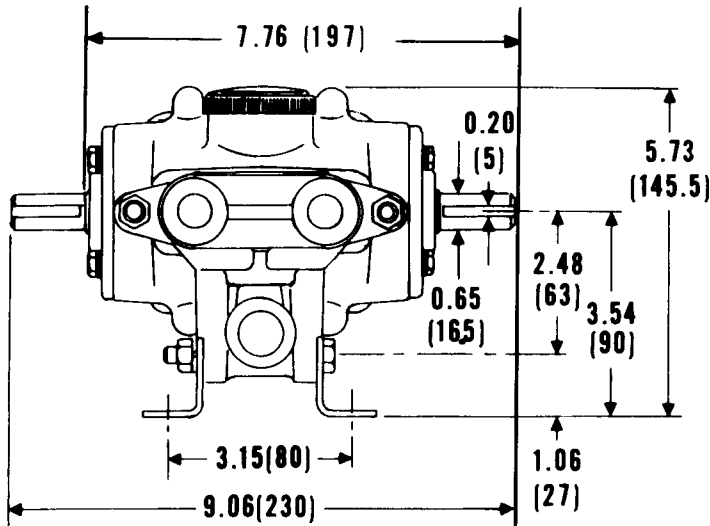
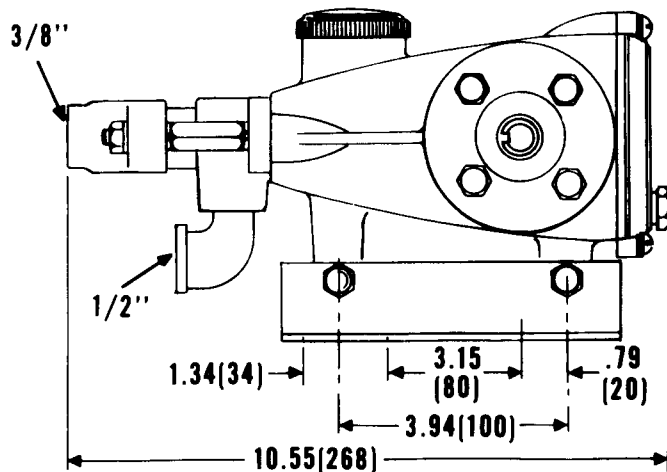


SPECIFICATION SHEET

Piston Pump Model 29 SPECIFICATIONS



	U.S. Measure	Metric Measure
Volume	3.5 G.P.M.	(13 L/M)
Discharge Pressure	1200 P.S.I.	(85 BAR)
Max. Inlet Pressure	- 8.5 to 40 P.S.I.	(- 0.6 to + 2.8 BAR)
RPM	1200 RPM	(1200 RPM)
Bore	0.780"	(20 mm)
Stroke	0.472"	(12 mm)
Crankcase Capacity	10 oz.	(.3 L)
Maximum Fluid Temperature	160°F	(71°C)
Inlet Ports (1)	1/2" NPT	(1/2" NPT)
Discharge Ports (1)	3/8" NPT	(3/8" NPT)
Pulley Mounting	Either side	(Either side)
Shaft Diameter	0.650"	(16.5 mm)
Weight	12.1 lbs.	(5.5 kg)
Dimensions	10.6" x 7.8" x 5.7"	(268 x 197 x 146 mm)



STANDARD CONSTRUCTION

- Unpainted crankcase
- Single-extended crankshaft
- Unchromed cylinder
- Solid piston rod
- Bac-cup piston assembly
- Unchromed brass manifolds
- Single inlet porting

HORSEPOWER REQUIREMENTS

Flow		PRESSURE			MOTOR PULLEY SIZE Using 1725 RPM Motor & Std. Pump Pulley O.D.	
		PSI 800	PSI 1000	PSI 1200		
GPM	L/M	BAR 55	BAR 70	BAR 85	RPM	Pulley O.D.
3.5	13	1.9	2.4	2.9	1200	3.5
3.0	11	1.7	2.1	2.5	1029	3.0
2.5	0	1.4	1.7	2.1	858	2.5

DETERMINING THE PUMP R.P.M.

$$\text{Rated G.P.M.} = \frac{\text{"Desired" G.P.M.}}{\text{Rated R.P.M.}}$$

$$\text{Rated R.P.M.} = \frac{\text{"Desired" R.P.M.}}{\text{Rated G.P.M.}}$$

DETERMINING THE REQUIRED H.P.

$$\frac{\text{GPM} \times \text{PSI}}{1460} = \frac{\text{Electric Brake}}{\text{Horsepower Required}}$$

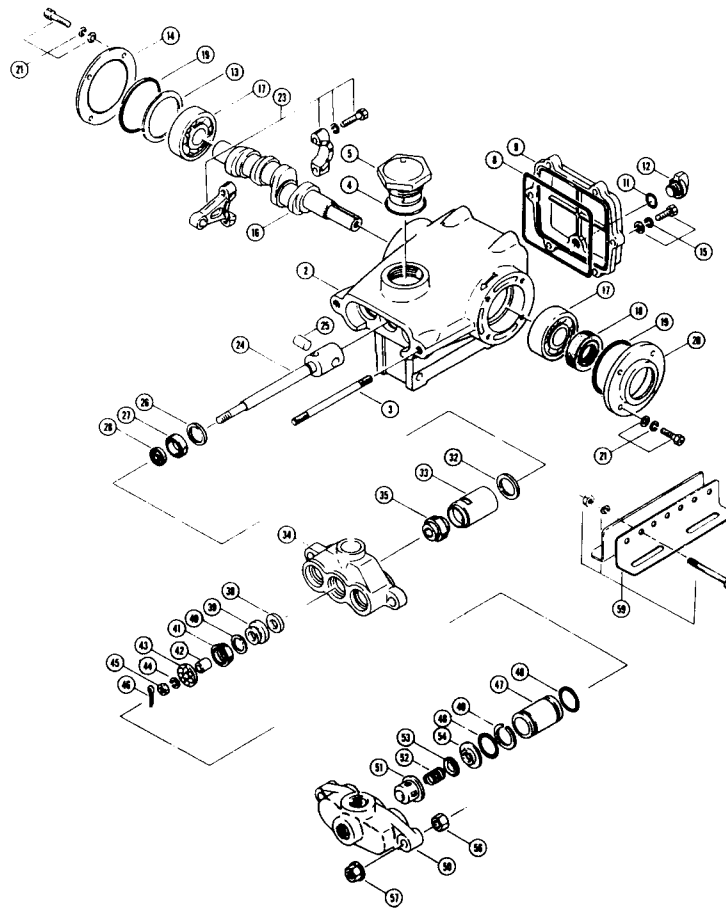
DETERMINING MOTOR PULLEY SIZE

$$\frac{\text{Motor Pulley O.D.}}{\text{Pump R.P.M.}} = \frac{\text{Pump Pulley O.D.}}{\text{Motor R.P.M.}}$$

$$\text{Motor R.P.M.} = \frac{\text{Pump R.P.M.} \times \text{Pump Pulley O.D.}}{\text{Motor Pulley O.D.}}$$

Note: Consult engine manufacturer when using gas or diesel engine

**EXPLODED VIEW
PISTON MODEL 29
December 1982**



PARTS LIST

ITEM	PART NO.	DESCRIPTION	QTY.	ITEM	PART NO.	DESCRIPTION	QTY.
2	28766	Crankcase	1	42	27983	Piston Spacer	3
3	85680	Stud (M8 x 82))	2	43	27002	Piston Retainer	3
4	14177	O-ring, Oil Filler Cap	1	44	27006	Conical Washer-SS (M6)	3
5	43211	Oil Filler Cap	1	45	18956	Nut-SS (M6)	3
8	26087	O-Ring, Crankcase Cover	1	46	14158	Cotterpin	3
9	*43453	Crankcase Cover	1	47	101802	Cylinder (43834 Unch)	3
11	23170	O-Ring, Drain Plug	1	48	23172	O-Ring, Cylinder	6
12	25625	Drain Plug	1		11377	O-Ring, Cylinder (Viton)	6
13	*43437	Washer	1	49	21985	Back-Up Ring, Cylinder	3
14	*43436	Blind Plate	1	50	24459	Discharge Manifold	1
15	92520	Sems Comb Head Screw (M6 x 20)	6		25634	Discharge Manifold Stainless Steel	1
16	*43997	Crankshaft	1	51	43442	Valve Spring Retainer	3
17	14487	Bearing	2	52	43360	Valve Spring	3
18	24159	Oil Seal	1	53	43723	Valve	3
19	26536	O-Ring, Oil Seal Case	2	54	43434	Discharge Valve Seat	3
20	27950	Oil Seal Case	1	56	81109	Hex Nut (M8)	2
21	92519	Sems Comb. Head Screw (M6 x 16)	8	57	101804	Hex Flange Nut (M8)	2
23	101799	Connecting Rod	3	59	30612	Angle Mounting	
24	*43998	Piston Rod	3		26246	Angle Rail	2
25	16948	Piston Pin	3		30901	Hex Cap Screw (5/16 x 2 3/4)	2
26	20017	Seal Washer	3		30920	Split Lockwasher (5/16 US)	2
27	25461	Oil Seal	3		30910	Hex Nut (5/16 US)	2
28	26853	Barrier Slinger	3	—	30246	Pulley Assembly	
32	26854	Seal Washer	3		30032	Pulley 5" w/2 Set screws	1
33	28597	Seal Retainer	3		30047	Key (M5)	1
34	25128	Inlet Manifold	1		30023	Cup Kit	
	25635	Inlet Manifold-Stainless Steel	1		30305	Seal Kit	
35	30315	Prrrrrm-A-Lube Seal	3		30686	Valve Kit	
	30325	Prrrrrm-A-Lube Seal (Viton)	3		30860	Piston Kit	
38	27004	Inlet Valve	3				
39	30543	Bac-Cup Piston	3				
40	30544	Bac-Cup Ring (Teflon)	3				
41	43172	Cup (Viton)	3				

*Special Order