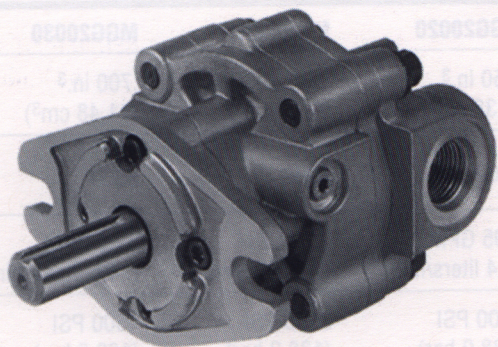


Model MGG2



- Description Hydraulic Motors
- Flow Range To 15 GPM (56.7 LTR)
- Displacements . . . To .700 C.I.R.(11.47 CC's/REV.)
- Maximum Pressure to. 2000 PSI (137 BAR)
- Maximum Speed to 5000 RPM
- Rotation Bi-Directional
- Bearings Roller
- Construction All Aluminum

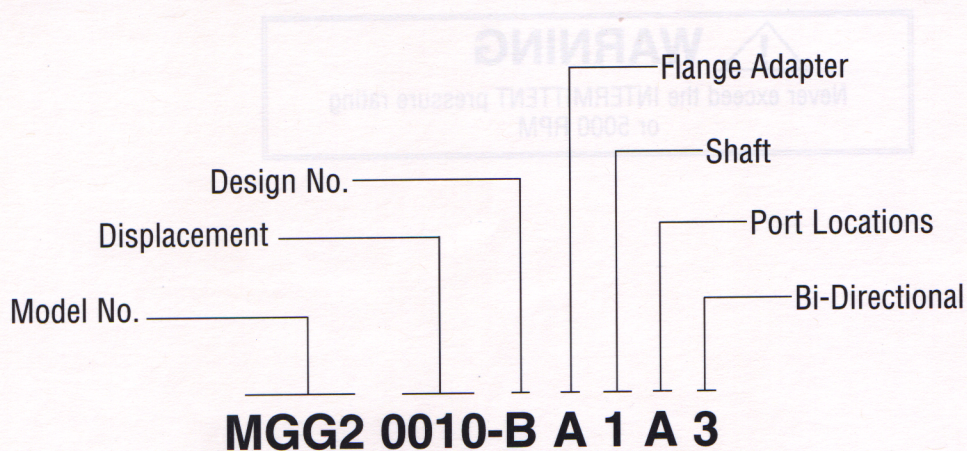
Performance Data

PUMP MODEL	DISPLACEMENT/REVOLUTION (Theoretical)					MAXIMUM PRESSURE		MAXIMUM SPEED
	US Gallons	Cubic Inches	Liters	Cubic Centimeters	Imperial Gallons	PSI	BAR	RPM
MGG20010	.0010	.218	.0039	3.572	.0008	2000	138	5000
MGG20016	.0016	.372	.0062	6.096	.0013	2000	138	5000
MGG20020	.0020	.450	.0078	7.374	.0016	2000	138	5000
MGG20025	.0025	.580	.0097	9.505	.0021	2000	138	5000
MGG20030	.0030	.700	.0116	11.471	.0025	1500	104	5000

When sizing motors, refer to the performance charts in the back of the MGG section to determine the volumetric efficiency and output horsepower.

When used in series circuits, back pressure is not to exceed 1500 PSIG.

How To Order



MGG Displacement

MODEL NO.	MGG20010	MGG20016	MGG20020	MGG20025	MGG20030	
DISPLACEMENT PER REVOLUTION	.218 in. ³ (3,57 cm ³)	.372 in. ³ (6,20 cm ³)	.450 in. ³ (7,38 cm ³)	.580 in. ³ (9,50 cm ³)	.700 in. ³ (11,48 cm ³)	
MAXIMUM RATED RPM	5000	5000	5000	5000	5000	
RATED FLOW PER 1000 RPM (NOMINAL)	.95 GPM (3,6 liters/min)	1.61 GPM (6,1 liters/min)	1.95 GPM (7,4 liters/min)	2.51 GPM (9,5 liters/min)	3.03 GPM (11,5 liters/min)	
MAXIMUM RATED PRESSURE	CONTINUOUS	2000 PSI (138,0 bar)	2000 PSI (138,0 bar)	2000 PSI (138,0 bar)	2000 PSI (138,0 bar)	1500 PSI (103,5 bar)
	INTERMITTENT	2500 PSI (172,5 bar)	2500 PSI (172,5 bar)	2500 PSI (172,5 bar)	2500 PSI (172,5 bar)	2000 PSI (138,0 bar)
OUTPUT TORQUE PER 1000 PSI* (69,0 bar)	35 in.-lbs. (40 kg-cm)	59 in.-lbs. (68 kg-cm)	72 in.-lbs. (83 kg-cm)	92 in.-lbs. (107 kg-cm)	111 in.-lbs. (128 kg-cm)	
WEIGHT	2.8 pounds (1,25 kg)	3.0 pounds (1,36 kg)	3.1 pounds (1,41 kg)	3.3 pounds (1,50 kg)	3.5 pounds (1,59 kg)	
SIDE LOAD**	170 lbs. (77,0 kg)	130 lbs. (59,0 kg)	110 lbs. (50,0 kg)	70 lbs. (31,7 kg)	30 lbs. (13,5 kg)	

*** THEORETICAL**

**** SIDE LOAD:** Maximum Permissible Shaft Side Load at 2500 RPM and 1000 PSI (69,0 bar) (B-10 Bearing Life of 1000 Hrs.)

OIL TEMPERATURE: Maximum recommended oil temperature 180° F (82,2° C)

OIL VISCOSITY: Recommended viscosity 150 SUS (3,65 engler). (32 centistokes)
Minimum recommended viscosity 60 SUS (2,1 engler). (13 centistokes)

FILTRATION: Minimum recommended filtration 10 Micron.

END THRUST: 80 LBS. (36,3 kg.) maximum.

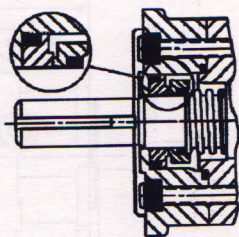


WARNING

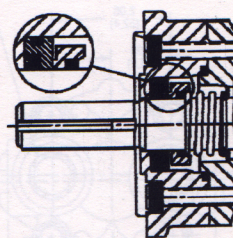
Never exceed the INTERMITTENT pressure rating or 5000 RPM

Design

B Bi-Directional Standard Seal

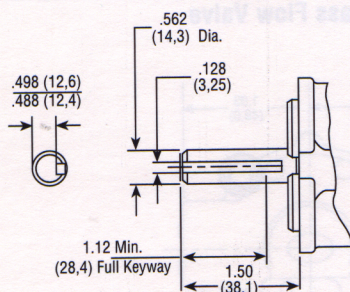


C Bi-Directional With Dust Seal

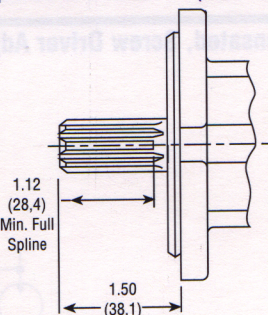


Shafts Available

1 9/16 Dia. Keyed Shaft
Torque Limit 39 Lbs. Ft. (52,9 Nm)

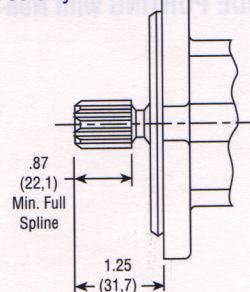


2 9/16 Dia. 8 Tooth Spline Shaft
Flat Root Side Fit-Class 2 Fit
Torque Limit 39 Lbs. Ft. (52,9 Nm)



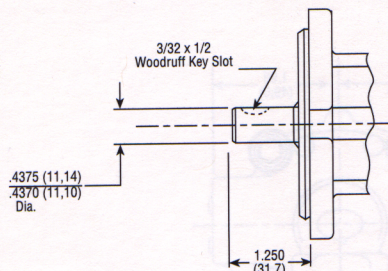
Spline Data
Diameter Pitch 16/32
Pressure Angle 30°
No. of Teeth 8

6 5/8 Dia. 9 Tooth Spline Shaft
Flat Root Side Fit - Class 1 Fit
Torque Limit 52 Lbs. Ft. (70,5 Nm)
Available in Models MGG20010, 20
25 & 30 Only

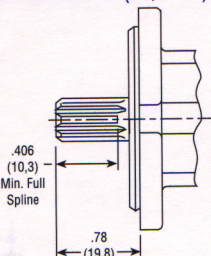


Spline Data
Diameter Pitch 16/32
Pressure Angle 30°
No. of Teeth 9

7 7/16 Dia. Keyed Shaft
Torque Limit 19 Lbs. Ft. (25,8 Nm)

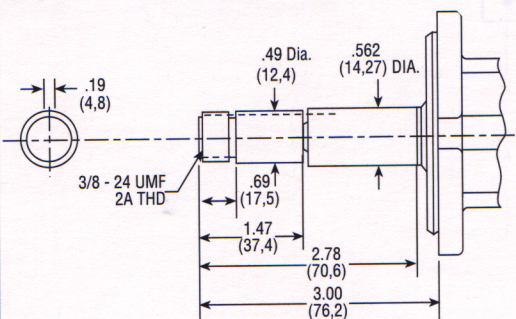


8 9/16 Dia. 8 Tooth Spline Shaft
Flat-Root Side Fit-Class 2 Fit
Torque Limit 39 Lbs. Ft. (52,9 Nm)



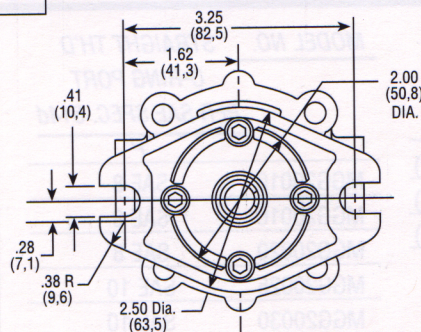
Spline Data
Diameter Pitch 16/32
Pressure Angle 30°
No. of Teeth 8

9 1/2 Dia. Keyed Shaft (Threaded)
Torque Limit 26.3 Lbs. Ft. (35,6 Nm)

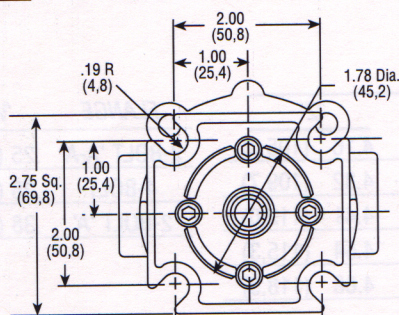


Mounting Flanges Available

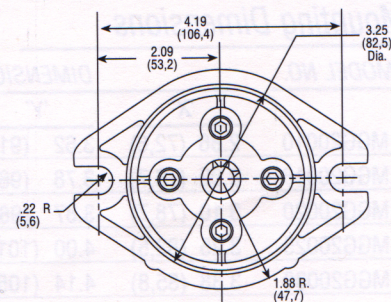
A SAE 'AA' 2-Bolt Adapter



B 4-Bolt Adapter



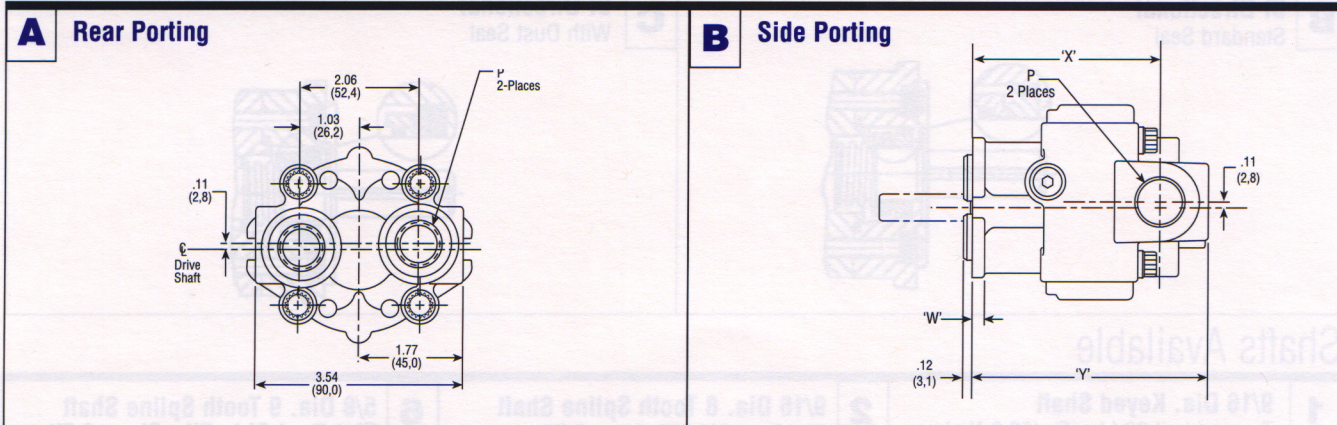
C SAE 'A' 2-Bolt Adapter



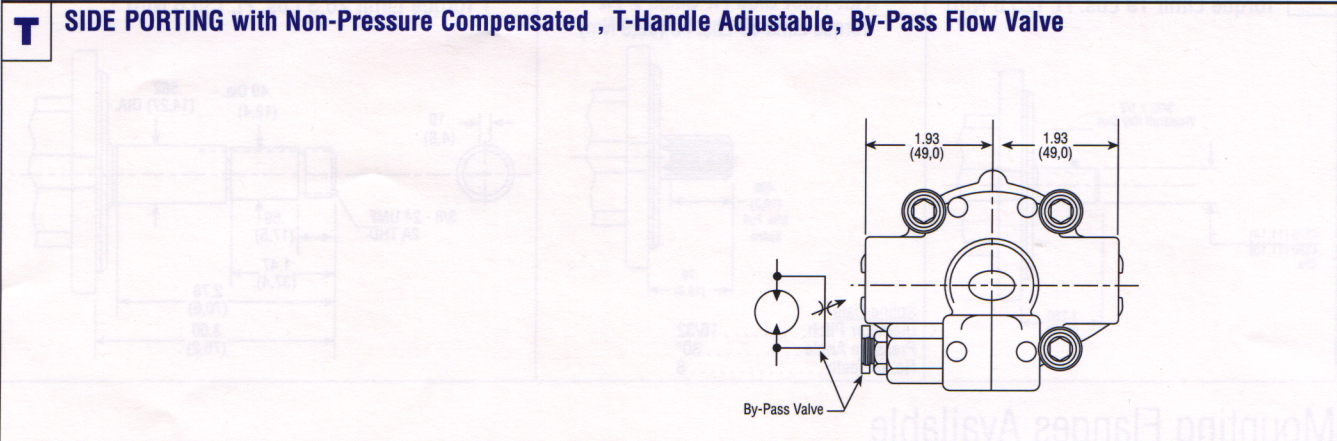
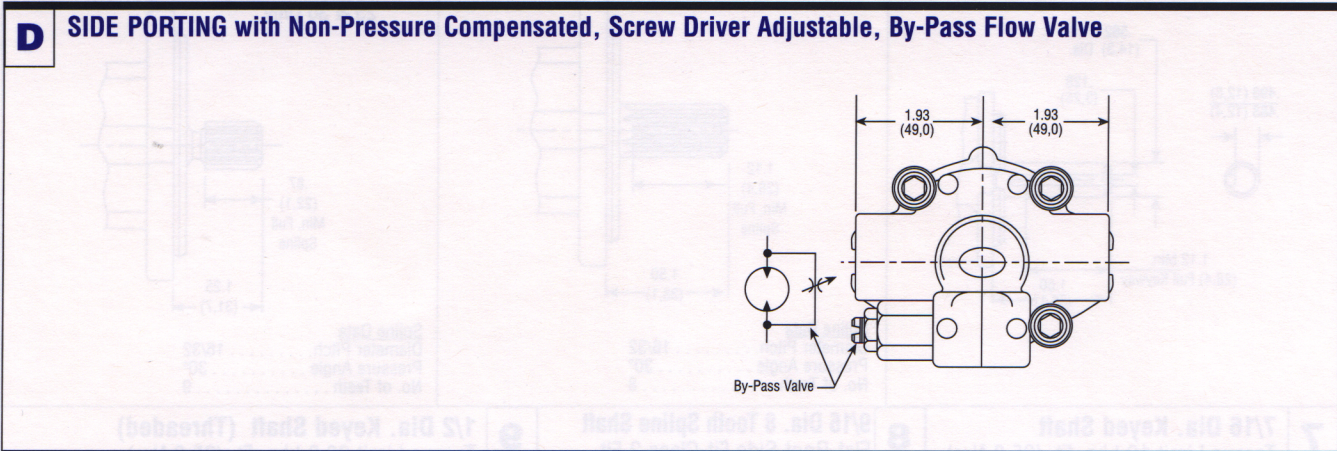
See "General Product & Safety Information" on inside front cover of this catalog



Cover Plates Available



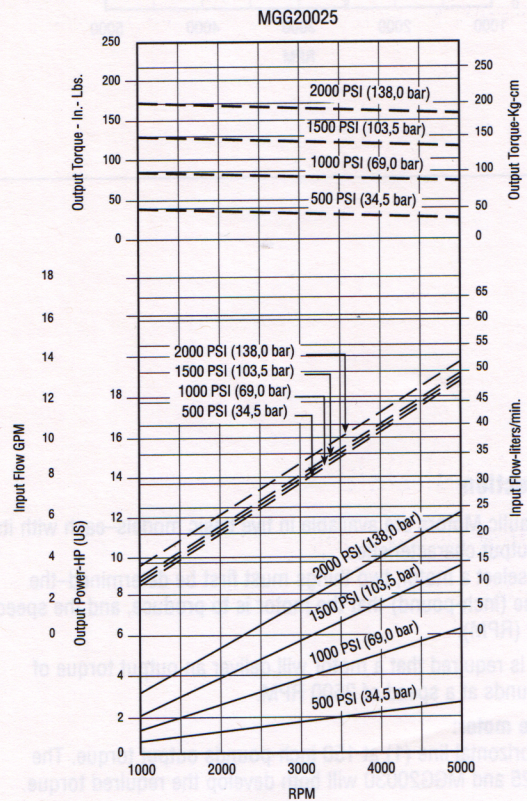
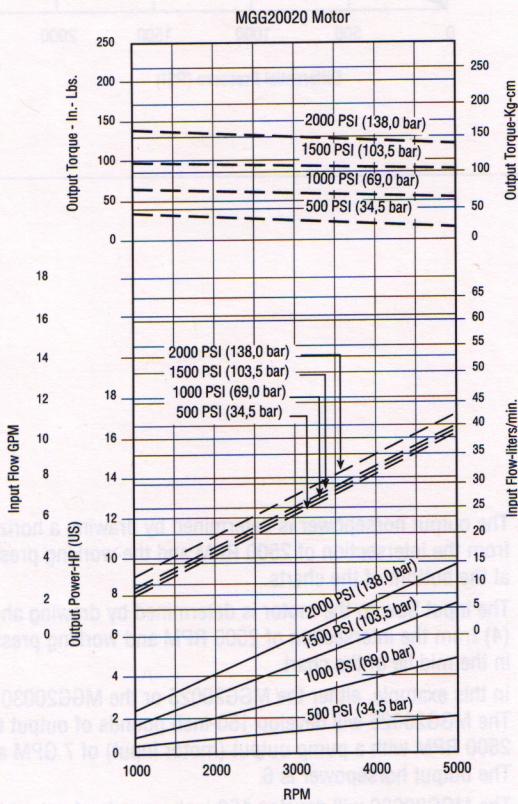
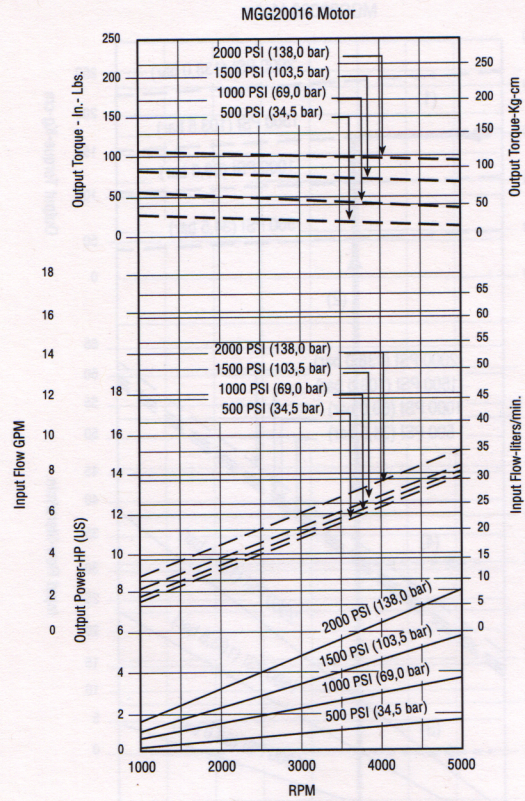
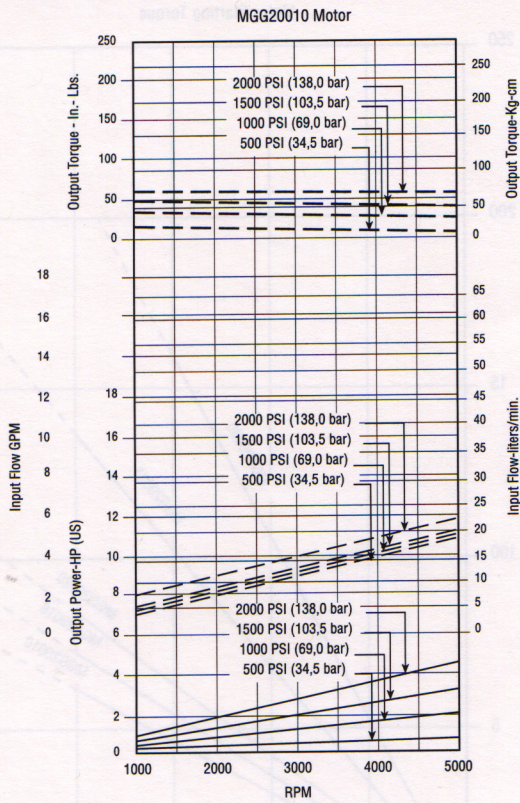
Mounting Flanges Available



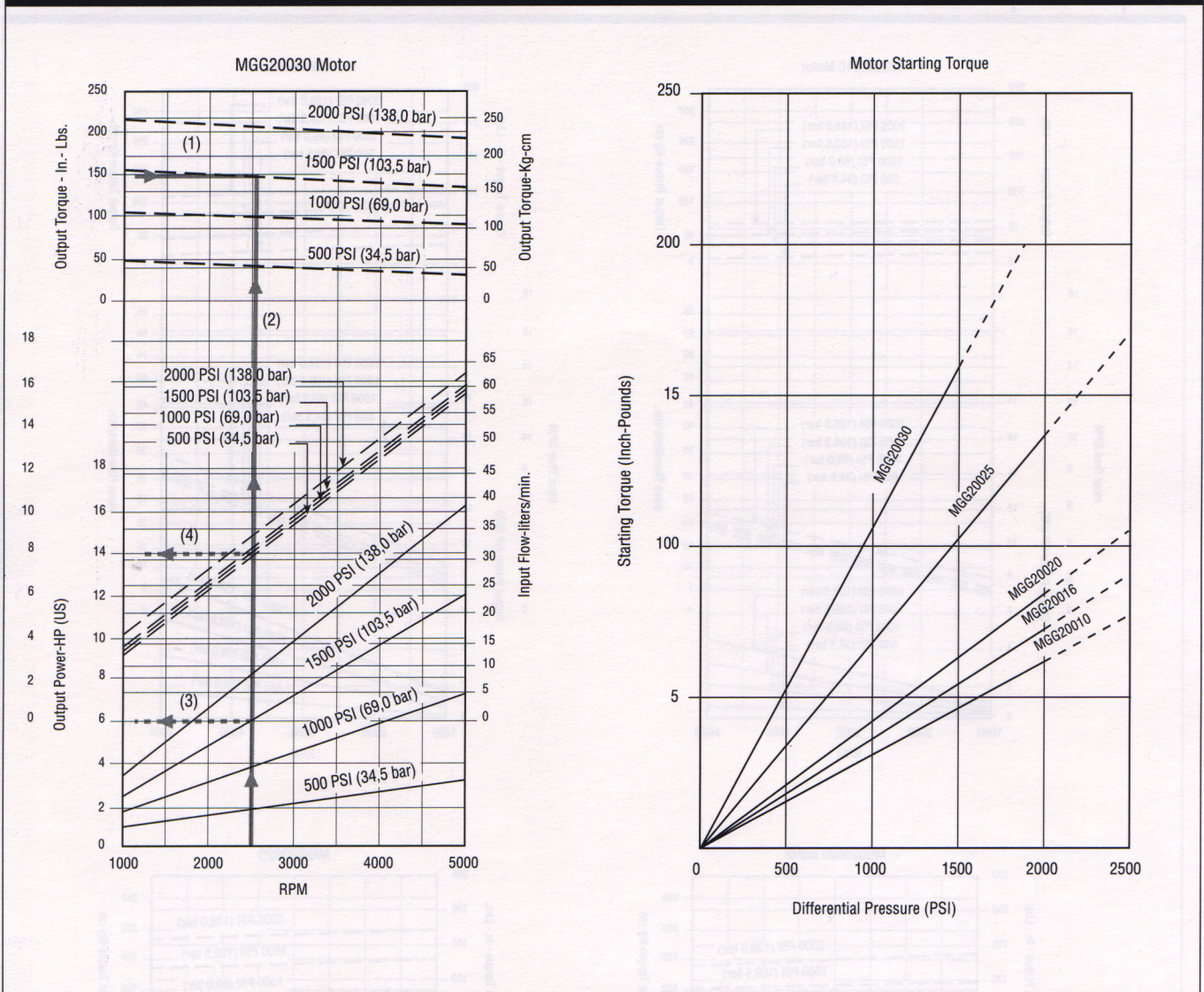
Dimensional Data

<i>Mounting Dimensions</i>						<i>MODEL NO.</i>	<i>STRAIGHT TH'D O-RING PORT PER SAE SPEC. 514d</i>
<i>MODEL NO.</i>	<i>DIMENSIONS</i>			<i>FLANGE</i>	<i>'W'</i>		<i>'P'</i>
	<i>'X'</i>	<i>'Y'</i>	<i>'Z'</i>				
MGG20010	2.86 (72,6)	3.62 (91,9)	4.16 (105,7)	2-BOLT 'A-A'	.25 (6,3)	MGG20010	SAE 8
MGG20016	3.02 (76,7)	3.78 (96,0)	4.32 (109,7)	4-BOLT	.25 (6,3)	MGG20016	SAE 8
MGG20020	3.10 (78,7)	3.87 (98,3)	4.41 (112,0)	2-BOLT 'A'	.38 (9,5)	MGG20020	SAE 8
MGG20025	3.25 (82,5)	4.00 (101,6)	4.54 (115,3)			MGG20025	SAE 10
MGG20030	3.38 (85,8)	4.14 (105,1)	4.68 (118,9)			MGG20030	SAE 10

Torque & Speed Selection Charts



Torque & Speed Selection Charts



Motor Selection

MGG2 Hydraulic Motors are available in five basic models—each with its own input/output characteristics. To properly select a motor, two things must first be determined—the output torque (inch-pound) that the motor is to produce, and the speed requirement (RPM).

Example: It is required that a motor will deliver an output torque of 150 inch-pounds at a speed of 2500 RPM.

To select the motor:

1. Draw a horizontal line (1) at 150 inch-pounds output torque. The MGG20025 and MGG20030 will both develop the required torque.
2. Draw a vertical line (2) up from 2500 RPM. The point of intersection of the 2 lines indicates the working pressure required at the motor to develop 150 inch-pounds at 2500 RPM.

3. The output horsepower is determined by drawing a horizontal line (3) from the intersection of 2500 RPM and the working pressure required at the bottom of the charts.
4. The input flow to the motor is determined by drawing a horizontal line (4) from the intersection of 2500 RPM and working pressure required in the middle of the chart.

In this example, either the MGG20025 or the MGG20030 can be used. The MGG20025 will develop 150-inch pounds of output torque at 2500 RPM with a pump output (motor input) of 7 GPM at 1800 PSI. The output horsepower is 6.

The MGG20030 will develop 150 inch-pounds of output torque at 2500 RPM with a pump output (motor input) of 8 GPM at 1500 PSI. The output horsepower is 6.