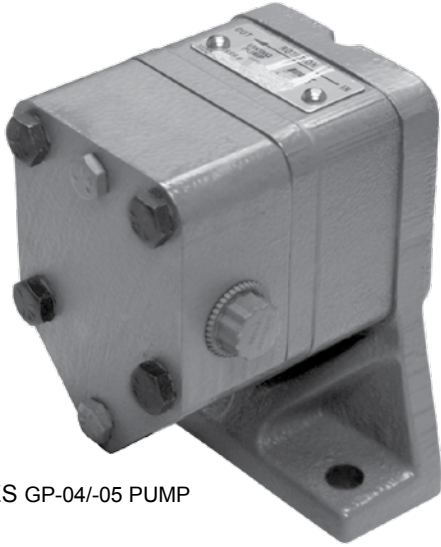
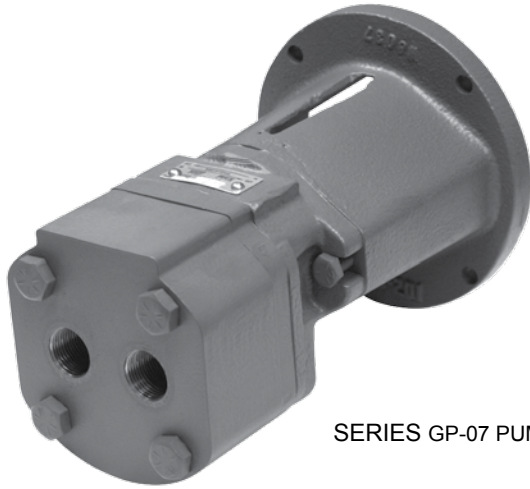


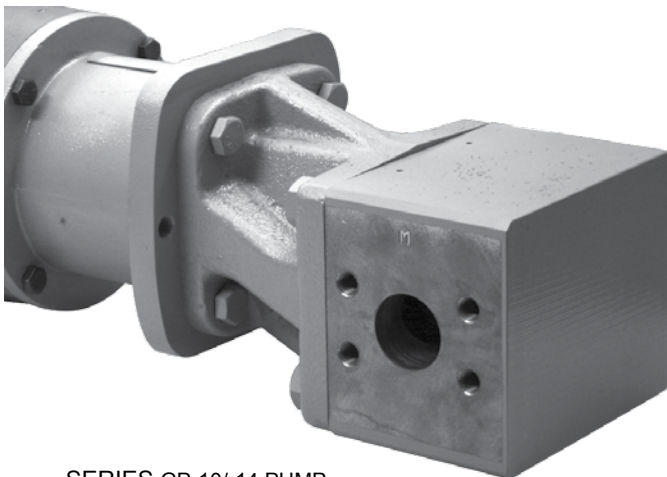
## VIKING HYDRAULIC GEAR PUMPS & MOTORS



SERIES GP-04/-05 PUMP



SERIES GP-07 PUMP



SERIES GP-10/-14 PUMP

### OPERATING RANGE:

GP Pumps (Cast Iron, Lip-Sealed)		
Displacements	No.	24
Flow Range	GPM	0.06 to 190
	M <sup>3</sup> /Hr	0.011 to 43
Pressure Range	PSI	to 2,500
	Bar	to 170

GP Motors (Cast Iron, Lip-Sealed)		
Displacements	No.	12
Power Range	HP	1/4 to 20
	KW	0.18 to 15

Maximum Temperature	°F	to +225° (Standard) to +450° (With Optional Materials)
	°C	to +107° (Standard) to +230° (With Optional Materials)
Viscosity Range	SSU	Suitable for hydraulic oils
	cSt	

### TYPICAL APPLICATIONS:

- Lubrication Equipment
- Fork Lift Trucks
- Conveyor Systems
- Transmissions
- Hydraulic Lifts
- Filtration Equipment
- Vibrators
- Garbage Compactors
- Construction Machinery
- Mobile Agricultural Equipment
- Machine Tools
- Car Wash Systems
- Hi-Lo Double Pumps for Log Splitter or Crusher Applications

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SERIES GP-04, -05, -07, -10, -14  
 SERIES GM-05, -07, -10, -14

## VIKING HYDRAULIC GEAR PUMPS & MOTORS

### SERIES DESCRIPTION

Viking GP is an extensive series of fixed displacement cast iron external gear pumps for fluid power (hydraulic) applications. With 24 displacements in five frame sizes to 190 GPM (43 M<sup>3</sup>/Hr), some models offer pressures up to 2500 PSI (170 Bar). These pumps were designed for greatest reliability, with standard features like spur-type gears (instead of helical gears, which thrust into pump casing and bracket) and rolling element anti-friction bearings (instead of bushings, which wear every time a pump is stopped and the hydrodynamic film is lost).

Installation is simple, with brackets to close couple to NEMA or IEC motors, or foot mount. Piping is easy, with straight-through ports with a variety of pipe thread and flange options.

Viking offers an extensive range of options and customization for fixed or mobile OEM applications.

### HYDRAULIC MOTORS

Fixed displacement, high speed hydraulic motors are available for applications requiring 500 to 4000 RPM in a variety of flow ranges. Needle bearings and high strength gears assure efficient performance and extended service life.

### MODEL NUMBER KEY

**GP - 05 18 - G 0 0 U - B**

**External Gear Principle**

**Use:**  
 P = Pump  
 M = Motor (GM-05, -07, only)

**Series:**  
 04  
 05  
 07  
 10  
 14

**Pump Capacity (at 1750 RPM)**

<b>GP-04:</b>	<b>GP-05:</b>	<b>GP-07:</b>
17 = 0.06 GPM	18 = 0.71 GPM	41 = 4.0 GPM
18 = 0.13 GPM	25 = 1.0 GPM	58 = 5.6 GPM
19 = 0.18 GPM	35 = 1.4 GPM	82 = 8.0 GPM
35 = 0.25 GPM	50 = 2.0 GPM	11 = 11.2 GPM
50 = 0.36 GPM	70 = 2.8 GPM	16 = 16.0 GPM
70 = 0.51 GPM	10 = 4.0 GPM	
	14 = 5.6 GPM	

**GP-10:**  
 09 = 16.0 GPM  
 13 = 25.0 GPM  
 26 = 50.0 GPM

**GP-14:**  
 20 = 70.0 GPM  
 36 = 125.0 GPM  
 56 = 190.0 GPM

**Design Series**  
 A = GP-04  
 G = GP-05, -07, -10, -14

**Shaft Rotation (Viewed from shaft end):**  
 0 = Clockwise  
 1 = Counter Clockwise  
 2 = Bi-Rotational (GP-04, -05 & -07 only)

**Relief Valve (pumps only):**  
 O = Without Valve  
 V = With Valve

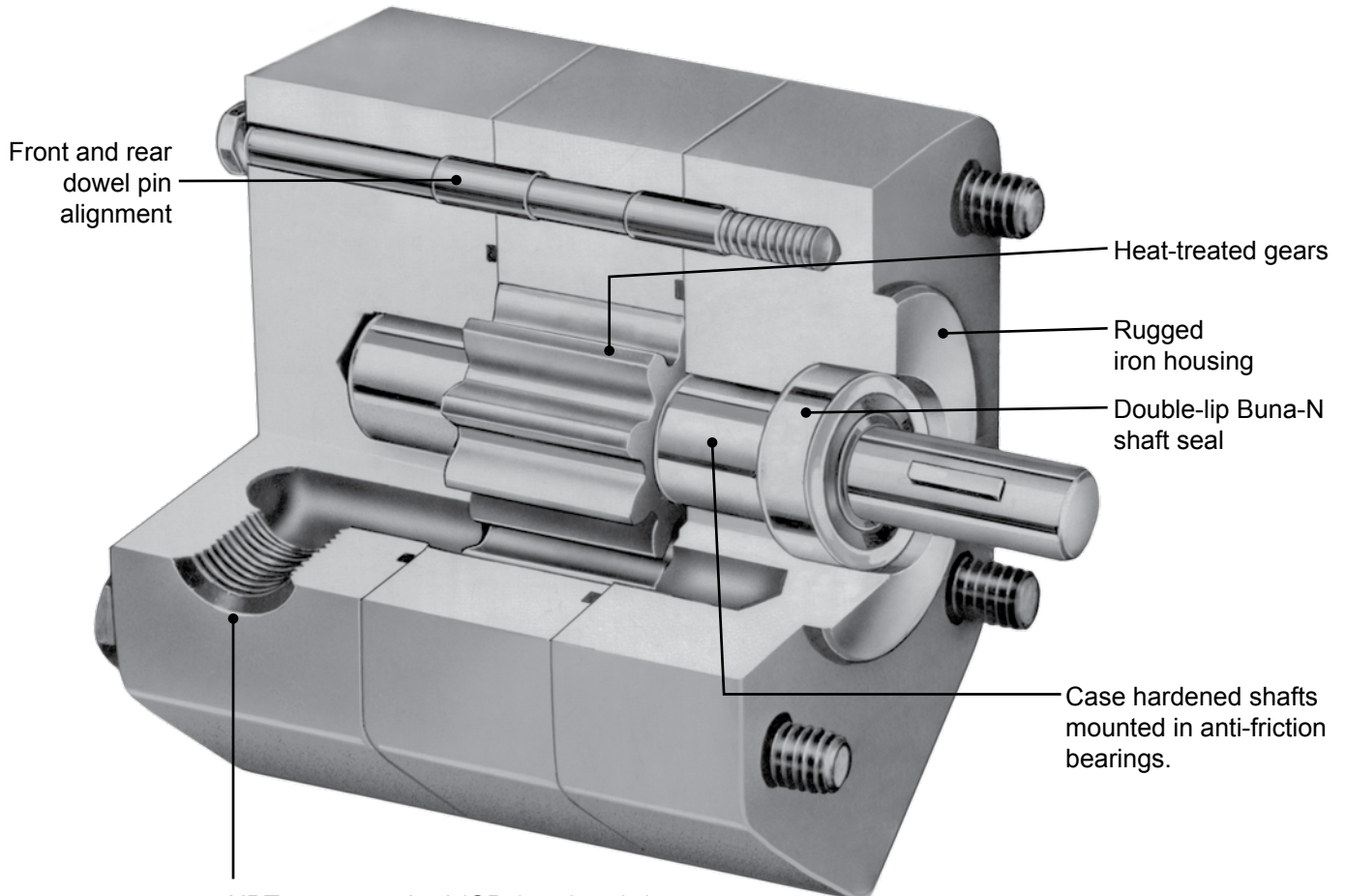
**Bracket:**  
 M = Metric Pilot (ISO) Bracket (GP-10, -14 only)  
 U = SAE Pilot Bracket (GP-10, -14 only)  
 Blank = GP-04, -05 or -07

**Drive Equipment:**  
 B = Foot Bracket Mounted  
 D = Base Mounted Direct Drive (pump only)  
 M = Face Mounted Motor Drive (pump only)  
 M4 = Four-Bolt Motor Drive (GP-04, -05 only)

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## VIKING HYDRAULIC GEAR PUMPS & MOTORS

### PUMP CONSTRUCTION AND FEATURES



NPT ports standard (GP-04, -05, -07),  
SAE 4-bolt flange standard (GP-10, -14).  
SAE O-ring end ports standard (GM-05, -07).  
Optional ports include NPT, BSP or SAE O-ring.

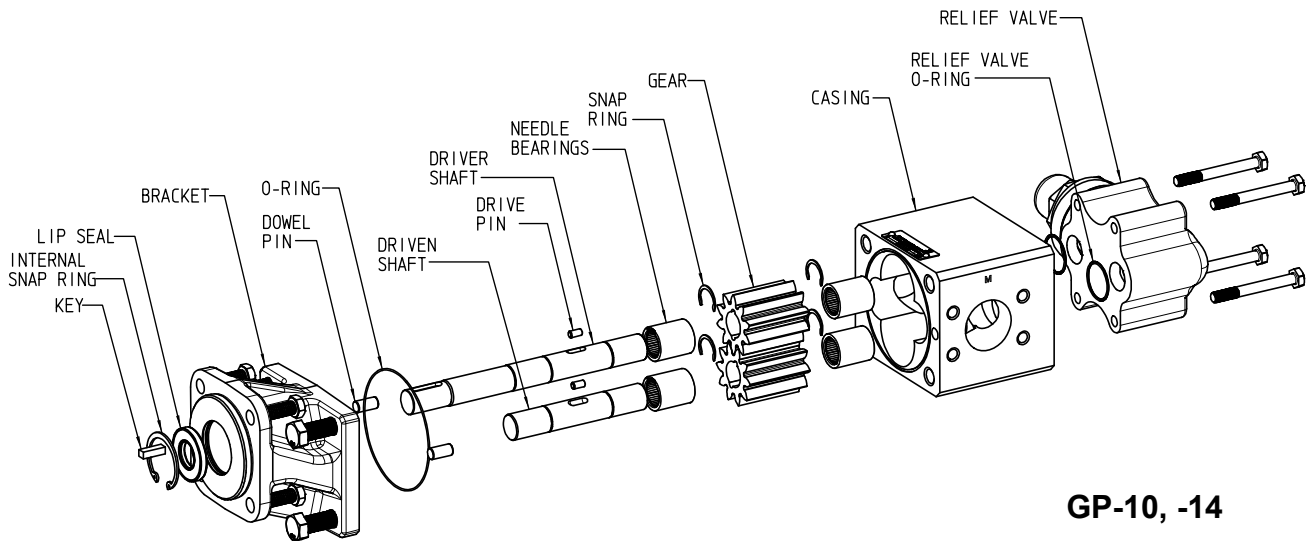
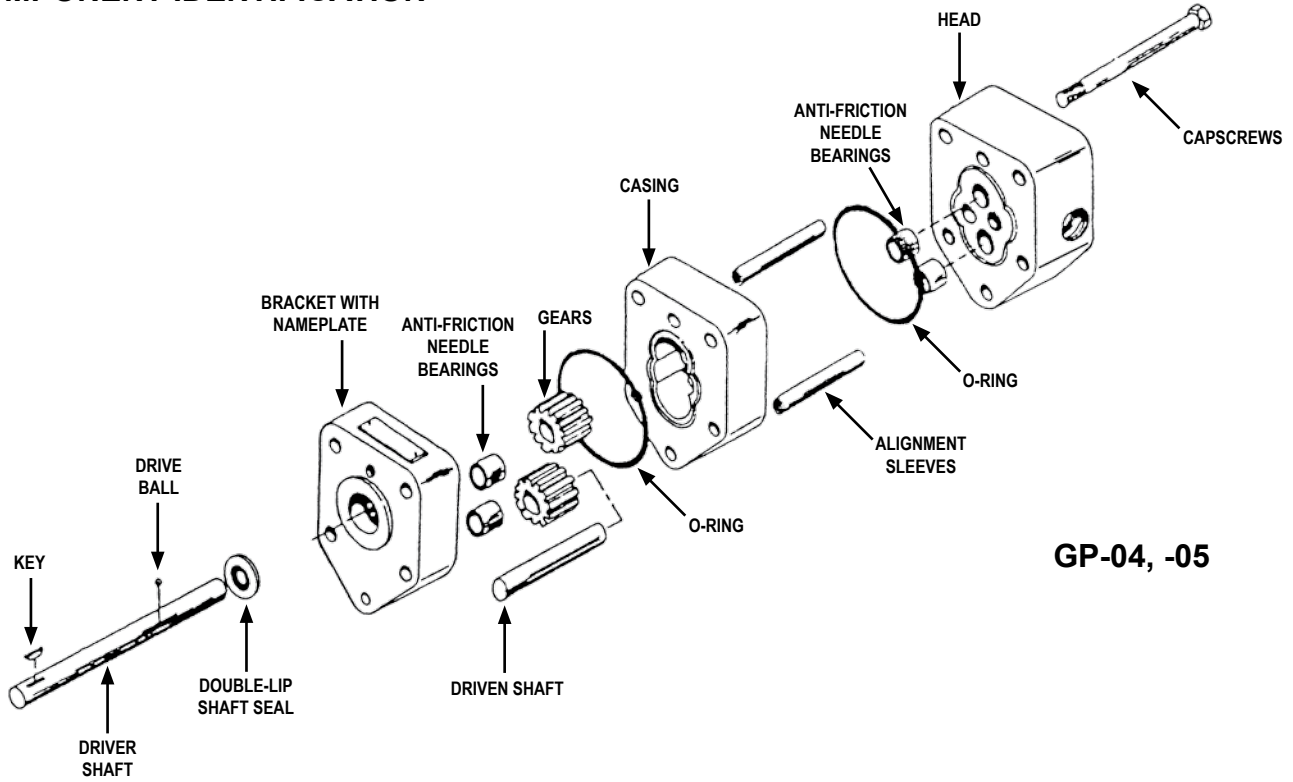
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SERIES GP-04, -05, -07, -10, -14  
 SERIES GM-05, -07, -10, -14

## VIKING HYDRAULIC GEAR PUMPS & MOTORS

### COMPONENT IDENTIFICATION





SERIES GP-04, -05, -07, -10, -14  
 SERIES GM-05, -07, -10, -14

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## VIKING HYDRAULIC GEAR PUMPS & MOTORS

### MATERIALS OF CONSTRUCTION - ALL SERIES

Component	Standard -04, -05, -07, -10, -14	Option
Casing, Bracket	Cast Iron, ASTM A823	Surface Hardening (Vitek)
Head, Separation Plate	Cast Iron, ASTM A823	Surface Hardening (Vitek)
Gears	Heat Treated Steel	---
Shafts	Hardened Steel, ASTM A322	---
Anti-Friction Needle Bearings	Bearing Steel	DU Bushings
O-Rings	Buna-N	Viton®, PTFE
Lip Seals	Buna-N	Viton®, PTFE
"B" drive foot bracket	Cast Iron, ASTM A823	---
"M" drive motor bracket	Cast Iron ASTM A823 (GP-04, -05, -07) Aluminum (GP-10, -14)	---

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### SPECIFICATIONS

Size	Nominal Capacity at 1750 RPM		Theoretical Displacement		Maximum Operating Conditions				
					Pressure				Maximum Speed  RPM
	GPM	LPM	in <sup>3</sup> /rev	cm <sup>3</sup> /rev	Continuous		Intermittent		
					PSI	BAR	PSI	BAR	
-0417	.06	0.23	.008	.13	750	52	750	52	3600
-0418	.14	0.53	.017	.28	1000	69	1000	69	3600
-0425	.18	0.68	.024	.39	1250	86	1500	103	4000
-0435	.27	1.02	.033	.54	1500	103	1750	121	4000
-0450	.36	1.36	.048	.79	1250	86	2000	138	4000
-0470	.50	1.89	.067	1.10	900	62	1500	103	4000
-0518	0.7	2.6	.094	1.54	1500	103	1500	103	3600
-0525	1.0	3.8	.139	2.27	2000	138	2500	172	4000
-0535	1.4	5.3	.194	3.18	1800	124	2500	172	4000
-0550	2.0	7.6	.277	4.54	1250	86	2500	172	4000
-0570	2.8	10.6	.388	6.36	900	62	1800	124	4000
-0510	4.0	15.1	.548	8.98	625	43	1250	86	3600
-0514	5.6	21.2	.761	12.47	450	31	900	62	3600
-0741	4.0	15.1	.548	8.98	2250	155	2500	172	4000
-0758	5.6	21.2	.765	12.53	1600	110	2500	172	4000
-0782	8.0	30.3	1.096	17.96	1125	77.6	2250	155	4000
-0711	11.2	42.4	1.530	25.07	800	55.1	1600	110	3600
-0716	16.0	61.0	2.192	35.92	550	37.9	1100	75.8	3600
-1009	16.0	61.0	2.112	34.60	500	34	2500	172	1750
-1013	25.0	95.0	3.299	54.06	500	34	1900	130	1750
-1026	50.0	189.0	6.599	108.14	500	34	1000	68	1750
-1420	70.0	265.0	9.240	151.42	500	34	1100	75	1750
-1436	125.0	473.0	16.500	270.39	290	20	580	40	1750
-1456	190.0	719.0	26.400	432.62	190	13	380	26	1750

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SERIES GP-04, -05, -07, -10, -14  
 SERIES GM-05, -07, -10, -14

## VIKING HYDRAULIC GEAR PUMPS & MOTORS

### MOTOR SELECTION FOR HYDRAULIC PUMPS

Size	Nominal Pump			Maximum Discharge Pressure - PSIG																
	Capacity		Speed	Motor HP (KW)																
	GPM	LPM	RPM	1/8 (0.09)	1/6 (0.12)	1/4 (0.18)	1/3 (0.25)	1/2 (0.37)	3/4 (0.55)	1 (0.75)	1 1/2 (1.1)	2 (1.5)	3 (2.2)	5 (3.7)	7 1/2 (5.5)	10 (7.5)	15 (11.2)	20 (15.0)	25 (18.65)	
GP-0417	.04 .06	0.15 0.23	1150 1750	400 200	500 350	750 650	— 750	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	
GP-0418	.09 .13	0.34 0.49	1150 1750	200 100	400 200	500 450	— 750	— 1000	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	
GP-0425	.12 .18	0.45 0.68	1150 1750	200 100	400 200	500 450	— 750	— 1000	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	
GP-0435	.16 .25	0.60 0.94	1150 1750	200 100	400 200	500 450	— 750	— 1000	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	
GP-0450	.24 .36	0.91 1.4	1150 1750	200 100	400 200	500 450	— 750	— 1000	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	
GP-0470	.34 .51	1.3 1.9	1150 1750	200 100	400 200	500 450	— 750	— 1000	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	
GP-0518	1.4 0.7 0.5	5.3 2.6 1.9	3450 1750 1150	— — —	— — —	150 450 650	200 600 775	375 950 1350	600 1475 1500	850 1500 —	1350 — —	1500 — —	— — —	— — —	— — —	— — —	— — —	— — —	— — —	
GP-0525	2.0 1.0 0.7	7.6 3.7 2.6	3450 1750 1150	— — —	— — —	70 300 500	110 400 700	200 700 1100	400 1000 1500	600 1400 2000	950 2000 2500	1350 2500 —	2000 — —	2500 — —	— — —	— — —	— — —	— — —	— — —	
GP-0535	2.8 1.4 0.9	10.6 5.3 3.4	3450 1750 1150	— — —	— — —	40 200 350	75 300 450	175 450 700	300 750 1000	425 1000 1450	700 1500 2050	925 2050 2500	1450 2500 —	2500 — —	— — —	— — —	— — —	— — —	— — —	
GP-0550	4.0 2.0 1.3	15.1 7.6 4.9	3450 1750 1150	— — —	— — —	40 125 250	75 175 325	100 300 550	190 500 800	300 700 1025	475 1075 1500	650 1450 2100	1050 2100 2500	1800 2500 —	2500 — —	— — —	— — —	— — —	— — —	
GP-0570	5.6 2.8 1.8	21.2 10.6 6.8	3450 1750 1150	— — —	— — —	20 100 175	60 150 225	125 225 350	200 400 550	200 525 750	325 800 1200	475 1050 1550	750 1550 1800	1300 1800 —	1800 — —	— — —	— — —	— — —	— — —	
GP-0510	8.0 4.0 2.6	30.3 15.1 9.8	3450 1750 1150	— — —	— — —	50 100	90 150	150 225	250 350	110 350 500	200 525 725	300 725 1000	500 1050 1250	825 1250 —	1250 — —	— — —	— — —	— — —	— — —	
GP-0514	11.2 5.6 3.7	42.4 21.2 14.0	3450 1750 1150	— — —	— — —	50 100	50 100	100 150	150 275	60 240 350	120 375 575	200 500 700	350 750 900	625 900 —	900 — —	— — —	— — —	— — —	— — —	
GP-0741	8.0 4.0 2.6	30.3 15.1 9.8	3450 1750 1150	— — —	— — —	— — —	— — —	— — —	— — —	100 275 500	135 700 750	225 1100 1050	560 1850 2500	970 2500 —	1470 — —	2250 — —	2500 — —	— — —	— — —	
GP-0758	11.2 5.6 3.7	42.4 21.2 14.0	3450 1750 1150	— — —	— — —	— — —	— — —	— — —	— — —	— 170 290	— 290 450	80 470 710	170 740 1080	425 1300 1900	725 1950 2500	1050 2500 —	1600 — —	2500 — —	— — —	
GP-0782	16.0 8.0 5.3	60.5 30.3 20.0	3450 1750 1150	— — —	— — —	— — —	— — —	— — —	— — —	— 105 190	— 190 290	— 320 490	100 500 735	250 865 1275	450 1360 2000	675 1820 2250	1050 2250 —	1500 — —	2250 — —	
GP-0711	22.4 11.2 7.4	84.8 42.4 28.0	3450 1750 1150	— — —	— — —	— — —	— — —	— — —	— — —	— 75 135	— 135 210	— 210 320	80 340 500	170 600 890	320 940 1380	480 1270 1600	780 1600 —	1080 — —	1600 — —	
GP-0716	32.0 16.0 10.5	121.1 60.5 39.7	3450 1750 1150	— — —	— — —	— — —	— — —	— — —	— — —	— 50 90	— 90 140	— 140 220	50 230 335	125 410 605	230 640 940	350 860 1100	575 1100 —	800 — —	1100 — —	

**Instructions:**

- Go to Nominal Pump Capacity column and locate the desired pump flow rate.
- Follow that row to the right to locate the desired pressure in PSI (1 bar = 14.7 PSI)
- Follow that column up to find the motor horsepower (kW) required to drive the pump.

Note that there may be several different pump sizes that meet the desired flow rate at different speeds and pressures. In general, slower speeds offer longer life and lower noise.

The above information based on 150 SSU Oil and 5" Hg suction.

Intermittent rating of pump indicated in bold italic.

GP-10 & GP-14 - Consult Factory



SERIES GP-04, -05, -07, -10, -14  
 SERIES GM-05, -07, -10, -14

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## VIKING HYDRAULIC GEAR PUMPS & MOTORS

### HYDRAULIC MOTOR SELECTION

**Instructions:**

- For whatever machine will be driven, identify the maximum brake horsepower (kW) required to drive it.
- Go to the Motor HP (kW) row and locate the horsepower (kW) rating greater than or equal to what is required to drive the machine.
- Follow that column down to locate the available pressure of your hydraulic system in PSI (1 bar = 14.7 PSI).

- Follow that row to the left to find the hydraulic fluid flow rate required through the hydraulic motor. This will let you identify the motor size required.

Note that there may be several different hydraulic motor sizes that meet the desired power requirement at different pressures and flow rates. In general, lower flow rates through the pump means slower speeds, which along with lower pressures offer longer life and lower noise. Note that hydraulic motors must discharge their flow to a sump at atmospheric pressure to create flow through the motor.

Size	Nominal Motor			Differential Pressure Required - PSIG								
	Capacity		Speed	Motor HP (KW)								
	GPM	LPM	RPM	1/4 (0.75)	1/3 (1.5)	1/2 (2.2)	3/4 (3.7)	1 (5.5)	1 1/2 (7.5)	2 (11.2)	3 (15.0)	5 (15.0)
GM-0518	1.4	5.3	3450	650	825	1250	1850	2400	—	—	—	—
	0.7	2.6	1750	1050	1450	2100	—	—	—	—	—	—
	0.5	1.9	1150	1600	2250	—	—	—	—	—	—	—
GM-0525	2.0	7.6	3450	450	525	650	850	1050	1450	1850	2800	—
	1.0	3.7	1750	550	700	975	1400	1800	2650	—	—	—
	0.7	2.6	1150	750	950	1375	2050	2750	—	—	—	—
GM-0535	2.8	10.6	3450	350	400	500	650	800	1100	1400	2000	—
	1.4	5.3	1750	425	500	700	1000	1300	1900	2500	—	—
	0.9	3.4	1150	550	700	1000	1475	1950	2850	—	—	—
GM-0550	4.0	15.1	3450	300	350	425	525	625	825	1050	1450	2300
	2.0	7.6	1750	350	425	550	750	950	1325	1725	2600	—
	1.3	4.9	1150	400	500	725	1050	1375	2000	2700	—	—
GM-0570	5.6	21.2	3450	225	250	300	375	450	600	725	1000	1600
	2.8	10.6	1750	250	300	375	500	650	950	1200	1800	—
	1.8	6.8	1150	300	375	500	725	950	1375	1800	—	—
GM-0510	8.0	30.3	3450	175	200	250	300	350	450	550	750	1150
	4.0	15.1	1750	200	225	300	375	475	675	875	1275	—
	2.6	9.8	1150	225	275	350	500	625	975	1250	—	—
GM-0514	11.2	42.4	3450	160	175	200	240	275	350	430	590	875
	5.6	21.2	1750	160	185	225	300	370	510	650	940	—
	3.7	14.0	1150	175	210	280	400	500	725	950	—	—

Size	Nominal Pumps			Maximum Discharge Pressure - PSIG							
	Capacity		Speed	Motor HP (KW)							
	GPM	LPM	RPM	1 (0.75)	2 (1.5)	3 (2.2)	5 (3.7)	7 1/2 (5.5)	10 (7.5)	15 (11.2)	20 (15.0)
GM-0741	8.3	31.4	3450	450	700	900	1350	1900	2450	—	—
	4.2	15.9	1750	550	950	1400	2200	—	—	—	—
	2.8	10.6	1150	750	1400	2000	—	—	—	—	—
GM-0758	11.7	44.3	3450	350	500	650	950	1400	1800	2550	—
	6.3	23.8	1750	400	700	1050	1650	2400	—	—	—
	4.3	16.3	1150	550	1000	1450	2400	—	—	—	—
GM-0782	17.3	65.5	3450	—	350	450	700	950	1250	1850	—
	9.1	34.4	1750	—	500	750	1150	1650	2200	—	—
	6.3	23.8	1150	—	750	1000	1700	—	—	—	—
GM-0711	23.4	88.6	3450	—	250	350	450	650	850	1300	1650
	12.3	46.6	1750	—	400	500	800	1200	1550	—	—
	8.3	31.4	1150	—	500	700	1200	—	—	—	—
GM-0716	34.1	129.1	3450	—	150	250	350	500	650	900	—
	17.6	66.6	1750	—	250	350	550	850	1100	—	—
	12	45.4	1150	—	300	500	850	—	—	—	—

The above information based on 150 SSU Oil.



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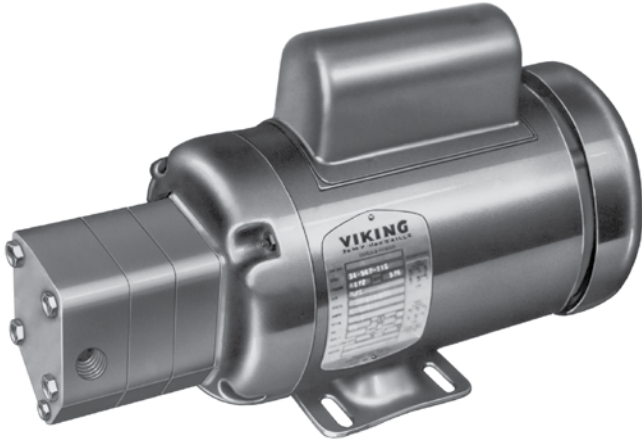


SERIES GP-04, -05, -07, -10, -14  
 SERIES GM-05, -07, -10, -14



## VIKING HYDRAULIC GEAR PUMPS & MOTORS

### PUMP DRIVE OPTIONS



#### FOUR-BOLT MOTOR MOUNTED UNITS (“M4” DRIVE)

Integral pump and motor units help reduce onsite assembly costs and provide maximum compactness where space is at a premium. The 4-bolt mounting can be provided with AC or DC motors.

*Dimensions for Motor Mounted Units (“M4” Drive)—  
 See Page 341.14.*



#### FOOT-BRACKET MOUNTED PUMPS (“B” DRIVE)

A sturdy cast iron bracket machined by Viking assures accurate fit with the pump or motor.

*Dimensions for Foot-Bracket Mounted Pumps and motors (“B” Drive)— See Page 341.15.*

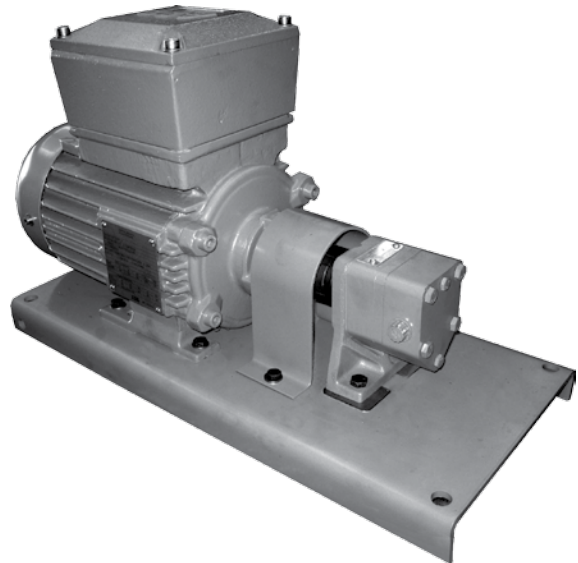


#### MOTOR MOUNTED UNITS (“M” DRIVE)

Viking hydraulic pumps in combination with the NEMA or IEC motor bracket and flexible coupling provide an easily assembled, compact unit. The adapter bracket is accurately machined to ensure shaft alignment.

*Dimensions for NEMA C Face-Mounted Units (“M” Drive)—  
 See Page 341.14.*

*Dimensions for IEC Face-Mounted Units (“M” Drive)—  
 See Page 341.14.1.*



#### BASE MOUNTED UNITS (“D” DRIVE)

The Viking rectangular, formed steel base provides a solid mounting for the drive equipment and the foot bracket mounted pump.

*Dimensions for Base-Mounted Units (“D” Drive)— See Page 341.16.*





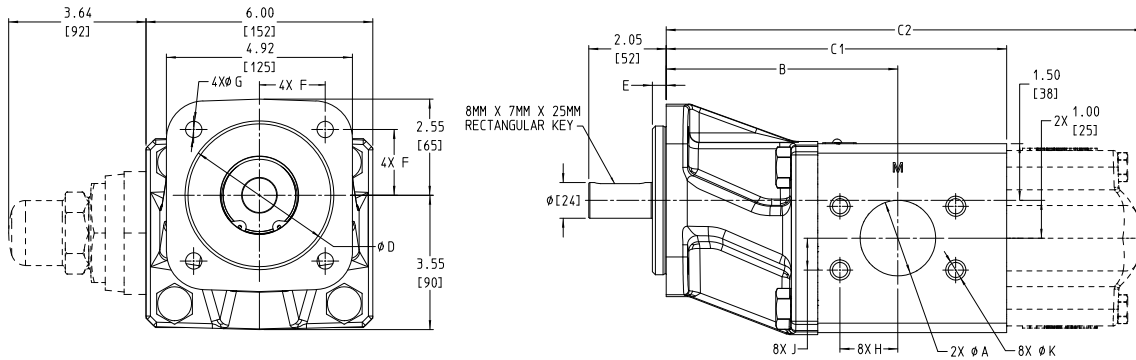
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SERIES GP-04, -05, -07, -10, -14  
 SERIES GM-05, -07, -10, -14

## VIKING HYDRAULIC GEAR PUMPS & MOTORS

### DIMENSIONS – SERIES GP/GM-10 UNMOUNTED PUMP



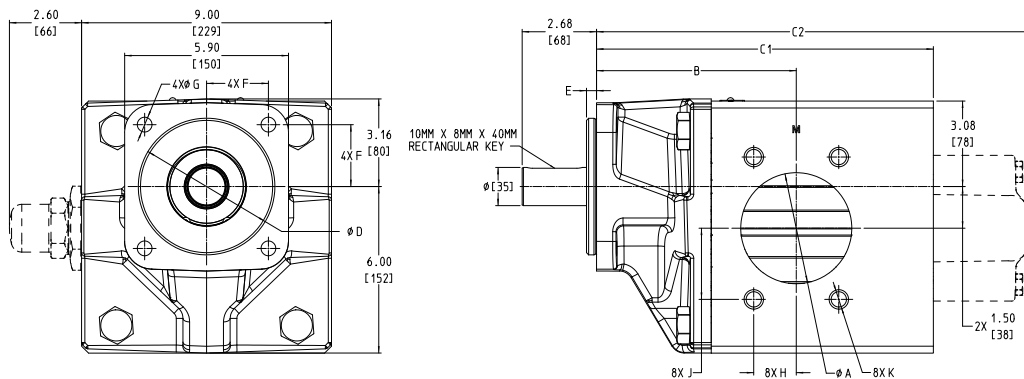
NOTE: Dimensions in inches (millimeters)

MODEL NO.	④		A ③	B	C1	C2 ⑤	D	E	F	G	H	J	K
-1009 ①	U	in	1.00	5.35	7.42	10.99	4.00	0.37	1.77	0.56	0.52	1.03	M10 X 1.50
-1009 ②	M	mm	25	136	188	279	100	9.2	44.2	11	13	26	M10 X 1.50
-1013 ①	U	in	1.50	5.91	8.04	11.61	4.00	0.37	1.77	0.56	1.38	0.70	M12 X 1.75
-1013 ②	M	mm	38	150	204	295	100	9.2	44.2	11	35	18	M12 X 1.75
-1026 ①	U	in	2.00	6.13	9.01	12.58	4.00	0.37	1.77	0.56	1.53	0.84	M12 X 1.75
-1026 ②	M	mm	51	156	229	320	100	9.2	44.2	11	39	21	M12 X 1.75

- ① Bracket pilot to SAE-B 4-bolt standard for NEMA M-drive or foot bracket
- ② Bracket pilot to 100 mm ISO 3019-2 DIN 4x standard for IEC M-drive or foot bracket
- ③ Standard ports SAE J518 code 61 flange. Optional tapped ports on same centerline include NPT or BSP (up to 2") or SAE O-Ring J1453 (up to 2")

- ④ Bracket pilot (digit 10 in Model Number Key page 341.4.2)
- ⑤ C2 dimension includes optional pressure relief valve.

### DIMENSIONS – SERIES GP/GM-14 UNMOUNTED PUMP



NOTE: Dimensions in inches (millimeters)

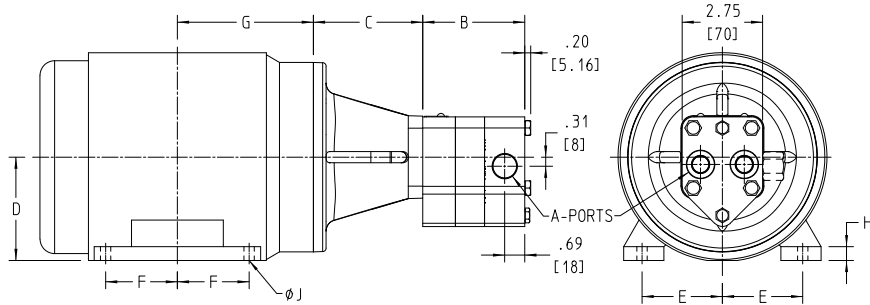
MODEL NO.	④		A ③	B	C1	C2 ⑤	D	E	F	G	H	J	K
-1420 ①	U	in	2.00	6.10	8.53	12.16	5.00	0.49	2.25	0.56	0.84	1.53	M12 X 1.75
-1420 ②	M	mm	51	155	217	309	125	9.2	56.6	13.5	21	39	M12 X 1.75
-1436 ①	U	in	3.00	6.80	10.13	13.76	5.00	0.49	2.25	0.56	1.22	2.09	M16 X 2.00
-1436 ②	M	mm	76	173	257	350	125	9.2	56.6	13.5	31	53	M16 X 2.00
-1456 ①	U	in	4.00	7.19	12.13	15.76	5.00	0.49	2.25	0.56	1.53	2.56	M16 X 2.00
-1456 ②	M	mm	102	183	308	400	125	9.2	56.6	13.5	39	65	M16 X 2.00

- ① Bracket pilot SAE-C 4-bolt standard for NEMA M-drive or foot bracket
- ② Bracket pilot 125 mm ISO 3019-2 DIN 4x standard for IEC M-drive or foot bracket
- ③ Standard ports SAE J518 code 61 flange. Optional tapped ports on same centerline include NPT or BSP (up to 4") or SAE O-Ring J1453 (up to 2")

- ④ Bracket pilot (digit 10 in Model Number Key page 341.4.2)
- ⑤ C2 dimension includes optional pressure relief valve.

## VIKING HYDRAULIC GEAR PUMPS & MOTORS

### DIMENSIONS – SERIES GP-04 & -05 C-FLANGE MOTOR MOUNT (“M” DRIVE) – NEMA

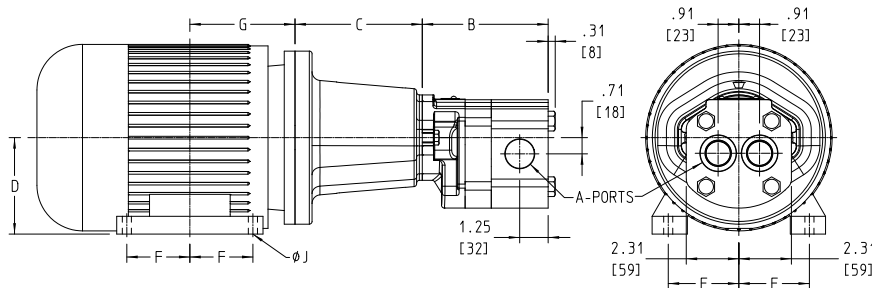


Dimensions in inches (mm)

PUMP SIZE	A	B
GP-0417	3/8" NPT	2.68 (68.1)
GP-0418	3/8" NPT	2.68 (68.1)
GP-0425	3/8" NPT	2.75 (69.9)
GP-0435	3/8" NPT	2.85 (72.4)
GP-0450	3/8" NPT	3.00 (76.2)
GP-0470	3/8" NPT	3.20 (81.3)
GP-0518	3/8" NPT	2.68 (68.1)
GP-0525	3/8" NPT	2.75 (69.9)
GP-0535	3/8" NPT	2.85 (72.4)
GP-0550	3/8" NPT	3.00 (76.2)
GP-0570	1/2" NPT	3.20 (81.3)
GP-0510	1/2" NPT	3.50 (88.9)
GP-0514	1/2" NPT	3.90 (99.1)

MOTOR FRAME SIZE	C	D	E	F	G	H	J
56C	3.75 (95.3)	3.50 (88.9)	2.44 (62.0)	1.50 (38.1)	4.06 (103.1)	0.12 (3.0)	0.34 (8.6) SLOT
143TC	3.75 (95.3)	3.50 (88.9)	2.75 (69.9)	2.00 (50.8)	4.88 (124.0)	0.31 (7.9)	0.34 (8.6)
145TC	3.75 (95.3)	3.50 (88.9)	2.75 (69.9)	2.50 (63.5)	5.38 (136.7)	0.31 (7.9)	0.34 (8.6)
182TC	4.25 (108.0)	4.50 (114.3)	3.75 (95.3)	2.25 (57.2)	5.78 (146.8)	0.38 (9.7)	0.41 (10.4)
184TC	4.25 (108.0)	4.50 (114.3)	3.75 (95.3)	2.75 (69.9)	6.28 (159.5)	0.38 (9.7)	0.41 (10.4)

### DIMENSIONS – SERIES GP-07 C-FLANGE MOTOR MOUNT (“M” DRIVE) – NEMA



Dimensions in inches (mm)

PUMP SIZE	A	B
GP-0741	3/4" NPT	3.04 (112.0)
GP-0758	3/4" NPT	3.21 (116.3)
GP-0782	3/4" NPT	3.45 (28.4)
GP-0711	1" NPT	3.78 (130.8)
GP-0716	1" NPT	4.28 (143.5)

MOTOR FRAME SIZE	C	D	E	F	G	H	J
56C	4.88 (124.0)	3.50 (88.9)	2.44 (62.0)	1.50 (38.1)	4.06 (103.1)	.12 (3.0)	.34 (8.6) SLOT
143TC	4.88 (124.0)	3.50 (88.9)	2.75 (69.9)	2.00 (50.8)	4.88 (124.0)	.31 (7.9)	.34 (8.6)
145TC	4.88 (124.0)	3.50 (88.9)	2.75 (69.9)	2.50 (63.5)	5.38 (136.7)	.31 (7.9)	.34 (8.6)
182TC	5.62 (142.7)	4.50 (114.3)	3.75 (95.3)	2.25 (57.2)	5.78 (146.8)	.38 (9.7)	.41 (10.4)
184TC	5.62 (142.7)	4.50 (114.3)	3.75 (95.3)	2.75 (69.9)	6.28 (159.5)	.38 (9.7)	.41 (10.4)
213TC	6.48 (164.6)	5.25 (133.4)	4.25 (108.0)	2.75 (69.9)	7.03 (178.6)	.62 (15.7)	.41 (10.4)
215TC	6.48 (164.6)	5.25 (133.4)	4.25 (108.0)	3.50 (88.9)	7.78 (197.6)	.62 (15.7)	.41 (10.4)
254TC	7.10 (180.3)	6.25 (158.8)	5.00 (127.0)	4.12 (104.6)	8.40 (213.4)	.62 (15.7)	.53 (13.5)
256TC	7.10 (180.3)	6.25 (158.8)	5.00 (127.0)	5.00 (127.0)	9.28 (235.7)	.62 (15.7)	.53 (13.5)

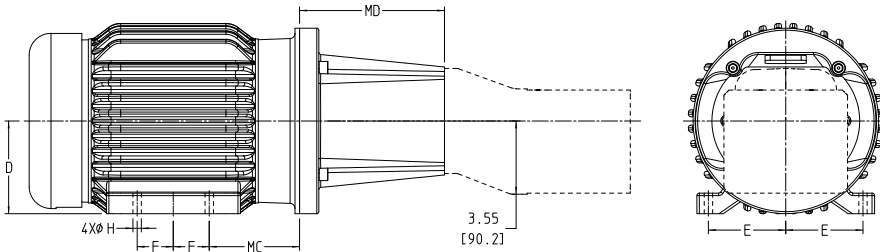
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SERIES GP-04, -05, -07, -10, -14  
 SERIES GM-05, -07, -10, -14

## VIKING HYDRAULIC GEAR PUMPS & MOTORS

### DIMENSIONS – SERIES GP-10 MOTOR MOUNT (“M” DRIVE) – NEMA

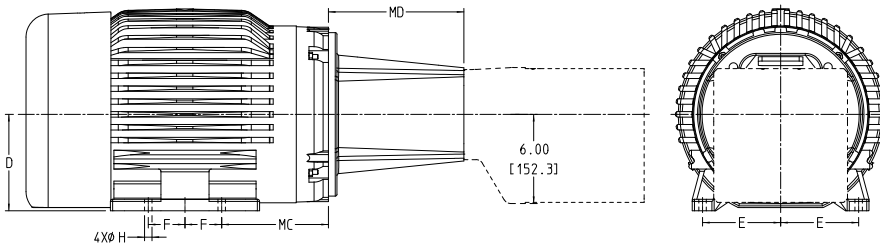


- ① Drive equipment weight listed is for a typical TEFC motor, mounting bracket and couplings. (If a more accurate motor shipping weight is required, consult factory with complete motor specifications.) For total unit shipping weight, add the drive equipment shipping weight to the pump shipping weight shown on the pump specification chart.
- ② Pump extends below motor feet. Motor must be blocked up.

**NOTE:** Cartridge seals may not be used with M-Drives

MOTOR FRAME		D	E	F	H	MC	MD	APPROX. DRIVE ① EQUIP. SHIPPING WEIGHT IN POUNDS (KG)
56C	in (mm)	3.50 (88.9) ②	2.44 (62.0)	1.50 (38.1)	.34 (8.6)	2.56 (65.0)	5.06 (128.5)	49 (22.1)
143TC	in (mm)	3.50 (88.9) ②	2.75 (69.9)	2.00 (50.8)	.34 (8.6)	2.88 (73.2)	5.06 (128.5)	65 (29.7)
145TC	in (mm)	3.50 (88.9) ②	2.75 (69.9)	2.50 (63.5)	.34 (8.6)	2.88 (73.2)	5.06 (128.5)	74 (33.5)
182TC	in (mm)	4.50 (114.3)	3.75 (95.3)	2.25 (57.2)	.41 (10.4)	3.38 (85.9)	5.69 (144.5)	151 (68.6)
184TC	in (mm)	4.50 (114.3)	3.75 (95.3)	2.75 (69.9)	.41 (10.4)	3.38 (85.9)	5.69 (144.5)	159 (71.9)
213TC	in (mm)	5.25 (133.4)	4.25 (108.0)	2.75 (69.9)	.41 (10.4)	4.25 (108.0)	6.63 (168.4)	190 (86.1)
215TC	in (mm)	5.25 (133.4)	4.25 (108.0)	3.50 (88.9)	.41 (10.4)	4.25 (108.0)	6.63 (168.4)	257 (116.6)
254TC	in (mm)	6.25 (158.8)	5.00 (127.0)	4.13 (104.9)	.53 (13.5)	4.75 (120.7)	7.04 (178.8)	284 (128.9)
256TC	in (mm)	6.25 (158.8)	5.00 (127.0)	5.00 (127.0)	.53 (13.5)	4.75 (120.7)	7.04 (178.8)	328 (149.0)
284TC	in (mm)	7.00 (177.8)	5.50 (139.7)	4.75 (120.7)	.53 (13.5)	4.75 (120.7)	8.11 (206.0)	432 (195.8)
286TC	in (mm)	7.00 (177.8)	5.50 (139.7)	5.50 (139.7)	.53 (13.5)	4.75 (120.7)	8.11 (206.0)	485 (220.1)

### DIMENSIONS – SERIES GP-14 MOTOR MOUNT (“M” DRIVE) – NEMA



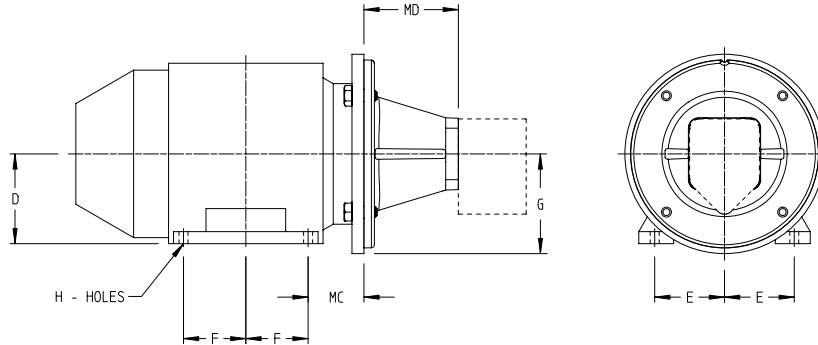
- ① Drive equipment weight listed is for a typical TEFC motor, mounting bracket and couplings. (If a more accurate motor shipping weight is required, consult factory with complete motor specifications.) For total unit shipping weight, add the drive equipment shipping weight to the pump shipping weight shown on the pump specification chart.
- ② Pump extends below motor feet. Motor must be blocked up.

② Pump extends below motor feet. Motor must be blocked up.

MOTOR FRAME		D	E	F	H	MC	MD	APPROX. DRIVE ① EQUIP. SHIPPING WEIGHT IN POUNDS (KG)
182TC	in (mm)	4.50 (114.3) ②	3.75 (95.3)	2.25 (57.2)	.41 (10.4)	3.62 (91.9)	7.63 (193.8)	151 (68.6)
184TC	in (mm)	4.50 (114.3) ②	3.75 (95.3)	2.75 (69.9)	.41 (10.4)	3.62 (91.9)	7.63 (193.8)	159 (71.9)
213TC	in (mm)	5.25 (133.4) ②	4.25 (108.0)	2.75 (69.9)	.41 (10.4)	4.50 (114.3)	7.63 (193.8)	190 (86.1)
215TC	in (mm)	5.25 (133.4) ②	4.25 (108.0)	3.50 (88.9)	.41 (10.4)	4.50 (114.3)	7.63 (193.8)	257 (116.5)
254TC	in (mm)	6.25 (158.8)	5.00 (127.0)	4.13 (104.9)	.53 (13.5)	4.75 (120.7)	7.63 (193.8)	284 (128.9)
256TC	in (mm)	6.25 (158.8)	5.00 (127.0)	5.00 (127.0)	.53 (13.5)	4.75 (120.7)	7.63 (193.8)	328 (149.0)
284TC	in (mm)	7.00 (177.8)	5.50 (139.7)	4.75 (120.7)	.53 (13.5)	4.75 (120.7)	9.12 (231.6)	432 (195.8)
286TC	in (mm)	7.00 (177.8)	5.50 (139.7)	5.50 (139.7)	.53 (13.5)	4.75 (120.7)	9.12 (231.6)	485 (220.1)
324TC	in (mm)	8.00 (203.2)	6.25 (158.8)	5.25 (133.4)	.53 (13.5)	5.25 (133.4)	9.13 (231.6)	680 (308.5)

## VIKING HYDRAULIC GEAR PUMPS & MOTORS

### DIMENSIONS – SERIES GP-04, GP-05 – MOTOR MOUNT – (“M” DRIVE) – IEC FRAME



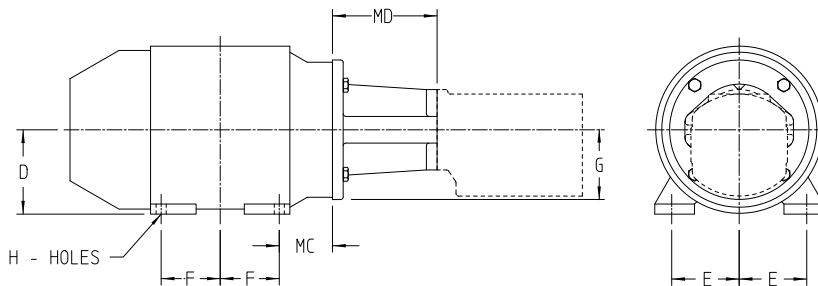
MOTOR FRAME		D	E	F	G	H	MC	MD	APPROX. DRIVE ① EQUIP. SHIPPING WEIGHT IN POUNDS (KG)
IEC 80 B35 FLANGE	in (mm)	3.15 (80)	2.46 (62.5)	1.97 (50)	3.94 (100)	0.39 (10)	1.97 (50)	3.73 (94.7)	46 (21)
IEC 90 B35 FLANGE	in (mm)	3.54 (90)	2.76 (70)	S 1.97 (50) / L 2.46 (62.5)	3.94 (100)	0.39 (10)	2.20 (56)	3.73 (94.7)	64 (29)

① Motor shipping weight listed is for a typical IEC motor.

(If a more accurate motor shipping weight is required, consult factory with complete motor specifications.)

For total unit shipping weight, add the electric motor shipping weight to the pump shipping weight shown on the pump specification chart.

### DIMENSIONS – SERIES GP-07 – MOTOR MOUNT (“M” DRIVE) – IEC FRAME



MOTOR FRAME		D	E	F	G	H	MC	MD	APPROX. DRIVE ① EQUIP. SHIPPING WEIGHT IN POUNDS (KG)
IEC 90 B35 FLANGE	in (mm)	3.54 (90)	2.76 (70)	S 1.97 (50) / L 2.46 (62.5)	3.94 (100)	0.39 (10)	2.20 (56)	5.13 (130.3)	68 (31)
IEC 100 B14 FACE	in (mm)	3.94 (100)	3.15 (80)	S 2.20 (56) / L 2.76 (70)	---	0.47 (12)	2.48 (63)	5.26 (133.6)	114 (52)
IEC 112 B14 FACE	in (mm)	4.41 (112)	3.74 (95)	S 2.24 (57) / L 2.76 (70)	---	0.47 (12)	2.76 (70)	5.26 (133.6)	129 (59)

① Motor shipping weight listed is for a typical IEC motor.

(If a more accurate motor shipping weight is required, consult factory with complete motor specifications.)

For total unit shipping weight, add the electric motor shipping weight to the pump shipping weight shown on the pump specification chart.

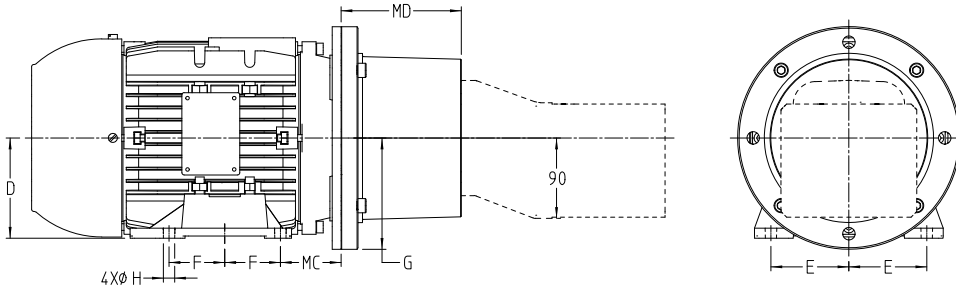
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SERIES GP-04, -05, -07, -10, -14  
 SERIES GM-05, -07, -10, -14

## VIKING HYDRAULIC GEAR PUMPS & MOTORS

### DIMENSIONS – GP-10 – MOTOR MOUNT (“M” DRIVE) – IEC B35 FRAME

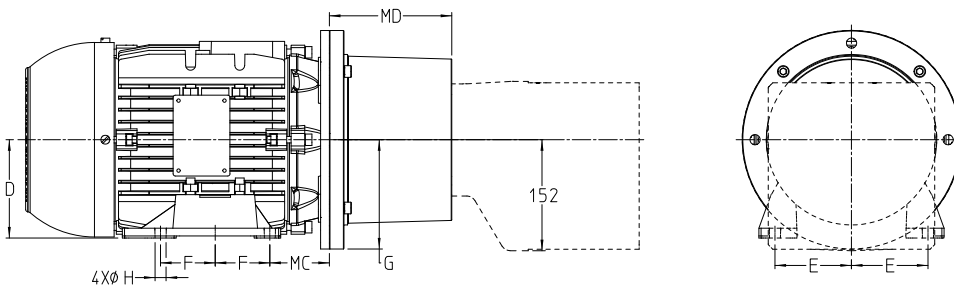


MOTOR FRAME SIZE		D	E	F	G	H	MC	BELLHOUSING PN ②	MD	APPROX. DRIVE ① EQUIPMENT SHIPPING WEIGHT IN POUNDS (KG)
90	in (mm)	3.54 (90)	2.76 (70)	2.46 (62.5)	3.94 (100)	0.39 (10)	2.20 (56)	2-085-054-720-00	4.88 (124)	63 (28.8)
100L	in (mm)	3.94 (100)	3.15 (80)	2.76 (70)	3.94 (100)	0.47 (12)	2.48 (63)	2-085-050-720-00	5.31 (135)	89 (40.5)
112M	in (mm)	4.41 (112)	3.74 (95)	2.76 (70)	4.92 (125)	0.47 (12)	2.76 (70)	2-085-050-720-00	5.31 (135)	110 (49.9)
132S/M	in (mm)	5.20 (132)	4.25 (108)	2.76 (70)	5.91 (150)	0.47 (12)	3.50 (89)	2-085-051-720-00	5.31 (135)	179 (81.3)
160L	in (mm)	6.30 (160)	5.00 (127)	4.13 (105)	6.89 (175)	0.59 (15)	4.25 (108)	2-085-052-720-00	7.40 (188)	331 (150.3)
180L	in (mm)	7.09 (180)	5.49 (139.5)	4.74 (120.5)	6.89 (175)	0.59 (15)	4.76 (121)	2-085-052-720-00	7.40 (188)	496 (225.1)
200M	in (mm)	7.87 (200)	6.26 (159)	5.26 (133.5)	7.87 (200)	0.71 (18)	5.24 (133)	2-085-053-720-00	8.03 (204)	668 (303.3)

① Drive equipment weight listed is for a typical TEFC motor, mounting bracket and couplings. (If a more accurate motor shipping weight is required, consult factory with complete motor specifications.) For total unit shipping weight, add the drive equipment shipping weight to the pump shipping weight shown on the pump specification chart.

② Viking offers several bellhousing styles, and these dimensions only pertain to the bellhousing part numbers listed. If using a different part number, dimensions may vary.

### DIMENSIONS – GP-14 – MOTOR MOUNT (“M” DRIVE) – IEC B35 FRAME



MOTOR FRAME SIZE		D	E	F	G	H	MC	BELLHOUSING PN ②	MD	APPROX. DRIVE ① EQUIPMENT SHIPPING WEIGHT IN POUNDS (KG)
132	in (mm)	5.20 (132)	4.25 (108)	2.76 (70)	5.91 (150)	0.47 (12)	3.50 (89)	2-085-041-720-00	6.61 (168)	179 (81.3)
160	in (mm)	6.30 (160)	5.00 (127)	4.13 (105)	6.89 (175)	0.59 (15)	4.25 (108)	2-085-048-720-00	8.03 (204)	331 (150.3)
180	in (mm)	7.09 (180)	5.49 (139.5)	4.74 (120.5)	6.89 (175)	0.59 (15)	4.76 (121)	2-085-048-720-00	8.03 (204)	496 (225.1)
200	in (mm)	7.87 (200)	6.26 (159)	5.26 (133.5)	7.87 (200)	0.71 (18)	5.24 (133)	2-085-040-720-00	8.03 (204)	668 (303.3)
225	in (mm)	8.86 (225)	7.01 (178)	5.63 (143)	8.86 (225)	0.71 (18)	5.87 (149)	2-085-049-720-00	9.21 (234)	793 (359.9)

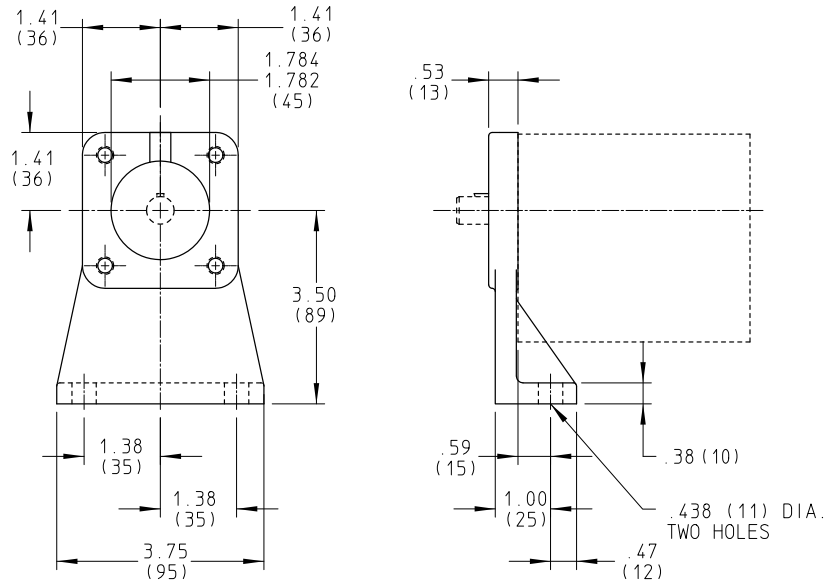
① Drive equipment weight listed is for a typical TEFC motor, mounting bracket and couplings. (If a more accurate motor shipping weight is required, consult factory with complete motor specifications.) For total unit shipping weight, add the drive equipment shipping weight to the pump shipping weight shown on the pump specification chart.

② Viking offers several bellhousing styles, and these dimensions only pertain to the bellhousing part numbers listed. If using a different part number, dimensions may vary.

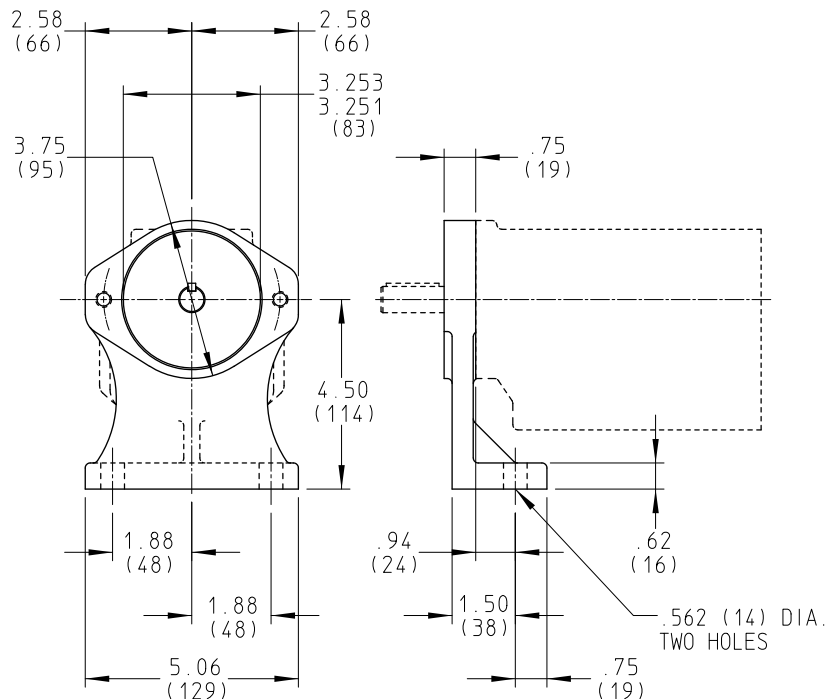
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**VIKING HYDRAULIC GEAR PUMPS & MOTORS**

**DIMENSIONS – SERIES GP-04, -05, GM-05 FOOT BRACKET (“B” DRIVE)**



**DIMENSIONS – SERIES GP-07, GM-07 FOOT BRACKET (“B” DRIVE)**





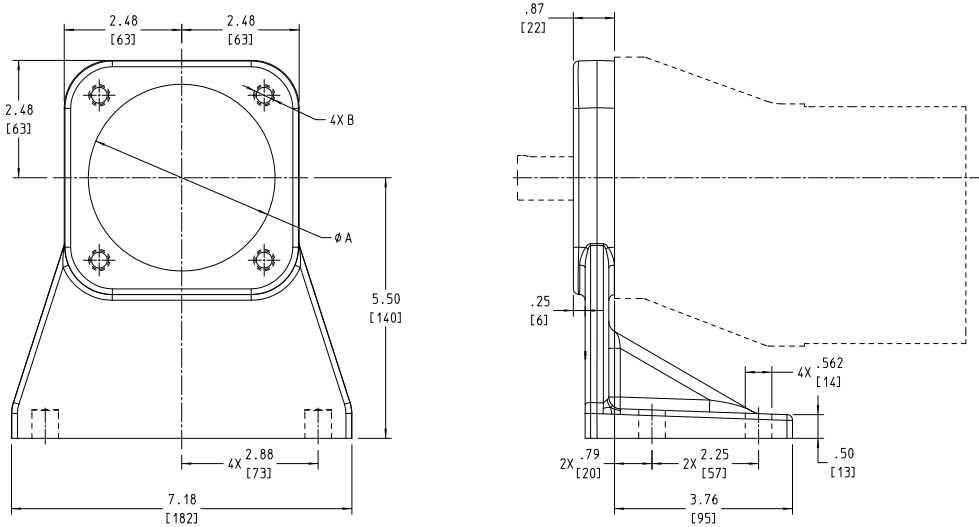
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SERIES GP-04, -05, -07, -10, -14  
 SERIES GM-05, -07, -10, -14

## VIKING HYDRAULIC GEAR PUMPS & MOTORS

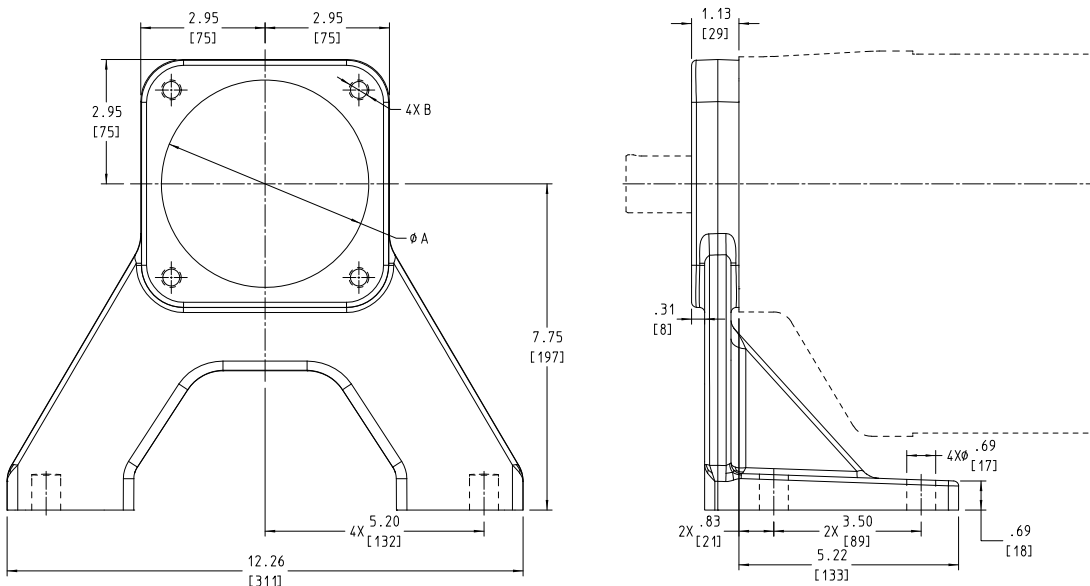
### DIMENSIONS – SERIES GP-10 FOOT BRACKET (“B” DRIVE)



FOR USE WITH		A	B
SAE B 4 BOLT	in	4.00	1/2 - 13
	mm	102	
ISO 100MM 4 BOLT	in	3.94	M10 X 1.5
	mm	100	

NOTE: Approximate shipping weight is 11 lbs (4.8 Kg)  
 NOTE: Dimensions shown in parentheses are millimeters; others are inches.

### DIMENSIONS – SERIES GP-14 FOOT BRACKET (“B” DRIVE)

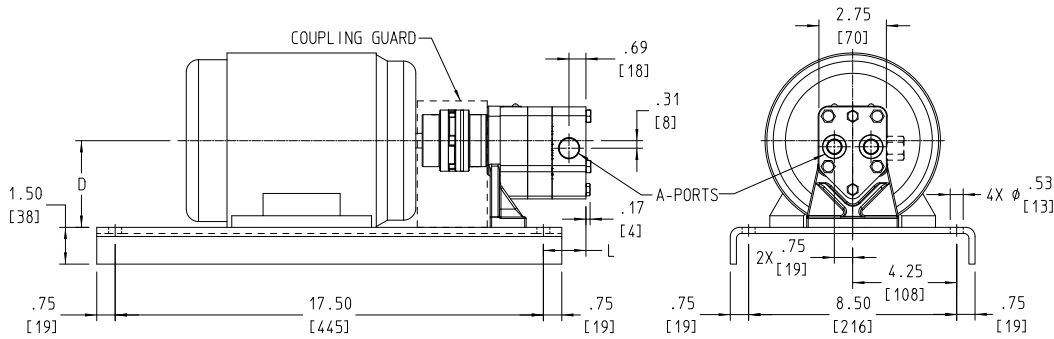


FOR USE WITH		A	B
SAE C 4 BOLT	in	5.00	1/2 - 13
	mm	127	
ISO 125MM 4 BOLT	in	4.92	M12 X 1.75
	mm	125	

NOTE: Approximate shipping weight is 19 lbs (8.6 Kg)  
 NOTE: Dimensions shown in parentheses are millimeters; others are inches.

## VIKING HYDRAULIC GEAR PUMPS & MOTORS

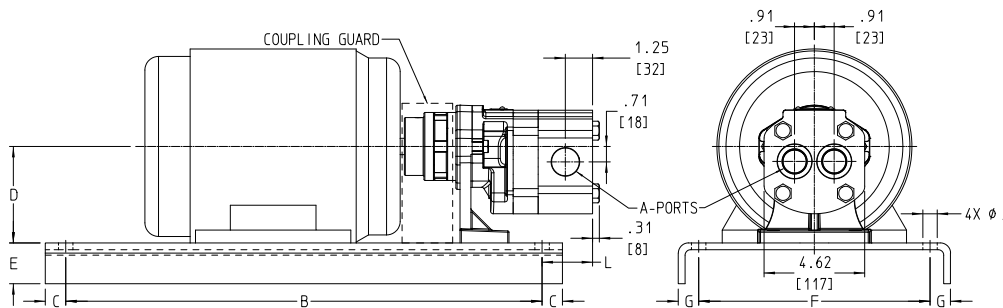
### DIMENSIONS – SERIES GP-04, -05 BASE-MOUNTED UNIT (“D” DRIVE)



NOTE: Dimensions in inches (mm)

PUMP SIZE	A	D		L
		NEMA MOTOR FRAME SIZE		
		56 - 145T	182 - 184T	
GP-0417	3/8" NPT	3.50 (88.9)	4.50 (114.3)	.18 (4.6)
GP-0418	3/8" NPT			.18 (4.6)
GP-0425	3/8" NPT			.25 (6.4)
GP-0435	3/8" NPT			.35 (8.9)
GP-0450	3/8" NPT			.50 (12.7)
GP-0470	3/8" NPT			.70 (17.8)
GP-0518	3/8" NPT	3.50 (88.9)	4.50 (88.9)	.18 (4.6)
GP-0525	3/8" NPT			.25 (6.4)
GP-0535	3/8" NPT			.35 (8.9)
GP-0550	3/8" NPT			.50 (12.7)
GP-0570	1/2" NPT			.70 (17.8)
GP-0510	1/2" NPT			1.00 (25.4)
GP-0514	1/2" NPT			1.40 (35.6)

### DIMENSIONS – SERIES GP-07 BASE-MOUNTED UNIT (“D” DRIVE)



NOTE: Dimensions in inches (mm)

PUMP SIZE	A	L	NEMA MOTOR FRAME SIZE 56 - 145T						NEMA MOTOR FRAME SIZE 182 - 215T						NEMA MOTOR FRAME SIZE 254T - 256T									
			B	C	D	E	F	G	J	B	C	D	E	F	G	J	B	C	D	E	F	G	J	
GP-0741	3/4" NPT	.88 (22.4)																						
GP-0758	3/4" NPT	1.04 (26.4)																						
GP-0782	3/4" NPT	1.28 (32.5)	20.50 (520.7)	.75 (19.05)	3.50 (88.9)	1.50 (38.1)	8.50 (215.9)	.75 (19.05)	.50 (12.7)	25.00 (635)	1.00 (25.4)	4.50 (114.3) (182T/184T)	2.94 (74.68)	9.00 (228.6)	1.50 (38.1)	.56 (14.22)	31.00 (787.4)	1.00 (25.4)	6.25 (158.75)	3.50 (88.9)	18.50 (469.9)	1.00 (25.4)	.62 (15.75)	
GP-0711	1" NPT	1.62 (41.1)										5.25 (133.4) (213T/215T)												
GP-0716	1" NPT	2.12 (53.8)																						

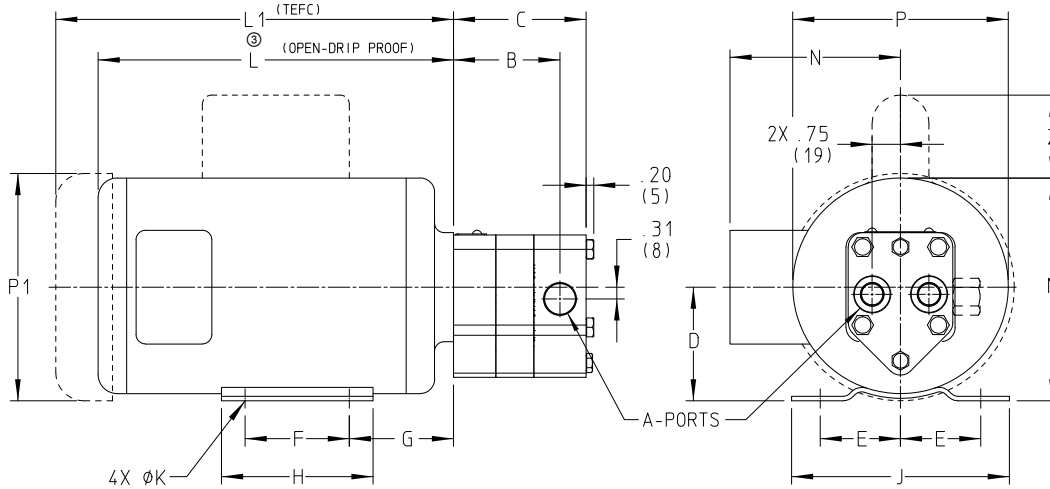
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SERIES GP-04, -05, -07, -10, -14  
 SERIES GM-05, -07, -10, -14

## VIKING HYDRAULIC GEAR PUMPS & MOTORS

### DIMENSIONS – SERIES GP-04, -05 FOUR-BOLT MOTOR MOUNTED UNIT (“M4” DRIVE)



CLOSE-COUPLED MOTOR FRAME	② APPROX. DRIVE EQUIPMENT SHIPPING WEIGHT POUNDS (KG)	AB	D	E	2F	H	MA	MB	MC	ENCL.	O	P	P <sub>i</sub>	ZZ
48 "M4" Drive	25 (11.1)	4.50 (114)	3.00 (76)	2.12 (54)	2.75 (70)	.34 (9) SLOT	5.75 (146)	4.00 (102)	2.75 (70)	ODP	5.88 (149)	5.69 (145)	---	2.19 (56)
										TEFC	5.88 (149)	---	6.12 (155)	2.25 (57)
56 "M4" Drive	29 (12.9)	5.25 (133)	3.50 (89)	2.44 (62)	3.00 (76)	.34 (9) SLOT	6.50 (165)	4.50 (114)	2.62 (66)	ODP	6.88 (175)	6.62 (168)	---	2.25 (57)
										TEFC	6.88 (175)	---	7.19 (183)	

① Motor shipping weight listed is for a typical TEFC motor.

(If a more accurate motor shipping weight is required, consult factory with complete motor specifications.)

For total unit shipping weight, add the electric motor shipping weight to the pump shipping weight shown on the pump specification chart.

② Drive equipment weight listed is for a typical TEFC motor, mounting bracket and couplings. (If a more accurate motor shipping weight is required, consult factory with complete motor specifications.) For total unit shipping weight, add the drive equipment shipping weight to the pump shipping weight shown on the pump specification chart.

③ L and L<sub>i</sub> length dependent on motor horsepower.

**NOTE:** See page 341.4.9 for unmounted pump dimensions.

**NOTE:** Dimensions in inches (millimeters)