

Polydisc HD

Whatman™ disposable filter

Instructions for Use

Introduction

Important

Read these instructions carefully before using the products.

Intended use

The products are intended for research use only, and shall not be used in any clinical or *in vitro* procedures for diagnostic purposes.

Background

Description

Polydisc HD is a disposable in-line filter suitable for general air and gas filtration, and filtration of solvents, chemicals, inks, and polymers. The larger pore sizes can also be used for filtration of aqueous solutions. This product is suitable for pre-filtration in the range between gross filters and microporous membrane filtration.

Polydisc HD is an all polypropylene filter. The filter media is monofilament anisotropic polypropylene (MAPP), a microfine continuous polypropylene material formed into a variety of media by varying the filaments diameter and the layer density.

Polydisc HD is intended for single use. Reuse is the responsibility of the operator who should protect the filter from cross contamination and detect loss of integrity by appropriate testing.

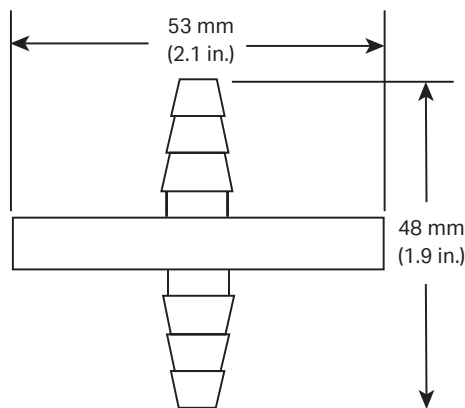
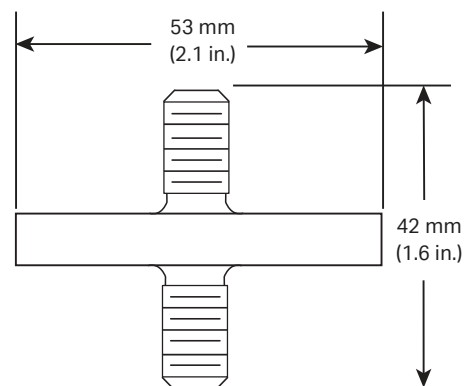
Typical applications

Polydisc HD is intended to be used for the following applications:

- General fine filtration for most liquids and gases requiring coarse filtration
- Pre-filtration to extend the life of reverse osmosis, ultrafiltration, or microfiltration membranes
- Semiconductor and magnetic media
- Inks and pigments
- Provide clean air or gas in laboratory equipment
- Photographic solutions (e.g., emulsions or rinse water)
- Filtration in food and beverage industries

Technical information

Illustration of Polydisc HD

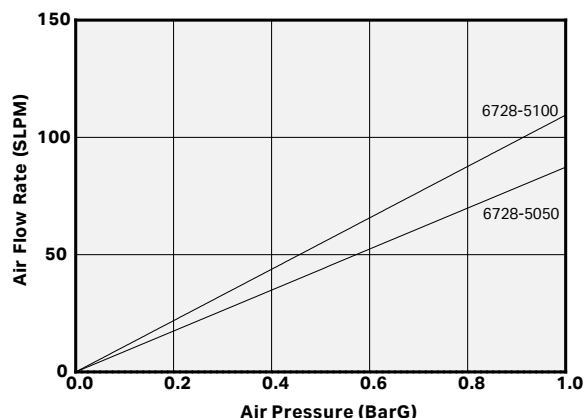


Technical data

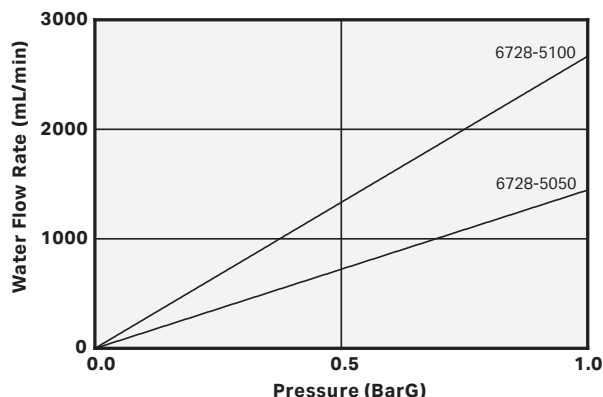
Housing and support:	Polypropylene	
Filter media:	MAPP	
Pore size:	Specification	Product code
	5 µm	2227, 6728-5050
	10 µm	2228, 6728-5100
Hold-up volume:	<0.1 mL with air purge	
Effective filtration area:	16 cm ²	

Inlet/outlet connections:	Specification	Product code
	MNPT	2227, 2228
	SB	6728-5050, 6728-5100
	MNPT: 1/8 in. male NPT threaded connection	
	SB: 6 to 10 mm (1/4 to 3/8 in.) stepped barb	
Dimensions (W×L):	Specification	Product code
	53 × 42 mm (2.1 × 1.6 in.)	2227, 2228
	53 × 48 mm (2.1 × 1.9 in.)	6728-5050, 6728-5100
Sealing method:	Heat-fused	
Autoclavable:	121°C (250°F) for 20 minutes at 0.1 MPa (1.0 bar, 15 psi)	
Maximum operating pressure:	0.41 MPa (4.1 bar, 60 psi)	
Operating temperature:	60°C (140°F)	
Flow direction:	Inlet to outlet	
Biosafety:	Materials pass USP Class VI	

Typical air flow rate



Typical water flow rate



Operating Instructions

Safety

When considering the specific factors of your application, see *Technical data* for correct use. Make sure not to exceed the Maximum operating pressure and follow temperature or chemical compatibility recommendations.



CAUTION

If the Maximum operating pressure is exceeded, bursting of the device can occur resulting in loss of sample or personal injury.

Venting

Step	Action
1	Securely connect the inlet port to the vessel, leaving the outlet open to the atmosphere. a. For filters with stepped barb connections, secure connections using band clamps. b. For filters with threaded connections, hand-tighten the connection to the vessel.
2	Change filter if there is condensation or contact with fluid preventing sufficient air flow.

In-line use

Step	Action
1	Securely connect both ports of the filter into the flow stream using flow arrows to guide orientation of the filter system. a. For filters with stepped barb connections, secure connections using band clamps. b. For filters with threaded connections, hand-tighten the connections of both ports.
2	Change filter if there is condensation or contact with fluid preventing sufficient air flow.

Filtering solution

Step	Action
1	Securely connect both ports of the filter into the flow stream using flow arrows to guide orientation of the filter system. a. For filters with stepped barb connections, secure connections using band clamps. b. For filters with threaded connections, hand-tighten the connections of both ports.
2	Fill the filter slowly and at a low pressure, allowing air to escape through the outlet until the filter is filled with fluid.
3	Ramp the pressure slowly until the desired flow rate is achieved, taking care not to exceed the Maximum operating pressure of the filter.
4	When filtration is complete, make sure to release all pressure from the test stand before loosening the band clamps or fittings, and removing tubing from the filter.

Ordering information

Product Code	Product Name	Qty./Pk.
6728-5050	Polydisc HD 5 µm	10
2227	Polydisc HD 5 µm	50
6728-5100	Polydisc HD 10 µm	10
2228	Polydisc HD 10 µm	50



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