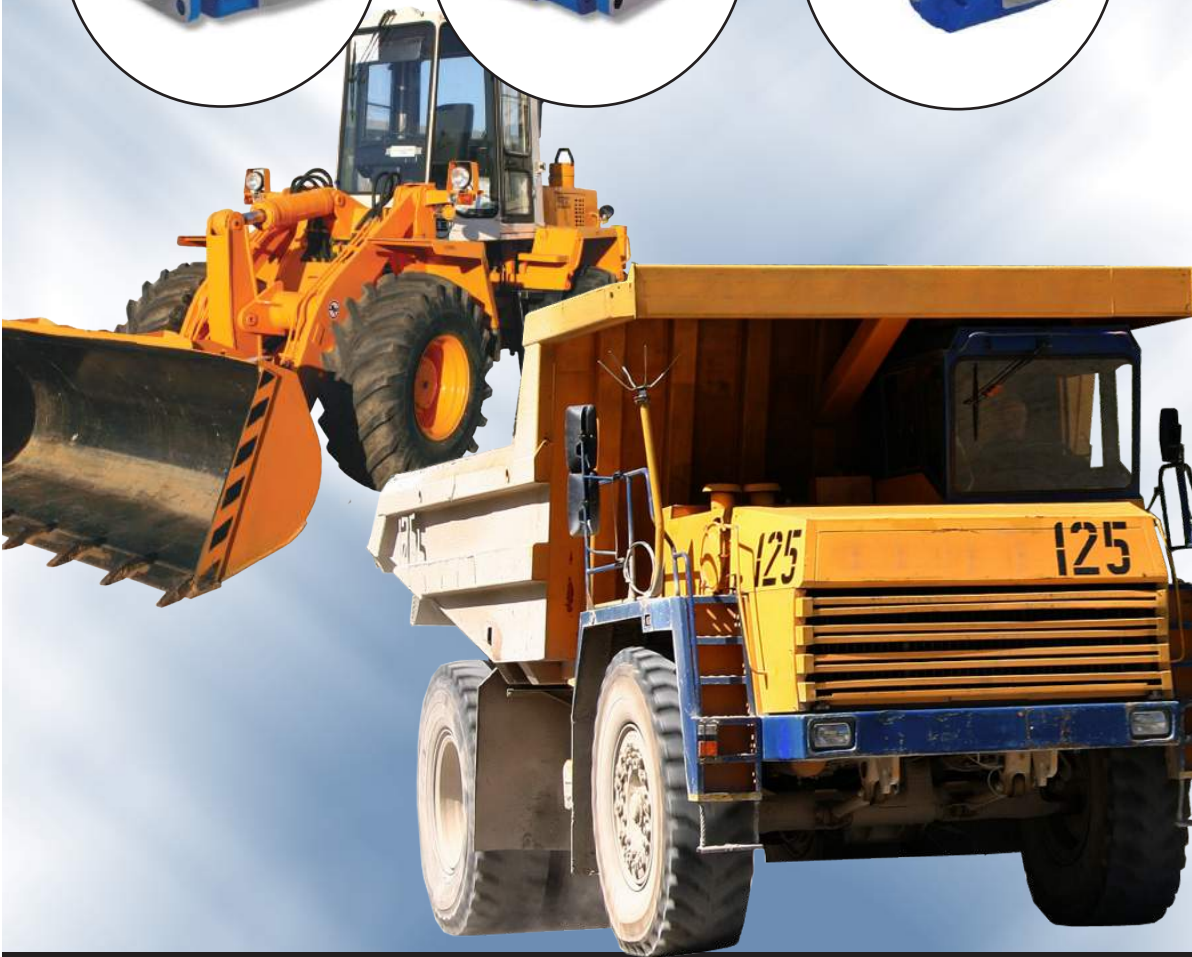


Dynaco

Your Source for Hydraulic Pump & Parts



**YOUR SOURCE FOR HIGH QUALITY
GEAR PUMPS AND COMPONENTS**

ACTIVE: SEPTEMBER 1, 2010

P30/31 P50/51 P75/76 Bearing Pump

DYNACO P31/P51/P76 GEAR PUMPS AND MOTORS



Characteristics :

- High efficiency single / multiple units
- Wide range of displacements
- Optional shafts / mountings
- Rugged cast iron construction
- Motor assemblies available
- Complete parts program
- Flow dividers available



ROLLER BEARING GEAR PUMPS PERFORMANCE DATA

Dynaco MODEL SERIES	Gear width (inches)	Theoretical displacement		Mineral oil maximum pressure				Recommended speed range		Approximate weight			
				Continuous		Intermittent		MAX	MIN	Single unit		Add section	
		in ³ /rev	cm ³ /rev	PSI	BAR	PSI	BAR	rpm	rpm	lbs	kg	lbs	kg
P31	1/2	1.00	16.39	2750	190	3000	207	2400	600	31	14	25	11
	3/4	1.48	24.58	2750	190	3000	207	2400	600	32	14.5	26	11.5
	1	1.97	32.77	2750	190	3000	207	2400	600	33	15	27	12
	1 1/4	2.46	40.97	2750	190	3000	207	2400	600	34	15.5	28	12.5
	1 1/2	2.96	49.16	2750	190	3000	207	2400	600	35	16	29	13
	1 3/4	3.45	57.35	2250	155	2500	172	2400	600	36	16.5	31	14
	2	3.94	65.55	2250	155	2500	172	2400	600	37	17	32	14.5
P51	3/4	1.91	31.66	2750	190	3000	207	2400	600	35.5	16.5	29.5	13
	1	2.55	42.11	2750	190	3000	207	2400	600	37	17	31	14
	1 1/4	3.19	52.77	2750	190	3000	207	2400	600	38.5	17.5	32.5	15
	1 1/2	3.83	63.25	2750	190	3000	207	2400	600	40	18	34	15.5
	1 3/4	4.46	73.74	2750	190	3000	207	2400	600	41.5	19	35.5	16
	2	5.10	84.23	2250	155	2500	172	2400	600	43	19.5	37	17
	2 1/4	5.74	94.88	2250	155	2500	172	2400	600	48.5	22	42.5	19
	2 1/2	6.38	105.37	2250	155	2500	172	2400	600	50	22.5	44	20
P76	3/4	3.07	50.40	2750	190	3000	207	2400	600	69	32	57	26
	1	4.10	67.20	2750	190	3000	207	2400	600	72	33	59	27
	1 1/4	5.12	84.00	2750	190	3000	207	2400	600	75	34	62	28
	1 1/2	6.15	100.80	2750	190	3000	207	2400	600	77	35	64	29
	1 3/4	7.17	117.60	2750	190	3000	207	2400	600	80	36	67	31
	2	8.20	134.40	2250	155	2500	172	2400	600	82	37	69	32
	2 1/4	9.22	151.20	2250	155	2500	172	2400	600	85	39	72	33
	2 1/2	10.25	168.00	2250	155	2500	172	2400	600	87	40	74	34
	2 3/4	11.27	184.80	1750	120	2000	138	2400	600	90	41	77	35
	3	12.30	201.60	1750	120	2000	138	2400	600	92	42	79	36

DYNACO manufactures bearing gear pumps and motors to the highest quality and durability for the most demanding applications. Our gears are produced to precise tolerances with a true involute profile along the tooth thus maximising volumetric efficiency. The result is more efficient longer lasting pumps & motors with lower noise emissions.

DYNACO casts all its shaft end covers, gear housings, bearing carriers, and port covers out of grade 17 cast iron, which is metallurgically controlled to provide only the highest quality castings. In all assemblies, high density bronze alloy thrust plates with superior wear characteristics ensures longer pump or motor life under the harshest conditions.

The high operating pressure and speed combined with the large number of displacements, mounting options and port configurations make these units ideal for single and multiple pump and motor applications.

DYNACO P31/P51/P76 PUMP PERFORMANCE DATA



Average Data at 2000psi / 138 bar
Oil Viscosity - 150 SUS (32 CST)

P31

		GEAR WIDTH (Inches)													
		1/2"		3/4"		1"		1 1/4"		1 1/2"		1 3/4"		2"	
cu in/rev		1		1.48		1.97		2.46		2.96		3.45		3.94	
cc/rev		16.39		24.58		32.77		40.97		49.16		57.35		65.55	
		lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm
		kw	Hp	kw	Hp	kw	Hp	kw	Hp	kw	Hp	kw	Hp	kw	Hp
600	600	5.7	1.5	8.6	2.3	11.4	3	15.2	4	22.8	6	26.7	7	32.3	8.5
	900	2.6	3.5	3.9	5.3	5.2	7	6.7	9	8.2	11	9.7	13	11.2	15
900	900	11.4	3	17.1	4.5	22.8	6	28.5	7.5	38	10	43.7	11.5	51.3	13.5
	1200	3.9	5.3	5.9	7.9	7.8	10.5	10.1	13.5	12.3	16.5	14.2	19	16.4	22
1200	1200	16.2	4.3	24.2	6.4	32.3	8.5	41.8	11	53.2	14	60.8	16	72.2	19
	1500	5	6.8	7.6	10.1	10.1	13.5	13.1	17.5	16	21.5	18.6	25	21.6	29
1500	1500	20.9	5.5	31.4	8.3	41.8	11	53.2	14	66.5	17.5	78	20.5	91.2	24
	1800	6.3	8.5	9.5	12.8	12.7	17	16.4	22	19.7	26.5	23.1	31	26.9	36
1800	1800	25.7	6.8	38.5	10.1	51.3	13.5	66.5	17.5	81.8	21.5	95	25	110.2	29
	2100	7.5	10	11.2	15	14.9	20	19.4	26	23.5	31.5	27.6	37	30.5	43
2100	2100	30.4	8	45.6	12	60.8	16	79.8	21	96.7	25.5	112.1	29.5	131.1	34.5
	2400	8.8	11.8	13.1	17.6	17.5	23.5	22.3	30	27.2	36.5	32.1	43	37.3	50
2400	2400	35.2	9.3	52.7	13.9	70.3	18.5	91.2	24	112.1	29.5	129.2	34	150.1	39.5
		10.1	13.5	15.1	20.3	20.1	27	25.4	34	31.3	42	36.6	49	42.5	57

P51

		GEAR WIDTH (Inches)															
		3/4"		1"		1 1/4"		1 1/2"		1 3/4"		2"		2 1/4"		2 1/2"	
cu in/rev		1.91		2.55		3.19		3.83		4.46		5.10		5.74		6.38	
cc/rev		31.66		42.11		52.77		63.25		73.74		84.23		94.88		105.37	
		lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm
		kw	Hp	kw	Hp	kw	Hp	kw	Hp	kw	Hp	kw	Hp	kw	Hp	kw	Hp
600	600	15.7	4.1	20.9	5.4	26.6	7	32.3	8.5	38	10	41.8	11	45.6	12	49.4	13
	900	5.6	7.5	7.46	9.5	9.32	12.5	10.4	14	11.9	16	14.1	19	15.3	20.5	17.1	23
900	900	24.2	6.4	32.3	8.5	41.8	11	49.4	13	60.8	16	66.5	17.5	72.2	19	79.8	21
	1200	8.4	11.3	11.1	14.0	13.4	18	15.6	21	17.9	24	20.5	27.5	23.1	31	25.4	34
1200	1200	32.8	8.6	43.7	12.0	57	15	68.4	18	81.7	21.5	91.2	24	100.7	26.5	110.2	29
	1500	10.9	14.6	14.5	19.5	17.9	24	20.5	27.5	23.8	32	27.2	36.5	30.5	41	34.3	46
1500	1500	42.8	11.3	57	15.0	72.2	19	87.4	23	102.6	27	115.9	30.5	127.3	33.5	142.5	37.5
	1800	13.4	18	17.9	22.5	22	29.5	25.7	34.5	29.8	40	33.9	45.5	38	51	42.5	57
1800	1800	51.3	13.5	68.4	18.0	87.4	23	106.4	28	125.4	33	140.6	37	155.8	41	174.8	46
	2100	16.2	21.8	21.6	26.5	26.1	35	30.58	41	35.4	47.5	40.2	54	45.5	61	51.1	68.5
2100	2100	59.9	15.8	79.8	21.5	102.6	27	123.5	32.5	146.3	38.5	165.3	43.5	182.4	48	205.2	54
	2400	16.2	21.8	24.9	31.5	30.5	41	35.4	47.5	41	55	46.9	63	52.9	71	59.7	80
2400	2400	68.4	18	91.2	25.0	117.8	31	142.5	37.5	167.2	44	190	50	210.9	55.5	235.6	62
		21.3	28.5	28.3	34.0	34.3	46	40.6	54.5	46.9	63	73.3	71.5	60.4	81	68.3	91.5

P76

		GEAR WIDTH (Inches)																			
		3/4"		1"		1 1/4"		1 1/2"		1 3/4"		2"		2 1/4"		2 1/2"		2 3/4"		3"	
cu in/rev		3.03		4.04		5.06		6.07		7.08		8.09		9.10		10.11		11.12		12.13	
cc/rev		49.70		66.27		82.84		99.40		115.97		132.54		149.11		165.67		182.22		198.78	
		lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm
		kw	Hp	kw	Hp	kw	Hp	kw	Hp	kw	Hp	kw	Hp	kw	Hp	kw	Hp	kw	Hp	kw	Hp
600	600	21.4	5.6	28.5	7.5	38	10	45.6	12.5	55.1	14.5	66.5	17.5	76	20	89.3	23.5	102.6	27	110.2	29
	1200	10.1	13.5	13.4	18	15.6	21	17.5	23.5	19.4	26	21.6	29	25	33.5	27	36.5	29	39	31.3	42
1200	1200	49.9	13.1	66.5	17.5	85.5	22.5	104.5	27.5	123.5	32.5	142.5	37.5	161.5	42.5	178.6	47	201.4	53	224.2	59
	1500	17.6	23.6	23.5	31.5	28.3	38	33.6	45	38.4	51.5	43.3	58	48.5	65	53.7	72	59.7	80	65.6	88
1500	1500	64.1	16.9	85.5	22.5	108.3	28.5	131.1	34.5	155.8	41	180.5	47.5	201.4	53	224.2	59	250.8	66	277.4	73
	1800	21.3	28.5	28.3	38	35	47	41.4	55.5	48.1	64.5	54.5	73	60.8	81.5	67.1	90	74.6	100	83.2	111.5
1800	1800	78.4	20.6	104.5	27.5	133	35	159.6	42	190	50	216.6	57	243.2	64	269.8	71	300.2	79	332.5	87.5
	2100	25.2	33.8	33.6	45	41.8	56	49.6	66.5	57.4	77	65.6	88	73.1	98	80.9	108.5	91	122	99.9	134
2100	2100	92.6	24.4	123.5	32.5	155.8	41	186.2	49	224.2	59	254.6	67	283.1	74.5	313.5	82.5	349.6	92	385.7	101.5
	2400	29.1	39	38.8	52	48.1	64.5	57.4	77	67.1	90	76.8	103	85	114	94.4	126.5	105.8	142	117.1	157
2400	2400	106.9	28.1	142.5	37.5	178.6	47	214.7	56.5	256.5	67.5	290.7	76.5	324.9	85.5	359.1	94.5	399	105	440.8	116
		32.7	43.9	43.6	58.5	54.4	73	65.2	87.5	76.8	103	88	118	96.9	130	108.1	145	121.6	163	134.3	180

NOTE - PERFORMANCE DATA SHOWN ARE AN AVERAGE AND ARE NOT REPRESENTATIVE OF ONE PARTICULAR UNIT

DYNACO M31/M51/M76 MOTOR PERFORMANCE DATA



Average Data at 2000psi / 138 bar
Oil Viscosity - 150 SUS (32 CST)

M31

Speed rpm	1" Gear			1 1/4" Gear			1 1/2" Gear			1 3/4" Gear			2" Gear		
	Displ.	1.97	in3/rev	Displ.	2.46	in3/rev	Displ.	2.96	in3/rev	Displ.	3.45	in3/rev	Displ.	3.94	in3/rev
	Input Flow	Output Torque	Output Hp	Input Flow	Output Torque	Output Hp	Input Flow	Output Torque	Output Hp	Input Flow	Output Torque	Output Hp	Input Flow	Output Torque	Output Hp
	gpm	in/lbs	Hp	gpm	in/lbs	Hp	gpm	in/lbs	Hp	gpm	in/lbs	Hp	gpm	in/lbs	Hp
	l/m	Nm	kw		l/m	Nm	kw		l/m	Nm	kw		l/m	Nm	kw
800	10	575	7.5	12	737.5	9.5	14	900	11.5	16	1040	13.3	18	1180	15
	38	64.8	5.6	45.6	83.1	7.1	53.2	101.4	8.6	60.8	117.1	9.9	68.4	132.9	11.2
1200	14	570	11	16.5	730	14	19	890	17	21.5	1030	19.8	24	1170	22.5
	53.2	64.2	8.2	62.7	82.2	10.4	72.2	100.2	12.7	81.7	116.0	14.7	91.2	131.8	16.8
1600	17	565	14.5	20.5	722.5	18.5	24	880	22.5	23.3	1020	25.8	22.5	1160	29
	64.6	63.6	10.8	77.9	81.4	13.8	91.2	99.1	16.8	88.4	114.9	19.2	85.5	130.6	21.6
2000	20	555	17.5	24.5	707.5	22.5	29	860	27.5	34	995	31.8	39	1130	36
	76	62.5	13	93.1	79.7	16.8	110.2	96.8	20.5	129.2	112	23.7	148.2	127.3	26.9

M51

Speed rpm	1" Gear			1 1/4" Gear			1 1/2" Gear			1 3/4" Gear			2" Gear			2 1/4" Gear			2 1/2" Gear				
	Displ.	2.55	in3/rev	Displ.	3.19	in3/rev	Displ.	3.83	in3/rev	Displ.	4.46	in3/rev	Displ.	5.10	in3/rev	Displ.	5.74	in3/rev	Displ.	6.38	in3/rev		
	Input Flow	Output Torque	Output Hp	Input Flow	Output Torque	Output Hp	Input Flow	Output Torque	Output Hp	Input Flow	Output Torque	Output Hp	Input Flow	Output Torque	Output Hp	Input Flow	Output Torque	Output Hp	Input Flow	Output Torque	Output Hp		
	gpm	in/lbs	Hp	gpm	in/lbs	Hp	gpm	in/lbs	Hp	gpm	in/lbs	Hp	gpm	in/lbs	Hp	gpm	in/lbs	Hp	gpm	in/lbs	Hp		
	l/m	Nm	kw		l/m	Nm	kw		l/m	Nm	kw		l/m	Nm	kw		l/m	Nm	kw		l/m	Nm	kw
800	11	730	9	13.5	935	11.5	16	1140	14	18.8	1335	16.3	21.5	1530	18.5	24	1715	21.3	26.5	1900	24		
	41.8	82.2	6.7	51.3	105.3	8.6	60.8	128.4	10.4	13.9	105.3	12.1	81.7	172.3	13.8	91.2	193.1	15.9	100.7	214	17.9		
1200	16	720	13.5	19.5	920	17.3	23	1120	21	27	1307.5	24.5	31	1495	28	34.3	1682.5	31.8	37.5	1870	35.5		
	60.8	81.1	10.1	74.1	103.6	12.9	87.4	126.1	15.7	102.6	147.2	18.3	117.8	168.4	20.8	130.2	189.5	23.7	142.5	210.6	26.5		
1600	20.5	710	17.5	25.5	905	2.3	30.5	1100	27	35.5	1285	32	40.5	1470	37	45.3	1645	41	50	1820	45		
	77.9	81.0	13.1	96.9	101.9	16.6	115.9	123.9	20.1	134.9	144.7	23.9	153.9	165.5	27.6	172.0	185.2	30.6	190	205.0	33.6		
2000	25.5	670	21	31.8	855	26.8	38	1040	32.5	44	1225	38.5	50	1410	44.5	56	1575	49.8	62	1740	55		
	96.9	75.5	15.7	120.7	96.3	20.0	144.4	117.1	24.2	167.2	138.0	28.7	190.0	158.8	33.2	212.8	177.4	37.1	235.6	195.9	41		

M76

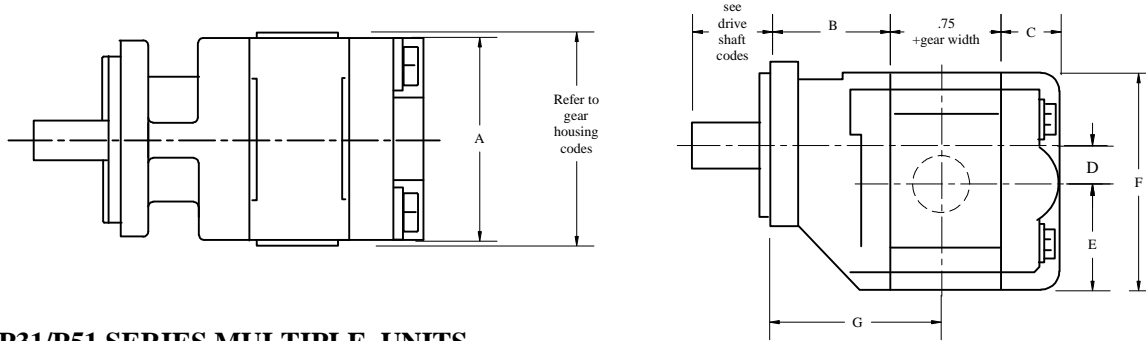
Speed rpm	1" Gear			1 1/4" Gear			1 1/2" Gear			1 3/4" Gear			2" Gear		
	Displ.	4.10	in3/rev	Displ.	5.12	in3/rev	Displ.	6.15	in3/rev	Displ.	7.17	in3/rev	Displ.	8.20	in3/rev
	Input Flow	Output Torque	Output Hp	Input Flow	Output Torque	Output Hp	Input Flow	Output Torque	Output Hp	Input Flow	Output Torque	Output Hp	Input Flow	Output Torque	Output Hp
	gpm	in/lbs	Hp	gpm	in/lbs	Hp	gpm	in/lbs	Hp	gpm	in/lbs	Hp	gpm	in/lbs	Hp
	l/m	Nm	kw		l/m	Nm	kw		l/m	Nm	kw		l/m	Nm	kw
800	19.5	1100	14.5	23.8	1400	18.3	28	1700	22	31.3	1985	25.5	34.5	2270	29
	74.1	123.9	10.8	90.3	157.7	13.6	106.4	191.4	16.4	118.8	223.5	19	131.1	255.6	21.6
1200	26.5	1090	20	32.3	1385	25.5	38	1680	31	43.5	1970	36.8	49	2260	42.5
	100.7	122.7	14.9	122.6	156.0	19	144.4	189.2	23.1	165.3	221.9	27.4	186.2	254.5	31.7
1600	34	1040	26	41.8	1345	33.5	49.5	1650	41	56.8	1935	48.3	64	2220	55.5
	129.2	117.1	19.4	158.7	151.5	25.0	188.1	185.8	30.6	215.7	217.9	35.9	243.2	250	41.4
2000	41	970	30.5	50.3	1285	40.3	59.5	1600	50	69	1890	59	78.5	2180	68
	155.8	109.2	22.8	191.0	144.7	30	226.1	180.2	37.3	262.2	212.8	44	298.3	245.5	50.7
Speed rpm	2 1/4" Gear			2 1/2" Gear			2 3/4" Gear			3" Gear					
	Displ.	9.22	in3/rev	Displ.	10.25	in3/rev	Displ.	11.27	in3/rev	Displ.	12.30	in3/rev			
	Input Flow	Output Torque	Output Hp	Input Flow	Output Torque	Output Hp	Input Flow	Output Torque	Output Hp	Input Flow	Output Torque	Output Hp			
	gpm	in/lbs	Hp	gpm	in/lbs	Hp	gpm	in/lbs	Hp	gpm	in/lbs	Hp			
	l/m	Nm	kw		l/m	Nm	kw		l/m	Nm	kw				
800	38.3	2600	33.3	42	2930	37.5	45.8	3315	42.3	49.5	3700	47			
	145.4	292.8	24.8	159.6	330.0	28.0	173.9	373.3	31.5	188.1	416.7	35.1			
1200	54.5	2580	48.5	60	2900	54.5	66.25	3380	60.8	72.5	3860	67			
	207.1	290.5	36.2	228	326.6	40.7	251.8	380.6	45.3	275.5	434.7	50.0			
1600	71	2530	63.5	78	2840	71.5	86	3205	80.5	94	3570	89.5			
	269.8	284.9	47.4	296.4	319.8	53.3	326.8	360.9	60	357.2	402	66.8			
2000	87.5	2470	77.5	96.5	2760	87	105.8	3095	98	115	3430	109			
	332.5	278.2	57.8	366.7	310.8	64.9	401.9	348.5	73.1	437	386.3	81.3			

DYNACO P31/P51 GEAR UNITS INSTALLATION DIMENSION & WEIGHT

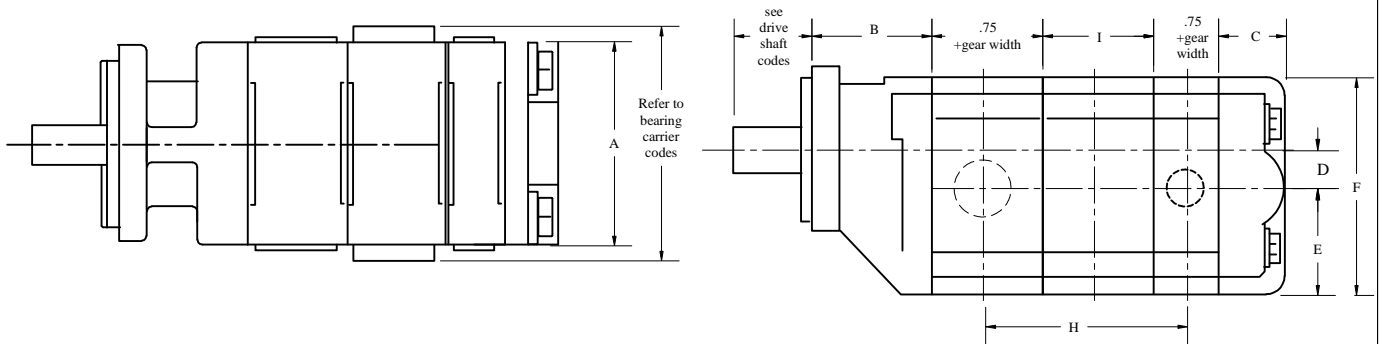


DIMENSION (inches)

P31/P51 SERIES SINGLE UNITS



P31/P51 SERIES MULTIPLE UNITS



MODEL	A	B	C	D	E	F	G	H	I
P31 series	4.81	2.94	1.75	.88	2.78	5.50	$3.31 + \frac{1}{2}$ gear width	$3.25 + \frac{1}{2}$ total gear width	2.50
P51 series	5.06	3.38	1.75	1.00	3.12	6.25	$3.75 + \frac{1}{2}$ gear width	$3.65 + \frac{1}{2}$ total gear width	2.88

APPROXIMATE WEIGHT

SINGLE UNITS

MODEL	gear width	1	1 1/4	1 1/2	1 3/4	2	2 1/4	2 1/2
P31 series	pounds	33	34	35	36	37	-	-
	KG	15	15.5	16	16.5	17	-	-
P51 series	pounds	37	38.5	40	41.5	43	48.5	50
	KG	17	17.5	18	18.75	19.5	22	22.5

MULTIPLE UNITS

MODEL	add per gear section	1	1 1/4	1 1/2	1 3/4	2	2 1/4	2 1/2
P31 series	pounds	27	28	29	31	32	-	-
	KG	12	12.5	13	14	14.2	-	-
P51 series	pounds	31	32.5	34	35.5	37	42.5	44
	KG	14	15	15.5	16	17	19.25	20

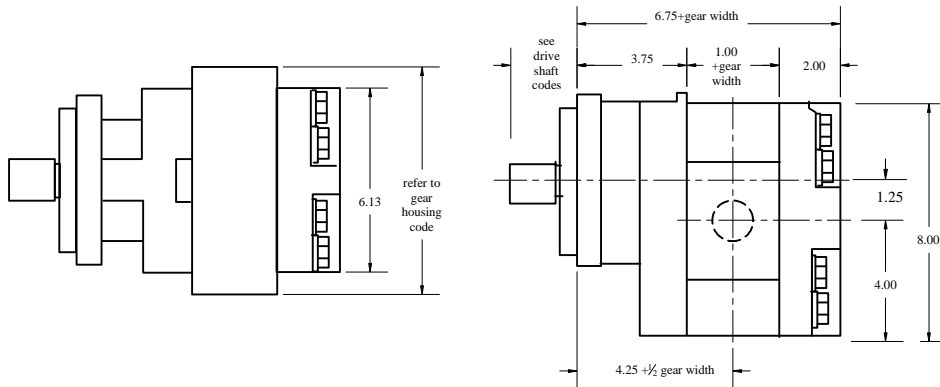
NOTE: MULTIPLE UNITS WEIGHT ADD SINGLE UNIT WEIGHT WITH EACH ADDITIONAL SECTION FROM ABOVE CHART

DYNACO P76 GEAR UNITS INSTALLATION DIMENSION & WEIGHT

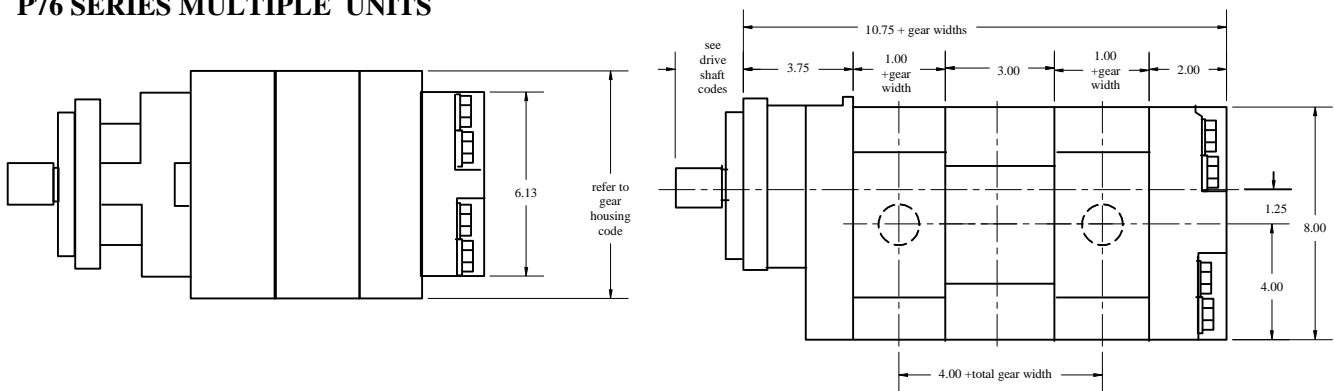


DIMENSION (inches)

P76 SERIES SINGLE UNITS



P76 SERIES MULTIPLE UNITS



APPROXIMATE WEIGHT

SINGLE UNITS

MODEL	gear width	1	1 1/4	1 1/2	1 3/4	2	2 1/4	2 1/2	2 3/4	3
P76 series	pounds	72	75	77	80	82	85	87	90	92
	KG	33	34	35	36	37	39	40	41	42

MULTIPLE UNITS

MODEL	add per gear section	1	1 1/4	1 1/2	1 3/4	2	2 1/4	2 1/2	2 3/4	3
P76 series	pounds	59	62	64	67	69	72	74	77	79
	KG	27	28	29	31	32	33	34	35	36

NOTE: MULTIPLE UNITS WEIGHT ADD SINGLE UNIT WEIGHT WITH EACH ADDITIONAL SECTION FROM ABOVE CHART

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