



NEED TO FIND	GIVEN	FORMULA
Ratio	High & Low RPM	$\frac{\text{High RPM}}{\text{Low RPM}}$
High RPM	Ratio & Low RPM	Ratio X Low RPM
Low RPM	Ratio & High RPM	$\frac{\text{High RPM}}{\text{Ratio}}$
Velocity in FPM	Dia. (inches) & RPM	.262 X Dia. X RPM
RPM	FPM & Dia.	$\frac{\text{FPM}}{.262 \text{ X Dia.}}$
Diameter (inches)	FPM & RPM	$\frac{\text{FPM}}{.262 \text{ X RPM}}$
Horsepower	Torque (In.Lbs.)	$\frac{\text{T X RPM}}{63025}$
Torque (In.Lbs.)	HP & RPM	$\frac{\text{HP X } 63025}{\text{RPM}}$
Horsepower	Force (Lbs.) & FPM	$\frac{\text{F X FPM}}{33,000}$
Motor RPM	Number of Poles	$\frac{120 \text{ X } 60 \text{ (hz)}}{\text{Number of Poles}}$
Degrees - Centigrade	Degrees Fahrenheit	.56(F-32)
Degrees - Fahrenheit	Degrees Centigrade	1.8 X C +32
Kilowatts	Horsepower	HP X .746
Horsepower	Kilowatts	KW X 1.34

RULES OF THUMB

1HP = 746 Watts or .746 Kilowatts
At 3600 rpm a motor develops 1.5 ft/lbs of Torque per HP
At 1800 rpm a motor develops 3 ft/lbs of Torque per HP
At 1200 rpm a motor develops 4.5 ft/lbs of Torque per HP