BULLETIN 350

FLOWS TO 225 GPM

CECO Sethco

Seal-less, Self Priming, Magnetic Drive Centrifugal Pumps



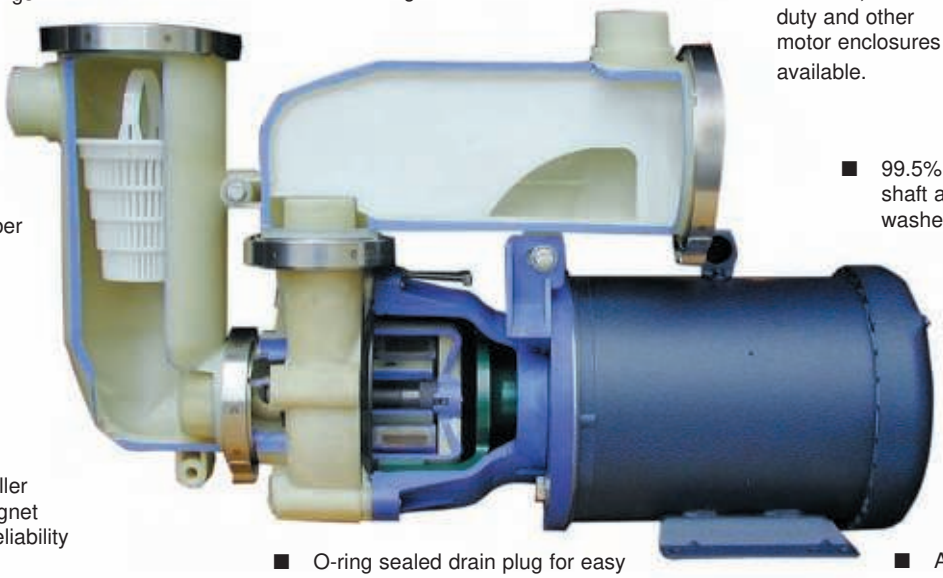


For Corrosive Liquid and Chemical Transfer



SETHCO® CORROSION RESISTANT SELF PRIMING MAGNETIC-DRIVE, SEAL-LESS CENTRIFUGAL PUMPS

- Viton®, EDPM or Teflon® O-rings for maximum corrosion resistance.
- Hi-purity carbon bushings standard. Alternate bearing materials are available.
- TEFC motors are standard, hazardous duty and other motor enclosures are available.
- 99.5% alumina ceramic shaft and thrust washers.
- Priming chamber with basket strainer opens wide for easy filling.
- Separate impeller and driven magnet for improved reliability and reduced maintenance.
- O-ring sealed drain plug for easy liquid removal.
- All stainless steel external hardware.



Simple Efficient Design For Reliable, Trouble-free Performance And Easy Maintenance

Sethco magnetic drive, seal-less pumps are precision designed to meet the demands of a wide range of OEM, chemical and industrial applications. These pumps can be used for highly corrosive or mild chemicals, acids or solvents.

Leakproof, Seal-less Construction

No shaft seal is used or required on these magnetically driven pumps. The superior seal-less, magnetic-drive design provides a reliable, smooth running, vibration-free pump that delivers high flow and pressure.

Self Priming Capability

This feature is extremely advantageous when pumping from elevations lower than the pump, such as emptying sumps. The 7-1/2 HP pump has the ability to lift liquid up to 20 feet in 3 minutes or less.

Excellent Chemical Resistance

The wetted components of these rugged seal-less pumps are available in your choice of Polypropylene or all PVDF. Polypropylene is glass reinforced and PVDF is carbon reinforced for added strength and reliability. These materials offer broad corrosion resistance to acids, alkalies, caustics, bleaches, sea water, solvents and m harsh environments.

All pumps include a 99.5% Alumina ceramic shaft and thrust washers. High purity carbon bearings are standard with Ryton® or silicone carbide available where required.



PVDF Model

Viton o-rings are standard on all pumps, while teflon and EDPM are available. There is no metal contact with the liquid being pumped.

Run Dry Capability

Once a self priming model has been initially primed, it is possible for it to run without any additional fluid. This insures that the pump will not be damaged if the liquid flow is interrupted for any reason.

Designed for Reliability

Among its many features is its unique impeller/driven magnet design. The two are separate distinct pieces so that one can be replaced without having to purchase the other. This feature also reduces the load on the front bearing and thrust washer.

Easy to Maintain

In the event a pump should ever need service, the limited number of parts allows for easy disassembly, inspection and maintenance without any special tools or talent. The motor can be separated from the pump housing without difficulty.

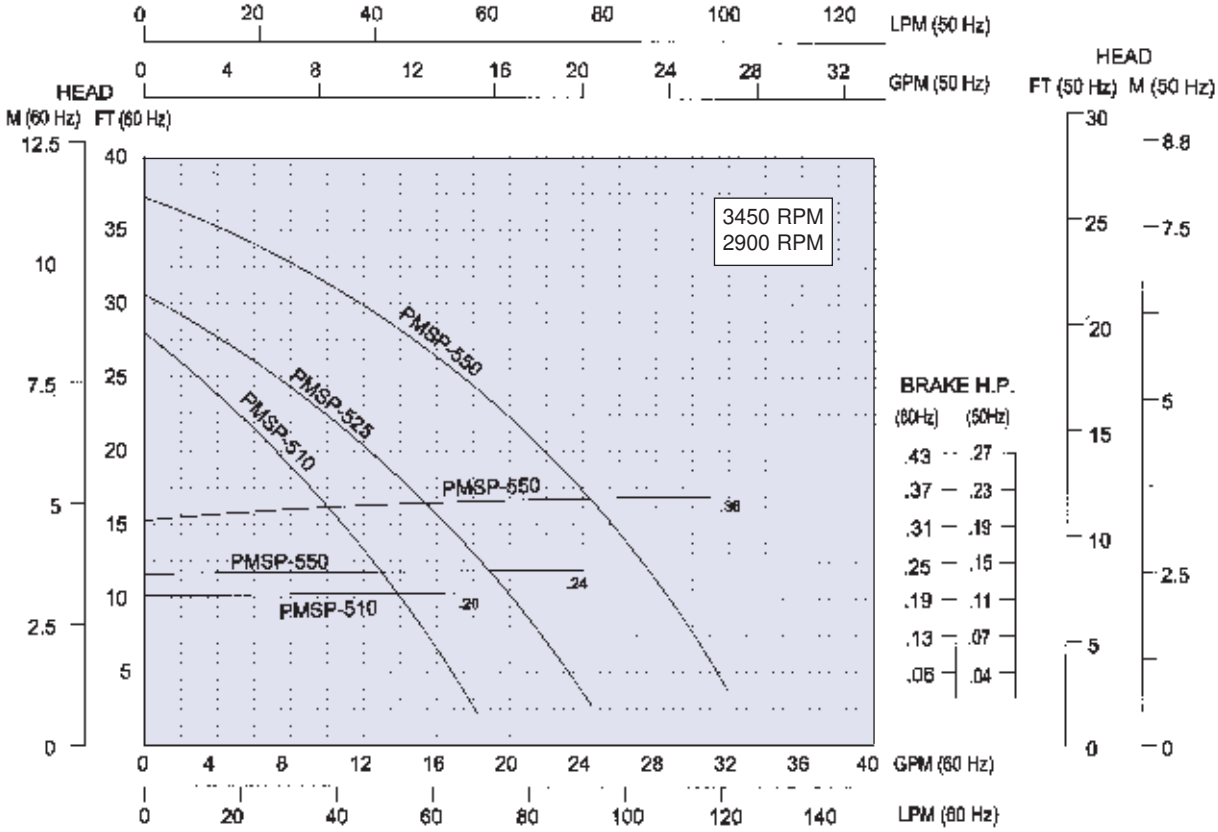


Polypropylene Model

Magnetic coupling design acts as a clutch to eliminate motor burnout and overloading under adverse conditions. Magnet housing acts as an insulator to prevent motor heat from being transferred to the fluid being pumped.

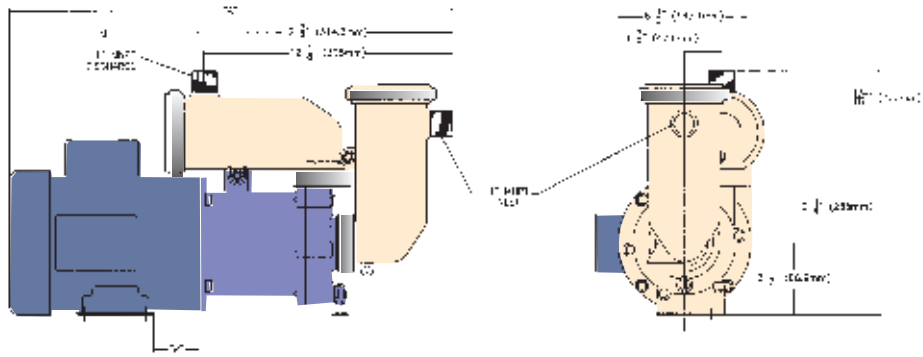
500 series *for flows to 32 GPM (120 LPM)*

PERFORMANCE CURVE



DIMENSIONS

Motor HP	Volts/Phase	"A"	"M"	"P"
1/4	115-208/230, 1 ph	20" (508mm)	7-5/8" (194mm)	2-1/8" (54mm)
1/3	115-208/230, 1 ph	20" (508mm)	7-5/8" (194mm)	2-1/8" (54mm)
1/3	115-208/230, 1 ph	20-5/8" (524mm)	8-1/4" (209mm)	2-1/8" (54mm)
1/2	115-208/230, 1 ph	21-1/8" (523mm)	8-3/4" (194mm)	2-1/8" (54mm)
1/2	208-230/460, 3 ph	20-5/8" (524mm)	8-1/4" (209mm)	2-1/8" (54mm
3/4	115-208/230, 1 ph	22-1/8" (523mm)	9-3/4" (247mm)	2-1/8" (54mm)
3/4	208-230/460, 3 ph	22-1/8" (524mm)	9-3/4" (247mm	2-1/8" (54mm



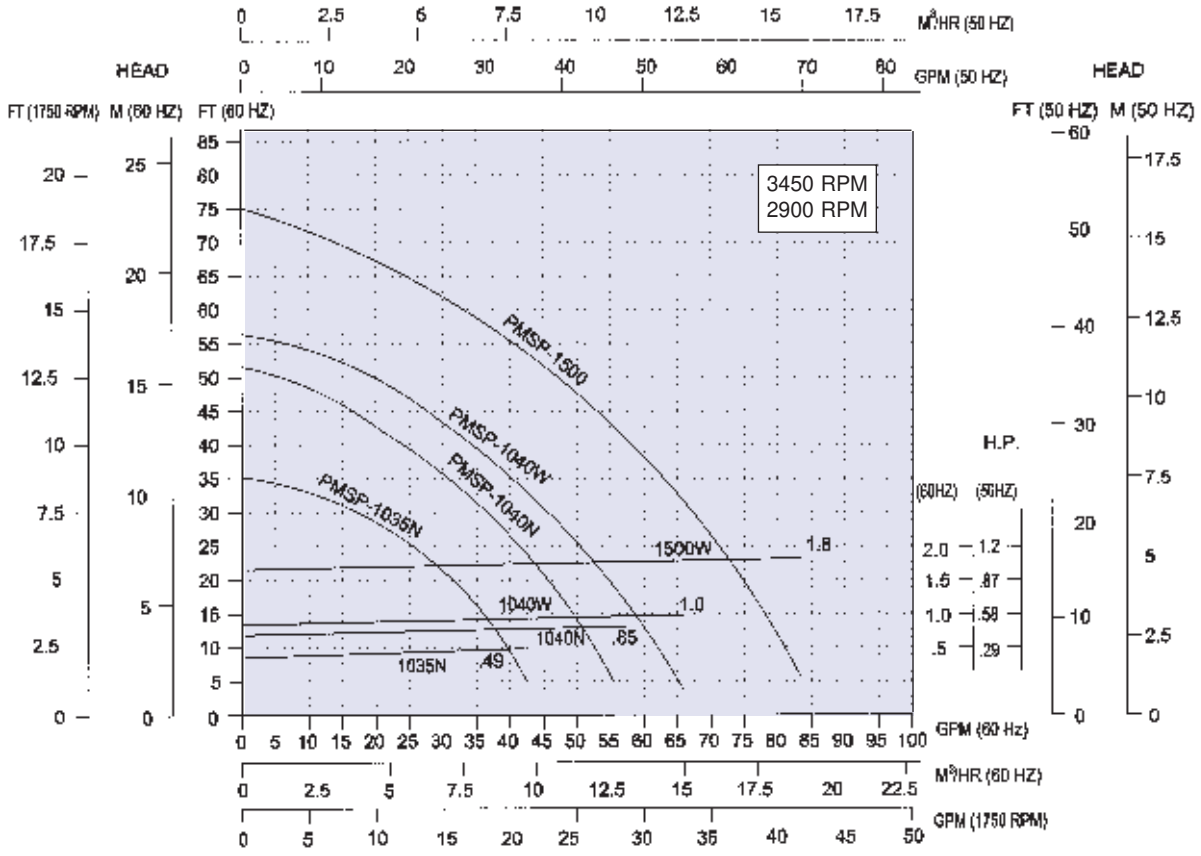
PUMP SPECIFICATIONS: FLOW CAPACITIES TO 32 GPM, PRESSURE TO 37 FT. 6 MODELS TO CHOOSE FROM

Model Number		Flow		Maximum Head		Maximum Operating Temp. (F / C)	HP*	Motor Characteristics*				Weight†	
Polypropylene	PVDF	GPM	LPM	Ft.	M.			Volts	Hz.	Phase	Type	Lbs.	Kg.
PMSP-510	KMSP-510	18	68	26	8	Polypropylene 180°F / 82°C	1/4	230/460	60	3 ph	TEFC	30	13.6
PMSP-525	KMSP-525	25	95	31	9.5		1/3					31	14
PMSP-550	KMSP-550	32	120	37	11	PVDF 210°F / 99°C	1/2					34	15.4

* Customer supplied external overload protection is required on 3 phase motors. Consult factory for 50 Hz. motor. Explosion proof motors are available
† Add approximately 3 pounds for PVDF. Add approximately 20% extra for shipping weight.

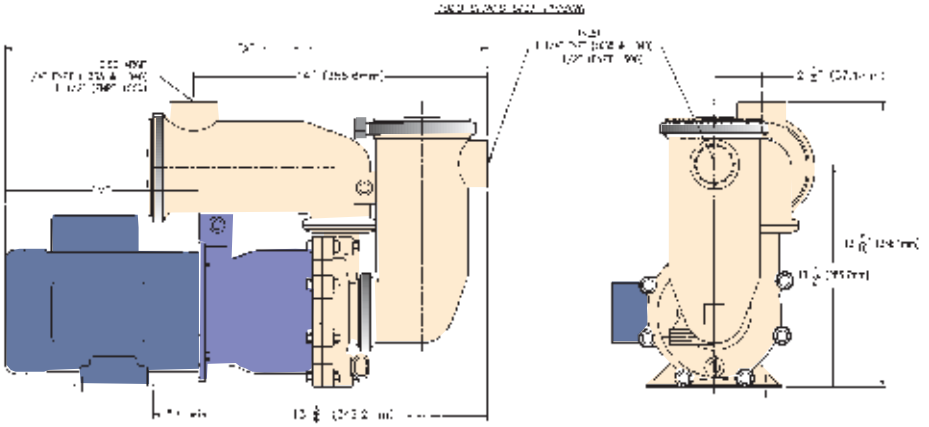
1000 series *for flows to 84 GPM (19 m^3/hr)*

PERFORMANCE CURVE



DIMENSIONS

Motor HP	Volts/Phase	"A"	"M"	"P"
1/2	115-208/230, 1 ph	22-1/2" (572mm)	8-3/4" (222mm)	2-1/8" (54mm)
1/2	208-230/460, 3 ph	22" (558mm)	8-1/4" (210mm)	2-1/8" (54mm)
3/4	115-208/230, 1 ph	23-1/2" (596mm)	9-3/4" (248mm)	2-1/8" (54mm)
3/4	208-230/460, 3 ph	23-1/2" (596mm)	9-3/4" (248mm)	2-1/8" (54mm)
1	115-208/230, 1 ph	23-1/2" (596mm)	9-3/4" (248mm)	2-1/8" (54mm)
1	208-230/460, 3 ph	23-1/2" (596mm)	9-3/4" (248mm)	2-1/8" (54mm
2	115-208/230, 1 ph	25" (635mm)	11-1/4" (285mm)	1-1/2" (38mm)
2	208-230/460, 3 ph	24" (609mm)	10-1/4" (260mm)	1-1/2" (38mm)
3	208-230/460, 3 ph	25.5" (648mm)	11-3/4" (298mm)	1-1/2" (38mm)
4	208-230/460, 3 ph	25.5" (648mm)	11-3/4" (298mm)	1-1/2" (38mm)



PUMP SPECIFICATIONS: FLOW CAPACITIES TO 85 GPM, PRESSURE TO 75 FT. 8 MODELS TO CHOOSE FROM

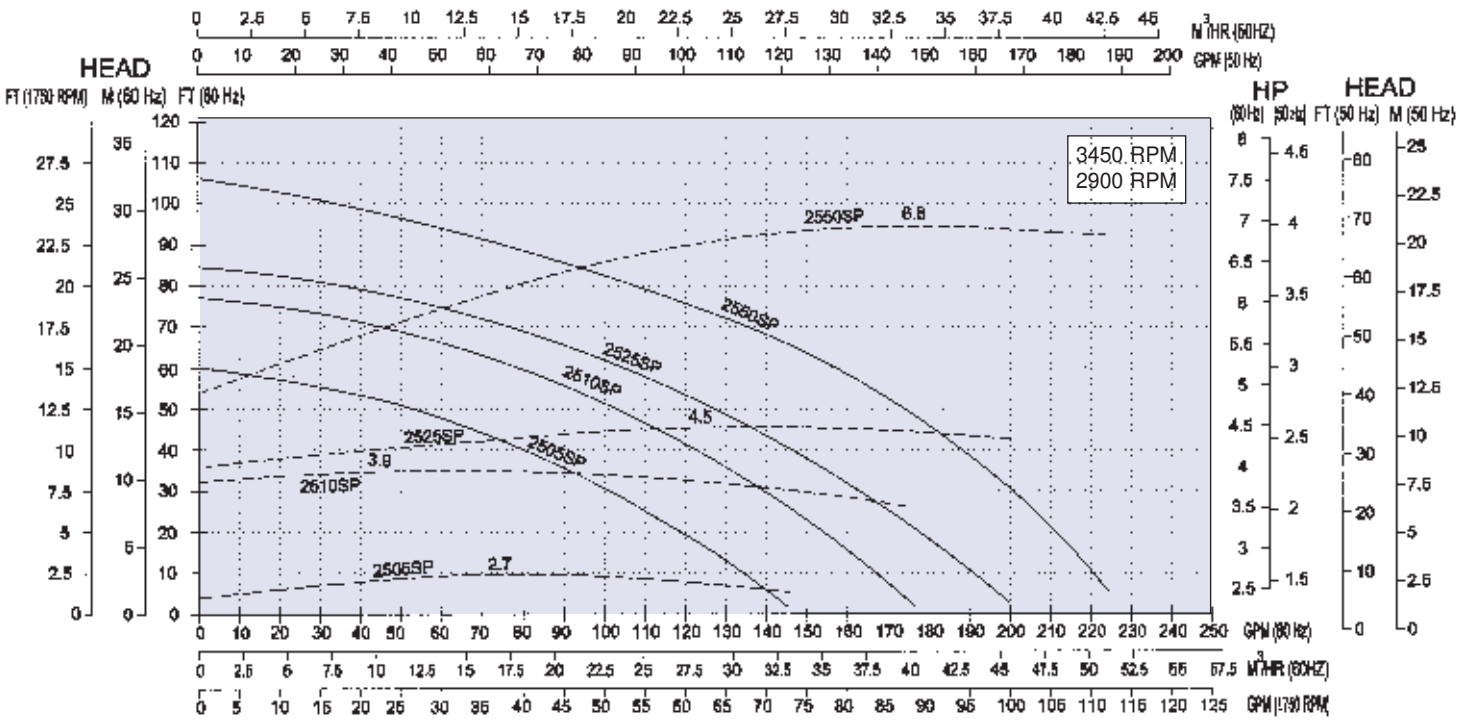
Model Number		Flow		Maximum Head		Maximum Operating Temp. (F / C)	HP*	Motor Characteristics*				Weight†	
Polypropylene	PVDF	GPM	m^3/hr	Ft.	M.			Volts	Hz.	Phase	Type	Lbs.	Kg.
PMSP-1035	KMSP-1035	43	10	35	10.5	Polypropylene 180°F / 82°C	1/2	230/460	60	3 ph	TEFC	39	17.6
PMSP-1040N	KMSP-1040N	55	12.5	51	15.5		3/4					44	20
PMSP-1040W	KMSP-1040W	66	15	56	17	PVDF 210°F / 99°C	1					55	25
PMSP-1500	KMSP-1500	85	19	75	23		2					57	26

*Customer supplied external overload protection is required on 3 phase motors. Consult factory for 50 Hz. motor. Explosion proof motors are available

† Add approximately 3 pounds for PVDF. Add approximately 20% extra for shipping weight.

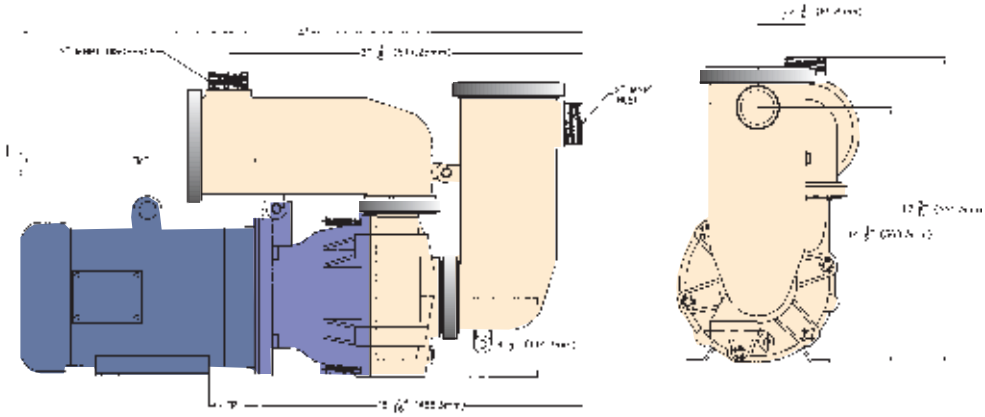
2500 series *for flows to 225 GPM (50 m^3/hr)*

PERFORMANCE CURVE



DIMENSIONS

Motor HP	Volts/Phase	"A"	"M"	"P"
3	208-230/460 3 phase	29-7/16" (747mm)	11" (279mm)	3" (76.2mm)
5	208-230/460 3 phase	30-5/16" (770mm)	11-7/8" (302mm)	3-1/2" (89mm)
7.5	208-230/460 3 phase	31-11/16" (805mm)	13-1/4" (337mm)	3-1/2" (89mm)
10	208-230/460 3 phase	DIMENSIONS VARY, CONSULT FACTORY		



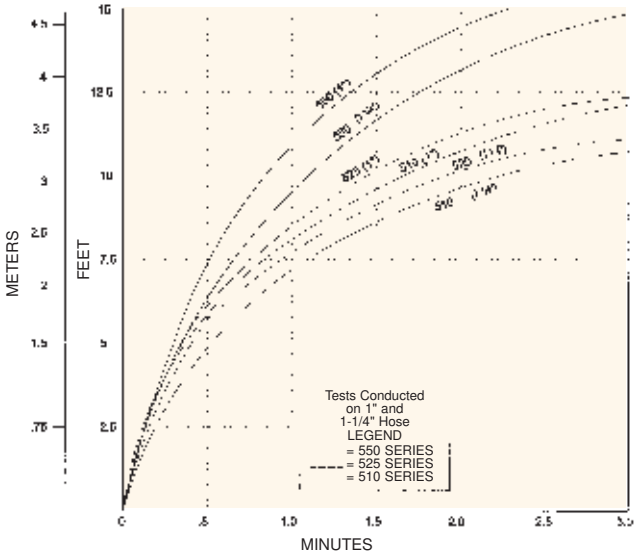
PUMP SPECIFICATIONS: FLOW CAPACITIES TO 225 GPM, PRESSURE TO 105 FT. 8 MODELS TO CHOOSE FROM

Model Number		Flow		Maximum Head		Maximum Operating Temp. (F / C)	HP*	Motor Characteristics*				Weight†	
Polypropylene	PVDF	GPM	m^3/hr	Ft.	M.			Volts	Hz.	Phase	Type	Lbs.	Kg.
PMSP-2505	KMSP-2505	145	33	60	18	Polypropylene 180°F / 82°C — PVDF 210°F / 99°C	3	230/460	60	3 ph	TEFC	87	40
PMSP-2510	KMSP-2510	178	40	76	23		5					109	50
PMSP-2525	KMSP-2525	200	46	85	26		5					109	50
PMSP-2550	KMSP-2550	225	51	105	32		7-1/2					120	54

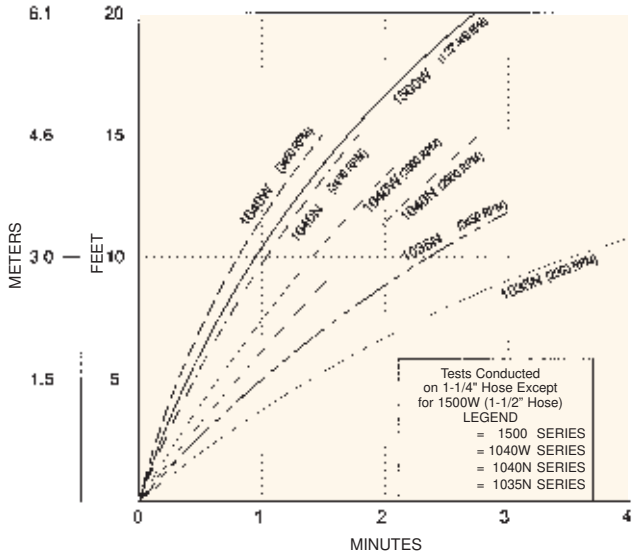
*Customer supplied external overload protection is required on 3 phase motors. Consult factory for 50 Hz. motor. Explosion proof motors are available
† Add approximately 3 pounds for PVDF. Add approximately 20% extra for shipping weight.

Sethco® SELF PRIMING, MAGNETIC DRIVE, SEAL-LESS, CENTRIFUGAL PUMPS

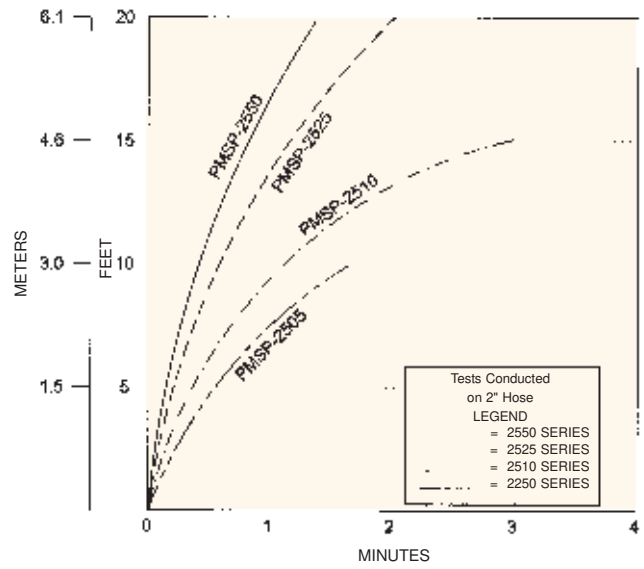
500 SERIES SELF-PRIMING MAGNETIC-DRIVE PUMPS PRIMING TIME (3450 RPM)



1000 SERIES SELF-PRIMING MAGNETIC-DRIVE PUMPS PRIMING TIME (3450 RPM)



2500 SERIES SELF-PRIMING MAGNETIC-DRIVE PUMPS PRIMING TIME (3450 RPM)





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".

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CECO Sethco 700 Emlen Way, Telford, PA 18969 • Phone: 215-723-8155 • Email: infofhs@onececo.com • www.cecoenviro.com