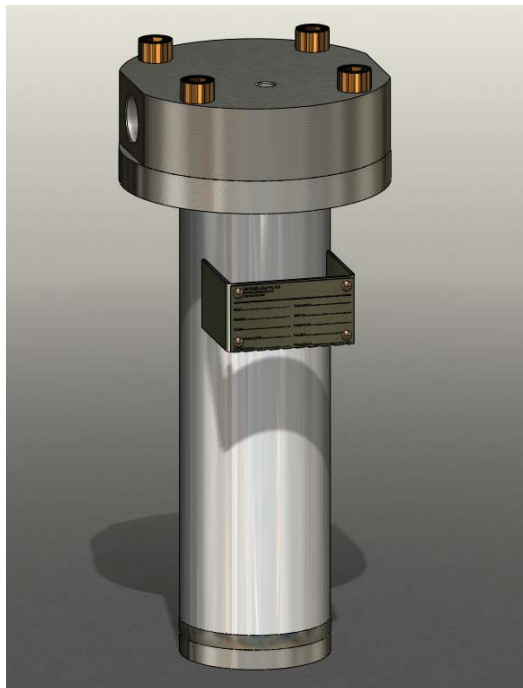


# 3M Purification



## 3M™ 1H1

### Cartridge Filter Housing

The Model 1H1 cartridge filter housing is a welded high-pressure filter housing featuring a bolt-on style head. The Model 1H1 housing has a maximum operating pressure and temperature of 7000 psig at 121°C with flow rates up to 98 lpm. For compressed air and gas service, the flow rate is up to 75 m<sup>3</sup>/min pressure drop at 7 kPa pressure drop across the filter. filter materials, which may change the photospeed and viscosity.

### Specifications

Table 1 gives specifications for the 1H1 Model filter housing. On Table 1, note that maximum operating pressure is the rating for the housing only. Actual filter operating temperature depends on capability of the filter cartridge used in housing.

**Table 1. Model 1H1 Specifications**

OPERATING DATA	
Maximum Operating Pressure & Temperature	7000 psig @ 121°C*
Flow Rate (LPM)	See Table 2
Connection Sizes	1" NPTF / Flange
Cartridge Size	Uses one 9 3/4" cartridge
MATERIALS OF CONSTRUCTION	
Head and Sump	Welded Steel or Stainless Steel
Pedestal	Steel
Cartridge Post	316 Stainless Steel
Head Gasket- Standard	Buna N
Head Gasket - Optional	EPR, Neoprene, Fluorocarbon, PTFE (order separately)
Drain Plug	Steel

\* Higher Pressure rating can be custom built

### Applicable Filter Cartridges

Betapure™ AU Series	Betafine™ Series
Beta-Klean™ BK-Z8 Series	LifeASSURE™ EF Series
Micro Klean™ RB Series	Micro Klean™ G Series
Micro Klean™ BM Series	Betapure™ PK Series

### Features & Benefits

#### Rugged, all-welded construction

- Ideal for high-pressure applications

#### Bolt-on-type head

- Easy to clean and maintenance

#### Internal baffle

- Prevents cartridge erosion in high pressure applications

### Cartridge Requirements

The Model 1H1 Filter housing accepts one single length filter cartridge (9 3/4 and 10 inch)

**Table 2. Model 1H1 Maximum Flow Rates (Liquids)**

Housing Model	Water	Viscosity in SSU				
		80	100	300	700	2000
		Flow in lpm				
1H1	98	87	80	72	65	53

### Flow Rates

#### Liquids

Table 2 lists the maximum liquid flow rate (lpm) for the Model 1H1 Filter Housing. Use the data in Table 2 only as a guide in establishing the maximum housing flow capability; do not use it for filter sizing. Once the flow rate for a selected cartridge is known, the use Table 3 to check whether the housing's flow rates fall within the recommended guidelines.

When sizing a filter, the amount of contaminant to be reduced needs to be considered in addition to the flow rate and pressure drop. Low initial pressure drop enhances filter cartridge life.



# Model 1H1 Cartridge Filter Housings Catalog Numbers

## Air & Gas

Table 3 shows the maximum recommended flow rates at various line pressures. The flow rates listed represent flows through both housing and filter cartridge. Variations in cartridge removal ratings for a given line size has little effect on pressure drop or air/gas flow capacity.

**Table 3. Air & Gas Flow Rates**

Housing Model	Flow Rate (5m <sup>3</sup> /min @ 7 kPa)			
	700 kPa	3500 kPa	5000 kPa	7000 kPa
1H1	3.5	5.0	6	7

## Replacement Parts

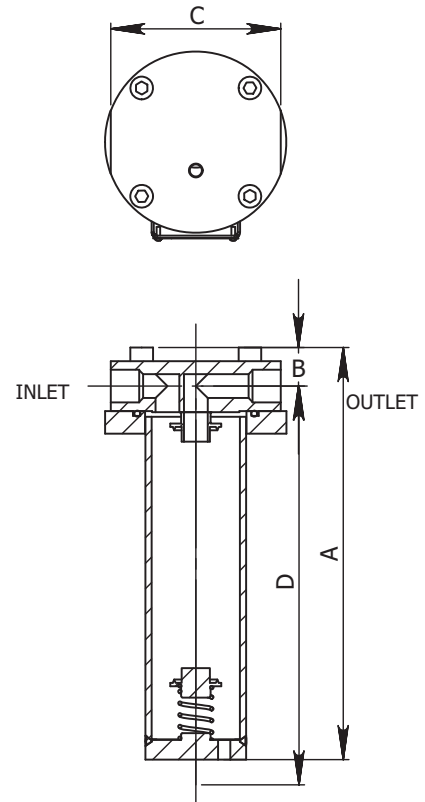
3M Purification can order replacement parts for customer convenience. A complete list of replacement parts is enclosed with the product.

**Table 4. Dimensions**

Housing Model	A	B	C	D*	Shipping Weight
1H1	432mm	50mm	127mm	380mm	18 kg
*Clearance for sump removal					

## Standard Model Dimensions

Table 4 gives dimensions in millimetre and shipping weight in kilogram for the Model 1H1 Filter Housing. To find selected dimension of a housing, locate the model in the left column and the selected dimension symbol (A-D) in the top row. Where the row and column meet is the selected dimension. For critical installation requirements, request a certified drawing.



## Important Notice

The information described in this literature is accurate to the best of our knowledge. A variety of factors, however, can affect the performance of the Product(s) in a particular application, some of which are uniquely within your knowledge and control. INFORMATION IS SUPPLIED UPON THE CONDITION THAT THE PERSONS RECEIVING THE SAME WILL MAKE THEIR OWN DETERMINATION AS TO ITS SUITABILITY FOR THEIR USE. IN NO EVENT WILL 3M PURIFICATION BE RESPONSIBLE FOR DAMAGES OF ANY NATURE WHATSOEVER RESULTING FROM THE USE OF OR RELIANCE UPON INFORMATION. It is your responsibility to determine if additional testing or information is required and if this product is fit for a particular purpose and suitable in your specific application.

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