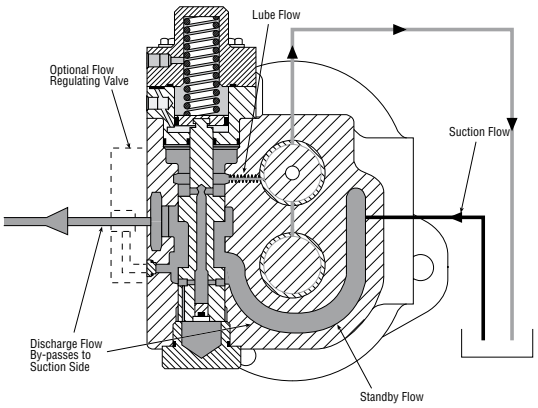
General Information for Wet Pump

- New patented standby mode eliminates the need for dry valves or clutches
- Low standby pressure
- Cast iron construction
- 10 tooth gears for low noise
- Large diameter journal bearings for long life
- New pressure balance design
- Controls: Manual, Solenoid, Electronic and Overspeed
- Especially suited for front loader refuse trucks

- Built-In Benefits:
  - **New Patented Standby Mode Eliminates Dry Valves or Clutches:** The new "stand-by" mode is provided by an air actuated integral system.
  - **No External Bleed Valves or Associated Hardware Needed:** There is no wasted pump flow in the pumping mode.
  - **Very Low Standby Pressure:** The power requirements are lower than most dry valve systems (50 PSI or less).
  - **Rugged Cast Iron Body:** Exceptional resistance to pressure spikes and contamination for long life.
  - **10 Tooth Gear Design:** Provides high efficiency and contamination resistance for demanding applications.
  - **Pressures to 3500 PSI:** Flexibility for almost any application.
  - **Large Diameter Journal:** Large shafts and journal bearings allow high pressure use with a long life.
  - **New Pressure Balanced Design:** One piece pressure balance design simplifies assembly and service.
  - **Light Weight:** This creative new design is more compact, has fewer parts, and is lighter than comparable pumps.
  - **Eliminates Need for Large Flow Capacity By-Pass Line to Reservoir**



Stand-By Mode

Operation

The new "stand-by" mode of the Model FPW257 allows you to direct-mount the pump without clutches, dry valves or PTOs. This by-pass feature has low power requirements in the standby mode and eliminates the need for external bleed valves.

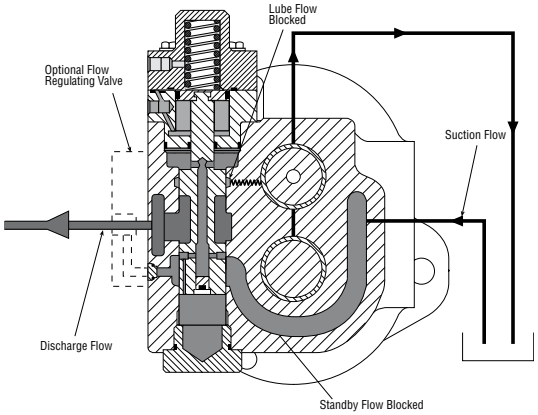
Stand-By Mode

In the standby mode, the integral air shifted valve allows the pump flow to be by-passed to the inlet side of the pump. This is done with very little pressure loss, therefore the power demand is very low. At the same time, some of the flow is routed through the journal bearing area to lubricate and cool the bearings.

Because all flow is internal to the pump, there is no need to provide an external bleed valve. The only requirement is for a bearing drain line direct to the reservoir.

Pumping Mode

In the pumping mode, the valve blocks the internal coring so that full pump flow is available for work.



Pumping Mode

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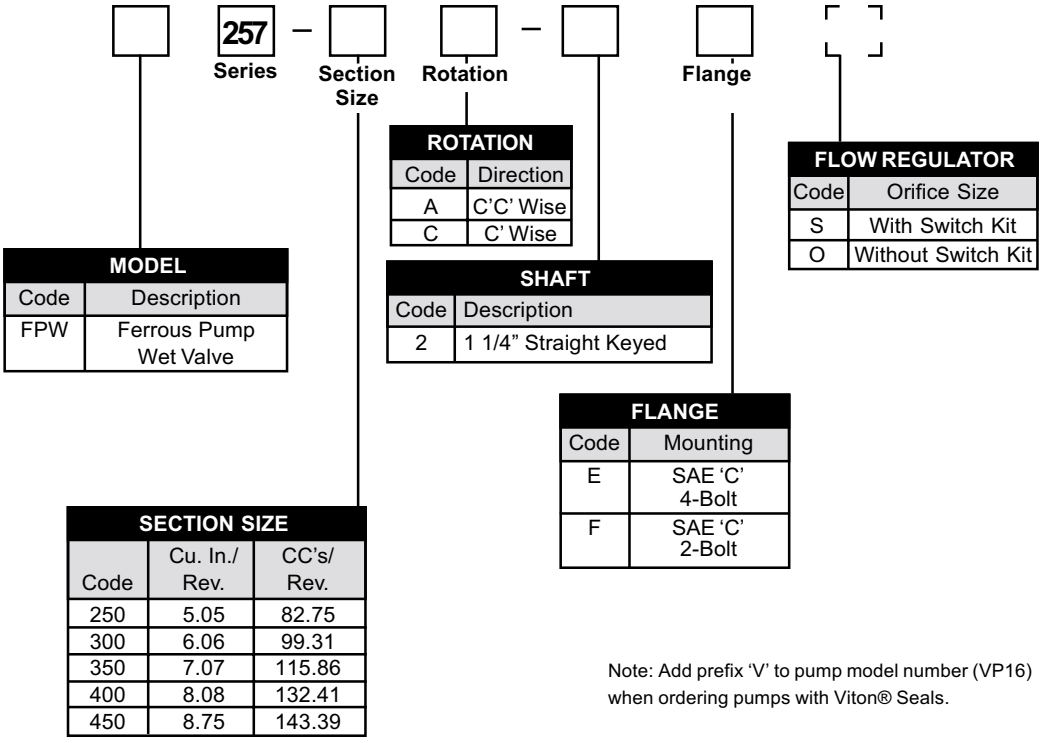
Youngstown, Ohio USA

How to Order Wet Pump:

Select the desired symbol (in the correct position) to construct a model code.

Assembly Example:



MODEL	
Code	Description
FPW	Ferrous Pump Wet Valve

ROTATION	
Code	Direction
A	C'C' Wise
C	C' Wise

SHAFT	
Code	Description
2	1 1/4" Straight Keyed

FLOW REGULATOR	
Code	Orifice Size
S	With Switch Kit
O	Without Switch Kit

FLANGE	
Code	Mounting
E	SAE 'C' 4-Bolt
F	SAE 'C' 2-Bolt

SECTION SIZE		
Code	Cu. In./ Rev.	CC's/ Rev.
250	5.05	82.75
300	6.06	99.31
350	7.07	115.86
400	8.08	132.41
450	8.75	143.39

Note: Add prefix 'V' to pump model number (VP16) when ordering pumps with Viton® Seals.

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Specifications for FPW257 Series

Description ..... Wet Valve Pump

Flow Range ..... To 94.4 GPM (357.3 LTR)

Displacements ..... .To 8.750 C.I.R. (143 cc's/Rev.)

Maximum Pressure to ..... 3500 PSI

Maximum Speed to ..... 2500 RPM

Rotation ..... A or C

Bearings ..... Journal

Construction ..... Cast Iron

Performance Data

Pump Model	Section Size	Displacement/Revolution (Theoretical)					Maximum Pressure		Maximum Speed
		US Gallons	Cubic Inches	Liters	Cubic Centimeters	Imperial Gallons	PSI	BAR	RPM
FPW257	250	.0219	5.050	.0828	82.75	.0282	3500	246	2500
FPW257	300	.0262	6.060	.0993	99.31	.0219	3500	246	2500
FPW257	350	.0306	7.070	.1159	115.86	.0255	3500	246	2500
FPW257	400	.0350	8.080	.1324	132.41	.0291	3200	220	2500
FPW257	450	.0379	8.750	.1434	143.39	.0316	3000	207	2500

Available with Viton Seals.

CAUTION: "Inlet vacuum" should not exceed 5" Hg at normal operating speed and temperature. Operation of pumps in excess of 5" Hg requires factory approval.

Dimensional Data

MOUNTING DIMENSIONS							
Pump Model	A	B	C	D	E	F	G
—250	76.70 (3.02)	118.90 (4.68)	172.20 (6.78)	211.80 (8.34)	124.50 (4.90)	185.40 (7.30)	187.70 (7.39)
—300	82.30 (3.24)	124.50 (4.90)	177.80 (7.00)	217.40 (8.56)	130.00 (5.12)	191.00 (7.52)	193.30 (7.61)
—350	87.90 (3.46)	130.00 (5.12)	183.40 (7.22)	223.00 (8.78)	139.40 (5.49)	196.60 (7.74)	198.90 (7.83)
—400	92.50 (3.64)	134.60 (5.30)	188.00 (7.40)	227.60 (8.96)	141.00 (5.55)	201.20 (7.92)	203.50 (8.01)
—450	97.80 (3.85)	140.00 (5.51)	193.30 (7.61)	232.90 (9.17)	146.30 (5.76)	208.50 (8.13)	208.80 (8.22)

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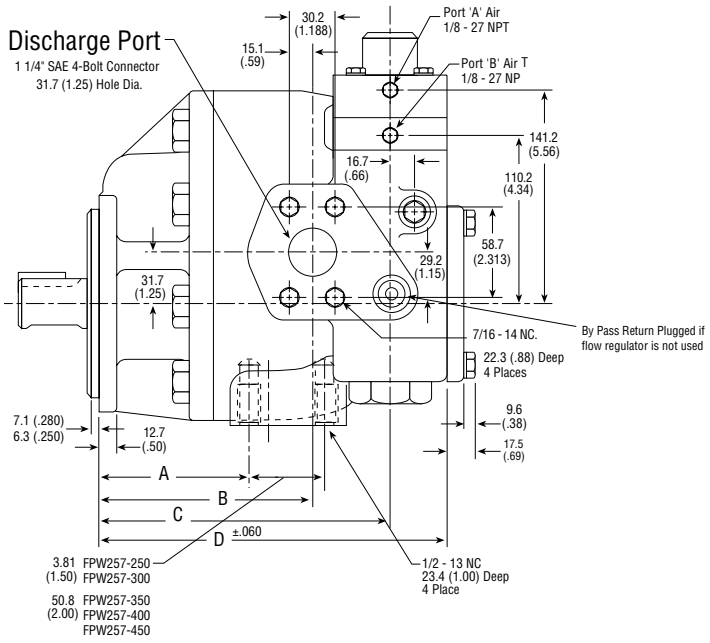
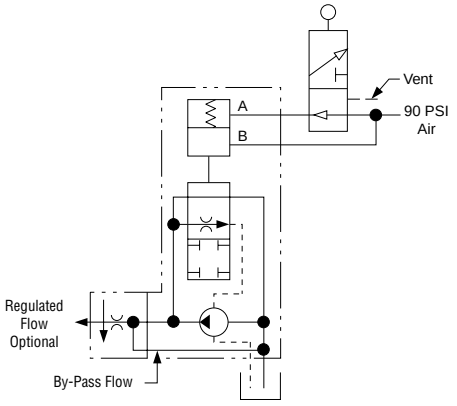
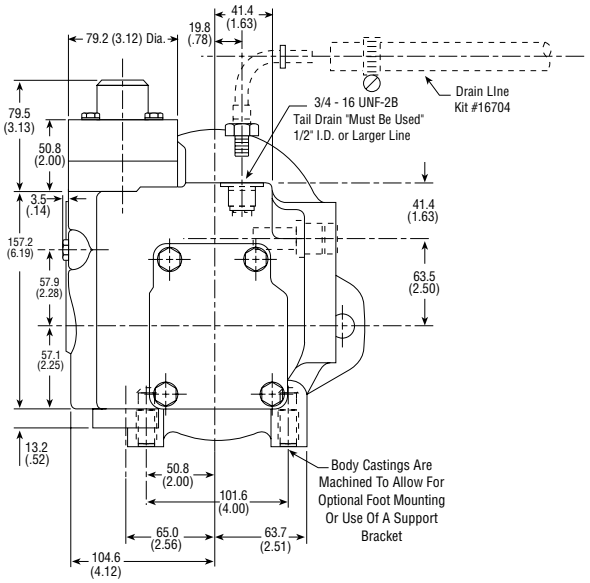
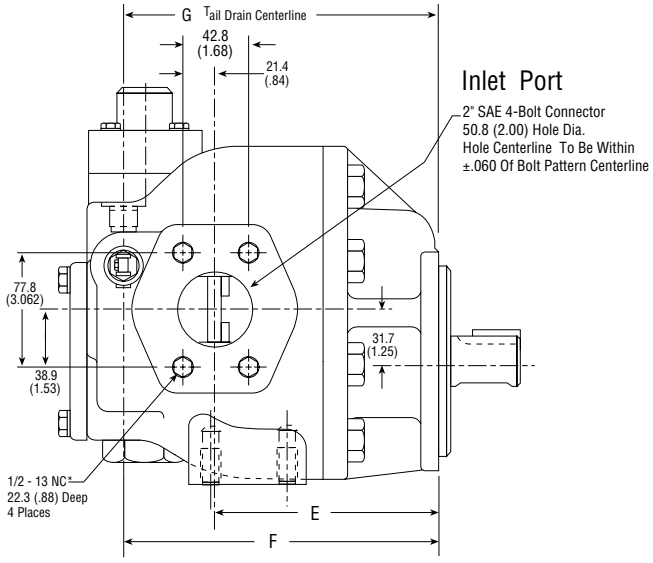
Dimensional Data

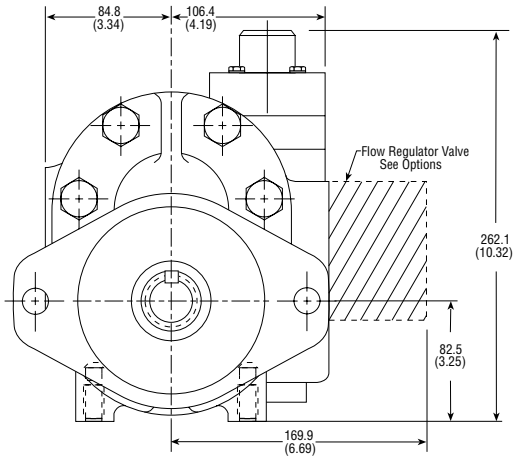
Inch equivalents for millimeter dimensions are shown in (**).











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