



Pump Specifications

	Max. Flow	Max. Flow	Nominal/Intermittent Pressure	Nominal/Intermittent Pressure	Max. Speed	Power Req'd	Power Req'd	Plunger Diameter	Plunger Diameter	Stroke	Stroke	NPSH Req'd	NPSH Req'd
Model	GPM	l/min	PSI	bar	RPM	BHP	kW	in	mm	in	mm	Ft.-Head	mWs
P317	3.5	13.2	3045/3350	210/230	1750	7.4/8.1	5.5/6.0	0.71	18	0.42	10.6	26.2	8.0
P323	3.5	13.2	3685	255	1750	8.9	7.2	0.71	18	0.42	10.6	26.2	8.0
P340	3.7	14.1	3500/4060	240/280	1750	8.9/10.4	6.6/7.8	0.63	16	0.56	14.1	N/A	N/A
P316	4.0	15.0	3045/3350	210/230	1450	8.4/9.2	6.3/6.9	0.71	18	0.56	14.1	19	5.8
P322	4.0	15.0	3500	240	1450	9.7	7.2	0.71	18	0.56	14.1	19	5.8
P328	4.1	15.5	3200/3500	220/240	3450	9.0/9.9	6.7/7.4	0.63	16	0.31	8.0	N/A	N/A
P329	4.1	15.5	3500/4000	240/275	3450	9.9/11.3	7.4/8.4	0.63	16	0.31	8.0	N/A	N/A
P316	4.7	17.8	2500/2750	170/190	1750	8.1/8.9	6.0/6.6	0.71	18	0.56	14.1	19	5.8
P322	4.7	17.8	3000	200	1750	9.7	7.2	0.71	18	0.42	10.6	26.2	8.0
P319	4.8	18.2	2500/2750	170/190	3450	8.3/9.1	6.2/6.8	0.71	18	0.31	8.0	N/A	N/A
P332	4.8	18.2	3000	200	1450	9.9	7.4	0.71	18	0.63	16	31.2	9.5
P325	4.8	18.2	3045	210	3450	10.1	7.5	0.71	18	0.31	8.0	N/A	N/A

White= US measurements
Grey= Metric measurements

Horsepower Ratings:

We recommend a 1.15 service factor be specified when selecting an electric motor as the power source.
To compute electric motor horsepower required, use the following formula: $HP = (GPM \times PSI) / 1450$.
The formula to determine the horsepower required for a gas engine is: $HP = (GPM \times PSI) / 1150$.
The formula to determine the horsepower required for a diesel engine is: $HP = (GPM \times PSI) / 1250$.

For the Application of a Hydraulic Motor:

To Determine the Torque of a Hydraulic Motor -- $(GPM \times PSI \times 36.77) / RPM = \text{Torque (in-lbs)}$

Calculating RPM / GPM of Pump:

A pump must be connected to an electric motor or gas or diesel engine with the correct ratio of pulleys and belts to attain the required speed and GPM. The use of a Variable Frequency Drive (VFD) may also be used to control the RPM of a properly sized electric motor when variable flows are required.

$$(\text{Max. Pump RPM} / \text{Rated Pump GPM}) \times \text{Required Pump GPM} = \text{Required Pump RPM}$$

To calculate a pulley diameter one (1) pulley diameter and the required pump RPM must be known:

$$(\text{Pump RPM} \times \text{Pump Pulley Diameter}) / \text{Motor RPM} = \text{Motor Pulley Diameter}$$

$$(\text{Motor RPM} \times \text{Motor Pulley Diameter}) / \text{Pump RPM} = \text{Pump Pulley Diameter}$$

Common Specifications:

Inlet Pressure 145 PSI (10 Bar)*
Crankshaft Diameter..... 0.94" (24mm)
Max. Temperature..... 160° F (70° C)
Oil Capacity (short)..... 14.2 fl. oz. (0.42 L)
Oil Capacity (extended)..... 17.0 fl. oz. (0.5 L)
Inlet Ports (2) 1/2" BSP
Discharge Ports..... (2) 3/8" BSP
Weight 16 lbs (7.3 kg)
Shaft Rotation..... Top of Pulley Towards Fluid End

Materials Used for P300 Pumps:

Manifold Forged Brass
Plungers Solid Ceramic Oxide
Valves High Grade Stainless Steel
Seals..... Nitrile with Fabric Reinforcing
Gear End Aluminum Die-Cast

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