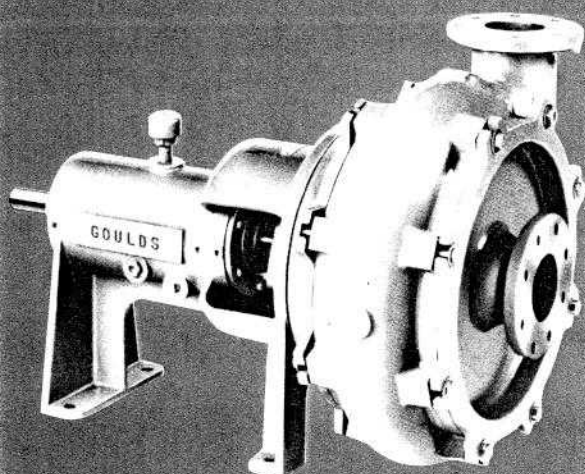




Goulds has combined proven design features with state-of-the-art metallurgical and foundry expertise to produce a recessed impeller pump without compromises found in other pumps. The 6100 provides better efficiencies, superior resistance to wear, and ease of maintenance.

All components are machined fit including the straight bore, positive key driven impeller. These fits allow positive alignment, ease of disassembly and reassembly, reduced vibration and elimination of babbitted fits on soft metal inserts.

Goulds Model 6100

Severe Duty Recessed Impeller Pumps Designed to Handle Sludge, Slurry, Large Solids, Fibrous Material and Entrained Air

- Capacities to 4600 GPM (1045 m³/h)
- Heads to 150 feet (45 m)
- Temperatures to 200°F (93°C)
- Pressures to 100 PSIG (690 kPa)
- Solids to 8 inches (200 mm)

Design Features

Fully Recessed Impeller Allows passage of any solids that can enter pump.

Cupped-Type Design Impeller designed to maximize wear life of wet end components.

Hard Metal Construction Wet end components constructed of 650 Brinell high chrome iron.

Suction Cover and Rear Liner Extra heavy replaceable wear surfaces extend pump life.

Reversible Casing and Impeller Allows rotation in either direction for layout flexibility, maximum parts interchangeability.

Better Efficiency Higher efficiency than other recessed impeller pumps; power savings can often pay for the pump.

Services

Primary Sludge

Grit

Abrasive Wastes

Large Solids

Industrial Waste

Mining

Heavy Duty Design Features for Handling Large Abrasive Solids

REPLACEABLE REAR LINER

Extra thick wear surface constructed of 650 BHN chrome iron for extended wear life. Provides ease of maintenance.

SUCTION COVER

Removable suction cover allows easy access to pump internals for maintenance, provides extra heavy replaceable wear surface for longer life in abrasive service. Constructed of 650 BHN chrome iron.

TAPERED ROLLER BEARINGS

Oil or grease lubrication; L₁₀ 100,000 hour rated.

EXTRA HEAVY, REVERSIBLE CASING

Bonus casing thickness for longer life. Casing and impeller can be reversed for rotation in either direction. 650 BHN chrome iron.

HEAVY DUTY SHAFT

Rugged high carbon steel designed for toughest services.

POSITIVE DRIVE

Machined fit, straight bore, key driven impeller provides positive transmission of torque unavailable with other hard metal pump designs. Confined O-ring seal at impeller nut protects shaft.

IMPELLER

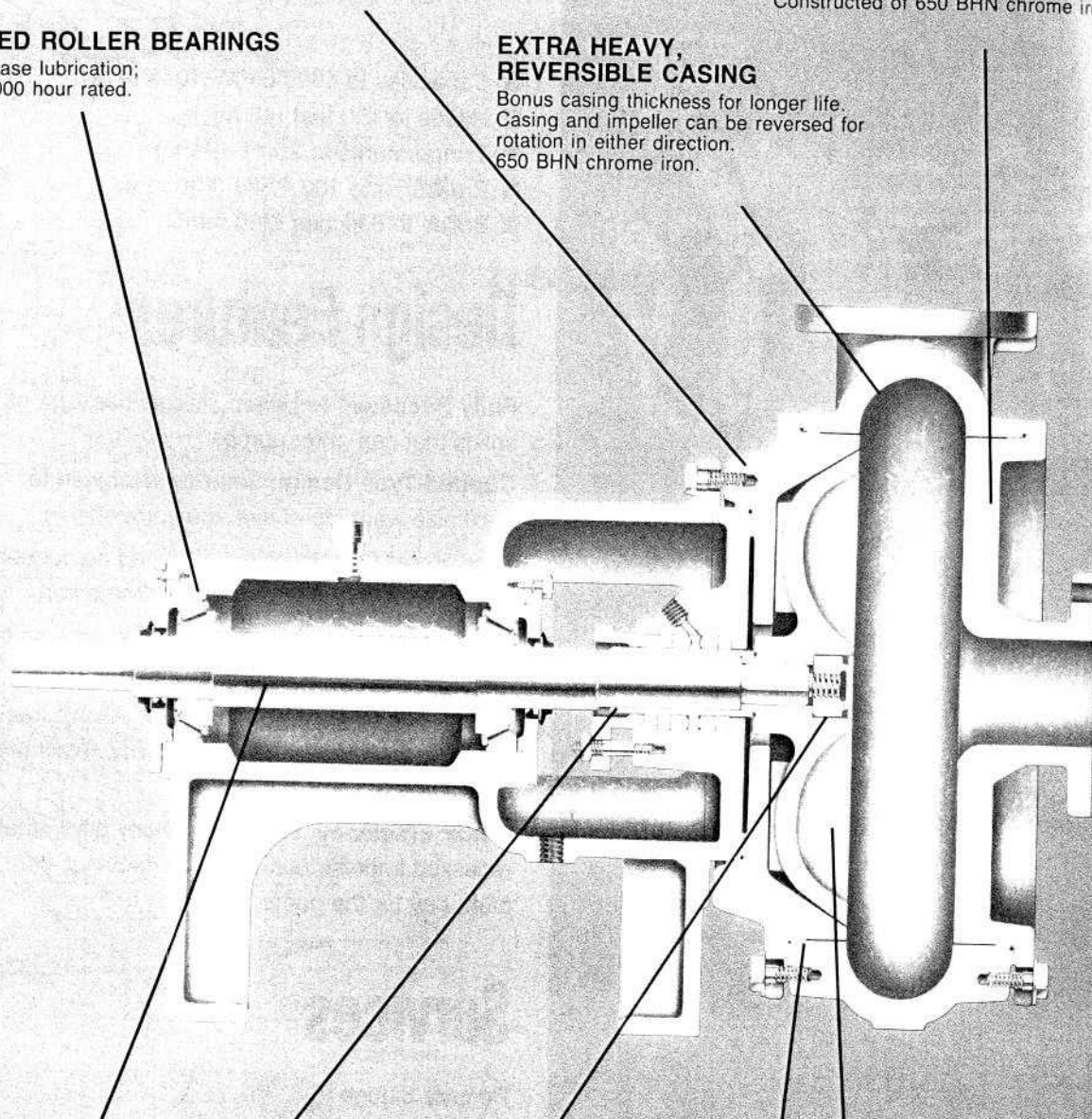
Fully recessed cup-type for maximum solids handling capability. 650 BHN chrome iron for superior resistance to wear. State-of-the-art design provides higher efficiencies than other recessed impeller pumps. Back pump-out vanes reduce stuffing box pressure and keep solids from entering stuffing box.

SHAFT SLEEVE

Pump shaft protected by hardened 420 stainless steel hook-type shaft sleeve. 450 BHN minimum. Fully confined O-ring between impeller and sleeve protects shaft from pumpage.

MACHINED FITS

Fully machined wet end registered fits with confined O-rings provide positive alignment and ease of maintenance throughout the entire pump.



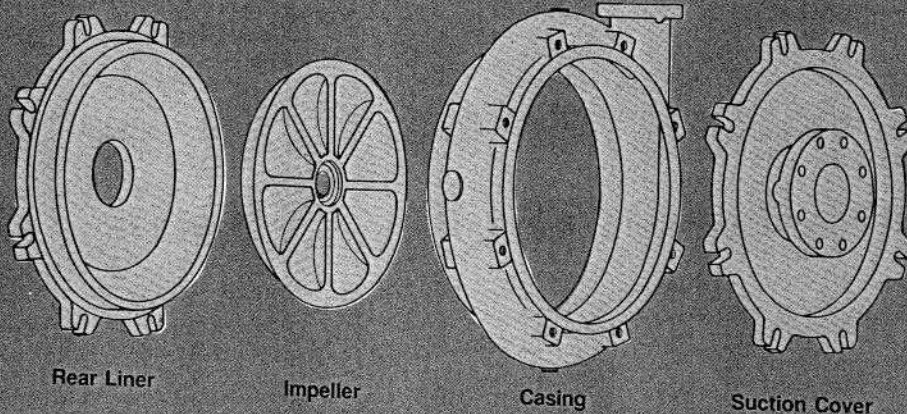
Designed for Long Life, Optimum Performance

Superior Wear Resistance

Chrome iron construction of wet end components offers distinct advantages over other designs. Chrome iron is fully machineable while providing superior resistance to abrasive wear. Machined components, including the straight bore, key-

driven impeller, offer the advantages of positive alignment over "as-cast" designs. In addition, wall sections of components are thickest at areas of highest wear for longer life.

Chrome iron wet end components are fully machined for positive alignment and then hardened to 650 Brinell for superior wear resistance.



Higher Efficiency, Lower Operating Costs

Goulds Model 6100 is more efficient than other comparable recessed impeller pump designs. Higher efficiency adds up to significant power savings.

Chart 1 compares the BHP requirement of a 4-inch 6100 with another 4-inch recessed impeller pump, both rated at 600 GPM/60 feet. The chart

shows a 4 HP difference at the rating. In Chart 2 this translates to a power savings of over \$1000 a year.

See the difference. The higher efficiencies of Goulds Model 6100 mean lower power costs ... Compare efficiencies before you buy your next recessed impeller pump.

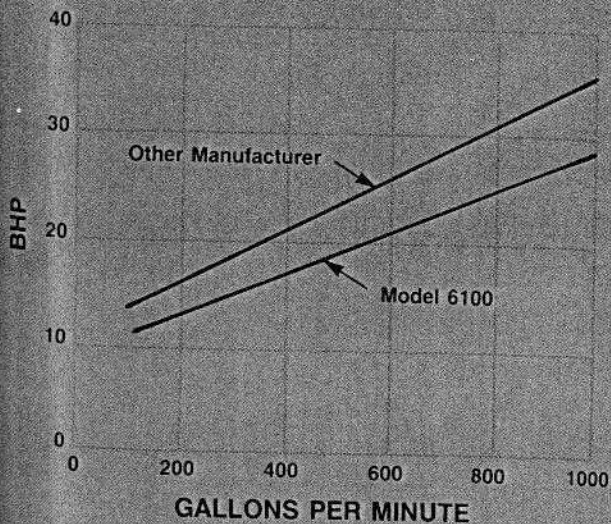


Chart 1

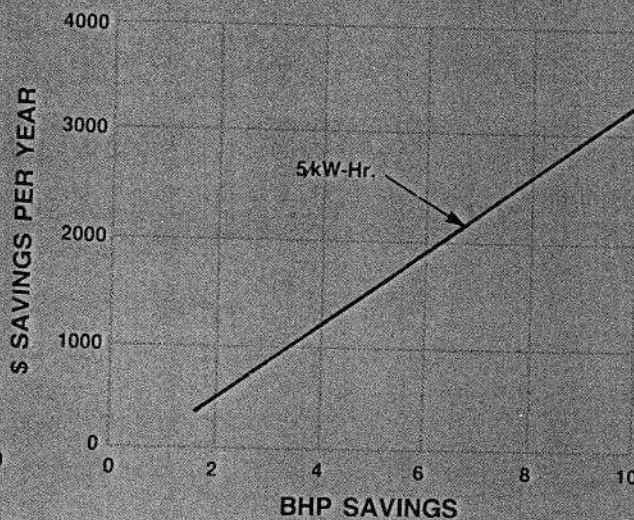
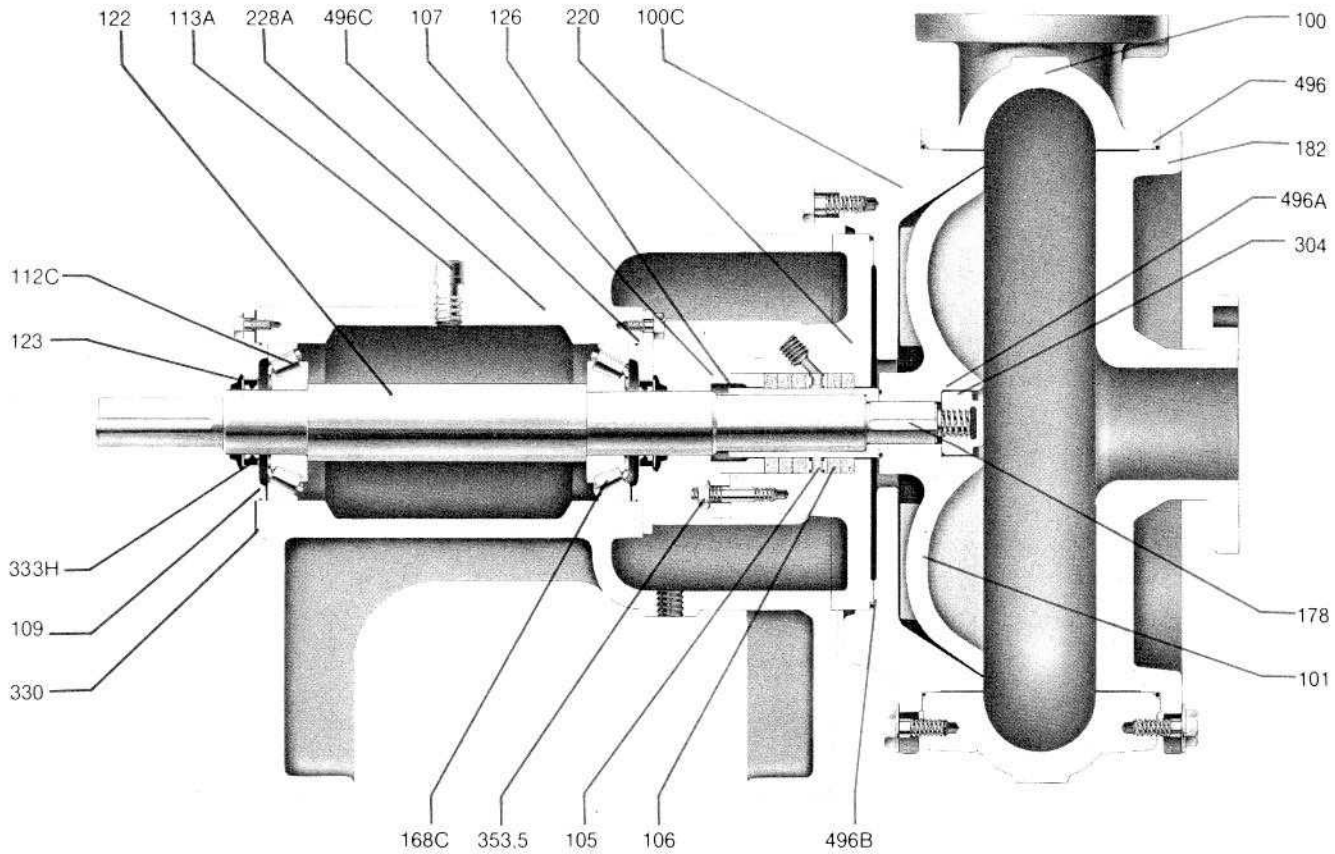


Chart 2

Sectional View Model 6100

Di
All c

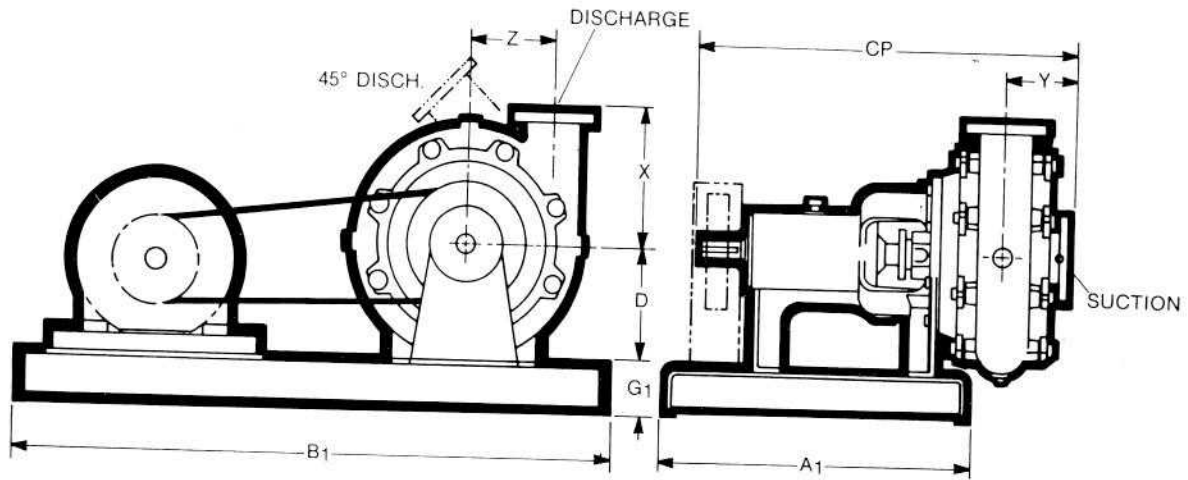


Parts List and Materials of Construction

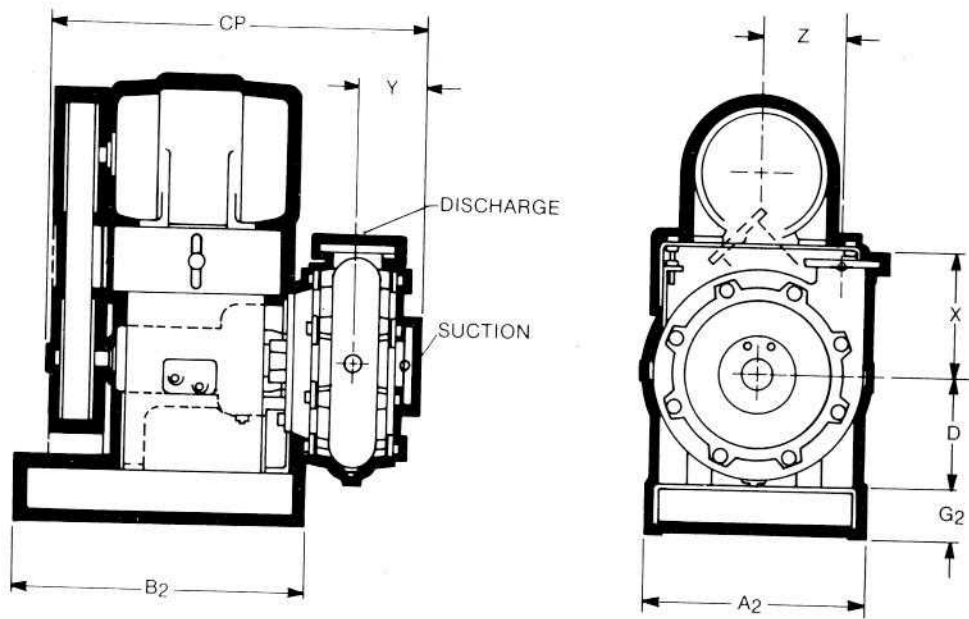
Item No	No. Req'd	Part Name	Material
100	1	Casing	HC 600
100C	1	Rear Liner	HC 600
101	1	Impeller	HC 600
105	1	Lantern Ring	Teflon
106	5	Packing	Garlock 8909, or equal
107	1	Gland, Split-Type	316 SS
109	2	Bearing End Cover	Cast Iron
112C	1	Thrust Bearing	Steel
113A	1	Breather	Steel
122	1	Shaft	AISI 1045 Steel
123	2	Deflector	Rubber
126	1	Shaft Sleeve	420 SS
168C	1	Radial Bearing	Steel
178	1	Key, Impeller	Steel
182	1	Suction Cover	HC 600
220	1	Stuffing Box Cover	Cast Iron
228A	1	Bearing Frame	Cast Iron
251	1	Oil Level Gauge (not illustrated)	—
304	1	Impeller Nut	316 SS
330	1	Shim Set	Plastic
333H	2	Lip Seal, Oil	Rubber
353.5	2	Gland Stud and Nut	18-8 SS
496	2	O-ring, Rearliner and Suction Cover to Casing	BUNA-N
496A	2	O-ring, Impeller Nut and Sleeve to Impeller	BUNA-N
496B	1	O-ring, Stuffing Box to Rear Liner	BUNA-N
496C	2	O-ring, End Cover to Bearing Frame	BUNA-N

Dimensions Model 6100

All dimensions in inches and (mm). Not to be used for construction.



1 — SIDE-BY-SIDE MOTOR MOUNTING



2 — OVERHEAD MOTOR MOUNTING

DIMENSIONS

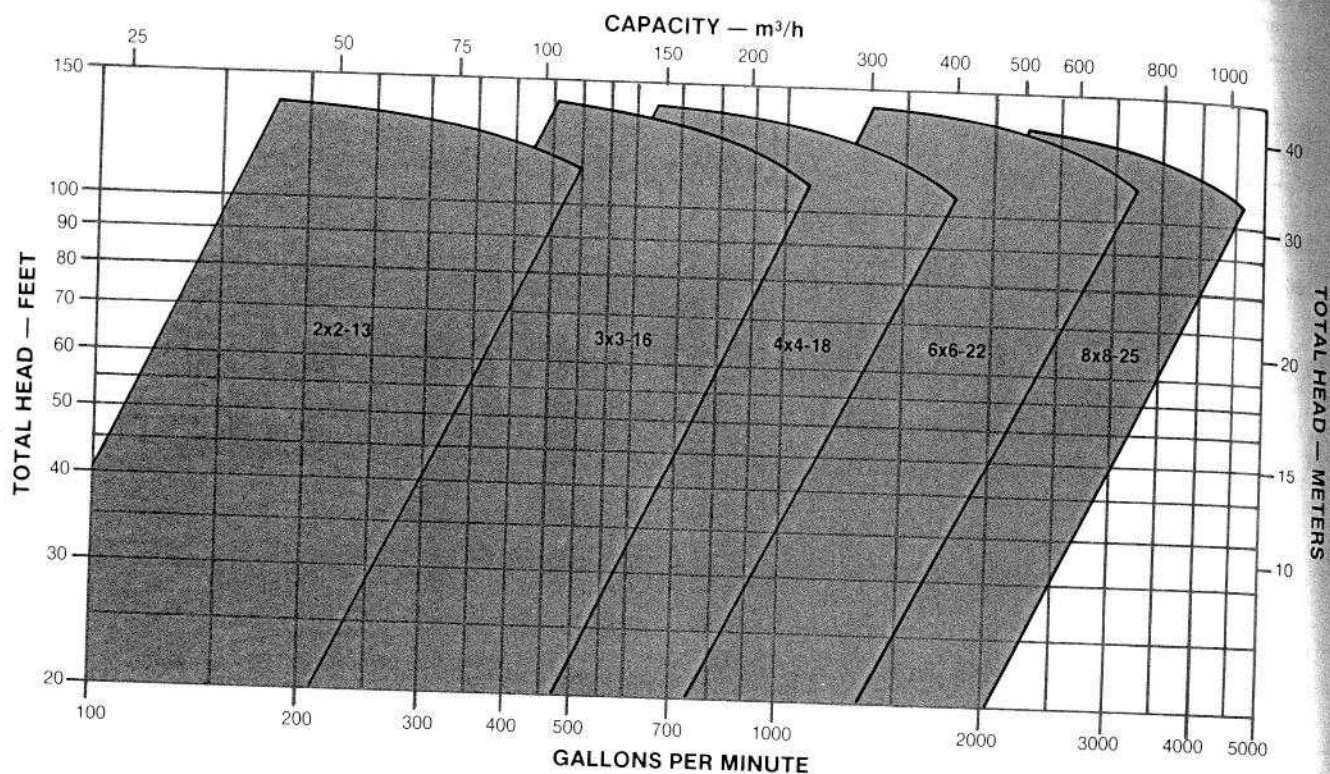
Pump Size	CP	D	A ₁	A ₂	B ₁ *	B ₂	G ₁	G ₂	X	Y	Z	Max. Motor Frame
2x2-13	33.25 (845)	10 (254)	30 (762)	20 (508)	60 (1524)	27 (686)	4 (102)	4 (102)	11 (279)	6 (152)	7.25 (184)	286T- ① 256T- ②
3x3-16	39.5 (1003)	13 (330)	33 (838)	22 (559)	66 (1676)	31 (787)	4 (102)	4 (102)	12.5 (318)	6.5 (165)	8.5 (216)	326T
4x4-18	40.5 (1029)	13 (330)	33 (838)	22 (559)	66 (1676)	31 (787)	4 (102)	4 (102)	14 (356)	7 (178)	9.5 (241)	326T
6x6-22	54.75 (1391)	19 (483)	42 (1067)	27 (686)	78 (1981)	40 (1016)	5 (127)	4 (102)	19 (483)	10 (254)	11.75 (298)	405T
8x8-25	57.25 (1454)	19 (483)	42 (1067)	27 (686)	78 (1981)	40 (1016)	5 (127)	4 (102)	22 (559)	11 (279)	13.25 (337)	405T

*For motor frames 215T and smaller, reduce dimension by 12 in. (305 mm).

① Side-by-side motor mounting.

② Overhead motor mounting.

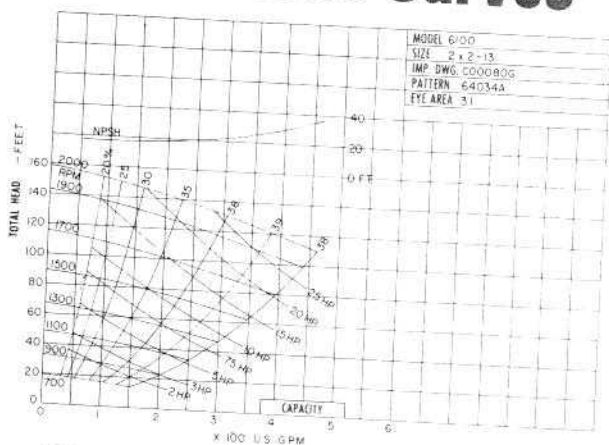
Hydraulic Coverage Model 6100



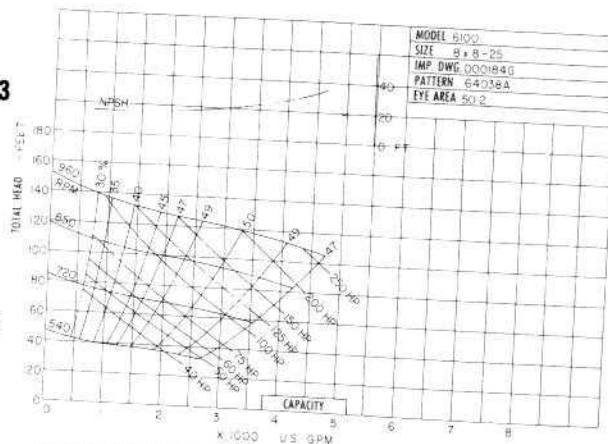
Construction Details

		2x2-13	3x3-16	4x4-18	6x6-22	8x8-25
General	Pump Weight — Lbs (kg)	440 (200)	770 (349)	895 (406)	1670 (757)	2130 (966)
	Minimum Casing Thickness	.75 (19)				
	Casing, Impeller, Suction Cover & Rear Liner Weight	250 (115)	450 (205)	570 (260)	1000 (455)	1450 (660)
	Minimum Suction Cover Thickness	.88 (22)	1 (25)	1.25 (32)		1.5 (38)
	Maximum Solid Size	2 (51)	3 (76)	4 (102)	6 (152)	8 (203)
	Maximum Liquid Temperature — °F (°C)	200 (93)				
	Maximum Working Pressure — PSIG (kPa)	100 (690)				
	Maximum Test Pressure — PSIG (kPa)	150 (1034)				
Bearings	Frame Size	A1	A2		A3	
	Bearing, Radial	Timken 55817C/55437	Timken 77225C/78551		Timken JHH 221436/JHH221413	
	Bearing, Thrust (Coupling End)				Timken J90354/J90748	

Performance Curves **Model 6100**



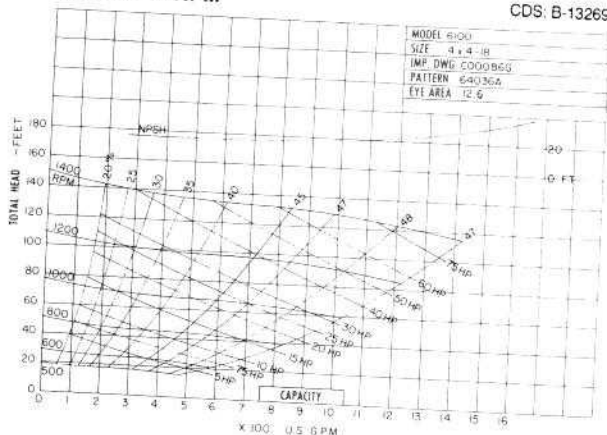
2 x 3-13



8 x 8-25

VARIABLE RPM

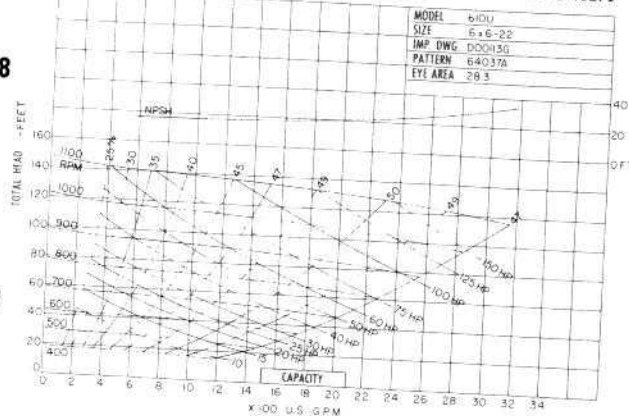
CDS: B-13269



4 x 4-18

VARIABLE RPM

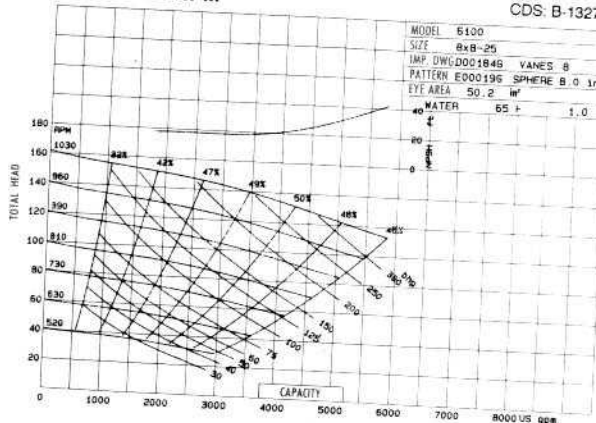
CDS: B-13270



6 x 6-22

VARIABLE RPM

CDS: B-13271



8 x 8-25

VARIABLE RPM

CDS: B-13274

VARIABLE RPM

CDS: B-13646