

**FLOWS  
TO 250 GPM**

**Sethco®**

# Seal-less, End Suction Magnetic Drive Centrifugal Pumps

*For Corrosive Liquid  
and Chemical Transfer*



# SETHCO® END SUCTION CORROSION RESISTANT MAGNETIC DRIVE, SEAL-LESS CHEMICAL PUMPS

*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 at flows to 250 GPM at temperatures to 210°F.*

## Leakproof, Seal-less Construction

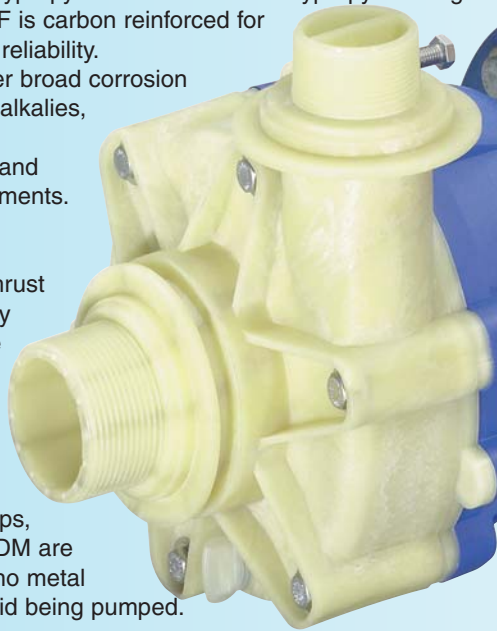
No shaft seal is used or required on these magnetically driven pumps. Power is transmitted by a magnetic field traveling from a magnet attached to the motor, through the solid body of the pump, to a magnet attached to the impeller. *No shaft seal ensures that leakage and troublesome seal replacement are completely eliminated.* The superior seal-less, magnetic drive design provides a reliable, smooth running, vibration-free pump that delivers high flow and pressure.

## 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 broad corrosion resistance to acids, alkalis, caustics, bleaches, sea water, solvents and many 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. Viton o-rings are standard on all pumps, while teflon and EPDM are available. There is no metal contact with the liquid being pumped.



PVDF Model KM-550



Polypropylene Model PM-2550

## Run Dry Capability

Once a Sethco end suction pump has been primed with solution, it is possible for it to run dry without damage if flow to the pump is interrupted for any reason. Run dry times may vary depending on model, bearing type and piping configuration.

## 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

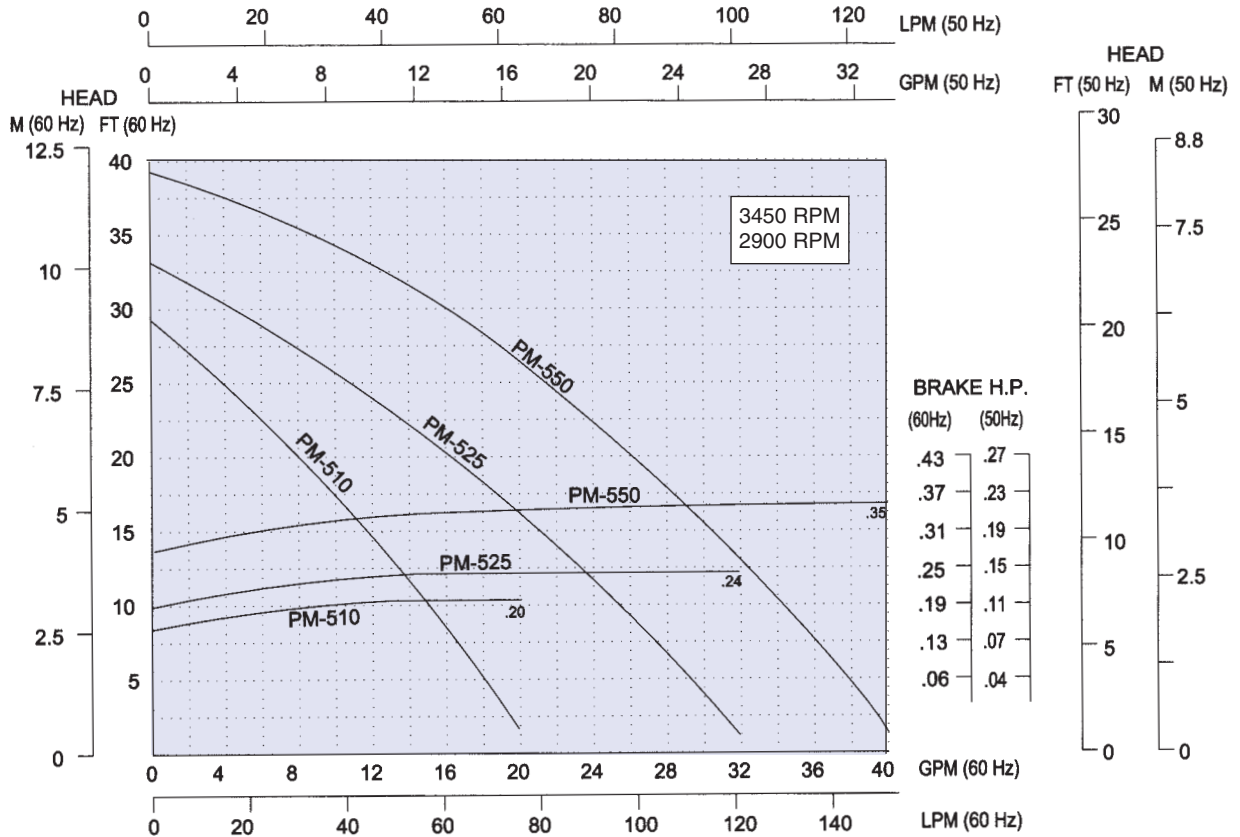
In the event a pump should ever need service, the limited number of parts allows for easy disassembly, inspection and maintenance without any special tools or talent. The motor can be separated from the pump housing without difficulty. Magnetic coupling design acts as a clutch to eliminate motor burnout and overloading under adverse conditions. Magnet housing acts as an insulator to prevent motor heat from being transferred to the fluid being pumped.



Polypropylene Model PM-1040W

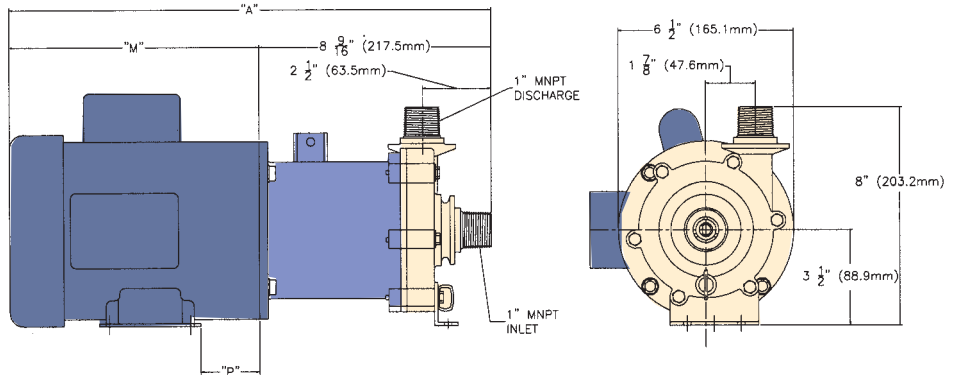
# 500 series *for flows to 40 GPM (150 LPM)*

## PERFORMANCE CURVE



## DIMENSIONS

Motor HP	Volts/Phase	"A"	"M"	"P"
1/4	115-208/230, 1 ph	16-3/16" (411mm)	7-5/8" (194mm)	2-1/8" (54mm)
1/3	115-208/230, 1 ph	16-3/16" (411mm)	7-5/8" (194mm)	2-1/8" (54mm)
1/3	115-208/230, 1 ph	16-13/16" (427mm)	8-1/4" (209mm)	2-1/8" (54mm)
1/2	115-208/230, 1 ph	17-5/16" (440mm)	8-3/4" (194mm)	2-1/8" (54mm)
1/2	208-230/460, 3 ph	16-13/16" (427mm)	8-1/4" (209mm)	2-1/8" (54mm)
3/4	115-208/230, 1 ph	18-5/16" (465mm)	9-3/4" (247mm)	2-1/8" (54mm)
3/4	208-230/460, 3 ph	18-5/16" (465mm)	9-3/4" (247mm)	2-1/8" (54mm)



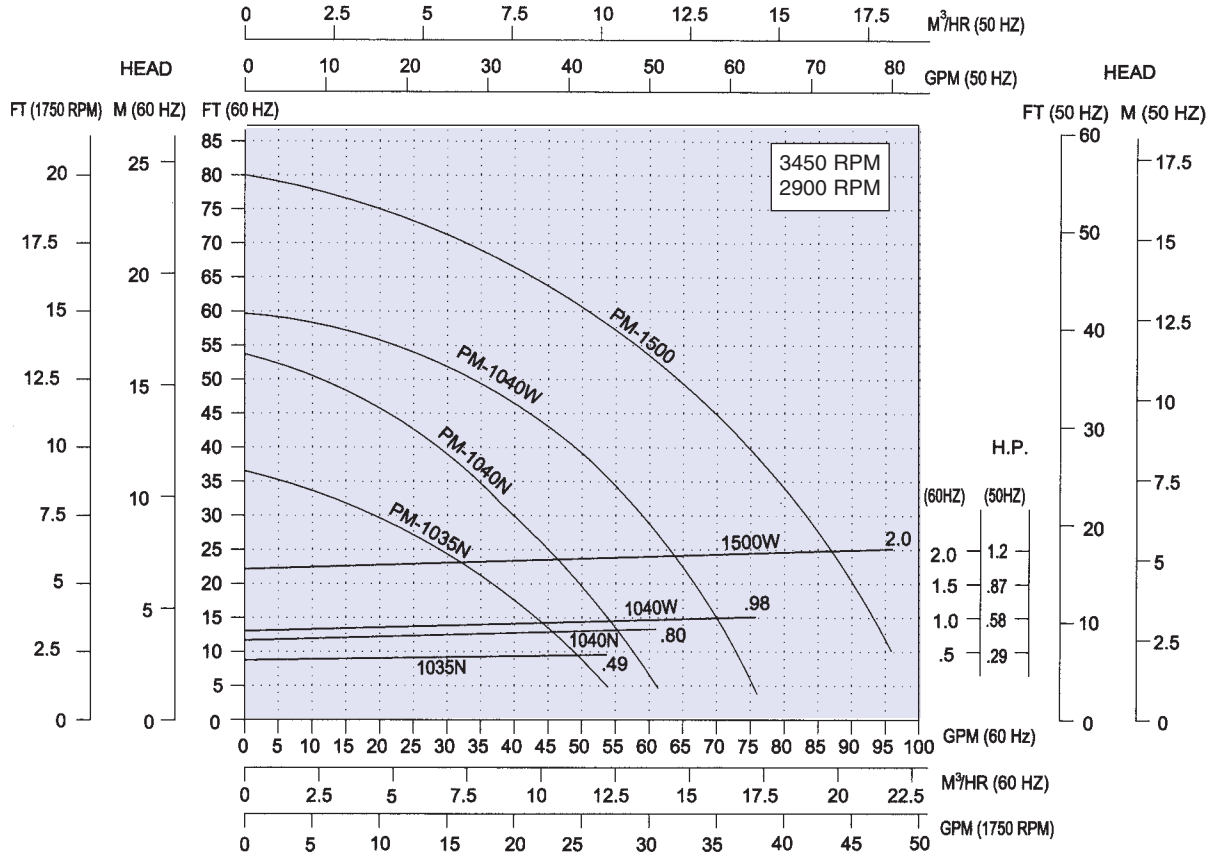
## PUMP SPECIFICATIONS: FLOW CAPACITIES TO 40 GPM, PRESSURE TO 38 FT. 6 MODELS TO CHOOSE FROM

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.
PM-510	KM-510	20	75	28	8.5	Polypropylene 180°F / 82°C	1/4	115/230	60	1 ph	TEFC	30	13.6
PM-525	KM-525	32	120	33	10		1/3					31	14
PM-550	KM-550	40	150	38	11.5	1/2	34					15.5	

\* 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.

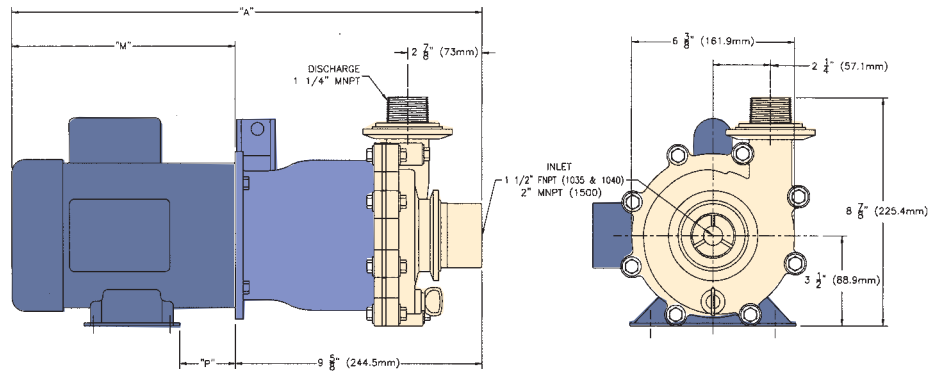
# 1000 series *for flows to 96 GPM (22 m<sup>3</sup>/hr)*

## PERFORMANCE CURVE



## DIMENSIONS

Motor HP	Volts/Phase	"A"	"M"	"P"
1/2	115-208/230, 1 ph	18-3/8" (466mm)	8-3/4" (222mm)	2-1/8" (54mm)
1/2	208-230/460, 3 ph	17-7/8" (454mm)	8-1/4" (210mm)	2-1/8" (54mm)
3/4	115-208/230, 1 ph	19-3/8" (492mm)	9-3/4" (248mm)	2-1/8" (54mm)
3/4	208-230/460, 3 ph	19-3/8" (492mm)	9-3/4" (248mm)	2-1/8" (54mm)
1	115-208/230, 1 ph	19-3/8" (492mm)	9-3/4" (248mm)	2-1/8" (54mm)
1	208-230/460, 3 ph	19-3/8" (492mm)	9-3/4" (248mm)	2-1/8" (54mm)
2	115-208/230, 1 ph	20-7/8" (530mm)	11-1/4" (285mm)	1-1/2" (38mm)
2	208-230/460, 3 ph	19-7/8" (504mm)	10-1/4" (260mm)	1-1/2" (38mm)
3	208-230/460, 3 ph	21-3/8" (543mm)	11-3/4" (298mm)	1-1/2" (38mm)
4	208-230/460, 3 ph	21-3/8" (543mm)	11-3/4" (298mm)	1-1/2" (38mm)



## PUMP SPECIFICATIONS: FLOW CAPACITIES TO 96 GPM, PRESSURE TO 80 FT. 8 MODELS TO CHOOSE FROM

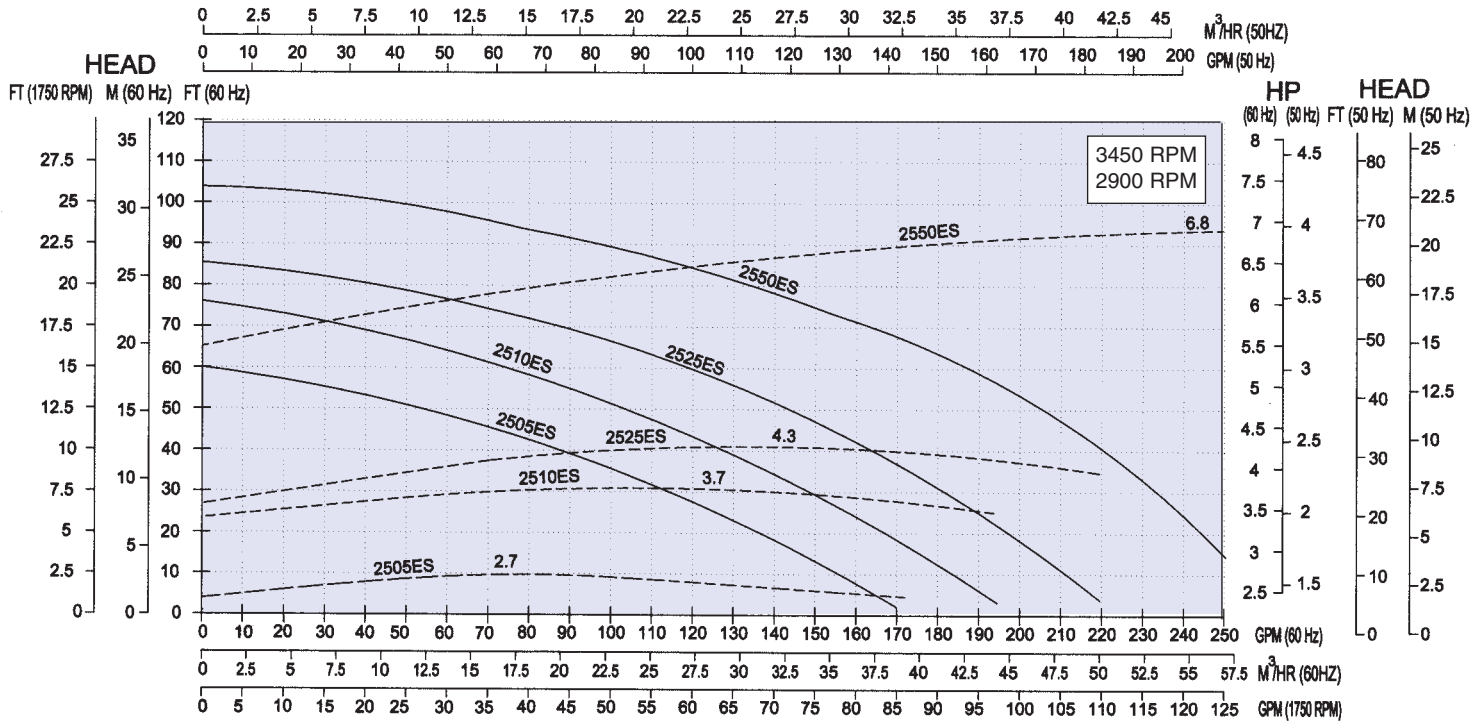
Model Number		Flow		Maximum Head		Maximum Operating Temp. (F / C)	HP*	Motor Characteristics*				Weight†	
Polypropylene	PVDF	GPM	m <sup>3</sup> /hr	Ft.	M.			Volts	Hz.	Phase	Type	Lbs.	Kg.
PM-1035	KM-1035	54	12	36	11	180°F / 82°C	1/2	115/230	60	1 ph	TEFC	34	15.4
PM-1040N	KM-1040N	62	14	53	16		3/4					35	15.8
PM-1040W	KM-1040W	76	17	60	18	1	37					16.8	
PM-1500	KM-1500	96	22	80	24	2	43					19.5	

\*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.

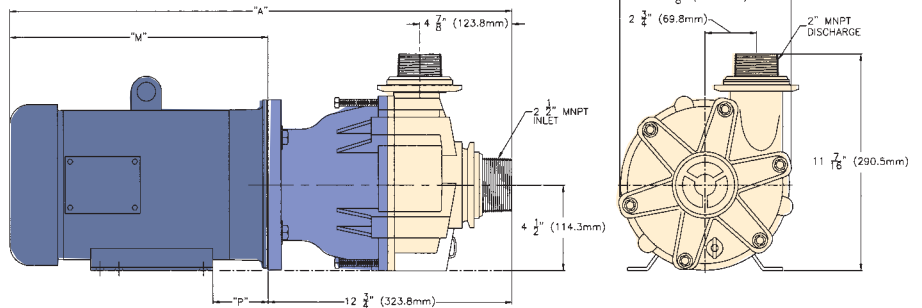
# 2500 series *for flows to 250 GPM (56 m<sup>3</sup>/hr)*

## PERFORMANCE CURVE



## DIMENSIONS

Motor HP	Volts/Phase	"A"	"M"	"P"
3	208-230/460 3 phase	23-3/4" (603mm)	11" (279mm)	3" (76.2mm)
5	208-230/460 3 phase	24-5/8" (625mm)	11-7/8" (302mm)	3-1/2" (89mm)
7.5	208-230/460 3 phase	26" (660mm)	13-1/4" (337mm)	3-1/2" (89mm)
10	208-230/460 3 phase	DIMENSIONS VARY, CONSULT FACTORY		



## PUMP SPECIFICATIONS: FLOW CAPACITIES TO 250 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 <sup>3</sup> /hr	Ft.	M.			Volts	Hz.	Phase	Type	Lbs.	Kg.
PM-2505	KM-2505	170	38.5	60	18	180°F / 82°C	3	208-230/ 460	60	3 ph	TEFC	84	38
PM-2510	KM-2510	195	44	76	23		5					105	48
PM-2525	KM-2525	220	50	85	26	210°F / 99°C	5					105	48
PM-2550	KM-2550	250	56.5	105	32		7-1/2					115	52

\*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® SEAL-LESS, END SUCTION, MAGNETIC DRIVE, CENTRIFUGAL PUMPS

## QUICK SELECTION GUIDE FOR MODELS PM & KM PUMPS

Add PM before model number for Polypropylene construction and KM before model number for PVDF construction.

		HEAD (Feet) 60 Hz									
		10	20	30	40	50	60	70	80	90	100
GALLONS PER MINUTE 60 Hz	10	510	525	550	1040NT	1040NT	1500	1500	2525	2550	2550
	20	525	550	1035NT	1040NT	1040WT	1500	1500	2525	2550	2550
	30	550	1035NT	1040NT	1040WT	1040WT	1500	1500	2525	2550	2550
	40	1035NT	1040NT	1040NT	1040WT	1500	1500	2525	2525	2550	2550
	50	1035NT	1040NT	1040WT	1040WT	1500	1500	2525	2550	2550	2550
	60	1040WT	1040WT	1040WT	1500	1500	2510	2525	2550	2550	–
	70	1040WT	1500	1500	1500	2510	2510	2525	2550	2550	–
	80	1500	1500	1500	2505	2510	2525	2525	2550	2550	–
	90	1500	1500	2505	2505	2510	2525	2550	2550	2550	–
	100	2505	2505	2505	2510	2510	2525	2550	2550	2550	–
	110	2505	2505	2505	2510	2525	2525	2550	2550	–	–
	120	2505	2505	2510	2510	2525	2525	2550	2550	–	–
	130	2505	2505	2510	2525	2525	2550	2550	2550	–	–
	140	2505	2510	2510	2525	2525	2550	2550	–	–	–
	150	2505	2510	2510	2525	2550	2550	2550	–	–	–
	160	2510	2510	2525	2525	2550	2550	2550	–	–	–
	170	2510	2525	2525	2550	2550	2550	–	–	–	–
	180	2510	2525	2525	2550	2550	2550	–	–	–	–
	190	2525	2525	2550	2550	2550	–	–	–	–	–
	200	2525	2550	2550	2550	2550	–	–	–	–	–
	210	2525	2550	2550	2550	–	–	–	–	–	–
	220	2550	2550	2550	2550	–	–	–	–	–	–
	230	2550	2550	2550	–	–	–	–	–	–	–
	240	2550	2550	–	–	–	–	–	–	–	–
	250	2550	–	–	–	–	–	–	–	–	–

Note: Not all selections will work for every application due to different specific gravity of liquids. Please consult a Sethco Application Engineer before purchasing a pump.



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