**General Information**

Dynamic offers a full range of pressure-balanced, fixed-displacement gear pumps with displacements ranging from .009 to 9.85 in<sup>3</sup>/rev. The range includes F0 and F1 all aluminium gear pumps, as well as our standard F10, F20 and F25 gear pumps constructed with aluminium center gear sections and cast iron mounting flanges and end plates. Also available are all cast iron HI/LO pumps with 14 displacement combinations, ideal for log-splitter applications, as well as side and rear ports PTO pumps for 540 and 1000 rpm applications.

## Hydraulic Pumps

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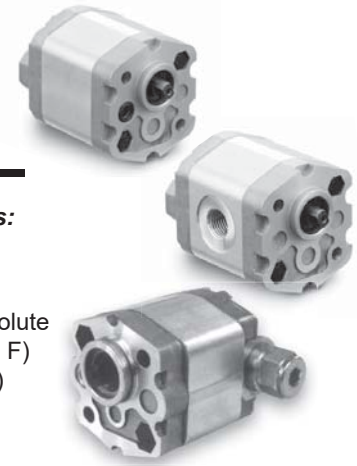
*\* Dynamic pumps are interchangeable with many leading domestic and European manufacturers.  
For information, call: 864-638-5544.*



FLUID COMPONENTS, INC.

# Hydraulic Gear Pump Model GP-F0

Available by Special Order Only



Model GP-F0 is an all aluminium construction, high pressure mini hydraulic gear pump with 12 displacement sizes from 0.009 - 0.120 in<sup>3</sup>/rev. (0.16 - 2.00 cm<sup>3</sup>/rev). The standard mounting flange is as detailed on the installation drawing and porting is any combination of rear, front or side as defined in the Ordering Example.

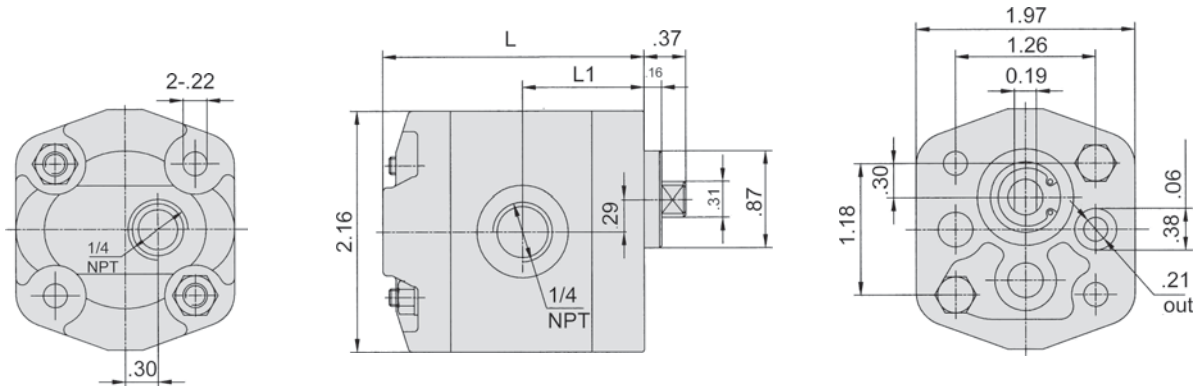
**Recommended working conditions:**

- FILTRATION: 25 micron or better
- OIL VISCOSITY: 7 - 700 cSt
- INLET PRESSURE: 12 - 32 psi absolute
- OIL TEMP: -25° - 80° C (-12° - 175° F)
- AMBIENT -22° - 55° C (-8° - 130° F)

## Technical Specifications

Model	Displacement	Pressure		Speed rpm		Weight	Dimensions	
	in <sup>3</sup> (cm <sup>3</sup> ) / rev	Rated	Max	Rated	Max	Lbs.	L	L1
GP-F0-016	0.009 (0.16)	2750	3335	2000	7000	0.82	2.40"	1.20"
GP-F0-025	0.015 (0.25)	2750	3335	2000	7000	0.84	2.44"	1.22"
GP-F0-038	0.023 (0.38)	2750	3335	2000	7000	0.85	2.46"	1.23"
GP-F0-050	0.030 (0.50)	2750	3335	2000	7000	0.87	2.48"	1.23"
GP-F0-070	0.043 (0.70)	2750	3335	2000	7000	0.90	2.40"	1.20"
GP-F0-075	0.045 (0.75)	2750	3335	2000	7000	0.91	2.44"	1.22"
GP-F0-084	0.051 (0.84)	2750	3335	2000	6000	0.91	2.46"	1.23"
GP-F0-100	0.060 (1.00)	2750	3335	2000	6000	0.92	2.48"	1.23"
GP-F0-125	0.080 (1.25)	2750	3335	2000	5000	1.00	2.79"	1.40"
GP-F0-150	0.090 (1.50)	2750	3335	2000	4000	1.04	2.87"	1.44"
GP-F0-175	0.110 (1.75)	2750	3335	2000	4000	1.08	2.95"	1.48"
GP-F0-200	0.120 (2.00)	2750	3335	2000	3500	1.13	3.03"	1.51"

Flow Rate (gpm) = Displacement (in<sup>3</sup>/rev) X Speed (rpm) / 231      Volumetric efficiency % ≥93



**Ordering Example:**      Category **GP** - Series **F0** - Displacement **016** - Drive Shaft **T** - Rotation **C** - Options

Category	Series	Displacement (cm <sup>3</sup> /rev)	Drive Shaft	Rotation	Options
Gear Pump	F0 Series	016/025/038/050/070/075/084/100/125/150/175/200	T = Flat Tang	C = Clockwise A = Counter-Clockwise (viewed from shaft end)	Omit = Standard (front & back) 1 = 1/4" NPT Side Ports 3 = Free running (reduced efficiency)

GAUGES & ACCESSORIES

HYDRAULIC PUMPS

HYDRAULIC MOTORS

APPENDIX



FLUID COMPONENTS, INC.

# Hydraulic Gear Pump Model GP-F1

Available by Special Order Only



Model GP-F1 is an all aluminium construction, high pressure hydraulic gear pump with 15 displacement sizes from 0.05 to 0.48 in<sup>3</sup>/rev. (0.8 to 8.0 cm<sup>3</sup>/rev). The standard mounting flange is as detailed on the installation drawing and porting is any combination of rear, front or side as defined in the Ordering Example. The drive shaft options include flat tang or tapered key.

**Recommended working conditions:**

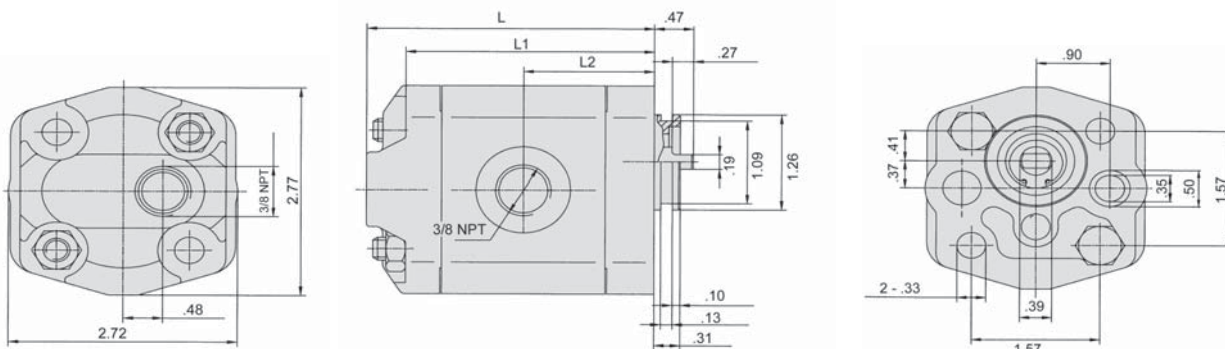
- FILTRATION: 25 micron or better
- OIL VISCOSITY: 7 - 700 cSt
- INLET PRESSURE: 12 - 32 psi absolute
- OIL TEMP: -25° - 80° C (-12° - 175° F)
- AMBIENT -22° - 55° C (-8° - 130° F)

## Technical Specifications

Model	Displacement	Pressure		Speed rpm		Weight	Measurements		
	in <sup>3</sup> (cm <sup>3</sup> ) / rev	Rated	Max	Rated	Max	lbs	L	L1	L2
GP-F1-08	0.05 (0.8)	2900	3626	2000	6000	1.65	2.87"	2.40"	1.26"
GP-F1-11	0.06 (1.1)	2900	3626	2000	6000	1.69	2.91"	2.44"	1.30"
GP-F1-13	0.07 (1.3)	2900	3626	2000	6000	1.73	2.95"	2.48"	1.32"
GP-F1-16	0.09 (1.6)	2900	3626	2000	6000	1.76	2.99"	2.52"	1.34"
GP-F1-18	0.10 (1.8)	2900	3626	2000	6000	1.78	3.03"	2.56"	1.36"
GP-F1-21	0.12 (2.1)	2900	3626	2000	6000	1.80	3.07"	2.60"	1.38"
GP-F1-27	0.16 (2.7)	2900	3626	2000	6000	1.87	3.15"	2.68"	1.42"
GP-F1-32	0.19 (3.2)	2900	3626	2000	5000	1.91	3.23"	2.76"	1.46"
GP-F1-37	0.22 (3.7)	2900	3626	2000	4500	1.98	3.31"	2.83"	1.50"
GP-F1-42	0.25 (4.2)	2900	3626	2000	4000	2.02	3.39"	2.91"	1.53"
GP-F1-48	0.29 (4.8)	2320	2900	2000	3500	2.09	3.46"	2.99"	1.57"
GP-F1-58	0.35 (5.8)	2320	2900	2000	2900	2.20	3.62"	3.15"	1.65"
GP-F1-60	0.36 (6.0)	2320	2900	2000	2750	2.25	3.66"	3.18"	1.69"
GP-F1-70	0.43 (7.0)	2320	2900	2000	2500	2.34	3.77"	3.30"	1.77"
GP-F1-80	0.48 (8.0)	2320	2900	2000	2100	2.42	3.94"	3.46"	1.81"

Flow Rate (gpm) = Displacement (in<sup>3</sup>/rev) X Speed (rpm) / 231

Volumetric efficiency % ≥93

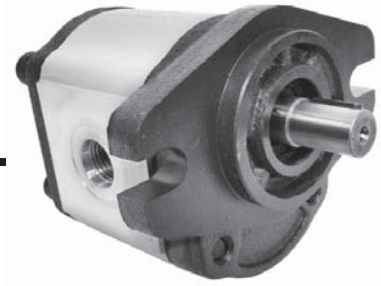


**Ordering Example:**

Category	Series	Displacement	Drive Shaft	Rotation	Options
<b>GP</b>	<b>F1</b>	<b>32</b>	<b>T</b>	<b>C</b>	<b> </b>

Category	Series	Displacement (cm <sup>3</sup> /rev)	Drive Shaft	Rotation	Options
Gear Pump	F1 Series	08/11/13/16/18/ 21/27/32/37/42/ 48/58/60/70/80	T = Flat Tang Z = Taper	C = Clockwise A = Counter-Clockwise (viewed from shaft end)	Omit = Standard (front & back) 1 = Side Ports (3/8" NPT) 2 = Side Ports (SAE-8/SAE-6) 3 = Free running (reduced efficiency)

## Hydraulic Gear Pump Model GP-F10



Constructed of an aluminium center section and cast iron end plates, model GP-F10 is a high pressure hydraulic gear pump with 8 displacement sizes from 0.07 - 0.48 in<sup>3</sup>/rev. (1.3 - 8.0 cm<sup>3</sup>/rev). The standard mounting flange is a SAE AA - 2 bolt; standard ports are SAE-8 inlet and SAE-6 outlet; and the drive shaft is a 1/2" diameter straight shaft with 1/8" key.

### Recommended working conditions:

FILTRATION: 25 micron or better  
OIL TEMP: -25° - 80°C (-12° - 175°F)

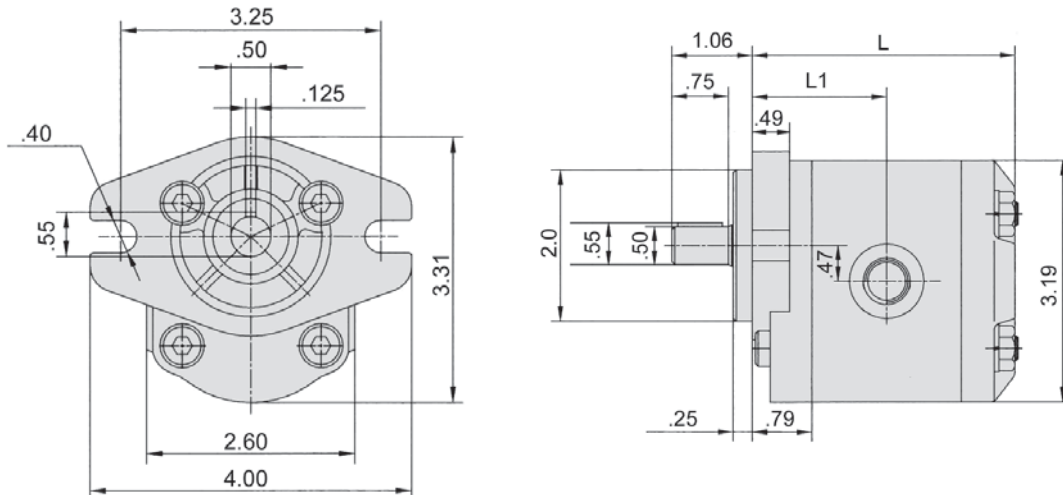
OIL VISCOSITY: 7 - 700 cSt  
AMBIENT TEMP: -22° - 55°C (-8° - 130°F)

INLET PRESSURE: 12 - 32 psi absolute

### Technical Specifications

Model	Displacement in <sup>3</sup> (cm <sup>3</sup> ) / rev	Pressure		Speed rpm		Weight Lbs.	L	L1	Ports	
		Rated	Max	Rated	Max				In	Out
GP-F10-13	0.07 (1.3)	2900	3625	2000	5000	2.02	3.23"	1.65"	SAE-8	SAE-6
GP-F10-20	0.12 (2.0)	2900	3625	2000	5000	2.31	3.30"	1.69"	SAE-8	SAE-6
GP-F10-27	0.16 (2.7)	2900	3625	2000	5000	2.68	3.39"	1.73"	SAE-8	SAE-6
GP-F10-34	0.20 (3.4)	2900	3625	2000	5000	2.99	3.46"	1.77"	SAE-8	SAE-6
GP-F10-41	0.25 (4.1)	2900	3625	2000	4000	3.34	3.54"	1.81"	SAE-8	SAE-6
GP-F10-51	0.31 (5.1)	2900	3625	2000	4000	3.78	3.66"	1.87"	SAE-8	SAE-6
GP-F10-61	0.37 (6.1)	2900	3625	2000	4000	4.18	3.78"	1.93"	SAE-8	SAE-6
GP-F10-80	0.48 (8.0)	2900	3625	2000	4000	5.01	3.97"	2.01"	SAE-8	SAE-6

Flow Rate (gpm) = Displacement (in<sup>3</sup>/rev) X Speed (rpm) / 231  
Volumetric efficiency % ≥93



**Ordering Example:**    **GP** - **F10** - **20** - **P** - **C** - **□**

Category    Series    Displacement    Drive Shaft    Rotation    Options

Category	Series	Displacement (see chart)	Drive Shaft*	Rotation	Options
Gear Pump	F10 Series SAE "AA" Mount	13/20/27/34 41/51/61/80	P = 1/2" dia. Straight	C = Clockwise A = Counter-Clockwise (viewed from shaft end)	BB* = Rear Ports Y* = Relief Valve

\* Special Order.

\*\* Additional seal and shaft options available. Please consult factory.

Seal kits are available for F10 gear pumps. See page 137 for details.



FLUID COMPONENTS, INC.

# Hydraulic Gear Pump Model GP-F20



Constructed of an aluminium center section and cast iron end plates, model GP-F20 is a high pressure hydraulic gear pump with 11 displacement sizes from 0.24 - 1.95 in<sup>3</sup>/rev. (4 - 32 cm<sup>3</sup>/rev). The standard mounting flange is a SAE A - 2 bolt. Standard drive shaft is a 5/8" straight shaft with 5/32" key. Additional shaft options are available as outlined in the Ordering Example.

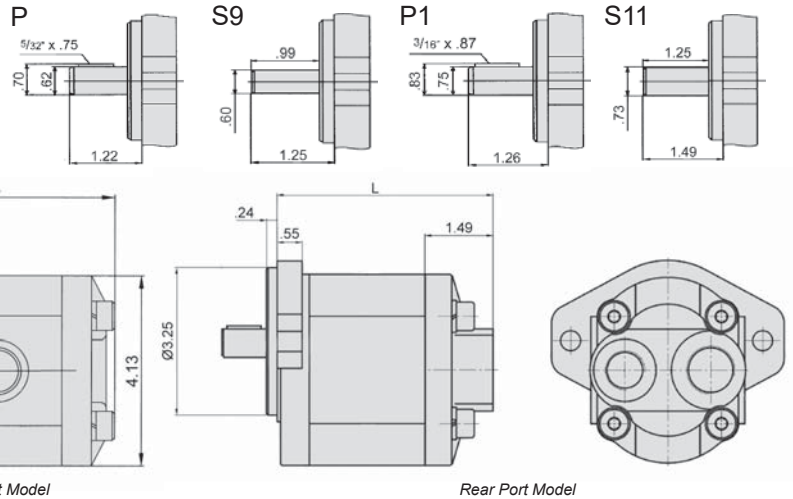
**Recommended working conditions:**

FILTRATION: 25 micron or better      OIL VISCOSITY: 7 - 700 cSt      INLET PRESSURE: 12 - 32 psi absolute  
OIL TEMP: -25° - 80°C (-12° - 175°F)      AMBIENT -22° - 55°C (-8° - 130°F)

**Technical Specifications**

Model	Displacement	Pressure psi		Speed rpm		Weight lbs	Ports		L		L1
	in <sup>3</sup> (cm <sup>3</sup> ) / rev	Rated	Max	Rated	Max		In	Out	side ported	rear ported	
GP-F20-04	0.24 (4)	2900	3625	2000	3500	7.75	SAE-12	SAE-10	3.70"	4.15"	1.70"
GP-F20-06	0.36 (6)	2900	3625	2000	3500	7.85	SAE-12	SAE-10	3.87"	4.32"	1.77"
GP-F20-08	0.48 (8)	2900	3625	2000	3500	8.00	SAE-12	SAE-10	3.95"	4.40"	1.83"
GP-F20-10	0.61 (10)	2900	3625	2000	3500	8.25	SAE-12	SAE-10	4.12"	4.47"	1.89"
GP-F20-12	0.73 (12)	2900	3625	2000	3500	8.60	SAE-12	SAE-10	4.25"	4.70"	1.97"
GP-F20-14	0.85 (14)	2900	3625	2000	3500	8.80	SAE-12	SAE-10	4.35"	4.80"	2.01"
GP-F20-16	0.97 (16)	2900	3625	2000	3500	9.00	SAE-12	SAE-10	4.50"	4.95"	2.09"
GP-F20-20	1.22 (20)	2900	3625	2000	3500	9.35	SAE-12	SAE-10	4.72"	5.17"	2.20"
GP-F20-25	1.52 (25)	2900	3625	2000	3000	9.75	SAE-12	SAE-10	5.17"	5.62"	2.36"
GP-F20-30	1.83 (30)	2320	2900	2000	3000	10.25	SAE-16	SAE-12	5.35"	5.80"	2.52"
GP-F20-32	1.95 (32)	2320	2900	2000	3000	10.60	SAE-16	SAE-12	5.79"	6.24"	2.87"

Flow Rate (gpm) = Disp. (in<sup>3</sup>/rev) X Speed (rpm) / 231  
Volumetric efficiency % ≥93



**Ordering Example:**    **GP** - **F20** - **25** - **P** - **C** -

Category	Series	Displacement (see chart)	Drive Shaft*	Rotation	Options
Gear Pump	F20 Series SAE "A" Mount	04/06/08/10/12 14/16/20/25/30/32	P = 5/8" dia. Straight P1 = 3/4" dia. Straight S9 = SAE 9-tooth spline S11* = SAE 11-tooth spline	C = Clockwise A = Counter-Clockwise (viewed from shaft end)	BB** = Rear Ports

\* Additional seal and shaft options available. Consult factory.  
\*\* Reduced flow for 20cc & 25cc models. Not available on 30cc or 32cc  
**Seal kits are available for F20 gear pumps. See page 137 for details.**

## Hydraulic Gear Pump Model GP-F25



Constructed of an aluminium center section and cast iron end plates, model GP-F25 is a high pressure hydraulic gear pump with 10 displacement sizes from 1.34 - 5.43 in<sup>3</sup>/rev (22 - 89 cm<sup>3</sup>/rev). The standard mounting flange is a SAE B - 2-bolt with a 7/8" diameter straight shaft and 1/4" key.

### Recommended working conditions:

FILTRATION: 25 micron or better  
OIL TEMP: -25° - 80°C (-12° - 175°F)

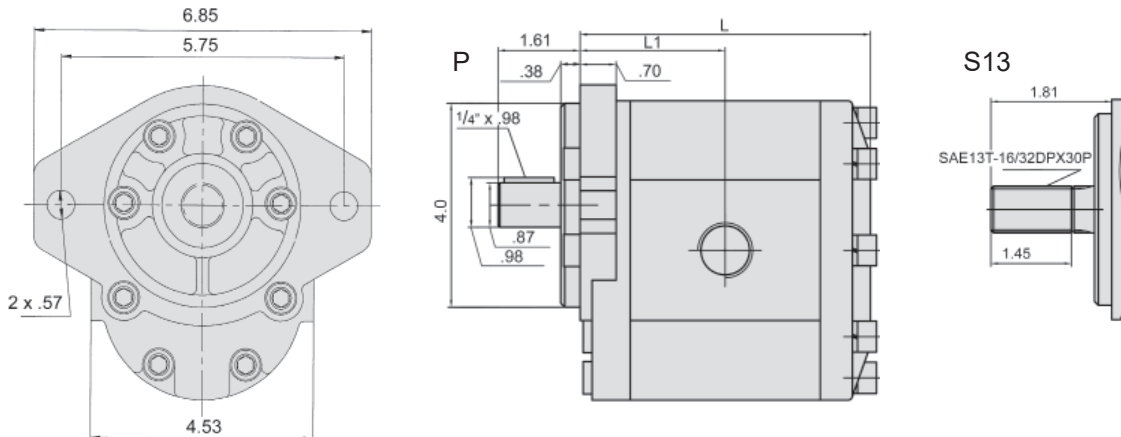
OIL VISCOSITY: 7 - 700 cSt  
AMBIENT -22° - 55°C (-8° - 130°F)

INLET PRESSURE: 12 - 32 psi absolute

### Technical Specifications

Model	Displacement in <sup>3</sup> (cm <sup>3</sup> ) / rev	Pressure psi		Speed rpm		Weight Lbs.	L	L1	Ports	
		Rated	Max	Rated	Max				In	Out
GP-F25-22	1.34 (22)	2900	3625	2000	3000	19.35	5.13"	2.57"	SAE-16	SAE-12
GP-F25-26	1.57 (26)	2900	3625	2000	3000	19.55	5.25"	2.63"	SAE-16	SAE-12
GP-F25-34	2.07 (34)	2900	3625	2000	3000	20.20	5.46"	2.71"	SAE-16	SAE-12
GP-F25-39	2.38 (39)	2900	3625	2000	3000	20.65	5.62"	2.79"	SAE-16	SAE-12
GP-F25-43	2.62 (43)	2900	3625	2000	2800	20.85	5.78"	2.87"	SAE-16	SAE-12
GP-F25-51	3.11 (51)	2900	3625	2000	2800	21.50	5.98"	2.99"	SAE-16	SAE-12
GP-F25-60	3.84 (60)	2600	3335	1500	2800	22.25	6.22"	3.11"	SAE-16	SAE-12
GP-F25-70*	4.27 (70)	2600	2900	1500	2500	22.75	6.53"	3.22"	SAE-20	SAE-16
GP-F25-78*	4.76 (78)	2300	2900	1500	2300	23.50	6.73"	3.34"	SAE-20	SAE-16
GP-F25-89*	5.43 (89)	2000	2600	1500	2000	25.00	6.93"	3.46"	SAE-20	SAE-16

Flow Rate (gpm) = Displacement (in<sup>3</sup>/rev) X Speed (rpm) / 231  
Volumetric efficiency % ≥93



**Ordering Example:** **GP** - **F25** - **34** - **P** - **C**

Category	Series	Displacement (see chart)	Drive Shaft**	Rotation
Gear Pump	F25 Series SAE "B" Mount	22/26/34/39/43/51 60/70*/78*/89*	P = 7/8" dia. Straight S13 = 13-tooth Spline	C = Clockwise A = Counter-Clockwise (viewed from shaft end)

\* Special Order.

\*\* Additional seal and shaft options available. Please consult factory.

Seal kits for F25 gear pumps are available. See page 137 for details.



FLUID COMPONENTS, INC.

# Hydraulic Gear Pumps Double & Triple Pumps

Dynamic gear pump models GP-F10, GP-F20 and GP-F25 are available with features that allow pumps to be stacked to produce double and triple pumps from the base model. Technical data, including displacement sizes, working pressure, rated speed, etc. is as per the first pump position pump model. For example model GP-F20D-12/08-S9-C is a double pump with displacements of 12 and 8 cm<sup>3</sup>/rev (.73 and .48 in<sup>3</sup>/rev) rated at 2000 rpm and 2900 psi with a 9-tooth spline drive shaft and clockwise rotation.

**Recommended working conditions:**

- FILTRATION: 25 micron or better
- OIL VISCOSITY: 7 - 700 cSt
- INLET PRESSURE: 12 - 32 psi absolute
- OIL TEMPERATURE: -25° - 80° C (-12° - 175° F)
- AMBIENT -22° - 55° C (-8° - 130° F)



**Installation Data**

Contact Dynamic for installation information on specific models. Custom stacked pumps can also be produced by special order. Consult factory for details.

**Ordering Example:**

Category	Series/Stack	Pump 1 Size	Pump 2 Size	Pump 3 Size	Drive Shaft	Rotation	Inlet
<b>GP</b>	<b>- F20D</b>	<b>- 12</b>	<b>/ 08</b>	<b>-</b>	<b>P</b>	<b>- C</b>	<b>-</b>

Category	Series	Stack	Pump Sizes	Drive Shaft	Rotation	Inlet
Gear Pump	F10 = "AA" Mount F20 = "A" Mount F25* = "B" Mount	D = Double T* = Triple	Displacement options below	Shaft options below	C = Clockwise A = Counter-Clockwise (viewed from shaft end)	omit = dual inlet SI = single inlet

**F10 - Disp. Options**

Model	Displacement in <sup>3</sup> (cm <sup>3</sup> ) / rev
GP-F10-13	0.07 (1.3)
GP-F10-20	0.12 (2.0)
GP-F10-27	0.16 (2.7)
GP-F10-34	0.20 (3.4)
GP-F10-41	0.25 (4.1)
GP-F10-51	0.31 (5.1)
GP-F10-61	0.37 (6.1)
GP-F10-80	0.48 (8.0)
<b>F10 Shaft Options</b>	
P = 1/2" dia. Straight	

**F20 - Disp. Options**

Model	Displacement in <sup>3</sup> (cm <sup>3</sup> ) / rev
GP-F20-04	0.24 (4)
GP-F20-06	0.36 (6)
GP-F20-08	0.48 (8)
GP-F20-10	0.61 (10)
GP-F20-12	0.73 (12)
GP-F20-14	0.85 (14)
GP-F20-16	0.97 (16)
GP-F20-20	1.22 (20)
GP-F20-25	1.52 (25)
GP-F20-30	1.83 (30)
GP-F20-32	1.95 (32)
<b>F20 Shaft Options</b>	
P = 5/8" dia. Straight	
P1* = 3/4" dia. Straight	
S9* = 9-tooth Spline	
S11* = 11-tooth Spline	

**F25 - Disp. Options**

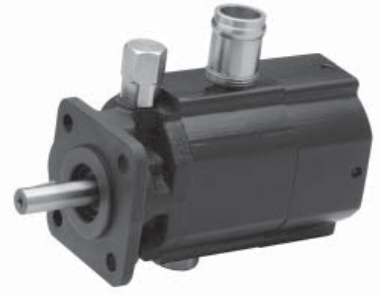
Model	Displacement in <sup>3</sup> (cm <sup>3</sup> ) / rev
GP-F25-22	1.34 (22)
GP-F25-26	1.57 (26)
GP-F25-34	2.07 (34)
GP-F25-39	2.38 (39)
GP-F25-43	2.62 (43)
GP-F25-51	3.11 (51)
GP-F25-60	3.84 (60)
GP-F25-70	4.27 (70)
GP-F25-78	4.76 (78)
GP-F25-89	5.43 (89)
<b>F25 Shaft Options</b>	
P* = 7/8" dia. Straight	
S13* = 13-tooth Spline	

**Please Note:**

Only F10 and F20 double pumps with dual inlets and the standard "P" shaft can be built in-house. All other double and triple pumps are special order and come direct from the factory.

\* Special Order

## Hydraulic Gear Pump Model GP-CBN



Model GP-CBN is a HI/LO hydraulic gear pump with 12 displacement combinations with maximum pressures of 900 psi for the low pressure pump and 3000 psi for the high pressure pump. The change from LO to HI pressure is automatic with the LO pressure preset at approx. 450 psi (adjustable from 400 to 900 psi - screw in to increase and out to decrease). The HI/LO pump is all cast iron. Applications for HI/LO pumps include log splitters, presses, etc. where rapid movement of the cylinder at low pressure is required prior to automatically switching to the high pressure mode to meet load requirements.

### Recommended working conditions:

FILTRATION: 25 micron or better  
OIL TEMP: -25° - 80° C (-12° - 175° F)

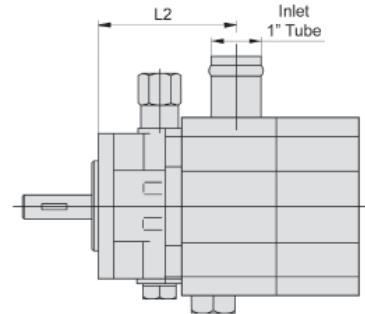
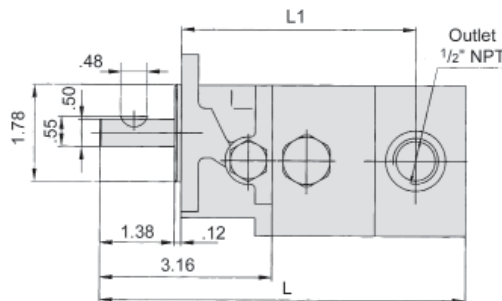
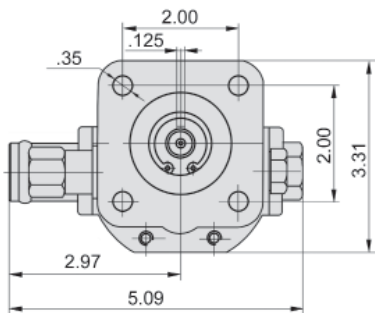
OIL VISCOSITY: 7 - 700 cSt  
AMBIENT -22° - 55° C (-8° - 130° F)

INLET PRESSURE: 12 - 32 psi absolute

### Technical Specifications

Model	Flow at 3600 rpm (gpm)	Displacement in <sup>3</sup> /rev (cm <sup>3</sup> /rev)		Pressure psi		Speed (rpm)	Dimensions			Weight (lbs)
		LO	HI	LO	HI		L	L1	L2	
GP-CBN-080-P-C	8	0.130 (2.1)	.385 (6.3)	400/900	3000	3600	6.07"	3.74"	2.41"	8.8
GP-CBN-090-P-C	9	0.220 (3.6)	.385 (6.3)	400/900	3000	3600	6.28"	3.90"	2.41"	9.2
GP-CBN-110-P-C	11	0.189 (3.1)	.537 (8.8)	400/900	3000	3600	6.61"	4.24"	2.74"	9.8
GP-CBN-130-P-C	13	0.189 (3.1)	.665 (10.9)	400/900	3000	3600	7.03	4.60	3.06	10.8
GP-CBN-160-P-C	16	0.256 (4.2)	.793 (13.0)	400/900	3000	3600	7.47	5.06	3.34	11.5

Flow Rate (gpm) = Displacement (in<sup>3</sup>/rev) X Speed (rpm) / 231  
Volumetric efficiency % ≥93



### Ordering Example:

Category: **GP** - Series: **CBN** - Displacement: **160** - Drive Shaft: **P** - Rotation: **C**

Category	Series	Nominal Flow gpm at 3600	Drive Shaft**	Rotation
GP = Gear Pump	CBN = HI/LO Series	080/090/110/ 130/160	P = 1/2" dia. Straight	C = Clockwise (viewed from shaft end)

\* Special Order

\*\* Additional shaft and flow rate options available by special order. Please consult factory.

Seal kits for CBN gear pumps are available. See page 137 for details.





FLUID COMPONENTS, INC.

# Hydraulic Gear Pump

## Model GP-CBN

### 22 and 28 gpm Models



Model GP-CBN is a HI/LO hydraulic gear pump offers maximum pressures of 900 psi for the low pressure pump and 3000 psi for the high pressure pump. The change from LO to HI pressure is automatic with the LO pressure preset at approx. 850 psi (adjustable from 400 to 900 psi - screw in to increase and out to decrease). The HI/LO pump is all cast iron. Applications for HI/LO pumps include log splitters, presses, etc. where rapid movement of the cylinder at low pressure is required prior to automatically switching to the high pressure mode to meet load requirements.

### Technical Specifications

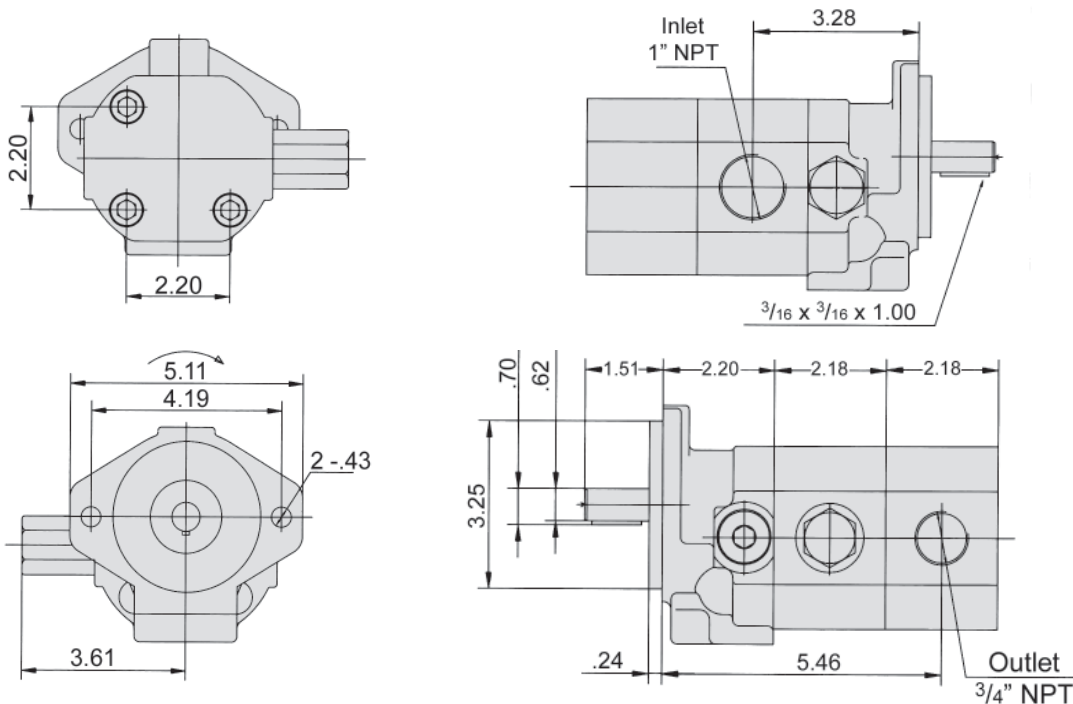
**Recommended working conditions:**

Model	Flow at 3600 rpm (gpm)	Displacement in <sup>3</sup> /rev (cm <sup>3</sup> /rev)		Pressure (psi)		Speed (rpm)	Weight (lbs)
		LO	HI	LO	HI		
GP-CBN-220-P-C	22	0.465 (7.63)	0.93 (15.26)	400/900	3000	3600	18.6
GP-CBN-280-P-C	28	0.465 (7.63)	1.395 (22.88)	400/900	3000	3600	19.7

FILTRATION: 25 micron or better  
 OIL VISCOSITY: 7 - 700 cSt  
 INLET PRESSURE: 12 - 32 psi abs.  
 OIL TEMP: -25° - 80°C (-12° - 175°F)  
 AMBIENT TEMP: -22° - 55°C (-8° - 130°F)

$Flow\ Rate\ (gpm) = Displacement\ (in^3/rev) \times Speed\ (rpm) / 231$  Volumetric efficiency %  $\geq 93$

### Installation Data



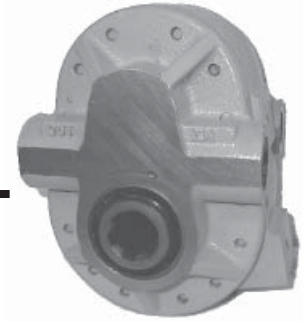
**Ordering Example:** **GP** - **CBN** - **280** - **P** - **C**

Category	Series	Nominal Flow gpm at 3600	Drive Shaft**	Rotation
GP = Gear Pump	CBN = HI/LO Series	220 = 22 gpm 280 = 28 gpm	P = 5/8" dia. Straight	C = Clockwise (viewed from shaft end)

\*\* Additional shaft options available. Please consult factory.

Seal kits for CBN gear pumps are available. See page 137 for details.

## Side Port PTO Gear Pump Model GP-PTO



Model GP-PTO is a Power Take Off gear pump constructed with cast iron end plates and an aluminum center section. It offers 4 displacement sizes from 3.41 to 9.76 in<sup>3</sup>/rev (56-160 cm<sup>3</sup>/rev). Standard drive is 1 3/8" diameter 6-tooth female spline.

### Technical Specifications

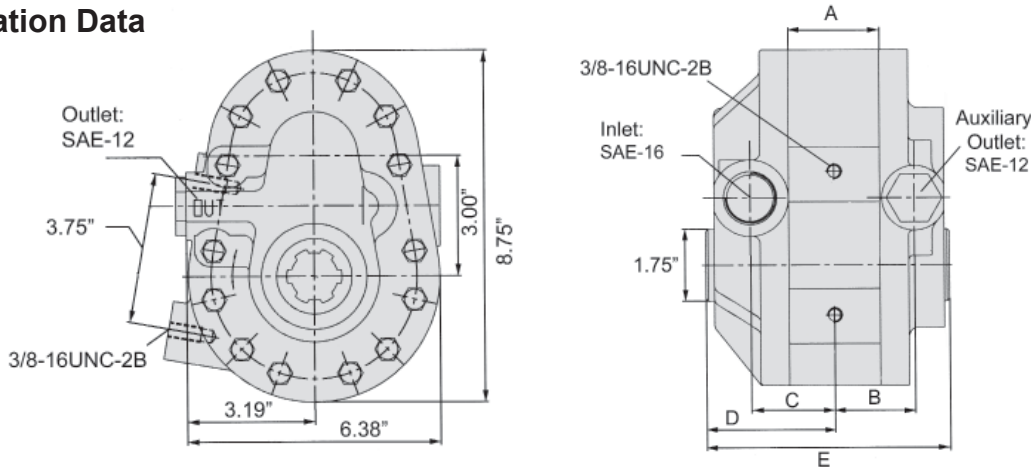
Model	Displacement (in <sup>3</sup> (cm <sup>3</sup> ) / rev)	Pressure (psi)	Speed		Weight (lbs)
			Rated	Max	
GP-PTO-A-3-6-S	3.41 (56)	2500	540	595	33
GP-PTO-A-3-21-S	3.41 (56)	2500	1000	1100	33
GP-PTO-A-5-6-S	5.50 (90)	2500	540	595	36
GP-PTO-A-5-21-S	5.50 (90)	2500	1000	1100	36
GP-PTO-A-7-6-S	7.62 (125)	2500	540	595	38
GP-PTO-A-9-6-S	9.76 (160)	2500	540	595	40

#### Recommended working conditions:

FILTRATION: 25 micron or better  
 OIL VISCOSITY: 7 - 700 cSt  
 INLET PRESSURE: 12 - 32 psi abs.  
 OIL TEMP: -25° - 80° C (-12° - 175° F)  
 AMBIENT: -22° - 55° C (-8° - 130° F)

Flow Rate (gpm) = Displacement (in<sup>3</sup>/rev) X Speed (rpm) / 231  
 Volumetric efficiency % ≥93

### Installation Data



Model	A	B	C	D	E
GP-PTO-A-3-*	1.26"	1.54"	1.63"	2.78"	5.23"
GP-PTO-A-5-*	1.62"	1.72"	1.81"	2.97"	5.60"
GP-PTO-A-7-*	2.00"	1.91"	2.00"	3.16"	5.97"
GP-PTO-A-9-*	2.37"	2.09"	2.19"	3.35"	6.35"

**Ordering Example:** **GP** - **PTO** - **A** - **5** - **6** - **S**

Category	Series	Center Section	Displacement	Drive	Ports
Gear Pump	PTO = Power Take Off Gear Pump	A = Aluminum	3/5/7/9	6 = 6-tooth Spline 21* = 21-tooth Spline	S = Side Ports

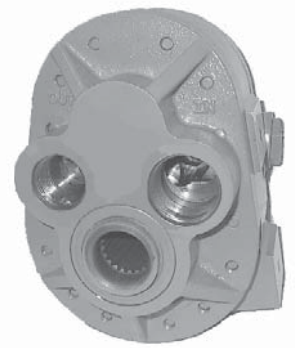
\*21-tooth Spline option only available on size 3 & 5 pumps by special order - minimum quantities may be required.

Seal kits for PTO pumps are available. See page 137 for details.

# DYNAMIC

FLUID COMPONENTS, INC.

## Rear Port PTO Gear Pump Model GP-PTO



Model GP-PTO is a rear-ported, Power Take Off gear pump constructed with cast iron end plates and an aluminum center section. This pump offers a 9.76 in<sup>3</sup>/rev (160 cm<sup>3</sup>/rev) displacement and higher flows at reduced engine rpm as compared to other PTO pumps. Standard drive is 1 3/8" diameter 21-tooth female spline.

### Recommended working conditions:

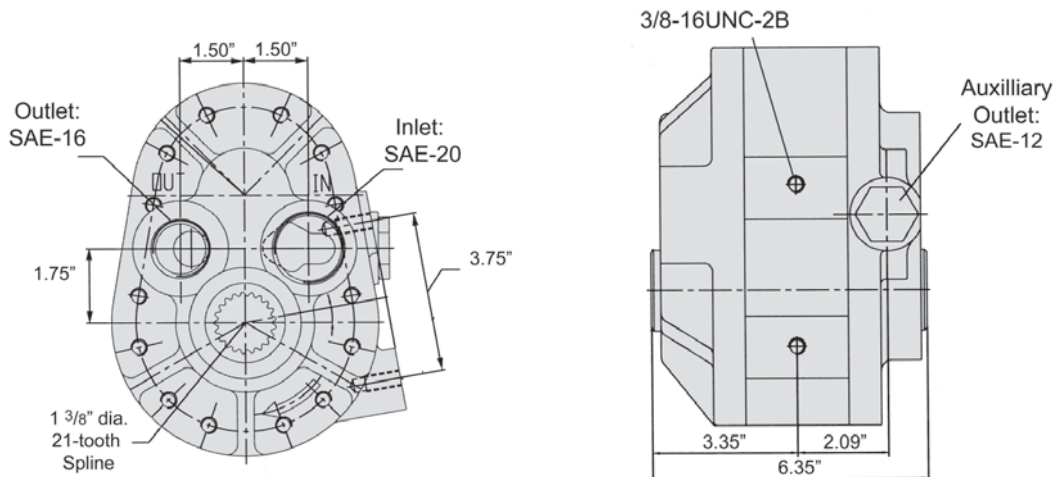
FILTRATION: 25 micron or better  
 OIL VISCOSITY: 7 - 700 cSt  
 INLET PRESSURE: 12 - 32 psi abs.  
 OIL TEMPERATURE: -25° - 80°C (-12° - 175°F)  
 AMBIENT TEMPERATURE: -22° - 55°C (-8° - 130°F)

### Technical Specifications

Model	Displacement		Pressure	Speed		Weight
	in <sup>3</sup> /rev	cm <sup>3</sup> /rev	psi	Rated	Max	Lbs
GP-PTO-A-9-21-R	9.76	160	2500	1000	1100	40

Flow Rate (gpm) = Displacement (in<sup>3</sup>/rev) X Speed (rpm) / 231  
 Volumetric efficiency % ≥93

### Installation Data



Ordering Example:

Category      Series      Center      Displacement      Drive      Ports  
**GP** - **PTO** - **A** - **9** - **21** - **R**

Category	Series	Center Section	Displacement	Drive	Ports
Gear Pump	PTO = Power Take Off Gear Pump	A = Aluminum	9	21 = 21-tooth Spline	R = Rear Ports

Seal kits for PTO pumps are available. See page 137 for details.