

SELF-PRIMING CENTRIFUGAL PUMPS

DATA SHEET

**ML-2 ML-3 ML-4 ML-6 ML-8 ML-10 ML-12
MH-3 MH-4 MH-6**



INTRODUCTION

Thank You for purchasing Motion Pumps Self-Priming Centrifugal Pump. The Data Sheet provides performance curve(s), a pump model cross-section drawing, for your pump. Therefore, it is the responsibility of the owner/installer of the pump to ensure that applications not addressed in this manual are performed **only** after establishing that neither operator safety nor pump integrity are compromised by the installation. Pumps and related equipment **must** be installed and operated according to all national, local and industry standards. This literature is not for sale, it is just a reference catalogue, not for use in United States of America, some pictures and information was taken from other manufacturers, this literature is made only for Costa Rica, under the local laws of Costa Rica where this information is protected by registration. If there are any questions regarding the pump which are not covered in this manual or in other literature accompanying the unit, please contact your Motion Pump distributor or our office:

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CROSS REFERENCE FOR SELF PRIMER PUMPS

			
Low Pressure Self Primer Pumps			
ML-2	T-2	LP-2	S-2
ML-3	T-3	LP-3	S-3
ML-4	T-4	LP-4	S-4
ML-6	T-6	LP-6	S-6
ML-8	T-8	LP-8	S-8
ML-10	T-10	LP-10	S-10
ML-12	T-12	LP-12	S-12
High Pressure Self Primer Pumps			
MH-3	U-3	HP-3	I-3
MH-4	U-4	HP-4	I-4
MH-6	U-6	HP-6	I-6

The names referred are just for internal information

Motion Pumps

Name and logo are property of Intra Corporation

Gorman-Rupp

Name and logo are property of The Gorman Rupp Company

Esco

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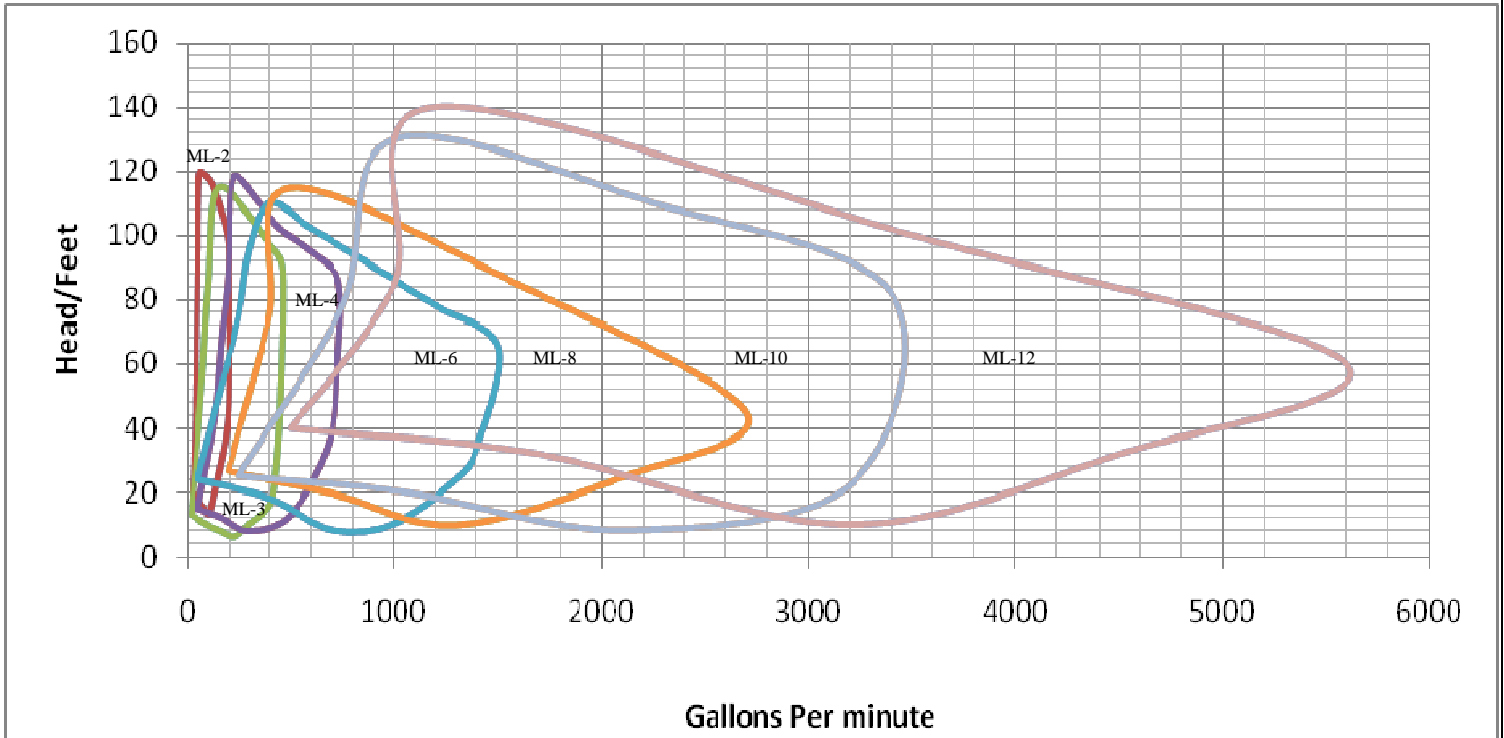
Allprime

Name and logo are property of Power & Pumps Inc.

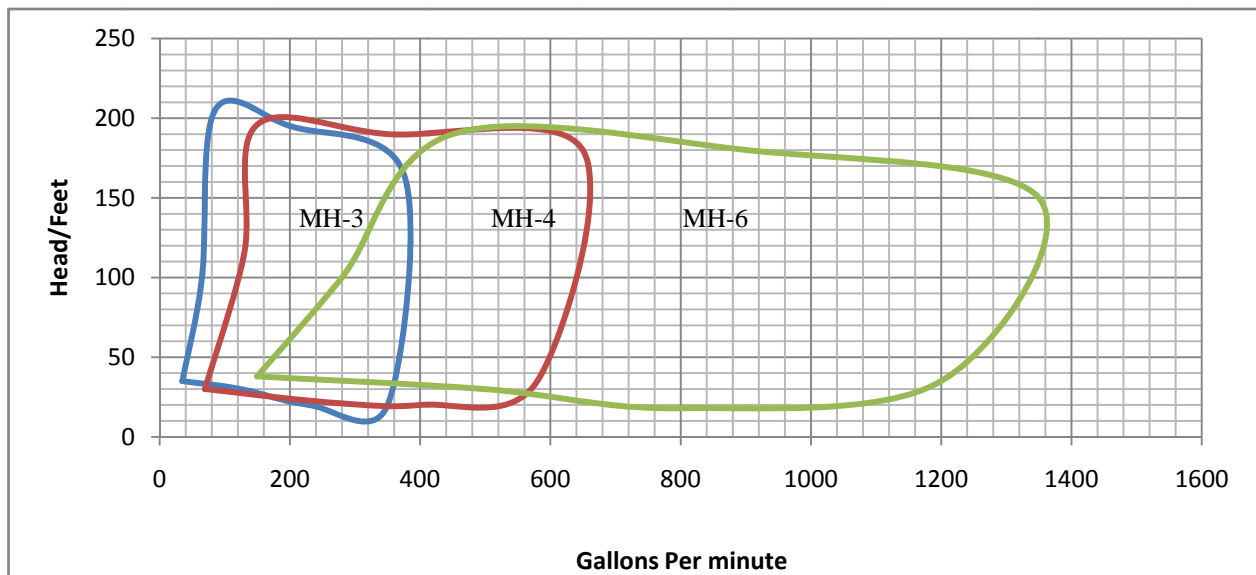


Flow Map

Low Pressure Self Primer Pumps ML-2 ML-3 ML-4 ML-6 ML-8 ML-10 ML-12



High Pressure Self Primer Pumps MH-3 MH-4 MH-6





MATERIALS OF CONSTRUCTION									
COMPONENT	STD	CI/316SS	CI/CD4MCU	CI/ADI	CI/HCI	ADI	316SS	CD4MCU	
Casing			A48CL30			ADI	316SS	CD4MCU	CD4MCU
Impeller	A60-40-18	316SS	CD4MCU	ADI	HCI	ADI	316SS	CD4MCU	CD4MCU
Wear Plate	A48CL30	316SS	CD4MCU	ADI	HCI	ADI	316SS	CD4MCU	CD4MCU
Cover Plate			A48CL30			ADI	316SS	CD4MCU	CD4MCU
Bearing Housing			A48CL30			ADI	316SS	CD4MCU	CD4MCU
Seal Plate	A48CL30	316SS	CD4MCU	ADI	HCI	ADI	316SS	CD4MCU	CD4MCU
Flap Valve			NEOPRENE				VITON		
Impeller Shaft	ANSI4140HT			ANSI17-4PH					
Seal Sleeve	ANSI4140HT			ANSI17-4PH					
Flanges			A48CL30			ADI	316SS	CD4MCU	CD4MCU
O'rings			BUNA				VITON		
Mechanical Seal			316SS,BUNA,TUNGS/TITANIUM CARBIDE			316SS,VITON,TUNGS/TITANIUM CARBIDE			



ML-2 Low Pressure Self Primer Pump



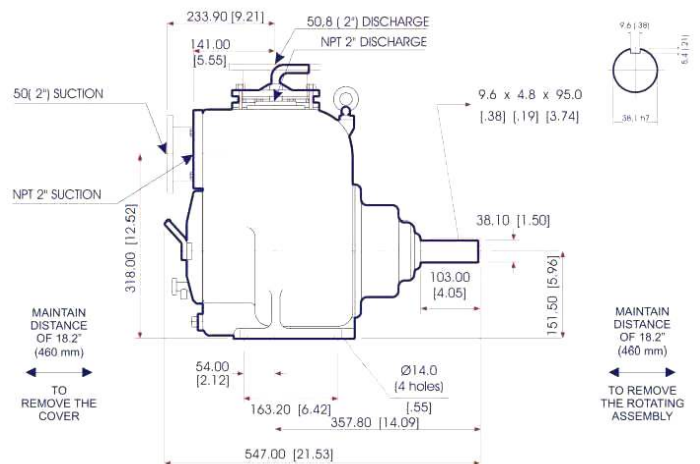
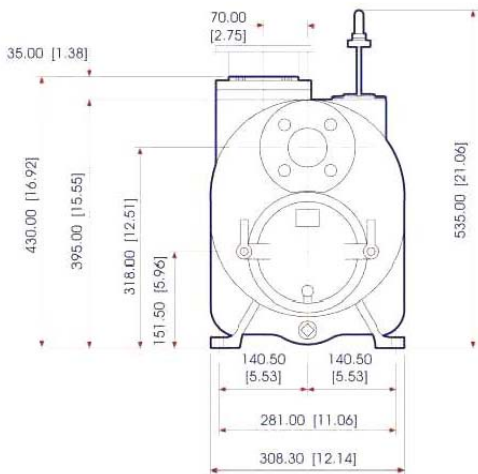
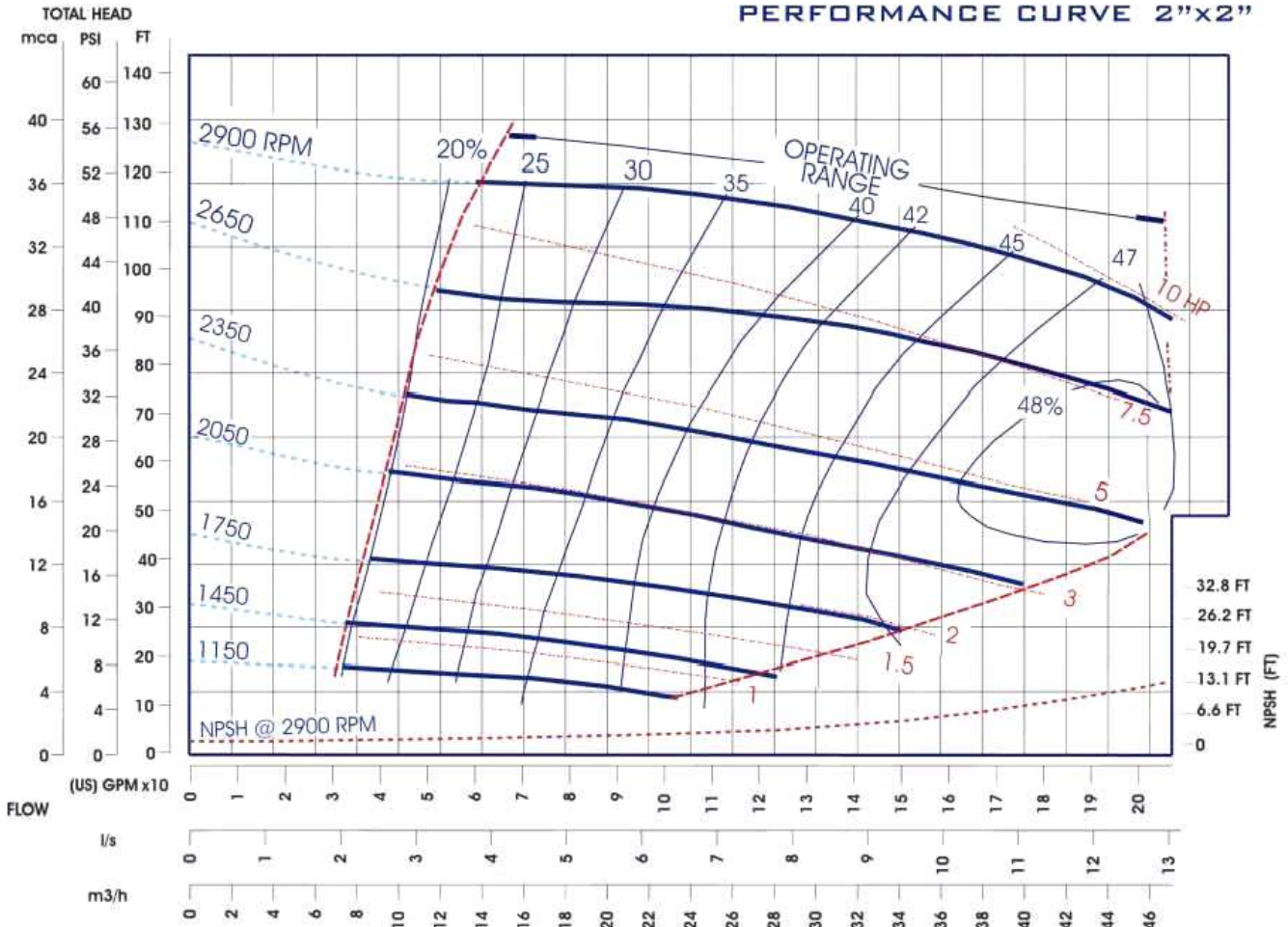
Pump Data	Self Priming Head
Net Weight: 203 lbs Shipping Weight: 252 lbs Impeller Diameter: 6¼ ” RPM range: 1150 to 2900 Max. Solids: 1¾ ”	1150 rpm: 24’ – 1450 rpm: 25’ 1750 rpm: 25’ – 2050 rpm: 25’ 2350 rpm: 20’ – 2650 rpm: 25’ 2650 rpm: 22’ – 2900 rpm: 25’ Check NPSH before using this table

COMPONENT	MATERIALS OF CONSTRUCTION							
	STD	CI/316SS	CI/CD4MCU	CI/ADI	CI/HCI	ADI	316SS	CD4MCU
Casing	A48CL30					ADI	316SS	CD4MCU
Impeller	A60-40-18	316SS	CD4MCU	ADI	HCI	ADI	316SS	CD4MCU
Wear Plate	A48CL30	316SS	CD4MCU	ADI	HCI	ADI	316SS	CD4MCU
Cover Plate	A48CL30					ADI	316SS	CD4MCU
Bearing Housing	A48CL30					ADI	316SS	CD4MCU
Seal Plate	A48CL30	316SS	CD4MCU	ADI	HCI	ADI	316SS	CD4MCU
Flap Valve	NEOPRENE					VITON		
Impeller Shaft	ANSI4140HT	ANSI17-4PH						
Seal Sleeve	ANSI4140HT	ANSI17-4PH						
Flanges	A48CL30					ADI	316SS	CD4MCU
O’rings	BUNA					VITON		
Mechanical Seal	316SS,BUNA,TUNGS/TITANIUM CARBIDE					316SS,VITON,TUNGS/TITANIUM CARBIDE		



ML-2 Low Pressure Self Primer Pump

PERFORMANCE CURVE 2"x2"





ML-3 Low Pressure Self Primer Pump



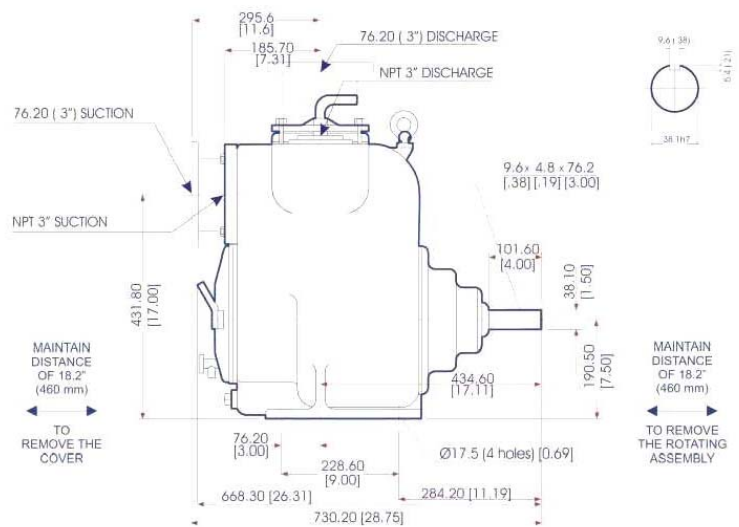
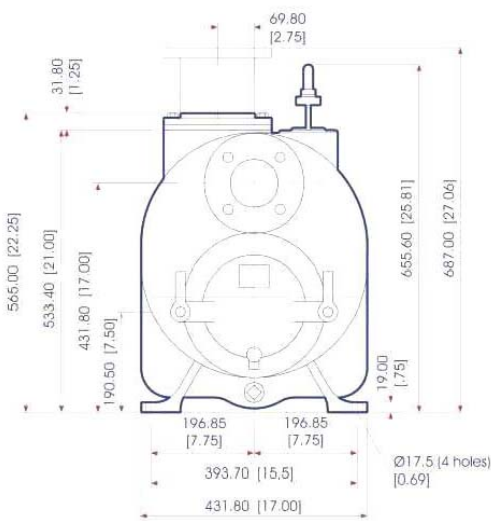
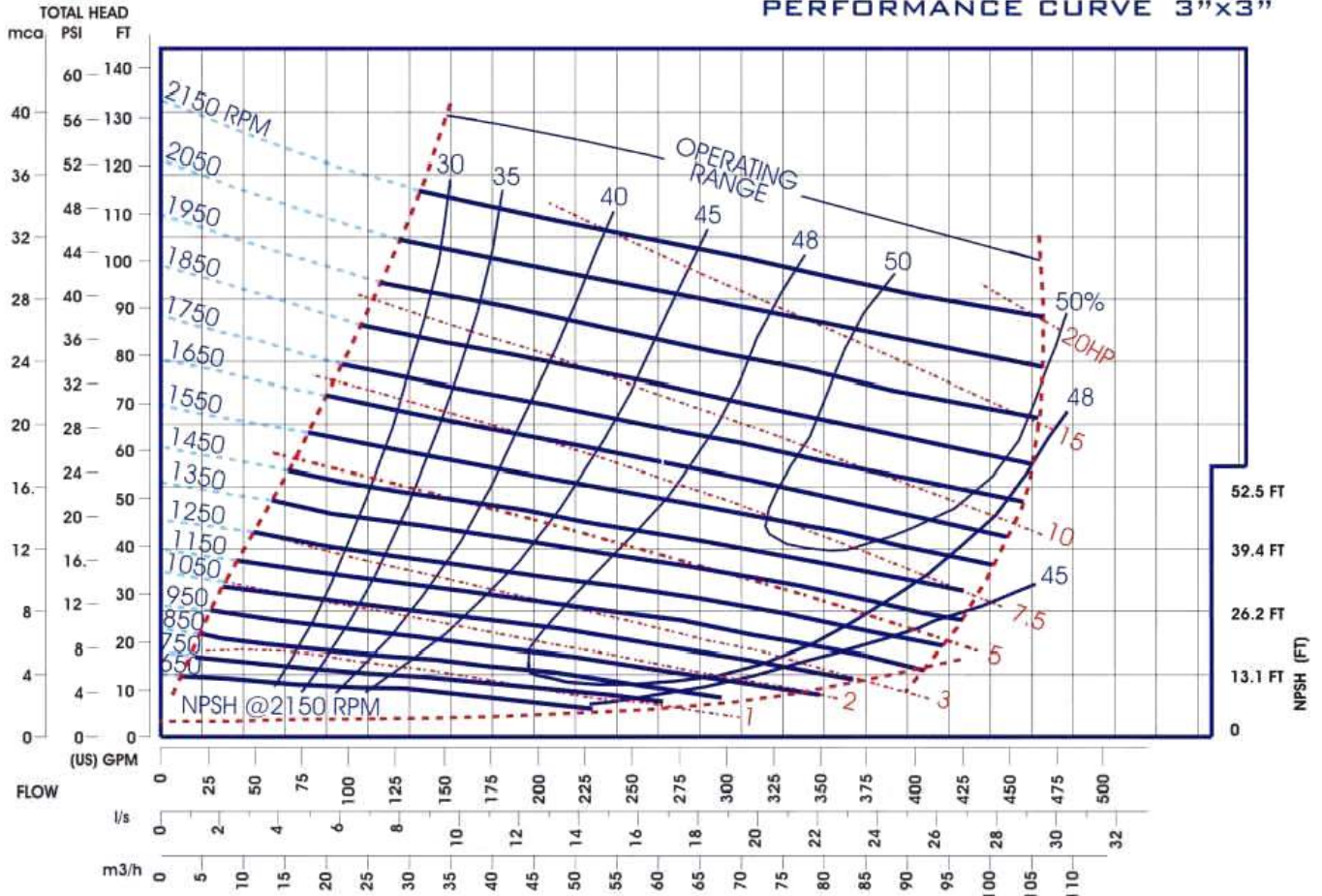
Pump Data	Self Priming Head
Net Weight: 404 lbs	650 rpm: 5' – 750 rpm: 6'
Shipping Weight: 452 lbs	850 rpm: 8' – 950 rpm: 10'
Impeller Diameter: 8¾"	1050 rpm: 13' – 1150 rpm: 16'
RPM range: 650 to 2150	1250 rpm: 18' – 1350 rpm: 19'
Max. Solids: 2½"	1450 rpm: 21' – 1550 rpm: 21'
	1650 rpm: 22' – 1750 rpm: 22'
	1850 rpm: 25' – 1950 rpm: 25'
	2050 rpm: 25' – 2150 rpm: 25'
	Check NPSH before using this table

COMPONENT	MATERIALS OF CONSTRUCTION							
	STD	CI/316SS	CI/CD4MCU	CI/ADI	CI/HCI	ADI	316SS	CD4MCU
Casing	A48CL30					ADI	316SS	CD4MCU
Impeller	A60-40-18	316SS	CD4MCU	ADI	HCI	ADI	316SS	CD4MCU
Wear Plate	A48CL30	316SS	CD4MCU	ADI	HCI	ADI	316SS	CD4MCU
Cover Plate	A48CL30					ADI	316SS	CD4MCU
Bearing Housing	A48CL30					ADI	316SS	CD4MCU
Seal Plate	A48CL30	316SS	CD4MCU	ADI	HCI	ADI	316SS	CD4MCU
Flap Valve	NEOPRENE					VITON		
Impeller Shaft	ANSI4140HT	ANSI17-4PH						
Seal Sleeve	ANSI4140HT	ANSI17-4PH						
Flanges	A48CL30					ADI	316SS	CD4MCU
O'rings	BUNA					VITON		
Mechanical Seal	316SS,BUNA,TUNGS/TITANIUM CARBIDE					316SS,VITON,TUNGS/TITANIUM CARBIDE		



ML-3 Low Pressure Self Primer Pump

PERFORMANCE CURVE 3"x3"





ML-4 Low Pressure Self Primer Pump



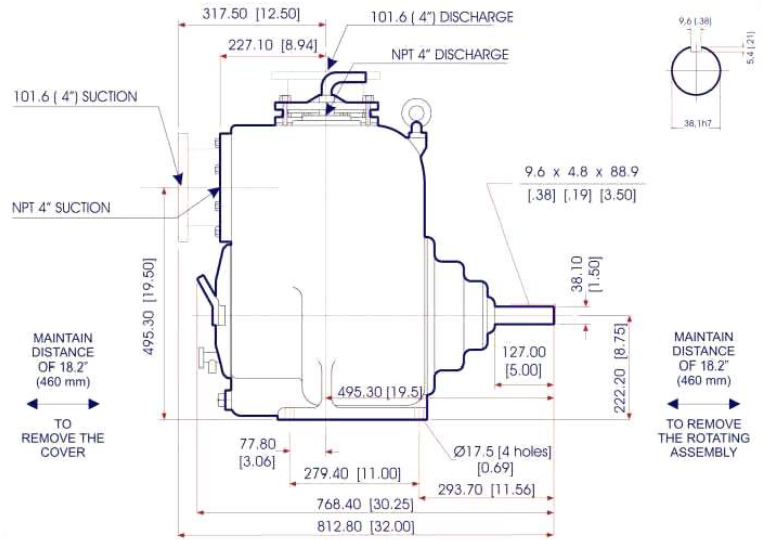
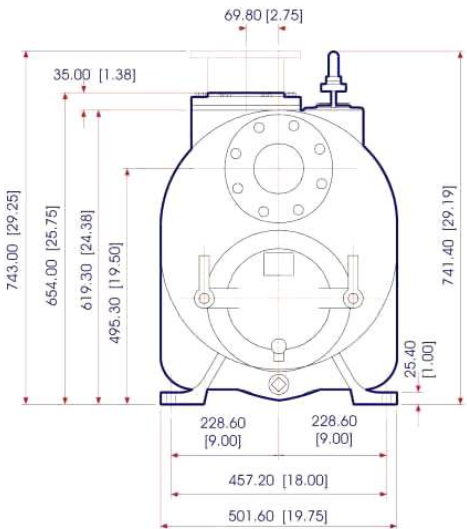
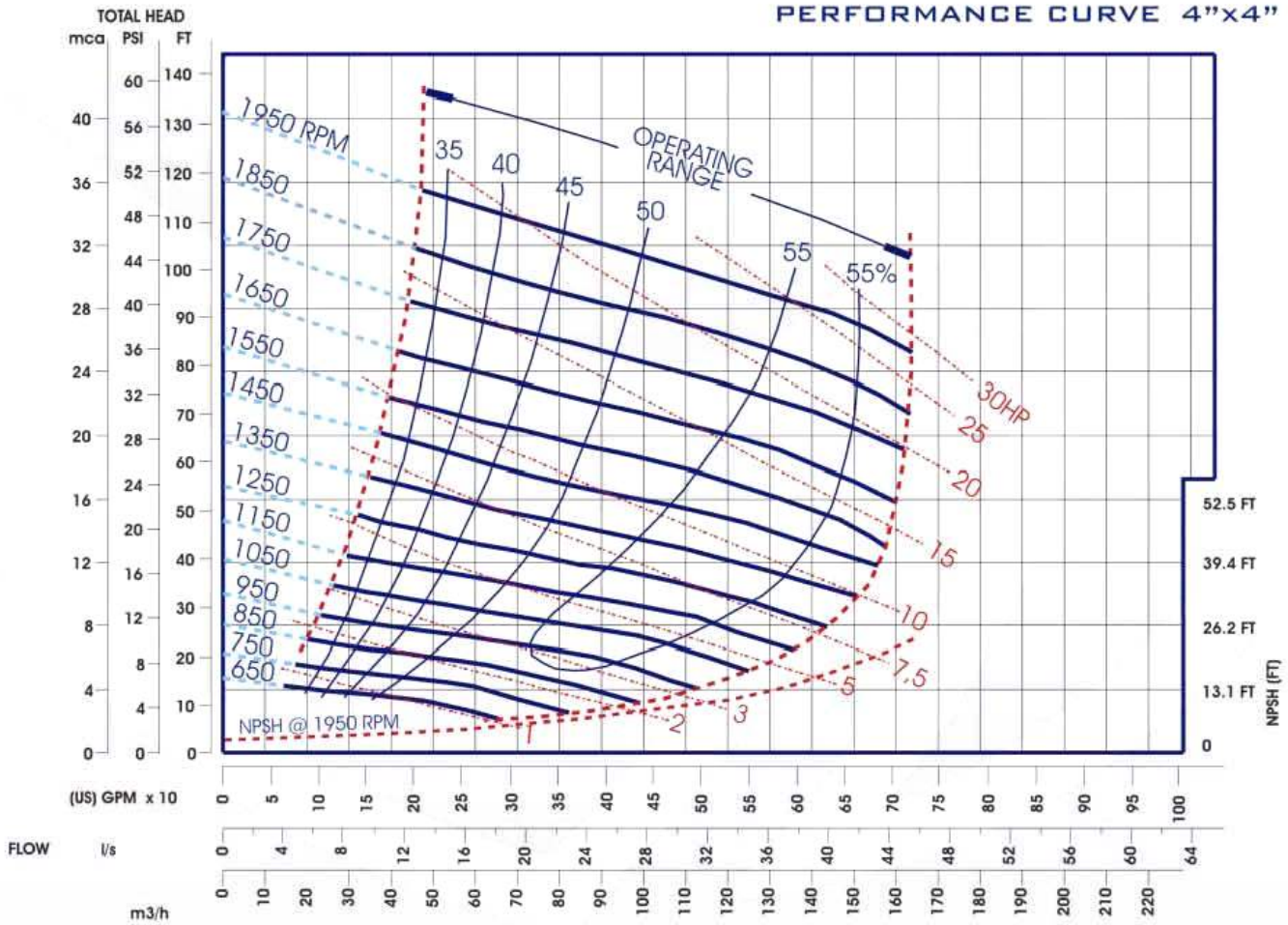
Pump Data	Self Priming Head
Net Weight: 600 lbs	650 rpm: 5' – 750 rpm: 8'
Shipping Weight: 655 lbs	850 rpm: 16' – 950 rpm: 19'
Impeller Diameter: 9¾ ”	1050 rpm: 22' – 1150 rpm: 24'
RPM range: 650 to 1950	1250 rpm: 25' – 1350 rpm: 25'
Max. Solids: 3 ”	1450 rpm: 25' – 1550 rpm: 25'
	1650 rpm: 25' – 1750 rpm: 25'
	1850 rpm: 25' – 1950 rpm: 25'
	Check NPSH before using this table

COMPONENT	MATERIALS OF CONSTRUCTION									
	STD	CI/316SS	CI/CD4MCU	CI/ADI	CI/HCI	ADI	316SS	CD4MCU		
Casing	A48CL30							ADI	316SS	CD4MCU
Impeller	A60-40-18	316SS	CD4MCU	ADI	HCI	ADI	316SS	CD4MCU		
Wear Plate	A48CL30	316SS	CD4MCU	ADI	HCI	ADI	316SS	CD4MCU		
Cover Plate	A48CL30					ADI	316SS	CD4MCU		
Bearing Housing	A48CL30					ADI	316SS	CD4MCU		
Seal Plate	A48CL30	316SS	CD4MCU	ADI	HCI	ADI	316SS	CD4MCU		
Flap Valve	NEOPRENE					VITON				
Impeller Shaft	ANSI4140HT	ANSI17-4PH								
Seal Sleeve	ANSI4140HT	ANSI17-4PH								
Flanges	A48CL30					ADI	316SS	CD4MCU		
O'rings	BUNA					VITON				
Mechanical Seal	316SS,BUNA,TUNGS/TITANIUM CARBIDE					316SS,VITON,TUNGS/TITANIUM CARBIDE				



ML-4 Low Pressure Self Primer Pump

PERFORMANCE CURVE 4"x4"





ML-6 Low Pressure Self Primer Pump



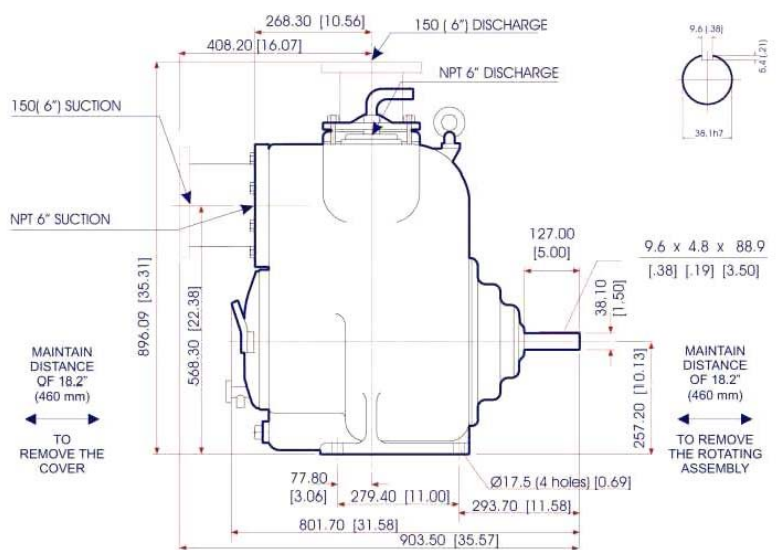
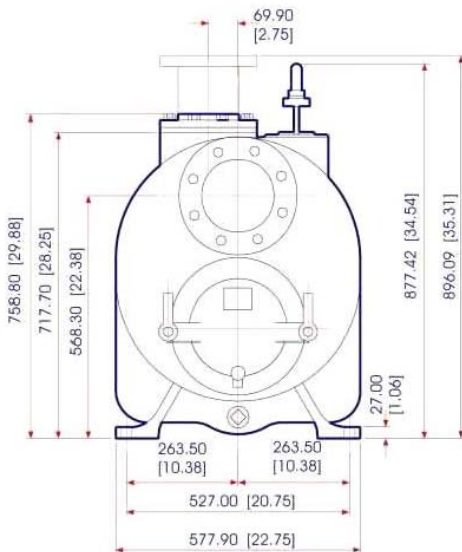
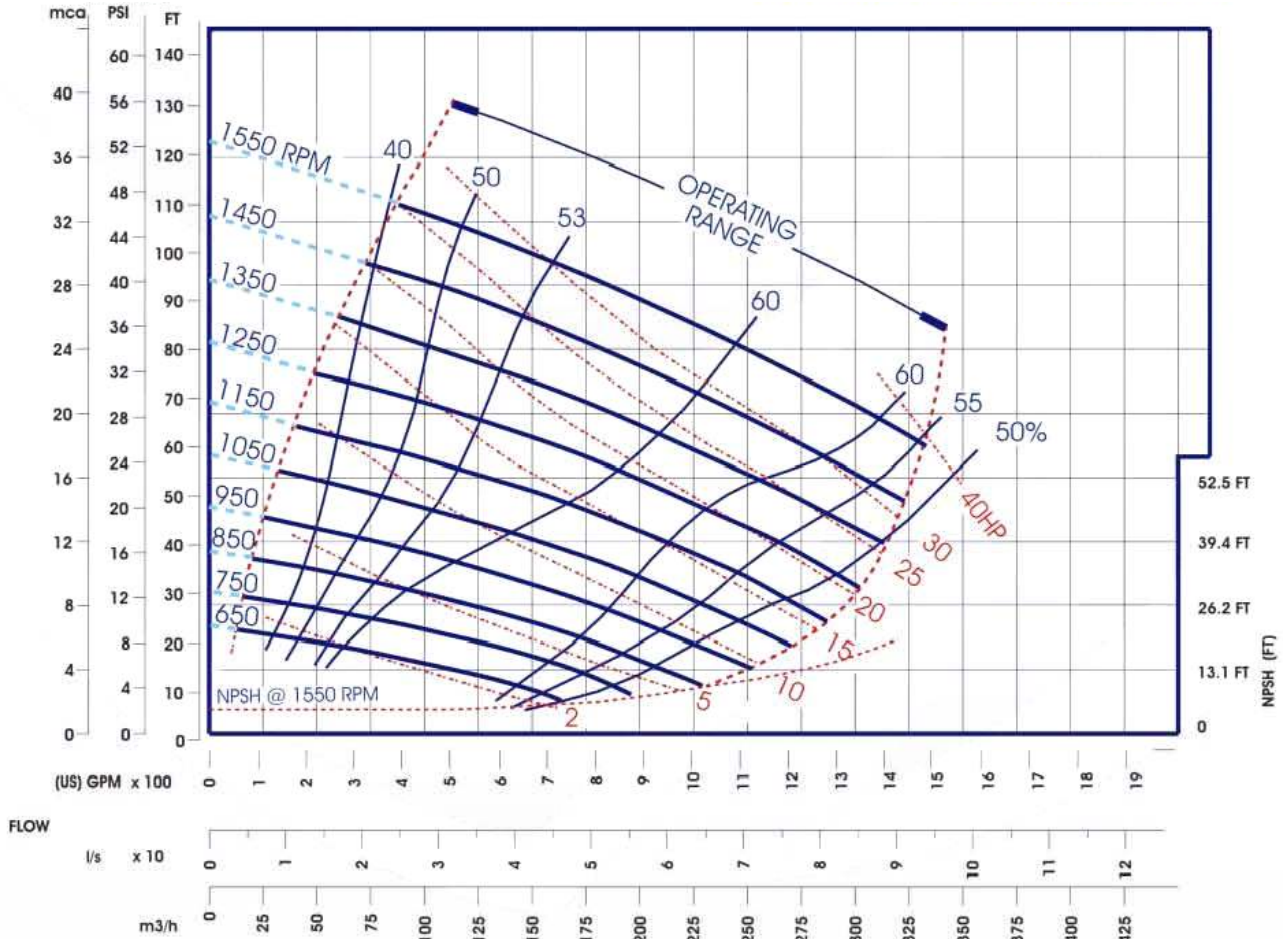
Pump Data	Self Priming Head
Net Weight: 802 lbs	650 rpm: 8' – 750 rpm: 9'
Shipping Weight: 862 lbs	850 rpm: 12' – 950 rpm: 14'
Impeller Diameter: 12-3/8"	1050 rpm: 18' – 1150 rpm: 21'
RPM range: 650 to 1550	1250 rpm: 21' – 1350 rpm: 22'
Max. Solids: 3"	1450 rpm: 23' – 1550 rpm: 25'
	Check NPSH before using this table

COMPONENT	MATERIALS OF CONSTRUCTION							
	STD	CI/316SS	CI/CD4MCU	CI/ADI	CI/HCI	ADI	316SS	CD4MCU
Casing	A48CL30					ADI	316SS	CD4MCU
Impeller	A60-40-18	316SS	CD4MCU	ADI	HCI	ADI	316SS	CD4MCU
Wear Plate	A48CL30	316SS	CD4MCU	ADI	HCI	ADI	316SS	CD4MCU
Cover Plate	A48CL30					ADI	316SS	CD4MCU
Bearing Housing	A48CL30					ADI	316SS	CD4MCU
Seal Plate	A48CL30	316SS	CD4MCU	ADI	HCI	ADI	316SS	CD4MCU
Flap Valve	NEOPRENE					VITON		
Impeller Shaft	ANSI4140HT	ANSI17-4PH						
Seal Sleeve	ANSI4140HT	ANSI17-4PH						
Flanges	A48CL30					ADI	316SS	CD4MCU
O'rings	BUNA					VITON		
Mechanical Seal	316SS,BUNA,TUNGS/TITANIUM CARBIDE					316SS,VITON,TUNGS/TITANIUM CARBIDE		



ML-6 Low Pressure Self Primer Pump

PERFORMANCE CURVE 6" X 6"





ML-8 Low Pressure Self Primer Pump



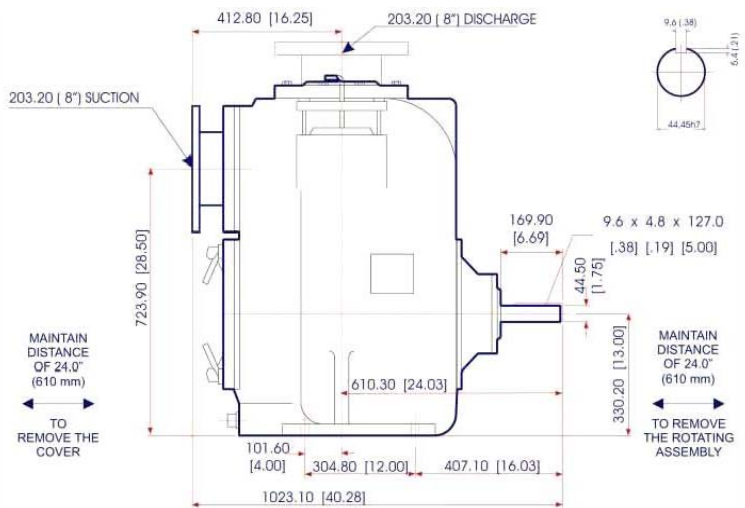
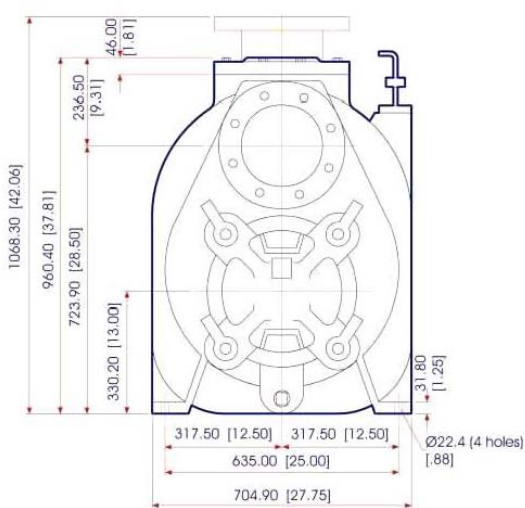
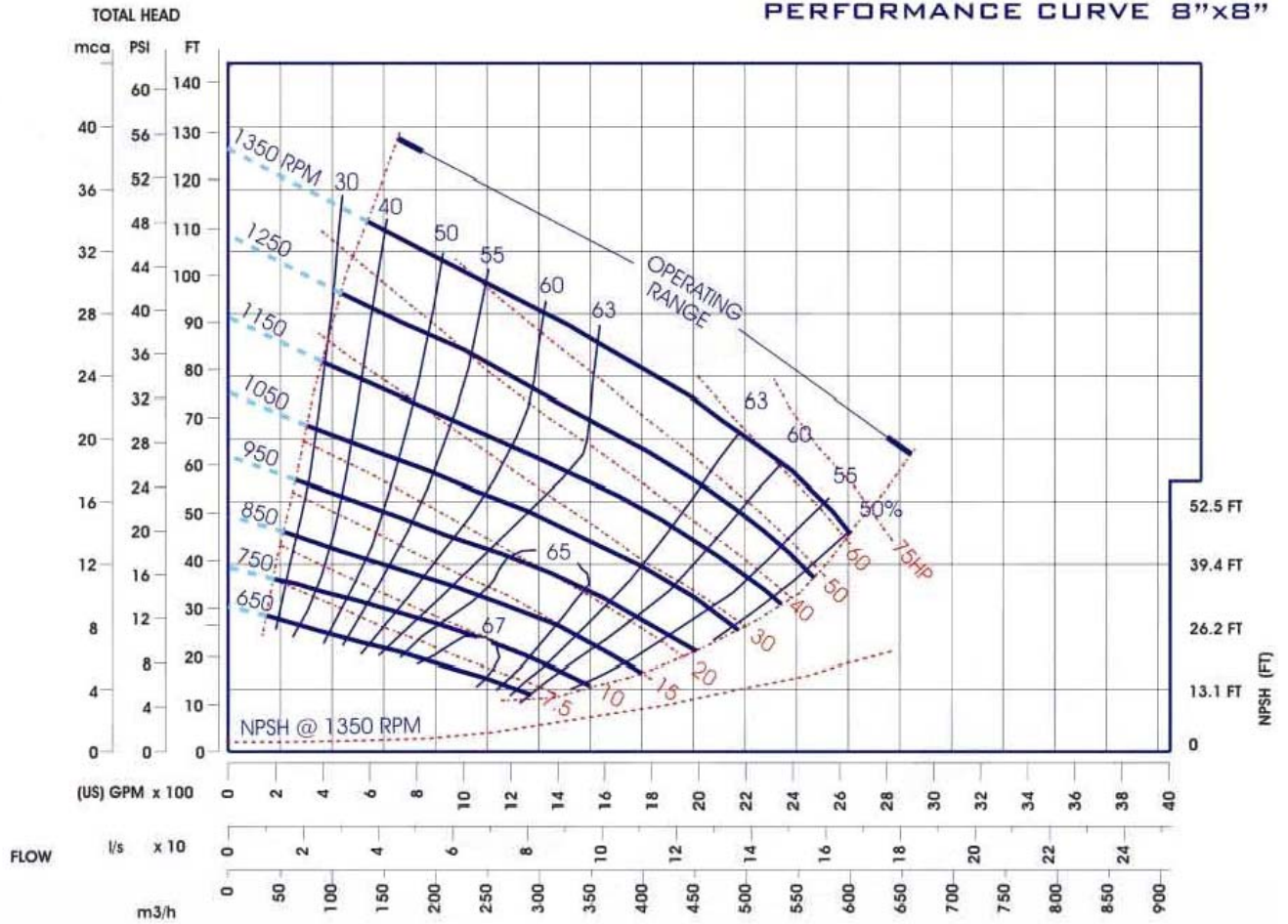
Pump Data	Self Priming Head
Net Weight: 1295 lbs Shipping Weight: 1399 lbs Impeller Diameter: 14 3/4" RPM range: 650 to 1350 Max. Solids: 3"	650 rpm: 9' – 750 rpm: 12' 850 rpm: 15' – 950 rpm: 17' 1050 rpm: 20' – 1150 rpm: 21' 1250 rpm: 22' – 1350 rpm: 23' Check NPSH before using this table

COMPONENT	MATERIALS OF CONSTRUCTION							
	STD	CI/316SS	CI/CD4MCU	CI/ADI	CI/HCI	ADI	316SS	CD4MCU
Casing	A48CL30					ADI	316SS	CD4MCU
Impeller	A60-40-18	316SS	CD4MCU	ADI	HCI	ADI	316SS	CD4MCU
Wear Plate	A48CL30	316SS	CD4MCU	ADI	HCI	ADI	316SS	CD4MCU
Cover Plate	A48CL30					ADI	316SS	CD4MCU
Bearing Housing	A48CL30					ADI	316SS	CD4MCU
Seal Plate	A48CL30	316SS	CD4MCU	ADI	HCI	ADI	316SS	CD4MCU
Flap Valve	NEOPRENE					VITON		
Impeller Shaft	ANSI4140HT	ANSI17-4PH						
Seal Sleeve	ANSI4140HT	ANSI17-4PH						
Flanges	A48CL30					ADI	316SS	CD4MCU
O'rings	BUNA					VITON		
Mechanical Seal	316SS,BUNA,TUNGS/TITANIUM CARBIDE					316SS,VITON,TUNGS/TITANIUM CARBIDE		



ML-8 Low Pressure Self Primer Pump

PERFORMANCE CURVE 8"x8"





ML-10 Low Pressure Self Primer Pump



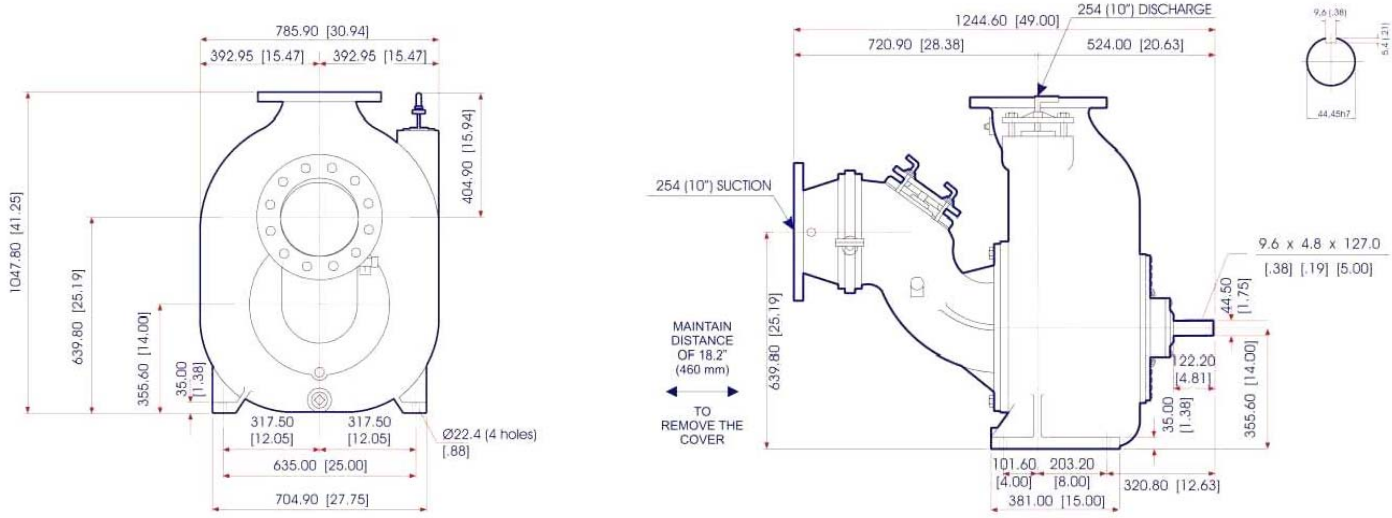
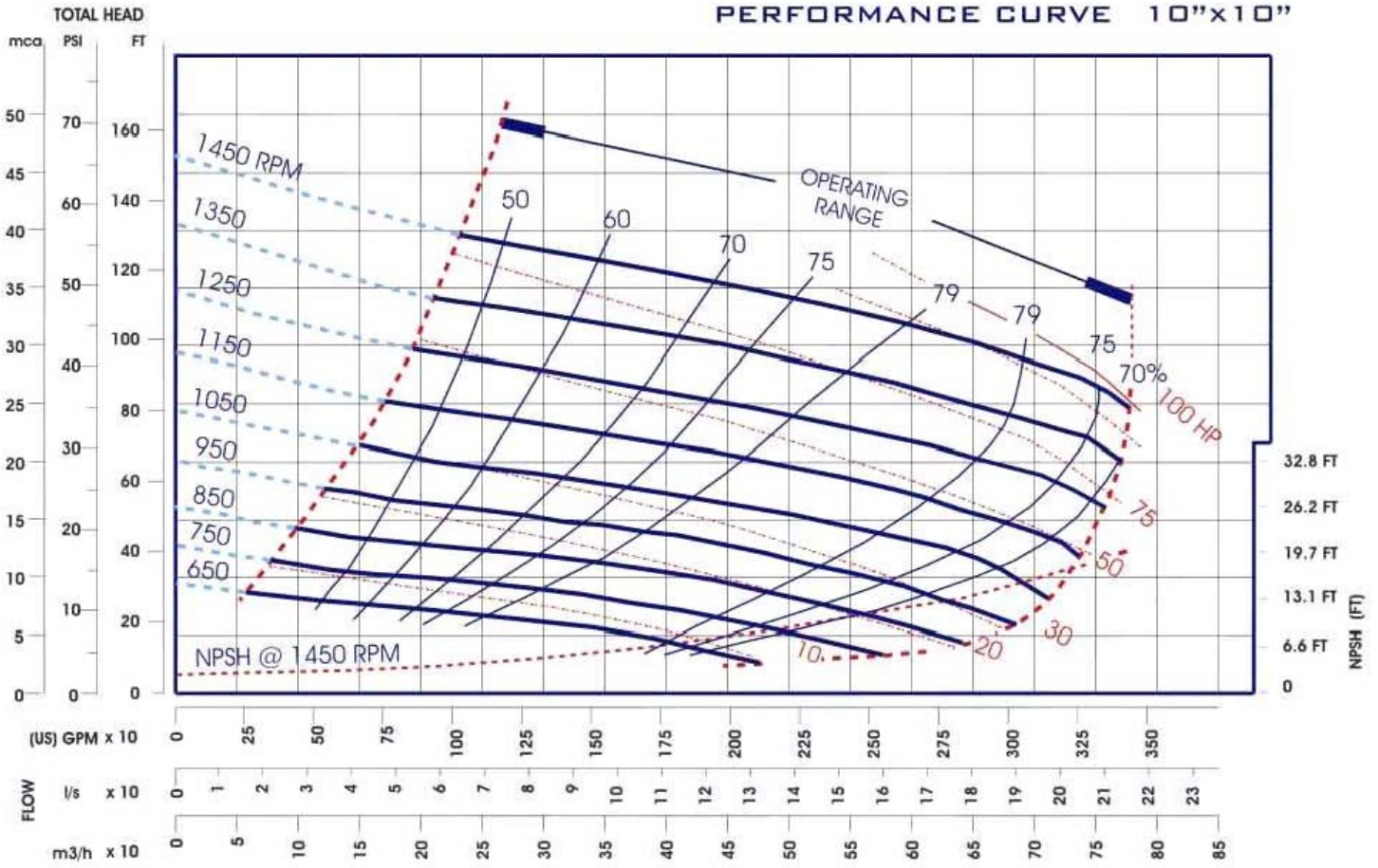
Pump Data	Self Priming Head
Net Weight: 1400 lbs	650 rpm: 7' – 750 rpm: 11'
Shipping Weight: 1461 lbs	850 rpm: 14' – 950 rpm: 17'
Impeller Diameter: 14¾"	1050 rpm: 18' – 1150 rpm: 18'
RPM range: 650 to 1450	1250 rpm: 19' – 1350 rpm: 22'
Max. Solids: 3"	1450 rpm: 22'
	Check NPSH before using this table

COMPONENT	MATERIALS OF CONSTRUCTION							
	STD	CI/316SS	CI/CD4MCU	CI/ADI	CI/HCI	ADI	316SS	CD4MCU
Casing	A48CL30					ADI	316SS	CD4MCU
Impeller	A60-40-18	316SS	CD4MCU	ADI	HCI	ADI	316SS	CD4MCU
Wear Plate	A48CL30	316SS	CD4MCU	ADI	HCI	ADI	316SS	CD4MCU
Cover Plate	A48CL30					ADI	316SS	CD4MCU
Bearing Housing	A48CL30					ADI	316SS	CD4MCU
Seal Plate	A48CL30	316SS	CD4MCU	ADI	HCI	ADI	316SS	CD4MCU
Flap Valve	NEOPRENE					VITON		
Impeller Shaft	ANSI4140HT	ANSI17-4PH						
Seal Sleeve	ANSI4140HT	ANSI17-4PH						
Flanges	A48CL30					ADI	316SS	CD4MCU
O'rings	BUNA					VITON		
Mechanical Seal	316SS,BUNA,TUNGS/TITANIUM CARBIDE					316SS,VITON,TUNGS/TITANIUM CARBIDE		



ML-10 Low Pressure Self Primer Pump

PERFORMANCE CURVE 10"x10"





ML-12 Low Pressure Self Primer Pump



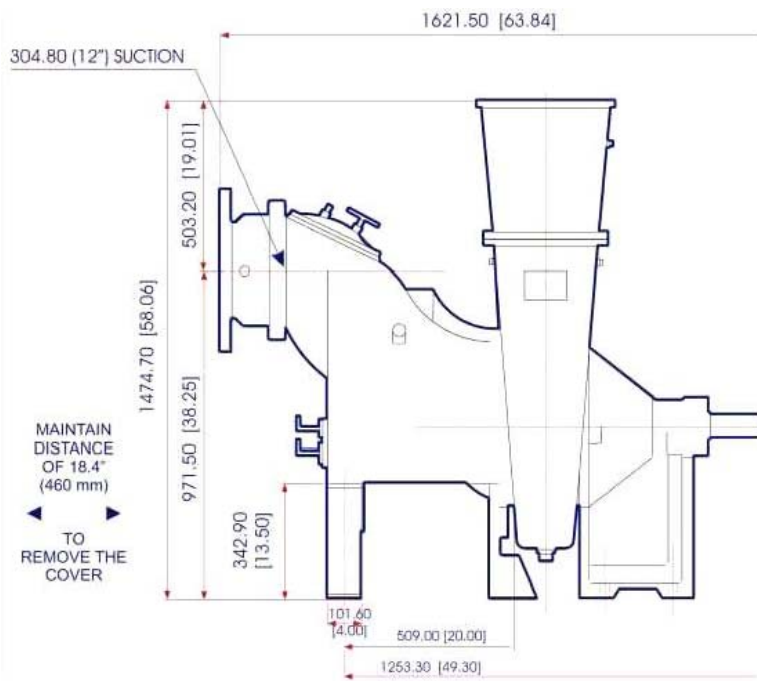
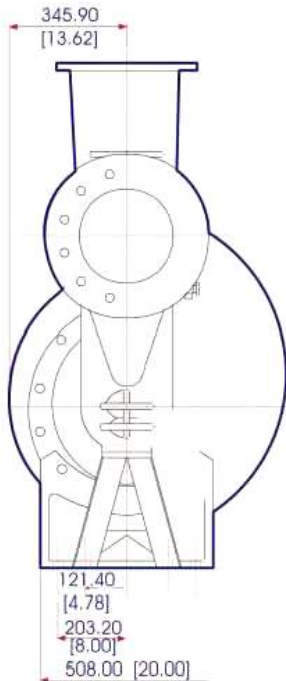
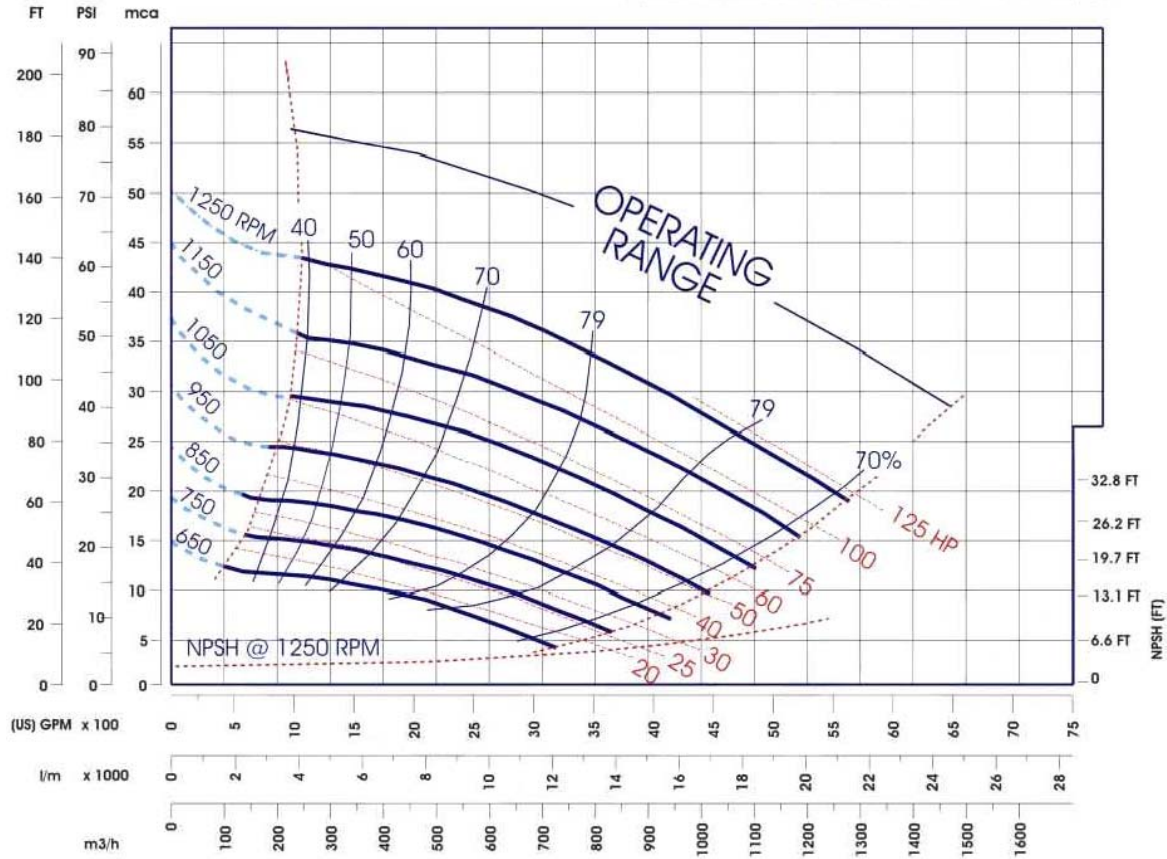
Pump Data	Self Priming Head
Net Weight: 2200 lbs Shipping Weight: 2350 lbs Impeller Diameter: 18" RPM range: 650 to 1250 Max. Solids: 3 "	650 rpm: 5' – 750 rpm: 9' 850 rpm: 13' – 950 rpm: 15' 1050 rpm: 16' – 1150 rpm: 16' 1250 rpm: 16' Check NPSH before using this table

COMPONENT	MATERIALS OF CONSTRUCTION							
	STD	CI/316SS	CI/CD4MCU	CI/ADI	CI/HCI	ADI	316SS	CD4MCU
Casing	A48CL30					ADI	316SS	CD4MCU
Impeller	A60-40-18	316SS	CD4MCU	ADI	HCI	ADI	316SS	CD4MCU
Wear Plate	A48CL30	316SS	CD4MCU	ADI	HCI	ADI	316SS	CD4MCU
Cover Plate	A48CL30					ADI	316SS	CD4MCU
Bearing Housing	A48CL30					ADI	316SS	CD4MCU
Seal Plate	A48CL30	316SS	CD4MCU	ADI	HCI	ADI	316SS	CD4MCU
Flap Valve	NEOPRENE					VITON		
Impeller Shaft	ANSI4140HT	ANSI17-4PH						
Seal Sleeve	ANSI4140HT	ANSI17-4PH						
Flanges	A48CL30					ADI	316SS	CD4MCU
O'rings	BUNA					VITON		
Mechanical Seal	316SS,BUNA,TUNGS/TITANIUM CARBIDE					316SS,VITON,TUNGS/TITANIUM CARBIDE		



ML-12 Low Pressure Self Primer Pump

PERFORMANCE CURVE 12" X 12"





MH-3 High Pressure Self Primer Pump



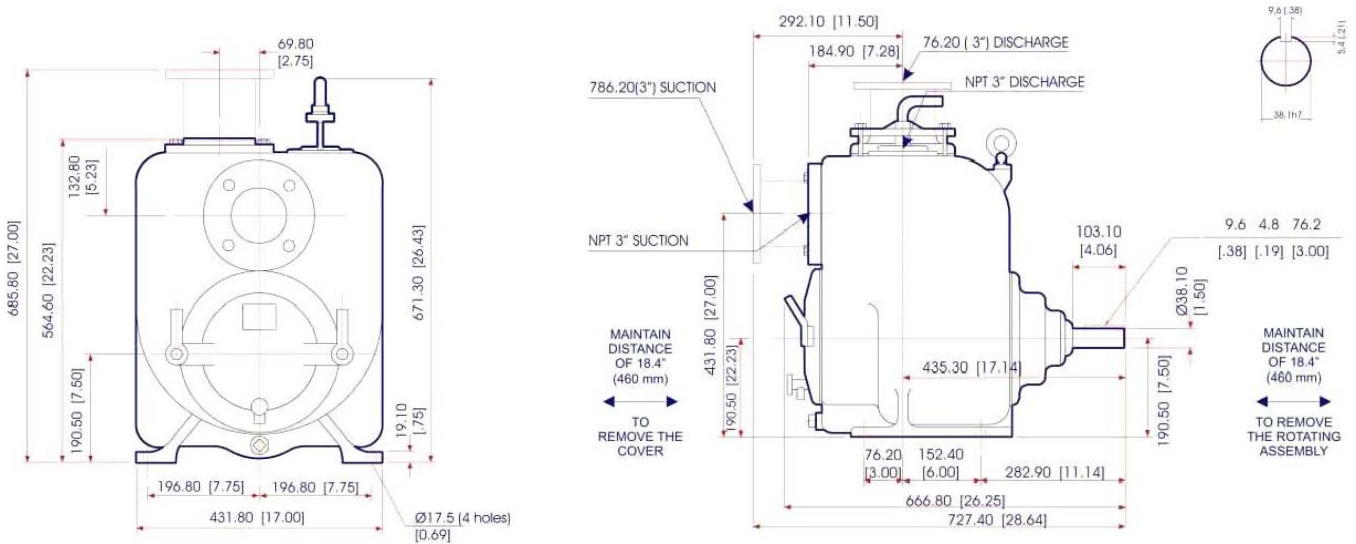
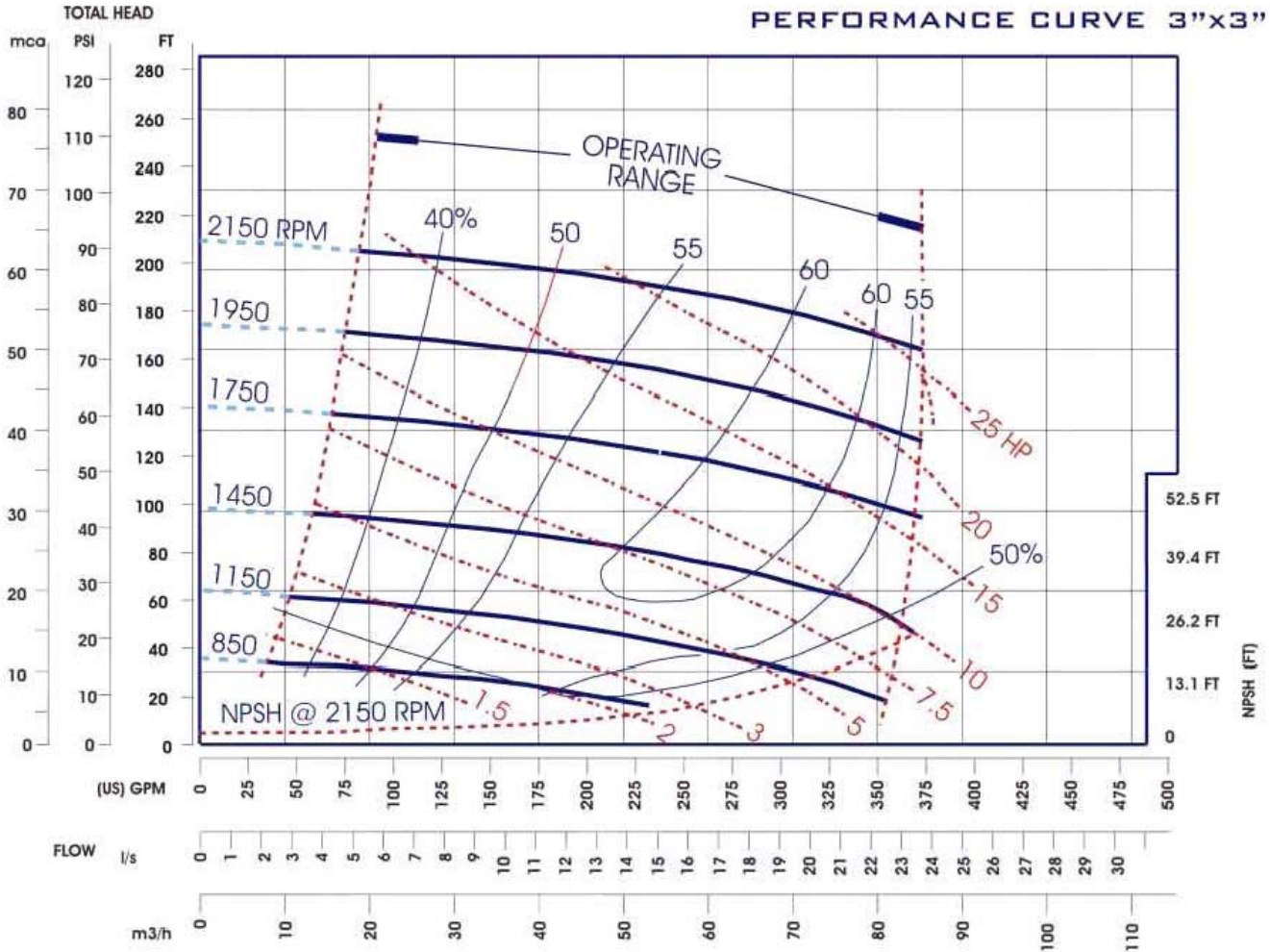
Pump Data	Self Priming Head
Net Weight: 472 lbs	850 rpm: 7' – 1150 rpm: 9'
Shipping Weight: 497 lbs	1450 rpm: 15' – 1750 rpm: 25'
Impeller Diameter: 11"	1950 rpm: 25' – 2150 rpm: 25'
RPM range: 850 to 2150	
Max. Solids: 1-3/16"	Check NPSH before using this table

COMPONENT	MATERIALS OF CONSTRUCTION							
	STD	CI/316SS	CI/CD4MCU	CI/ADI	CI/HCI	ADI	316SS	CD4MCU
Casing	A48CL30					ADI	316SS	CD4MCU
Impeller	A60-40-18	316SS	CD4MCU	ADI	HCI	ADI	316SS	CD4MCU
Wear Plate	A48CL30	316SS	CD4MCU	ADI	HCI	ADI	316SS	CD4MCU
Cover Plate	A48CL30					ADI	316SS	CD4MCU
Bearing Housing	A48CL30					ADI	316SS	CD4MCU
Seal Plate	A48CL30	316SS	CD4MCU	ADI	HCI	ADI	316SS	CD4MCU
Flap Valve	NEOPRENE					VITON		
Impeller Shaft	ANSI4140HT	ANSI17-4PH						
Seal Sleeve	ANSI4140HT	ANSI17-4PH						
Flanges	A48CL30					ADI	316SS	CD4MCU
O'rings	BUNA					VITON		
Mechanical Seal	316SS,BUNA,TUNGS/TITANIUM CARBIDE					316SS,VITON,TUNGS/TITANIUM CARBIDE		



MH-3 High Pressure Self Primer Pump

PERFORMANCE CURVE 3"x3"





MH-4 High Pressure Self Primer Pump



Pump Data	Self Priming Head
Net Weight: 600 lbs Shipping Weight: 655 lbs Impeller Diameter: 11" RPM range: 850 to 2150 Max. Solids: 1-1/8"	850 rpm: 8' – 1150 rpm: 10' 1450 rpm: 12' – 1750 rpm: 13' 1950 rpm: 15' – 2150 rpm: 17' Check NPSH before using this table

COMPONENT	MATERIALS OF CONSTRUCTION							
	STD	CI/316SS	CI/CD4MCU	CI/ADI	CI/HCI	ADI	316SS	CD4MCU
Casing	A48CL30					ADI	316SS	CD4MCU
Impeller	A60-40-18	316SS	CD4MCU	ADI	HCI	ADI	316SS	CD4MCU
Wear Plate	A48CL30	316SS	CD4MCU	ADI	HCI	ADI	316SS	CD4MCU
Cover Plate	A48CL30					ADI	316SS	CD4MCU
Bearing Housing	A48CL30					ADI	316SS	CD4MCU
Seal Plate	A48CL30	316SS	CD4MCU	ADI	HCI	ADI	316SS	CD4MCU
Flap Valve	NEOPRENE					VITON		
Impeller Shaft	ANSI4140HT	ANSI17-4PH						
Seal Sleeve	ANSI4140HT	ANSI17-4PH						
Flanges	A48CL30					ADI	316SS	CD4MCU
O'rings	BUNA					VITON		
Mechanical Seal	316SS,BUNA,TUNGS/TITANIUM CARBIDE					316SS,VITON,TUNGS/TITANIUM CARBIDE		



MH-6 High Pressure Self Primer Pump



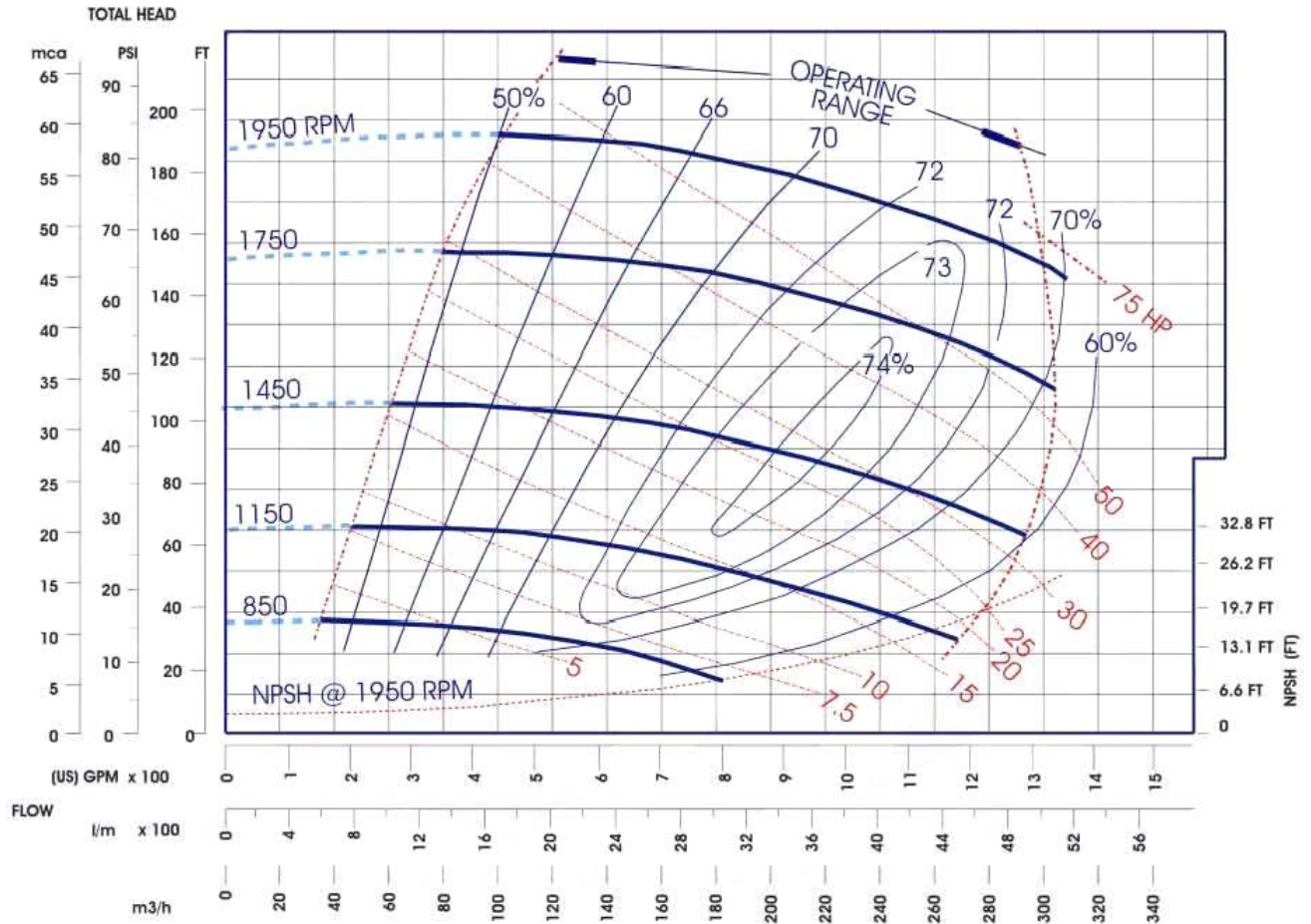
Pump Data	Self Priming Head
Net Weight: 910 lbs Shipping Weight: 965 lbs Impeller Diameter: 12 ½” RPM range: 850 to 1950 Max. Solids: 1 ¼”	850 rpm: 8’ – 1150 rpm: 10’ 1450 rpm: 10’ – 1750 rpm: 15’ 1950 rpm: 15’ Check NPSH before using this table

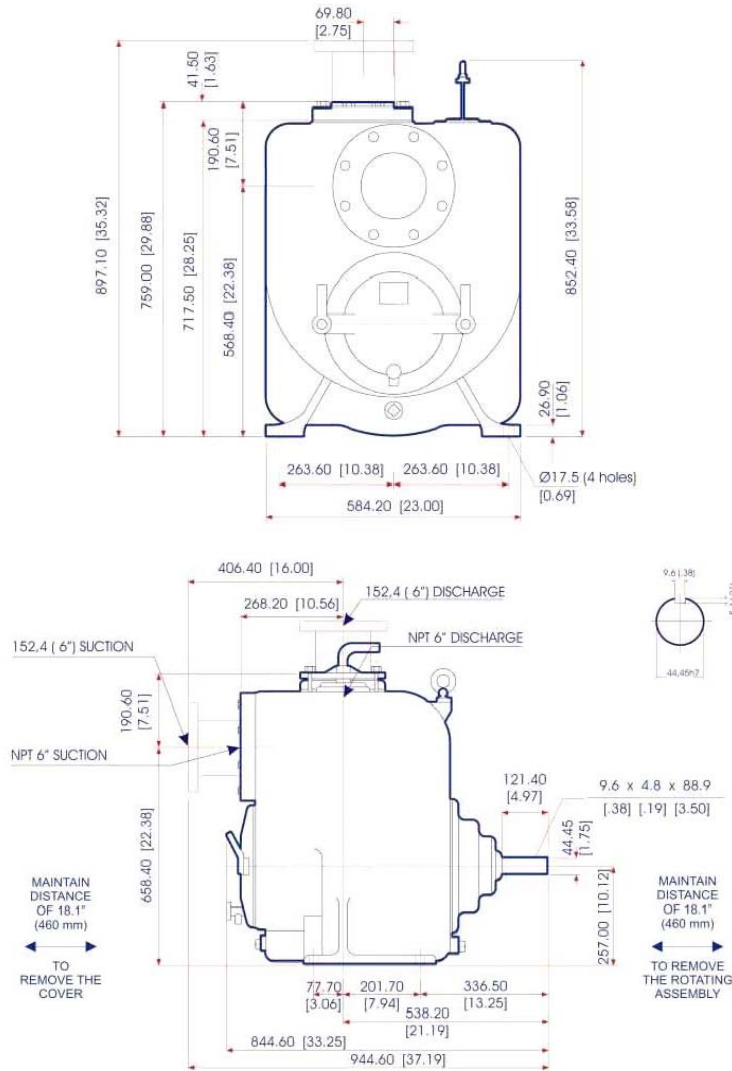
COMPONENT	MATERIALS OF CONSTRUCTION							
	STD	CI/316SS	CI/CD4MCU	CI/ADI	CI/HCI	ADI	316SS	CD4MCU
Casing	A48CL30					ADI	316SS	CD4MCU
Impeller	A60-40-18	316SS	CD4MCU	ADI	HCI	ADI	316SS	CD4MCU
Wear Plate	A48CL30	316SS	CD4MCU	ADI	HCI	ADI	316SS	CD4MCU
Cover Plate	A48CL30					ADI	316SS	CD4MCU
Bearing Housing	A48CL30					ADI	316SS	CD4MCU
Seal Plate	A48CL30	316SS	CD4MCU	ADI	HCI	ADI	316SS	CD4MCU
Flap Valve	NEOPRENE					VITON		
Impeller Shaft	ANSI4140HT	ANSI17-4PH						
Seal Sleeve	ANSI4140HT	ANSI17-4PH						
Flanges	A48CL30					ADI	316SS	CD4MCU
O’rings	BUNA					VITON		
Mechanical Seal	316SS,BUNA,TUNGS/TITANIUM CARBIDE					316SS,VITON,TUNGS/TITANIUM CARBIDE		



MH-6 High Pressure Self Primer Pump

PERFORMANCE CURVE 6"x6"







WARRANTY

Pumping units manufactured or distributed by Intra Corporation, are guaranteed to be free from defects in material and workmanship for one year from date of shipment from factory in Florida. The obligation under this Warranty, statutory or otherwise, is limited to replacement or repair at Saint Petersburg, Florida factory or at a point designated by Intra Corporation, of such part as shall appear to us upon inspection at such point, to have been defective in material or workmanship.

This Warranty does not obligate Intra Corporation to bear the cost of labor or transportation charges in connection with replacement or repair of defective parts; nor shall it apply to a pump upon which repairs or alterations have been made unless authorized by Intra Corporation.

No warranty is made in respect to engines, motors, or trade accessories, such being subject to warranties of their respective manufacturers.

No express implied or statutory warranty, other than herein set forth is made or authorized to be made by Intra Corporation.

In no event shall Intra Corporation be liable for consequential damages or contingent liabilities arising out of the failure of any Motion pumps or parts thereof to operate properly.

INTRA CORPORATION
Saint Petersburg, Florida