



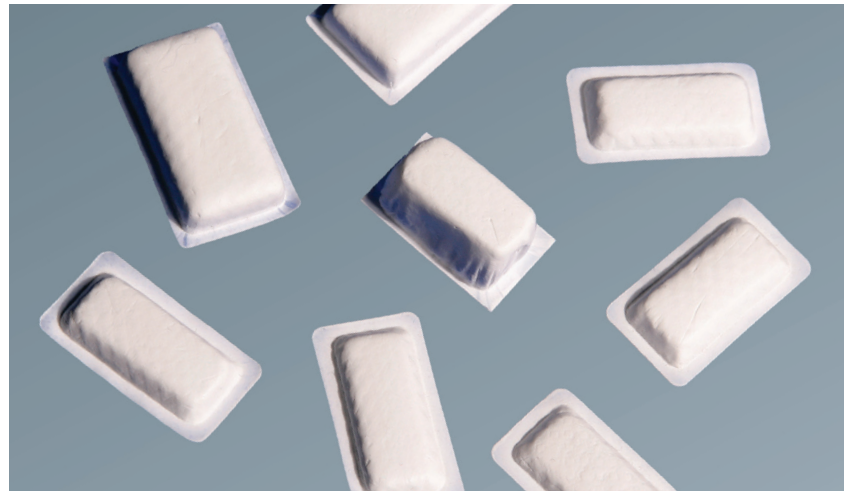
## DESCRIPTION

The Adsorbent Pouch Filter (APF) is a porous membrane pouch containing a specially formulated adsorbent element.

## PRINCIPLE OF OPERATION

The APF is designed to provide protection from hydrocarbons, acid gases, and the effects of water vapor such as condensation and corrosion. The high efficiency filtration membrane encapsulates the adsorbent element while remaining permeable to gaseous contamination and water vapor. The adsorbent element is specially formulated to control humidity and to adsorb acid gases and hydrocarbons from internal and external sources. The most common adsorbents and their associated functions are as follows:

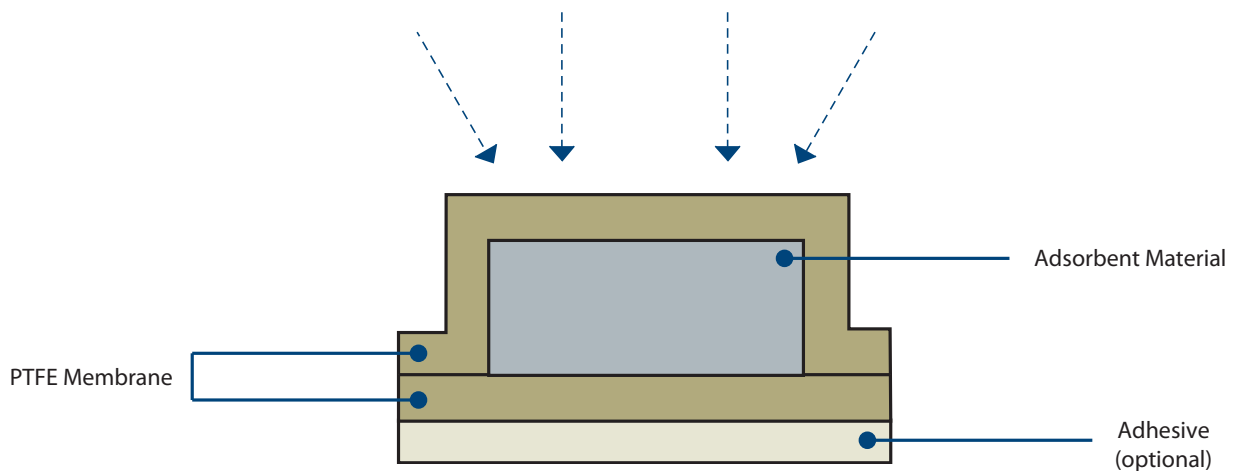
- **Activated Carbon:** Relative humidity control and adsorption of hydrocarbons
- **Chemically Treated Activated Carbon:** Relative humidity control and adsorption of acid gases and hydrocarbons
- **Silica Gel:** Relative humidity control



## INSTALLATION IN DRIVE

The APF is typically located in a cavity inside the disk drive. It may also be attached to the cover or base using a pressure-sensitive adhesive. Because the adsorption mechanism is diffusion-based, the pouch can be located anywhere inside the disk drive assembly.

When using an APF filter, it is recommended that diffusion protection be incorporated into the drive. Diffusion protection reduces the amount of hydrocarbons, water vapor, and acid gases entering the drive from the surrounding environment.

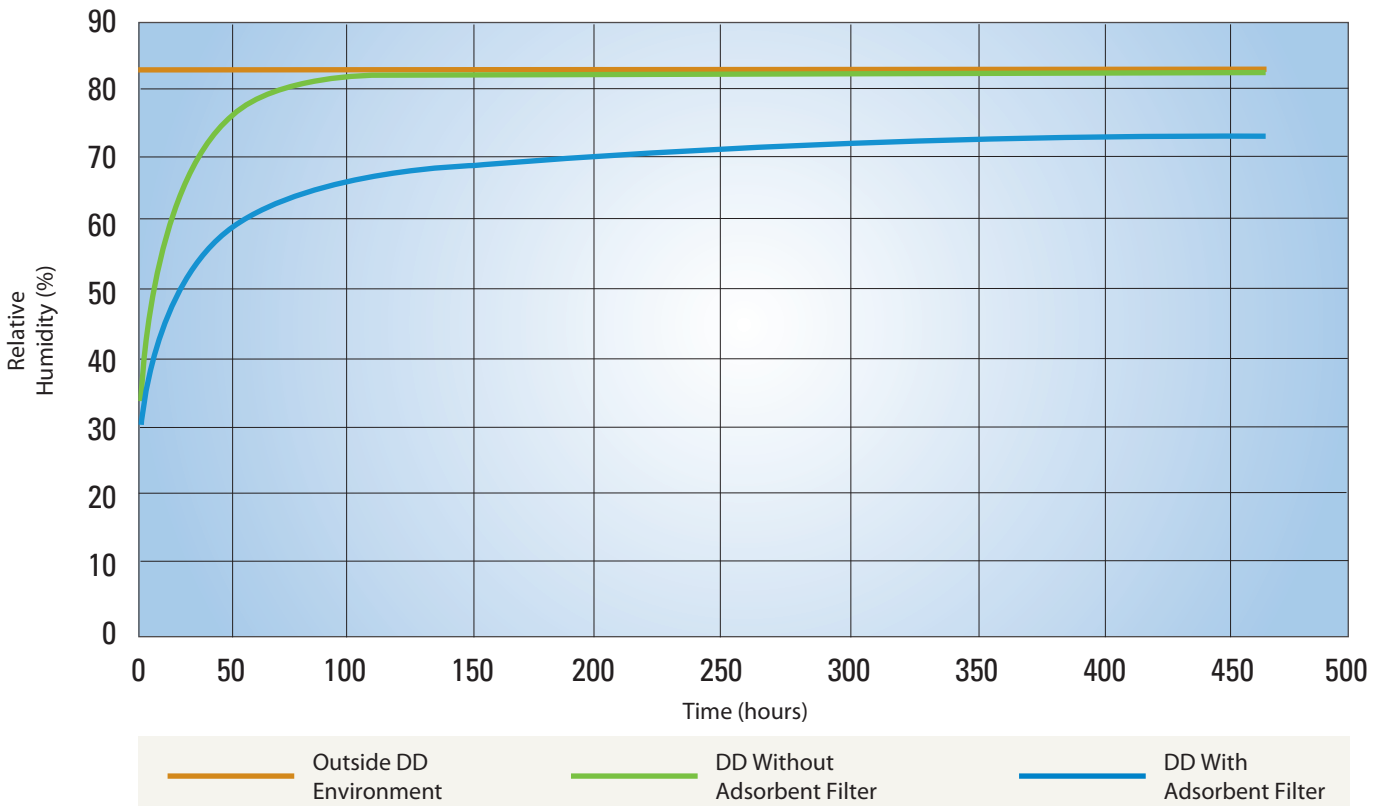


# ADSORBENT POUCH FILTER (APF)

## PRODUCT GUIDELINES AND SPECIFICATIONS

Membrane MVTR (Moisture Vapor Transmission Rate)	950 g/m <sup>2</sup> /24-hour minimum per ASTM E96 wet cup
<b>Packaging</b>	
Inner Bag	Level 100 cleanroom bag free of silicone, amides, and DOP per NVR/FTIR
Outer Packaging	Inner cleanroom bag enclosed in metalized vapor barrier bag
Contamination Control	Designed to pass the most stringent cleanliness specifications. Manufactured in a cleanroom environment

## RELATIVE HUMIDITY TEST



Contact Donaldson today for more information!



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Adsorbent Pouch Filter (07/10)  
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