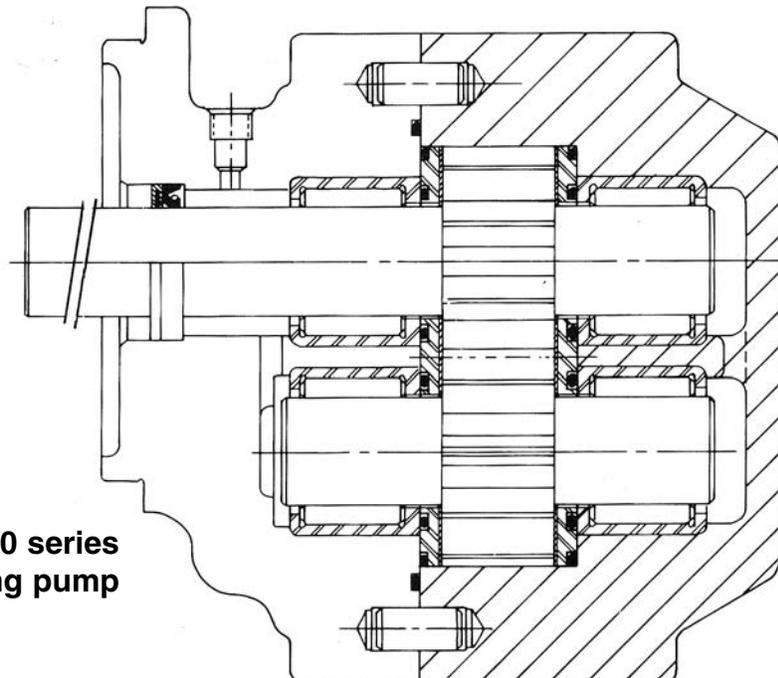


Single and Multiple Gear Pump Features

2200 High Performance Gear Pump

- Rated to 3000 PSI and 3000 RPM the 2200 size pumps utilize a very rigid, doweled, two piece construction. This simpler construction method is combined with integral gears and shafts and HYDRECO's long used four-bolt design which places all four high strength assembly bolts within the area of greatest internal pressure. This combination maintains perfect alignment and thus eliminates any decrease in efficiency due to "center section shift" at high pressures. The four-bolt design further reduces internal distortion and the resulting wear of working parts.
- Roller bearing 2200 size units have a pressure balanced seal plate, on each side of the gears. Bybalancing pressure forces on the front and back of these plates, a precise balance is obtained between minimum clearances for high volumetric efficiencies, and minimum contact with rotating parts for low mechanical losses. This combination of effort produces pumps of exceptionally high overall efficiency.
- Rotation may be changed in the field with no new or additional parts.
- Specially designed, long life roller bearings are continuously pressure lubricated even when the pump is under no load.
- Rugged high density cast iron construction further maintains high volumetric efficiency even at high operating temperatures.
- More horsepower per dollar of original cost. Large horsepower capacity in a small package. May be used as a uni-directional motor. Mounting flanges are of the versatile HYDRECO combination SAE two or four bolt design. Multiple units are of a modular design. This allows assembly of modules from stock to meet any multiple pump requirement.
- Modular design allows field replacement of any one section.
- Units are repairable due to roller bearing design. Roller bearing construction is relatively insensitive to moderate amounts of contamination. Modifications such as telltale seal drain, other port sizes, and other shaft configurations are available. Contact Hydreco.



**Cross section 2200 series
Roller bearing pump**

Single and Multiple Gear Pump Model Number System

Model Number System and Shafts

P
P-Plain Bearing
R-Roller Bearing

22
Model

00
GPM / 1000 RPM

A
Design

1
Shaft

B
Adapter

1
Cover

R or L
Rotation

Model
22

GPM I 1000 RPM

18-4.31 Cu in/Rev.

22-5.27 Cu in/Rev.

26-6.21 Cu in/Rev.

Design

A. Standard (roller bearing)

E. Telltale drain (roller bearing)

Shafts

1. SAE "C" splined shaft (under cut)
2. SAE "C" straight keyed shaft
3. SAE "B - B" straight keyed shaft
4. SAE "B" splined shaft
6. Splined shaft for rear pump
7. Splined shaft for center pump

Adapter

B-SAE "B" 2 & 4 bolt

C-SAE "C" 2 & 4 bolt

D-Center & Rear

Covers

2218, 2222 & 2226

single and rear pumps

1. Side ported pumps. 1 1/2" inlet/1 1/4" outlet S.F.

2222 front & center pumps

2. Side ports 2 1/2" inlet/1 1/4" outlet S.F.

2218 front & center pumps

2. Side ports 2" inlet/1 1/4" outlet S.F.

Rotation

View pump from shaft end

R-Clockwise

L-Counter Clockwise

Shafts

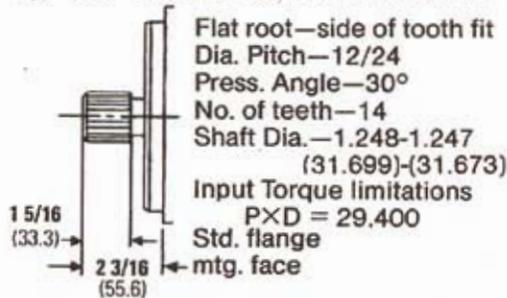
- Rotation is determined by viewing from shaft end.

2200 Max. Recommended Drive Shaft Torque Transmission Capacity

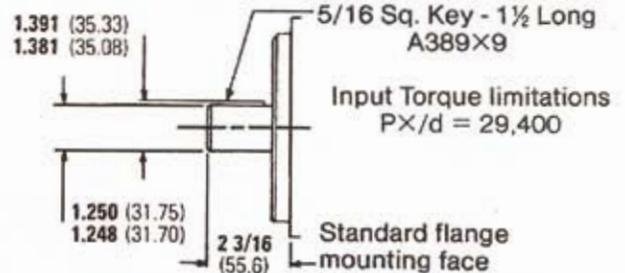
The drive shaft can withstand the required torque provided the product of pressure (PSIG) times displacement (cubic inches/rev.) does not exceed the constant indicated. Sections must be added together; sum should not exceed P x D value listed below.

No. 1 SAE "C" Splined Shaft

1 1/4" Dia. - SAE 14 Tooth Involute Spline

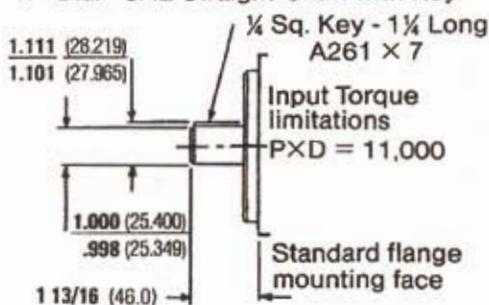


No. 2 SAE "C" Straight Keyed Shaft



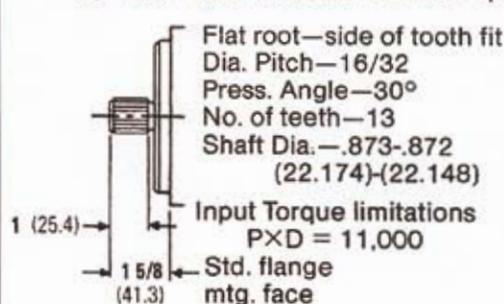
No. 3 SAE "B-B" Straight Keyed Shaft

1" Dia. - SAE Straight Shaft with Key



No. 4 SAE "B" Splined Shaft

7/8" Dia. - SAE 13 Tooth Involute Spline



No. 6

Splined shaft for rear pump.

No. 7

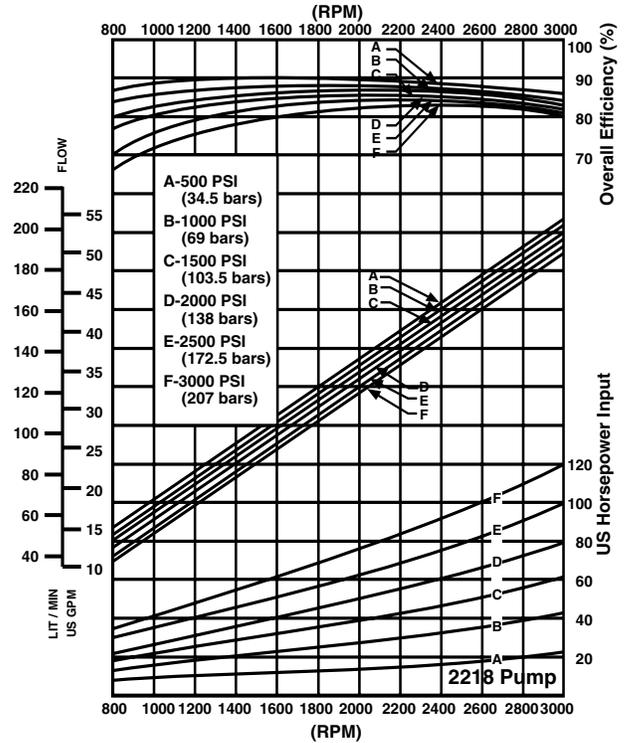
Splined shaft for center pump

Single Gear Pump Performance Data

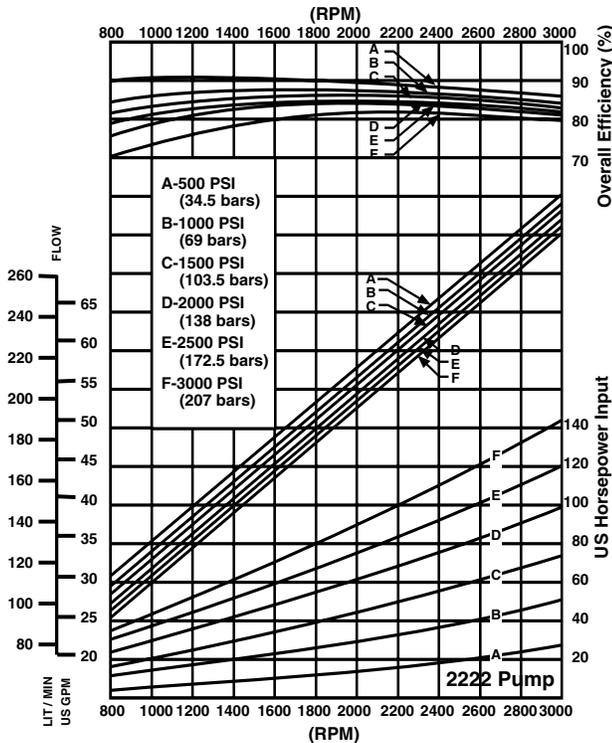
- Shown are the average results based on a series of laboratory tests of production units and are not necessarily representative of any one unit. Tests were run with the oil reservoir temperature at 120°F and viscosity 150 SSU at 100°F. Requests for more specific data should be directed to our Technical Service Department through our Sales Representatives.
- Consult your Hydreco Sales Representative for operation of pumps at (1) pressures and speeds above those shown on charts, (2) temperatures above 180°F, (3) speeds under 400 rpm when under load.
- Inlet Conditions: Max. 5" HG. at rated speed.
- Refer to individual model listings to determine which sizes are available as single, front, center or rear modules.

Pressure rating may be higher depending on duty cycle. Contact factory.

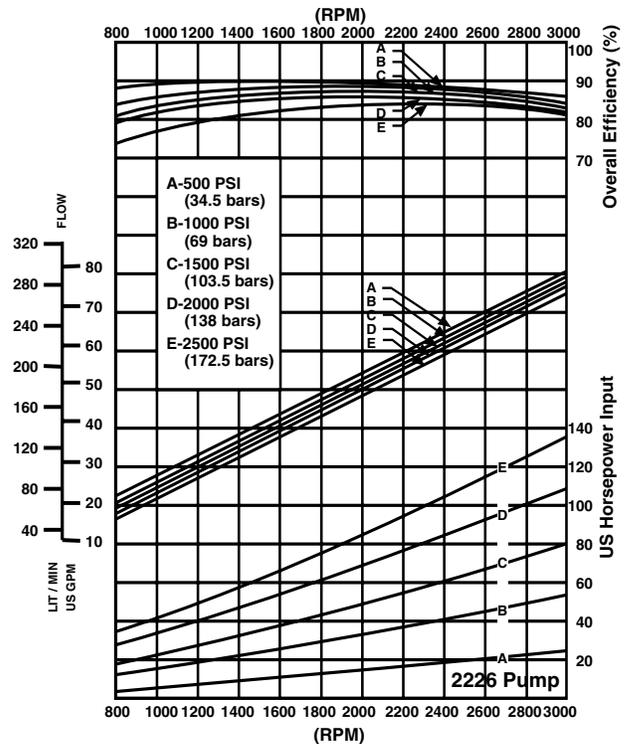
2218 Pump



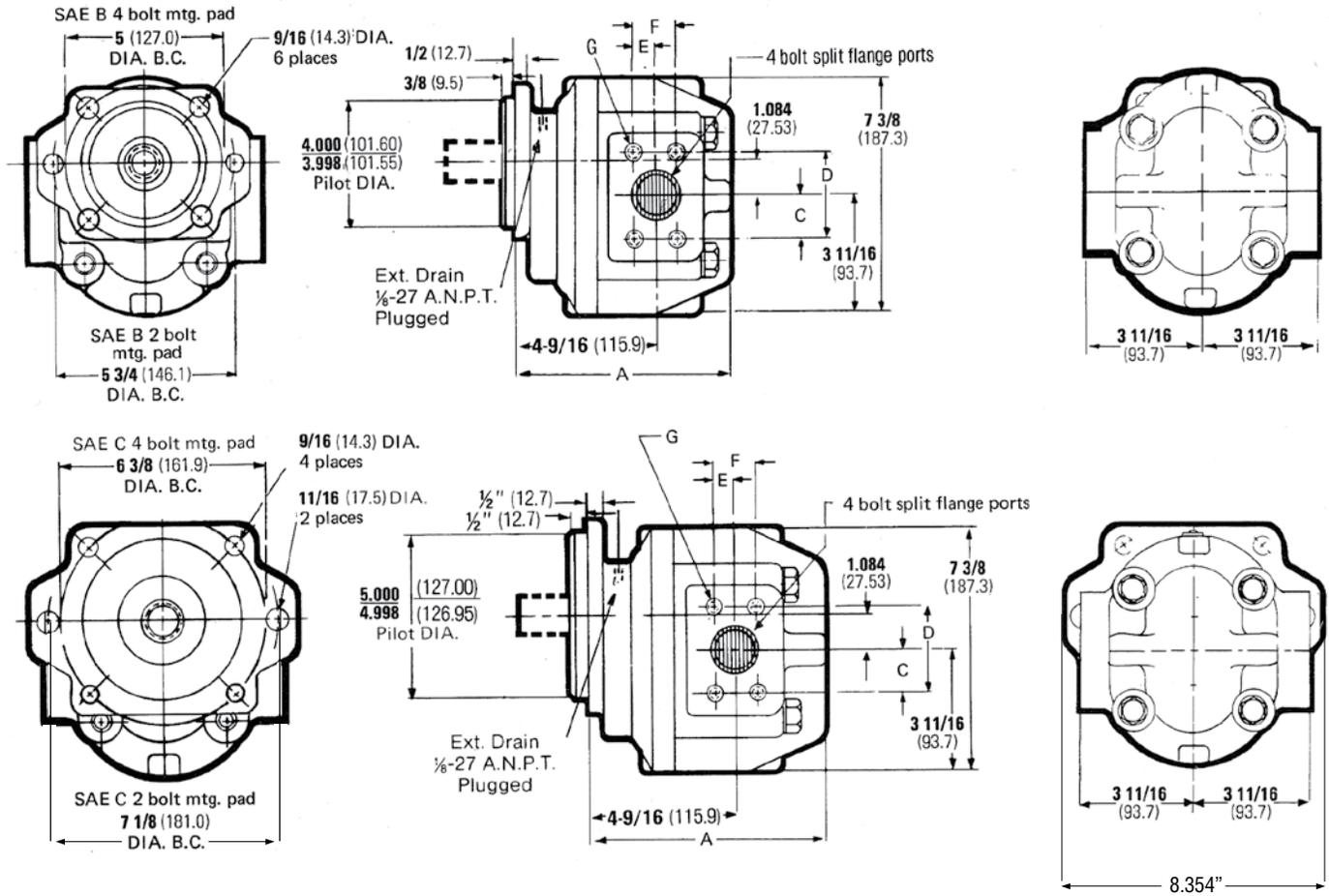
2222 Pump



2226 Pump



Single Gear Pump Installation Dimensions

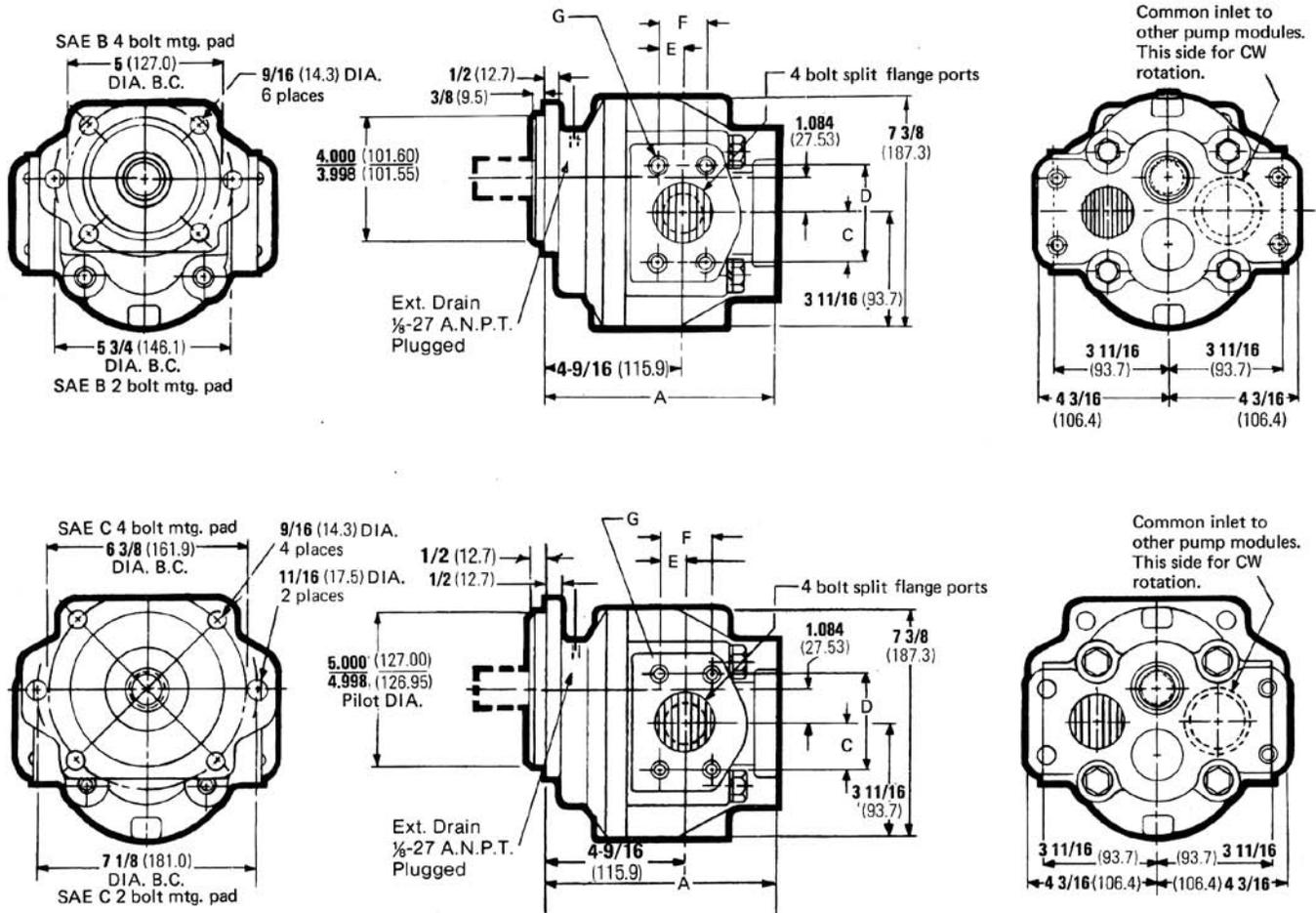


All 2200 Series Single Pumps are Available in R or L Rotation (see model no. page)

Model No. & Displacement	Max. Operating PSI (bars)	Max. Operating R.P.M.	Shaft Type	Dim "A"
2218A4B1 4.31 cir	2625*	3000	SAE "B" splined	6-5/16"
2218A1B1 4.31 cir	3000	3000	SAE "C" splined	6-5/16"
2218A1C1 4.31 cir	3000	3000	SAE "C" splined	6-5/16"
2222A1 B1 5.27 cir	3000	3000	SAE "C" splined	6-5/16"
2222A3B1 5.27 cir	2200*	3000	SAE "B - B" str. keyed	6-5/16"
2222A1 C1 5.27 cir	3000	3000	SAE "C" splined	6-5/16"
2226A1 C1 6.21 cir	2500	3000	SAE "C" splined	7-5/16"
2226A2C1 6.21 cir	2500	3000	SAE "C" str. keyed	7-5/16"

Approx. weight of 2200 series single pumps is 56 1/4 lbs. or (25.49 kg.) Mounting flanges conform to SAE J744C except two bolt and four bolt mounts are combined.
*Due to input shaft torque limitations.

Front Gear Pump Installation Dimensions



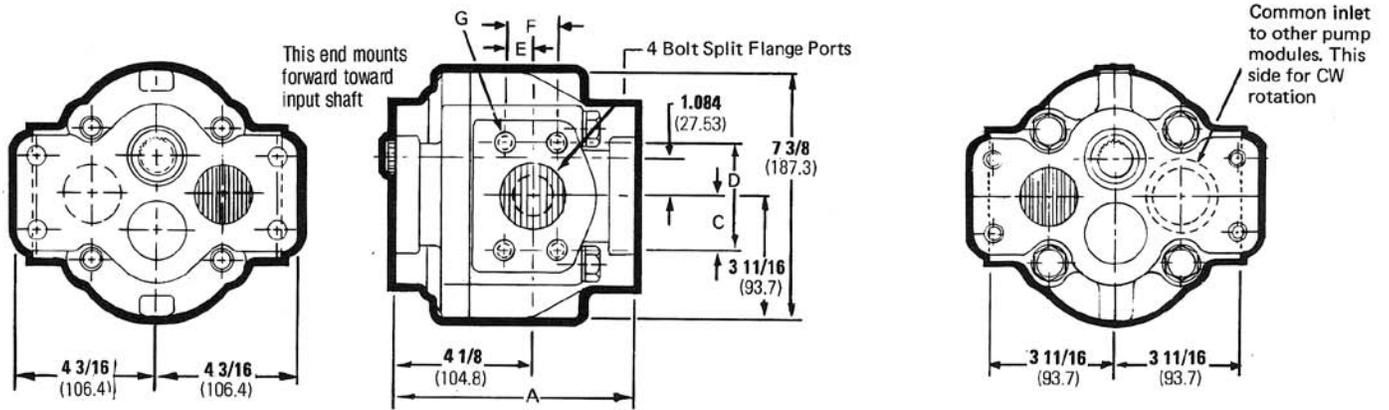
All 2200 Series Front Pumps are Available in R or L Rotation (see model no. page)

Model No. & Displacement	Max. Operating PSI (bars)	Max. Operating R.P.M.	Shaft Type	Dim "A"
221 8A4B2 4.31 cir	2650* splined	3000	SAE "B"	7 - 9/16"
221 8A3B2 4.31 cir	2650* str. keyed	3000	SAE "B-B"	7 - 9/16"
221 8A1 02 4.31 cir	3000 splined	3000	SAE "O"	7-9/16"
2222A1 B2 5.27 cir	3000 splined	3000	SAE "C"	7-9/16"
2222A2B2 5.27 cir	3000 str. keyed	3000	SAE "C"	7 - 9/16"
2222A1 C2 5.27 cir	3000 splined	3000	SAE "C"	7 - 9/16"

Approx. weight on 2200 series front pumps is 56 1/4 lbs. or (25.49 kg.) Mounting flanges conform to SAE J744G except two bolt and four bolt mounts are combined.

*Due to input shaft torque limitations.

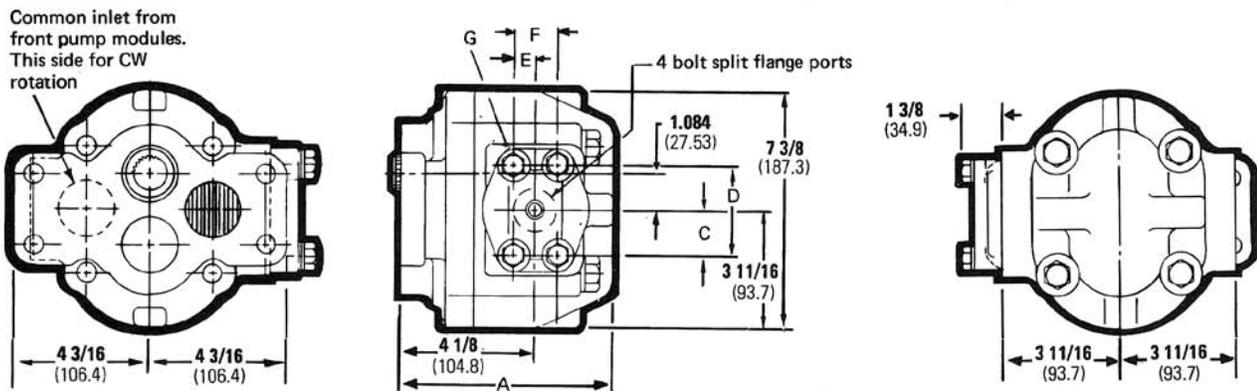
Center and Rear Gear Pump Installation Dimensions



All 2200 Series Front Pumps are Available in R or L Rotation (see model no. page)

Model No. & Displacement	Max. Operating PSI (bars)	Max. Operating R.P.M.	Shaft Type	Dim "A"
2218A7D2 4.31cir	3000	3000 (207.0)	None	7 1/8" (181.0)
2222A7D2 5.27cir	3000	3000 (207.0)	None	7 1/8" (181.0)

Approx. weight on 2200 series center pumps is 54 lbs. or (24.49 kg.)



All 2200 Series Rear Pumps are Available in R or L Rotation (see model no. page)

Model No. & Displacement	Max. Operating PSI (bars)	Max. Operating R.P.M.	Shaft Type	Dim "A"
2218A6D1 4.3 cir	3000 (207.0)	3000	None	6 1/2" (165.1)
2222A6D1 5.27 cir	3000 (207.0)	3000	None	6 1/2" (165.1)
2226A6D1 6.21cir	3000 (207.0)	3000	None	6 7/8" (174.7)

Approx. weight of 2200 series rear pumps is 54 1/2 lbs. or (24.72 kg.)