# PUMPS





Vertical In-Line Pump

**WDM Water Systems** 



#### **Benefits**

- Two models: rigid coupling or close coupled (PI CC)
- Easy Maintenance
- Complete rotating assembly easily removed.
- Full circle register protected by confined gasket assures permanent alignment.
- Compact Designed Footprint
- Coupling Guard worker protection (PI model)

## **PI CC**



## Aplications

- Water
- HVAC
- Petrochemical
- Chemical
- Paint
- Automotive
- Metal

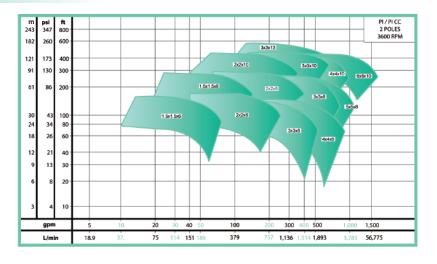


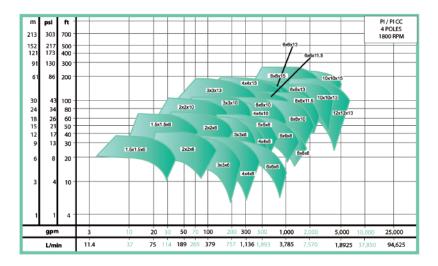
### PI CC Close Coupled Pump

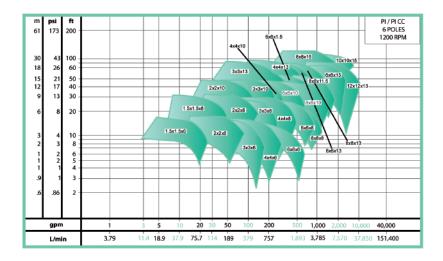
PI rigid coupling version , or PI CC with direct coupling.



### **Selection Charts**





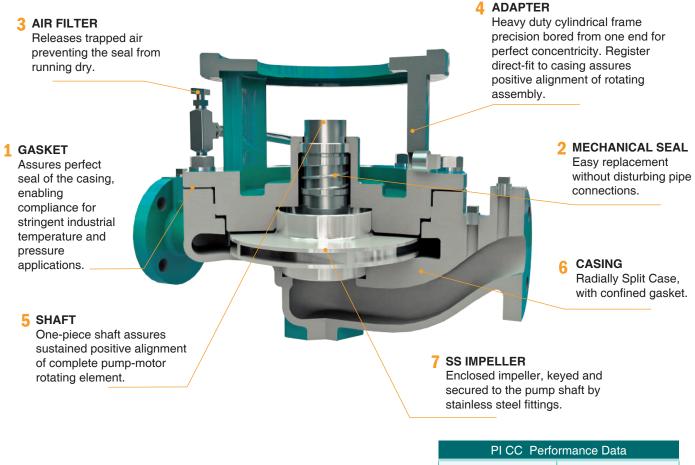




## Characteristics

#### Materials of Construction

WDM's PI CC pump is designed in Cast Iron/ SST (CF8)



PI CC Performance Data			
Flow	10,000 gpm		
Head	580 ft		
Temperature	-50° F to 300° F		
Pressure	275 psig		

- Images for general arrangement use only, not certified for construction.
- For Pump operation outside this range, please contact a WDM representative.

#### Description

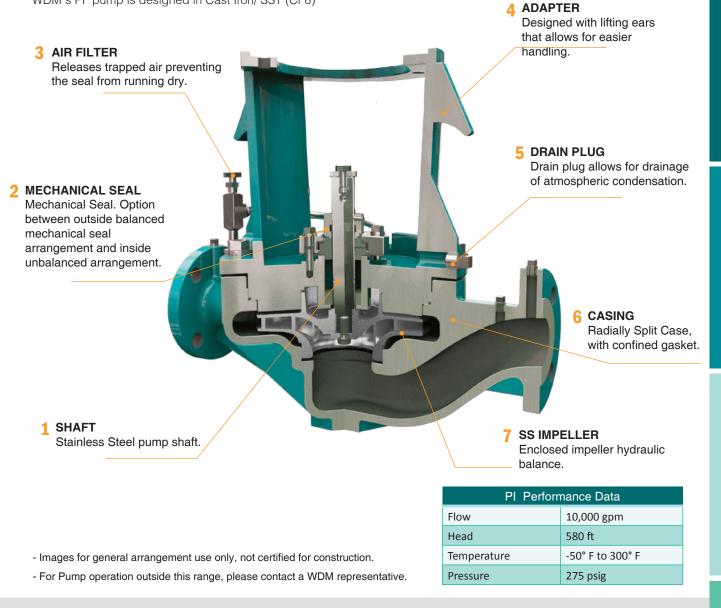
- Single stage, single suction vertical in-line pump.
- Close-Coupled.
- Radially split casing with side-side suction and discharge configuration.
- Fully enclosed impeller dynamically balanced which avoids vibration.
- Top Pull-Out allows complete rotating assembly easily removed for inspection without disturbing piping.
- Flanged suction and discharge, aligned to center line.
- Case and impeller of some sizes are interchangeable between PI and PI CC models.



## Characteristics

#### Materials of Construction

WDM's PI pump is designed in Cast Iron/ SST (CF8)



#### Description

- Split-Coupling simplifies maintenance and allows an easy access to the mechanical seal without disconnecting the pump or removing the motor.
- Flanged suction and discharge in common center line.
- Designed for working with pressures up to 275 PSI.Fully enclosed, balanced, one-piece Impeller design.
- Coupling Guard for protection during operation.
- Water Drainer to avoid condensed water collection.



STANDARD MATERIALS OF CONSTRUCTION						
COMPONENT	CAST IRON / SST		DUCTILE IRON / SST			
COMPONENT	DESCRIPTION	ASTM	DESCRIPTION	ASTM		
Case	Iron 30 B /Casting	A 48 Cl. 30B	Ductile Iron/ Casting A 536 Gr. 60-4			
Impeller	SST 304/Casting	A 351 Gr. CF8	SST 304/Casting	A 351 Gr. CF8		
Mechanical seal (stationary seat)	Silicon Carbide	-	Silicon Carbide	-		
Top mechanical seal gasket	Non asbestos	-	Non asbestos	-		
Bottom mechanical seal gasket	Non asbestos	-	Non asbestos	-		
Mechanical Seal (rotating assy)	Silicon Carbide	-	Silicon Carbide	-		
Case screw	CTS Gr.5	5AE Gr. 5	CST Gr. 5	SAE Gr. 5		
Gland screw	SST 316 / Bolt	A 193 Gr. B8M Cl 2	SST - 316 / Bolt	A 193 Gr. B8M Cl 2		
Driver (shaft)	Carbon Steel	-	Carbon Steel	-		
Bushing	Carbon	-	Carbon	-		
Gland	SST 316 / Bar	A 276 Type 316	SST 316 / Bar	A 276 Type 316		
Impeller washer	SST 316 / Bar	A 276 Type 316	SST 316 / Bar	ST 316 / Bar A 276 Type 316		
Impeller screw	SST	5AE 304	SST			
Motor screw	CST Gr.5	5AE Gr. 5	CST Gr. 5	SAE Gr. 5		
Case o-ring	Non Asbestos	-	Non Asbestos	-		
Flush pipe	SST 316	-	SST 316 -			
Tubing connector	Bronze	-	Bronze -			
Valve	Bronze	-	Bronze -			
Tubing	Copper	-	Copper	-		
Suction plug	Carbon Steel	-	SST 316	-		
Case washer	Carbon Steel	-	Carbon Steel	-		
Gland washer	SST 316 / Bolt	A 193 Gr. B8M Cl 2	SST - 316 / Bolt	A 193 Gr. B8M Cl 2		
Shaft key	SST 316 / Bar	A 276 Type 316	CST 1018 / Bar	A 576 Gr. 1018		
Set screw	SST 316	-	SST 316	-		
Impeller key	SST 316 / Bar	A 276 Type 316	SST 316 / Bar	A 276 Type 316		
Drain plug	Carbon Steel	-	SST 316	-		
Motor key	SST 316 / Bar	A 276 Type 316	SST 316 / Bar	A 276 Type 316		
Coupling Guard	Carbon Steel	-	Carbon Steel	-		

			SEALS			
SEAL TYPE	CODE	MATERIAL IDENTIFICATION ROTATING FACE/ ELASTOMERS/ STATIONARY FACE	MAXIMUM STUFFING BOX PRESSURES	LIQUID RANGE TEMP	APPLICATIONS	BALANCING
Cartridge Type 5610	XF551XO58	Carbon/Viton/Silicon Carbide	300 psig	-20°F - 190°F	Water, Hydrocarbon, Light Oils	Unbalanced
Outside Balance 8B2	XF511X058 H 316/HC	Carbon/Viton/Silicon Carbide	300 psig	-20°F - 190°F	Water, Hydrocarbon, Light Oils	Balanced
Inside Type 1	BF501C1	Carbon/BUNA/Silicon Carbide	300 psig	-20°F - 190°F	Water, Hydrocarbon, Light Oils	Unbalanced

Notes: \*RP's choice of manufaturers.



# **ENGINEERING DATA**

#### TEFC THREE PHASE TC FRAME VERTICAL MOTORS FOR IVP PUMPS DESCRIPTION

TEFC THREE PHASE TC FRAME VERTICAL MOTORS FOR IVP PUMPS DESCRIPTION
1 - 100 HP -Round Body C-Flange, For Motor >100 HP, C-Flange, and Mill off Motor Feet.
Totally Enclosed Fan Cooled (IP54)
NEMA Premium Efficient Ratings From 1-500 HP
60 Hz - 230/460V (Usable on 208V). 150 HP and Larger is 460V Only
1.15 Service Factor - Continuous
Class B Temperature Rise
NEMA Design B Torques as a Minimum
Oversized Main Conduit Box Rotatable in 90 Degree Increments - Fully Gasketed with NPT Threaded
Entrance - F1 Mounted.
Designed for 40°C Ambient Temperature
Designed for 3300 ft. Elevation
Certified for Class 1, Div. 2, Groups B, C, D Temp Code T3C, Non Sparking, Non Static Fan
Bi-Directional Rotation Except 2-Pole Motors 5000 Frame and Larger which are Uni-directional
CCW Facing the Drive-End.
Cast Iron Frame, End Brackets, Fan Cover and Main Conduit Box
1045 Carbon Steel Shaft
Paint System: Phenolic Rust Proof Base Plus Polyurethane Top Coat
Vacuum De-Gassed Re-Greasable Bearings Frames 280TS-449T/TS with Polyrex EM Grease
Double Shielded Bearings on Frames 140T-280T Pre-Packed with MULTEMP SRL Grease
Automatic Grease Discharge on Frames on Re-Greasable Motors
Labyrinth Type Metal Flinger on Both Ends for Frames 280TS-449T/TS
Cast Iron Inner and Outer Bearing Caps for Frames 280TS-449T/TS
Rubber Flinger on Drive-End for Frames 140T - 280T
Grounding Terminal Inside Main Box
Stainless Steel Nameplate

#### **Distributed by:**

WDM Pumps has expanded its brand as an international manufacturer of fluid handling pumps by consistently meeting and exceeding the needs customers for pumps.

Continuing a tradition of more than 50 years, WDM Pumps manufactures quality electric and engine driven pumps for diverse commercial and industrial applications. Our continued growth is based on a commitment to high standards for efficient product design, production, sales, and customer support.

Our customers rely on our world-class team of experienced WDM Pumps engineers, technicians, and product application specialists.

WDM offers pump products and related equipment for a wide variety of industries, including industrial, agricultural, and construction. The WDM Pumps product line includes self priming, flexible coupled, close coupled, diesel and gasoline driven centrifugal pumps, in addition to submersible solids handling products.

WDM Pumps plants are strategically located throughout the Americas in the United States, Colombia, Mexico, Panama, Argentina, and Guatemala.





## www.wdmpumps.com

info@wdmpumps.com

4034 Mint Way, Dallas, TX 75237, USA. Phone: (214) 337-8780 sales@wdmpumps.com