

Conversion Tables & Formulas

Weights & Volumes

Gal.	x 3.785	=	Liters
Gal.	x 128	=	Ounces
Gal	x 231	=	Cu. In.
Gal.	x 8.3453	=	Pounds
Ltr.	x 61.02	=	Cu. In.
Ltr.	x 33.82	=	Ounces
Ltr	x .2642	=	Gallons
Ltr.	x 1000	=	Cubic CM
ML (CC)	x .0338	=	Ounces
Gram	x .03527	=	Ounces
PSI	x .0680	=	bar.
Bar	x 14.7	=	PSI
In. HG	x .4912	=	PSI
In. H ₂ O	x .8226	=	In. HG

Torque

NM	=	.Ft./lb.	x	1.35
Ft./lb.	=	.NM	/	1.35
In./lb.	=	Ft./lb	x	12

Temperatures

°C	=	.555(°F-32)
°F	=	(1.8*°C)+32

Required Horsepower

$\frac{\text{GPM} \times \text{PSI}}{1460}$	=	Elec. Brake HP
$\frac{\text{GPM} \times \text{PSI}}{1714}$	=	Hydraulic HP
$\frac{\text{GPM} \times \text{PSI}}{1100}$	=	Gasoline HP

Length Calculations

.001 in.	x	25.4	=	Microns
In.	x	25.4	=	MM
MM	x	.03937	=	Inches
Belt Length =	2 x CD+D+d x 1.57			

$$\text{Nozzle \#} = \frac{\text{Nozzles}}{\text{GPM}} \sqrt{\frac{4000}{\text{PSI}}}$$

$$\text{GPM} = \text{Nozzle \#} \sqrt{\frac{\text{PSI}}{4000}}$$

$$\text{PSI} = 4000 \times \left(\frac{\text{GPM}}{\text{Nozzle \#}} \right)^2$$

Pulley Ratio

$$\frac{\text{Motor Pulley OD}}{\text{Pump RPM}} = \frac{\text{Pump RPM}}{\text{Motor Pulley OD}}$$