

# Magnetic Drive

## Product Catalog

- For use with Mildly-Corrosive, Semi-Corrosive, and Highly-Corrosive Liquids



# Proven Tough

## For Chemical Plating

"Electroplating circuit boards involves high heat and the circulation of incredibly caustic chemicals like acids and cyanide. My Little Giant magnetic drive pump handles it all without a problem and has remained trouble-free for years now."



## For Hydroponic Gardening

"Pesticides, fungicides, fertilizers ... my Little Giant magnetic drive pump is exposed to these chemicals 24/7, but so far no problem. Without a seal, there's nothing to fail and virtually no maintenance."



## For Aquariums

"I've used the same Little Giant magnetic drive pump to recirculate and aerate the water in my salt water and fresh water tanks for years. It takes the prolonged exposure to the salt and the tank-cleaning chemicals, plus it's incredibly quiet."



See your distributor for more information, or email Franklin Electric at [export@LittleGiantPump.com](mailto:export@LittleGiantPump.com).

# Magnetic Drive Product Catalog

- For use with Mildly-Corrosive, Semi-Corrosive, and Highly-Corrosive Liquids



## Table of Contents

About Magnetic Drive Pumps . . . . . 3-4

### Magnetic Drive Pumps

MD Series . . . . . 5-7

MD-SC Series . . . . . 8-14

MD-HC Series . . . . . 15-18

MD-CK Series . . . . . 19-20

### Accessories

Accessories . . . . . 21

Viton® is a registered trademark of Dupont Performance Elastomers.  
Teflon® is a registered trademark of Dupont Performance Elastomers.  
Kynar® is a registered trademark of Arkema, Inc.  
Ryton® is a registered trademark of Chevron Phillips Chemical Company.  
Noryl® is a registered trademark of General Electric Company.



# About our Magnetic

Little Giant Magnet Driven Pumps feature a leak-proof design that allows the pump to be used in a variety of applications where continuous and reliable operation is desired and when pumping corrosive liquids is necessary. Four series of pumps are offered: the MD, the MD-SC, MD-HC and MD-CK. The four groups offer increasing product features and chemical resistance. Little Giant MD pumps are in wide use in over 40 countries operating in applications ranging from circulating photographic solutions in film processing machines to moving harsh chemicals in electroplating equipment. The pumps are also found in OEM filtration equipment pumping de-ionized water and in many other fluid transfer processes.



TE-7-MD-CK



1-AA-MD

## No leakage

The magnetically coupled pump system replaces the shaft seal found in conventional pumps. The use of chemically resistant polymers for the materials of construction permits highly corrosive liquids to be pumped without causing corrosion to the pumping chamber. Advanced materials used in the MD-HC and MD-CK Series offer the highest level of chemical resistance and provide excellent temperature and strength properties.

## Operating principle

A pair of magnets, which form part of the impeller and motor shaft, drives the centrifugal pump. The magnet housing separates the pump chamber and motor shaft. This seal-less pump design eliminates conventional mechanical shaft seals because the motor shaft magnetically drives the impeller magnet by transmitting torque through the magnet housing. The combined coupling torque of the drive magnet and impeller magnet provides sufficient power to move a wide range of liquids including high-density liquids.

## A variety of models from 11 L/min to 183 L/min

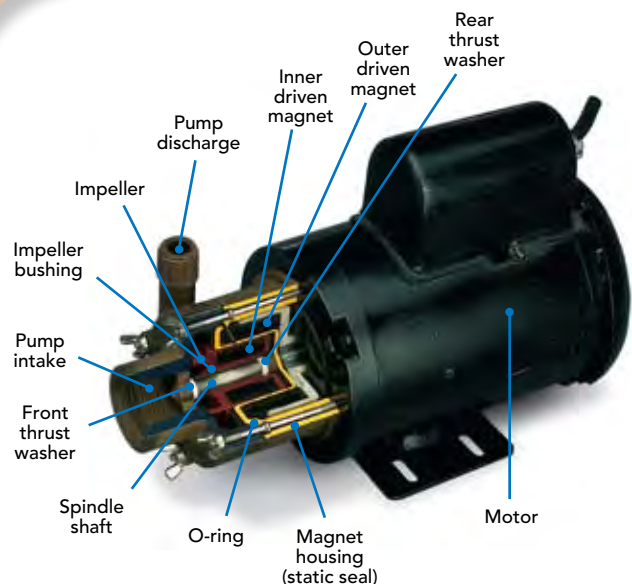
Little Giant MD Pumps can be selected for almost every application because there are over thirty different models available. The pumps are grouped in four product ranges from the 1-AA-MD with the lowest flow rate to the TE-7-MD-CK with the highest flow rate. Special purpose, high capacity models as well as economical models offer a wide selection. High-density acids such as concentrated sulfuric acid can be pumped by the larger models without overload by changing impeller sizes. Each pump assembly consists of only a few parts. Therefore maintenance, disassembly and inspection are very easy to perform.

## Pump selection guide

Several factors are involved in the proper selection of a magnetic drive pump. Caution should be exercised in matching the wetted pump parts to the chemicals and concentrations in the solution to be pumped. For the chemical resistance of the wetted pump parts, refer to Little Giant Pump Company Chemical Resistance Chart (Form #995516).

## Factors that must be taken into consideration in choosing a pump

- Pump Characteristics: Capacity (liters per minute or hour), discharge lift (in meters), suction lift (if any), outlet pressure (bar or Kg/cm<sup>2</sup>), inlet and outlet pipe size and horizontal pipe length and any noise limitations.
- Fluid characteristics: Chemical composition, **temperature** and solids content in suspension (nature, size and abrasive quality) and **density** or approximate concentration percentage (weight per liter) and **viscosity** at the liquid's normal pumping temperature.
- Other characteristics: Motor electrical requirements (Volts, Hertz, Phase), space limitations and normal ambient air temperature of the area in which the pump and motor will be installed.



# Drive Pumps

## Features:

- Leakproof, seal-less magnetic drive
- No maintenance due to seal wear
- No seal friction to reduce motor horsepower
- Only chemical resistant materials are in contact with fluids
- Dynamically balanced drive magnet for long motor bearing life
- Magnetic coupling design acts as a clutch to eliminate motor burnout and overloading under adverse conditions
- Pumping heads are easily rotated, cleaned or serviced with no special tool requirements
- Spindle shaft is supported at both ends to prevent impeller damage during start-up and stop of pump
- Magnet housing acts as an insulator to prevent motor heat from being transferred to the fluid being pumped
- Wide selections of materials for the pump wetted components to provide the best chemical resistance
- All threaded intake and discharge ports are USA (American) standard taper pipe threads (NPT). Teflon® tape is provided with Ryton® pumping head models.
- The MD-HC Series models have “run-dry” capability
- All motors feature thermal overload protection
- All motors are rated for continuous duty

## Four series with increasing chemical resistance



### MD Series

Designed for pumping mild solutions such as those found in film processing and most neutral chemicals with temperatures up to 66°C. Materials of construction include glass-filled polypropylene, titanium, nitrile and a barium-ferrite magnet.



### MD-SC Series

Designed to pump mild to strong acids found in electroplating applications with temperatures up to 66°C. Materials of construction include glass-filled polypropylene, ceramic and nitrile.



### MD-HC Series

Designed to pump strong acids and alkaline solutions including sulfuric, nitric and hydrochloric acid with temperatures up to 93°C. In addition, the HC series offers “Run Dry” protection. Materials of construction include glass-filled polyphenylene sulfide (Ryton®), ceramic, Viton® and pure carbon.



### MD-CK Series

Designed to pump highly corrosive acids and halogenated hydrocarbons such as hydrofluoric acid and ultrapure water solutions. Maximum fluid temperature is 93° C. Materials of construction include carbon-filled PVDF, ceramic, Viton® and carbon Teflon®.

Little Giant's comprehensive line of magnetic drive pumps is designed for circulation of acids, alkalis, solvents, brine, plating solutions, sterile solutions, and other special fluids, for use in environments such as hospitals, chemical companies, photo labs, dry cleaning plants, car washes, machine shops, laboratories, manufacturing plants, print shops and wineries.

**NOTE:** Consult your local distributor or Franklin Electric about applications with ambient temperatures, specific gravities and viscosities beyond the ranges shown for pumps in this catalog.

## MD Series Pumps

# 1-AA-MD SERIES 1/200 HP

Non-Submersible, In-line Use



### Applications

- Circulation of mildly corrosive acids, alkalis, solvents, brine, plating solutions, sterile solutions, and other mildly corrosive chemicals and solutions that are compatible with the pump's material of construction

### Features

- Impeller magnet is uncoated, permanent high quality ceramic/barium ferrite
- Most models have a titanium shaft and thrust washer for excellent wear and corrosion resistance
- 1/200 HP open motor
- Glass-filled polypropylene magnet housing and volute
- 1.1 specific gravity
- Viton® O-ring
- Rulon "J" (Teflon®) thrust washers
- Stainless steel shaft

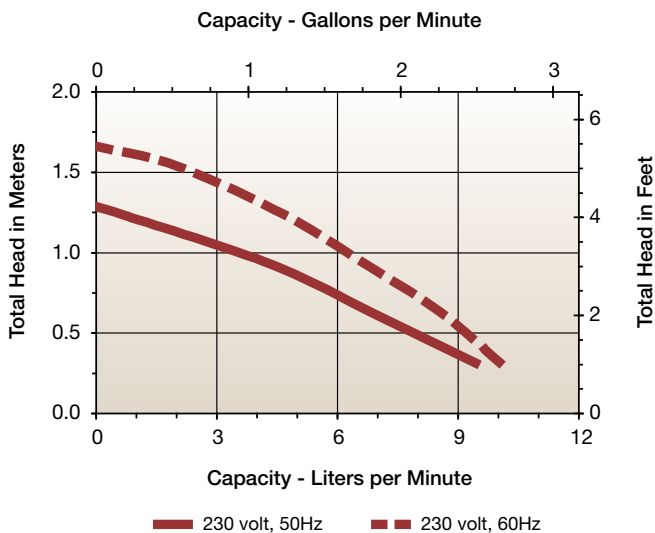
### Series Specifications

<b>RPM:</b> 2900/3000	<b>Intake:</b> 1/2" OD (12.7 mm)
<b>Capacity:</b> 9 LPM	<b>Impeller:</b> Glass-filled polypropylene & Ceramagnet "A" (Barium Ferrite)
<b>Shut Off:</b> 1.3 m	<b>Electrical:</b> 230V, 50/60Hz
<b>Liquid Temperature:</b> 66°C	
<b>Discharge:</b> 1/2" OD (12.7 mm)	

### Model Characteristics

Item #	Model	Volts	Hertz	Amps	Watts	Lead Wires	List/Cert.
588002	1-AA-MD	230	50/60	0.14	15	0.9 m (w/o plug)	UR

### Performance Curves 1-AA-MD 230V, 50/60Hz



# 1-MD SERIES 1/70 HP

Non-Submersible, In-line Use



### Applications

- Circulation of mildly corrosive acids, alkalis, solvents, brine, plating solutions, sterile solutions, and other mildly corrosive chemicals and solutions that are compatible with the pump's material of construction

### Features

- Impeller magnet is uncoated, permanent high quality ceramic/barium ferrite
- Most models have a titanium shaft and thrust washer for excellent wear and corrosion resistance
- 1/70 HP open FC motor
- Glass-filled polypropylene magnet housing and volute
- 1.1 specific gravity
- Nitrile O-ring
- Titanium thrust washers and shaft

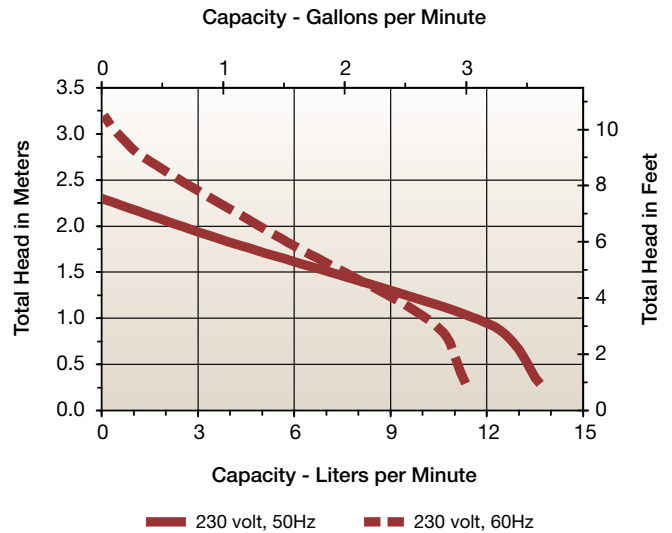
### Series Specifications

<b>RPM:</b> 2700/3000	<b>Intake:</b> 1/2" OD (12.7 mm)
<b>Capacity:</b> 13.2 LPM	<b>Impeller:</b> Glass-filled polypropylene & Ceramagnet "A" (Barium Ferrite)
<b>Shut Off:</b> 2.3 m	<b>Electrical:</b> 230V, 50/60Hz
<b>Liquid Temperature:</b> 66°C	
<b>Discharge:</b> 1/2" OD (12.7 mm)	

### Model Characteristics

Item #	Model	Volts	Hertz	Amps	Watts	Cord	List/Cert.
589012	1-MD	230	50/60	0.66	90	1.8 m (w/o plug)	-

### Performance Curves 1-MD 230V, 50/60Hz



## MD Series Pumps

# 2-MD SERIES 1/30 HP

Non-Submersible, In-line Use



### Applications

- Circulation of mildly corrosive acids, alkalis, solvents, brine, plating solutions, sterile solutions, and other mildly corrosive chemicals and solutions that are compatible with the pump's material of construction

### Features

- Impeller magnet is uncoated, permanent high quality ceramic/barium ferrite
- Most models have a titanium shaft and thrust washer for excellent wear and corrosion resistance
- 1/30 HP open FC motor
- Glass-filled polypropylene magnet housing and volute
- 1.1 specific gravity
- Nitrile O-ring
- Titanium thrust washers and shaft

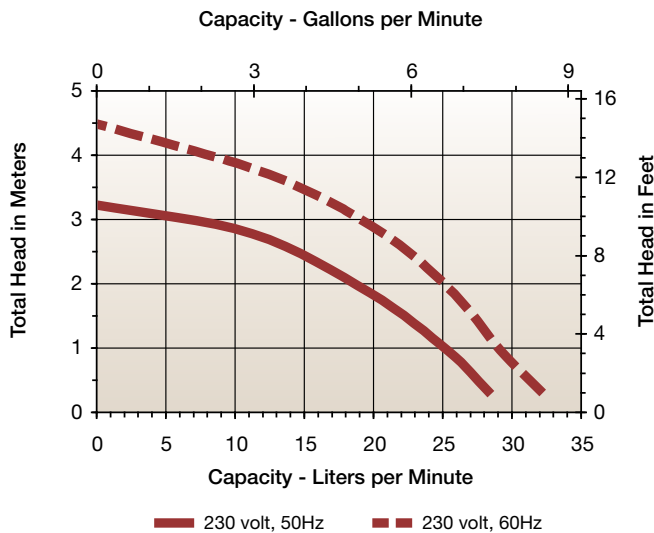
### Series Specifications

**RPM:** 2700/3000  
**Capacity:** 28 LPM  
**Shut Off:** 3.2 m  
**Liquid Temperature:** 66°C  
**Discharge:** 1/2" MNPT (12.7 mm)  
**Intake:** 1/2" FNPT (12.7 mm)  
**Impeller:** Glass-filled polypropylene & Ceramagnet "A" (Barium Ferrite)  
**Electrical:** 230V, 50/60Hz

### Model Characteristics

Item #	Model	Volts	Hertz	Amps	Watts	Cord	List/Cert.
580012	2-MD	230	50/60	0.65	105	1.8 m (w/o plug)	UR/C-CSA
580038	2-MD	230	50/60	0.65	105	—	CE

### Performance Curves 2-MD 230V, 50/60Hz



# TE-3-MD SERIES 1/20 HP

Non-Submersible, In-line Use



### Applications

- Circulation of mildly corrosive acids, alkalis, solvents, brine, plating solutions, sterile solutions, and other mildly corrosive chemicals and solutions that are compatible with the pump's material of construction

### Features

- Impeller magnet is uncoated, permanent high quality ceramic/barium ferrite
- Most models have a titanium shaft and thrust washer for excellent wear and corrosion resistance
- 1/20 HP TEFC motor
- Glass-filled polypropylene magnet housing and volute
- 1.1 specific gravity
- Nitrile O-ring
- Titanium thrust washers and shaft

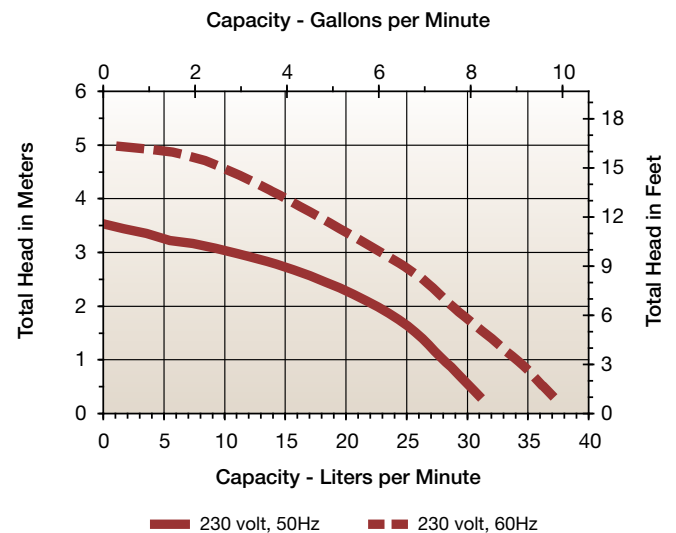
### Series Specifications

**RPM:** 2750/3200  
**Capacity:** 31 LPM  
**Shut Off:** 3.5 m  
**Liquid Temperature:** 66°C  
**Discharge:** 1/2" MNPT (12.7 mm)  
**Intake:** 1/2" FNPT (12.7 mm)  
**Impeller:** Glass-filled polypropylene & Ceramagnet "A" (Barium Ferrite)  
**Electrical:** 230V, 50/60Hz

### Model Characteristics

Item #	Model	Volts	Hertz	Amps	Watts	Cord	List/Cert.
581012	TE-3-MD	230	50/60	1.10	135	1.8 m (w/o plug)	UR/C-CSA

### Performance Curves TE-3-MD 230V, 50/60Hz



## MD Series Pumps

# 5-MD SERIES 1/8 HP

Non-Submersible, In-line Use



### Applications

- Circulation of mildly corrosive acids, alkalis, solvents, brine, plating solutions, sterile solutions, and other mildly corrosive chemicals and solutions that are compatible with the pump's material of construction

### Features

- Impeller magnet is uncoated, permanent high quality ceramic/barium ferrite
- Most models have a titanium shaft and thrust washer for excellent wear and corrosion resistance
- 1/8 HP PSC open FC motor
- Glass-filled polypropylene magnet housing and volute
- 1.1 specific gravity
- Nitrile O-ring
- Titanium thrust washers and shaft

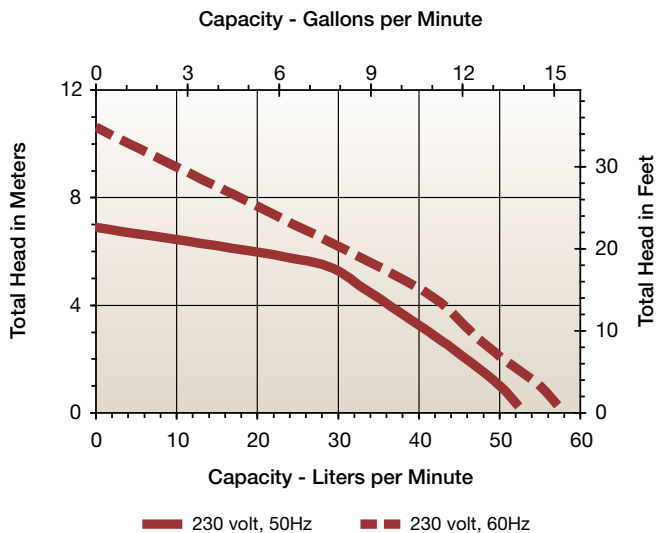
### Series Specifications

<b>RPM:</b> 2400/2500	<b>Intake:</b> 1/2" FNPT (12.7 mm)
<b>Capacity:</b> 52 LPM	<b>Impeller:</b> Glass-filled polypropylene & Ceramagnet "A" (Barium Ferrite)
<b>Shut Off:</b> 6.8 m	<b>Electrical:</b> 230V, 50/60Hz
<b>Liquid Temperature:</b> 66°C	
<b>Discharge:</b> 1/2" MNPT (12.7 mm)	

### Model Characteristics

Item #	Model	Volts	Hertz	Amps	Watts	Cord	List/Cert.
583012	5-MD	230	50/60	0.90	185	1.8 m (w/o plug)	UR/CSA

### Performance Curves 5-MD 230V, 50/60Hz





## MD-SC Series Pumps

# 1.5-MDI-SC SERIES 1/35 HP

Non-Submersible, In-line Use



### Applications

- Circulation of moderately corrosive acids, alkalis, solvents, brine, plating solutions, sterile solutions, and other moderately corrosive chemicals and solutions that are compatible with the pump's material of construction

### Features

- Ceramic shaft and thrust washers are 99.5% pure alumina for excellent wear and trouble-free service
- 1/35 HP open FC motor
- Glass-filled polypropylene magnet housing and volute
- 1.1 specific gravity
- Viton® O-ring

### Series Specifications

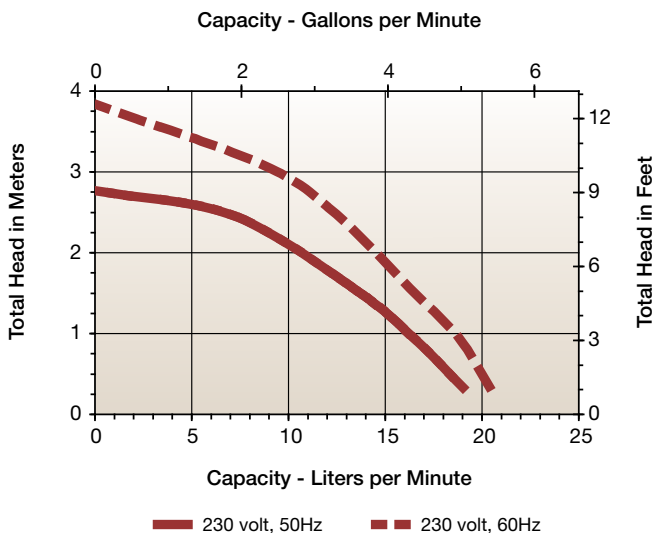
**RPM:** 3100  
**Capacity:** 19 LPM  
**Shut Off:** 2.7 m  
**Liquid Temperature:** 66°C  
**Discharge:** 1/4" MNPT (6 mm)

**Intake:** 3/4" MNPT (19 mm) & 3/8" FNPT (9.5 mm)  
**Impeller:** Glass-filled polypropylene  
**Electrical:** 230V, 50/60Hz

### Model Characteristics

Item #	Model	Volts	Hertz	Amps	Watts	Cord	List/Cert.
589211	1.5-MDI-SC	230	50/60	0.70	95	1.8 m (w/o plug)	UR/C-CSA

### Performance Curves 1.5-MDI-SC 230V, 50/60Hz



# PE-1.5-MDI-SC SERIES 1/35 HP

Submersible Use Only



### Applications

- Circulation of moderately corrosive acids, alkalis, solvents, brine, plating solutions, sterile solutions, and other moderately corrosive chemicals and solutions that are compatible with the pump's material of construction

### Features

- Ceramic shaft and thrust washers are 99.5% pure alumina for excellent wear and trouble-free service
- 1/35 HP encapsulated motor
- Glass-filled polypropylene magnet housing and volute
- 1.1 specific gravity
- Nitrile O-ring
- Polyester motor case
- Stainless steel screws
- Polyethylene intake screen

### Series Specifications

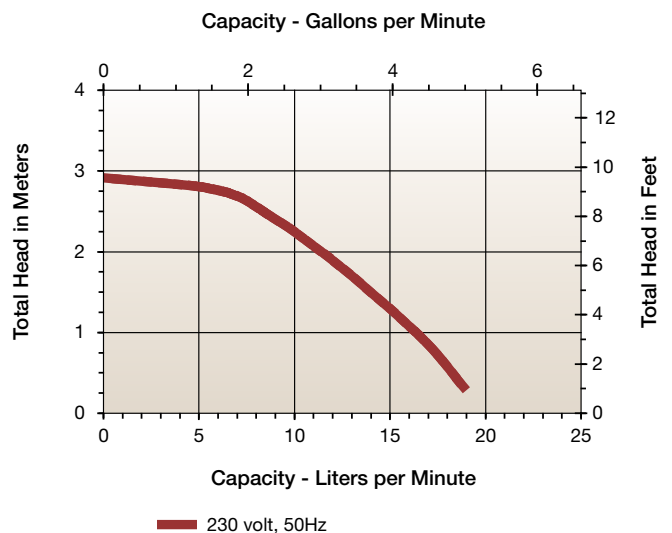
**RPM:** 3000  
**Capacity:** 19 LPM  
**Shut Off:** 2.9 m  
**Liquid Temperature:** 25°C  
**Discharge:** 1/4" MNPT (6 mm)

**Intake:** 1/2" MNPT (12.7 mm)  
**Impeller:** Glass-filled polypropylene  
**Electrical:** 230V, 50Hz

### Model Characteristics

Item #	Model	Volts	Hertz	Amps	Watts	Cord	List/Cert.
589237	PE-1.5-MDI-SC	230	50	0.43	50	1.8 m (3-prong plug)	CE

### Performance Curves PE-1.5-MDI-SC 230V, 50Hz



## MD-SC Series Pumps

# 2-MD-SC SERIES 1/30 HP

Non-Submersible, In-line Use



### Applications

- Circulation of moderately corrosive acids, alkalis, solvents, brine, plating solutions, sterile solutions, and other moderately corrosive chemicals and solutions that are compatible with the pump's material of construction

### Features

- Volute, magnet housing and impeller are glass-filled polypropylene for excellent chemical resistance
- Encapsulated glass-filled polypropylene permanent impeller magnet
- Ceramic shaft and thrust washers are 99.5% pure alumina for excellent wear and trouble-free service
- 1/30 HP open FC motor
- 1.1 specific gravity
- Nitrile O-ring

### Series Specifications

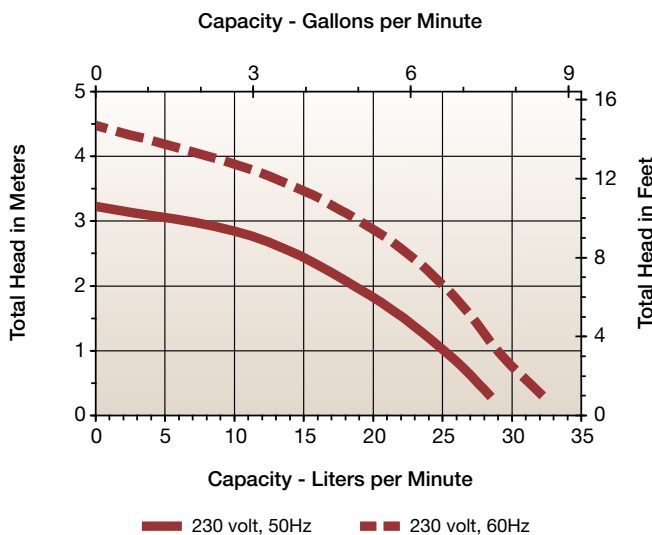
**RPM:** 2700/3000  
**Capacity:** 28 LPM  
**Shut Off:** 3.2 m  
**Liquid Temperature:** 66°C  
**Discharge:** 1/2" MNPT (12.7 mm)

**Intake:** 1/2" FNPT (12.7 mm)  
**Impeller:** Glass-filled polypropylene  
**Electrical:** 230V, 50/60Hz

### Model Characteristics

Item #	Model	Volts	Hertz	Amps	Watts	Cord	List/Cert.
580513	2-MD-SC	230	50/60	0.65	105	1.8 m (w/o plug)	UR/C-CSA
580514	2-MD-SC	230	50/60	0.65	105	—	CE

### Performance Curves 2-MD-SC 230V, 50/60Hz



# 3-MD-SC SERIES 1/12 HP

Non-Submersible, In-line Use



### Applications

- Circulation of moderately corrosive acids, alkalis, solvents, brine, plating solutions, sterile solutions, and other moderately corrosive chemicals and solutions that are compatible with the pump's material of construction

### Features

- Volute, magnet housing and impeller are glass-filled polypropylene for excellent chemical resistance
- Encapsulated glass-filled polypropylene permanent impeller magnet
- Ceramic shaft and thrust washers are 99.5% pure alumina for excellent wear and trouble-free service
- 1/12 HP open FC motor
- 1.1 specific gravity
- Nitrile O-ring

### Series Specifications

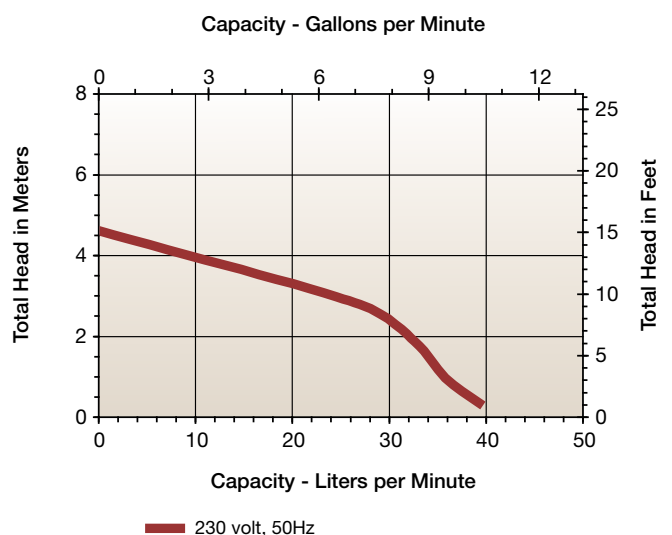
**RPM:** 3000  
**Capacity:** 39 LPM  
**Shut Off:** 4.6 m  
**Liquid Temperature:** 66°C  
**Discharge:** 1/2" MNPT (12.7 mm)

**Intake:** 3/4" FNPT (19 mm)  
**Impeller:** Glass-filled polypropylene  
**Electrical:** 230V, 50Hz

### Model Characteristics

Item #	Model	Volts	Hertz	Amps	Watts	Cord	List/Cert.
581576	3-MD-SC	230	50	0.82	120	1.8 m (w/o plug)	UR

### Performance Curves 3-MD-SC 230V, 50Hz



## MD-SC Series Pumps

# TE-3-MD-SC SERIES 1/20 HP

Non-Submersible, In-line Use



### Applications

- Circulation of moderately corrosive acids, alkalis, solvents, brine, plating solutions, sterile solutions, and other moderately corrosive chemicals and solutions that are compatible with the pump's material of construction

### Features

- Volute, magnet housing and impeller are glass-filled polypropylene for excellent chemical resistance
- Encapsulated glass-filled polypropylene permanent impeller magnet
- Ceramic shaft and thrust washers are 99.5% pure alumina for excellent wear and trouble-free service
- 1/20 HP TEFC PSC motor
- 1.1 specific gravity
- Nitrile O-ring

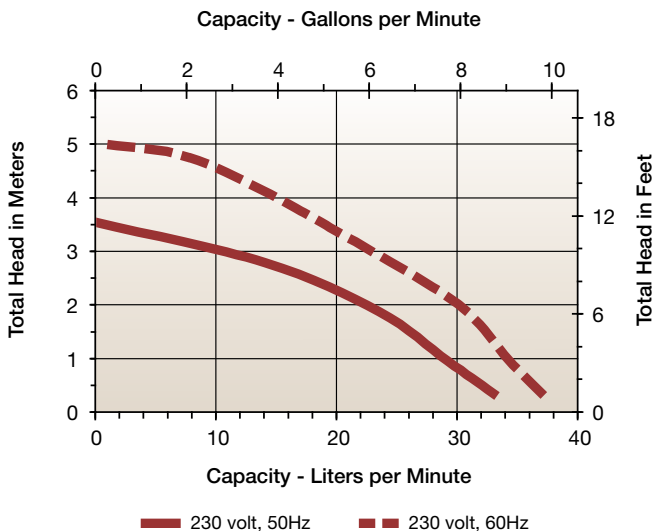
### Series Specifications

**RPM:** 2750/3000      **Intake:** 1" FNPT (25.4 mm)  
**Capacity:** 33 LPM      **Impeller:** Glass-filled polypropylene  
**Shut Off:** 3.5 m      **Electrical:** 230V, 50/60Hz  
**Liquid Temperature:** 66°C  
**Discharge:** 1/2" MNPT (12.7 mm)

### Model Characteristics

Item #	Model	Volts	Hertz	Amps	Watts	Cord	List/Cert.
581538	TE-3-MD-SC	230	50/60	0.89	120	1.8 m (w/o plug)	CE

### Performance Curves TE-3-MD-SC 230V, 50/60Hz



# 3-MDQX-SC SERIES 1/15 HP

Non-Submersible, In-line Use



### Applications

- Pump designed specifically for aquarium filtration applications, either in fresh water or salt water

### Features

- Volute, magnet housing and impeller are glass-filled polypropylene for excellent chemical resistance
- Encapsulated glass-filled polypropylene permanent impeller magnet
- Ceramic shaft and thrust washers are 99.5% pure alumina for excellent wear and trouble-free service
- 1/15 HP TEFC PSC motor
- 1.1 specific gravity
- Nitrile O-ring

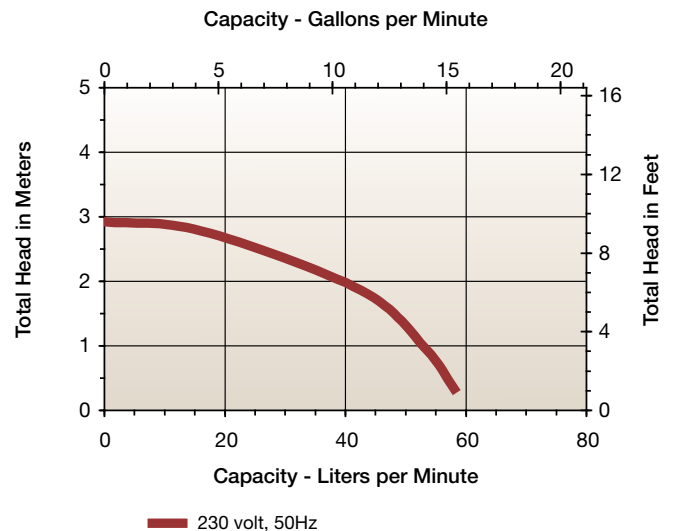
### Series Specifications

**RPM:** 3200      **Intake:** 1" FNPT (25.4 mm)  
**Capacity:** 58 LPM      **Impeller:** Glass-filled polypropylene  
**Shut Off:** 2.9 m      **Electrical:** 230V, 50Hz  
**Liquid Temperature:** 66°C  
**Discharge:** 1" MNPT (25.4 mm)

### Model Characteristics

Item #	Model	Volts	Hertz	Amps	Watts	Cord	List/Cert.
581517	3-MDQX-SC	230	50	0.31	70	1.8 m (3-prong plug)	-

### Performance Curves 3-MDQX-SC 230V, 50Hz



## MD-SC Series Pumps

# TE-4-MD-SC SERIES 1/10 HP

Non-Submersible, In-line Use



### Applications

- Circulation of moderately corrosive acids, alkalis, solvents, brine, plating solutions, sterile solutions, and other moderately corrosive chemicals and solutions that are compatible with the pump's material of construction

### Features

- Volute, magnet housing and impeller are glass-filled polypropylene for excellent chemical resistance
- Encapsulated glass-filled polypropylene permanent impeller magnet
- Ceramic shaft and thrust washers are 99.5% pure alumina for excellent wear and trouble-free service
- 1/10 HP TEFC PSC motor
- 1.1 specific gravity
- Nitrile O-ring

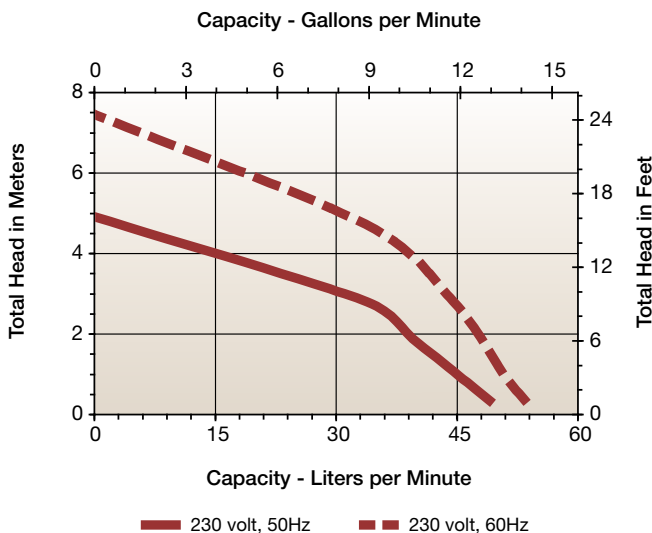
### Series Specifications

**RPM:** 2750/3000  
**Capacity:** 49 LPM  
**Shut Off:** 4.9 m  
**Liquid Temperature:** 66°C  
**Discharge:** 1/2" MNPT (12.7 mm)  
**Intake:** 1" FNPT (25.4 mm)  
**Impeller:** Glass-filled polypropylene  
**Electrical:** 230V, 50/60Hz

### Model Characteristics

Item #	Model	Volts	Hertz	Amps	Watts	Cord	List/Cert.
582514	TE-4-MD-SC	230	50/60	0.50	120	1.8 m (w/o plug)	UR/C-CSA
582538	TE-4-MD-SC	230	50/60	0.50	120	1.8 m (w/o plug)	CE

### Performance Curves TE-4-MD-SC 230V, 50/60Hz



# TE-4-MDX-SC SERIES 1/10 HP

Non-Submersible, In-line Use



### Applications

- Circulation of moderately corrosive acids, alkalis, solvents, brine, plating solutions, sterile solutions, and other moderately corrosive chemicals and solutions that are compatible with the pump's material of construction

### Features

- Volute, magnet housing and impeller are glass-filled polypropylene for excellent chemical resistance
- Encapsulated glass-filled polypropylene permanent impeller magnet
- Ceramic shaft and thrust washers are 99.5% pure alumina for excellent wear and trouble-free service
- 1/10 HP TEFC PSC motor
- 1.1 specific gravity
- Nitrile O-ring

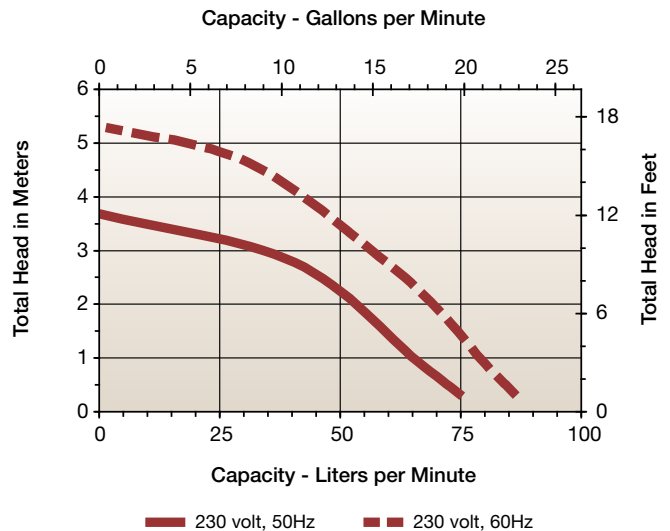
### Series Specifications

**RPM:** 2750/3000  
**Capacity:** 75.7 LPM  
**Shut Off:** 3.7 m  
**Liquid Temperature:** 66°C  
**Discharge:** 1" MNPT (25.4 mm)  
**Intake:** 1" FNPT (25.4 mm)  
**Impeller:** Glass-filled polypropylene  
**Electrical:** 230V, 50/60Hz

### Model Characteristics

Item #	Model	Volts	Hertz	Amps	Watts	Cord	List/Cert.
582515	TE-4-MDX-SC	230	50/60	0.50	120	1.8 m (w/o plug)	UR/C-CSA

### Performance Curves TE-4-MDX-SC 230V, 50/60Hz





## MD-SC Series Pumps

# 5-MD-SC SERIES 1/8 HP

Non-Submersible, In-line Use



### Applications

- Circulation of moderately corrosive acids, alkalis, solvents, brine, plating solutions, sterile solutions, and other moderately corrosive chemicals and solutions that are compatible with the pump's material of construction

### Features

- Volute, magnet housing and impeller are glass-filled polypropylene for excellent chemical resistance
- Encapsulated glass-filled polypropylene permanent impeller magnet
- Ceramic shaft and thrust washers are 99.5% pure alumina for excellent wear and trouble-free service
- 1/8 HP open FC PSC motor
- 1.1 specific gravity
- Nitrile O-ring

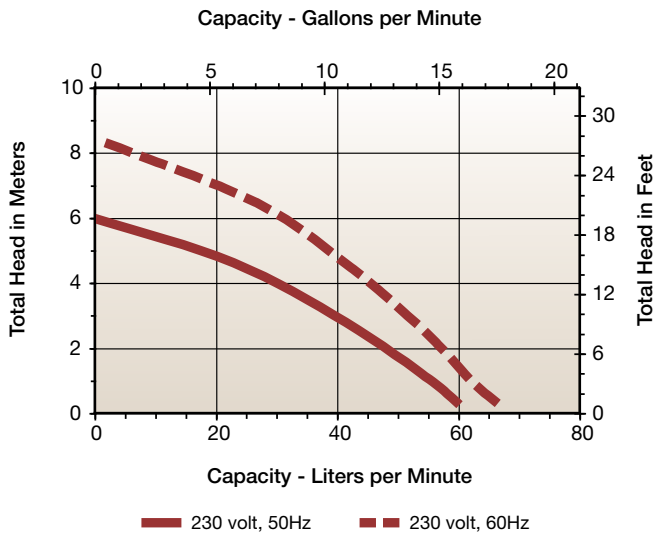
### Series Specifications

**RPM:** 2400/2500      **Intake:** 1" FNPT (25.4 mm)  
**Capacity:** 60 LPM      **Impeller:** Glass-filled polypropylene  
**Shut Off:** 5.9 m      **Electrical:** 230V, 50/60Hz  
**Liquid Temperature:** 66°C  
**Discharge:** 1/2" MNPT (12.7 mm)

### Model Characteristics

Item #	Model	Volts	Hertz	Amps	Watts	Cord	List/Cert.
583513	5-MD-SC	230	50/60	1.00	200	1.8 m (w/o plug)	UR/C-CSA

### Performance Curves 5-MD-SC 230V, 50/60Hz



# TE-5-MD-SC SERIES 1/8 HP

Non-Submersible, In-line Use



### Applications

- Circulation of moderately corrosive acids, alkalis, solvents, brine, plating solutions, sterile solutions, and other moderately corrosive chemicals and solutions that are compatible with the pump's material of construction

### Features

- Volute, magnet housing and impeller are glass-filled polypropylene for excellent chemical resistance
- Encapsulated glass-filled polypropylene permanent impeller magnet
- Ceramic shaft and thrust washers are 99.5% pure alumina for excellent wear and trouble-free service
- 1/8 HP TEFC PSC motor
- 1.1 specific gravity
- Nitrile O-ring

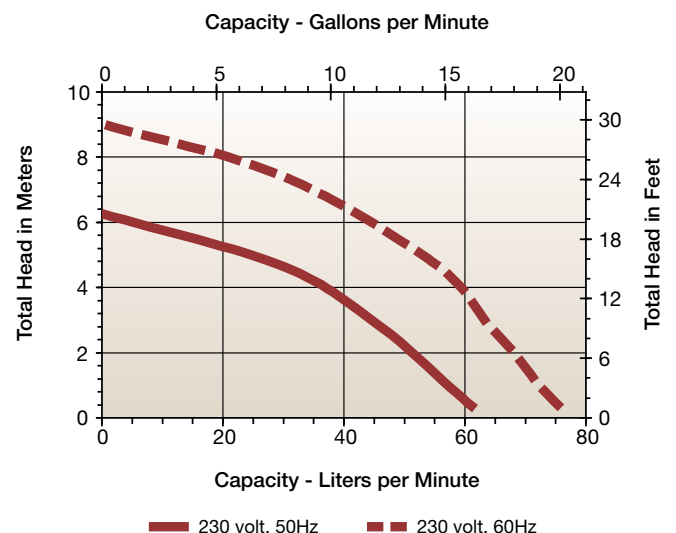
### Series Specifications

**RPM:** 2850/3450      **Intake:** 1" FNPT (25.4 mm)  
**Capacity:** 61 LPM      **Impeller:** Glass-filled polypropylene  
**Shut Off:** 6.2 m      **Electrical:** 230V, 50/60Hz  
**Liquid Temperature:** 66°C  
**Discharge:** 1/2" MNPT (12.7 mm)

### Model Characteristics

Item #	Model	Volts	Hertz	Amps	Watts	Cord	List/Cert.
584538	TE-5-MD-SC	230	50/60	1.3	220	1.8 m (3-prong plug) Cord not installed	CE

### Performance Curves TE-5-MD-SC 230V, 50/60Hz



## MD-SC Series Pumps

# TE-5.5-MD-SC SERIES 1/3 HP

Non-Submersible, In-line Use



### Applications

- Circulation of moderately corrosive acids, alkalis, solvents, brine, plating solutions, sterile solutions, and other moderately corrosive chemicals and solutions that are compatible with the pump's material of construction

### Features

- Volute, magnet housing and impeller are glass-filled polypropylene for excellent chemical resistance
- Encapsulated glass-filled polypropylene permanent impeller magnet
- Ceramic shaft and thrust washers are 99.5% pure alumina for excellent wear and trouble-free service
- 1/3 HP TEFC motor
- Glass-filled polypropylene volute
- Glass-filled Ryton® backplate
- 1.1 specific gravity
- Viton® O-ring

### Series Specifications

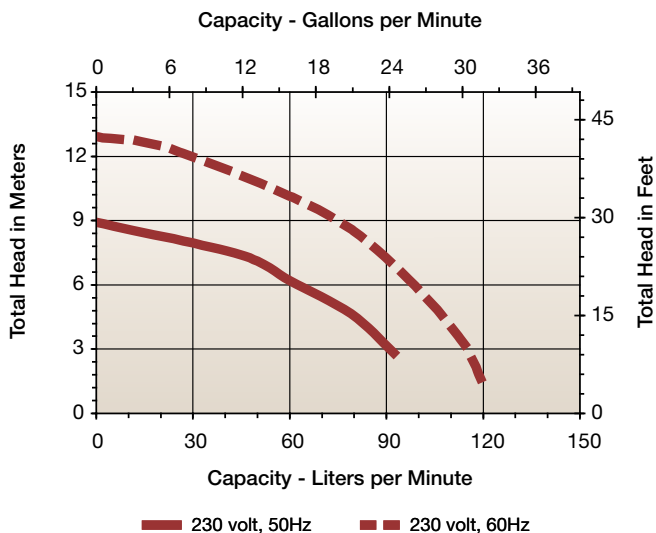
<b>RPM:</b> 2850/3450	<b>Intake:</b> 1" FNPT (25.4 mm)
<b>Capacity:</b> 102 LPM	<b>Impeller:</b> Glass-filled polypropylene w/ carbon bushing
<b>Shut Off:</b> 8.8 m	<b>Electrical:</b> 230V, 50/60Hz
<b>Liquid Temperature:</b> 66°C	
<b>Discharge:</b> 3/4" MNPT (19 mm)	

### Model Characteristics

Item #	Model	Volts	Hertz	Amps	Watts	Cord	List/Cert.
585504	TE-5.5-MD-SC	230	50/60	2.8	340	Not included	UR/C-CSA

NOTE: Although no pump should be operated dry, the TE-5.5-MD-SC models have a run-dry capability of up to eight hours without damage.

### Performance Curves TE-5.5-MD-SC 230V, 50/60Hz



# TE-5.5-MDQ-SC SERIES 1/2 HP

Non-Submersible, In-line Use



### Applications

- Pump designed specifically for aquarium filtration applications, either in fresh water or salt water

### Features

- Volute, magnet housing and impeller are glass-filled polypropylene for excellent chemical resistance
- Encapsulated glass-filled polypropylene permanent impeller magnet
- Ceramic shaft and thrust washers are 99.5% pure alumina for excellent wear and trouble-free service
- 1/2 HP TEFC motor
- Glass-filled polypropylene volute
- 1.1 specific gravity
- Glass-filled Ryton® backplate
- Viton® O-ring
- 63-68 DBA

### Series Specifications

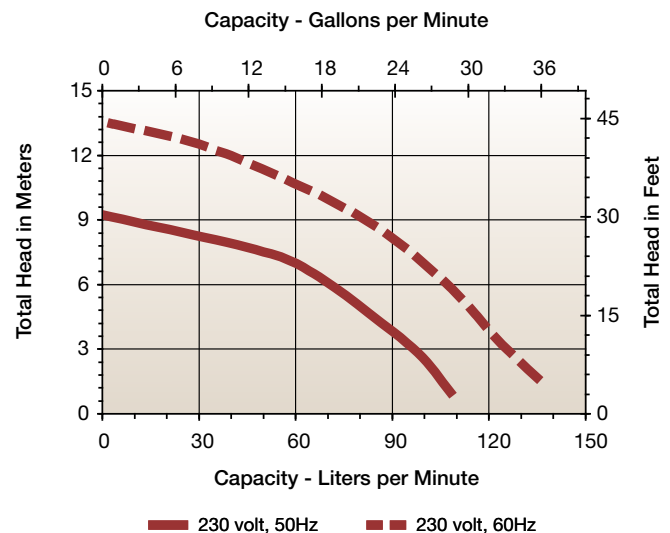
<b>RPM:</b> 2850/3450	<b>Intake:</b> 1" FNPT (25.4 mm)
<b>Capacity:</b> 109 LPM	<b>Impeller:</b> Glass-filled polypropylene w/ carbon bushing
<b>Shut Off:</b> 9.1 m	<b>Electrical:</b> 230V, 50/60Hz
<b>Liquid Temperature:</b> 66°C	
<b>Discharge:</b> 3/4" MNPT (19 mm)	

### Model Characteristics

Item #	Model	Volts	Hertz	Amps	Watts	Cord	List/Cert.
585514	TE-5.5-MDQ-SC	230	50/60	2.2	300	Not included	UL/CSA

NOTE: Although no pump should be operated dry, the TE-5.5-MDQ-SC models have a run-dry capability of up to eight hours without damage.

### Performance Curves TE-5.5-MDQ-SC 230V, 50/60Hz



## MD-SC Series Pumps

# TE-6-MD-SC SERIES 1/2 HP

Non-Submersible, In-line Use



### Applications

- Circulation of moderately corrosive acids, alkalis, solvents, brine, plating solutions, sterile solutions, and other moderately corrosive chemicals and solutions that are compatible with the pump's material of construction

### Features

- Volute, magnet housing and impeller are glass-filled polypropylene for excellent chemical resistance
- Encapsulated glass-filled polypropylene permanent impeller magnet
- Ceramic shaft and thrust washers are 99.5% pure alumina for excellent wear and trouble-free service
- 1/2 HP TEFC motor
- Glass-filled polypropylene volute
- 1.1 specific gravity
- Glass-filled Ryton® backplate
- Viton® O-ring

### Series Specifications

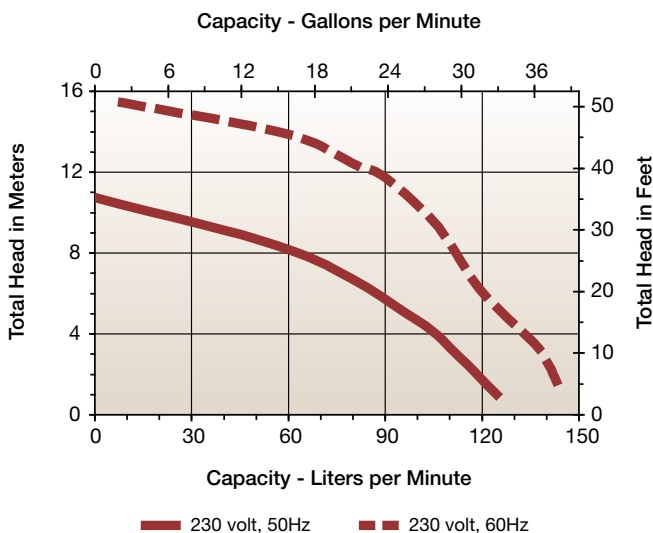
<b>RPM:</b> 2850/3450	<b>Intake:</b> 1" FNPT (25.4 mm)
<b>Capacity:</b> 125 LPM	<b>Impeller:</b> Glass-filled polypropylene w/ carbon bushing
<b>Shut Off:</b> 10.7 m	<b>Electrical:</b> 230V, 50/60Hz
<b>Liquid Temperature:</b> 66°C	
<b>Discharge:</b> 3/4" MNPT (19 mm)	

### Model Characteristics

Item #	Model	Volts	Hertz	Amps	Watts	Cord	List/Cert.
586504	TE-6-MD-SC	230	50/60	11.6	640	Not included	UR/C-CSA
586538	TE-6-MD-SC	230	50/60	5.8	640	Not included	CE

NOTE: Although no pump should be operated dry, the TE-6-MD-SC models have a run-dry capability of up to eight hours without damage.

### Performance Curves TE-6-MD-SC 230V, 50/60Hz



# TE-7-MD-SC SERIES 3/4 HP

Non-Submersible, In-line Use



### Applications

- Circulation of moderately corrosive acids, alkalis, solvents, brine, plating solutions, sterile solutions, and other moderately corrosive chemicals and solutions that are compatible with the pump's material of construction

### Features

- Volute, magnet housing and impeller are glass-filled polypropylene for excellent chemical resistance
- Encapsulated glass-filled polypropylene permanent impeller magnet
- Ceramic shaft and thrust washers are 99.5% pure alumina for excellent wear and trouble-free service
- 3/4 HP TEFC motor
- Glass-filled polypropylene volute
- Glass-filled Ryton® backplate
- 1.1 specific gravity
- Viton® O-ring

### Series Specifications

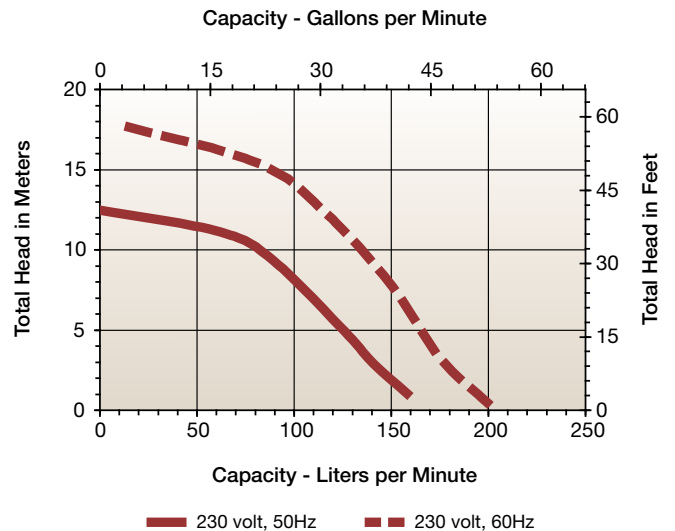
<b>RPM:</b> 2850/3450	<b>Intake:</b> 1-1/2" FNPT (38 mm)
<b>Capacity:</b> 159 LPM	<b>Impeller:</b> Glass-filled polypropylene w/ carbon bushing
<b>Shut Off:</b> 12.3 m	<b>Electrical:</b> 230V, 50/60Hz
<b>Liquid Temperature:</b> 66°C	
<b>Discharge:</b> 1" MNPT (25.4 mm)	

### Model Characteristics

Item #	Model	Volts	Hertz	Amps	Watts	Cord	List/Cert.
587400	TE-7-MD-SC	230	50/60	5.2	700	Not included	UR/C-CSA

NOTE: Although no pump should be operated dry, the TE-7-MD-SC models have a run-dry capability of up to eight hours without damage.

### Performance Curves TE-7-MD-SC 230V, 50/60Hz



## MD-HC Series Pumps

# 2-MD-HC SERIES 1/30 HP

Non-Submersible, In-line Use



### Applications

- Circulation of highly corrosive acids, alkalis, solvents, brine, plating solutions, sterile solutions, and other highly corrosive chemicals and solutions that are compatible with the pump's material of construction

### Features

- Run dry capability for up to eight hours without apparent damage
- Volute, magnet housing and impeller are glass-filled Ryton® (PPS) for excellent chemical resistance
- Self-lubricating carbon impeller bushing is impervious to fluids and long-lived in abrasive solutions
- Encapsulated glass-filled Ryton® permanent impeller magnet
- Ceramic shaft and thrust washers are 99.5% pure alumina for excellent wear and trouble-free service with harsh solutions
- 1/30 HP open FC motor
- Glass-filled polyphenylene sulfide (e.g. Ryton®) magnet housing and volute
- 1.1 specific gravity
- Viton® O-ring

### Series Specifications

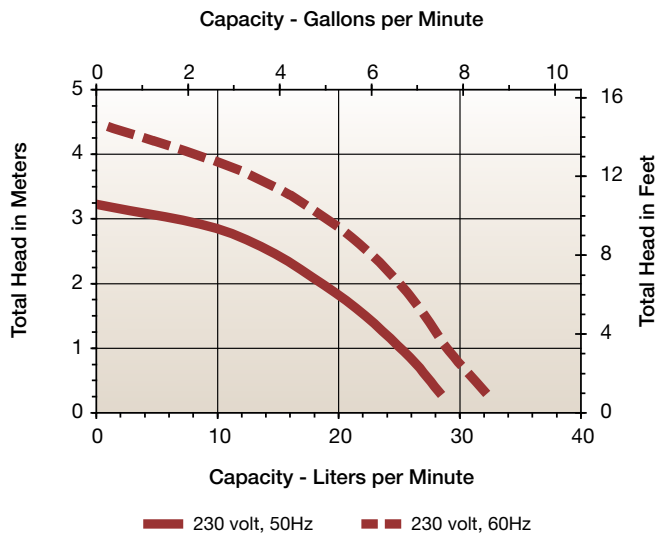
<b>RPM:</b> 2700/3000	<b>Intake:</b> 1/2" FNPT (12.7 mm)
<b>Capacity:</b> 28 LPM	<b>Impeller:</b> Glass-filled polyphenylene sulfide (e.g. Ryton®) w/ carbon bushing
<b>Shut Off:</b> 3.2 m	<b>Electrical:</b> 230V, 50/60Hz
<b>Liquid Temperature:</b> 93.3°C	
<b>Discharge:</b> 1/2" MNPT (12.7 mm)	

### Model Characteristics

Item #	Model	Volts	Hertz	Amps	Watts	Cord	List/Cert.
580613	2-MD-HC	230	50/60	0.65	105	1.8 m (w/o plug)	UR/C-CSA
580614	2-MD-HC	230	50/60	0.65	105	1.8 m (w/o plug)	CE

NOTE: Although no pump should be operated dry, the 2-MD-HC models with carbon bushing and ceramic shaft have a run-dry capability of up to eight hours without damage.

### Performance Curves 2-MD-HC 230V, 50/60Hz



# TE-3-MD-HC SERIES 1/20 HP

Non-Submersible, In-line Use



### Applications

- Circulation of highly corrosive acids, alkalis, solvents, brine, plating solutions, sterile solutions, and other highly corrosive chemicals and solutions that are compatible with the pump's material of construction

### Features

- Run dry capability for up to eight hours without apparent damage
- Volute, magnet housing and impeller are glass-filled Ryton® (PPS) for excellent chemical resistance
- Self-lubricating carbon impeller bushing is impervious to fluids and long-lived in abrasive solutions
- Encapsulated glass-filled Ryton® permanent impeller magnet
- Ceramic shaft and thrust washers are 99.5% pure alumina for excellent wear and trouble-free service with harsh solutions
- 1/20 HP TEFC motor
- Glass-filled polyphenylene sulfide (e.g. Ryton®) magnet housing and volute
- 1.1 specific gravity
- Viton® O-ring

### Series Specifications

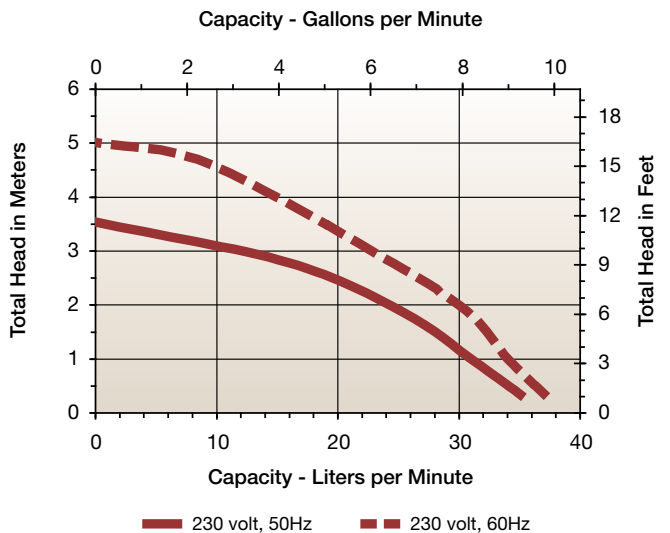
<b>RPM:</b> 2750/3200	<b>Intake:</b> 1/2" FNPT (12.7 mm)
<b>Capacity:</b> 35 LPM	<b>Impeller:</b> Glass-filled polyphenylene sulfide (e.g. Ryton®) w/ carbon bushing
<b>Shut Off:</b> 3.5 m	<b>Electrical:</b> 230V, 50/60Hz
<b>Liquid Temperature:</b> 93.3°C	
<b>Discharge:</b> 1/2" MNPT (12.7 mm)	

### Model Characteristics

Item #	Model	Volts	Hertz	Amps	Watts	Cord	List/Cert.
581614	TE-3-MD-HC	230	50/60	1.10	135	1.8 m (w/o plug)	UR/C-CSA
581638	TE-3-MD-HC	230	50/60	0.89	120	1.8 m (w/o plug)	CE

NOTE: Although no pump should be operated dry, the TE-3-MD-HC models with carbon bushing and ceramic shaft have a run-dry capability of up to eight hours without damage.

### Performance Curves TE-3-MD-HC 230V, 50/60Hz





## MD-HC Series Pumps

# TE-4-MD-HC SERIES 1/10 HP

Non-Submersible, In-line Use



### Applications

- Circulation of highly corrosive acids, alkalis, solvents, brine, plating solutions, sterile solutions, and other highly corrosive chemicals and solutions that are compatible with the pump's material of construction

### Features

- Run dry capability for up to eight hours without apparent damage
- Volute, magnet housing and impeller are glass-filled Ryton® (PPS) for excellent chemical resistance
- Self-lubricating carbon impeller bushing is impervious to fluids and long-lived in abrasive solutions
- Encapsulated glass-filled Ryton® permanent impeller magnet
- Ceramic shaft and thrust washers are 99.5% pure alumina for excellent wear and trouble-free service with harsh solutions
- 1/10 HP open TEFC PSC motor
- Glass-filled polyphenylene sulfide (e.g. Ryton®) magnet housing and volute
- 1.1 specific gravity
- Viton® O-ring

### Series Specifications

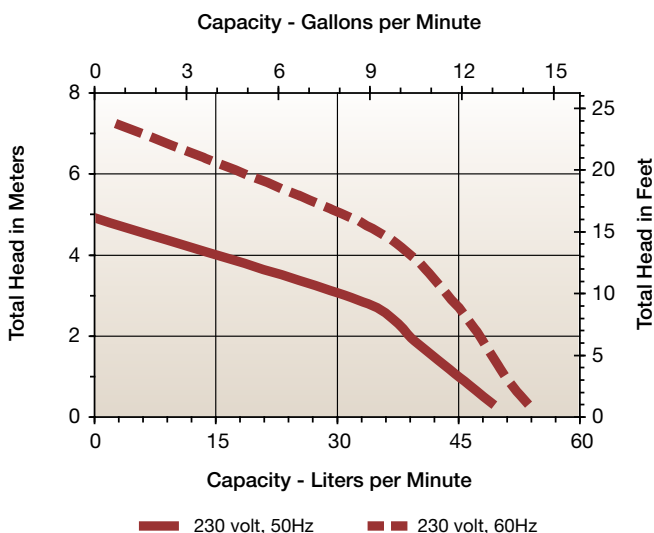
<b>RPM:</b> 2750/3000	<b>Intake:</b> 1/2" FNPT (12.7 mm)
<b>Capacity:</b> 49 LPM	<b>Impeller:</b> Glass-filled polyphenylene sulfide (e.g. Ryton®) w/ carbon bushing
<b>Shut Off:</b> 4.9 m	<b>Electrical:</b> 230V, 50/60Hz
<b>Liquid Temperature:</b> 93.3°C	
<b>Discharge:</b> 1/2" MNPT (12.7 mm)	

### Model Characteristics

Item #	Model	Volts	Hertz	Amps	Watts	Cord	List/Cert.
582614	TE-4-MD-HC	230	50/60	0.50	120	1.8 m (w/o plug)	UR/C-CSA
582638	TE-4-MD-HC	230	50/60	0.50	120	1.8 m (w/o plug)	CE

NOTE: Although no pump should be operated dry, the TE-4-MD-HC models with carbon bushing and ceramic shaft have a run-dry capability of up to eight hours without damage.

### Performance Curves TE-4-MD-HC 230V, 50/60Hz



# 5-MD-HC SERIES 1/8 HP

Non-Submersible, In-line Use



### Applications

- Circulation of highly corrosive acids, alkalis, solvents, brine, plating solutions, sterile solutions, and other highly corrosive chemicals and solutions that are compatible with the pump's material of construction

### Features

- Run dry capability for up to eight hours without apparent damage
- Volute, magnet housing and impeller are glass-filled Ryton® (PPS) for excellent chemical resistance
- Self-lubricating carbon impeller bushing is impervious to fluids and long-lived in abrasive solutions
- Encapsulated glass-filled Ryton® permanent impeller magnet
- Ceramic shaft and thrust washers are 99.5% pure alumina for excellent wear and trouble-free service with harsh solutions
- 1/8 HP open FC PSC motor
- Glass-filled polyphenylene sulfide (e.g. Ryton®) magnet housing and volute
- 1.1 specific gravity
- Viton® O-ring

### Series Specifications

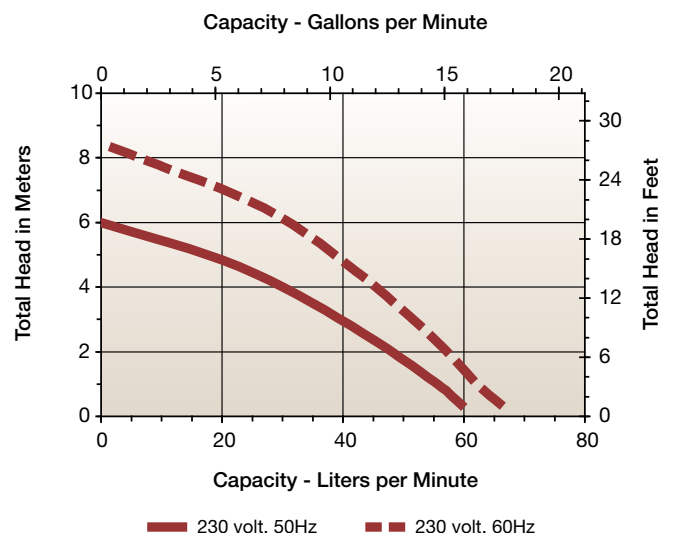
<b>RPM:</b> 2500/3000	<b>Intake:</b> 1" FNPT (25.4 mm)
<b>Capacity:</b> 60 LPM	<b>Impeller:</b> Glass-filled polyphenylene sulfide (e.g. Ryton®) w/ carbon bushing
<b>Shut Off:</b> 5.9 m	<b>Electrical:</b> 230V, 50/60Hz
<b>Liquid Temperature:</b> 93.3°C	
<b>Discharge:</b> 1/2" MNPT (12.7 mm)	

### Model Characteristics

Item #	Model	Volts	Hertz	Amps	Watts	Cord	List/Cert.
583613	5-MD-HC	230	50/60	0.9	194	1.8 m (w/o plug)	UR/C-CSA

NOTE: Although no pump should be operated dry, the 5-MD-HC models with carbon bushing and ceramic shaft have a run-dry capability of up to eight hours without damage.

### Performance Curves 5-MD-HC 230V, 50/60Hz



## MD-HC Series Pumps

# TE-5-MD-HC SERIES 1/8 HP

Non-Submersible, In-line Use



### Applications

- Circulation of highly corrosive acids, alkalis, solvents, brine, plating solutions, sterile solutions, and other highly corrosive chemicals and solutions that are compatible with the pump's material of construction

### Features

- Run dry capability for up to eight hours without apparent damage
- Volute, magnet housing and impeller are glass-filled Ryton® (PPS) for excellent chemical resistance
- Self-lubricating carbon impeller bushing is impervious to fluids and long-lived in abrasive solutions
- Encapsulated glass-filled Ryton® permanent impeller magnet
- Ceramic shaft and thrust washers are 99.5% pure alumina for excellent wear and trouble-free service with harsh solutions
- 1/8 HP TEFC PSC motor
- Glass-filled polyphenylene sulfide (e.g. Ryton®) magnet housing and volute
- 1.1 specific gravity
- Viton® O-ring

### Series Specifications

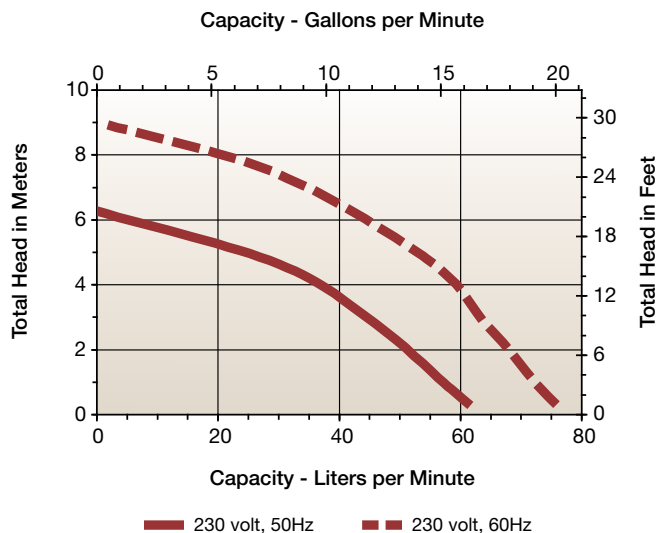
<b>RPM:</b> 2850/3450	<b>Intake:</b> 1" FNPT (25.4 mm)
<b>Capacity:</b> 61 LPM	<b>Impeller:</b> Glass-filled polyphenylene sulfide (e.g. Ryton®) w/ carbon bushing
<b>Shut Off:</b> 6.2 m	<b>Electrical:</b> 230V, 50/60Hz
<b>Liquid Temperature:</b> 93.3°C	
<b>Discharge:</b> 1/2" MNPT (12.7 mm)	

### Model Characteristics

Item #	Model	Volts	Hertz	Amps	Watts	Cord	List/Cert.
584604	TE-5-MD-HC	230	50/60	1.3	220	1.8 m (3-prong plug) Cord not installed	UR/C-CSA
584638	TE-5-MD-HC	230	50/60	1.3	220	1.8 m (3-prong plug) Cord not installed	CE

NOTE: Although no pump should be operated dry, the TE-5-MD-HC model with carbon bushing and ceramic shaft has a run-dry capability of up to eight hours without damage.

### Performance Curves TE-5-MD-HC 230V, 50/60Hz



# TE-5.5-MD-HC SERIES 1/3 HP

Non-Submersible, In-line Use



### Applications

- Circulation of highly corrosive acids, alkalis, solvents, brine, plating solutions, sterile solutions, and other highly corrosive chemicals and solutions that are compatible with the pump's material of construction

### Features

- Run dry capability for up to eight hours without apparent damage
- Volute, magnet housing and impeller are glass-filled Ryton® (PPS) for excellent chemical resistance
- Self-lubricating carbon impeller bushing is impervious to fluids and long-lived in abrasive solutions
- Encapsulated glass-filled Ryton® permanent impeller magnet
- Ceramic shaft and thrust washers are 99.5% pure alumina for excellent wear and trouble-free service with harsh solutions
- 1/3 HP TEFC motor
- Glass-filled polyphenylene sulfide (e.g. Ryton®) volute and backplate
- 1.1 specific gravity
- Viton® O-ring

### Series Specifications

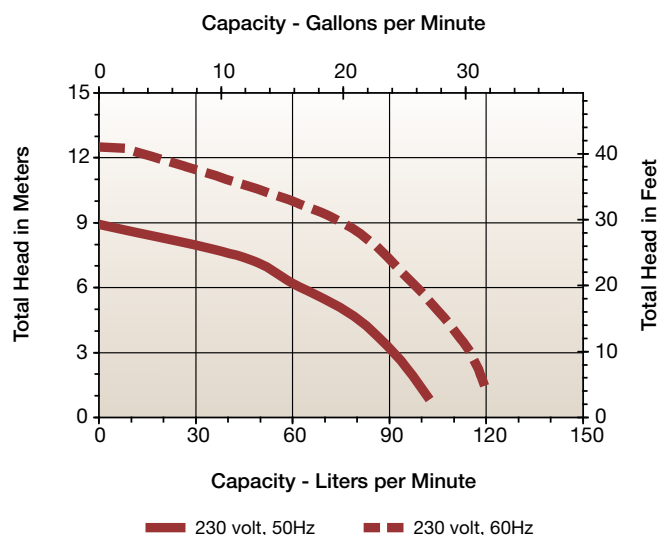
<b>RPM:</b> 2850/3450	<b>Intake:</b> 1" FNPT (25.4 mm)
<b>Capacity:</b> 102 LPM	<b>Impeller:</b> Glass-filled polyphenylene sulfide (e.g. Ryton®) w/ carbon bushing
<b>Shut Off:</b> 8.8 m	<b>Electrical:</b> 230V, 50/60Hz
<b>Liquid Temperature:</b> 82.2°C	
<b>Discharge:</b> 3/4" MNPT (19 mm)	

### Model Characteristics

Item #	Model	Volts	Hertz	Amps	Watts	Cord	List/Cert.
585604	TE-5.5-MD-HC	230	50/60	2.8	340	Not included	UR/C-CSA

NOTE: Although no pump should be operated dry, the TE-5.5-MD-HC model with carbon bushing and ceramic shaft has a run-dry capability of up to eight hours without damage.

### Performance Curves TE-5.5-MD-HC 230V, 50/60Hz



## MD-HC Series Pumps

# TE-6-MD-HC SERIES 1/2 HP

Non-Submersible, In-line Use



### Applications

- Circulation of highly corrosive acids, alkalis, solvents, brine, plating solutions, sterile solutions, and other highly corrosive chemicals and solutions that are compatible with the pump's material of construction

### Features

- Run dry capability for up to eight hours without apparent damage
- Volute, magnet housing and impeller are glass-filled Ryton® (PPS) for excellent chemical resistance
- Self-lubricating carbon impeller bushing is impervious to fluids and long-lived in abrasive solutions
- Encapsulated glass-filled Ryton® permanent impeller magnet
- Ceramic shaft and thrust washers are 99.5% pure alumina for excellent wear and trouble-free service with harsh solutions
- 1/2 HP TEFC split phase motor
- Glass-filled polyphenylene sulfide (e.g. Ryton®) volute and backplate
- 1.1 specific gravity
- Viton® O-ring

### Series Specifications

**RPM:** 2850/3450

**Capacity:** 125 LPM

**Shut Off:** 10.7 m

**Liquid Temperature:** 82.2°C

**Discharge:** 3/4" MNPT (19 mm)

**Intake:** 1" FNPT (25.4 mm)

**Impeller:** Glass-filled polyphenylene sulfide (e.g. Ryton®) w/ carbon bushing

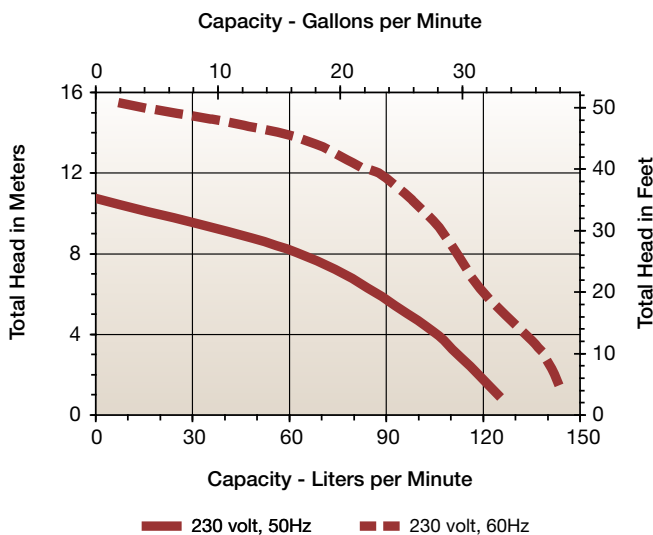
**Electrical:** 230V, 50/60Hz

### Model Characteristics

Item #	Model	Volts	Hertz	Amps	Watts	Cord	List/Cert.
586604	TE-6-MD-HC	230	50/60	5.8	640	Not included	UR/C-CSA
586638	TE-6-MD-HC	230	50/60	5.8	640	Not included	CE

NOTE: Although no pump should be operated dry, the TE-6-MD-HC model with carbon bushing and ceramic shaft has a run-dry capability of up to eight hours without damage.

### Performance Curves TE-6-MD-HC 230V, 50/60Hz



# TE-7-MD-HC SERIES 3/4 HP

Non-Submersible, In-line Use



### Applications

- Circulation of highly corrosive acids, alkalis, solvents, brine, plating solutions, sterile solutions, and other highly corrosive chemicals and solutions that are compatible with the pump's material of construction

### Features

- Run dry capability for up to eight hours without apparent damage
- Volute, magnet housing and impeller are glass-filled Ryton® (PPS) for excellent chemical resistance
- Self-lubricating carbon impeller bushing is impervious to fluids and long-lived in abrasive solutions
- Encapsulated glass-filled Ryton® permanent impeller magnet
- Ceramic shaft and thrust washers are 99.5% pure alumina for excellent wear and trouble-free service with harsh solutions
- 3/4 HP TEFC PSC motor
- Glass-filled polyphenylene sulfide (e.g. Ryton®) volute and backplate
- 1.1 specific gravity
- Viton® O-ring

### Series Specifications

**RPM:** 2850/3450

**Capacity:** 159 LPM

**Shut Off:** 12.3 m

**Liquid Temperature:** 93.3°C

**Discharge:** 1" MNPT (25.4 mm)

**Intake:** 1-1/2" FNPT (38 mm)

**Impeller:** Glass-filled polyphenylene sulfide (e.g. Ryton®) w/ carbon bushing

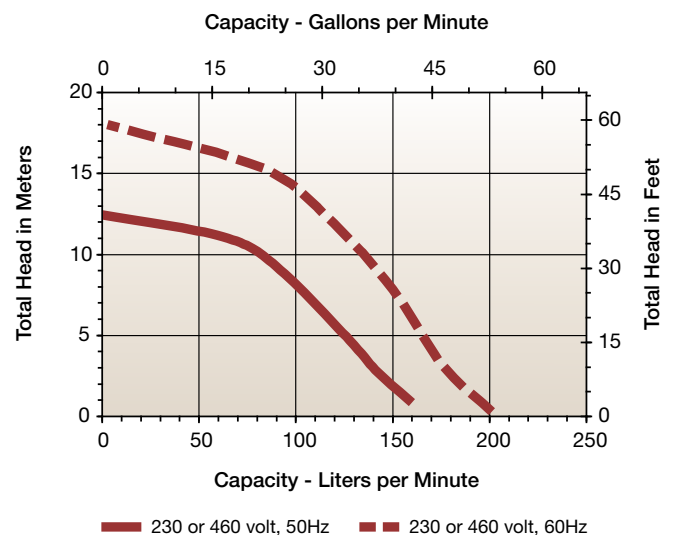
**Electrical:** 230V, 50/60Hz  
230V, 50/60Hz CE  
230/460V, 50/60Hz (3 phase)

### Model Characteristics

Item #	Model	Volts	Hertz	Amps	Watts	Cord	List/Cert.
587010	TE-7-MD-HC	230	50/60	5.2	700	Not included	UR/C-CSA
587039	TE-7-MD-HC	230	50/60	5.2	700	Not included	CE
587040	TE-7-MD-HC	230/460	50/60 3 phase	3.0/1.5	700/680	Not included	UR

NOTE: Although no pump should be operated dry, the TE-7-MD-HC models with carbon bushing and ceramic shaft have a run-dry capability of up to eight hours without damage.

### Performance Curves TE-7-MD-HC 230V or 460V, 50/60Hz



## TE-MD-CK Series Pumps

# TE-5.5-MD-CK SERIES 1/3 HP

Non-Submersible, In-line Use



### Applications

- Circulation of highly corrosive acids, alkalis, solvents, brine, plating solutions, sterile solutions, and other highly corrosive chemicals and solutions that are compatible with the pump's material of construction

### Features

- Volute, magnet housing and impeller are carbon-filled Kynar® (PVDF) for excellent chemical resistance
- Mica-filled Teflon® bushing is long-lived in abrasive solutions
- Encapsulated carbon-filled Kynar® permanent impeller magnet
- Ceramic shaft and thrust washers are 99.5% pure alumina for excellent wear and trouble-free service with harsh solutions
- 1/3 HP TEFC split phase motor
- Carbon-filled Kynar® (PVDF) volute and backplate
- 1.1 specific gravity
- Viton® O-ring

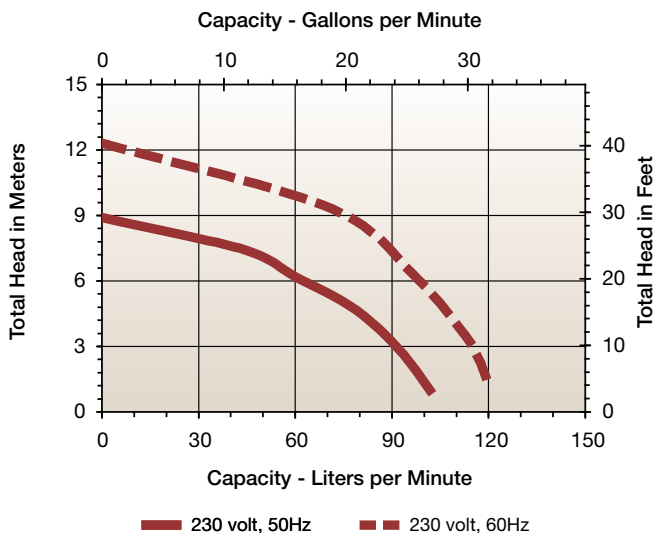
### Series Specifications

<b>RPM:</b> 2850/3450	<b>Intake:</b> 1" FNPT (25.4 mm)
<b>Capacity:</b> 102 LPM	<b>Impeller:</b> Carbon-filled Kynar® (PVDF) w/ mica-filled Teflon® bushing*
<b>Shut Off:</b> 8.8 m	<b>Electrical:</b> 230V, 50/60Hz
<b>Liquid Temperature:</b> 93.3°C	
<b>Discharge:</b> 3/4" MNPT (19 mm)	

### Model Characteristics

Item #	Model	Volts	Hertz	Amps	Watts	Cord	List/Cert.
585600	TE-5.5-MD-CK	230	50/60	2.8	340	Not included	UR/C-CSA

### Performance Curves TE-5.5-MD-CK 230V, 50/60Hz



# TE-6-MD-CK SERIES 1/2 HP

Non-Submersible, In-line Use



### Applications

- Circulation of highly corrosive acids, alkalis, solvents, brine, plating solutions, sterile solutions, and other highly corrosive chemicals and solutions that are compatible with the pump's material of construction

### Features

- Volute, magnet housing and impeller are carbon-filled Kynar® (PVDF) for excellent chemical resistance
- Self-lubricating carbon-filled Teflon® (Chemloy) impeller bushing is impervious to fluids and long-lived in abrasive solutions
- Encapsulated carbon-filled Kynar® permanent impeller magnet
- Ceramic shaft and thrust washers are 99.5% pure alumina for excellent wear and trouble-free service with harsh solutions
- 1/2 HP TEFC split phase motor
- Carbon-filled Kynar® (PVDF) volute and backplate
- 1.1 specific gravity
- Viton® O-ring

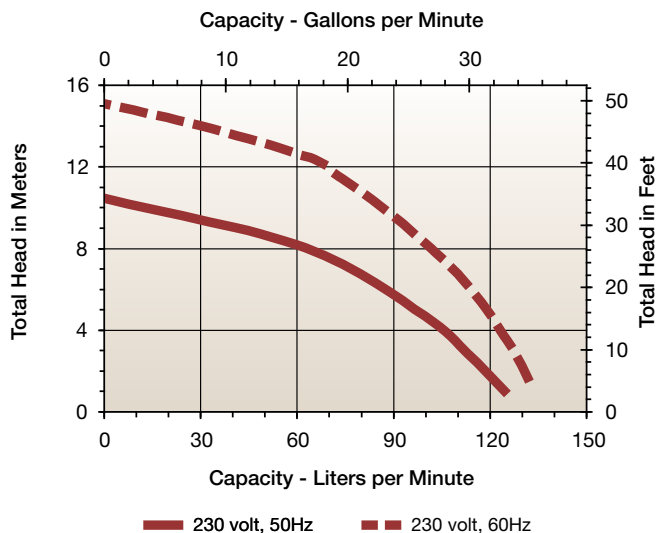
### Series Specifications

<b>RPM:</b> 2850/3450	<b>Impeller:</b> Carbon-filled Kynar® (PVDF) w/ Chemloy bushing (586600); Mica-filled Teflon® bushing (586610)
<b>Capacity:</b> 125 LPM	<b>Electrical:</b> 230V, 50/60Hz
<b>Shut Off:</b> 10.4 m	
<b>Liquid Temperature:</b> 93.3°C	
<b>Discharge:</b> 3/4" MNPT (19 mm)	
<b>Intake:</b> 1" FNPT (25.4 mm)	

### Model Characteristics

Item #	Model	Volts	Hertz	Amps	Watts	Cord	List/Cert.
586600	TE-6-MD-CK	230	50/60	5.8	640	Not included	UR/C-CSA
586610	TE-6-MD-CK	230	50/60	5.8	640	Not included	UR/C-CSA

### Performance Curves TE-6-MD-CK 230V, 50/60Hz





## TE-MD-CK Series Pumps

# TE-7-MD-CK SERIES 3/4 HP

Non-Submersible, In-line Use



### Applications

- Circulation of highly corrosive acids, alkalis, solvents, brine, plating solutions, sterile solutions, and other highly corrosive chemicals and solutions that are compatible with the pump's material of construction

### Features

- Volute, magnet housing and impeller are carbon-filled Kynar® (PVDF) for excellent chemical resistance
- Self-lubricating carbon-filled Teflon® (Chemloy) impeller bushing is impervious to fluids and long-lived in abrasive solutions
- Encapsulated carbon-filled Kynar® permanent impeller magnet
- Ceramic shaft and thrust washers are 99.5% pure alumina for excellent wear and trouble-free service with harsh solutions
- 3/4 HP TEFC PSC motor
- Carbon-filled Kynar® (PVDF) volute and backplate
- 1.1 specific gravity
- Viton® O-ring

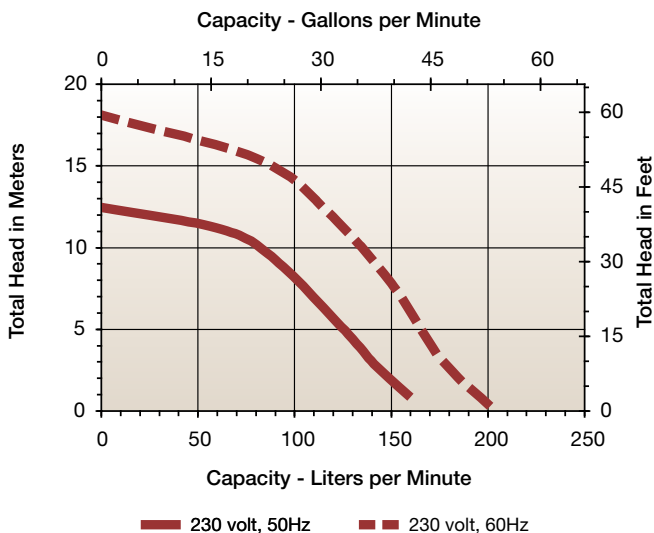
### Series Specifications

<b>RPM:</b> 2850/3450	<b>Impeller:</b> Carbon-filled Kynar® (PVDF) w/ Chemloy bushing
<b>Capacity:</b> 159 LPM	<b>Electrical:</b> 230V 50/60Hz 230/460V 50/60Hz (3 phase)
<b>Shut Off:</b> 12.3 m	
<b>Liquid Temperature:</b> 93.3°C	
<b>Discharge:</b> 1" MNPT (25.4 mm)	
<b>Intake:</b> 1-1/2" FNPT (38 mm)	

### Model Characteristics

Item #	Model	Volts	Hertz	Amps	Watts	Cord	List/Cert.
587600	TE-7-MD-CK	230	50/60	5.2	700	Not included	UR/C-CSA
587603	TE-7-MD-CK	230/460	50/60	3.0/1.5	700/680	Not included	UR

### Performance Curves TE-7-MD-CK 230V, 50/60Hz



# Magnetic Drive Pumps Accessories

### Theoretical Impeller Diameter Change for Liquids Heavier Than Water

Liquid density (specific weight)	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
Multiply original diameter by:	1.0	0.97	0.94	0.91	0.89	0.87	0.85	0.83	0.82	0.81	0.79

Example: The diameter of a TE-4-MD-HC impeller is 6.35 cm. To use this pump with a liquid having a 1.4 density, multiply the impeller's original diameter by .89 to calculate the needed trimmed size (6.35 cm X .89 = 5.66 cm).

### Tubing Adapters for Inlets of MD Pumps

Item No.	Description	Pump Inlet Size
599454	1-1/2" MNPT x 3.81 cm OD Barb	1 1/2" FNPT

**Material = Polypropylene Temp. Rating = 65°C.**

This adapter allows the use of flexible tubing to be easily connected to the pump inlets with no restriction of flow.

### O-Rings

Item No.	Type	Size	Uses
924023	Teflon® Encapsulated Viton®	2-040 (7.275 cm ID x 0.178 cm)	Replaces standard O-ring in MD, MD-SC and MD-HC #1 through #5 series pumps.
924008	Viton®	2-040 (7.275 cm ID x 0.178 cm)	Standard on MD-HC, #2 through #5 series pumps. Can be used on MD and SC #1 through #5 series.
924019	Teflon®	2-243 (10.437 cm ID x 0.353 cm)	Replaces standard O-ring in TE-5.5, TE-6; and 7-MD, SC and HC pumps.

NOTES:

## About Our Company.

In 2006, Franklin Electric Company acquired Little Giant Pump Company to solidify our position as a leading global supplier of water pumping systems for residential and commercial markets. Little Giant® products – sump, sewage, effluent, utility, condensate removal, and submersible industrial pumps – complement and broaden Franklin Electric's overall water systems offering.

Little Giant Pump Company, now Franklin Electric – offers the industry a well-respected brand of products – Little Giant. Founded on quality, availability, service, innovation and value, Franklin Electric continues to bring the Little Giant brand name advantage through Pumps. People. Partnerships.

Franklin Electric is a global leader in the production and marketing of systems and components for the movement of water and automotive fuels. Recognized as a technical leader in its specialties, Franklin serves customers around the world in residential, commercial, agricultural, industrial, municipal, and fueling applications.

Long recognized as the world's largest manufacturer of submersible electric motors, Franklin Electric has been able to leverage its expertise in motor applications to grow and serve several different markets. The principal application for Franklin products is water well pumping systems, where the company offers pumps, motors, drives, and controls. In addition, Franklin Electric produces a vast array of products for fueling systems and the water transfer market.

With 3,500 employees worldwide, Franklin Electric is a global manufacturer with over 25 manufacturing and distribution facilities located in the United States, Germany, Czech Republic, Italy, Mexico, Canada, Australia, Brazil, South Africa, China, and Japan.

Little Giant products are produced to the following ISO standards:  
Quality – 9001:2000  
Environmental – 14001: 2004

**Franklin Electric**  
3810 North Tulsa  
Oklahoma City, OK 73112  
Tel: +1 405-947-2511  
Fax: +1 405-942-2431  
Email: [export@LittleGiantPump.com](mailto:export@LittleGiantPump.com)  
[www.LittleGiantPump.com](http://www.LittleGiantPump.com)



**Franklin Electric**

©2010 Franklin Electric Co., Inc.  
Little Giant® is a registered trademark of Franklin Electric Co., Inc.  
Form 996869 2/10