Donaldson’s Weld-Fit enclosure protection vents provide protection from particles, water, oils, and liquids while allowing pressure equalization in enclosures. Donaldson offers Weld-Fit enclosure protection vents as either integrated assembly parts or as media that can be welded seamlessly into a component. Weld-Fit vents are typically used in devices where adhesives are not appropriate, where chemical incompatibilities or extreme temperatures exist, in devices requiring physical protection of the filter path, and/or ease of assembly into the device.

**FEATURES & BENEFITS**

- Prevents the passage of harmful particles and liquids into the device
- Allows for constant pressure equalization during altitude and temperature fluctuations
- High efficiency particulate removal
- Venting of gases and pressure equalization in both directions
- Oleophobicity ratings from 1 to 8
- IP ratings up to IP69K
- Easy application and device integration
- Custom sizes and shapes are available

**TYPICAL CONSTRUCTION OF WELD-FIT ASSEMBLIES**

A Weld-Fit Assembly is comprised of a filter material attached thermally, with adhesive, or over-molded in a plastic housing and supplied as a vent assembly. Typical Weld-Fit Assemblies include:

- **High efficiency ePTFE membrane** - Acts as particulate, hydrophobic, and oleophobic barrier while allowing necessary gases to flow through
- **Plastic housing** - Incorporates the filter material and is designed to fit into your enclosure. Available in a wide variety of thermoplastics, elastomers, and other materials
STANDARD MATERIALS AVAILABLE

- The many options include Donaldson’s proprietary Tetratex® ePTFE membrane, woven, nonwoven, and extruded materials such as nylon, polyester, polypropylene, and polyester/polyethylene
- Hydrophobic and oleophobic acoustic materials are available
- Membrane thickness: <0.3mm (<0.012")
- Continuous Operating Temperature Range: -40° to 149°C (-40° to 300°F)
- Minimum efficiency of 99.97% on 0.1 µm particles
- Material data sheets available upon request

PACKAGING OPTIONS

WELD-FIT ASSEMBLIES

- Manufactured, inspected and packaged in clean room environment
- Supplied in stackable trays and sealed in cleanroom bags, ready to be picked by a robot or other automated equipment
- Bulk packaged in cleanroom bags

WELD-FIT MEDIA

- Manufactured, inspected and packaged in clean room environment
- Supplied on a light-tack adhesive continuous release liner: 2,000 - 5,000 parts per polyethylene cores
- Roll sealed in clean room bag unless otherwise specified
- Optional protective liner

Donaldson is IATF 16949:2016 certified and our focus is on high quality manufacturing, responsive customer service, and tailored solutions that can be easily integrated into our customer’s device or application. Our unique, proprietary membrane and oleophobic treatment processes allow us to select the best types of materials to meet your application requirements.

Donaldson Company is a leading global provider of filtration products, with sales and manufacturing of venting products in the U.S., Europe and Asia. Let Donaldson be your partner in problem-solving.