

Pump Tech Spec

Vertical Turbine – 4 Pump – Large Deck

High Flow Pump Station – 4 Pumps on a single deck 40 to 75 HP per pump; Up to 140 psi (9.7 bar); Up to 3000 gpm (189 lps, 681 m³/h)

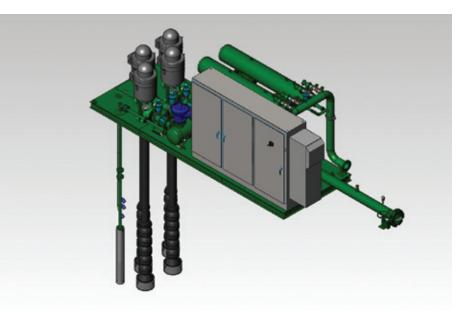
Rain Bird's 4 pump, vertical turbine pump station on a polyester powder-coated deck is designed to be installed over wet wells or vaults. Vertical turbines offer the highest hydraulic efficiency available, leading to the lowest cost of ownership of the life of the system. With a PM pump for pressure maintenance and optional IP (Intermediate Pump), this station is well-suited for large Turf and Golf Course irrigation applications with flows up to 3000 gpm (189 lps, 681 m³/h).

At-A-Glance Description

- Energy efficient Vertical turbine pumps with Variable Frequency Drive (VFD) maintain constant pressure at varying flow demand.
- High Flow capacity up to 3000 gpm at 80 psi (189 lps, 681 m³/h at 5.5 bar))
- **Sophisticated control package** with enhanced PLC software, large color touch panel display and a choice of communication options for remote access, central control software integration-ready.
- Choice of filtration options and accessories.

Standard Features

- Main Pumps
 - Marine Bronze Impellers
 - Stainless Steel Vertical Line Shaft
 - Marine Bronze Bowls
 - 60 KPSI Ductile Iron Head
- Pressure Maintenance
- 5 HP PM pump Submersible
- Motors
 - High Efficiency Motors, Weather Protected Type WP1, Class F insulation
 - Motor heaters
- Mechanical Features
 - Inlet Butterfly Isolation Valve
 - Discharge Butterfly Isolation Valve
 - Silent Check Valve
 - Pressure Relief Valve
 - Air Relief Valve per head
 - Hose bib
- Pressure / Flow
 - Stainless Steel Pressure Transducer
 - Paddle Wheel Flow Meter
- Enclosures / External Connections
 - Polyester Powder-Coated Steel Deck and Piping



- Intergral Wet Well Service Hatch
- NEMA 4 Electrical Enclosure
- Heat Exchanger on Electrical Enclosure
- Pump Control
 - VFD with pump rotation
 - Illuminated, 3-position HOA switches
 - Resettable Circuit Breakers

• Display

- 8.4 inch, Color Touch Panel Display
- Ethernet port for VNC Connectivity
- PLC (Programmable Logic Control)
 Ethernet-ready PLC Control Package
- Lake Level Safety
 - Low Level Shut Off (Float) (continued on back)

Vertical Turbine – 4 Pump – Large Deck				
Motor Size	40 HP	50 HP	60 HP	75 HP
Power Requirement	480/60/3 V/HZ/PH			
	415/50/3 V/HZ/PH – Europe			
	380/50/3 V/HZ/PH – China			
	575/60/3 V/HZ/PH – Canada			
Disconnect Size	400 Amp			
Discharge Flow at 110 psi (1)	1600 GPM 101 LPS, 363 m ³ /hr	2000 GPM 126 LPS, 454 m ³ /hr	2400 GPM 151 LPS, 545 m ³ /h	3000 GPM 189 LPS, 681 m ³ /hr
Discharge Pipe	6″	6″	8″	8″
PM Pump	5 HP Submersible PM Pump - Standard (7.5 HP Submersible PM Pump Optional)			
Optional IP Pump	10 – 30 HP - Optional			
Deck Dimensions	7'0" x 16'0" (2.13 meters x 4.88 meters)			
Min Slab Dimension	14' 6" x 26' 0" minimum (4.4 Meters x 7.9 Meters minimum)			
Wet Well Diameter	84" Diameter (min) 2.1 meters (min)			
Pump Set Length	Up to 40 ft. (12.2 meters)			
Cabinet Height (from slab)	7′ 10″ (239 cm)			

(1) Refer to pump performance curves, provided upon request from pumps@rainbird.com



Optional Features

Main Pumps

- SSt or NiAl Bronze Impellers
- SSt or NiAl Bronze Bowls

Pressure Maintenance

- 3 or 7.5 HP PM pump Submersible
- Motors
 - Premium Efficiency Motors
- Mechanical Feature
 - Well Service Valve (requires larger deck)
- Pressure / Flow
 - Magnetic Flow Meter
- Pump Control
 - VPM (VFD Per Motor)
- Display
 - 4 Line Monochrome Touch Screen

Panel Only

- Electrical Panel only (for retrofits)
- Communications
 - Ethernet Radio Modem Kit
 - Hardwire Ethernet Extender kit

Accessories

Filters

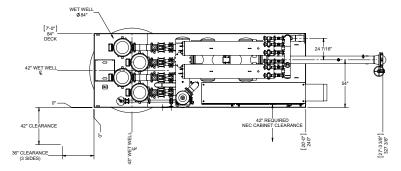
- 12" Wye Strainer Filter (1/8" openings)
- 8 or 10" Auto Backwashing Filter (250 μ)
- 8 12" Suction Scanner I-Series (300 μ)

Intake Filters

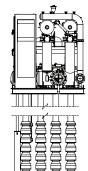
- SSt Steel Box Screen
- SSt Self Cleaning Intake Screen

Enclosures / External Connections

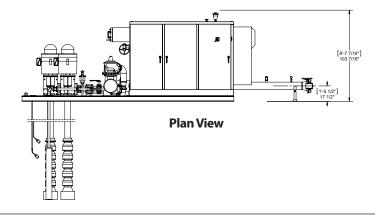
- Air Conditioning on Electrical Cabinet
 5 KW room heater
- Power Zono (120)/AC or 220/2
- Power Zone (120 VAC or 220/240 VAC)
- Custom Zee PipeLake Level Control
 - Lake Level Controls (Float or Analog)



Profile View (with I Series Filter Option)



Side View



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Details