GEARTEK®

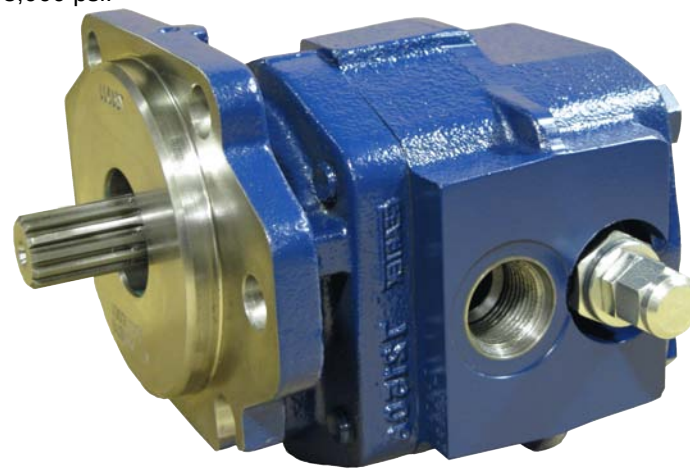
HYDRAULIC GEAR PUMPS AND MOTORS

# 'MCX' Series

## SINGLE MOTOR w/ RELIEF VALVE

**GEARTEK 'RPMC' SERIES MOTOR**
**WITH INTEGRAL CROSSOVER RELIEF VALVE**

Valve will relieve fron high pressure side to low pressure side regardless of rotation. Flows to 20 GPM, pressures from 100 psi to 3,000 psi.



## Performance Data

| MODEL SIZE | DISPLACEMENT/REVOLUTION (THEORETICAL) | | | | | IN-LB TORQUE @ 2400 RPM & 2500 PSI | | HP/OUT @ 2400 RPM & 2500 PSI | MAX. PRESSURE | |
|---|---|---|---|---|---|---|---|---|---|---|
| | U.S. GALLONS | CUBIC INCHES | CUBIC CENT. | RPM MIN. | RPM MAX. | START | RUN | | PSI | BAR |
| MCX45 | .0038 | 0.88 | 14.4 | 600 | 3600 | 241 | 301 | 11 | 3000 ** | 241 |
| MCX65 | .0055 | 1.27 | 20.8 | 600 | 3600 | 347 | 434 | 16 | 3000 ** | 241 |
| MCX85 | .0072 | 1.66 | 27.2 | 600 | 3400*** | 455 | 569 | 22 | 3000 ** | 241 |
| MCX100 | .0085 | 1.96 | 32.1 | 600 | 3300*** | 535 | 669 | 25 | 3000 ** | 241 |
| MCX115 | .0097 | 2.24 | 36.7 | 600 | 3100*** | 615 | 769 | 29 | 3000 | 207 |
| MCX150 | .0127 | 2.93 | 48.1 | 600 | 2800*** | 802 | 1003 | 38 | 2500 | 172 |
| MCX180 | .0152 | 3.51 | 57.5 | 600 | 2500*** | 962 | 1203 | 46 | 2500* | 172 |
| MCX200 | .0169 | 3.90 | 63.9 | 600 | 2200 | 1069 | 1337 | 51 | 2500* | 172 |

* CONSULT FACTORY WITH TYPE APPLICATION - PRESSURES MAY BE LIMITED TO SHAFT TYPE
** RELIEF VALVE RATED @ 3000 PSI
*** RELIEF VALVE RATED TO 20 GPM

- CAST IRON THROUGHOUT
- PRESSURES TO 3000 PSI
- FLOWS TO 20 GPM
- HEAVY DUTY SLEEVE TYPE BEARINGS
- DOUBLE VITON® SHAFT SEALS STANDARD
- PRESSURE COMPENSATED THRUST PLATES
- DESIGNED FOR HEAVY DUTY APPLICATIONS
- SINGLE STAGE CONFIGURATIONS
- VARIOUS SHAFT, FLANGE AND PORT OPTIONS
- PRECISION GEARS MACHINED FROM SOLID BAR STOCK
- COMPATIBLE WITH MOST FIRE RESISTANT FLUIDS
- CONTAMINANT RESISTANT
- COMPUTER DESIGNED AND MANUFACTURED
- QUALITY CERTIFIED
- FLEXIBLE DESIGN FOR NEW OR OEM REPLACEMENTS
- SERVICE SUPPORTED BY DEDICATION AND INVENTORY

P. O. BOX 2160, 1506 FULTON DR.
CORINTH, MISSISSIPPI 38835

Phone: 662/286-2252 Fax: 662/287-6580 E-mail: haisales@geartek.com Http: www.geartek.com

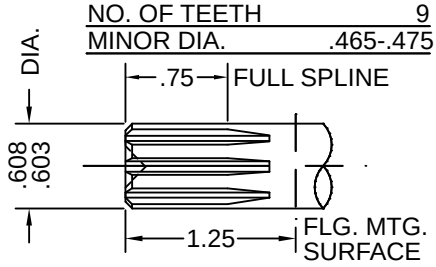
# SHAFTS AVAILABLE

## 1 5/8"-9 TOOTH SPLINE

**AVAILABLE ON 45 THRU 100 SIZES ONLY**
**TORQUE LIMIT 52 FT.-LBS.**

**FLAT ROOT SIDE FIT**

| | |
|---|---|
| DIAMETRAL PITCH | 16/32 |
| PRESSURE ANGLE | 30° |
| NO. OF TEETH | 9 |
| MINOR DIA. | .465-.475 |

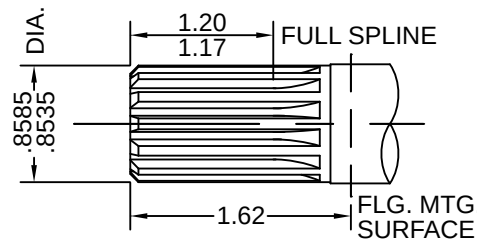



## 2 7/8"-13 TOOTH SPLINE

**TORQUE LIMIT 184 FT.-LBS.**

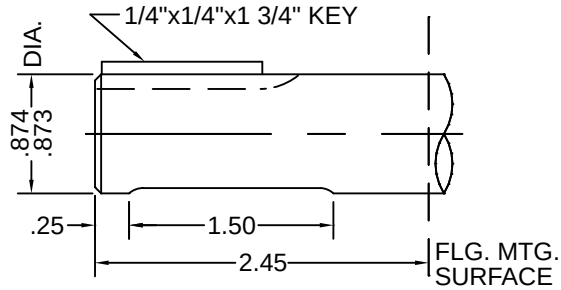
**FLAT ROOT SIDE FIT**

| | |
|---|---|
| DIAMETRAL PITCH | 16/32 |
| PRESSURE ANGLE | 30° |
| NO. OF TEETH | 13 |
| MINOR DIA. | .722-.733 |



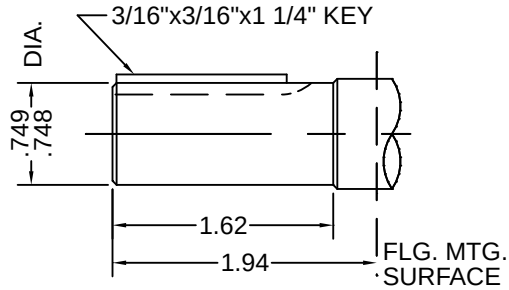

## 5 7/8" STRAIGHT

**TORQUE LIMIT 184 FT.-LBS.**



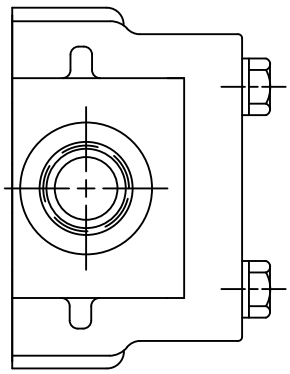

## 6 3/4" STRAIGHT

**AVAILABLE ON 45 THRU 115 SIZES ONLY**
**TORQUE LIMIT 105 FT.-LBS.**




# PORTS AVAILABLE

## 5 SIDE PORTED SAE STRAIGHT THREAD



### PORT SIZES

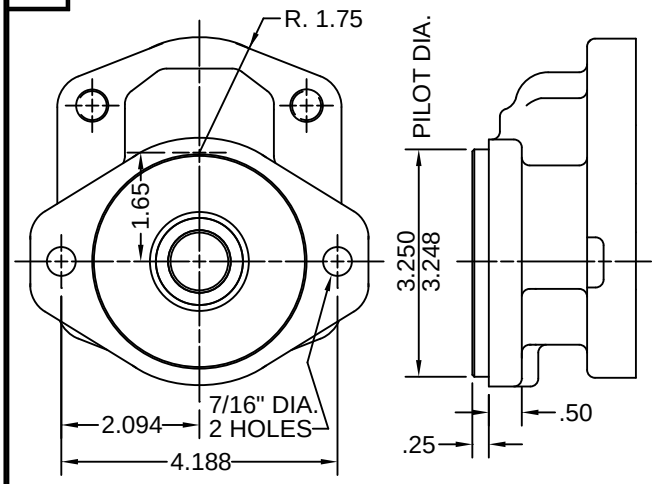
| SIZE | FOR CODE 5 PORTS BOTH SIDES SAE STRAIGHT THREAD O-RING BOSS |
|---|---|
| RPMC45 | NO. 12 1 1/16-12UN-2B |
| RPMC65 | NO. 16 1 5/16-12UN-2B |
| RPMC85 | NO. 16 1 5/16-12UN-2B |
| RPMC100 | NO. 16 1 5/16-12UN-2B |
| RPMC115 | NO. 20 1 5/8-12UN-2B |
| RPMC150 | NO. 20 1 5/8-12UN-2B |
| RPMC180 | NO. 20 1 5/8-12UN-2B |
| RPMC200 | NO. 20 1 5/8-12UN-2B |



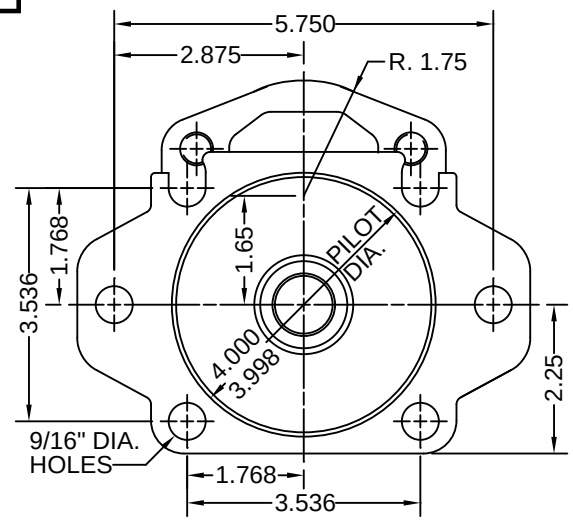
UNLESS OTHERWISE SPECIFIED, ALL LINEAR DIMENSIONS ARE IN INCHES.

# FLANGES AVAILABLE

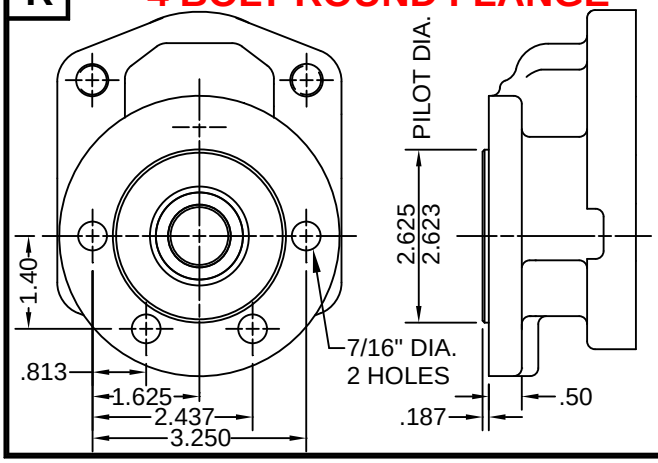
## A SAE 2 BOLT 'A' FLANGE




## B SAE 'B' FLANGE




## R 4 BOLT ROUND FLANGE




| MOUNTING DIMENSIONS | | |
|---|---|---|
| SIZE | A | B |
| MCX45 | .88 | 2.98 |
| MCX65 | 1.06 | 3.20 |
| MCX85 | 1.06 | 3.41 |
| MCX100 | 1.06 | 3.57 |
| MCX115 | 1.25 | 3.73 |
| MCX150 | 1.25 | 4.10 |
| MCX180 | 1.25 | 4.42 |
| MCX200 | 1.25 | 4.64 |

FOR METRIC DIMENSIONS
MULTIPLY 25.4 X IN. = mm

# DIMENSIONAL DATA

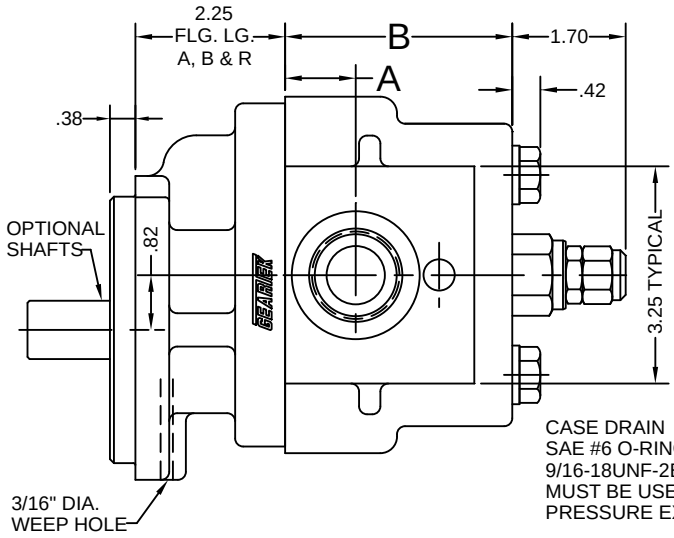
OTHER PORT TYPES AVAILABLE
CONSULT FACTORY

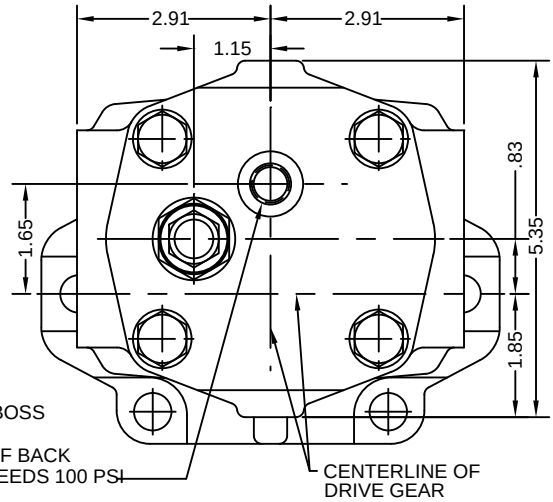
LOCATION OF VALVE CARTRIDGE
DEPENDANT ON APPLICATION
CONSULT FACTORY

## MODEL EXAMPLE

M C X 45 - 2 B - 5 - 30

- MOTOR
- SERIES
- w/ CROSS-OVER RELIEF VALVE
- SIZE
- SHAFT
- FLANGE
- PORTS (OTHER PORT TYPES AVAILABLE CONSULT FACTORY)
- PRESSURE SETTING RELIEF VALVE RATED 100 PSI THRU 3000 PSI CODE EXAMPLES: 01 = 100 PSI, 30 = 3000 PSI



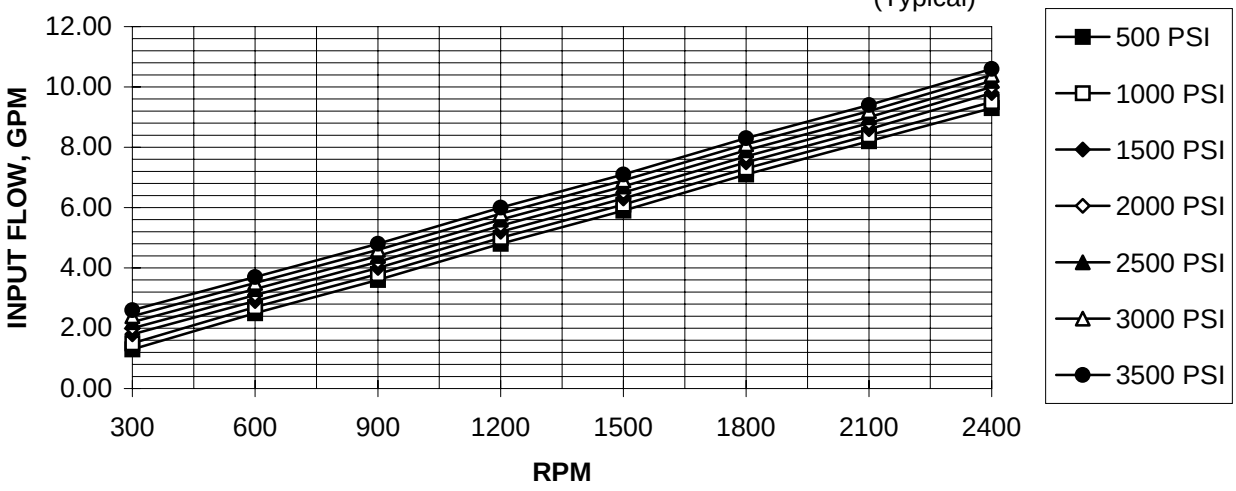



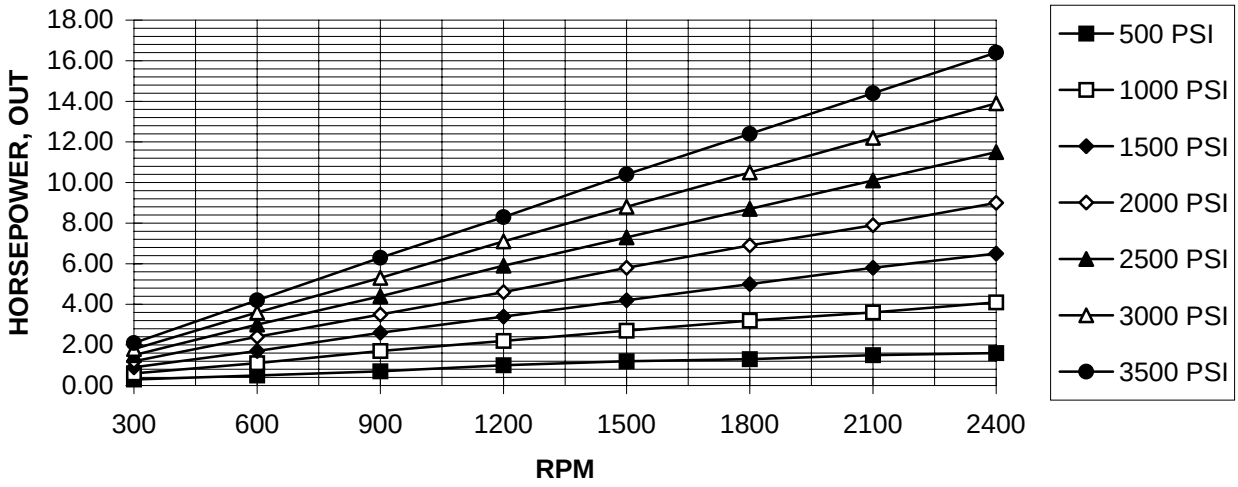

UNLESS OTHERWISE SPECIFIED, ALL LINEAR DIMENSIONS ARE IN INCHES.

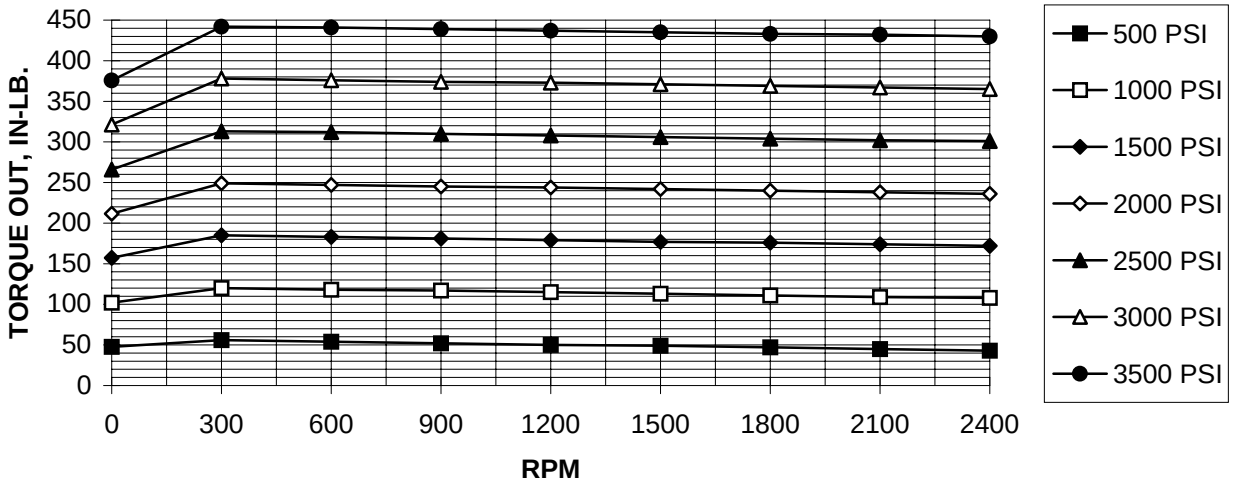
# GEARTEK MC45 MOTOR PERFORMANCE

SAE 10W oil @ 150 degrees F

(Typical)



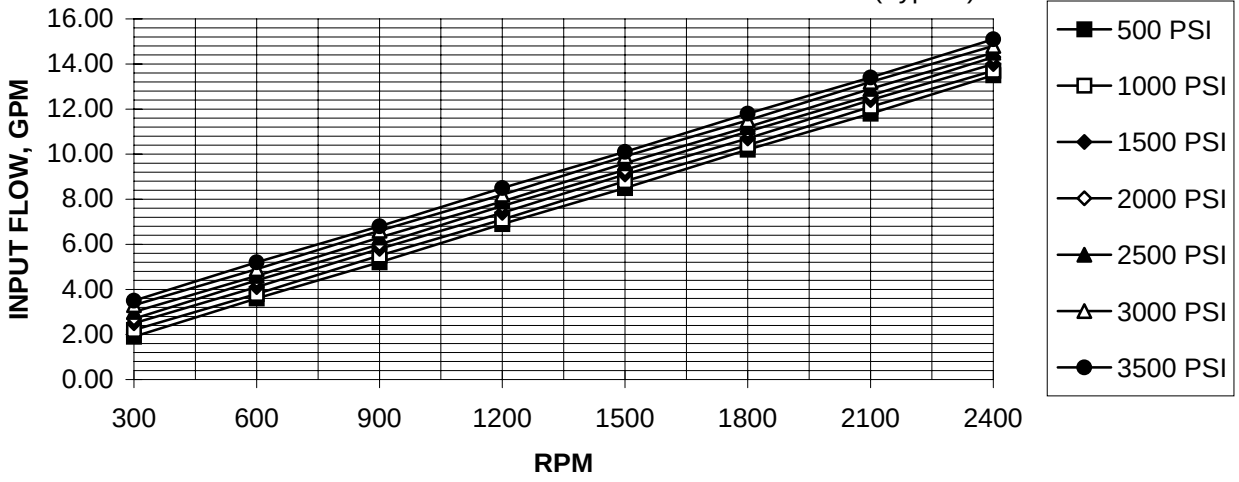



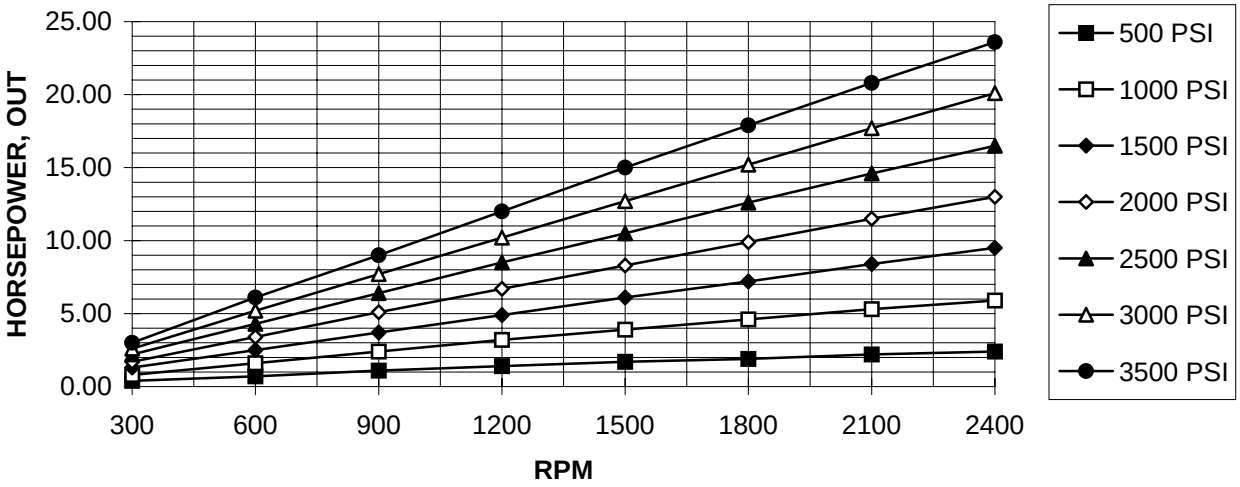



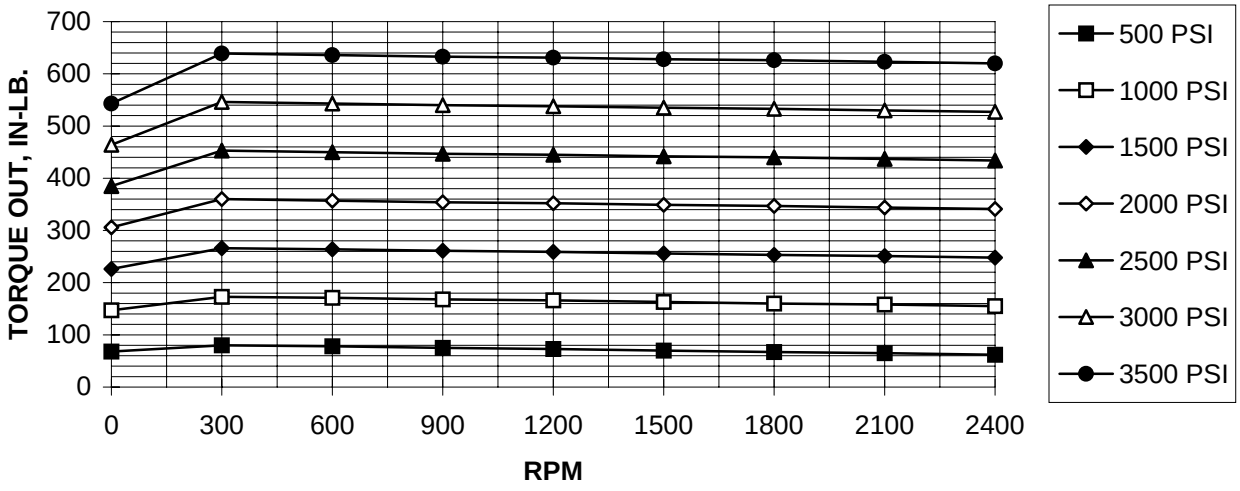
# GEARTEK MC65 MOTOR PERFORMANCE

SAE 10W oil @ 150 degrees F

(Typical)



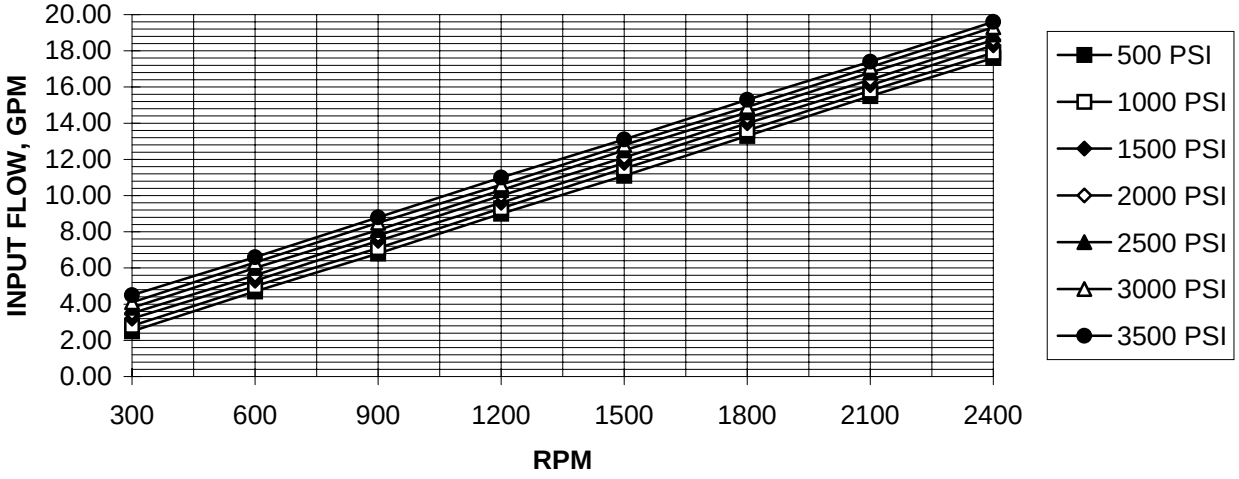



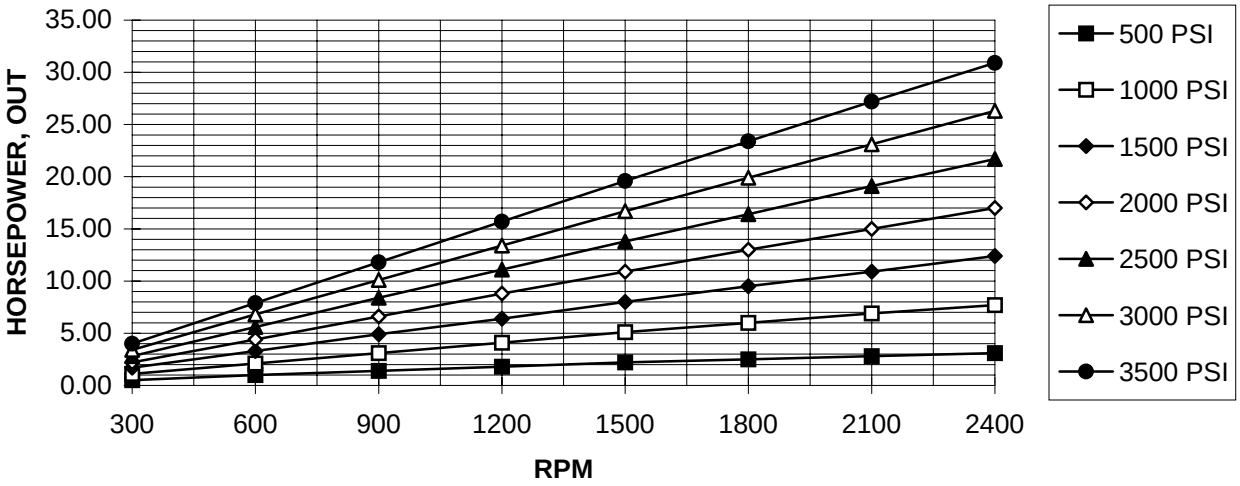



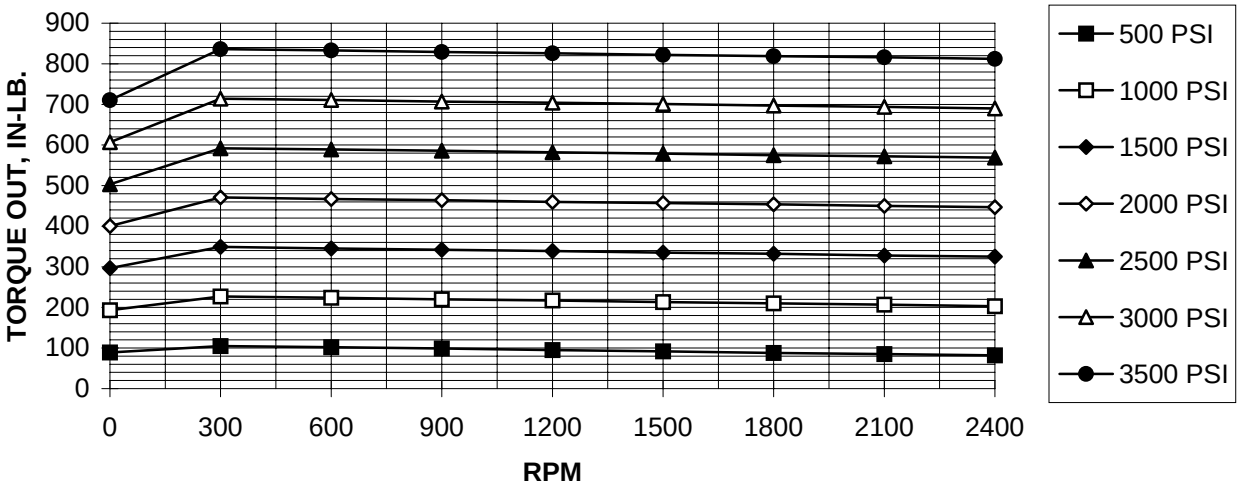
# GEARTEK MC85 MOTOR PERFORMANCE

SAE 10W oil @ 150degrees F

(Typical)



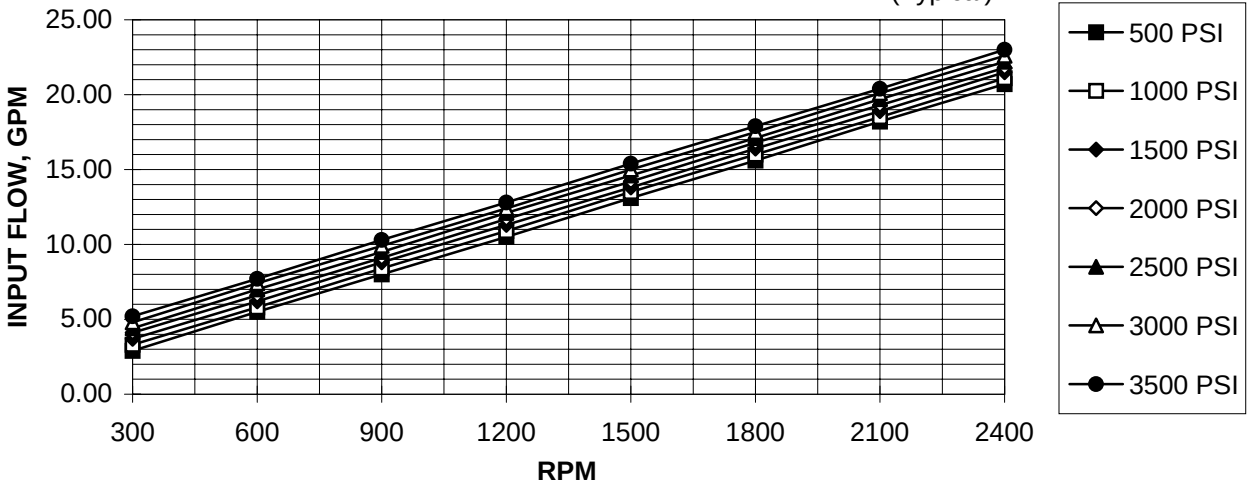



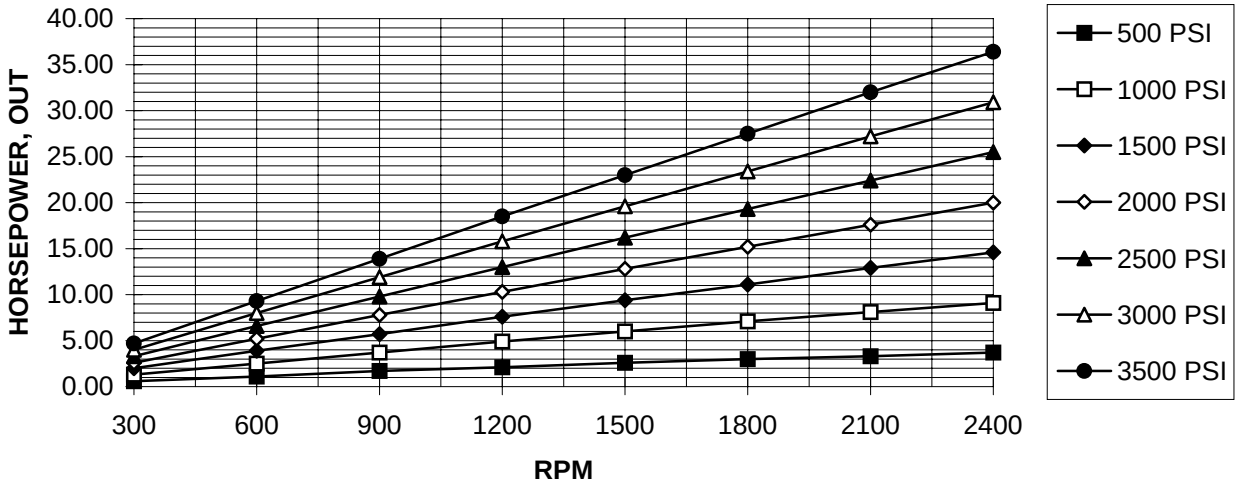



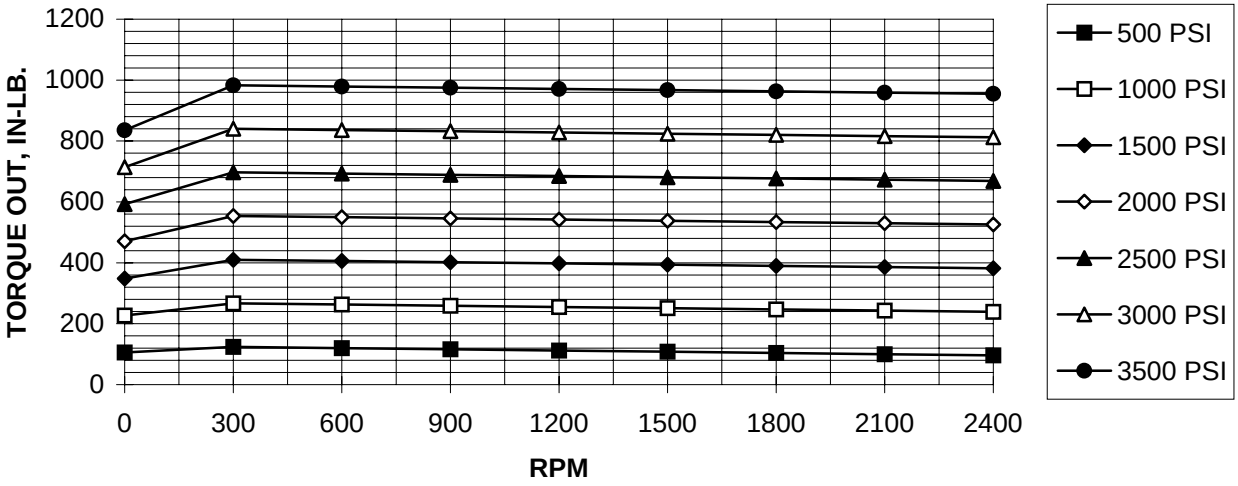
# GEARTEK MC100 MOTOR PERFORMANCE

SAE 10W oil @ 150degrees F

(Typical)



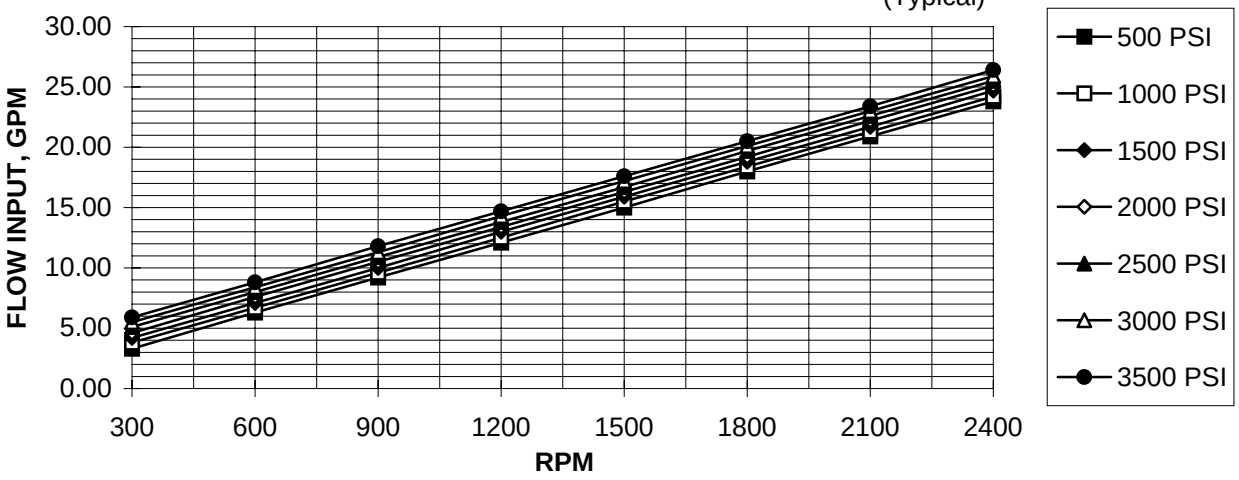



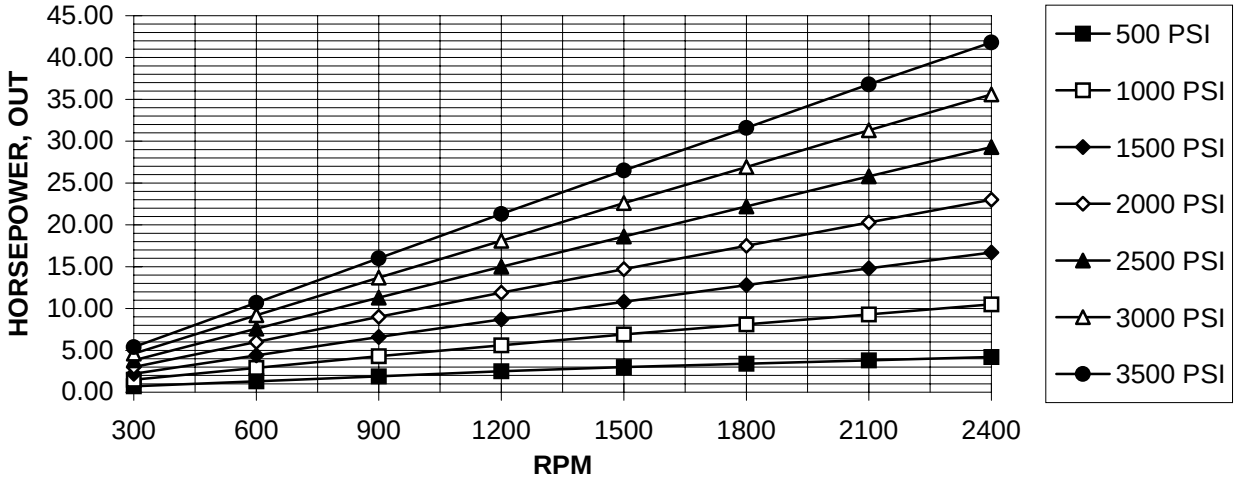



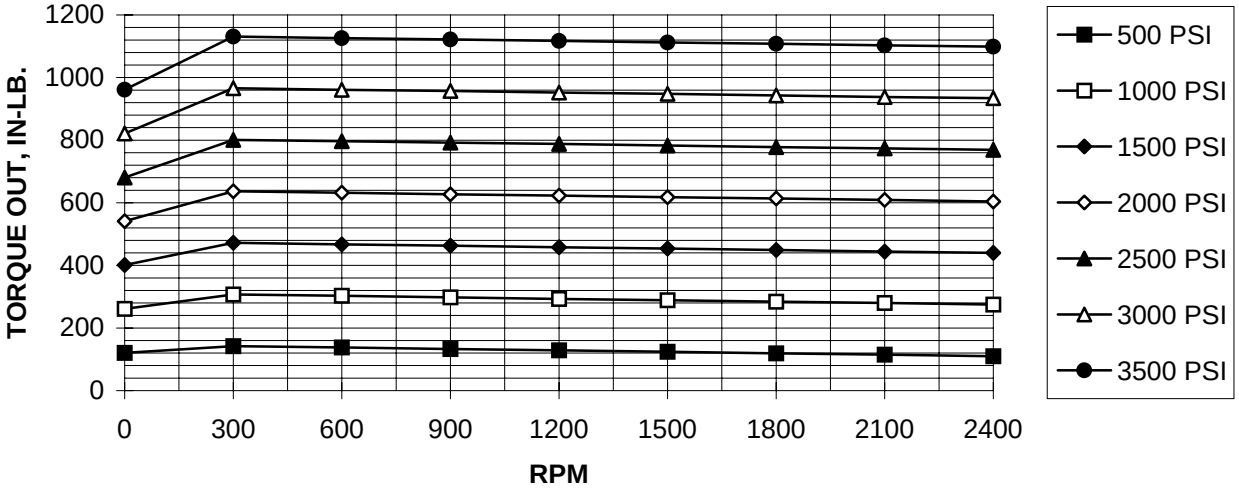
# GEARTEK MC115 MOTOR PERFORMANCE

SAE 10W oil @ 150 degrees F

(Typical)



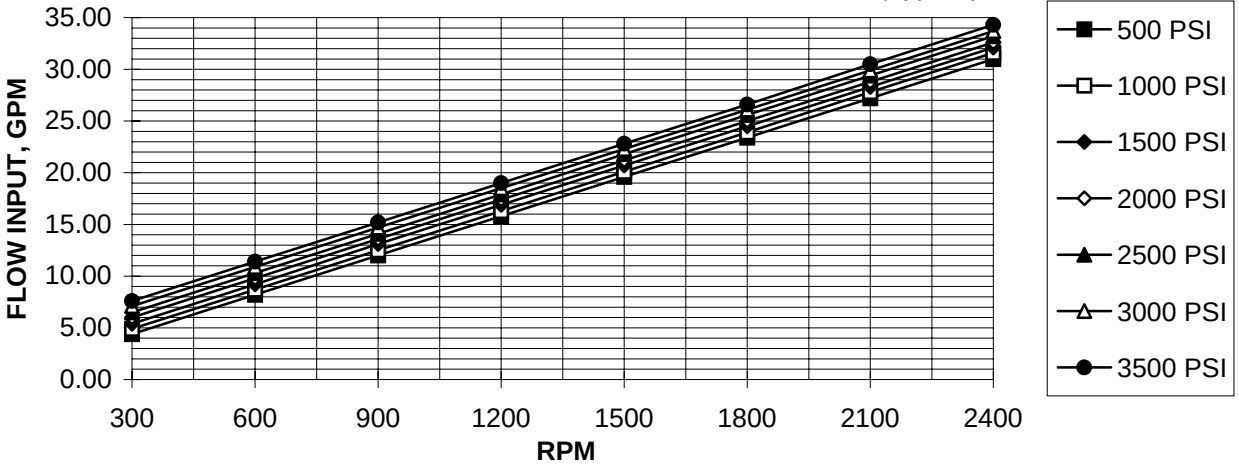



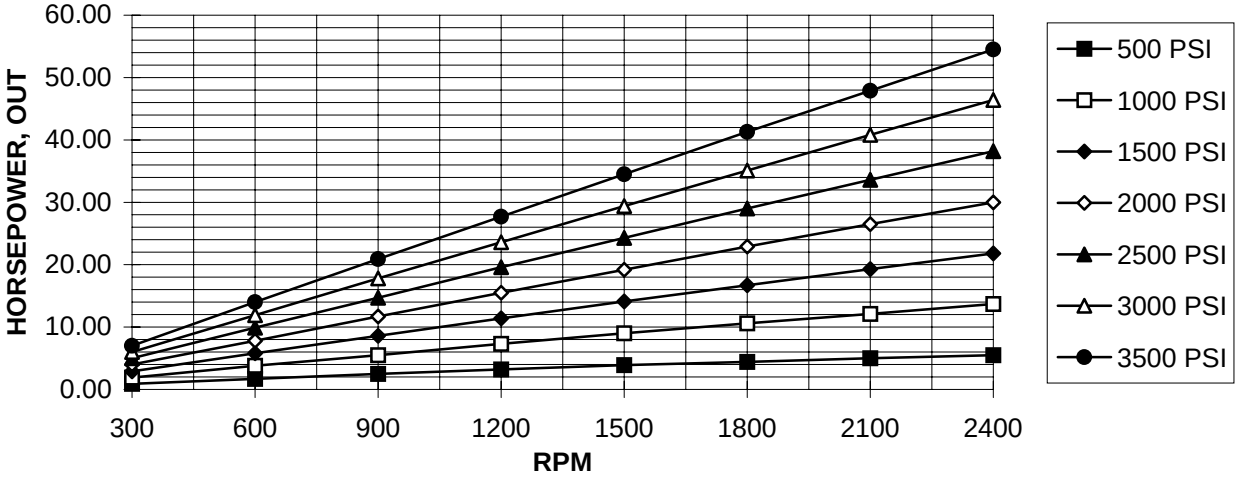



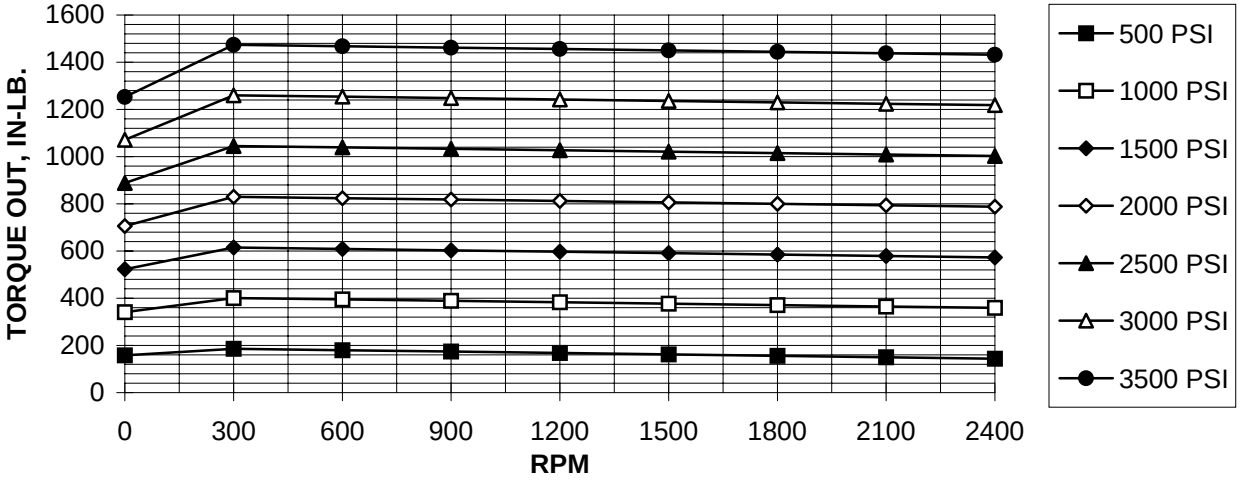
# GEARTEK MC150 MOTOR PERFORMANCE

SAE 10W oil @ 150 degrees F

(Typical)



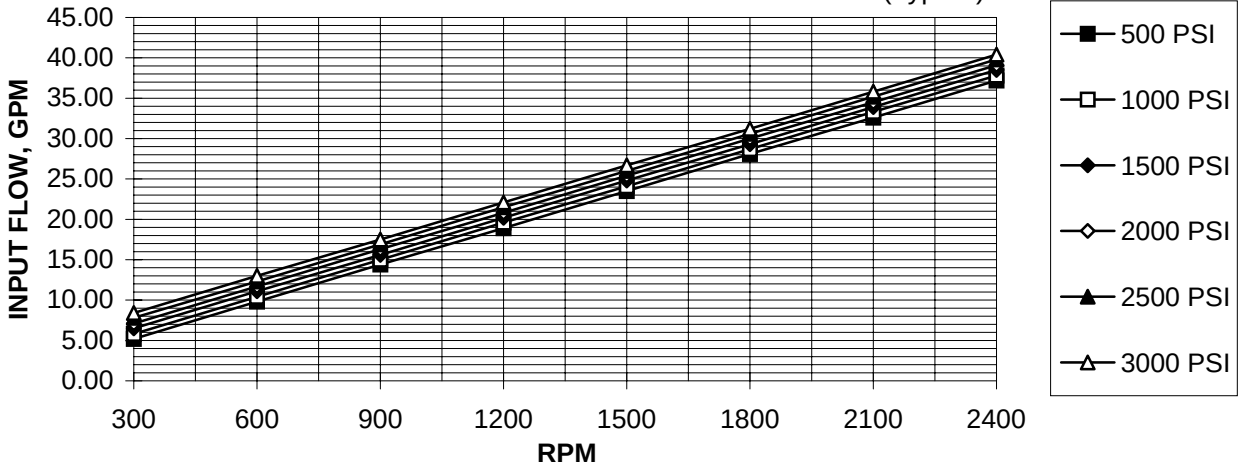



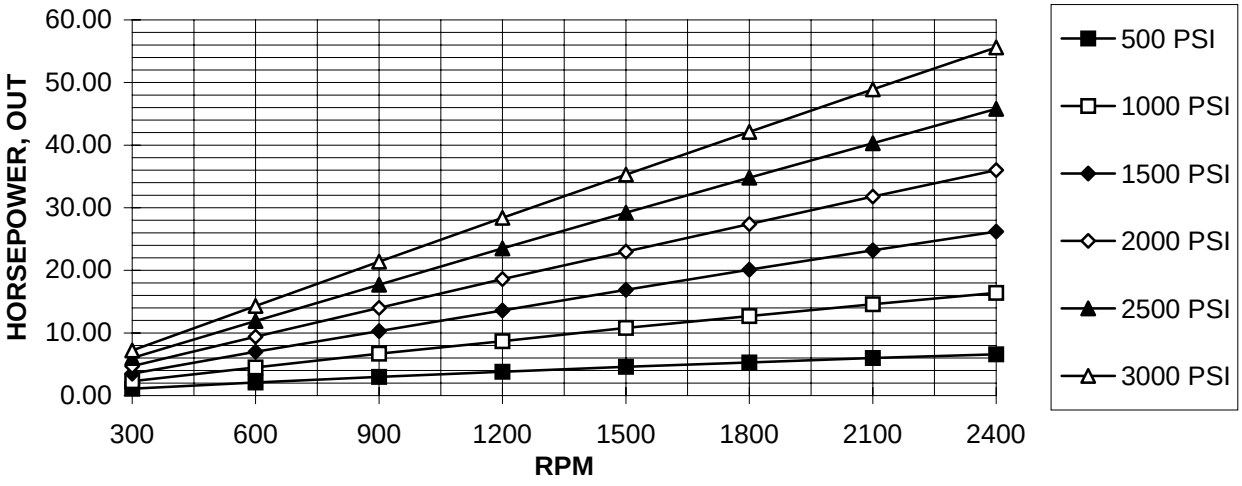



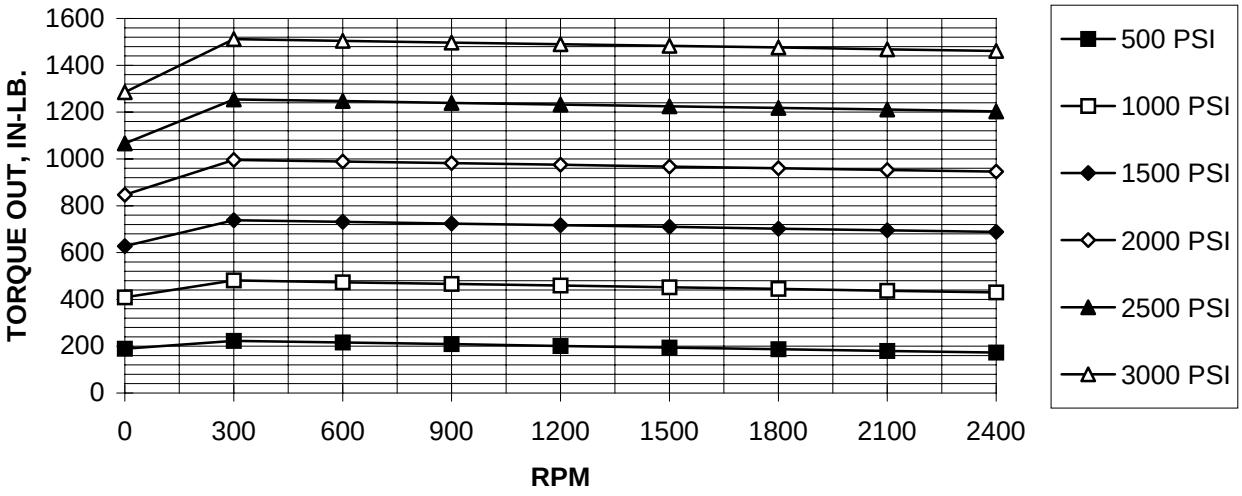
# GEARTEK MC180 MOTOR PERFORMANCE

SAE 10W oil @ 150 degrees F

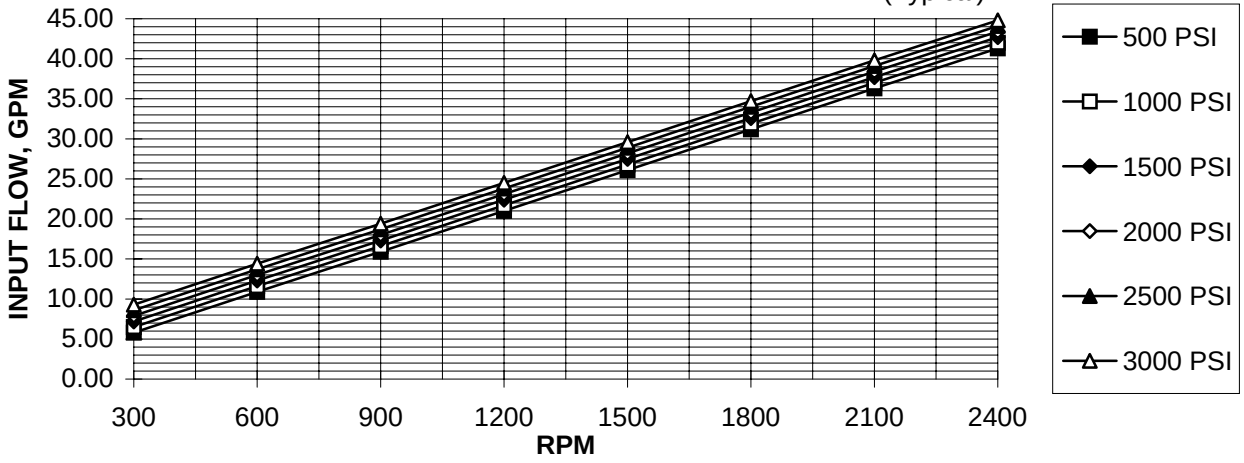
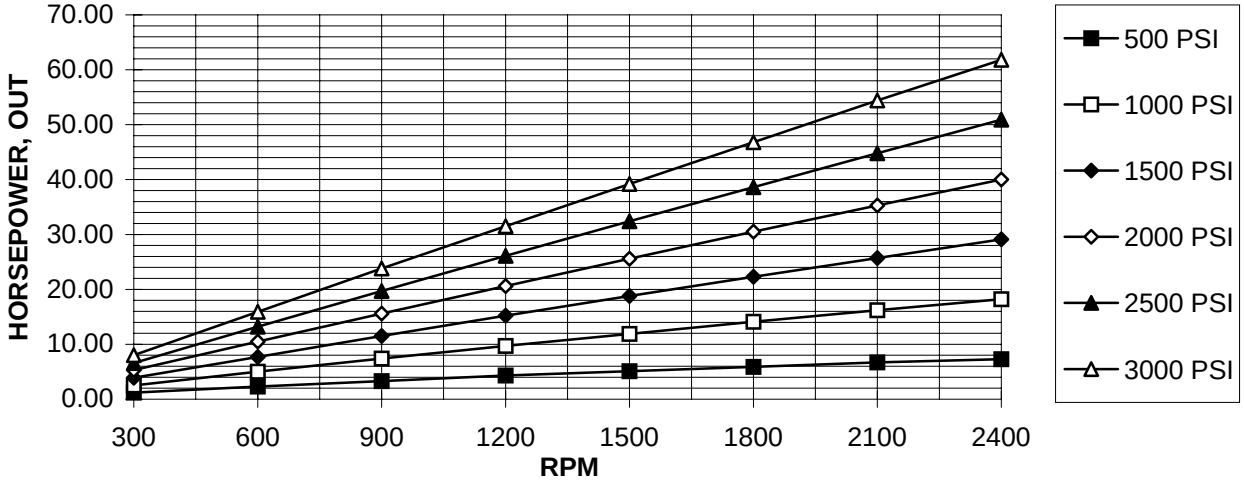
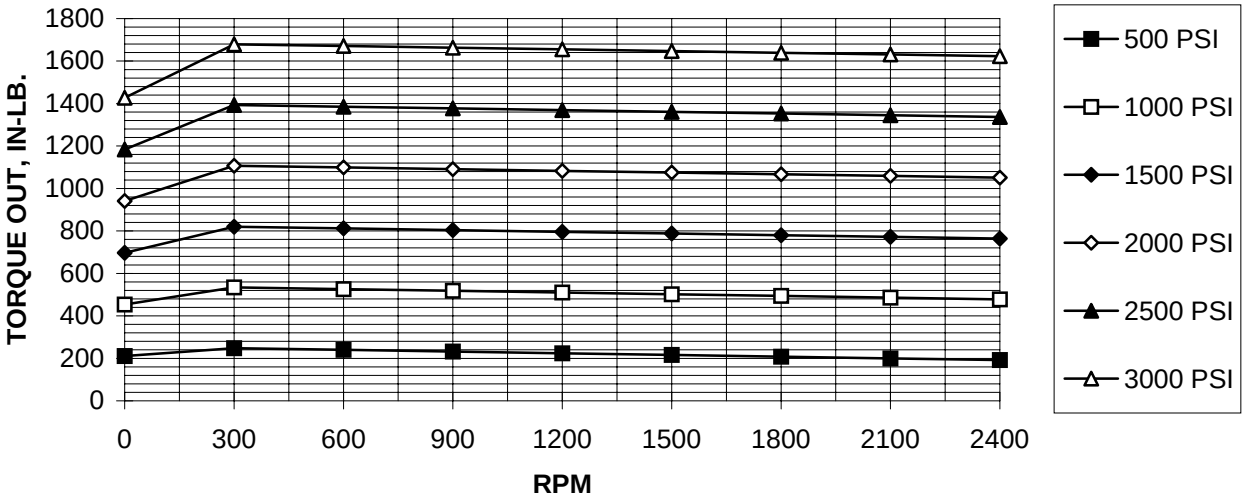
(Typical)



# GEARTEK MC200 MOTOR PERFORMANCE

SAE 10W oil @ 150 degrees F

(Typical)