

Specifications

Model GP8045-5100

	U.S.	(Metric)
Volume.....	Up to 48.9 GPM	(185 LPM)
Discharge Pressure	Up to 4350 PSI	(300 bar)
Power Consumption	143 BHP	(107 kW)
Speed		Up to 580 RPM
Inlet Pressure.....	Up to 29 PSI*.....	(2.0 bar)*
Plunger Diameter.....	1.77"	(45mm)
Plunger Stroke	2.83"	(72mm)
Crankshaft Diameter.....	2.76"	(70mm)
Key Width	0.55"	(14mm)
Crankshaft Mounting.....		Either side
Shaft Rotation		Top of pulley towards manifold
Temperature of Pumped Fluids.....	Up to 86 °F	(30 °C)
Inlet Ports.....		(2) 3" BSP
Discharge Ports		(2) 1-1/4" BSP
Weight.....	771 lbs.	(350kg)
Crankcase Oil Capacity	3.3 Gal.	(12.5 liters)
Fluid End Material.....		AISI 316 Stainless Steel

*If operating the pump below 100 HP (75 kW) the oil cooler system can be removed and the inlet pressure can be increased to 145 PSI (10 bar).

Consult the factory for special requirements that must be met if the pump is to operate beyond one or more of the limits specified above.

GP8045-5100					
Horsepower Requirements					
RPM	GPM	1000 PSI	2000 PSI	3000 PSI	4350 PSI
300	25.3	17.4	34.9	52.3	75.9
400	33.7	23.2	46.5	69.7	101.1
500	42.2	29.1	58.2	87.3	126.6
580	48.9	33.7	67.5	101.2	146.7

HORSEPOWER RATINGS:

The rating shown are the power requirements for the pump. Gas engine power outputs must be approximately twice the pump power requirements shown above.

We recommend a 1.15 service factor be specified when selecting an electric motor as the power source. To compute specific pump horse power requirements, use the following formula:

$$\frac{\text{GPM} \times \text{PSI}}{1450} = \text{HP}$$

SPECIAL NOTE:
 The theoretical gallons per revolution (gal/rev) is 0.0843. To find specific outputs at various RPM, use the formula:

$$\text{GPM} = 0.0843 \times \text{RPM}$$