Models: PO3LA, PO3LB

1-1/2" & 2-1/2" Spherical Solids Handling
Universal Drive

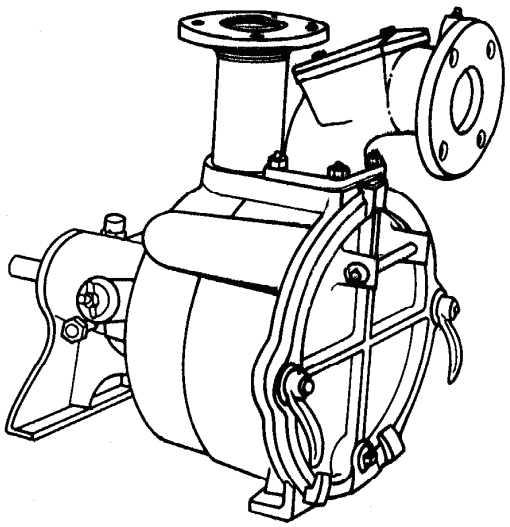
I&O Manual

Self-Priming Solids Handling Pumps

Specifications:

SUCTION/DISCHARGE .....3" (76mm) x 3" (76mm) 125 lb. Flange
LIQUID TEMPERATURE .....160°F (71°C) Continuous
SOLIDS HANDLING:
PO3LA .....1-1/2" (38mm)
PO3LB .....2-1/2" (63.5mm)
VOLUTE/WEARPLATE .....Cast Iron ASTM A-48, Class 30
Replaceable External Clearance Adjustment
CASE.....Cast Iron ASTM A-48, Class 30
END COVER .....Cast Iron ASTM A-48, Class 30
Full Diameter, Removable
SEAL PLATE .....Alloy Steel, Replaceable
PEDESTAL.....Cast Iron ASTM A-48, Class 30
IMPELLER: *Design* .....Two Vane, Open. Dynamically Balanced, ISO G6.3
Material .....Cast Iron ASTM A-48, Class 30
SHAFT .....High Carbon Steel
SHAFT SLEEVE .....316 Stainless Steel
SQUARE RINGS .....Buna-N
HARDWARE .....Corrosion Resistant Steel
PAINT .....Air Dry Enamel.
SEAL: *Design* .....Single Mechanical
Lubrication .....Grease, with Self-Feeding Lubricator
Material .....Rotating Faces - Carbon
Stationary Faces - Ceramic
Elastomer - Buna-N
Hardware -300 Series Stainless
BEARING - PUMP END:
Design .....Single Row, Ball, Oil Lubricated
Load .....Radial & Thrust
BEARING - DRIVE END:
Design .....Single Row, Ball, Oil Lubricated
Load.....Radial & Thrust
CHECK VALVE:
Material .....Elbow - Cast Iron ASTM A-48, Class 30
Valve Flap - Neoprene
Weight - Cast Iron ASTM A-48, Class 30

OPTIONAL EQUIPMENT.....Seal Materials, Case Heater, Stainless Hardware; High Temperature Control; Flex Coupled Assy. with Base & OSHA Guard; Right Hand V-Belt Drive Assy. and Left Hand V-Belt Drive Assy. with Unit Base, Motor Adjusting Base & OSHA Guard



Model: **PO3LA-8D**
PO3LA-7B
PO3LB-7B

Sample Specification

DESCRIPTION:

SELF-PRIMING CENTRIFUGAL SOLIDS HANDLING PUMPS DESIGNED FOR MUNICIPAL AND INDUSTRIAL APPLICATIONS.

WARNING:
CANCER AND REPRODUCTIVE HARM - WWW.P65WARNINGS.CA.GOV

Models: PO3LA, PO3LB

1-1/2" & 2-1/2" Spherical Solids Handling
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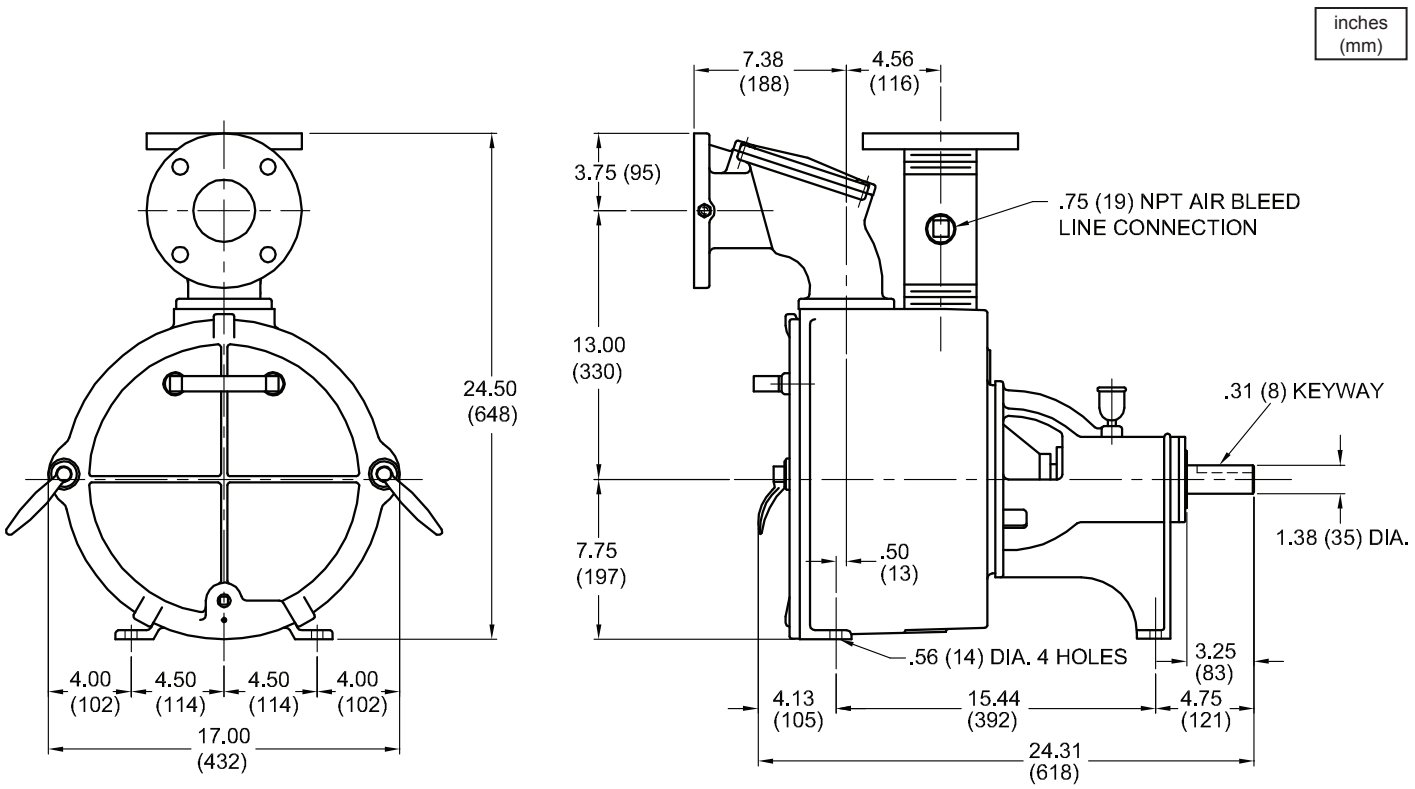

MODEL NO	PART NO	WEIGHT LBS. (kg)	
PO3LA-8D	3C01D-0008D-031	275 (125)	
PO3LA-7B	3C01D-0007B-031	275 (125)	
PO3LB-7B	3C03D-0007B-031	305 (138)	

IMPORTANT !

1.) **DO NOT** USE FOR PUMPING FLUIDS WITH A FLASH POINT OF LESS THAN 100°F.
2.) MAKE CERTAIN THAT PUMP AND/OR MOTOR ASSEMBLY AND CONTROLS HAVE THE APPROPRIATE RATINGS FOR THE GIVEN APPLICATION AREA CLASSIFICATION. (ie DIVISION I, AGENCY LISTING ETC.)

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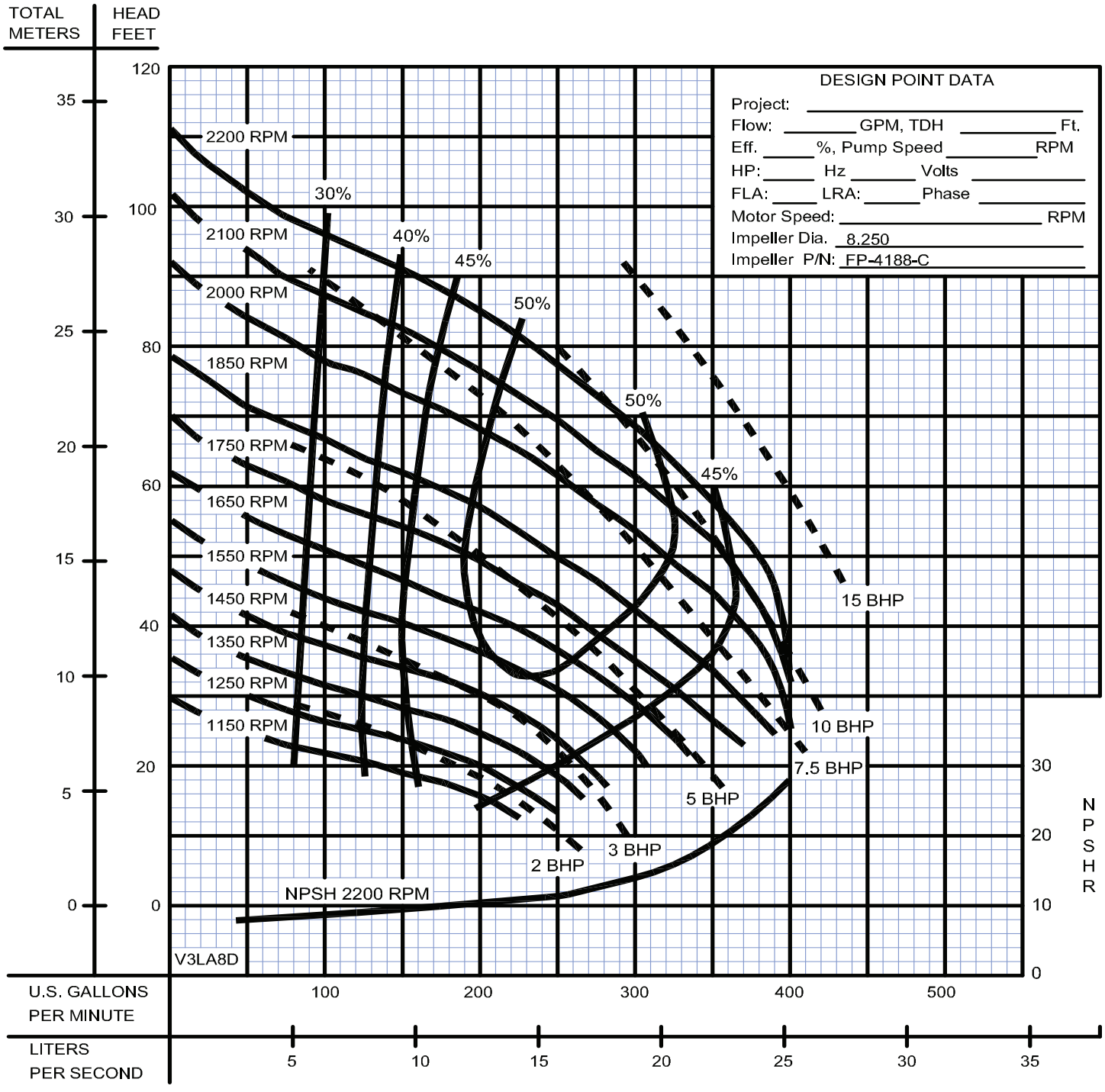
Model: PO3LA-8D

Performance Curve
Various RPM

I&O Manual

Self-Priming Solids Handling Pumps



MAXIMUM DRY PRIMING LIFT					
PUMP SPEED	**2 Min**	**4 Min**	**6 Min**	**8 Min**	**10 Min**
1150 RPM	8 Ft.	14 Ft.	17 Ft.	18 Ft.	19 Ft.
1450 RPM	14 Ft.	20 Ft.	22 Ft.	23 Ft.	25 Ft.
1750 RPM	22 Ft.	25 Ft.	25 Ft.	25 Ft.	25 Ft.
2050 RPM	24 Ft.	25 Ft.	25 Ft.	25 Ft.	25 Ft.
2200 RPM	25 Ft.	25 Ft.	25 Ft.	25 Ft.	25 Ft.

When pump is operating, the **SUCTION LIFT** is limited by the available **NPSH** which is the corrected atmospheric pressure minus the dynamic suction lift, vapor pressure loss and 2 foot safety factor. This ***net available*** **NPSH** must exceed the ***required*** **NPSH** of the pump or a reduction of capacity, loss of efficiency, noise, vibration and cavitation will result. Calculate the dynamic suction lift from the ***low*** liquid level to the centerline of the impeller. When pump is priming, it is limited by the dry **PRIMING LIFT** which is the vertical distance from the ***high*** liquid level to the centerline of the impeller.

Testing is performed with water, specific gravity 1.0 @ 68° F @ (20°C), other fluids may vary performance

Model: PO3LA-7B

Performance Curve
Various RPM

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Self-Priming Solids Handling Pumps

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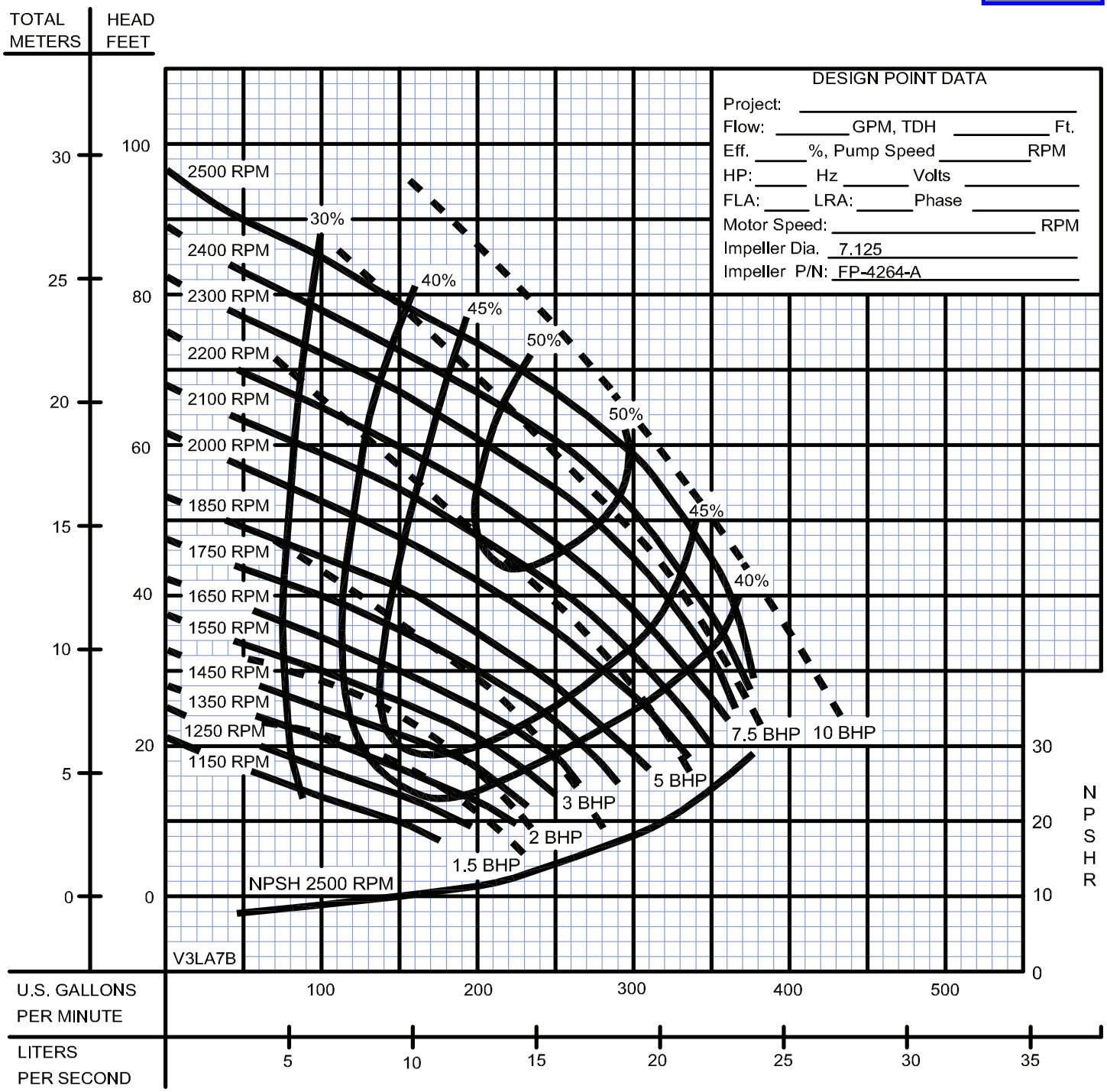

MAXIMUM DRY PRIMING LIFT					
PUMP SPEED	**2 Min**	**4 Min**	**6 Min**	**8 Min**	**10 Min**
1150 RPM	7 Ft.	11 Ft.	12 Ft.	12 Ft.	13 Ft.
1450 RPM	13 Ft.	16 Ft.	18 Ft.	20 Ft.	22 Ft.
1750 RPM	16 Ft.	22 Ft.	23 Ft.	25 Ft.	25 Ft.
2050 RPM	20 Ft.	23 Ft.	25 Ft.	25 Ft.	25 Ft.
2350 RPM	25 Ft.	25 Ft.	25 Ft.	25 Ft.	25 Ft.
2500 RPM	25 Ft.	25 Ft.	25 Ft.	25 Ft.	25 Ft.

When pump is operating, the **SUCTION LIFT** is limited by the available **NPSH** which is the corrected atmospheric pressure minus the dynamic suction lift, vapor pressure loss and 2 foot safety factor. This ***net available*** **NPSH** must exceed the ***required*** **NPSH** of the pump or a reduction of capacity, loss of efficiency, noise, vibration and cavitation will result. Calculate the dynamic suction lift from the ***low*** liquid level to the centerline of the impeller. When pump is priming, it is limited by the dry **PRIMING LIFT** which is the vertical distance from the ***high*** liquid level to the centerline of the impeller.

Testing is performed with water, specific gravity 1.0 @ 68° F @ (20°C), other fluids may vary performance

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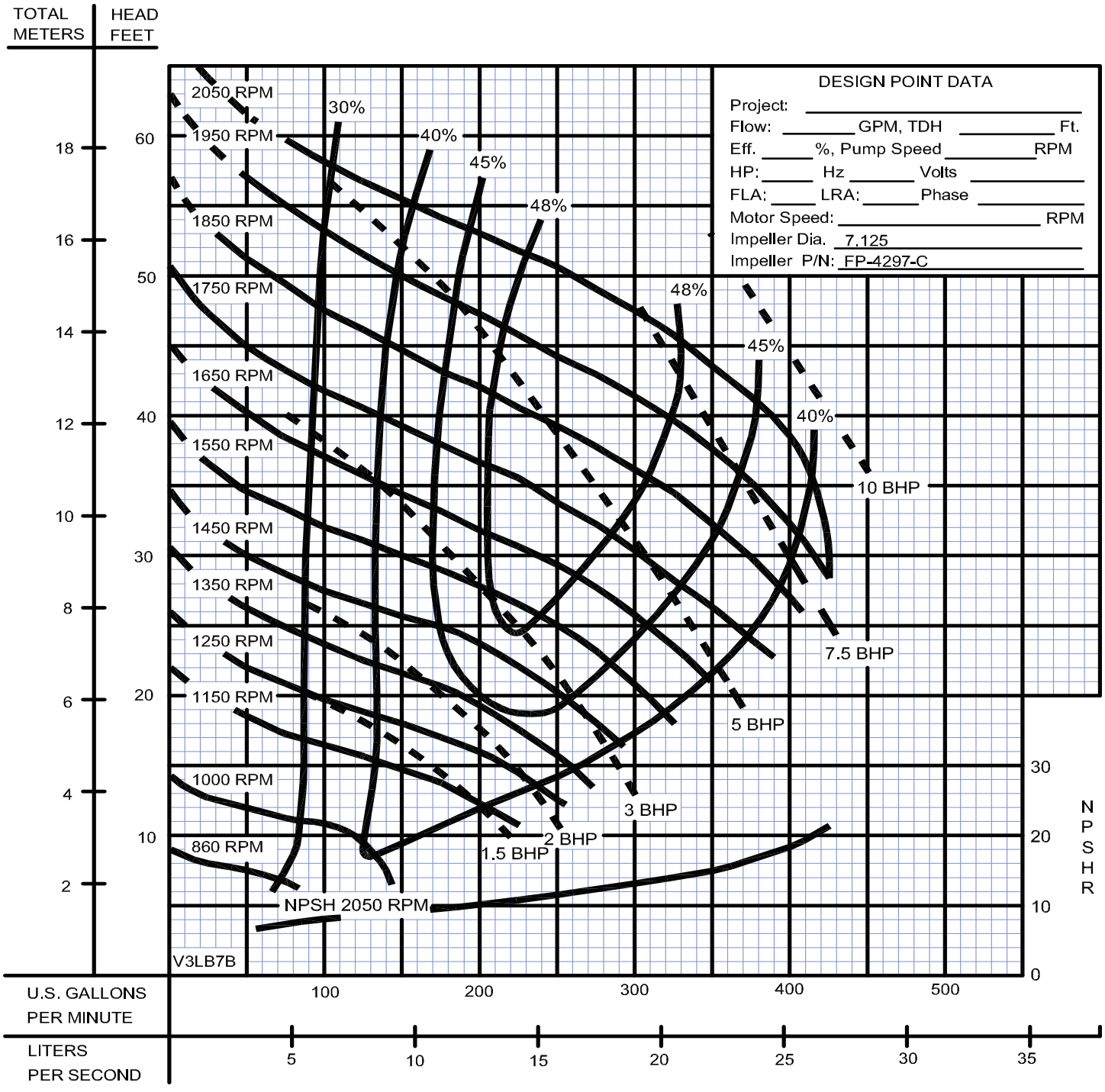
Model: PO3LB-7B

Performance Curve
Various RPM

I&O Manual

Self-Priming Solids Handling Pumps



MAXIMUM DRY PRIMING LIFT					
PUMP SPEED	**2 Min**	**4 Min**	**6 Min**	**8 Min**	**10 Min**
1150 RPM	7 Ft.	11 Ft.	12 Ft.	12 Ft.	13 Ft.
1450 RPM	13 Ft.	16 Ft.	18 Ft.	20 Ft.	22 Ft.
1750 RPM	16 Ft.	22 Ft.	23 Ft.	25 Ft.	25 Ft.
2050 RPM	20 Ft.	23 Ft.	25 Ft.	25 Ft.	25 Ft.
2350 RPM	25 Ft.	25 Ft.	25 Ft.	25 Ft.	25 Ft.
2500 RPM	25 Ft.	25 Ft.	25 Ft.	25 Ft.	25 Ft.

When pump is operating, the **SUCTION LIFT** is limited by the available **NPSH** which is the corrected atmospheric pressure minus the dynamic suction lift, vapor pressure loss and 2 foot safety factor. This ***net available*** **NPSH** must exceed the ***required*** **NPSH** of the pump or a reduction of capacity, loss of efficiency, noise, vibration and cavitation will result. Calculate the dynamic suction lift from the ***low*** liquid level to the centerline of the impeller. When pump is priming, it is limited by the dry **PRIMING LIFT** which is the vertical distance from the ***high*** liquid level to the centerline of the impeller.

DO NOT Operate in "DASHED" Area of HQ Curve. Testing is performed with water, specific gravity 1.0 @ 68º F @ (20ºC), other fluids may vary performance

Models: PO3LA & PO3LB

Horizontal V-Belt Base, Motor Speed: 1750 RPM
V-Belt Drive, Sheaves & Bushings, Pump Shaft: 1.375 Dia.

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Self-Priming Solids Handling Pumps

I&O Manual

Driven Speed	Speed Ratio	Motor HP	Frame Size	Center Distance	Drive P/N	Driven Speed	Speed Ratio	Motor HP	Frame Size	Center Distance	Drive P/N
2500	1.43	20	256T	15.8	090735	1800	1.03	7.5	213-215T	17.3	090775
2500	1.43	15	254T	15.8	090736	1800	1.03	5	213T	17.3	090776
2500	1.43	10	215T	15.8	090737	1800	1.03	5	184T	17.3	090777
						1800	1.03	3	182-184T	17.3	090778
2450	1.40	15	254T	17.1	090738						
2450	1.40	10	215T	17.1	090739	1750	1.00	7.5	213-215T	16.3	090779
2450	1.40	7.5	213-215T	17.1	090740	1750	1.00	5	213T	16.3	090780
						1750	1.00	5	184T	16.3	090781
2400	1.37	15	254T	16.1	090741	1750	1.00	3	182-184T	16.3	090782
2400	1.37	10	215T	16.1	090742						
2400	1.37	7.5	213-215T	16.1	090742	1700	1.03	5	213T	16.1	090783
						1700	1.03	5	184T	16.1	090784
2350	1.34	15	254T	17.0	090743	1700	1.03	3	182-184T	16.1	090785
2350	1.34	10	215T	17.0	090744						
2350	1.34	7.5	213-215T	17.0	090744	1650	1.06	5	213T	16.5	090786
						1650	1.06	5	184T	16.5	090787
2300	1.31	15	254T	16.9	090745	1650	1.06	3	182-184T	16.5	090788
2300	1.31	10	215T	16.9	090746						
2300	1.31	7.5	213-215T	16.9	090747	1600	1.09	5	213T	17.0	090789
						1600	1.09	5	184T	17.0	090790
2250	1.29	15	254T	16.0	090748	1600	1.09	3	182-184T	17.0	090790
2250	1.29	10	215T	16.3	090749						
2250	1.29	7.5	213-215T	16.3	090750	1550	1.13	5	213T	16.4	090791
						1550	1.13	5	184T	16.4	090792
2200	1.25	15	254T	16.5	090751	1550	1.13	3	182-184T	16.4	090793
2200	1.25	10	215T	17.1	090752						
2200	1.25	7.5	213-215T	17.1	090752	1500	1.16	5	213T	15.9	090794
						1500	1.16	5	184T	15.9	090795
2150	1.23	10	215T	16.7	090753	1500	1.16	3	182-184T	15.9	090796
2150	1.23	7.5	213-215T	16.7	090754	1500	1.16	2	182T	15.9	090796
2150	1.23	5	213T	16.7	090754	1500	1.16	2	145T	15.9	090797
2150	1.23	5	184T	16.7	090755						
						1450	1.20	5	213T	16.4	090798
2100	1.20	10	215T	16.4	090756	1450	1.20	5	184T	16.4	090799
2100	1.20	7.5	213-215T	16.4	090757	1450	1.20	3	182-184T	16.4	090800
2100	1.20	5	213T	16.4	090757	1450	1.20	2	182T	16.4	090801
2100	1.20	5	184T	16.4	090758	1450	1.20	2	145T	16.4	090802
2050	1.17	10	215T	16.9	090759	1400	1.25	3	182-184T	17.1	090803
2050	1.17	7.5	213-215T	16.9	090760	1400	1.25	2	182T	17.1	090803
2050	1.17	5	213T	16.9	090760	1400	1.25	2	145T	17.1	090804
2050	1.17	5	184T	16.9	090761						
						1350	1.30	3	182-184T	16.0	090805
2000	1.14	10	215T	16.1	090762	1350	1.30	2	182T	16.0	090805
2000	1.14	7.5	213-215T	16.1	090763	1350	1.30	2	145T	16.0	090806
2000	1.14	5	213T	16.1	090763						
2000	1.14	5	184T	16.1	090764	1300	1.35	3	182-184T	16.3	090807
						1300	1.35	2	182T	16.3	090808
1950	1.11	10	215T	16.3	090765	1300	1.35	2	145T	16.3	090809
1950	1.11	7.5	213-215T	16.3	090766	1300	1.35	1.5	145T	16.3	090809
1950	1.11	5	213T	16.3	090767						
1950	1.11	5	184T	16.3	090768	1250	1.40	3	182-184T	17.4	090810
						1250	1.40	2	182T	17.4	090811
1900	1.09	7.5	213-215T	17.0	090769	1250	1.40	2	145T	17.4	090812
1900	1.09	5	213T	17.0	090770	1250	1.40	1.5	145T	17.4	090812
1900	1.09	5	184T	17.0	090771						
						1200	1.46	2	182T	16.7	090813
1850	1.06	7.5	213-215T	16.9	090772	1200	1.46	2	145T	16.7	090814
1850	1.06	5	213T	16.9	090773	1200	1.46	1.5	145T	16.7	090814
1850	1.06	5	184T	16.9	090774						
						1150	1.52	2	182T	16.3	090815
						1150	1.52	2	145T	16.3	090816
						1150	1.52	1.5	145T	16.3	090817