

Disk Drive Adsorbent Pouch Filter (APF)

Product Guidelines & Specifications

Description

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

Principle of Operation

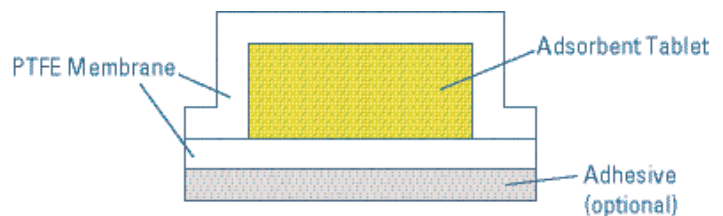
The APF is designed to provide protection from hydrocarbons, acid gases, and the effects of water vapor such as condensation and corrosion. The high efficiency filtration membrane encapsulates the adsorbent element while remaining permeable to gaseous contamination and water vapor. The adsorbent element 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.



Parameter

Specification

Membrane MVTR (Moisture Vapor Transmission Rate)

950 g/m²/24-hour minimum per ASTM E96 wet cup

Packaging

Inner Bag

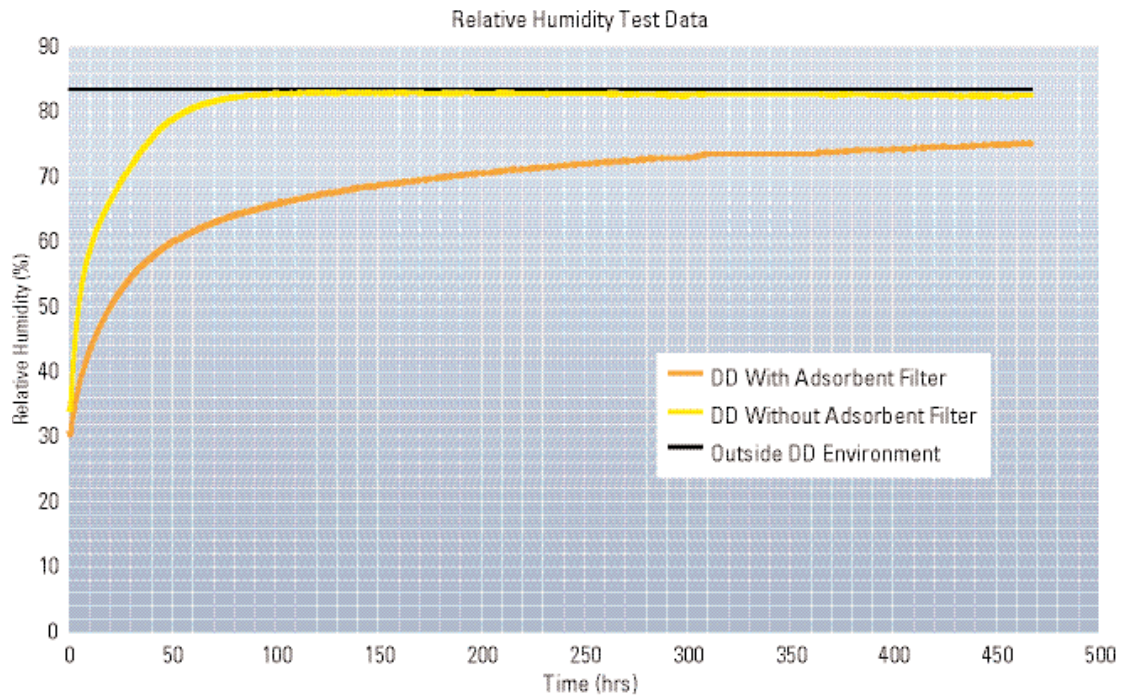
Level 100 cleanroom bag free of silicone, amides, and DOP per NVR/FTIR

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.



Contact Donaldson today for more information!



Donaldson Company, Inc.
Minneapolis, MN
952-887-3344

Donaldson Filters Co., Ltd.
Wuxi, China
86-510-8528-2010

Nippon Donaldson Ltd.
Tokyo, Japan
81-42-540-4119

Donaldson Far East Ltd.
Hong Kong
852-24058319

Donaldson Ltd.
Rayong, Thailand
66-38-650280

Donaldson Singapore Office
Singapore
65-6311-7373

Donaldson Korea Co. Ltd.
Seoul
85-2-517-3333