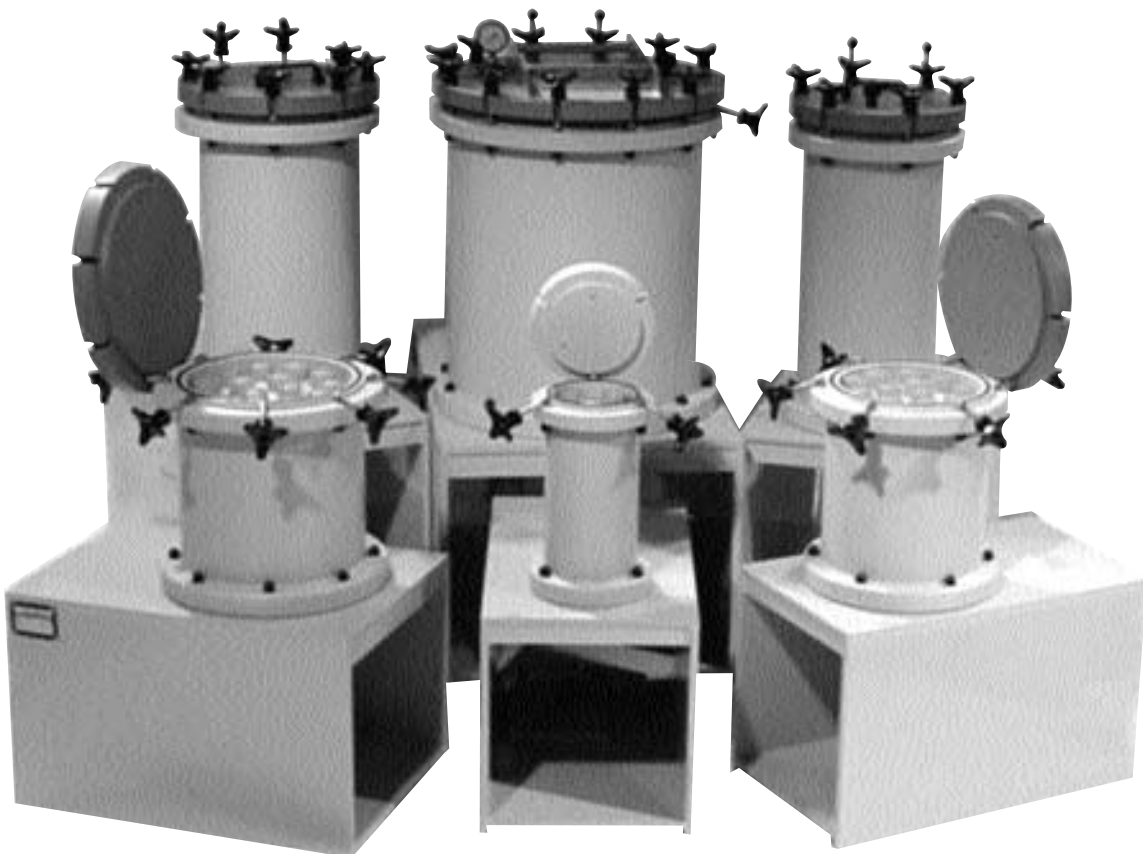


# MicroExact™ Filter Systems

## QUICK CHANGE “GF” SERIES

Cartridge Filter Systems  
BOTTOM INLET / BOTTOM OUTLET



**m** THE **murdock** Company, Inc.  
838 TURRET COURT • MUNDELEIN, IL 60080  
1-817-586-0050 FAX 1-817-586-0057 1-800-345-1958

# MicroExact Cartridge Filtration Systems

## BOTTOM INLET & BOTTOM OUTLET

This new generation of **MicroExact** filters incorporates the corrosion resistance and durability of solid SIMONA polypropylene or PVDF construction, with enhanced maintenance features for rapid filter change-outs. Heat fused polypropylene filter vessels and piping manifolds provide long-term reliability in hazardous chemical services even with temperature cycling. Solid all thermoplastic filtration designs resist external corrosion and deterioration associated with metallic construction.

### FEATURES:

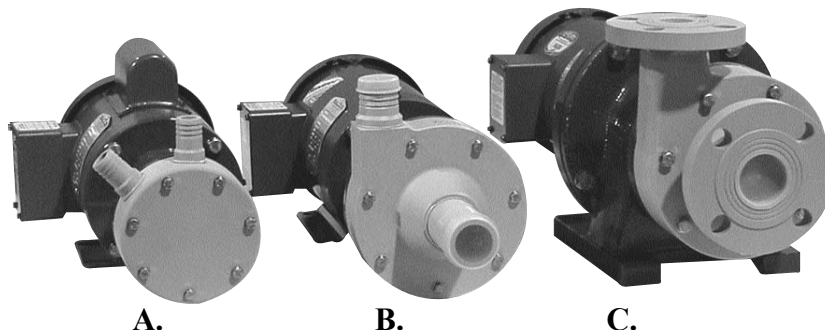
- SOLID Thermoplastic Construction, Free of Coated or Lined Metal Parts
- SOLID Polypropylene Support Base, Protects Pump & Motor
- Tilt Lid w/ Swing Bolts for Quick Filter Change-outs
- Bottom Inlet & Bottom Outlet for Easy Access
- Bottom Mounted Cartridges

### OPTIONS:

- SOLID Thermoplastic Seal-less Mag-Drive Pumps
- SOLID Thermoplastic Seal-less Vertical Pumps
- SOLID Thermoplastic Self-Priming Mag-Drive Pumps
- Slurry Mixing Tank
- Titanium Swing Bolts
- Starter w/ Power Monitor
- Thermoplastic Direct Reading Flowmeter/ Rotameter

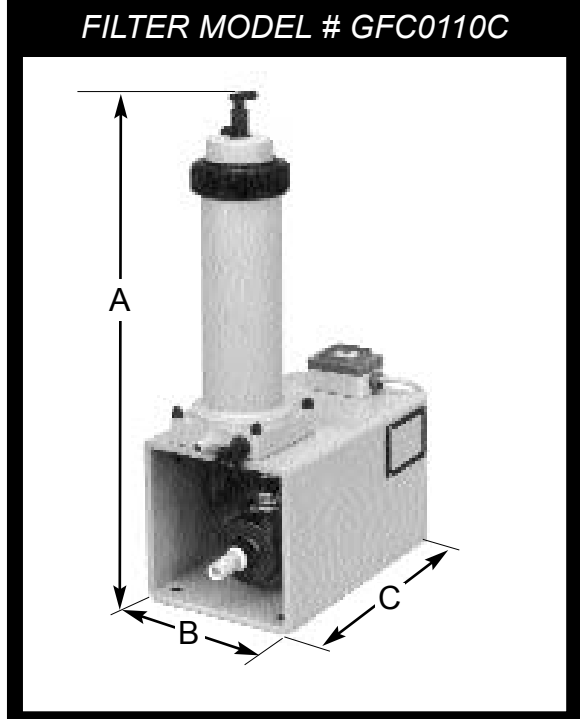
## STANDARD FILTER PUMPS

**MicroExact** filter systems can be equipped with **MT** high pressure turbine, **MCH** high flow centrifugal or the optional **MCSP** self-priming magnetic drive pumps that are free of leaky shaft seals. These rugged pumps feature robust pump casings and impeller assemblies machined from solid block polypropylene or PVDF. High efficiency impeller designs develop high pressures needed for fine filtration with extended element life. Added benefits include low horsepower requirements and zero emissions for meeting EPA regulations.



A. "MT" Mag-Drive Turbine    B. "MCH" Mag-Drive Centrifugal    C. "MCH" Flanged Mag-Drive Centrifugal

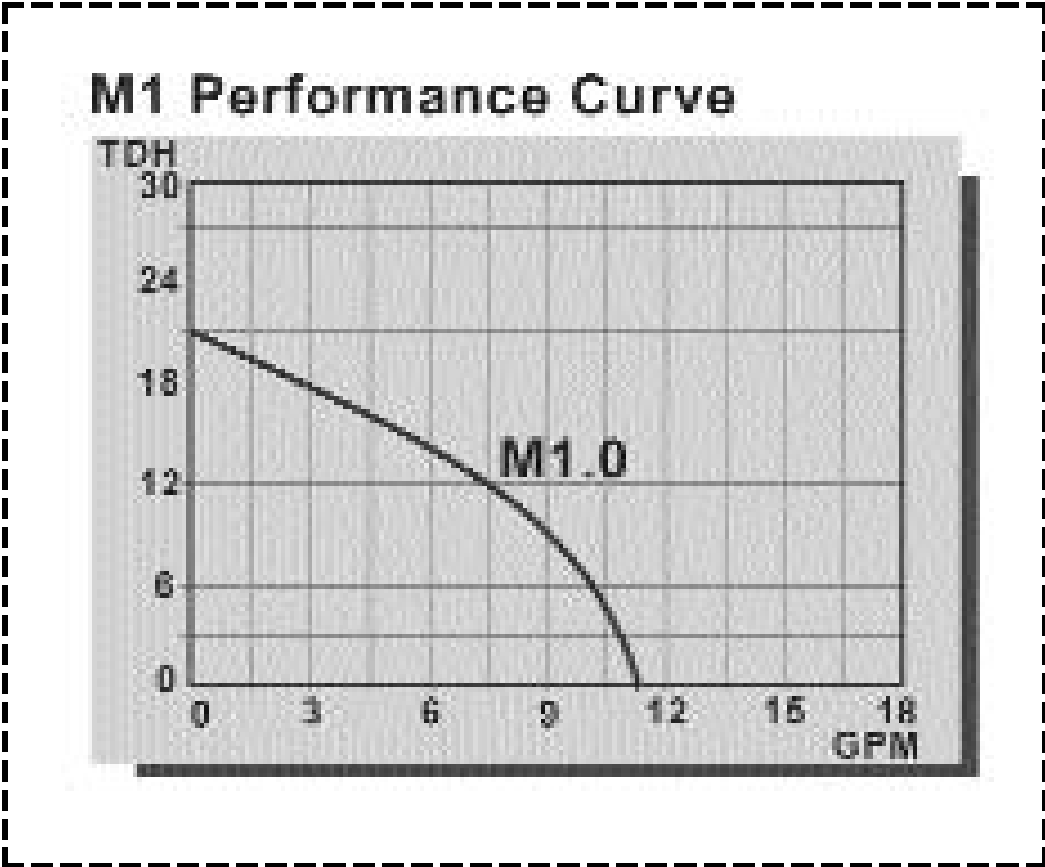
<b>Filter Specifications</b>	
<b>System Model #</b>	
GFC0110C	
<b>Max Rated Flow</b>	
6 gpm / 360 gph	
<b>Cartridges</b>	
1 - 10" (double open end)	
<b>Construction Materials</b>	
Polypropylene, EPDM	
<b>Inlet Port</b>	<b>Outlet Port</b>
1" (Hose Barb)	5/8" (Hose Barb)



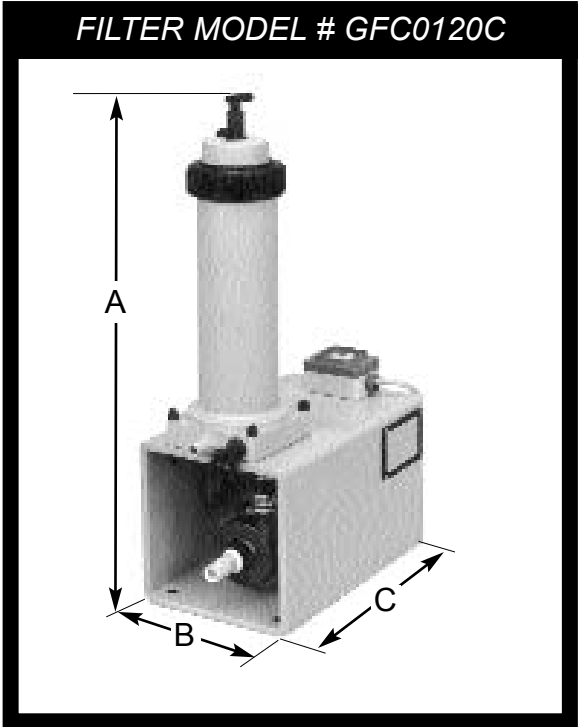
Polypropylene  
**MAX. Operating TEMP. 140°F**

*1/12 Hp Mag-Drive Pump Model M1.0H1APHT11*

<b>DIMENSIONS</b>	
A	25"
B	12"
C	8"



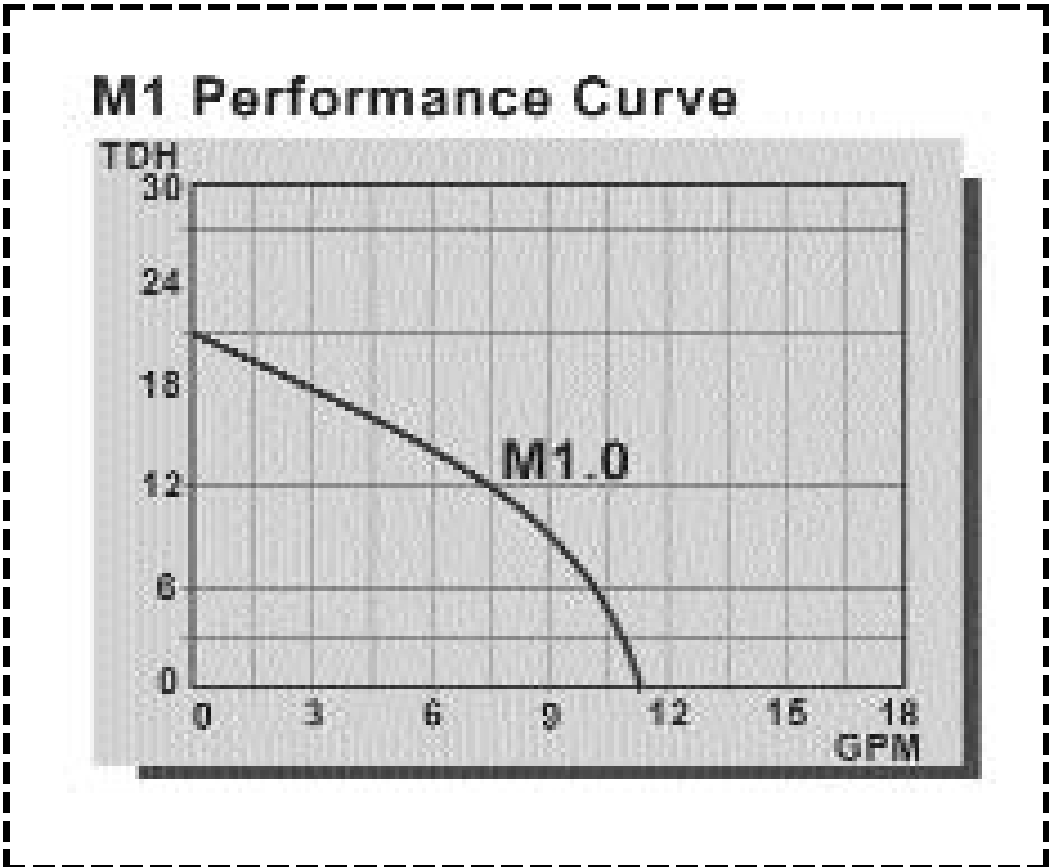
<i>Filter Specifications</i>	
<b>System Model #</b>	
GFC0120C	
<b>Max Rated Flow</b>	
8 gpm / 480 gph	
<b>Cartridges</b>	
1 - 20" (double open end)	
<b>Construction Materials</b>	
Polypropylene, EPDM	
<b>Inlet Port</b>	<b>Outlet Port</b>
1" (Hose Barb)	5/8" (Hose Barb)



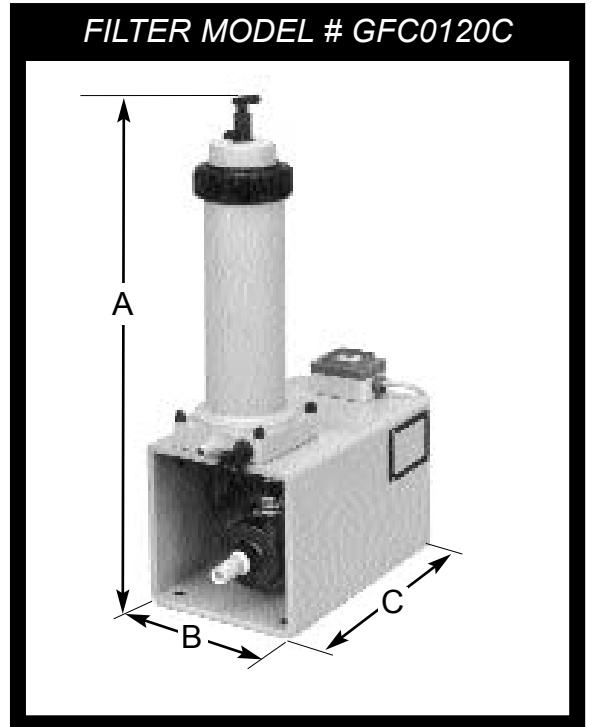
Polypropylene  
**MAX. Operating TEMP. 140°F**

**1/12 Hp Mag-Drive Pump Model M1.0H1APHT11**

<b>DIMENSIONS</b>	
A	35"
B	12"
C	8"



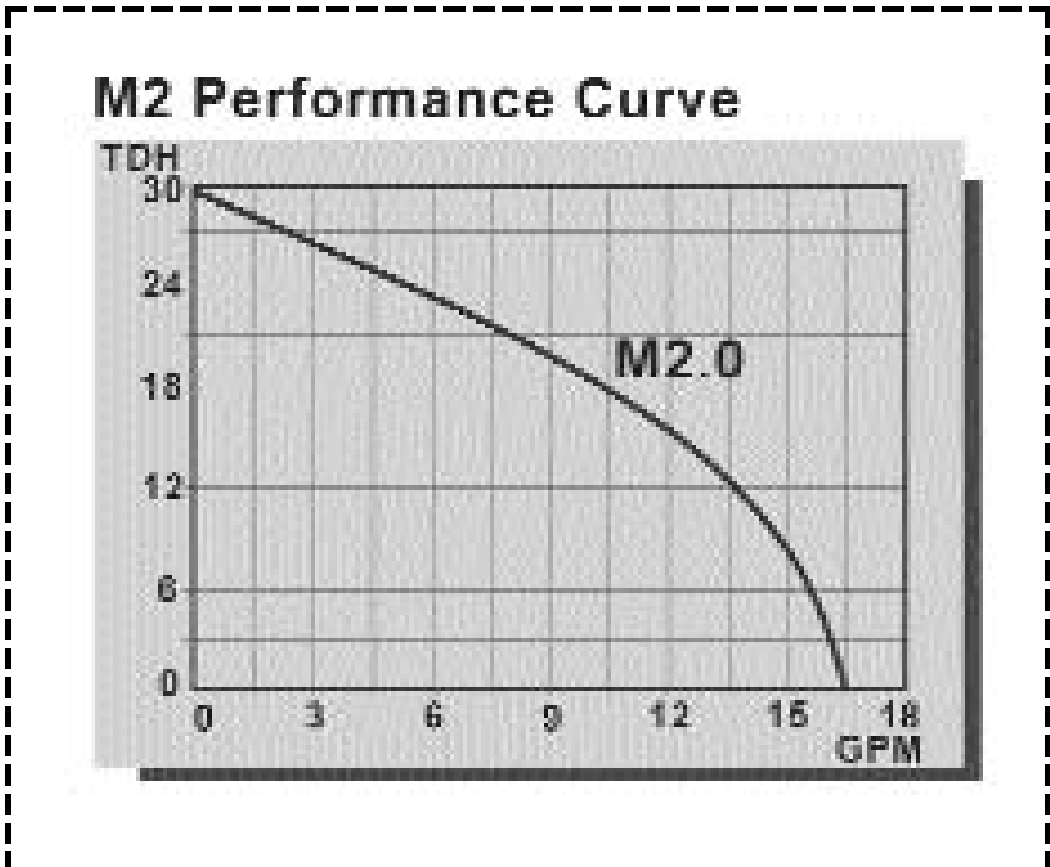
<b>Filter Specifications</b>	
<b>System Model #</b>	
GFC0120C	
<b>Max Rated Flow</b>	
11 gpm / 660 gph	
<b>Cartridges</b>	
1 - 20" (double open end)	
<b>Construction Materials</b>	
Polypropylene, EPDM	
<b>Inlet Port</b>	<b>Outlet Port</b>
1" (Hose Barb)	3/4" (Hose Barb)



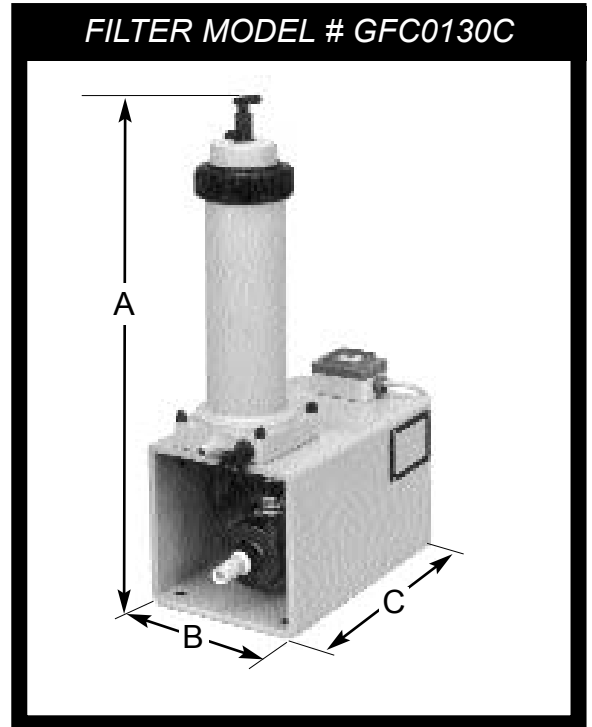
**Polypropylene**  
**MAX. Operating TEMP. 140°F**

**1/6 Hp Mag-Drive Pump Model M2.0H1APHT11**

<b>DIMENSIONS</b>	
A	35"
B	12"
C	8"



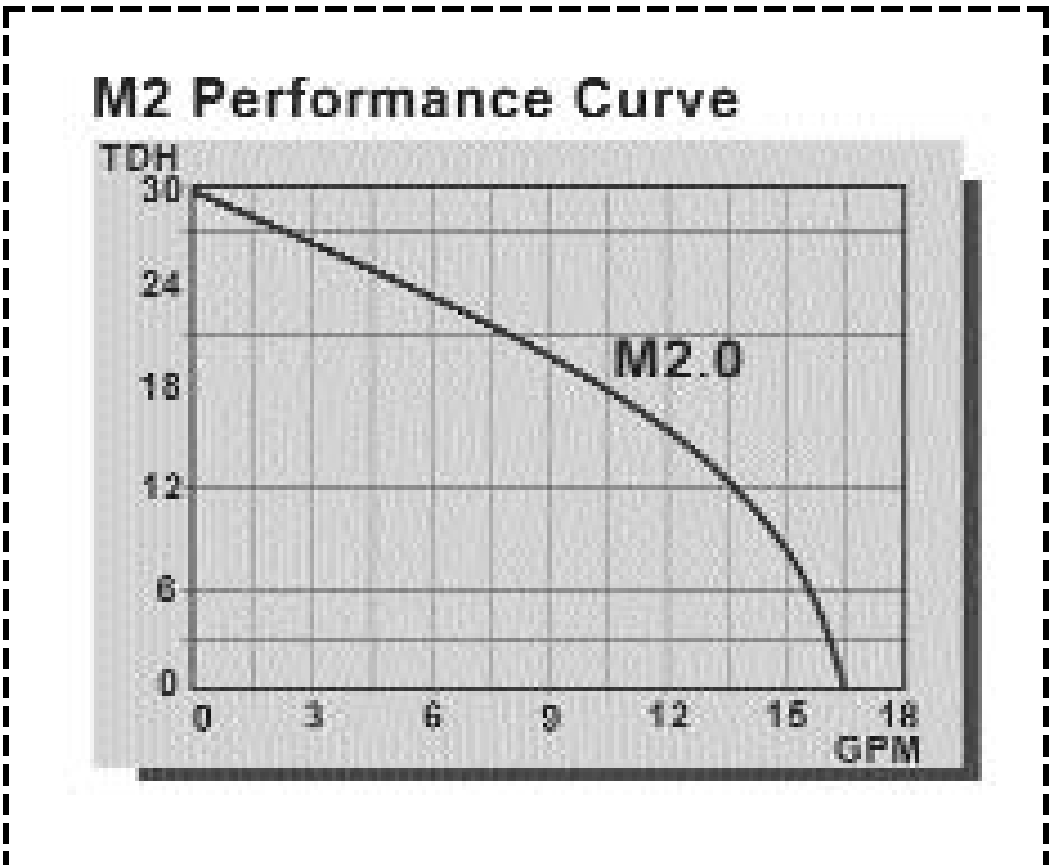
<b>Filter Specifications</b>	
<b>System Model #</b>	
GFC0130C	
<b>Max Rated Flow</b>	
13 gpm / 780 gph	
<b>Cartridges</b>	
1 - 30" (double open end)	
<b>Construction Materials</b>	
Polypropylene, EPDM	
<b>Inlet Port</b>	<b>Outlet Port</b>
1" (Hose Barb)	3/4" (Hose Barb)



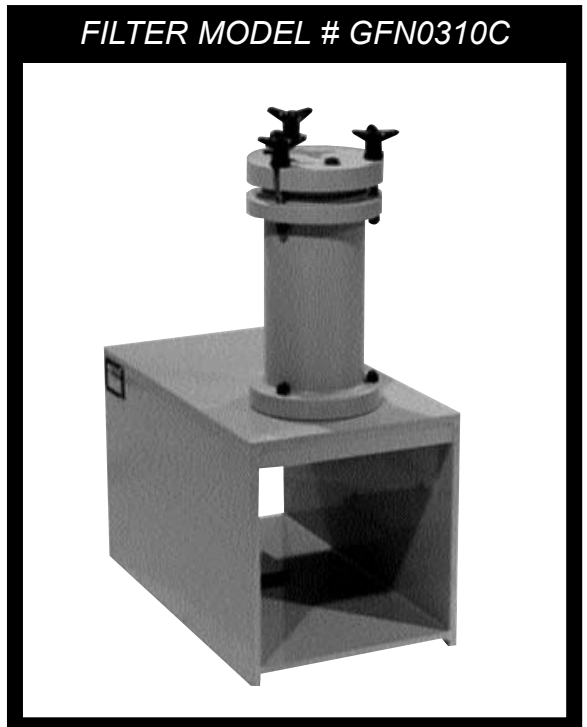
Polypropylene
<b>MAX. Operating TEMP. 140°F</b>

**1/6 Hp Mag-Drive Pump Model M2.0H1APHT11 Rated for 460v / 3ph / 60hz**

<b>DIMENSIONS</b>	
A	45"
B	12"
C	8"



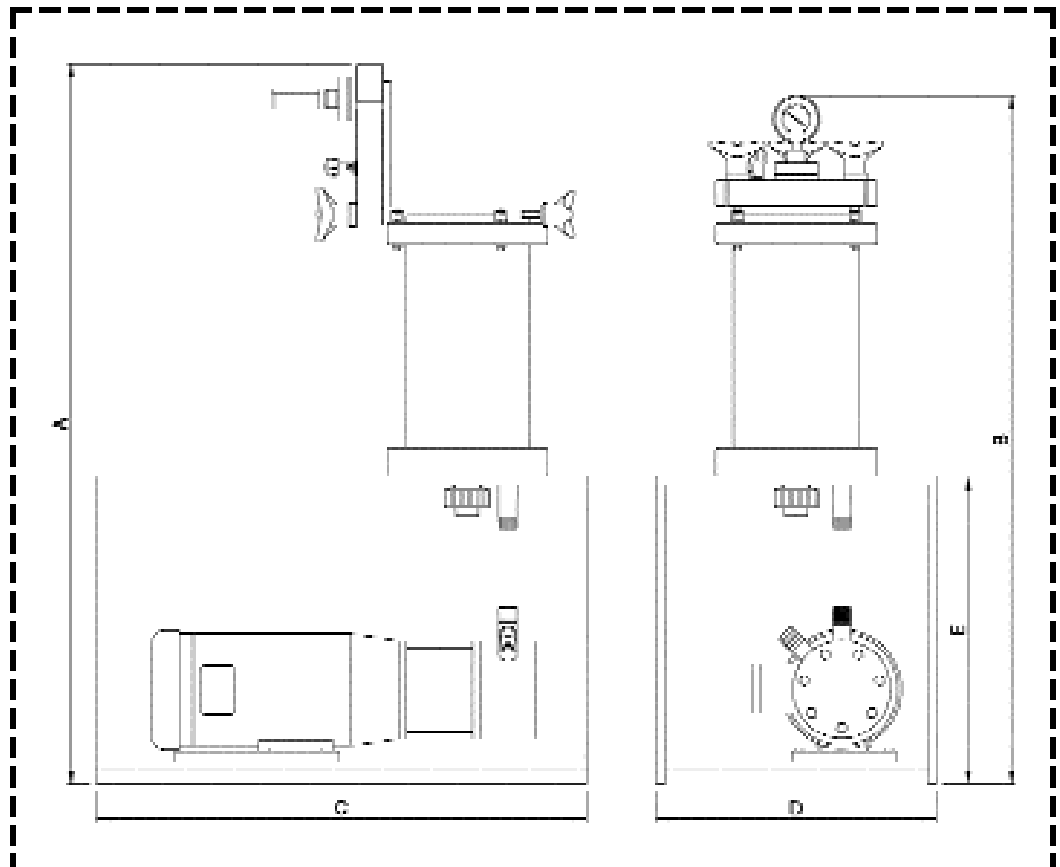
<b>Filter Specifications</b>	
<b>System Model #</b>	
GFN0310C	
<b>Max Rated Flow</b>	
15 gpm / 900 gph	
<b>Cartridges</b>	
3 - 10" (double open end)	
<b>Construction Materials</b>	
Polypropylene, EPDM / PVDF, Viton	
<b>Inlet Port</b>	<b>Outlet Port</b>
1" (Hose Barb)	3/4" (Hose Barb)



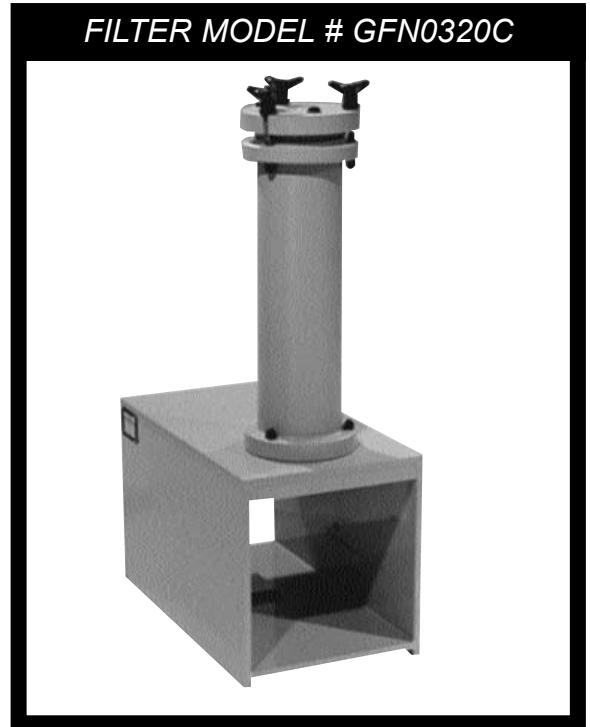
<b>Polypropylene</b>	<b>MAX. PSI Pressure at Operating TEMP.</b>				
	<b>TEMP.</b>	70°F	100°F	120°F	140°F
	<b>PSI</b>	100	70	60	50

**Recommended Pump Model MT3003-P1H1**

<b>DIMENSIONS</b>	
A	41"
B	39 1/2"
C	27 1/2"
D	15 3/4"
E	17 3/8"



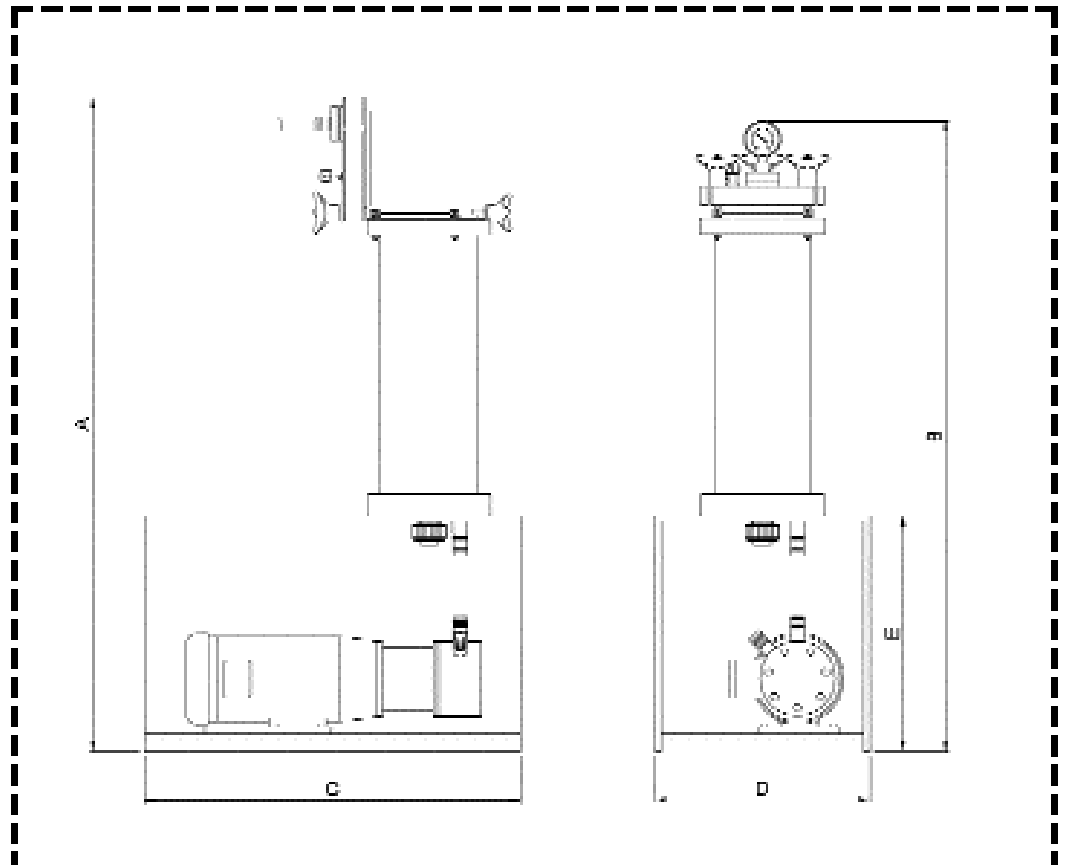
<b>Filter Specifications</b>	
<b>System Model #</b>	
GFN0320C	
<b>Max Rated Flow</b>	
20 gpm / 1200 gph	
<b>Cartridges</b>	
3 - 20" (double open end)	
<b>Construction Materials</b>	
Polypropylene, EPDM / PVDF, Viton	
<b>Inlet Port</b>	<b>Outlet Port</b>
1" (Hose Barb)	1" (Hose Barb)



Polypropylene	<b>MAX. PSI Pressure at Operating TEMP.</b>				
	<b>TEMP.</b>	70°F	100°F	120°F	140°F
	<b>PSI</b>	100	70	60	50

**Recommended Pump Model MT5002-P1H1**

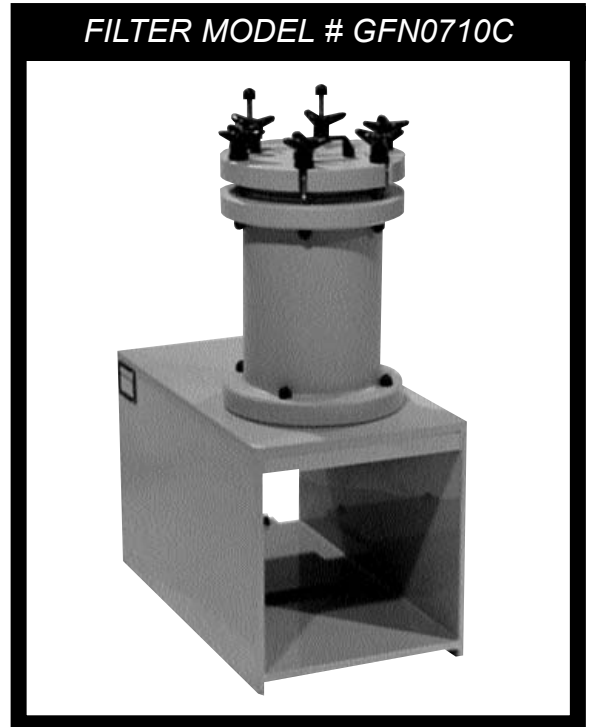
<b>DIMENSIONS</b>	
A	51"
B	50"
C	27 1/2"
D	15 3/4"
E	17 3/8"







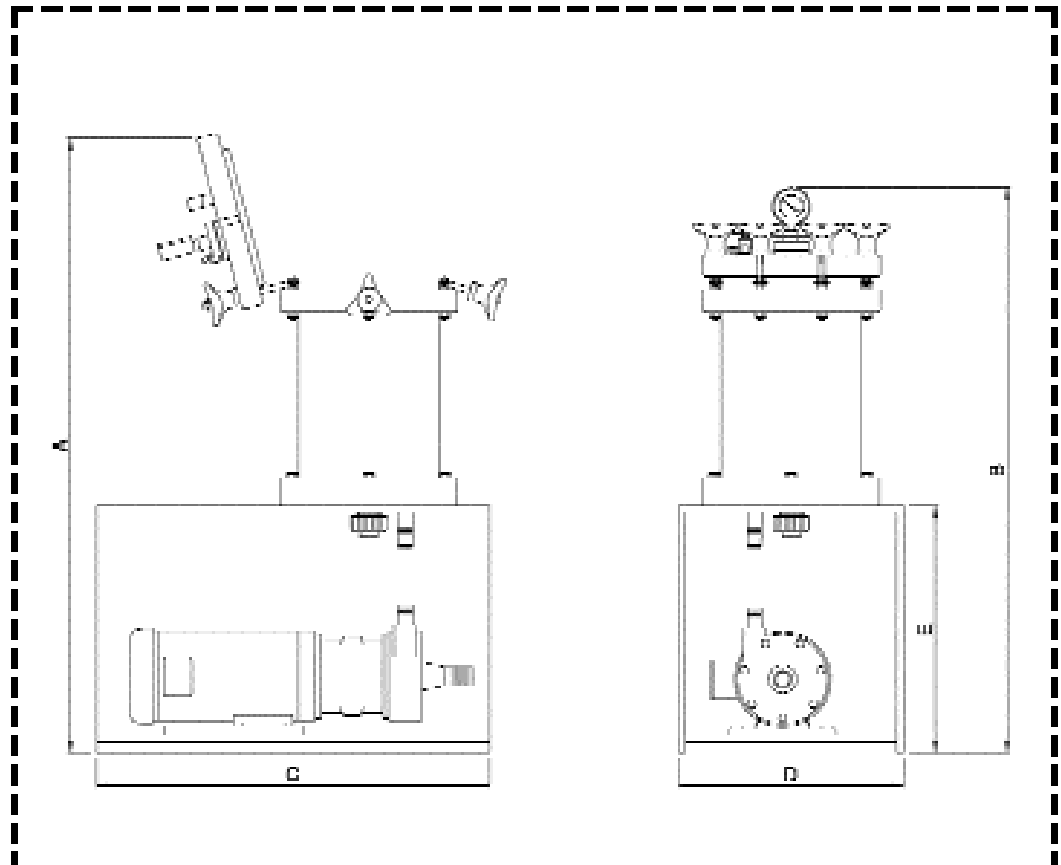
<b>Filter Specifications</b>	
<b>System Model #</b>	
GFN0710C	
<b>Max Rated Flow</b>	
35 gpm / 2100 gph	
<b>Cartridges</b>	
7 - 10" (double open end)	
<b>Construction Materials</b>	
Polypropylene, EPDM / PVDF, Viton	
<b>Inlet Port</b>	<b>Outlet Port</b>
1-1/4" (Hose Barb)	1-1/4" (Hose Barb)



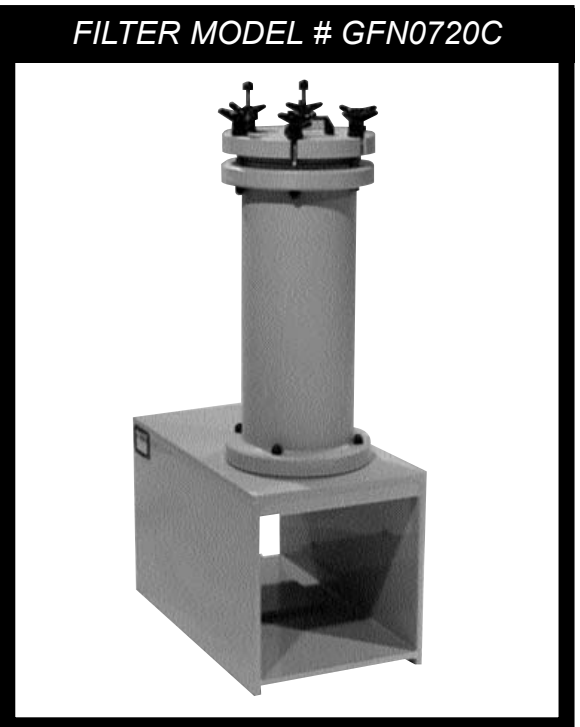
Polypropylene	<b>MAX. PSI Pressure at Operating TEMP.</b>				
	<b>TEMP.</b>	70°F	100°F	120°F	140°F
	<b>PSI</b>	100	70	60	50

**Recommended Pump Model MCH11001-P2H1**

<b>DIMENSIONS</b>	
A	43 1/2"
B	39 1/2"
C	27 1/2"
D	15 3/4"
E	17 3/8"



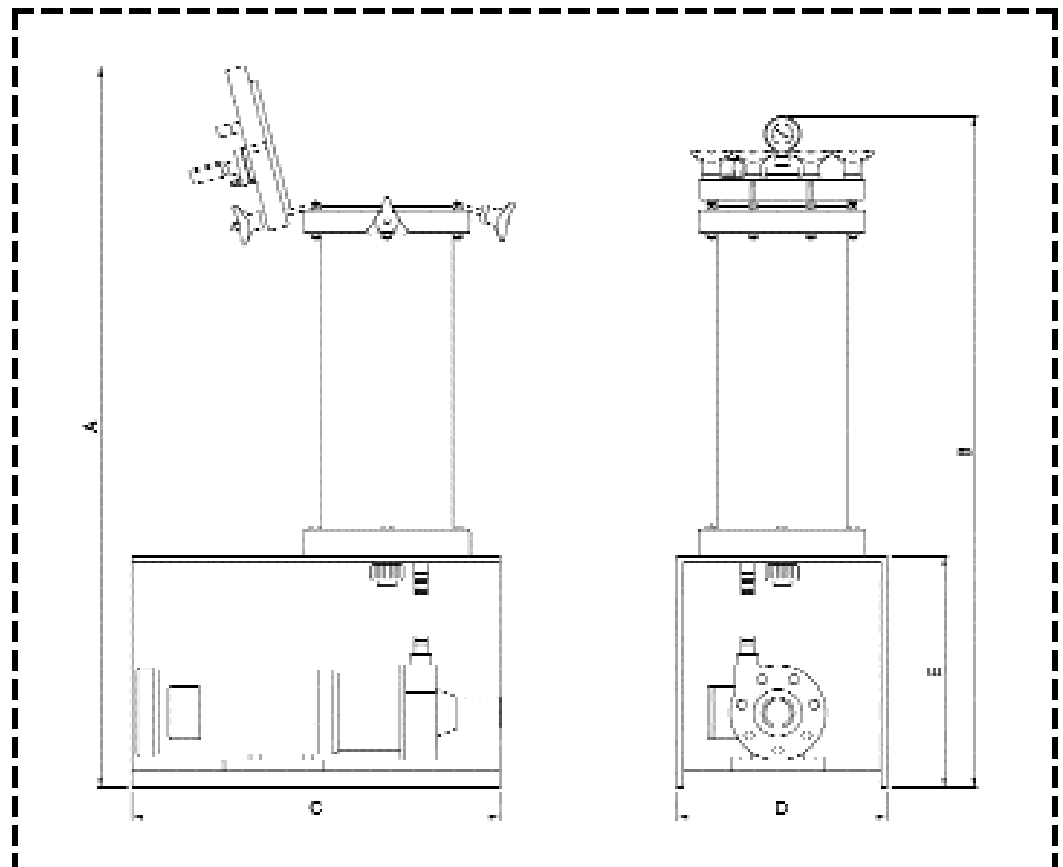
<b>Filter Specifications</b>	
<b>System Model #</b>	
GFN0720C	
<b>Max Rated Flow</b>	
50 gpm / 3000 gph	
<b>Cartridges</b>	
7 - 20" (double open end)	
<b>Construction Materials</b>	
Polypropylene, EPDM / PVDF, Viton	
<b>Inlet Port</b>	<b>Outlet Port</b>
1-1/4" (Hose Barb)	1-1/4" (Hose Barb)



<b>Polypropylene</b>	<b>MAX. PSI Pressure at Operating TEMP.</b>				
	<b>TEMP.</b>	70°F	100°F	120°F	140°F
	<b>PSI</b>	100	70	60	50

**Recommended Pump Model MCH16002-P2H1**

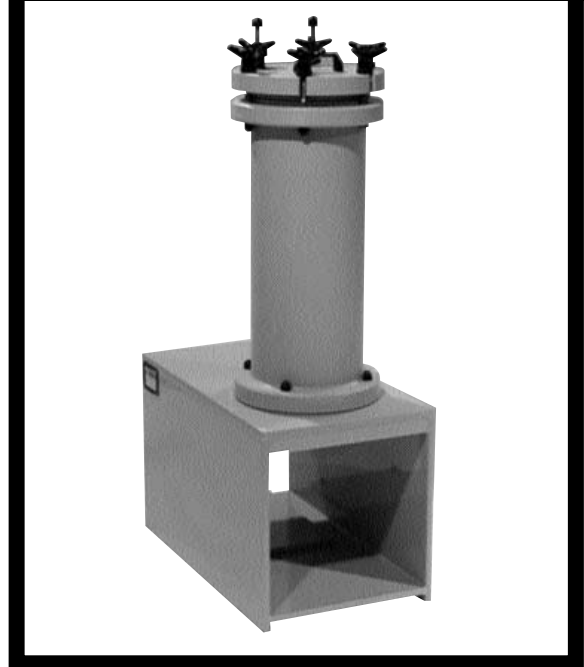
<b>DIMENSIONS</b>	
A	53 1/2"
B	50"
C	27 1/2"
D	15 3/4"
E	17 3/8"



### Filter Specifications

System Model #	
GFN0730C	
Max Rated Flow	
65 gpm / 3900 gph	
Cartridges	
7 - 30" (double open end)	
Construction Materials	
Polypropylene, EPDM / PVDF, Viton	
Inlet Port	Outlet Port
1-1/4" (Hose Barb)	1-1/4" (Hose Barb)

### FILTER MODEL # GFN0730C

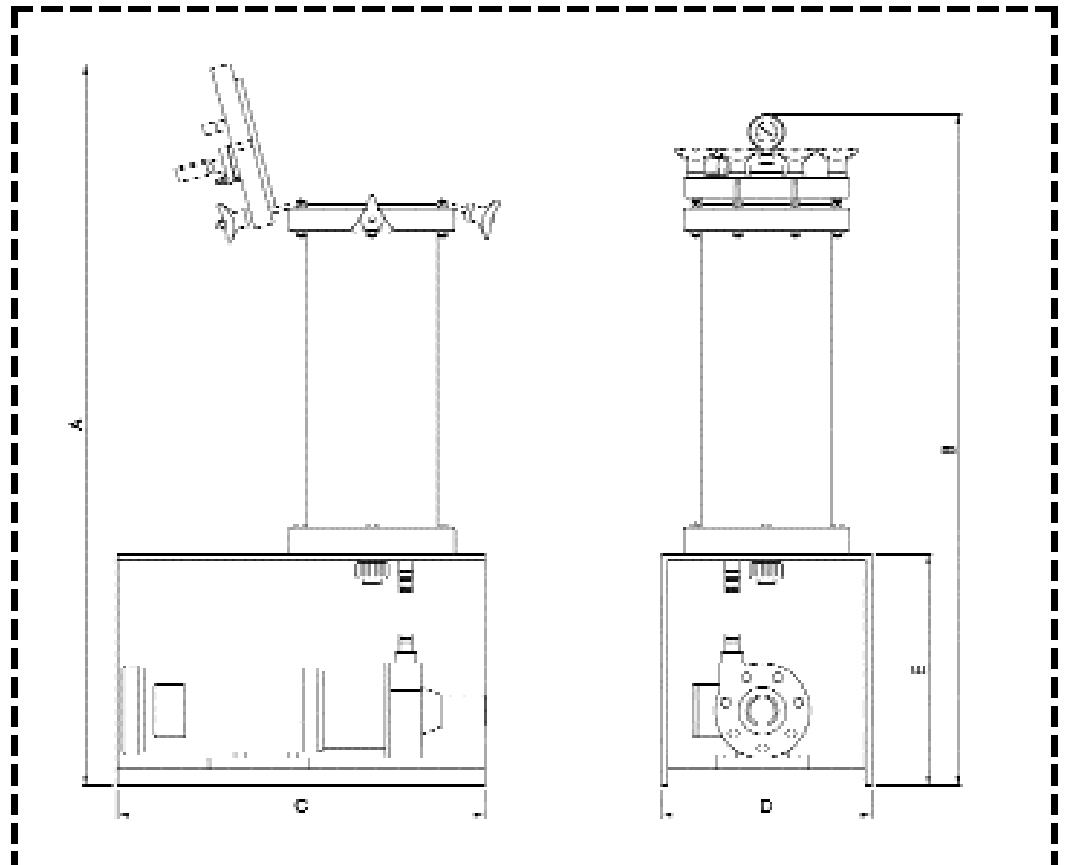


Polypropylene	MAX. PSI Pressure at Operating TEMP.				
	TEMP.	70°F	100°F	120°F	140°F
	PSI	100	70	60	50

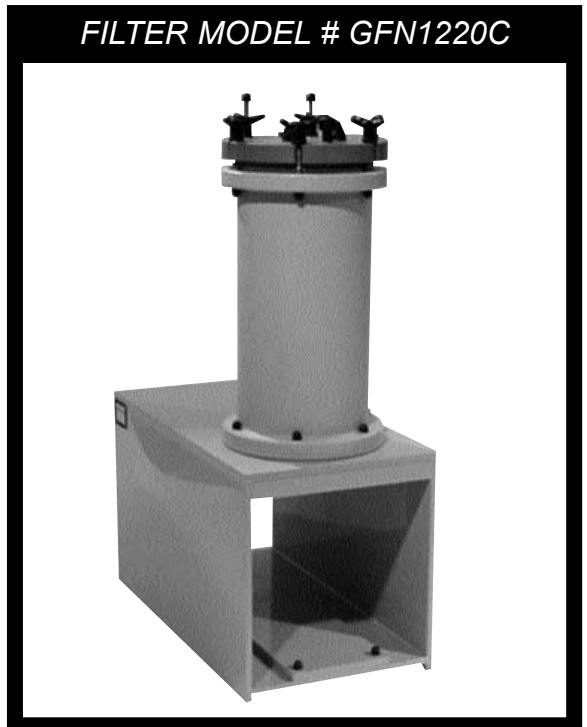
**Recommended Pump Model MCH16001-P2H1**

### DIMENSIONS

A	63 1/2"
B	60"
C	27 1/2"
D	15 3/4"
E	17 3/8"



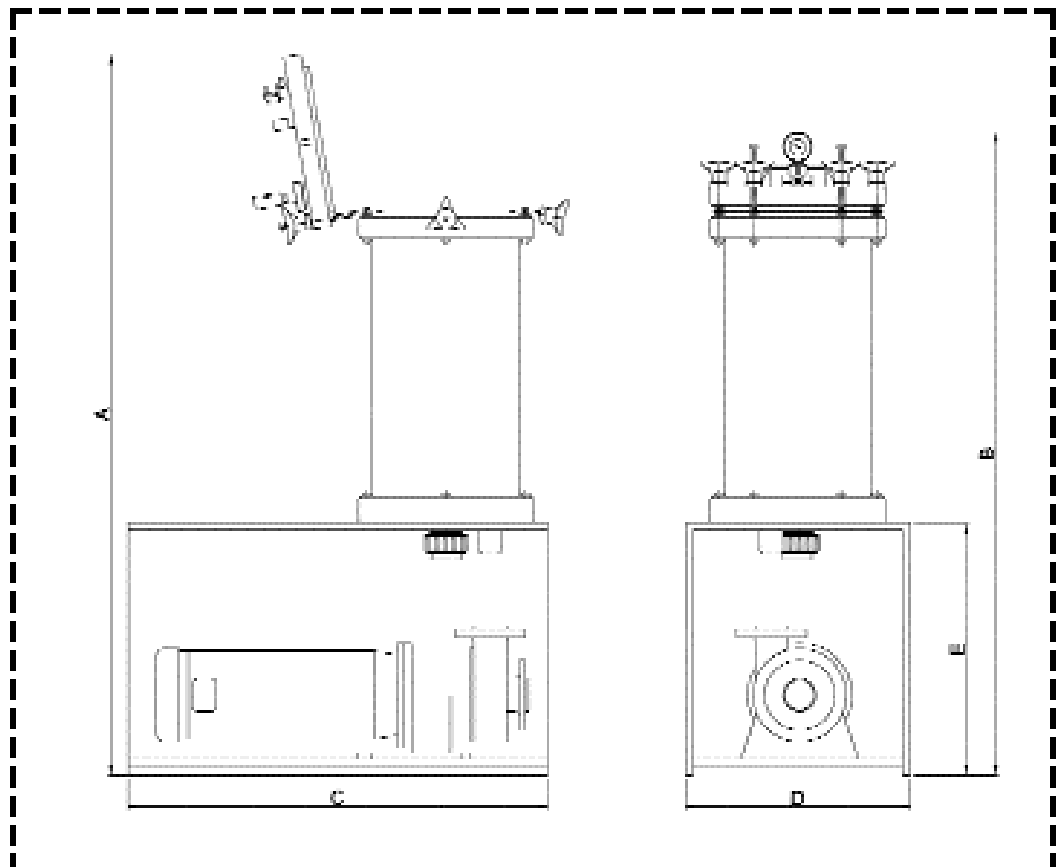
<b>Filter Specifications</b>	
<b>System Model #</b>	
GFN1220C	
<b>Max Rated Flow</b>	
85 gpm / 5100 gph	
<b>Cartridges</b>	
12 - 20" (double open end)	
<b>Construction Materials</b>	
Polypropylene, EPDM	
<b>Inlet Port</b>	<b>Outlet Port</b>
2" (Flanged)	1 1/2" (Union)



<b>Polypropylene</b>	<b>MAX. PSI Pressure at Operating TEMP.</b>				
	<b>TEMP.</b>	70°F	100°F	120°F	140°F
	<b>PSI</b>	100	70	60	50

**Recommended Pump Model MCH28002-P2F1**

<b>DIMENSIONS</b>	
A	59 1/2"
B	54 1/4"
C	35 1/2"
D	19"
E	21 1/4"







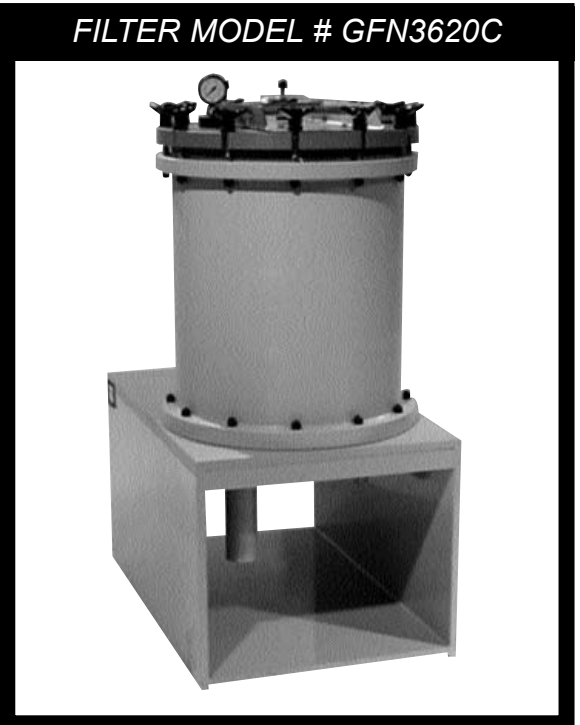




# MicroExact™ Filter Systems

Series GFN

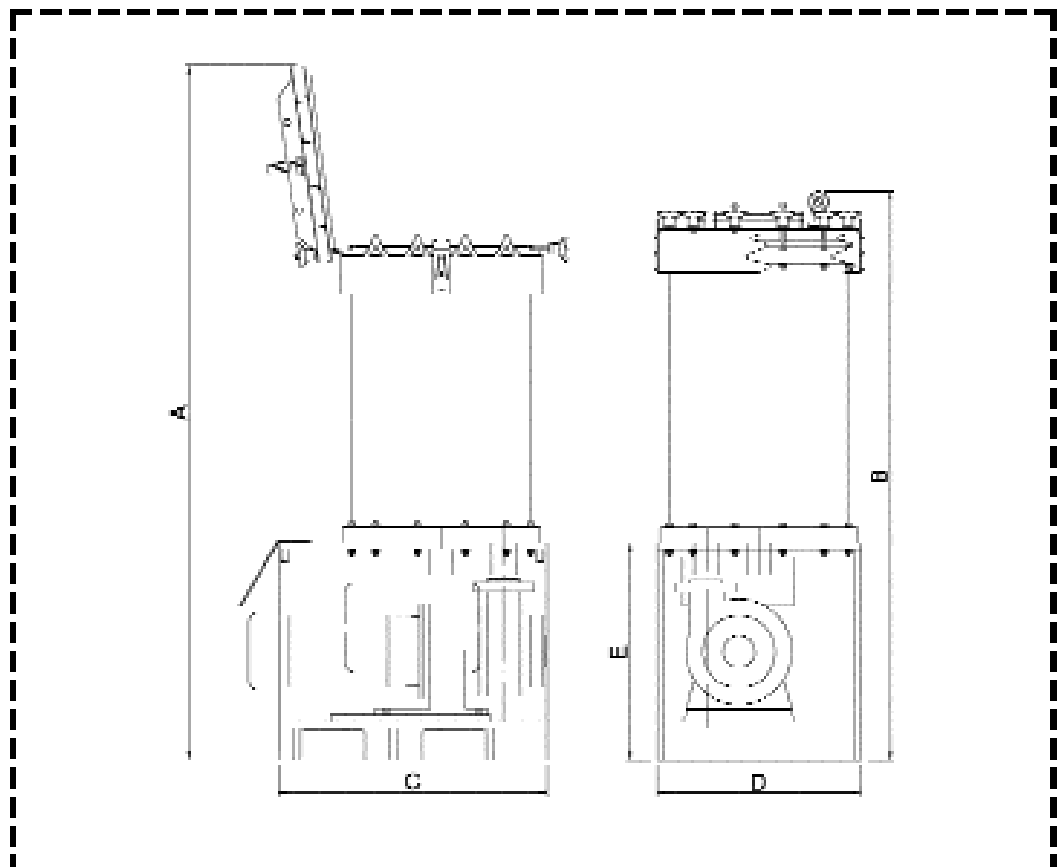
<b>Filter Specifications</b>	
<b>System Model #</b>	
GFN3620C	
<b>Max Rated Flow</b>	
225 gpm / 13,500 gph	
<b>Cartridges</b>	
36 - 20" (double open end)	
<b>Construction Materials</b>	
Polypropylene, EPDM	
<b>Inlet Port</b>	<b>Outlet Port</b>
3" (Flanged)	2" (Flanged)



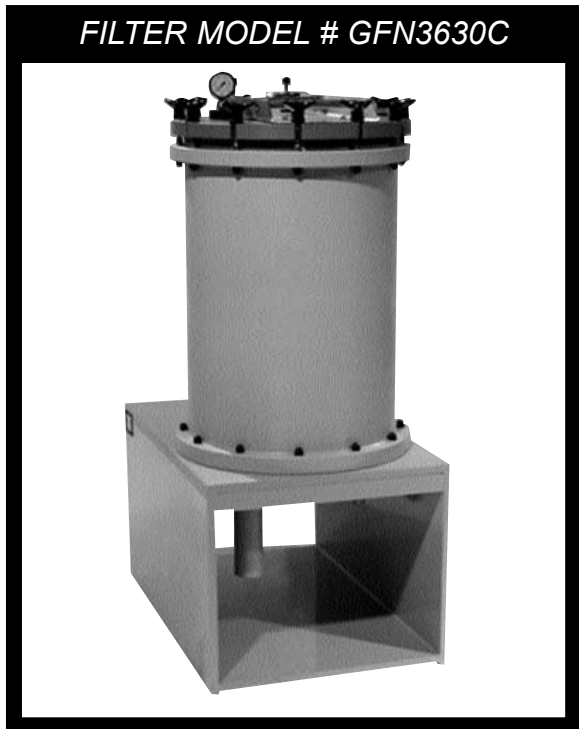
Polypropylene	<b>MAX. PSI Pressure at Operating TEMP.</b>				
	<b>TEMP.</b>	70°F	100°F	120°F	140°F
	<b>PSI</b>	100	70	60	50

**Recommended Pump Model MCH81003-P2F1**

<b>DIMENSIONS</b>	
A	71 1/2"
B	55 1/4"
C	39 1/2"
D	25 1/4"
E	21 3/4"



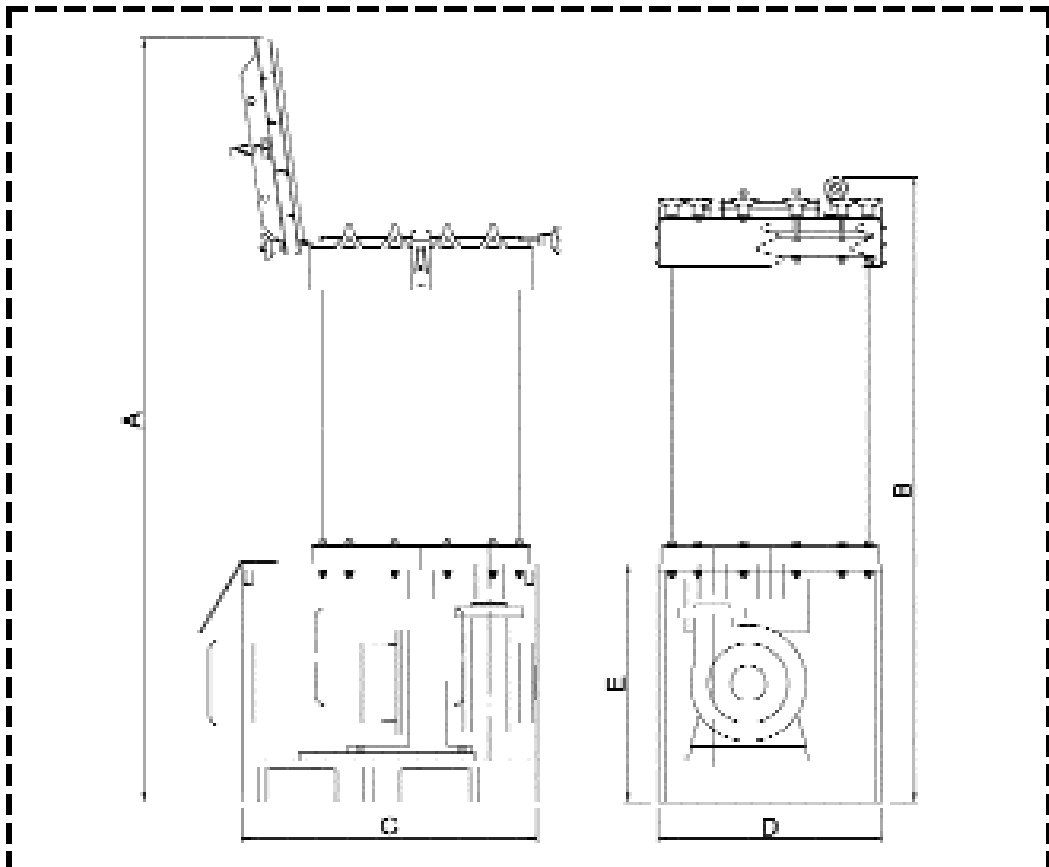
<b>Filter Specifications</b>	
<b>System Model #</b>	
GFN3630C	
<b>Max Rated Flow</b>	
325 gpm / 19,500 gph	
<b>Cartridges</b>	
36 - 30" (double open end)	
<b>Construction Materials</b>	
Polypropylene, EPDM	
<b>Inlet Port</b>	<b>Outlet Port</b>
3" (Flanged)	3" (Flanged)



Polypropylene	<b>MAX. PSI Pressure at Operating TEMP.</b>				
	<b>TEMP.</b>	70°F	100°F	120°F	140°F
	<b>PSI</b>	100	70	60	50

**Recommended Pump Model MCH81001-P2F1**

<b>DIMENSIONS</b>	
A	81 1/2
B	65 1/4
C	39 1/2
D	25 1/4
E	21 3/4



# MicroExact MAG-DRIVE PUMP SELECTION CHART

Please consult your **MicroExact** sales representative for standard seal-less mag-drive pump selections to be mounted on corresponding filtration systems. Certain system requirements may require increased filtration capacity with a lower flow pump and in other cases maximum flow may be preferred, requiring a higher flow pump.

PUMP MODEL	RATED FLOW (GPM) (GPH)		MAX TEMP (DEG. F)	PORTS	MAT'L	HP	VOLTS (60Hz)
MT2003-P1H1	6	360	140	1/2"x1/2"	PP	0.5	230/460
MT2003-F1H1	6	360	180	1/2"x1/2"	PP/PVDF	0.5	230/460
MT2003-P1H2	6	360	140	1/2"x1/2"	PP	0.5	115/230
MT2003-F1H2	6	360	180	1/2"x1/2"	PP/PVDF	0.5	115/230
MT3003-P1H1	13	780	140	3/4"x3/4"	PP	1.0	230/460
MT3003-F1H1	13	780	180	3/4"x3/4"	PP/PVDF	1.0	230/460
MT3003-P1H2	13	780	140	3/4"x3/4"	PP	1.0	115/230
MT3003-F1H2	13	780	180	3/4"x3/4"	PP/PVDF	1.0	115/230
MT5002-P1H1	20	1200	140	1" x 1"	PP	1.5	230/460
MT5002-F1H1	20	1200	180	1" x 1"	PP/PVDF	1.5	230/460
MT5002-P1H2	20	1200	140	1" x 1"	PP	1.5	115/230
MT5002-F1H2	20	1200	180	1" x 1"	PP/PVDF	1.5	115/230
MT7002-P1H1	30	1800	140	1" x 1"	PP	2.0	230/460
MT7002-F1H1	30	1800	180	1" x 1"	PP/PVDF	2.0	230/460
MT7002-P1H2	30	1800	140	1" x 1"	PP	2.0	115/230
MT7002-F1H2	30	1800	180	1" x 1"	PP/PVDF	2.0	115/230
MCH11001-P2H1	50	3000	140	1-1/4"x1"	PP	1.0	230/460
MCH11001-F2H1	50	3000	180	1-1/4"x1"	PP/PVDF	1.0	230/460
MCH11001-P2H2	50	3000	140	1-1/4"x1"	PP	1.0	115/230
MCH11001-F2H2	50	3000	180	1-1/4"x1"	PP/PVDF	1.0	115/230
MCH16001-P2H1	75	4500	140	1-1/2"x1-1/4"	PP	2.0	230/460
MCH16001-F2H1	75	4500	180	1-1/2"x1-1/4"	PP/PVDF	2.0	230/460
MCH16001-P2H2	75	4500	140	1-1/2"x1-1/4"	PP	2.0	115/230
MCH16001-F2H2	75	4500	180	1-1/2"x1-1/4"	PP/PVDF	2.0	115/230
MCH28001-P2F1	120	7200	140	2"x1-1/2"	PP	3.0	230/460
MCH28001-F2F1	120	7200	180	2"x1-1/2"	PP/PVDF	3.0	230/460
MCH51001-P2F1	200	12000	140	3" x 2"	PP	7.5	230/460
MCH51001-F2F1	200	12000	180	3" x 2"	PP/PVDF	7.5	230/460
MCH81003-P2F1	350	21000	140	4" x 3"	PP	15	230/460
MCH81003-F2F1	350	21000	180	4" x 3"	PP/PVDF	15	230/460
MCH91003-P2F1	500	30000	140	4" x 3"	PP	20	230/460
MCH91003-F2F1	500	30000	180	4" x 3"	PP/PVDF	20	230/460

## PERFORMANCES:

- Rated flow for MT turbine pumps based upon 20' TDH
- Rated flow for MCH11001, MCH16001 & MCH28001 centrifugal pumps based upon 40' TDH
- Rated flow for MCH51001, MCH81003 & MCH91003 centrifugal pumps based upon 60' TDH

## PORT CONFIGURATIONS:

- MT2003 thru MCH 16001 are equipped with fused hose barb connections
- MCH28001 and larger units are equipped with integral 150 lb. ANSI flanges

## MATERIALS OF PUMP CONSTRUCTION:

- PP: Polypropylene (PP), PTFE-C, EPDM & high purity ceramic
- PP/PVDF: Polypropylene (PP), PVDF, PTFE-C, EPDM & high purity ceramic

# OPTIONAL EQUIPMENT



**Horizontal Disc Filter Assemblies**

**MicroExact** series **GFN** can be equipped with either horizontal disc or cartridge elements, depending upon liquid conditions. Interlocking discs are designed for sub-micron filtration without by-pass. Various types of media are available including pure polypropylene and polyethylene.



**Self-Priming Mag-Drive Pumps**

**MicroExact** series **GFN** can be equipped with **MCSP** Thermoplastic Centrifugal Self-Priming magnetic drive pumps which are free of leaky shaft seals. Pump features include a heavy duty pump casing and impeller assembly machined from solid block polypropylene or PVDF and a high efficiency impeller design that develops high pressures needed for fine filtration. Added benefits are extended element life and low horsepower requirements.



**LINEMAN Power Monitors**

**LINEMAN** power sensing relays prevent costly failures of pumps and other process equipment. These units monitor actual power absorbed by the motor by combining amps, volts, and a power factor for providing a linear output. Adjustable high and low load trip switches can be precisely set to sense dry-running, dead-heading, clogged filters and cavitation. The **LINEMAN** device is a cost effective means of protecting your process equipment and production line.



**EXAKT** non-metallic direct reading flowmeters are suitable for metering a wide range of corrosive chemicals. The direct reading display provides the operator with a visual indication of the actual turnover rate, independent of pressure, line losses and other variables. Optional reed switches, in conjunction with a magnetic float, are available for monitoring low flow operation (i.e. dry-running, dead-heading or clogged filters).

**THE**  
**m murdock** Company, Inc.  
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1-815-588-0050 FAX 1-815-588-0057 1-800-345-1958

**Your Authorized Distributer:**