

Pioneer Prime

PP86S17L71



Typical Pump Configuration

Performance

Pioneer Prime series - vacuum assisted, end suction centrifugal pump

Bare shaft, frame mounted, fully automatic dry priming, vacuum assisted, run dry, heavy duty solids handling pump

Size	8" x 6" 200 x 150 mm
Flow, Max	5,600 USgpm 1290 m ³ /h 350 l/s
Head, Max	440 feet 130 meters
Flow at BEP	3,350 USgpm 770 m ³ /h 210 l/s
Efficiency at BEP	72%
Solids Handling, Max	3.0" 76 mm
Operating Speed, Max	1980 rpm
Suction Connection	8" (200 mm) 150 ANSI Flanges
Delivery Connection	6" (150 mm) 150 ANSI Flanges
Bearing Lubrication	Oil STD Grease optional
Fasteners	Imperial

Applications

Dirty water	Raw water pumps
Sewage bypass	Flood pumps
Silt returns	Mine dewatering
Cooling pumps	

High pressure, high flow, heavy duty solids handling pump

Designed to run over a broad range of performance while delivering outstanding suction lift, the PP86S17 is the solid choice. The rugged construction and modular design provide proven reliability and flexibility in the most demanding applications.

UltraPrime™ Priming System

Priming System	Mechanically Driven Diaphragm Style Vacuum Pump
Air Removal Capability	50 CFM
Priming Chamber	Single chamber with positive sealing air separation PosiValve™ with stainless steel float ball & linkage.
Discharge Check Valve	Swing Style - ductile iron with Buna-n Disc

Other Specifications

Mechanical Seal	Single seal w/ tungsten carbide vs. silicon carbide seal faces, Viton® elastomers, 300 series stainless steel hardware and spring, designed for indefinite dry running
Pump End Bearing	Single row ball
Drive End Bearing	Double Row Angular Contact
Shaft	17-4 PH Stainless Steel

Construction Materials

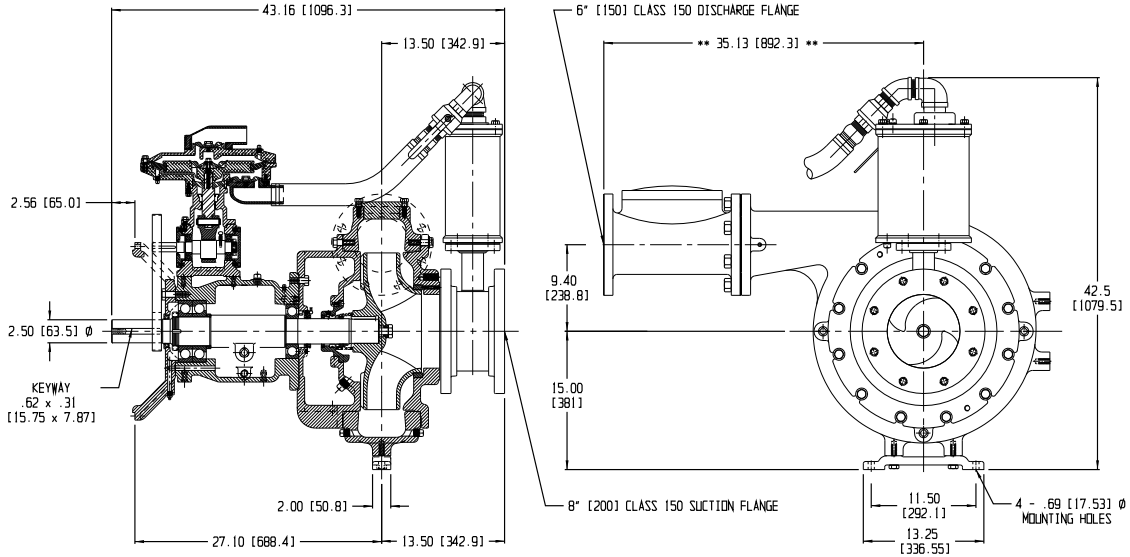
	Standard Construction	CD4MCu Stainless Steel
Impeller	CA6NM SS	CD4MCu
Volute	Ductile Iron ASTM A536 65-45-12	CD4MCu
Wear Ring	ASTM A48 Class 40 Gray Iron	316 SS
Suction Cover	Ductile Iron ASTM A536 65-45-12	CD4MCu
Brac-plate	Ductile Iron ASTM A536 65-45-12	CD4MCu

Mechanical Dimensions



Typical Pump Configuration

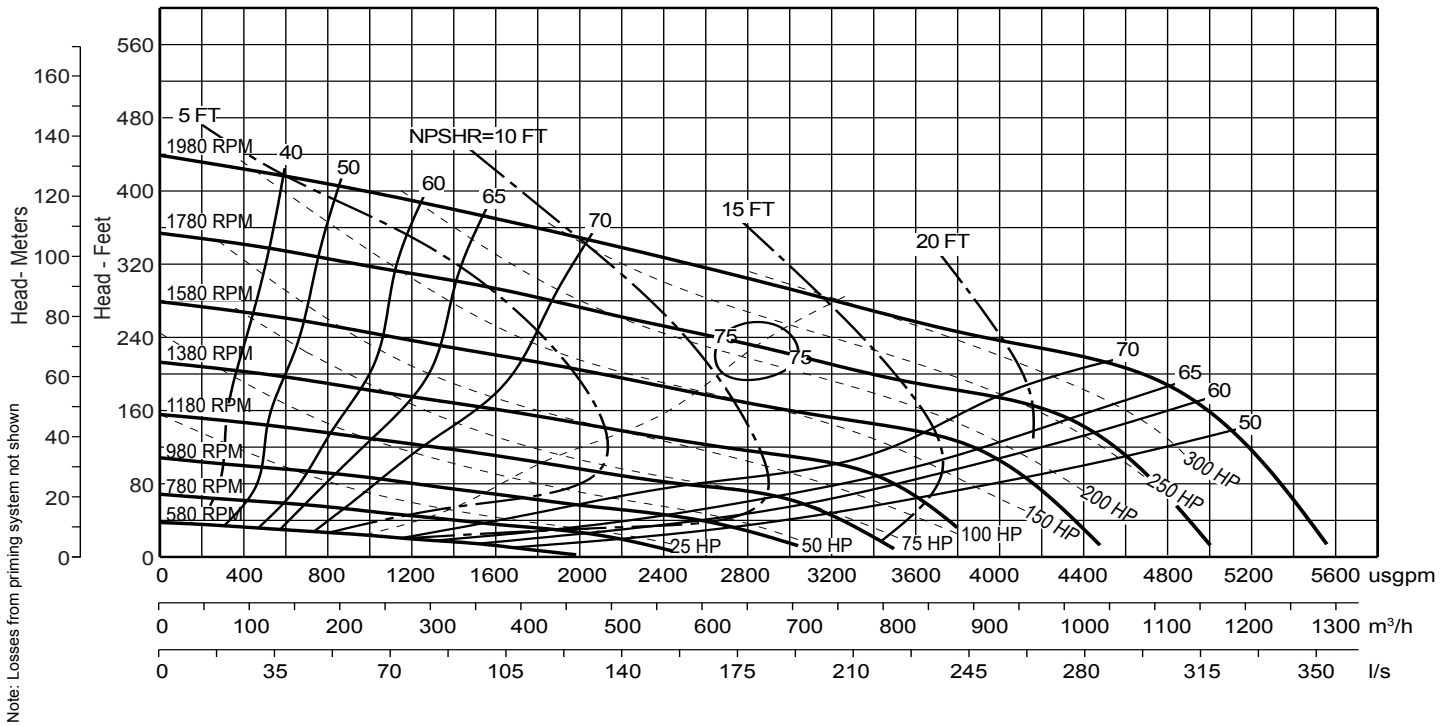
PP86S17



NOTE:
 - DIMENSIONS ARE INCHES AND (MILLIMETERS).
 - USE 11.5" OR 14.00" ENGINE DRIVE.
 - ** DIMENSION MAY VARY BASED ON VALVE MANUFACTURER **

Performance Curve

Model: PP86S17	Impeller Dia: 17"	Speed: Variable	Solids Size: 3.0"	Curve #08672HQ
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Note: Losses from priming system not shown

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