

# 3M™ AL Series

## Filter Housing

The 3M™ AL series filter housing, constructed from durable low-cost cast iron and steel is a quality-built vessel designed to satisfy general-purpose industrial and commercial filtration needs. The 3M AL series filter housing features a three piece design with centerpost construction. Long-lasting stainless steel internal components make maintenance quick and easy.

The 3M AL series filter housing is designed to accommodate liquids at a maximum of 150 psi at 250 °F. Available in a wide range of sizes, from a 3 cartridge model to an 18 cartridge model, the 3M AL series filter housing can be used in systems with flow rates up to 105 gpm (water).

## Standard Specifications

Table 1 gives specifications for the 3M AL series filter housing. In 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 the housing.

**Table 1. Model AI Specifications**

Operating Data		
Housing Model	3AL Model	6AL Model
Maximum Operating Pressure and Temperature	150 psi @ 250°F	
Flow Rate (GPM)	See Table 2	
Connection Sizes	1 ½" NPTF- 2" NPTF	
Cartridge Sizes	9 ¾" to 30"	
Materials of Construction		
Head	Cast Iron	
Cover	Steel	
Shell	Steel	
Centerpost	Steel	
Shell Gasket- Standard	Buna N	
Shell Gasket- Optional	Cork, EPR, Neoprene, Fluorocarbon (order separately)	
Cap-Nut	Fiber	
Cartridge Pedestals	304 Stainless Steel	
Cartridge Posts		

## Features & Benefits

### Materials

- Cost- effective, durable cast iron and steel with stainless steel internals

### 3- Piece Construction

- Housing disassembles for quick and easy cleaning

### Removable Cartridge Posts

### Gauge Port connections

### Convenient Drains and Petcock Vent

### Mounting Pads to securely hold housing



## Applicable Filter Cartridges

Betapure™

Betafine™

Betapure™ PK Series

Micro-Klean™ CS Series

LifeASSURE™ MFE

Micro-Klean™ RB Series

Micro-Klean™ RT Series

**Table 2. Cartridge Requirements**

Housing Model	Number of Cartridges/EQSL* Required	Cartridge Length
3AL1	3/3	10"
3AL2	3/6	20"
3AL3	3/9	30"
6AL1	6/6	10"
6AL2	6/12	20"
6AL3	6/18	30"

\*EQSL- Equivalent Single Length (9 ¾" or 10")

## Cartridge Requirements

Table 2 lists the number of filter cartridges required for the 3M AL series filter housing.

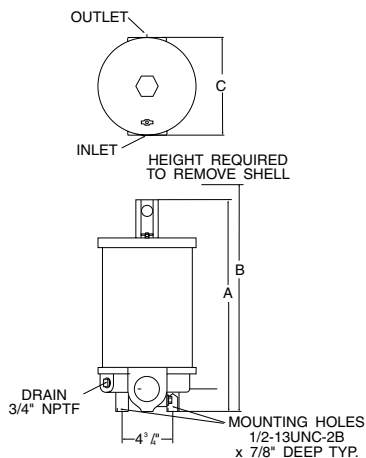


## Flow Rates

Table 3 lists the maximum liquid flow rate (gpm) for the 3M™ AL series filter housing. Use the data in Table 3 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, then 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 drop enhances filter cartridge life.

## Standard Model Dimensions

Table 4 gives dimensions in inches and shipping weight in pounds for the 3M AL series filter housing. To find a selected dimension of a housing, locate the model in the left column and the selected dimension symbol from Figure 1 (A-C) in the top row. Where the row and column meet is the selected dimension. For critical installation requirements, request a certified drawing.



## Replacement Parts

3M Purification Inc. dealers stock replacement parts for customer convenience. A complete list of replacement parts is enclosed with the product.

**Table 3. Recommended Flow Rates**

Housing Model	Flow (gpm)					
	Water	80 SSU	150 SSU	300 SSU	600 SSU	1000 SSU
3AL	65	52	43	35	24	16
6AL	105	85	78	70	51	35

**Table 4. 3M™ AL Series Filter Housing Dimensions**

Model	A	B	C	Shipping Weight (lbs)
3AL1	19 3/4"	26"	7 5/8"	47
3AL2	30 1/8"	46"		61
3AL3	40"	66"		71
6AL1	20 1/2"	27"	9 1/2"	77
6AL2	30 7/8"	47"		94
6AL3	40 3/4"	67"		112

## 3M™ AL Series Filter Housing Ordering Guide

Model	Catalog Number	Model	Catalog Number
3AL1	44079-01	6AL1	44080-01
3AL2	44079-02	6AL2	44080-02
3AL3	44079-03	6AL3	44080-03

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**3M Purification Inc.**  
 400 Research Parkway  
 Meriden, CT 06450  
 U.S.A.  
 Phone (800) 243-6894  
 (203) 237-5541  
 Fax (203) 630-4530  
 www.3Mpurification.com

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