

DYNAMIC

FLUID COMPONENTS, INC.



HYDRAULIC GEAR PUMPS

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Catalog GP-2006

Hydraulic Gear Pump Model GP-F0

Technical Data

Model GP-F0 is an all aluminium construction, high pressure Mini Hydraulic Gear Pump with 9 displacement sizes from 0.09 to 0.120 cu.in/rev. (0.16 to 2.00 cm³/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 6 to 200 cSt/ INLET PRESSURE 12 to 32 psi absolute.
TEMPERATURE OIL-25 to 55 degrees C (-12 to 175 degrees F). AMBIENT -22 to 55 degrees C.

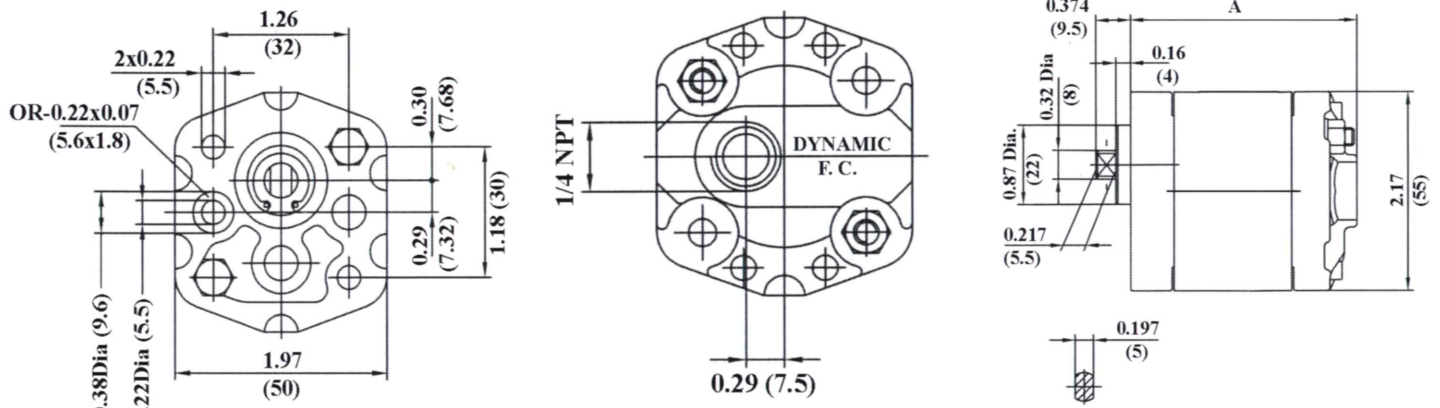
Model	Displacement		Pressure		Speed RPM		Weight	
	cu.in/rev	cm ³ /rev	PSI	Mpa	Rated	Max	Lbs	Kg
GP-F0-016	0.009	0.16	3000	21	2000	7000	0.82	0.37
GP-F0-025	0.015	0.25	3000	21	2000	7000	0.84	0.38
GP-F0-050	0.030	0.50	3000	21	2000	7000	0.87	0.39
GP-F0-075	0.045	0.75	3000	21	2000	7000	0.91	0.41
GP-F0-100	0.060	1.00	3000	21	2000	6000	0.92	0.42

Model	Displacement		Pressure		Speed RPM		Weight	
	cu.in/rev	cm ³ /rev	PSI	Mpa	Rated	Max	Lbs	Kg
GP-F0-125	0.080	1.25	3000	21	2000	5000	1.00	0.45
GP-F0-150	0.090	1.50	3000	21	2000	4000	1.04	0.47
GP-F0-175	0.110	1.75	3000	21	2000	4000	1.08	0.49
GP-F0-200	0.120	2.00	3000	21	2000	3500	1.13	0.51

Flow rate in gpm - Displacement (cu.in/rev) X speed (rpm) / 231

Volumetric efficiency % ≥93

Installation Data



Model	A		Model	A	
	Millimeters	Inches		Millimeters	Inches
GP-F0-016	60	2.36	GP-F0-125	70	2.75
GP-F0-025	61	2.40	GP-F0-150	72	2.83
GP-F0-050	63	2.48	GP-F0-175	75	2.95
GP-F0-075	65	2.55	GP-F0-200	77	3.03
GP-F0-100	68	2.68			

Ordering Information

GP	-	F0	-	016	-	T	-	C	-	1
Aluminum Gear Pump		High Pressure Series		Displacement cm ³ /rev (see chart) 016/025/050 075/100/125 150/175/200		Drive Shaft T-Flat Tang		Rotation Direction C-Clockwise A-Counter Clockwise (viewed from drive shaft end)		Port Options Omit-Standard (see drawing) 1-1/4 NPT Side Ports 2-Special (specify)

Hydraulic Gear Pump Model GP-F1

Technical Data

Model GP-F1 is an all aluminium construction, high pressure Hydraulic Gear Pump with 12 displacement sizes from 0.06 to 0.48 cu.in/rev. (1.1 to 8.0 cm3/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 keyed.



Recommended working conditions:

FILTRATION: 25 micron or better/OIL VISCOSITY 6 to 200 cSt/ INLET PRESSURE 12 to 32 psi absolute.
TEMPERATURE OIL-25 to 55 degrees C (-12 to 175 degrees F). AMBIENT -22 to 55 degrees C.

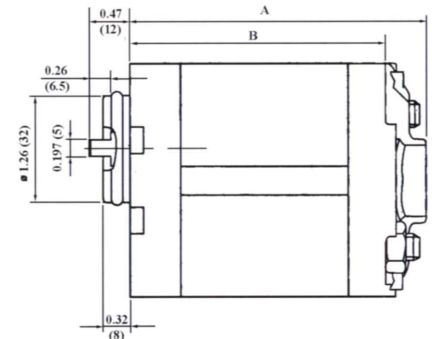
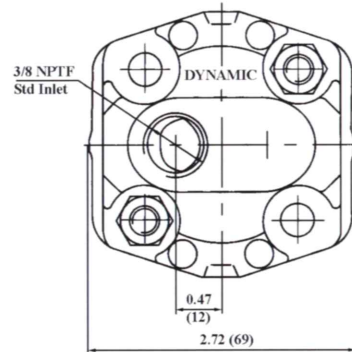
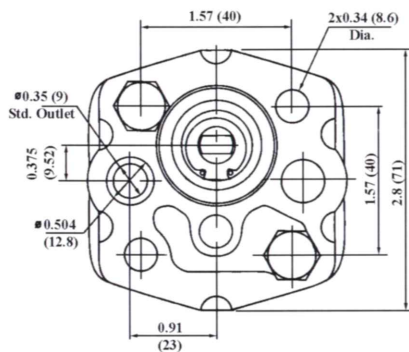
Model	Displacement		Pressure		Speed RPM		Weight	
	cu.in/rev	cm3/rev	PSI	Mpa	Rated	Max	Lbs	Kg
GP-F1-11	0.06	1.1	3650	25	2000	6000	1.69	0.77
GP-F1-13	0.07	1.3	3650	25	2000	6000	1.73	0.79
GP-F1-16	0.09	1.6	3650	25	2000	6000	1.76	0.80
GP-F1-18	0.10	1.8	3650	25	2000	6000	1.78	0.81
GP-F1-21	0.12	2.1	3650	25	2000	6000	1.80	0.82
GP-F1-27	0.16	2.7	3650	25	2000	6000	1.87	0.85

Model	Displacement		Pressure		Speed RPM		Weight	
	cu.in/rev	cm3/rev	PSI	Mpa	Rated	Max	Lbs	Kg
GP-F1-32	0.19	3.2	3650	25	2000	5000	1.91	0.87
GP-F1-37	0.22	3.7	3650	25	2000	4500	1.98	0.90
GP-F1-42	0.25	4.2	3650	25	2000	4000	2.02	0.92
GP-F1-48	0.29	4.8	2900	20	2000	3500	2.09	0.95
GP-F1-58	0.35	5.8	2900	20	2000	2900	2.20	1.0
GP-F1-80	0.48	8.0	2900	20	2000	2100	2.42	1.1

Flow rate in gpm - Displacement (cu.in/rev) X speed (rpm) / 231

Volumetric efficiency % ≥93

Installation Data



Model	A		B	
	Millimeters	Inches	Millimeters	Inches
GP-F1-11	74	2.91	62	2.44
GP-F1-13	75	2.95	63	2.48
GP-F1-16	76	2.99	64	2.52
GP-F1-18	77	3.03	65	2.56
GP-F1-21	78	3.07	66	2.6
GP-F1-27	80	3.15	68	2.68

Model	A		B	
	Millimeters	Inches	Millimeters	Inches
GP-F1-32	82	3.23	70	2.76
GP-F1-37	84	3.31	72	2.83
GP-F1-42	86	3.39	74	2.91
GP-F1-48	88	3.46	76	2.99
GP-F1-58	92	3.62	80	3.15
GP-F1-80	100	3.94	88	3.46

Ordering Information

GP

Aluminum
Gear Pump

-

F1

High
Pressure
Series

-

16

Displacement
cm3/rev
(see chart)
11/13/16/18
21/27/32/37
42/48/58/80

-

T

Drive
Shaft
T-Flat Tang
Z-Taper

-

C

Rotation
Direction
C-Clockwise
A-Counter
Clockwise

-

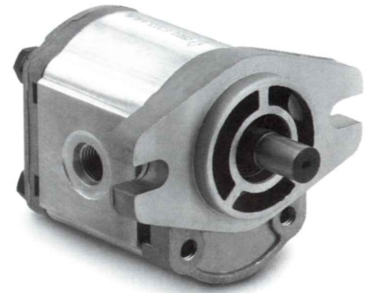
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Port Options
Omit-Standard (see drawing)
1-3/8 NPT Side Ports
2-Special
(specify)
(viewed from drive shaft end)

Hydraulic Gear Pump Model GP-F10

Technical Data

Model GP-F10 is an all aluminium construction, high pressure Hydraulic Gear Pump with 7 displacement sizes from 0.07 to 0.37 cu.in/rev. (1.3 to 6.1 cm³/rev). The standard mounting flange is SAE AA – 2 bolt, standard ports are SAE-8 inlet and SAE-6 outlet, and standard drive shaft is 1/2 inch straight shaft with 1/8 inch key.



Model	Displacement		Pressure		Speed RPM		Weight	
	cu.in/rev	cm ³ /rev	PSI	Mpa	Rated	Max	Lbs	Kg
GP-F10-13	0.07	1.3	3625	25	2000	5000	2.02	0.92
GP-F10-20	0.12	2	3625	25	2000	5000	2.31	1.05
GP-F10-27	0.16	2.7	3625	25	2000	5000	2.68	1.22
GP-F10-34	0.20	3.4	3625	25	2000	5000	2.99	1.36
GP-F10-41	0.25	4.1	3625	25	2000	4000	3.34	1.52
GP-F10-51	0.31	5.1	3625	25	2000	4000	3.78	1.72
GP-F10-61	0.37	6.1	3625	25	2000	4000	4.18	1.90

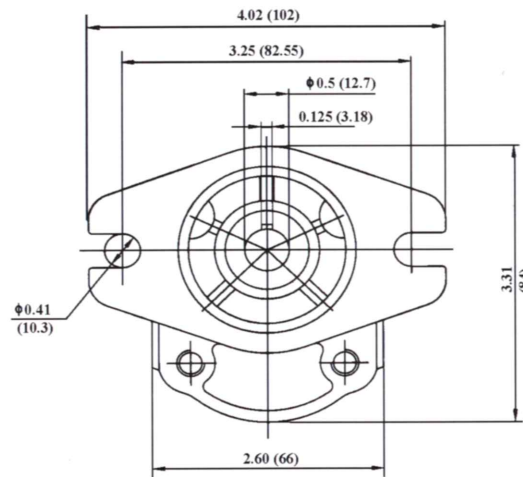
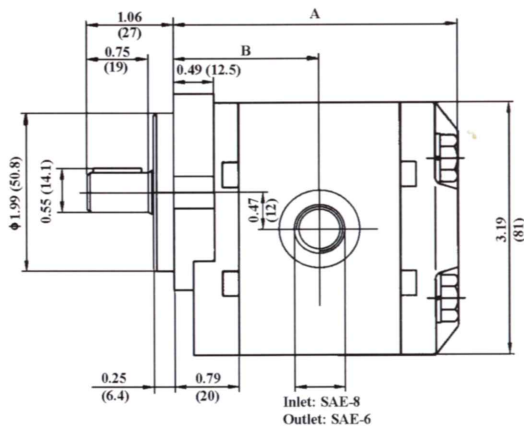
Recommended working conditions:

1. FILTRATION 25 micron or better
2. OIL VISCOSITY 6 to 200 cSt
3. INLET PRESSURE 12 to 32 psi abs.
4. OIL TEMPERATURE -25 to 55 degrees C (-12 to 175 degrees F).
5. AMBIENT -22 to 55 degrees C (-8 to 130 degrees F).

Flow rate in gpm

Displacement (cu.in/rev) X speed (rpm) / 231
Volumetric efficiency % ≥93

Installation Data



Port Sizes
Inlet - SAE-8 (3/4-16)
Outlet - SAE-6 (9/16-18)

Model	A		B	
	Millimeters	Inches	Millimeters	Inches
GP-F10-13	82	3.23	42	1.65
GP-F10-20	84	3.3	43	1.69
GP-F10-27	86	3.39	44	1.73
GP-F10-34	88	3.46	45	1.77

Model	A		B	
	Millimeters	Inches	Millimeters	Inches
GP-F10-41	90	3.54	46	1.81
GP-F10-51	93	3.66	47.5	1.87
GP-F10-61	96	3.78	49	1.93

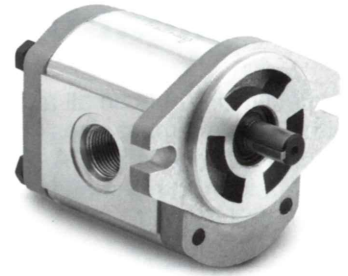
Ordering Information

GP	-	F10	-	20	-	P	-	C
Aluminum Gear Pump		High Pressure Series		Displacement cm ³ /rev (see chart) 13/20/27/34 41/51/61		Drive Shaft P-1/2 Dia Straight		Rotation Direction C- Clockwise A-Counter Clockwise (viewed from drive shaft end)

Hydraulic Gear Pump Model GP-F20

Technical Data

Model GP-F20 is an all aluminium construction, high pressure Hydraulic Gear Pump with 8 displacement sizes from 0.36 to 1.52 cu.in/rev. (6 to 25 cm³/rev). The standard mounting flange is SAE A – 2 bolt, standard ports are SAE-12 inlet and SAE-10 outlet. The standard drive shaft is a 5/8 inch diameter straight with 5/32 straight key. Optional shafts include an S9-SAE 9 tooth spline and a 3/4 inch dia. straight with a 3/16 straight key available on special request.



Model	Displacement		Pressure		Speed RPM		Weight	
	cu.in/rev	cm ³ /rev	PSI	Mpa	Rated	Max	Lbs	Kg
GP-F20-06	0.36	6	3650	25	2000	3000	5.35	2.45
GP-F20-08	0.48	8	3650	25	2000	3000	5.61	2.55
GP-F20-10	0.61	10	3650	25	2000	3000	5.72	2.60
GP-F20-12	0.73	12	3650	25	2000	3000	5.91	2.69
GP-F20-14	0.85	14	3650	25	2000	3000	6.00	2.73
GP-F20-16	0.97	16	2900	20	2000	3000	6.27	2.85
GP-F20-20	1.22	20	2900	20	2000	3000	6.73	3.06
GP-F20-25	1.52	25	2900	20	2000	3000	7.19	3.27

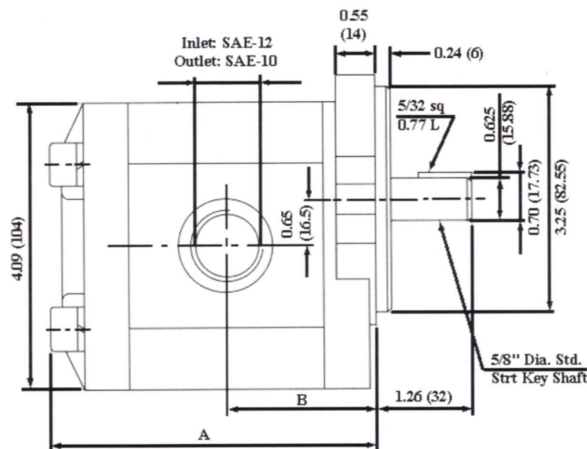
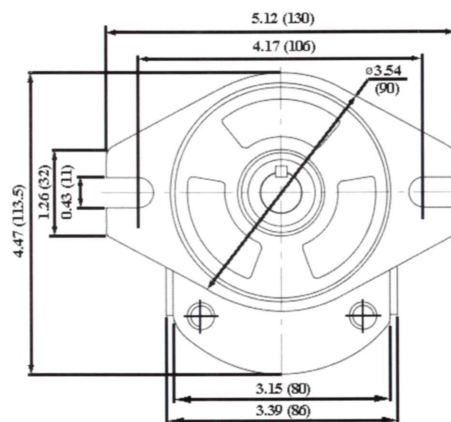
Recommended working conditions:

1. FILTRATION 25 micron or better
2. OIL VISCOSITY 6 to 200 cSt
3. INLET PRESSURE 12 to 32 psi abs.
4. OIL TEMPERATURE -25 to 55 degrees C (-12 to 175 degrees F).
5. AMBIENT -22 to 55 degrees C (-8 to 130 degrees F).

Flow rate in gpm

Displacement (cu.in/rev) X speed (rpm) / 231
Volumetric efficiency % ≥93

Installation Data



Port Sizes

Inlet - SAE-12 (1 1/16-12)
Outlet - SAE-10 (7/8-14)

Model	A		B	
	Millimeters	Inches	Millimeters	Inches
GP-F20-06	98	3.87	45	1.77
GP-F20-08	100	3.95	47	1.85
GP-F20-10	104	4.12	48	1.89
GP-F20-12	108	4.25	50	1.97

Model	A		B	
	Millimeters	Inches	Millimeters	Inches
GP-F20-14	110	4.35	51	2
GP-F20-16	114	4.50	52.5	2.07
GP-F20-20	120	4.72	56	2.2
GP-F20-25	128	5.05	60	2.36

Ordering Information

GP - **F20** - **16** - **P** - **C**

Aluminum
Gear Pump

High
Pressure
Series

Displacement
cm³/rev
(see chart)
06/08/10/12/14/16
20/25

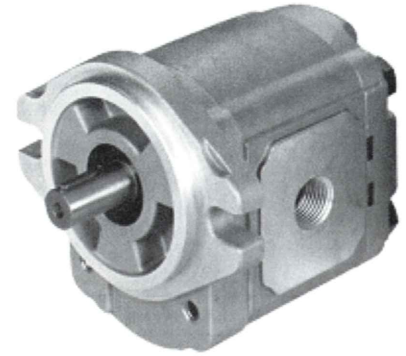
Drive
Shaft
P-5/8 Dia
Straight
P1-3/4 Dia
Straight
S9-Spline 9 tooth

Rotation
Direction
C- Clockwise
A-Counter Clockwise
(viewed from drive shaft end)

Hydraulic Gear Pump Model GP-F20A

Technical Data

Model GP-F20A is an all aluminium construction, high pressure Hydraulic Gear Pump with 7 displacement sizes from 0.61 to 2.44 cu.in/rev. (10 to 40 ml/rev). The standard mounting flange is SAE A-2 bolt, standard ports are SAE16 inlet and SAE12 outlet. The standard drive shaft is 5/8 inch dia (.625) keyed. Available options include 3/4 dia keyed and splined.



Model	Displacement		Pressure		Speed RPM		Weight	
	cu.in/rev	cm3/rev	PSI	Mpa	Rated	Max	Lbs	Kg
GP-F20A-10	0.61	10	3650	25	2000	3000	7.26	3.3
GP-F20A-16	0.97	16	3650	25	2000	3000	7.7	3.5
GP-F20A-25	1.52	25	3650	25	2000	3000	8.36	3.8
GP-F20A-27	1.61	26.5	3650	25	2000	3000	8.58	3.9
GP-F20A-30	1.83	30	3650	25	2000	3000	8.8	4
GP-F20A-32	1.95	32	3650	25	2000	3000	9.02	4.1
GP-F20A-40	2.44	40	3650	25	2000	3000	9.46	4.3

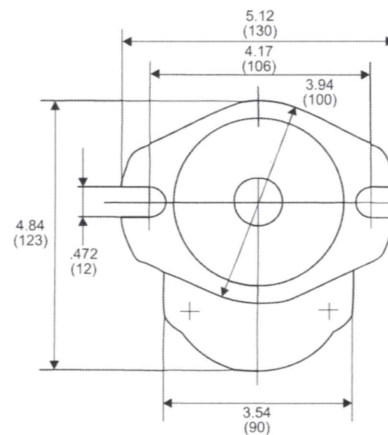
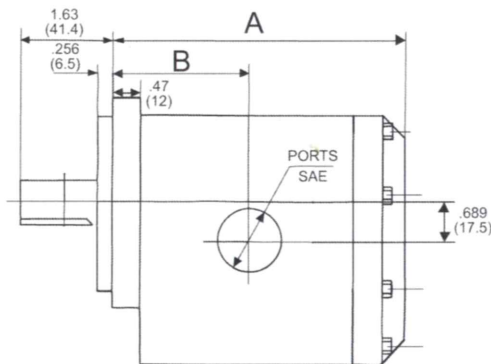
Recommended working conditions:

1. FILTRATION 25 micron or better
2. OIL VISCOSITY 6 to 200 cSt
3. INLET PRESSURE 12 to 32 psi abs.
4. OIL TEMPERATURE -25 to 55 degrees C (-12 to 175 degrees F).
5. AMBIENT -22 to 55 degrees C (-8 to 130 degrees F).

Flow rate in gpm - Displacement (cu.in/rev) X speed (rpm) / 231

Volumetric efficiency % ≥93

Installation Data



Model	A		B	
	Millimeters	Inches	Millimeters	Inches
GP-F20A-10	108	4.25	53.5	2.1
GP-F20A-16	114	4.48	56.5	2.22
GP-F20A-25	124	4.88	62	2.44
GP-F20A-27	126	4.96	62.5	2.46

Model	A		B	
	Millimeters	Inches	Millimeters	Inches
GP-F20A-30	130.5	5.13	65	2.55
GP-F20A-32	133	5.23	65	2.55
GP-F20A-40	142	5.59	70	2.75

Ordering Information

GP - **F20A** - **16** - **P** - **C**

Aluminum
Gear Pump

High
Pressure
Series

Displacement
cm3/rev
(see chart)
10/16/25/27
30/32/40

Drive
Shaft
P-5/8 Dia
Straight
P1-3/4 Dia
Straight

Rotation
Direction
C-Clockwise
A-Counter
(viewed from drive shaft end)

S9-Spline 9 tooth

TERMS AND CONDITIONS

PAYMENT TERMS

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WARRANTY

Seller warrants the items sold hereunder shall be free from defects in materials or workmanship for a period of one (1) year from the date of shipment. This warranty comprises the entire warranty pertaining to items provided hereunder. Seller makes no other warranty, guarantee or representation of any kind. If the buyer disassembles, repairs or modifies the unit in any way warranty is no longer valid. All returns must be accompanied by our Return Authorization Form. Dynamic Fluid Components, Inc. is not responsible for material returned without authorization.

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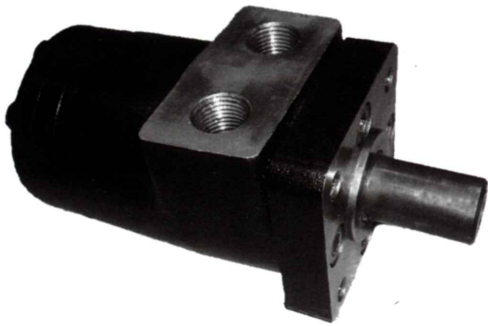
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