

# Permeaflon® M60W Venting Membrane



### Reliable protection against pressure variations and water ingress

In the interior of hermetic housings, in containers, headlights or batteries, changes in temperature or differences in height cause substantial variations in internal pressure.

Permeaflon® pressure compensation units (PCUs) from Berghof compensate for differences in pressure and prevent penetration by water, dust, grime and even oils. The pressure compensation units therefore guarantee the reliable functioning of components throughout their long life cycle.

## Physical and Technical Specifications | Membrane

Reference thickness	0.19 mm
Material	<b>Permeaflon®</b> Polytetrafluorethylene (PTFE); porous, isostatically pressed, sintered Hydrophobic Oleophobic acc. to AATCC 118 / ISO 14419 (optional) Free of PFOA and PFOS
Colour	White / natural
IP protection class @RT; test area 1 cm <sup>2</sup>	IP67, IP68 (acc. to ISO 20653, IPx8 is a user-defined test; is passed depending on conditions. Higher protection classes depending on the housing design and the environmental conditions of the application.)
Typical water entry pressure @RT; test area 1 cm <sup>2</sup>	≥ 600 mbar
Typical airflow rate @RT; Δp = 100 mbar (1.45 psi)	≥ 4.4 L/(h·cm <sup>2</sup> )
Chemical resistance	Virtually universal
Thermal resistance	-200 to +250 °C
Flammability	UL 94 V-0
Physiological properties	Physiologically insignificant At temperatures of > 400 °C gaseous by-products from thermal decomposition which are harmful to health must be reckoned with.

Physical and Technical Specifications   Membrane	
Bacterial Filtration Efficiency (BFE <sup>1</sup> )	99.999 % Nominal
Viral Filtration Efficiency (VFE <sup>2</sup> )	99.999 % Nominal
Storage	May be stored indefinitely at room temperature.
Processing information	No predefined direction of installation. Can be welded to various polymers by thermal and ultrasonic means. Weldability should be tested in each instance.
Conformity	Substances of Very High Concern (SVHC) (REACH). Directive 2011/65/EU on restricting the use of certain hazardous substances in electrical and electronic equipment (RoHS2). Perfluorooctanesulfonates (PFOS) as identified in EU Directive 2006/122/EC (30 <sup>th</sup> amendment to EU Directive 76/769/EEC) or Perfluorooctanoic acid (PFOA), its salts and related compounds as described in (EU) 2019/1021 (POP).
Supplied as	Tape Stamped parts Our highly qualified staff will be pleased to help you in developing user-specific ventilation and extraction solutions. Please contact us with your requirements.

**Note:** Guide values are given in this data print-out that have been compiled on the basis of current experience and knowledge. These values may be influenced by processing conditions, modifications, additives and environmental conditions and do not release users from the obligation to carry out their own checks and trials. A legally binding guarantee of particular properties or suitability for a concrete purpose cannot be derived from our information.

<sup>1</sup> This Permeafロン® PTFE material exceeded the standard BFE value of 98%, all test method acceptance criteria were met. This standard BFE test procedure was modified from Nelson Laboratories, LLC (NL), in order to employ a more severe challenge than would be experienced in normal use. This method was adapted from ASTM F2101. Testing was performed in compliance with US FDA good manufacturing practice (GMP) regulations 21 CFR Parts 210, 211 and 820. Complete testing data and information is available upon request.

<sup>2</sup> With this Permeafロン® PTFE material all test method acceptance criteria were met. The VFE at an Increased Challenge Level test procedure was adapted from ASTM F2101. This standard VFE test procedure was modified from Nelson Laboratories, LLC (NL), in order to employ a more severe challenge than would be experienced in normal use. Testing was performed in compliance with US FDA good manufacturing practice (GMP) regulations 21 CFR Parts 210, 211 and 820. Complete testing data and information is available upon request.