

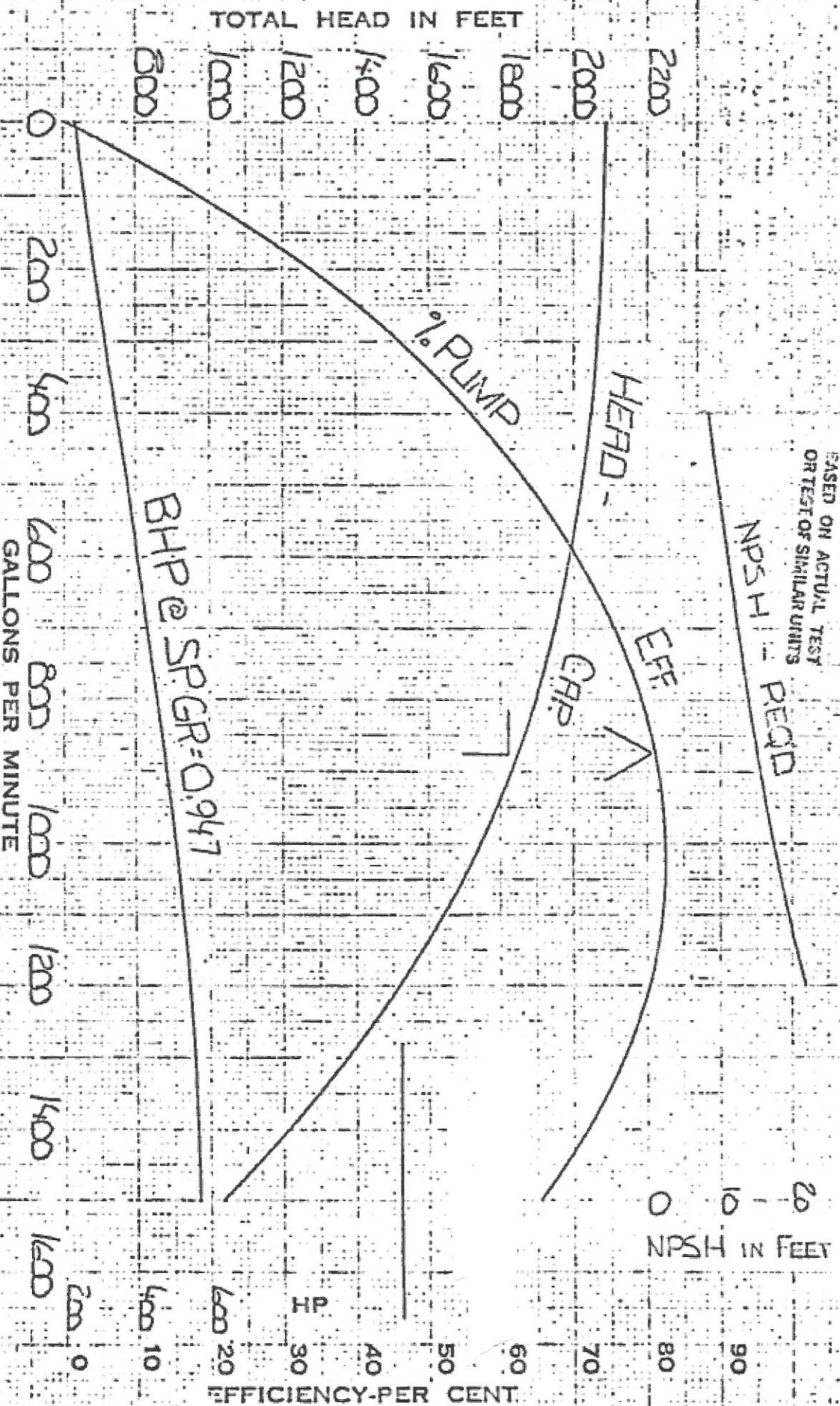
BYRON JACKSON

CERTIFIED CORRECT

BASED ON ACTUAL TEST
OR TEST OF SIMILAR UNITS

NPSH - REQD

UNLESS OTHERWISE SPECIFICALLY ADDED, THE CAPACITY, HEAD AND EFFICIENCY CURVES ARE BASED ON SHOP TESTS AND WHEN HANDLING SLAT GOLD FRESH WATER AT A TEMPERATURE OF 60°F NOT OVER 10 DEGREES F THE GUARANTEE IS AT THE SPECIFIED RATING ONLY A D DOTS NOT FIVE SUSTAINED PERFORMANCE OVER ANY PERIOD OF TIME. NON UNDER CONDITIONS VARYING FROM THE ABOVE



PUMP SIZE AND TYPE 4x6x9 D 5 ST DVMX	RPM 3550	ASSEMBLY NO.	IMPELLER NO. R-2071-2834	DIA 9 1/8	UNION OVER	FILED TO 12	BYRON JACKSON TEST
FACTORY NO. 721-5-1172			DATE 10-2-74	HRT			1-34575

TYPE DVMX MULTIPLEX PUMP

STANDARD MATERIAL SPECIFICATION

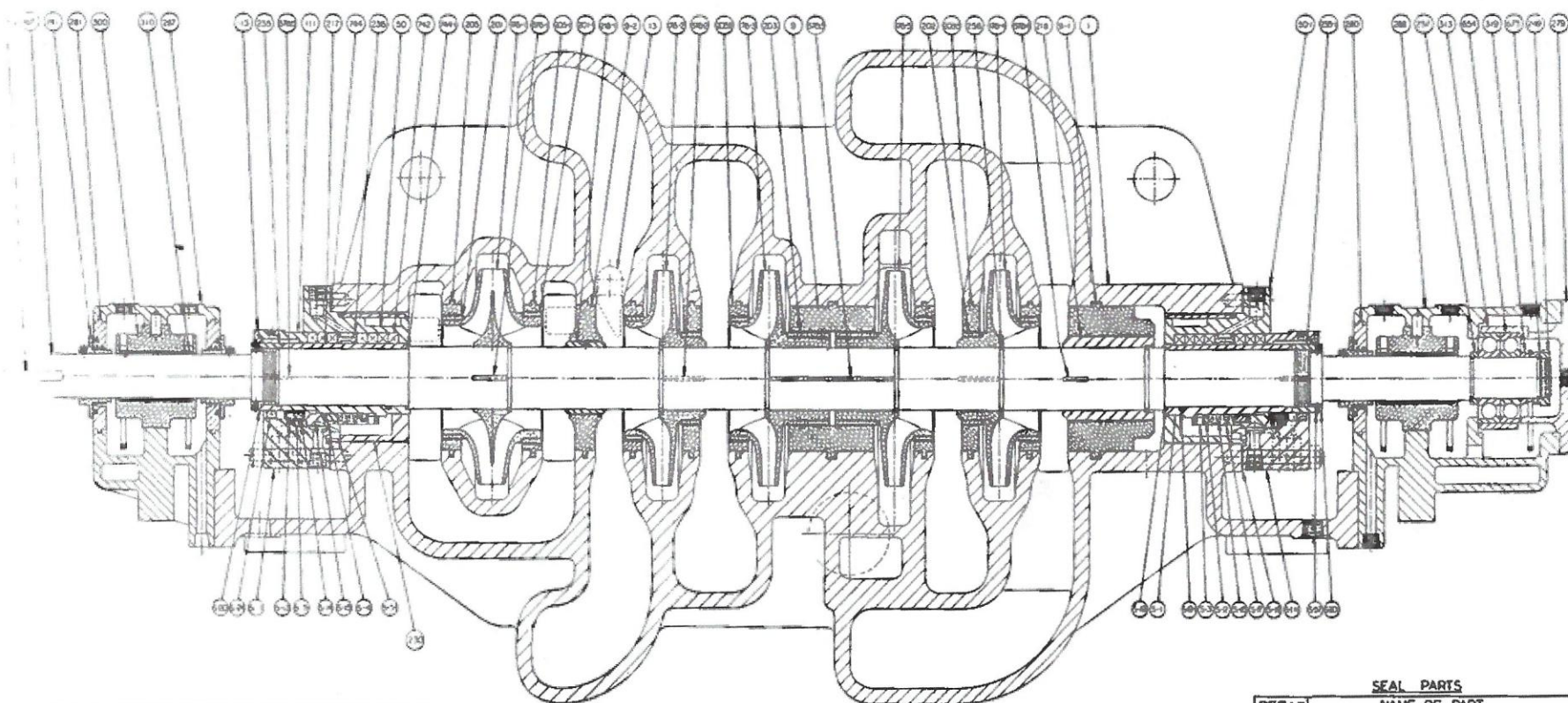


NAME OF PART	STANDARD CONSTRUCTION		BOILER FEED PUMPS (250°F & UP)	
	COMMON TERM	ASTM SPEC.	COMMON TERM	ASTM SPEC.
Pump Case	Cast Iron 40	A-278, CL. 40	13-4 CR-NI 4-Cr. Steel	A291-72 CR-CA-6NM A-217 Gr. 9.5
Case Studs	4140 H.T.	A-193, Gr. B.7	AISI 4140 H.T.	A-193, Gr. B.7
Case Wear Rings	Cast Iron 30	A-48, CL. 30	420 S.S. H.T.	A-362, Gr. CA. 40 H.T.
Stages Pieces	Cast Iron 30	A-48, CL. 30	420 S.S. H.T.	A-362, Gr. CA. 40 H.T.
Throttle Bushing	Cast Iron 30	A-48, CL. 30	420 S.S. H.T.	A-362, Gr. CA. 40 H.T.
Impellers	Bronze	B-145, Gr. 4A	410 S.S.	A-296, Gr. CA. 15
*Impeller Wear Rings	Bronze	B-143, CL. 1B	410 S.S. H.T.	A-276, Type 410
*Impeller Hub Rings	Bronze	B-143, CL. 1B	410 S.S. H.T.	A-276, Type 410
Balance Sleeves	410 S.S. H.T.	A-336, Gr. F.6	410 S. H.T.	A-276, Type 410
Shaft Sleeves	410 S.S. H.T.	A-362, Gr. CA. 15	4 O.S. H.T.	A-362 Gr CA 15
Shaft Sleeve Nuts	410 S.S. H.T.	A-276, Type 410	410 S.S. H.T.	A-276, Type 410
Throat Bushings	Cast Iron 30	A-48, CL. 30	420 S.S. H.T.	A-362, Gr. CA. 40 H.T.
Shaft	4140 H.T.	A-193, Gr. B.7	410 S.S. H.	A-276 Type 410 .T
Keys — Internal	304 S.S.	A-276, Type 304	304 S.S.	A 7 Type 0
Split Rings	410 S.S.	A-276, Type 410	4 O.S.S.	A-276, Type 410
Bearing Housings	Cast Iron 40	A-278, CL. 40	Cast Iron 40	A-278, CL. 40
Case Gasket	Composition Asbestos		Composition Asbestos	
Base Plate	Welded Steel		Welded Steel	
Coupling	Fast		ast	

*When Used

B.J.

5 STAGE — DOUBLE SUCTION FIRST STAGE — TYPE DVMX MULTIPLEX PUMP — DRAWING IF-4118



REF.NO.	NAME OF PART
1	CASE — BOTH HALVES
9	STAGE PIECE — CENTER
9-1	STAGE PIECE — BALANCE
9-2	STAGE PIECE — W/SPLITTER
13	SPLITTER
50	STUFFING BOX — SUCTION
50-1	STUFFING BOX — DISCHARGE
111	GLAND
113	BUSHING — GLAND
167	SHAFT
176-1	IMPELLER — 1 st STG
176-2	IMPELLER — 2 nd STG
176-3	IMPELLER — 3 rd STG
176-4	IMPELLER — 4 th STG
176-5	IMPELLER — 5 th STG
201	WEAR RING — IMPELLER — 1 st STG — SMALL EYE
201-1	WEAR RING — IMPELLER — 1 st STG — LARGE EYE
202	WEAR RING — IMPELLER — HUB
203	WEAR RING — IMPELLER — CENTER — HUB

REF. NO.	NAME OF PART
205	WEAR RING — CASE — 1 st STG — SMALL EYE
205-1	WEAR RING — CASE — 1 st STG — LARGE EYE
205-2	WEAR RING — CASE — EYE
205-3	WEAR RING — CASE — HUB
217	SHAFT SLEEVE
218	BALANCE SLEEVE
218-1	BALANCE SLEEVE — 1 st & 2 nd STG
230	THROAT BUSHING
235	NUT — SHAFT SLEEVE — SUCTION END
235-1	NUT — SHAFT SLEEVE — DISCHARGE END
236	CAGE RING
241	DEFLECTOR
249	NUT — THRUST BEARING
256	SPLIT RING
257	LOCATING RING — SHAFT
279	END COVER — THRUST BEARING
280	BEARING COVER — INBOARD
281	BEARING COVER — COUPLING END
287	HOUSING — RADIAL BEARING

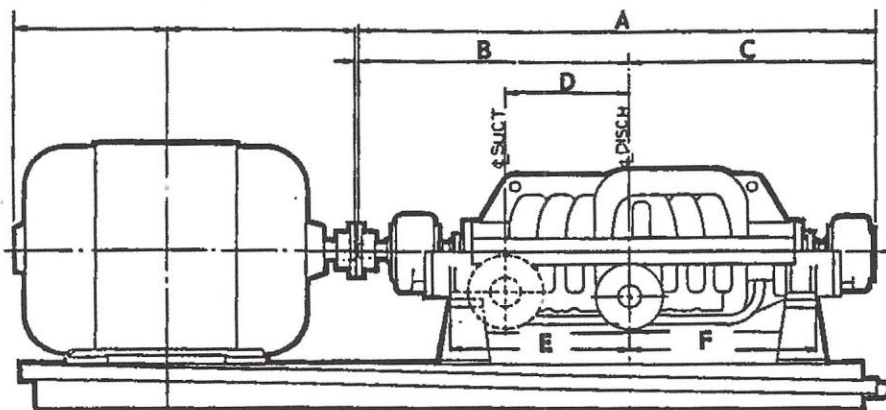
REF. NO.	NAME OF PART
288	HOUSING — THRUST BEARING
300	SLEEVE BEARING
310	OIL RINGS
313	OUTER RACE STOP
319	RETAINER — OIL RING
654	BALL BEARING — THRUST
673	LOCK WASHER — THRUST BEARING
676	KEY — COUPLING
676-1	KEY — IMPELLER — 1 st STG
676-2	KEY — IMPELLER — 2 nd & 4 th STG
676-3	KEY — IMPELLER — CENTER
676-4	KEY — BALANCE SLEEVE
676-5	KEY — NUT — SHAFT SLEEVE
742	PACKING
744	GASKET — STUFFING BOX
744-1	GASKET — SHAFT SLEEVE

REF. NO.	NAME OF PART
S-1	SHAFT SLEEVE
S-2	SEAL DRIVE
S-3	DRIVE PIN
S-4	"U" CUP
S-5	LOCK PIN
S-5-1	LOCK PIN — SEAL FLANGE
S-11	SEAL FLANGE — SUCTION
S-11-1	SEAL FLANGE — DISCHARGE
S-13	SEAL GASKET — O' RING
S-14	STATIONARY FACE
S-15	ROTATING FACE
S-16	COIL SPRING
S-17	SPRING HOLDER
S-18	GASKET — SEAL FLANGE
S-19	GASKET — SHAFT SLEEVE
S-19-1	GASKET — SHAFT SLEEVE — O' RING
S-20	SHAFT SLEEVE NUT — SUCTION
S-20-1	SHAFT SLEEVE NUT — DISCHARGE
S-24	FLANGE BUSHING
S-57	SET SCREW



**TYPE DVMX MULTIPLEX PUMP
OUTLINE DIMENSIONS
DOUBLE SUCTION FIRST STAGE**

APPROX WEIGHTS
Pump = 5500 #
MOTOR = 3600 #
TURBINE = 2050 #



4 x 6 x 9 - Figure 2 Nozzles

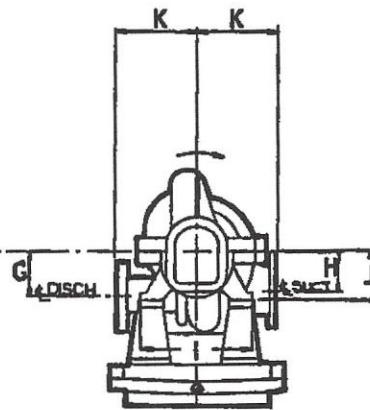


Figure 2

STAGES	A	B	C	D	E	F	G	H	I	J	K
4	60½	33	27½	11	22	21½	7	7	17½	7	13½
5	65	37½	27½	15½	26½	21½	7	7	17½	7	13½
6	69½	37½	32	15½	26½	25	7	7	17½	7	13½
7	74	42	32	20	31	25	7	7	17½	7	13½
8	78½	42	36½	20	31	29½	7	7	17½	7	13½
9	83	46½	36½	24½	35½	29½	7	7	17½	7	13½
10	87½	46½	41	24½	35½	34	7	7	17½	7	13½
11	92	51	41	29	40	34	7	7	17½	7	13½

4 x 6 x 10 - Figure 2 Nozzles

STAGES	A	B	C	D	E	F	G	H	I	J	K
4	70	38½	31½	12½	24½	24½	7½	7½	18	8	14
5	75¼	43¼	31½	17¼	29¼	24½	7½	7½	18	8	14
6	80½	43¼	36¼	17¼	29¼	29¼	7½	7½	18	8	14
7	85¼	49	36¼	23	35	29¼	7½	7½	18	8	14
8	91	49	42	23	35	35	7½	7½	18	8	14
9	96¼	54¼	42	28¼	40¼	35	7½	7½	18	8	14

6 x 8 x 11 - Figure 2 Nozzles

STAGES	A	B	C	D	E	F	G	H	I	J	K
4	75½	41½	34	14½	27½	25½	8½	10½	21	9½	18
5	81½	47½	34	20½	33½	25½	8½	10½	21	9½	18
6	87½	47½	40	20½	33½	31½	8½	10½	21	9½	18
7	93½	53½	40	26½	39½	31½	8½	10½	21	9½	18
8	99½	53½	46	26½	39½	38	8½	10½	21	9½	18

Dimensions shown are in inches and are approximate only. Not to be used for construction purposes. All dimensions are for pumps of counter-clockwise rotation when viewed from coupling end. Pumps may be furnished with clockwise rotation if desired.

Suction and discharge flanges are standard A.S.A., the flange series being determined by pressures involved.

TYPE DVMX MULTIPLEX PUMP
TECHNICAL DATA

Pump Size	Nozzle Size		Shaft					Type Of 1st Stage Impeller	Stuffing Box		
	Disch.	Suct.	Dia. At Coupling	Dia. At Impeller	Dia. At Sleeves	Shaft Span See Note 1	A		Bore	Sleeve Dia.	Depth
3 x 4 x 9A	3	4	2 $\frac{1}{8}$	2 $\frac{1}{2}$	2 $\frac{1}{4}$	42 $\frac{1}{2}$	3 $\frac{3}{4}$	SS	3 $\frac{1}{2}$	2 $\frac{3}{4}$	3 $\frac{1}{2}$
3 x 4 x 9B	3	4	2 $\frac{1}{8}$	2 $\frac{1}{2}$	2 $\frac{1}{4}$	42 $\frac{1}{2}$	3 $\frac{3}{4}$	SS	3 $\frac{1}{2}$	2 $\frac{3}{4}$	3 $\frac{1}{2}$
3 x 4 x 9C	3	4	2 $\frac{1}{8}$	2 $\frac{1}{2}$	2 $\frac{1}{4}$	42 $\frac{1}{2}$	3 $\frac{3}{4}$	SS	3 $\frac{1}{2}$	2 $\frac{3}{4}$	3 $\frac{1}{2}$
3 x 4 x 9D	3	4	2 $\frac{1}{8}$	2 $\frac{1}{2}$	2 $\frac{1}{4}$	42 $\frac{1}{2}$	3 $\frac{3}{4}$	SS	3 $\frac{1}{2}$	2 $\frac{3}{4}$	3 $\frac{1}{2}$
3 x 6 x 9E	3	6	2 $\frac{1}{8}$	2 $\frac{1}{2}$	2 $\frac{1}{4}$	42 $\frac{1}{2}$	3 $\frac{3}{4}$	SS	3 $\frac{1}{2}$	2 $\frac{3}{4}$	3 $\frac{1}{2}$
4 x 6 x 9A	4	6	2 $\frac{1}{8}$	2 $\frac{1}{2}$	2 $\frac{1}{4}$	49	4 $\frac{1}{2}$	DS	3 $\frac{1}{2}$	2 $\frac{3}{4}$	3 $\frac{1}{2}$
4 x 6 x 9B	4	6	2 $\frac{1}{8}$	2 $\frac{1}{2}$	2 $\frac{1}{4}$	49	4 $\frac{1}{2}$	DS	3 $\frac{1}{2}$	2 $\frac{3}{4}$	3 $\frac{1}{2}$
4 x 6 x 9C	4	6	2 $\frac{1}{8}$	2 $\frac{1}{2}$	2 $\frac{1}{4}$	49	4 $\frac{1}{2}$	DS	3 $\frac{1}{2}$	2 $\frac{3}{4}$	3 $\frac{1}{2}$
4 x 6 x 9D	4	6	2 $\frac{1}{8}$	2 $\frac{1}{2}$	2 $\frac{1}{4}$	49	4 $\frac{1}{2}$	DS	3 $\frac{1}{2}$	3	3 $\frac{1}{2}$
4 x 6 x 10A	4	6	2 $\frac{1}{8}$	3	2 $\frac{3}{4}$	57	5 $\frac{1}{4}$	DS	4 $\frac{1}{4}$	3 $\frac{3}{4}$	4 $\frac{3}{4}$
4 x 6 x 10B	4	6	2 $\frac{1}{8}$	3 $\frac{1}{4}$	2 $\frac{1}{2}$	57	5 $\frac{1}{4}$	DS	4 $\frac{1}{2}$	3 $\frac{1}{2}$	3 $\frac{3}{4}$
4 x 6 x 10C	4	6	2 $\frac{1}{8}$	3 $\frac{1}{4}$	3	57	5 $\frac{1}{4}$	DS	5	4	4 $\frac{3}{4}$
6 x 8 x 11A	6	8	2 $\frac{1}{8}$	3 $\frac{1}{4}$	3	62	6	DS	5	4	4 $\frac{3}{4}$
6 x 8 x 11B	6	8	3 $\frac{1}{8}$	4 $\frac{1}{4}$	3 $\frac{3}{4}$	62	6	DS	5 $\frac{1}{4}$	4 $\frac{1}{4}$	4 $\frac{3}{4}$
6 x 8 x 11C	6	8	3 $\frac{1}{8}$	4 $\frac{1}{4}$	3 $\frac{3}{4}$	62	6	DS	5 $\frac{1}{4}$	4 $\frac{1}{4}$	4 $\frac{3}{4}$

*Larger Shafts can be furnished when required, consult factory.

Pump Size	Packing		Ball Bearing		Sleeve Brgs.		Rotating Element See Note 2		Max. H.P.		Maximum Standard Hydrotest	
	No. Rings	Size	Thrust	Radial	Radial	Kingsbury	Wt.	B	Ball Brg.	Siv. Brg.	C.I.	Steel
3 x 4 x 9A	7	$\frac{1}{8}$	7409D	6213	2 $\frac{1}{8}$ x1 $\frac{1}{2}$	No. 5	140	25	530	620	1500	3000
3 x 4 x 9B	7	$\frac{1}{8}$	7409D	6213	2 $\frac{1}{8}$ x1 $\frac{1}{2}$	No. 5	140	25	530	620	1500	3000
3 x 4 x 9C	7	$\frac{1}{8}$	7409D	6213	2 $\frac{1}{8}$ x1 $\frac{1}{2}$	No. 5	140	25	530	620	1500	3000
3 x 4 x 9D	7	$\frac{1}{8}$	7409D	6213	2 $\frac{1}{8}$ x1 $\frac{1}{2}$	No. 5	140	25	530	620	1500	3000
3 x 6 x 9E	7	$\frac{1}{8}$	7409D	6213	2 $\frac{1}{8}$ x1 $\frac{1}{2}$	No. 5	160	25	530	620	1500	3000
4 x 6 x 9A	7	$\frac{1}{8}$	7409D	6213	2 $\frac{1}{8}$ x1 $\frac{1}{2}$	No. 5	210	30	530	620	1500	3000
4 x 6 x 9B	7	$\frac{1}{8}$	7409D	6213	2 $\frac{1}{8}$ x1 $\frac{1}{2}$	No. 5	210	30	530	620	1500	3000
4 x 6 x 9C	7	$\frac{1}{8}$	7409D	6213	2 $\frac{1}{8}$ x1 $\frac{1}{2}$	No. 5	210	30	530	620	1500	3000
4 x 6 x 9D	7	$\frac{1}{8}$	7310D	6216	2 $\frac{3}{8}$ x1 $\frac{1}{2}$	No. 5	230	35	740	880	1500	3000
4 x 6 x 10A	7	$\frac{1}{2}$	7310D	6216	2 $\frac{3}{8}$ x1 $\frac{1}{2}$	No. 5	250	40	740	880	1500	3000
4 x 6 x 10B	7	$\frac{1}{2}$	7311D	6216	2 $\frac{3}{4}$ x1 $\frac{1}{2}$	No. 5	300	45	1140	1370	1500	3000
4 x 6 x 10C	7	$\frac{1}{2}$	7311D	6216	2 $\frac{3}{4}$ x1 $\frac{1}{2}$	No. 5	300	45	1500	1500	1500	3000
6 x 8 x 11A	7	$\frac{1}{2}$	7311D	6216	2 $\frac{3}{4}$ x1 $\frac{1}{2}$	No. 5	350	50	1140	1370	1500	3000
6 x 8 x 11B	7	$\frac{1}{2}$	7315D	6218	3 $\frac{3}{8}$ x2 $\frac{3}{8}$	No. 6	400	60	2100	2500	1500	3000
6 x 8 x 11C	7	$\frac{1}{2}$	7315D	6218	3 $\frac{3}{8}$ x2 $\frac{3}{8}$	No. 6	400	60	2100	2500	1500	3000

Note:

1. Bearing span is given for four stage pump. For each additional stage add the value in column "A".
2. Rotating element weight is given for 4 stages. For each additional stage add weight given in column "B".