

are balanced between the two stages. This is achieved by opposing the point of discharge of the two stages and connecting discharge of first stage with suction of second stage by an external channel.

Pumps are standard fitted, bronze fitted, and all bronze and are supplied with ASA flanged connections.

Models 3521, 3711, 3721, and 3741 have the by-pass between stages located under the pump. Two impellers are arranged in series.

Models 3751, 3756, 3771, 3776, 3791, and 3796 have the by-pass between stages located at top of pump. Models with numbers ending in digit (1) contain impellers arranged in series. Models with numbers ending in digit (6) contain impellers arranged in parallel.

SERIES 2000 two-stage turbine power plant pumps consist of fifteen models divided into two general frame sizes.

Standard fitted, bronze fitted, and all bronze pumps are supplied with ASA screwed connections.

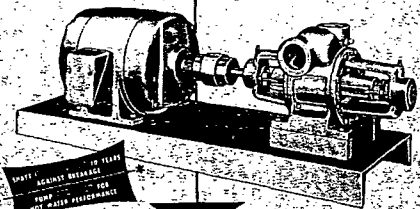
SELECTION TABLE — SERIES 2000 — 1750 RPM

Model No.	Excl.	Disch.	MPH	100	150	200	250	300	350	400	450	500
2511	1 1/2	1 1/4	3"	GPM	12.2	11.8	10.6	9.3	8.4	7.4	6.4	4.5
				GPM	11.2	10.0	8.7	7.8	6.5	5.5	4.6	3.6
				GPM	11.2	10.0	8.7	7.8	6.5	5.5	4.6	3.6
				BHP	1.1	1.3	1.5	1.7	2.0	2.3	2.7	3.5
2521	1 1/2	1 1/4	3"	GPM	12.7	12.4	11.1	10.0	9.0	8.0	7.1	6.3
				GPM	12.6	11.8	10.4	9.2	8.2	7.2	6.3	5.4
				GPM	12.6	11.8	10.4	9.2	8.2	7.2	6.3	5.4
				BHP	1.1	1.3	1.5	1.8	2.0	2.3	2.5	3.0
2531	1 1/2	1 1/4	3"	GPM	15.1	13.5	12.1	10.8	9.6	8.4	7.2	6.0
				GPM	13.7	12.4	11.1	9.8	8.5	7.3	6.1	4.9
				GPM	13.7	12.4	11.1	9.8	8.5	7.3	6.1	4.9
				BHP	1.4	1.6	1.8	2.1	2.4	2.7	3.0	3.5
2531A	1 1/2	1 1/4	3"	GPM	15.1	13.5	12.1	10.8	9.6	8.4	7.2	6.0
				GPM	15.3	13.5	12.1	10.4	9.2	8.0	6.8	5.6
				GPM	14.1	13.5	12.7	11.1	9.5	7.9	6.4	5.0
				BHP	1.5	1.8	2.1	2.5	2.8	3.2	3.6	4.1
2541	1 1/2	1 1/4	3"	GPM	14.8	14.5	13.4	12.3	11.0	9.7	8.2	7.2
				GPM	14.6	13.5	12.6	11.8	10.6	9.5	8.3	7.4
				GPM	14.2	13.4	12.5	11.6	10.6	9.6	8.5	7.4
				BHP	1.3	2.2	2.5	2.8	3.1	3.5	4.2	4.5
2551	1 1/2	1 1/4	3"	GPM	25	22	19.6	17	14.6	12	9.6	7.2
				GPM	21	20	18.2	16	13.8	11.4	9.0	6.5
				GPM	21	20	18.2	16	13.8	11.4	9.0	6.5
				BHP	1.7	2.0	2.4	3.0	3.4	3.9	4.5	5.0
2561	1 1/2	1 1/4	3"	GPM	25.8	23.7	21.6	19.7	17.8	16	14.3	12.8
				GPM	23.6	21.5	20	18.1	16.4	14.7	13.2	11.7
				GPM	17.7	17.4	17.1	16.6	15.7	14.2	12.4	10.9
				BHP	1.8	2.2	2.6	3.0	3.5	4.0	4.5	5.0
2571	1 1/2	1 1/4	3"	GPM	34	30	29	25	21	17.2	13.5	9.7
				GPM	32	31	28	24	20	16.6	12.4	8.3
				GPM	22	22	21	19.8	15.7	11.4	7.7	5.0
				BHP	2.6	3.0	3.3	3.8	4.4	5.1	5.8	7.4
2581	1 1/2	1 1/4	3"	GPM	29.0	26.0	26.3	24.6	21.1	17.8	14.6	10.6
				GPM	24.0	23.9	23.8	23.5	21.2	19.8	18.6	17.2
				GPM	17.0	17.0	16.9	16.7	16.4	16.0	15.6	15.1
				BHP	3.1	2.7	3.2	3.4	4.3	4.9	5.5	6.1
2591	1 1/2	1 1/4	3"	GPM	37.0	34.6	31.5	27.2	21.8	17.0	12.7	8.5
				GPM	32	31	28.5	24.5	20	16.8	13.5	9.2
				GPM	21.0	21.0	20.8	20.2	18.7	16.8	15.5	14.2
				BHP	3.2	3.5	4.0	4.5	5.4	6.2	7.0	8.5
2631	2 1/2	2	3"	GPM	46	43	39	35	31	27	23	19
				GPM	41	38	35	32	28	25	21	17
				GPM	34	33	32	29	27	23	20	16
				BHP	3.2	3.8	4.5	5.3	6.1	7.0	8.2	10.6
2651	2 1/2	2	3"	GPM	56	53	48	44	40	36	32	27
				GPM	51	48	44	40	36	32	27	23
				GPM	36	36	35	34	32	30	28	26
				BHP	4.6	5.3	6.0	6.8	7.7	8.7	9.8	11.0
2671	2 1/2	2	3"	GPM	69	66	62	56	48	41	34	28
				GPM	61	58	51	44	36	28	23	19
				GPM	54	50	46	41	36	32	27	23
				BHP	6.5	6.9	7.0	8.4	9.6	11.0	12.0	13.0
2681	2 1/2	2	3"	GPM	57.8	54.9	51.8	48.5	45.0	41.5	38	33
				GPM	47	45	43	40	36	33	30	26
				GPM	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0
				BHP	5.0	5.2	5.8	6.4	7.2	8.3	9.4	10.5
2691	2 1/2	2	3"	GPM	86	79	72	65	58	50	42	35
				GPM	61	59	54	48	42	36	30	25
				GPM	43	40	36	30	22	18	15	12
				BHP	6.3	6.8	7.3	8.0	9.0	10.0	11.5	13.0

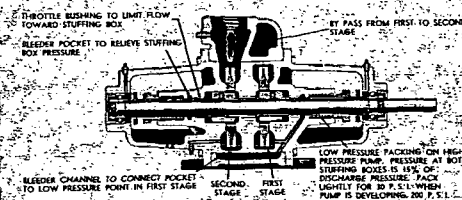
MECHANICAL DATA — SERIES 2000

Model No.	Hydrastatic Test Press. — PSI	Max. Water Oil or Gas — PSI
	C.I.	Brz.
2511-2591	500	600
2631-2691	500	600
		175
		400

ROTH TWO-STAGE POWER PLANT PUMPS



SERIES 2000



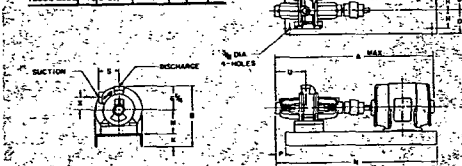
INSTALLATION DIMENSIONS — SERIES 2000

Motor Fr. NEMA ST'd	A	A ₁	B	C	D	E	F	G	H	I	J	K	L	M	N	P
182, 184	34-5/16	36-1/8	12-3/4	30	6 1/2	3-1/2	7 1/2	3 1/2	2 1/2	2	4 1/2	33-9/16	3-5/16	3-5/16	3-5/16	3-5/16
213, 215	38-5/16	39-7/8	14-9/16	40	6 1/2	4-1/2	7 1/2	3 1/2	2 1/2	2	4 1/2	33-9/16	42-9/16	42-9/16	42-9/16	42-9/16
2540, 2560	41-1/2	42-3/4	15-9/16	40	6 1/2	4-1/2	7 1/2	3 1/2	2 1/2	2	4 1/2	33-9/16	44-1/2	44-1/2	44-1/2	44-1/2

Motor Fr. NEMA ST'd	A	A ₁	B	C	D	E	F	G	H	I	J	K	L	M	N	P
182, 184	36-5/8	38-7/16	13-13/16	40	6 1/2	5	7 1/2	3 1/2	2 1/2	2	4 1/2	33-9/16	42-9/16	42-9/16	42-9/16	42-9/16
213, 215	40-5/8	42-3/16	14-9/16	40	6 1/2	5	7 1/2	3 1/2	2 1/2	2	4 1/2	33-9/16	44-1/2	44-1/2	44-1/2	44-1/2
2540, 2560	45-9/16	46-13/16	15-9/16	40	6 1/2	5	7 1/2	3 1/2	2 1/2	2	4 1/2	33-9/16	44-1/2	44-1/2	44-1/2	44-1/2
2840, 2860	48-11/16	49-13/16	16-11/16	40	6 1/2	5	7 1/2	3 1/2	2 1/2	2	4 1/2	33-9/16	44-1/2	44-1/2	44-1/2	44-1/2

A: Covers standard drip-proof motors
A₁: Covers totally enclosed motors

Model	S	U	V	X	SWC Dia- Glandless
2511-2591	5 1/4	6-3/32	1-13/16	4	1 1/2
2631-2691	5 1/4	6-13/32	2-1/4	5 1/2	2



ROY E. ROTH COMPANY TURBINE PUMP DIVISION ROCK ISLAND, ILLINOIS

SEE PAGE TWELVE