, the pressure increased sharply in a short time and reaches a designated threshold, explosion-proof valves membrane touches the internal thimble and instantaneous blast, rapidly release the pressure and prevent the battery and other components from damage, thus reduce the vehicle PACK's risk of breakdown , enhances the security performance



Pressure and airflow variation

压力KPa	1	2	3	4	5	6	7	8	9	10
透风量	0.48	1.06	1.73	2.53	3.16	3.99	4.74	5.33	6.2	7.27



Pressure KPa	1.5	2	3	4	5	6	7	8	9	10
Airflow L/MIN	1.5	1.9	2.9	4.1	5.0	5.9	6.7	7.9	8.1	8.8

Typical Applications

New energy vehicle battery pack, Start and stop the battery, large seal enclosure and all kinds of sealed component need to be protective and anti-explosion.

Test criteria

IP67 test	GB/T 20854-2007
Fire Test	UL94V0 GB/T 31467.3-2015
Salt Spray Test	GB/T 31467.3-2015
Muddy Water Test	Corporate standards
Vibration Test	GB/T 31467.3-2015
Air flow Test	GB/T 20854-2007
Air Tightness Test	GB/T 20854-2007
Low Temperature storage Test	GB/T 31467.3-2015
Burst Pressure Test	20kpa-40kpa （Corporate standards）
High temperature storage Test	GB/T2423.1-2008
Sea Water Immersion Test	GB/T 31467.3-2015
Damp Heat Cycle Test	GB/T31467.3-2015
Thermal Shock Test	GB/T 31467.3-2015
Torque Test	6N.m （Corporate standards）