

DIAVENT

Our innovative DIAvent is the ideal pressure management solution intended for large-scale batteries in electric and hybrid vehicles. It is made up of a patented multi layer, nonwoven fabric combined with an umbrella membrane that allows DIAvent to intelligently and reliably handle the bi-directional pressure equalization of any battery, even in the harshest of operating conditions.

DIAvent provides extremely high gas permeation during normal operation and a reversible emergency degassing function while also meeting the requirements for water tightness according to protection category IP67 and higher.

Additionally, the DIAvent ...

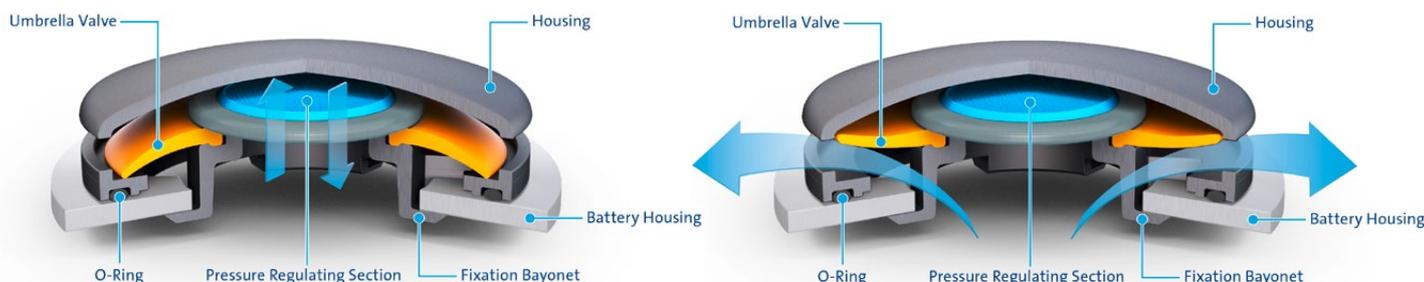
... passed tests according to ISO 20653:
IP6K9K; IP67; IP68; IPXXC

... is according to flammability class UL94: V0

... is shock and vibration resistant designed

During normal operation:

- Permeation rate: Typical value 21 L/min at 100 mbar
Minimal value 16 L/min at 100 mbar
- Permeation also given under high humidity conditions
- Watertight up to 2 m for 2 hours for deionized-water and water with 1% NaCl
- Re-drying time of 2 to 3 hours at 25 °C with 50% humidity



The information contained herein is believed to be reliable, but no representation, guarantees or warranties of any kind are made to its accuracy or suitability for any purpose. The information presented herein is based on laboratory testing and does not necessarily indicate end product performance. Full scale testing and end product performance are the responsibility of the user.

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VALUES FOR THE CUSTOMER

DIAvent delivers multi-function ability contained in one element:

- Pressure regulation in normal operation with extremely high gas permeation
- Overpressure release function in case of cell venting/malfunction, repeatable over 10,000 times
- Fully reversible overpressure release function that self closes after emergency activation
- Water tight
- Oil Resistant
- Resistant to corrosive atmosphere and sprayed saltwater
- Different connection designs (customizable)
- Quick assembly and firm mounting/manipulation proof
- One-sided mounting possible
- Robust design when compared to traditional PTFE solutions
- Wide temperature operation range, between -40 °C to 120 °C, Humidity range 20 – 95% rel.
- 100% EOL test for normal and emergency venting as well as IPX7

For emergency venting:

- Emergency blow-off: Typical value 18 L/s at 300 mbar
Minimal value 15 L/s at 300 mbar for outer housing of 55 mm