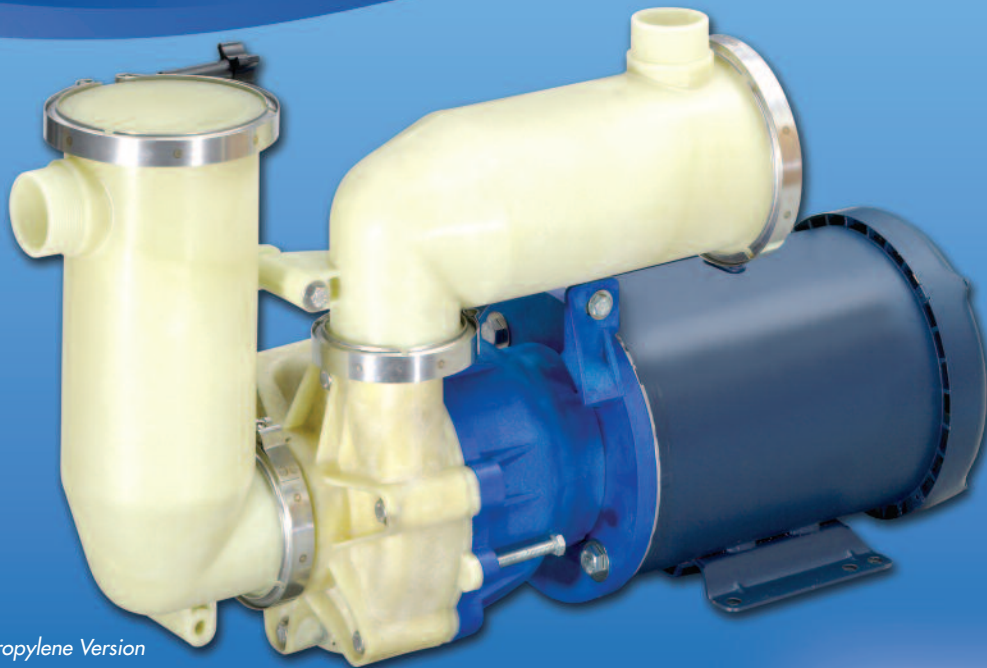


# SETHCO® SEALLESS, SELF-PRIMING, MAGNETIC DRIVE CENTRIFUGAL PUMPS

For Corrosive Liquids and Chemical Transfer



*PVDF Version*



*Polypropylene Version*

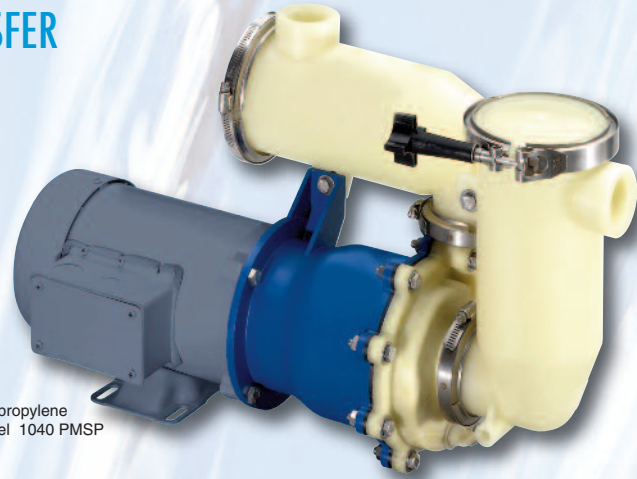


A Met-Pro Fluid Handling Technologies Business  
Combining the Resources of Dean Pump, Fybroc & Sethco

# SETHCO® SEALLESS, SELF-PRIMING MAGNETIC DRIVE CENTRIFUGAL PUMPS

## FOR CORROSIVE LIQUIDS AND CHEMICAL TRANSFER

- Flows to 230 GPM (870 LPM)
- Heads to 93 feet (28 M)
- Powers to 10 HP (7.5 kW)
- Temperatures to 210°F (99°C)
- 24 models available
- Materials of construction:  
Polypropylene and Kynar (PVDF)



Polypropylene  
Model 1040 PMSP

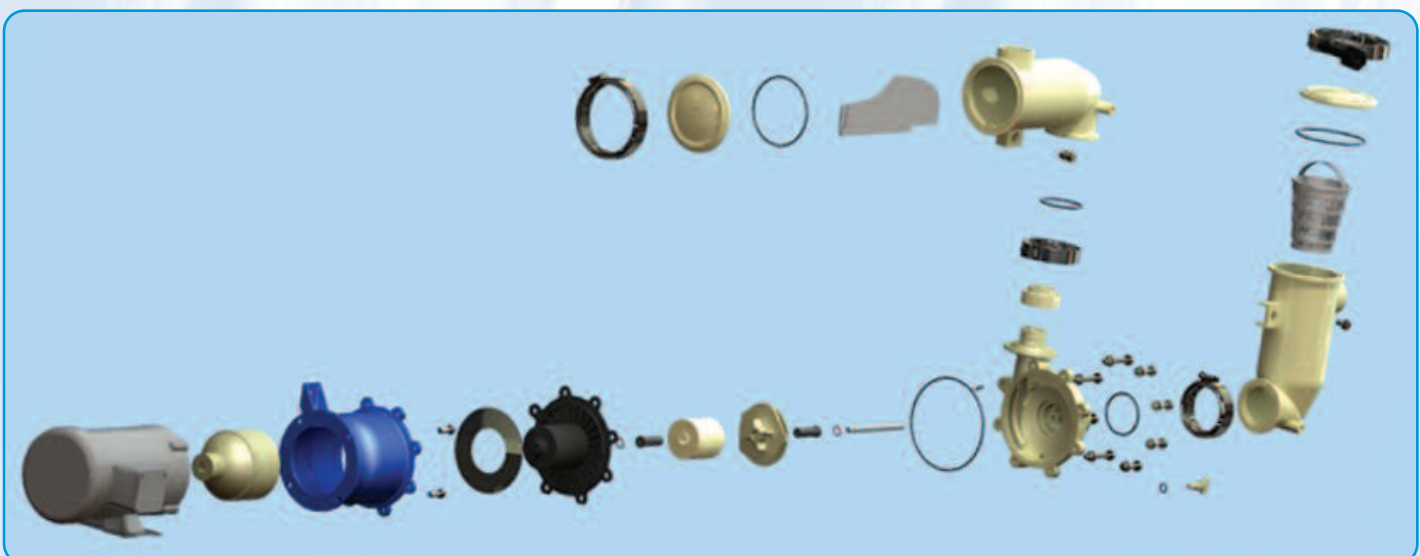
## DESIGN FEATURES

- Self-priming magnetic drive, sealless design
- Close-coupled configuration
- Removable, integral suction basket strainer
- No metal contact with process fluids
- Two-piece impeller and inner magnet assembly
- Stationary, self-aligning, replaceable ceramic shaft
- Bearing materials include ceramic and silicon carbide options
- Zero emissions
- Simple operation and ease of maintenance
- Available with optional FRP baseplate assembly
- Mounts to standard NEMA or IEC frame motors

## APPLICATIONS

- Acids
- Bleaches
- Caustics
- Chemical Transfer
- Cleaning/Mixing
- Filtration
- Ideal for OEMs
- Processing
- Recirculation
- Reverse Osmosis
- Scrubber
- Seawater
- Solvents
- Wastewater

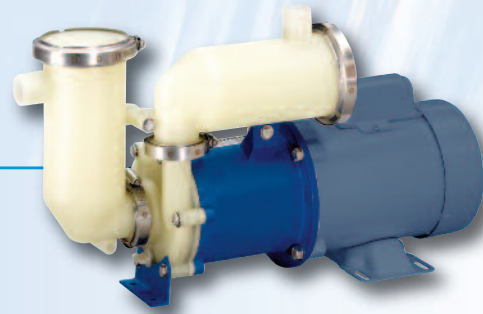
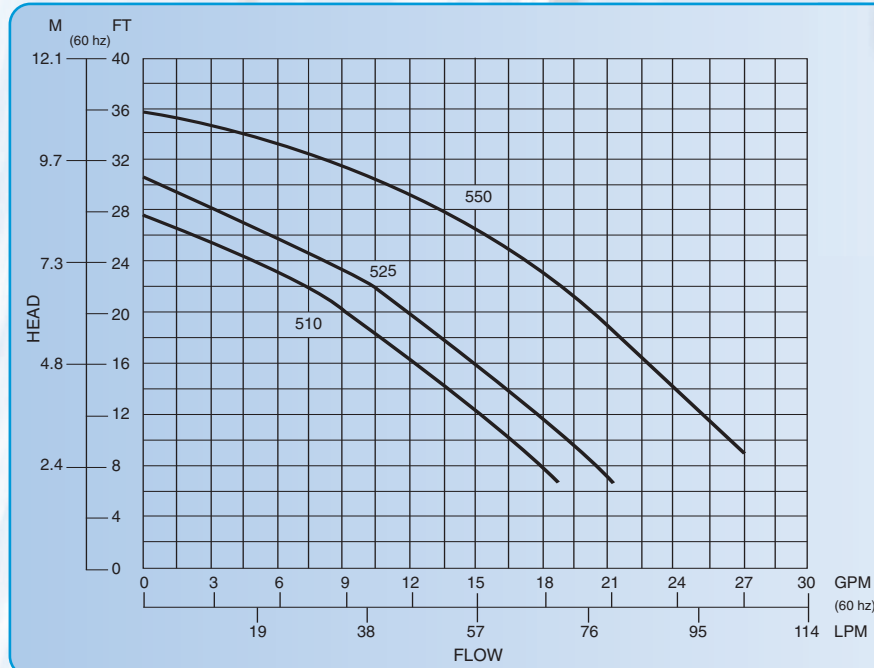
## TYPICAL PMSP SERIES ASSEMBLY DRAWING



# 500 SERIES

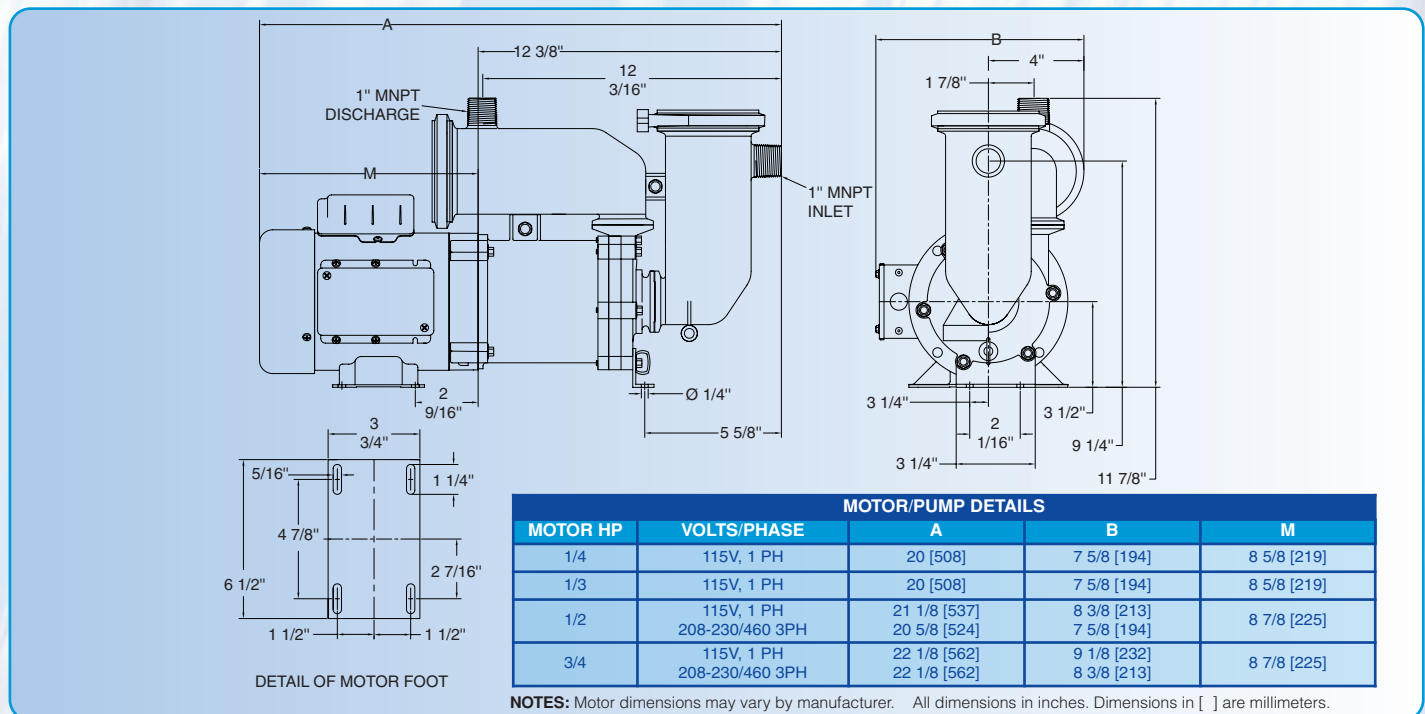
FOR FLOWS TO 27 GPM (102 LPM), HEADS TO 36 FT. (11 M)

## Composite Curves



FOR MODELS  
PMSP/KMSP-510  
PMSP/KMSP-525  
PMSP/KMSP-550

## Dimensions



## Pump Specifications: 6 Models Available

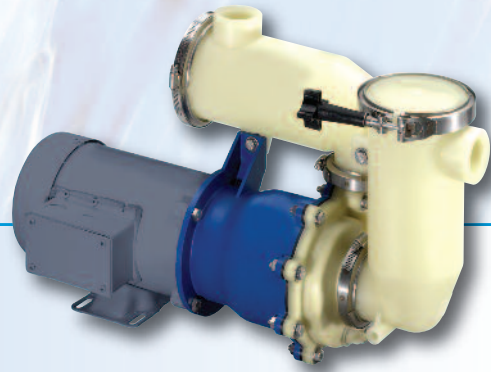
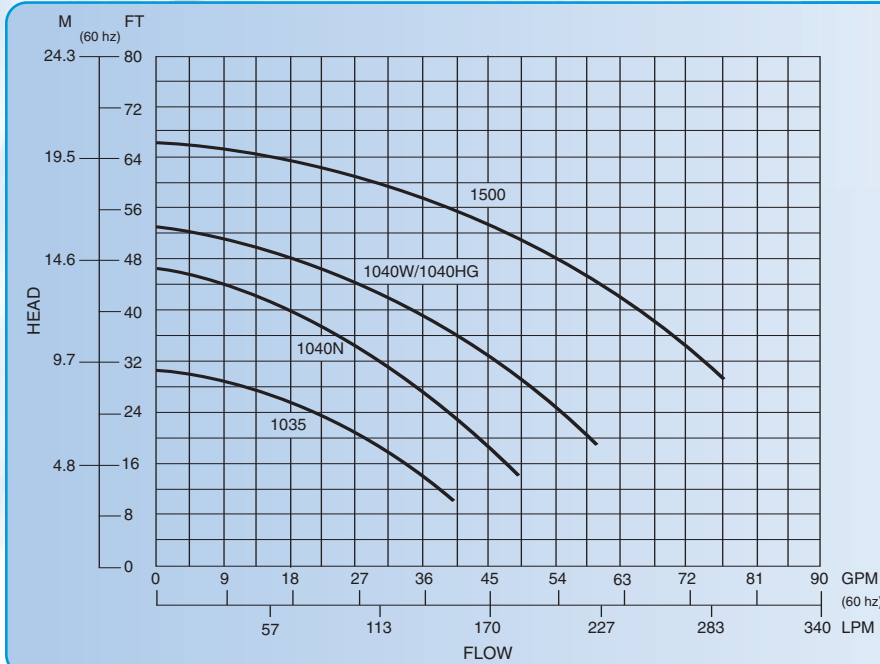
Model Number		Max Flow		Max Head		Max Operating Temperature	Motor Characteristics*					Weight (Lbs./Kg.)†	
Polypropylene	PVDF	GPM	LPM	Ft.	M		HP*	Volts	Hz	Phase	Type	Lbs.	Kg.
PMSP-510	KMSP-510	18	68	28	8.5	Polypropylene: 180°F / 82°C PVDF: 210°F / 99°C	1/4	230/460	60	1 PH	TEFC	32	14.5
PMSP-525	KMSP-525	21	79	30	9		1/3			33		15	
PMSP-550	KMSP-550	27	102	36	11		1/2			36		16.3	

\* Customer supplied overload protection is required on 3 phase motors. Consult Factory for the following options: 50 Hz. motors, explosion proof motors, and alternate motor HPs.  
† Add approximately 3 lbs./1.4 kg. for PVDF. † Add approximately 20% extra for shipping weight.

# 1000 SERIES

FOR FLOWS TO 76 GPM (288 LPM), HEADS TO 66 FT. (20 M)

## Composite Curves



## FOR MODELS

PMSP/KMSP-1035

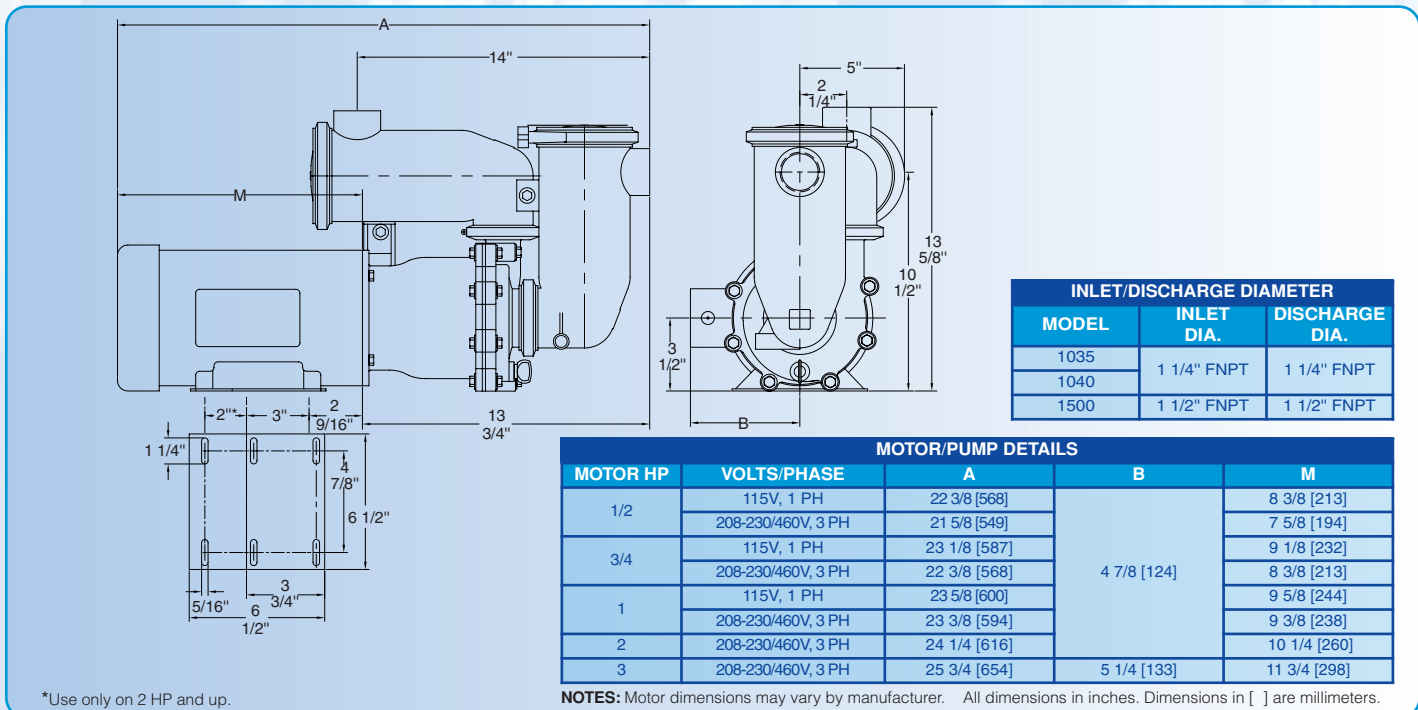
PMSP/KMSP-1040N

PMSP/KMSP-1040W

PMSP/KMSP-1040HG

PMSP/KMSP-1500

## Dimensions



MOTOR/PUMP DETAILS				
MOTOR HP	VOLTS/PHASE	A	B	M
1/2	115V, 1 PH	22 3/8 [568]	4 7/8 [124]	8 3/8 [213]
	208-230/460V, 3 PH	21 5/8 [549]		7 5/8 [194]
3/4	115V, 1 PH	23 1/8 [587]		9 1/8 [232]
	208-230/460V, 3 PH	22 3/8 [568]		8 3/8 [213]
1	115V, 1 PH	23 5/8 [600]		9 5/8 [244]
	208-230/460V, 3 PH	23 3/8 [594]		9 3/8 [238]
2	208-230/460V, 3 PH	24 1/4 [616]	10 1/4 [260]	
3	208-230/460V, 3 PH	25 3/4 [654]	5 1/4 [133]	11 3/4 [298]

\*Use only on 2 HP and up.

NOTES: Motor dimensions may vary by manufacturer. All dimensions in inches. Dimensions in [ ] are millimeters.

## Pump Specifications: 10 Models Available

Model Number		Max Flow		Max Head		Max Operating Temperature	Motor Characteristics*					Weight (Lbs./Kg.)†					
Polypropylene	PVDF	GPM	LPM	Ft.	M		HP*	Volts	Hz	Phase	Type	Lbs.	Kg.				
PMSP-1035	KMSP-1035	59	151	31	9.4	Polypropylene: 180°F / 82°C  PVDF: 210°F / 99°C	1/2	115/230	60	1 & 3 PH	TEFC	38	17				
PMSP-1040N	KMSP-1040N	49	185	46	14		1					40	18				
PMSP-1040W	KMSP-1040W	59	223	53	16		1					41	18.6				
PMSP-1040HG	KMSP-1040HG	60	227	53	16		2					47	21.3				
PMSP-1500	KMSP-1500	76	288	66	20		2					47	21.3				
							2							3 PH [230/460V]			

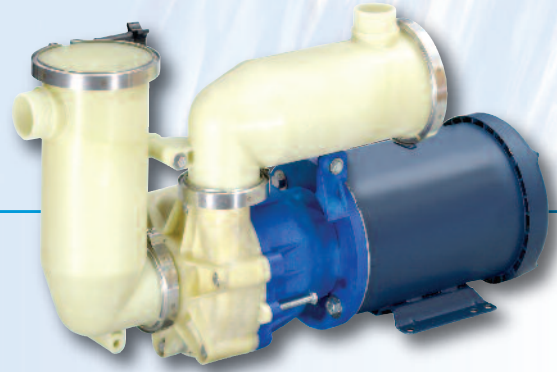
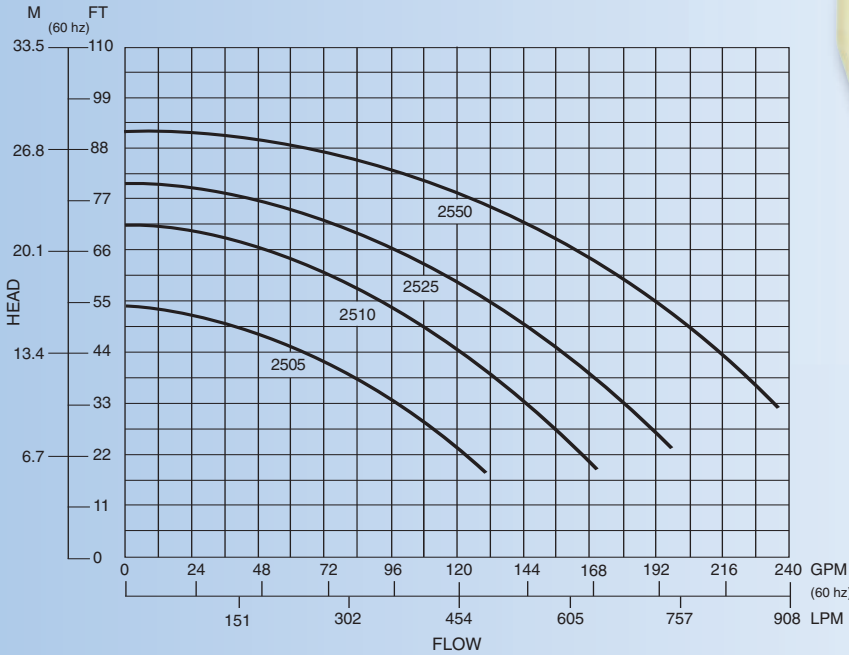
\* Customer supplied overload protection is required on 3 phase motors. Consult Factory for the following options: 50 Hz. motors, explosion proof motors, and alternate motor HPs.

† Add approximately 3 lbs./1.4 kg. for PVDF. † Add approximately 20% extra for shipping weight.

# 2500 SERIES

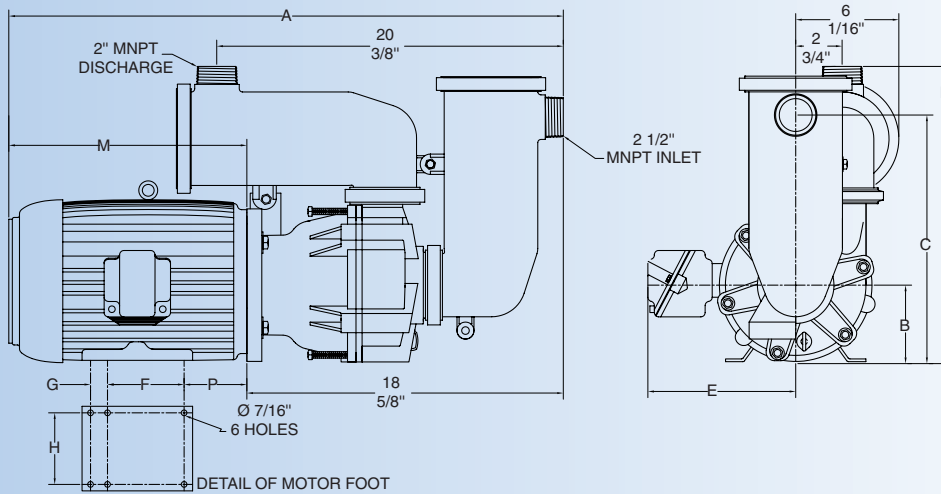
FOR FLOWS TO 230 GPM (870 LPM), HEADS TO 93 FT. (28 M)

## Composite Curves



**FOR MODELS**  
 PMSP/KMSP-2505  
 PMSP/KMSP-2510  
 PMSP/KMSP-2525  
 PMSP/KMSP-2550

## Dimensions



MOTOR/PUMP DETAILS											
MOTOR HP	VOLTS/PHASE	A	B	C	D	E	F	G	H	M	P
3	208-230/460V, 3 PH	32 1/2 [826]	4 1/2 [114]	14 3/8 [365]	17 3/8 [441]	7 13/16 [198]	4 1/2 [114]	1 [25]	7 1/2 [191]	13 7/8 [353]	3 3/8 [86]
5	208-230/460V, 3 PH	32 1/2 [826]		14 3/8 [365]	17 3/8 [441]	7 13/16 [198]	4 1/2 [114]	1 [25]	7 1/2 [191]	13 7/8 [353]	
7.5	208-230/460V, 3 PH	34 1/4 [870]	5 1/4 [133]	15 1/8 [384]	18 1/8 [460]	8 11/16 [221]	5 1/2 [140]	1 1/2 [38]	8 1/2 [216]	15 5/8 [397]	4 1/4 [108]
10	208-230/460V, 3 PH	35 5/8 [905]		15 1/8 [384]	18 1/8 [460]	8 11/16 [221]	5 1/2 [140]	1 1/2 [38]	8 1/2 [216]	17 [432]	

NOTES: Motor dimensions may vary by manufacturer. All dimensions in inches. Dimensions in [ ] are millimeters.

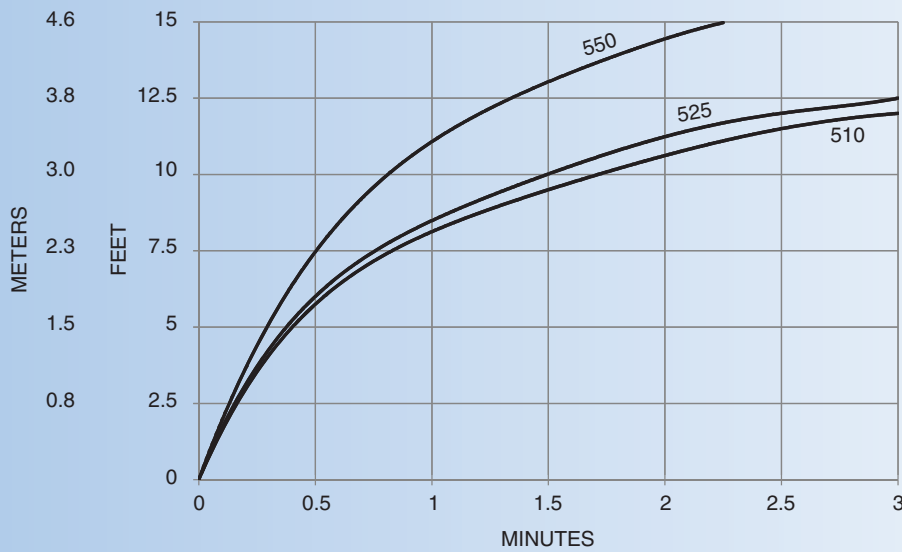
## Pump Specifications: 8 Models Available

Model Number		Max Flow		Max Head		Max Operating Temperature	Motor Characteristics*					Weight (Lbs./Kg.)†	
Polypropylene	PVDF	GPM	LPM	Ft.	M		HP*	Volts	Hz	Phase	Type	Lbs.	Kg.
PMSP-2505	KMSP-2505	130	490	55	17	Polypropylene: 180°F / 82°C PVDF: 210°F / 99°C	3	208-230/460	60	3 PH	TEFC	91	41.3
PMSP-2510	KMSP-2510	165	625	72	22		5					133	60.3
PMSP-2525	KMSP-2525	190	719	80	24		5					133	60.3
PMSP-2550	KMSP-2550	230	870	93	28		7 1/2					199	90.3

\* Customer supplied overload protection is required on 3 phase motors. Consult Factory for the following options: 50 Hz. motors, explosion proof motors, and alternate motor HPs.

† Add approximately 3 lbs./1.4 kg. for PVDF. † Add approximately 20% extra for shipping weight.

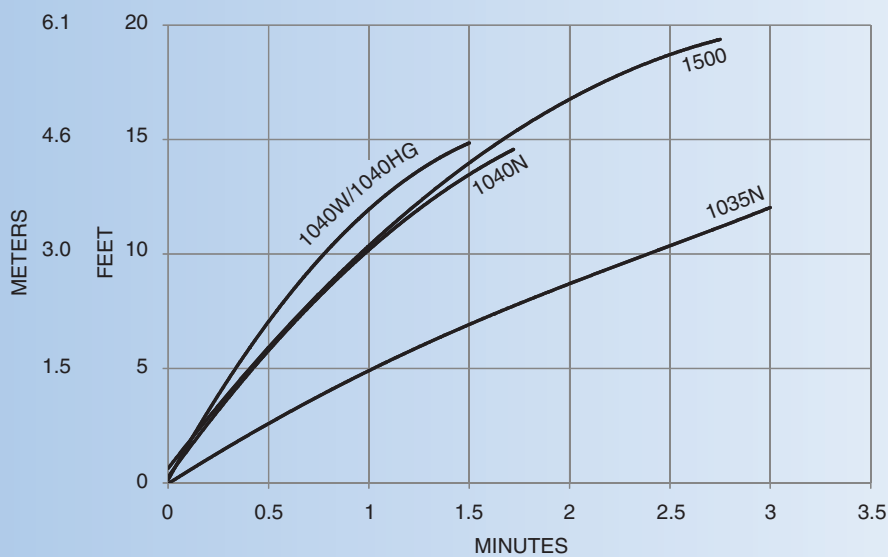
## PRIMING TIME – 500 SERIES SELF-PRIMING MAGNETIC DRIVE PUMPS



**FOR MODELS**  
 PMSP/KMSP-510  
 PMSP/KMSP-525  
 PMSP/KMSP-550

**NOTE:** The above priming times are based on water (SG = 1.0) using a 1" inlet hose connected to the pump suction. **Consult Factory** for priming times with other fluids or different suction tubing.

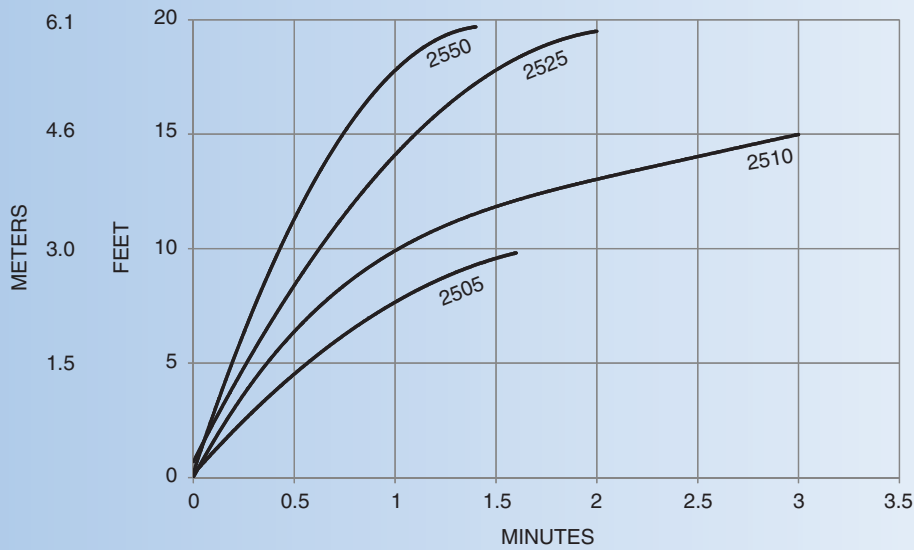
## PRIMING TIME – 1000 SERIES SELF-PRIMING MAGNETIC DRIVE PUMPS



**FOR MODELS**  
 PMSP/KMSP-1035  
 PMSP/KMSP-1040N  
 PMSP/KMSP-1040W  
 PMSP/KMSP-1040HG  
 PMSP/KMSP-1500

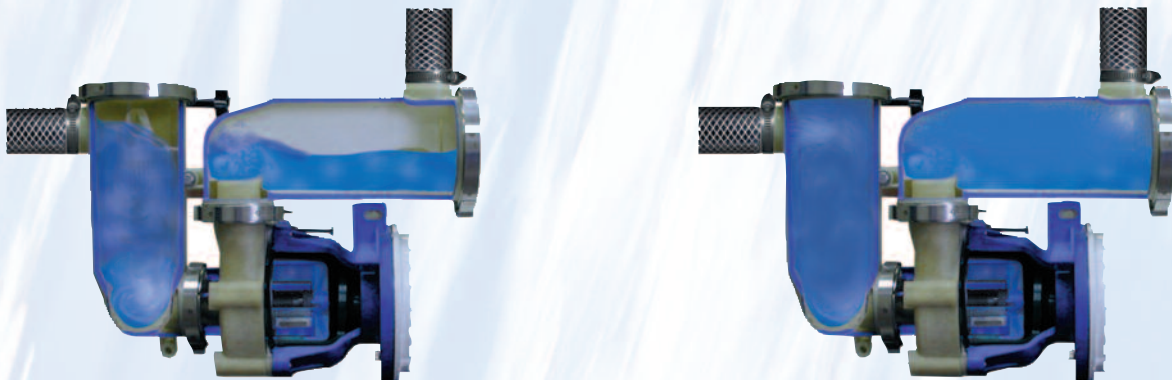
**NOTE:** The above priming times are based on water (SG = 1.0) using a 1-1/4" inlet hose connected to the pump suction for all pumps except the PMSP-1500. The PMSP-1500 has a 1-1/2" inlet hose. **Consult Factory** for priming times with other fluids or different suction tubing.

## PRIMING TIME – 2500 SERIES SELF-PRIMING MAGNETIC DRIVE PUMPS



**FOR MODELS**  
PMSP/KMSP-2505  
PMSP/KMSP-2510  
PMSP/KMSP-2525  
PMSP/KMSP-2550

**NOTE:** The above priming times are based on water (SG = 1.0) using a 2" inlet hose connected to the pump suction.  
**Consult Factory** for priming times with other fluids or different suction tubing.



### METHOD OF PRIMING

Priming the pump is easy. Simply fill the priming chamber with liquid through the wide opening at the top. Secure the cover and turn on the pump. When the pump is started, the impeller discharges a mixture of liquid and air into the discharge chamber. The air is separated and vented through the discharge while the liquid is returned to the impeller. This priming liquid continues to draw in more air from the suction line. The cycle continues until all air is evacuated from the suction line and replaced by the liquid to be pumped, at which time the pump is "primed".

## ABOUT MET-PRO GLOBAL PUMP SOLUTIONS

Met-Pro Global Pump Solutions, which combines the resources of the Company's internationally recognized Dean®, Fybroc® and Sethco® brands, is a leading niche-oriented global provider of solutions and products for the pumping of corrosive, abrasive and high temperature liquids. Its broad range of high quality centrifugal pumps provide excellent performance for tough applications including pumping of acids, brines, caustics, bleaches, seawater, high temperature liquids and a wide variety of waste liquids for a broad range of applications including the chemical, petrochemical, metal finishing, wastewater treatment, desalination and aquarium/aquaculture markets.

## ABOUT MET-PRO

Met-Pro Corporation is a global provider of solutions and products for product recovery, pollution control and fluid handling applications. The Company's products include filtration and purification equipment for air, water and harsh, corrosive applications; fluid handling equipment for water, corrosive, abrasive, and high temperature liquids; and proprietary water treatment chemicals. For more information, visit [www.met-pro.com](http://www.met-pro.com).



A Met-Pro Fluid Handling Technologies Business  
Combining the Resources of **Dean Pump, Fybroc & Sethco**

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