

# AURORA SERIES 110

## SELECTION TABLE

1750 R.P.M.

Date **JANUARY 2003**

Supersedes Section 110 Page 395

Dated JULY 1969

### PUMP SIZES A35 THROUGH R4

PUMP SIZE	TOTAL DYNAMIC HEAD	PSI (BARS) FEET (METERS)	4.4	8.6	13	17.3	21.5	26	30	34.5	43	50	54	65	73.5	86.5	49.5	108	130	151.5	173	195
			(0.3)	(0.6)	(0.9)	(1.2)	(1.5)	(1.8)	(2.1)	(2.4)	(3.0)	(3.4)	(3.7)	(4.5)	(5.1)	(6.0)	(6.4)	(7.4)	(9.0)	(10.4)	(11.9)	(13.4)
			10	20	30	40	50	60	70	80	100	115	125	150	170	200	230	250	300	350	400	450
			(3)	(6)	(9)	(12)	(15)	(18)	(21)	(24)	(31)	(35)	(38)	(46)	(52)	(61)	(70)	(76)	(91)	(107)	(122)	(137)
A35	G.P.M.		3.6	3.2	2.8	2.5	2.1	1.8	1.5	1.2												
	M <sup>3</sup> /HR		(0.8)	(0.7)	(0.6)	(0.6)	(0.5)	(0.4)	(0.3)	(0.3)												
	B.H.P.		.04	.05	.06	.07	.08	.09	.10	.11												
A4	G.P.M.		4.4	4.0	3.7	3.3	3.0	2.6	2.3	1.9	1.2											
	M <sup>3</sup> /HR		(1.0)	(0.9)	(0.8)	(0.7)	(0.7)	(0.6)	(0.5)	(0.4)	(0.3)											
	B.H.P.		.06	.08	.09	.11	.12	.14	.15	.17	.20											
B4	G.P.M.		2.5	2.3	2.0	1.8	1.6	1.4	1.2	1.0	.6											
	M <sup>3</sup> /HR		(0.6)	(0.5)	(0.5)	(0.4)	(0.4)	(0.3)	(0.3)	(0.2)	(0.1)											
	B.H.P.		.03	.04	.05	.06	.07	.08	.09	.10	.11											
C4	G.P.M.		6.2	5.6	5.4	4.6	4.4	4.2	3.4	3.2	2.3	1.5										
	M <sup>3</sup> /HR		(1.4)	(1.3)	(1.2)	(1.0)	(1.0)	(1.0)	(0.8)	(0.7)	(0.5)	(0.3)										
	B.H.P.		.08	.09	.10	.12	.13	.15	.18	.20	.25	.28										
D4	G.P.M.		8.3	7.7	7.3	6.6	6.2	5.6	5.1	4.7	3.7	2.9	2.5	1.2								
	M <sup>3</sup> /HR		(1.9)	(1.7)	(1.7)	(1.5)	(1.4)	(1.3)	(1.2)	(1.1)	(0.8)	(0.7)	(0.6)	(0.3)								
	B.H.P.		.12	.18	.20	.20	.23	.25	.30	.34	.40	.45	.49	.59								
E4	G.P.M.		10.2	9.9	9.4	9.0	8.5	8.0	7.5	7.1	6.2	5.5	5.0	3.7	2.8							
	M <sup>3</sup> /HR		(2.3)	(2.2)	(2.1)	(2.0)	(1.9)	(1.8)	(1.7)	(1.6)	(1.4)	(1.2)	(1.1)	(0.8)	(0.6)							
	B.H.P.		.22	.25	.28	.30	.32	.34	.38	.40	.46	.50	.54	.63	.71							
F4	G.P.M.		14.2	13.5	12.8	12.1	11.5	11.0	10.5	9.8	8.7	7.5	7.2	5.8	4.8	3.0						
	M <sup>3</sup> /HR		(3.2)	(3.1)	(2.9)	(2.7)	(2.6)	(2.5)	(2.4)	(2.2)	(2.0)	(1.7)	(1.6)	(1.3)	(1.1)	(0.7)						
	B.H.P.		.27	.29	.30	.35	.40	.42	.45	.50	.60	.70	.75	.83	.95	1.1						
G4	G.P.M.		17.5	16.8	15.9	15.0	14.5	13.7	13.0	12.4	11.0	10.2	9.5	7.9	6.5	4.9	3.0					
	M <sup>3</sup> /HR		(4.0)	(3.8)	(3.6)	(3.4)	(3.3)	(3.1)	(3.0)	(2.8)	(2.5)	(2.3)	(2.2)	(1.8)	(1.5)	(1.1)	(0.7)					
	B.H.P.		.25	.30	.35	.40	.42	.48	.50	.52	.70	.75	.80	1.0	1.2	1.4	1.5					
H4	G.P.M.		24.5	23.3	22.5	20.8	20.0	18.6	17.0	15.8	12.8	9.5	8.5									
	M <sup>3</sup> /HR		(5.6)	(5.3)	(5.1)	(4.7)	(4.5)	(4.2)	(3.9)	(3.6)	(2.9)	(2.2)	(1.9)									
	B.H.P.		.35	.40	.45	.60	.65	.70	.75	.80	.85	1.0	1.1									
I4	G.P.M.		27.5	26.2	25.0	24.0	23.0	21.2	20.0	18.9	16.1	14.5	13.0	10.0	7.0							
	M <sup>3</sup> /HR		(6.2)	(6.0)	(5.7)	(5.5)	(5.2)	(4.8)	(4.5)	(4.3)	(3.7)	(3.3)	(3.0)	(2.3)	(1.6)							
	B.H.P.		.40	.45	.50	.60	.70	.75	.85	.95	1.1	1.2	1.3	1.4	1.5							
I4A	G.P.M.		37.0	35.8	34.0	32.5	31.0	29.1	27.0	25.5	21.6	18.5	16.1	11.0								
	M <sup>3</sup> /HR		(8.4)	(8.1)	(7.7)	(7.4)	(7.0)	(6.6)	(6.1)	(5.8)	(4.9)	(4.2)	(3.7)	(2.5)								
	B.H.P.		.75	.90	.95	1.0	1.1	1.2	1.2	1.3	1.4	1.5	1.6	1.8								
M4	G.P.M.		51.0	48.0	45.2	43.0	40.0	36.5	33.2	30.0	22.0	16.0	10.0									
	M <sup>3</sup> /HR		(11.6)	(10.9)	(10.3)	(9.8)	(9.1)	(8.3)	(7.5)	(6.8)	(5.0)	(3.6)	(2.3)									
	B.H.P.		.80	1.0	1.2	1.3	1.4	1.5	1.6	1.75	2.0	2.3	2.5									
P4	G.P.M.		59.0	56.5	54.0	51.0	48.5	46.0	42.0	40.0	33.0	27.0	24.0	10.0								
	M <sup>3</sup> /HR		(13.4)	(12.8)	(12.3)	(11.6)	(11.0)	(10.4)	(9.5)	(9.1)	(7.5)	(6.1)	(5.5)	(2.3)								
	B.H.P.		1.0	1.1	1.2	1.4	1.5	1.7	1.8	1.9	2.2	2.5	2.6	3.0								
R4	G.P.M.		69.0	66.0	63.0	60.0	57.5	54.0	50.0	47.0	40.0	35.0	32.0	22.5	12.5							
	M <sup>3</sup> /HR		(15.7)	(15.0)	(14.3)	(13.6)	(13.1)	(12.3)	(11.4)	(10.7)	(9.1)	(7.9)	(7.3)	(5.1)	(2.8)							
	B.H.P.		1.2	1.3	1.4	1.6	1.7	1.8	1.9	2.0	2.5	3.0	3.2	3.5	3.8							

**NOTES:**

- Above table shows the operating range of each size pump based on 20 (6096.0) feet suction lift at sea level. Greater suction lift is permissible but the performance will be altered slightly.
- Two pumps can be connected in series, thereby developing twice the head of a single pump requiring twice the horsepower. Usually the arrangement calls for both pumps mounted on one side of the motor; however, by using an extended shaft motor one pump can be mounted on either side.
- Pump efficiency can be computed by this formula  

$$\frac{\text{G.P.M.} \times \text{total head for water} \times \text{specific gravity}}{3960 \times \text{B.H.P.}}$$
- Performance based on pumping clear water at normal temperatures.
- Liquids of higher viscosity than water require slightly additional B.H.P.; also pump capacity is slightly reduced. Where viscosity exceeds 600" Saybolt Universal, refer to factory for recommendations.

SUCTION & DISCHARGE SIZES		
PUMP SIZE	SUCTION	DISCHARGE
A35-14A	1-1/4 (32)	1-1/4 (32)
M4-R4	1-1/2 (38)	1-1/2 (38)

**AURORA SERIES 110**

SELECTION TABLE

1750 R.P.M.

PUMP SIZE D4T THROUGH I5

PUMP SIZE	TOTAL DYNAMIC HEAD	PSI (BARS)	4.4	8.6	13	17.3	21.5	26	30	34.5	43	50	54	65	73.5	86.5	49.5	108	130	151.5	173	195	
			(0.3)	(0.6)	(0.9)	(1.2)	(1.5)	(1.8)	(2.1)	(2.4)	(3.0)	(3.4)	(3.7)	(4.5)	(5.1)	(6.0)	(6.0)	(3.4)	(7.4)	(9.0)	(10.4)	(11.9)	(13.4)
			FEET (METERS)	10 (3)	20 (6)	30 (9)	40 (12)	50 (15)	60 (18)	70 (21)	80 (24)	100 (30)	115 (35)	125 (38)	150 (46)	170 (52)	200 (61)	230 (70)	250 (76)	300 (91)	350 (107)	400 (122)	450 (137)
D4T	G.P.M.	8.7	8.4	8.2	7.7	7.6	7.4	7.2	6.8	6.4	6.0	5.7	5.1	4.6	3.9	3.2	2.7	1.5					
	M <sup>3</sup> /HR	(2.0)	(1.9)	(1.9)	(1.7)	(1.7)	(1.7)	(1.6)	(1.5)	(1.5)	(1.4)	(1.3)	(1.2)	(1.0)	(0.9)	(0.7)	(0.6)	(0.3)					
	B.H.P.	.30	.33	.37	.40	.41	.42	.44	.46	.48	.50	.56	.60	.65	.75	.85	.90	1.2					
E4T	G.P.M.	10.6	10.4	10.2	9.8	9.4	9.1	8.8	8.2	8.0	7.7	7.2	6.5	6.1	5.3	4.5	4.1	3.1	2.2	1.3			
	M <sup>3</sup> /HR	(2.4)	(2.4)	(2.3)	(2.2)	(2.1)	(2.1)	(2.0)	(1.9)	(1.8)	(1.7)	(1.6)	(1.5)	(1.4)	(1.2)	(1.0)	(0.9)	(0.7)	(0.5)	(0.3)			
	B.H.P.	.30	.35	.37	.40	.45	.49	.50	.51	.53	.60	.70	.80	.90	1.0	1.2	1.3	1.5	1.7	1.8			
F4T	G.P.M.	14.5	14.0	13.8	13.3	13.0	12.7	12.3	11.9	11.3	10.8	10.5	9.8	8.9	8.0	7.2	6.3	5.2	4.0	2.8	1.4		
	M <sup>3</sup> /HR	(3.3)	(3.2)	(3.1)	(3.0)	(3.0)	(2.9)	(2.8)	(2.7)	(2.6)	(2.5)	(2.4)	(2.2)	(2.0)	(1.8)	(1.6)	(1.4)	(1.2)	(0.9)	(0.6)	(0.3)		
	B.H.P.	.50	.58	.63	.70	.75	.80	.91	.95	.98	1.0	1.0	1.1	1.2	1.4	1.5	1.6	1.9	2.0	2.2	2.6		
G4T	G.P.M.	18.2	18.0	17.5	16.7	16.2	15.9	15.2	14.8	14.0	13.7	13.2	12.2	11.5	10.5	9.4	8.9	7.2	5.6	3.9	2.1		
	M <sup>3</sup> /HR	(4.1)	(4.1)	(4.0)	(3.8)	(3.7)	(3.6)	(3.5)	(3.4)	(3.2)	(3.1)	(3.0)	(2.8)	(2.6)	(2.4)	(2.1)	(2.0)	(1.6)	(1.3)	(0.9)	(0.5)		
	B.H.P.	.50	.55	.60	.70	.73	.75	.80	.90	1.0	1.0	1.1	1.2	1.3	1.4	1.7	1.8	2.0	2.3	2.8	3.0		
H4T	G.P.M.	25.0	24.5	23.7	23.0	22.5	21.5	21.0	20.5	19.2	18.0	17.5	16.0	14.2	12.0	9.5	7.8						
	M <sup>3</sup> /HR	(5.7)	(5.6)	(5.4)	(5.2)	(5.1)	(4.9)	(4.8)	(4.7)	(4.4)	(4.1)	(4.0)	(3.6)	(3.2)	(2.7)	(2.2)	(1.8)						
	B.H.P.	.70	.75	.80	.90	1.0	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.9	2.1	2.3						
I4T	G.P.M.	30.0	29.0	28.5	27.5	27.0	26.5	25.2	24.5	23.2	22.5	21.0	19.6	17.5	16.0	13.0	12.0	8.5					
	M <sup>3</sup> /HR	(6.8)	(6.6)	(6.5)	(6.2)	(6.1)	(6.0)	(5.7)	(5.6)	(5.3)	(5.1)	(4.8)	(4.5)	(4.0)	(3.6)	(3.0)	(2.7)	(1.9)					
	B.H.P.	.90	1.0	1.0	1.1	1.2	1.2	1.3	1.4	1.4	1.5	1.7	1.8	1.9	2.1	2.3	2.5	3.0					
I4TA	G.P.M.	38.5	37.5	36.5	36.0	35.0	34.5	33.5	33.0	31.0	30.0	29.0	26.5	25.0	21.2	17.0	15.5						
	M <sup>3</sup> /HR	(8.7)	(8.5)	(8.3)	(8.2)	(7.9)	(7.8)	(7.6)	(7.5)	(7.0)	(6.8)	(6.6)	(6.0)	(5.7)	(4.8)	(3.9)	(3.5)						
	B.H.P.	1.0	1.1	1.2	1.3	1.5	1.7	1.8	1.9	2.0	2.2	2.4	2.6	2.7	2.9	3.0	3.2						
D5	G.P.M.	6.7	6.6	6.4	6.3	6.2	6.0	5.8	5.7	5.4	5.1	5.0	4.5	4.2	3.7	3.2	2.7	2.0					
	M <sup>3</sup> /HR	(1.5)	(1.5)	(1.5)	(1.4)	(1.4)	(1.4)	(1.3)	(1.3)	(1.2)	(1.2)	(1.1)	(1.0)	(1.0)	(0.8)	(0.7)	(0.6)	(0.5)					
	B.H.P.	.45	.48	.50	.52	.54	.56	.58	.60	.65	.70	.72	.75	.78	.80	.90	1.0	1.2					
E5	G.P.M.	10.3	10.1	9.8	9.7	9.5	9.3	9.1	8.9	8.5	8.2	7.9	7.3	7.0	6.3	5.6	5.3	4.2	3.2	2.1			
	M <sup>3</sup> /HR	(2.3)	(2.3)	(2.2)	(2.2)	(2.2)	(2.1)	(2.1)	(2.0)	(1.9)	(1.9)	(1.8)	(1.7)	(1.6)	(1.4)	(1.3)	(1.2)	(1.0)	(0.7)	(0.5)			
	B.H.P.	.55	.56	.58	.59	.60	.63	.67	.70	.75	.78	.80	.85	.90	1.0	1.1	1.2	1.3	1.5	1.7			
F5	G.P.M.	17.6	17.0	16.5	16.0	15.6	15.2	14.5	14.0	13.0	12.2	11.8	10.5	9.5	8.0	6.5	5.5	3.0					
	M <sup>3</sup> /HR	(4.0)	(3.9)	(3.7)	(3.6)	(3.5)	(3.5)	(3.3)	(3.2)	(3.0)	(2.8)	(2.7)	(2.4)	(2.2)	(1.8)	(1.5)	(1.2)	(0.7)					
	B.H.P.	.40	.43	.47	.50	.55	.60	.70	.75	.90	1.0	1.0	1.2	1.3	1.5	1.7	1.8	2.0					
G5	G.P.M.	22.0	21.5	21.0	20.5	20.0	19.4	19.0	18.5	18.0	17.0	16.8	15.5	14.5	13.0	12.0	10.5	8.3	6.3	3.5			
	M <sup>3</sup> /HR	(5.0)	(4.9)	(4.8)	(4.7)	(4.5)	(4.4)	(4.3)	(4.2)	(4.1)	(3.9)	(3.8)	(3.5)	(3.3)	(3.0)	(2.7)	(2.4)	(1.9)	(1.4)	(0.8)			
	B.H.P.	.80	.83	.87	.90	.95	.98	1.0	1.0	1.1	1.2	1.3	1.5	1.6	1.8	2.0	2.1	2.2	2.8	3.2			
H5	G.P.M.	24.0	23.7	23.5	23.1	23.0	22.6	22.1	21.8	21.2	20.8	19.4	18.5	17.6	16.5	15.4	14.5	12.5	10.5				
	M <sup>3</sup> /HR	(5.5)	(5.4)	(5.3)	(5.2)	(5.2)	(5.1)	(5.0)	(5.0)	(4.8)	(4.7)	(4.4)	(4.2)	(4.0)	(3.7)	(3.5)	(3.3)	(2.8)	(2.4)				
	B.H.P.	1.0	1.0	1.0	1.0	1.0	1.1	1.2	1.3	1.3	1.4	1.5	1.8	1.9	2.0	2.3	2.5	2.9	3.3				
I5	G.P.M.	37.2	36.6	36.0	35.5	35.0	34.0	33.5	33.0	32.0	31.0	30.0	28.5	27.0	25.2	23.0	22.2	19.0	16.0				
	M <sup>3</sup> /HR	(8.4)	(8.3)	(8.2)	(8.1)	(7.9)	(7.7)	(7.6)	(7.5)	(7.3)	(7.0)	(6.8)	(6.5)	(6.1)	(5.7)	(5.2)	(5.0)	(4.3)	(3.6)				
	B.H.P.	1.2	1.3	1.3	1.4	1.5	1.7	2.0	2.3	2.4	2.4	2.5	2.7	2.9	3.3	3.7	3.8	4.0	5.0				

NOTES:

- Above table shows the operating range of each size pump based on 20 (6096.0) feet suction lift at sea level. Greater suction lift is permissible but the performance will be altered slightly.
- Two pumps can be connected in series, thereby developing twice the head of a single pump requiring twice the horsepower. Usually the arrangement calls for both pumps mounted on one side of the motor; however, by using an extended shaft motor one pump can be mounted on either side.
- Pump efficiency can be computed by this formula  

$$\frac{\text{G.P.M.} \times \text{total head for water} \times \text{specific gravity}}{3960 \times \text{B.H.P.}}$$
- Performance based on pumping clear water at normal temperatures.
- Liquids of higher viscosity than water require slightly additional B.H.P.; also pump capacity is slightly reduced. Where viscosity exceeds 600" Saybolt Universal, refer to factory for recommendations.

SUCTION & DISCHARGE SIZES		
PUMP SIZE	SUCTION	DISCHARGE
D4T-I5	1-1/4 (32)	1-1/4 (32)

PUMP SIZES J5 THROUGH I5T

PUMP SIZE	TOTAL DYNAMIC HEAD	PSI (BARS)	4.4	8.6	13	17.3	21.5	26	30	34.5	43	50	54	65	73.5	86.5	99.5	108	130	151.5	173	195	216.5	238
			(0.3)	(0.6)	(0.9)	(1.2)	(1.5)	(1.8)	(2.1)	(2.4)	(3.0)	(3.4)	(3.7)	(4.5)	(5.1)	(6.0)	(6.9)	(7.4)	(9.0)	(10.4)	(11.9)	(13.4)	(14.9)	(16.4)
		FEET (METERS)	10 (3)	20 (6)	30 (9)	40 (12)	50 (15)	60 (18)	70 (21)	80 (24)	100 (30)	115 (35)	125 (38)	150 (46)	170 (52)	200 (61)	230 (70)	250 (76)	300 (91)	350 (107)	400 (122)	450 (137)	500 (152)	550 (168)
J5	G.P.M.	43.5	43.0	42.0	41.5	40.5	39.5	38.2	37.6	36.0	35.0	33.5	31.2	30.0	27.0	23.5	21.5	18.0	13.0	8.0				
	M <sup>3</sup> /HR	(9.9)	(9.8)	(9.5)	(9.4)	(9.2)	(9.0)	(8.7)	(8.5)	(8.2)	(7.9)	(7.6)	(7.1)	(6.8)	(6.1)	(5.3)	(4.9)	(4.1)	(3.0)	(1.8)				
	B.H.P.	1.3	1.3	1.4	1.4	1.5	1.8	2.0	2.1	2.4	2.5	2.7	2.9	3.4	3.7	4.0	4.5	5.0	5.5	6.2				
K5	G.P.M.	53.0	52.0	51.0	50.0	48.5	47.0	46.5	45.5	43.5	42.0	41.0	37.5	36.0	33.0	29.0	27.5	22.5	17.0	12.0	6.0			
	M <sup>3</sup> /HR	(12.0)	(11.8)	(11.6)	(11.4)	(11.0)	(10.7)	(10.6)	(10.3)	(9.9)	(9.5)	(9.3)	(8.5)	(8.2)	(7.5)	(6.6)	(6.2)	(5.1)	(3.9)	(2.7)	(1.4)			
	B.H.P.	1.3	1.4	1.5	1.7	2.0	2.3	2.4	2.5	2.6	2.7	2.9	3.1	3.5	4.0	4.8	5.0	5.9	6.5	7.5	8.2			
L5	G.P.M.	72.5	71.0	68.0	67.0	65.0	63.0	62.0	60.5	58.0	55.0	53.0	50.0	47.0	43.0	39.0	37.0	31.0	24.0	18.0				
	M <sup>3</sup> /HR	(16.5)	(16.1)	(15.4)	(15.2)	(14.8)	(14.3)	(14.1)	(13.7)	(13.2)	(12.5)	(12.0)	(11.4)	(10.7)	(9.8)	(8.9)	(8.4)	(7.0)	(5.5)	(4.1)				
	B.H.P.	2.0	2.2	2.4	2.5	2.6	2.8	3.0	3.2	3.7	3.8	4.0	4.8	5.2	5.6	6.7	7.0	8.0	9.0	10.5				
M5	G.P.M.	82.0	78.0	76.0	72.0	69.0	67.0	62.0	58.0	50.0	40.0	30.0												
	M <sup>3</sup> /HR	(18.6)	(17.7)	(17.3)	(16.4)	(15.7)	(15.2)	(14.1)	(13.2)	(11.4)	(9.1)	(6.8)												
	B.H.P.	1.3	1.5	1.7	1.9	2.0	2.1	2.4	2.6	3.0	3.4	3.7												
N5	G.P.M.	108.0	103.0	98.0	92.5	87.0	82.0	76.0	72.0	63.0	56.0	51.0	40.0	34.0	18.0									
	M <sup>3</sup> /HR	(24.5)	(23.4)	(22.3)	(21.0)	(19.8)	(18.6)	(17.3)	(16.4)	(14.3)	(12.7)	(11.6)	(9.1)	(7.7)	(4.1)									
	B.H.P.	1.3	1.4	1.9	2.3	2.6	2.7	3.0	3.5	4.0	4.4	5.0	6.0	6.2	7.0									
P5	G.P.M.	148.0	142.0	136.0	132.0	127.0	121.0	116.0	111.0	100.0	93.0	86.0	75.0	64.0	45.0									
	M <sup>3</sup> /HR	(33.6)	(32.2)	(30.9)	(30.0)	(28.8)	(27.5)	(26.3)	(25.2)	(22.7)	(21.1)	(19.5)	(17.0)	(14.5)	(10.2)									
	B.H.P.	2.3	2.5	3.0	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.5	8.0	10.0									
D5T	G.P.M.	6.9	6.8	6.7	6.6	6.5	6.4	6.3	6.2	6.1	5.9	5.8	5.7	5.6	5.4	5.0	4.9	4.5	4.2	3.7	3.2	2.9	2.4	
	M <sup>3</sup> /HR	(1.6)	(1.5)	(1.5)	(1.5)	(1.5)	(1.5)	(1.4)	(1.4)	(1.4)	(1.3)	(1.3)	(1.3)	(1.3)	(1.2)	(1.1)	(1.1)	(1.0)	(1.0)	(0.8)	(0.7)	(0.7)	(0.5)	
	B.H.P.	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.1	1.1	1.1	1.2	1.2	1.3	1.3	1.4	1.5	1.7	1.9	1.9	2.0	
E5T	G.P.M.	10.3	10.1	10.0	9.9	9.8	9.7	9.6	9.5	9.3	9.0	8.8	8.7	8.4	8.0	7.6	7.5	6.9	6.2	5.7	4.9	4.3	3.7	
	M <sup>3</sup> /HR	(2.3)	(2.3)	(2.3)	(2.2)	(2.2)	(2.2)	(2.2)	(2.2)	(2.1)	(2.0)	(2.0)	(2.0)	(1.9)	(1.8)	(1.7)	(1.7)	(1.6)	(1.4)	(1.3)	(1.1)	(1.0)	(0.8)	
	B.H.P.	1.1	1.1	1.1	1.2	1.2	1.2	1.3	1.3	1.3	1.4	1.4	1.4	1.5	1.5	1.6	1.8	1.9	2.0	2.2	2.4	2.7	2.8	
F5T	G.P.M.	17.5	17.3	17.0	16.8	16.5	16.2	15.6	15.4	15.0	14.6	14.2	13.5	12.8	12.1	11.4	10.8	9.3	7.9	6.2	5.0	3.5	2.0	
	M <sup>3</sup> /HR	(4.0)	(3.9)	(3.9)	(3.8)	(3.7)	(3.7)	(3.5)	(3.5)	(3.4)	(3.3)	(3.2)	(3.1)	(2.9)	(2.7)	(2.6)	(2.5)	(2.1)	(1.8)	(1.4)	(1.1)	(0.8)	(0.5)	
	B.H.P.	1.2	1.2	1.2	1.2	1.2	1.3	1.3	1.3	1.4	1.5	1.5	1.6	1.8	1.9	2.0	2.1	2.5	2.7	3.1	3.4	3.8	3.9	
G5T	G.P.M.	22.3	22.0	21.7	21.5	21.2	21.0	20.9	20.5	20.0	19.5	19.1	18.8	18.3	17.5	16.8	16.2	15.0	13.7	12.5	11.5	10.0	8.8	
	M <sup>3</sup> /HR	(5.1)	(5.0)	(4.9)	(4.9)	(4.8)	(4.8)	(4.7)	(4.7)	(4.5)	(4.3)	(4.3)	(4.3)	(4.2)	(4.0)	(3.8)	(3.7)	(3.4)	(3.1)	(2.8)	(2.6)	(2.3)	(2.0)	
	B.H.P.	1.2	1.3	1.5	1.6	1.7	1.9	2.0	2.0	2.1	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.9	3.1	3.5	4.0	4.5	5.0	
H5T	G.P.M.	24.5	24.2	24.0	23.7	23.5	23.2	23.0	22.8	22.5	22.3	21.9	21.2	21.0	20.3	19.2	18.9	17.9	17.0	16.0	14.5	13.5	12.5	
	M <sup>3</sup> /HR	(5.6)	(5.5)	(5.5)	(5.4)	(5.3)	(5.3)	(5.2)	(5.2)	(5.1)	(5.1)	(5.0)	(4.8)	(4.8)	(4.6)	(4.4)	(4.3)	(4.1)	(3.9)	(3.6)	(3.3)	(3.1)	(2.8)	
	B.H.P.	2.0	2.1	2.2	2.2	2.3	2.4	2.5	2.7	2.8	2.9	3.0	3.0	3.1	3.2	3.5	3.6	4.0	4.2	4.5	5.0	5.2	6.0	
I5T	G.P.M.	37.6	37.5	37.1	36.4	36.5	36.0	36.0	35.5	34.5	33.2	32.6	32.0	31.9	31.0	28.5	28.0	27.0	25.0	23.0	21.3	19.0	17.2	
	M <sup>3</sup> /HR	(8.5)	(8.5)	(8.4)	(8.3)	(8.3)	(8.2)	(8.2)	(8.1)	(7.8)	(7.5)	(7.4)	(7.3)	(7.2)	(7.0)	(6.5)	(6.4)	(6.1)	(5.7)	(5.2)	(4.8)	(4.3)	(3.9)	
	B.H.P.	2.2	2.2	2.3	2.5	2.7	2.8	2.9	3.0	3.0	3.0	3.0	3.0	3.1	3.1	3.5	3.9	4.0	4.3	5.0	6.0	7.1	8.0	

NOTES:

- Above table shows the operating range of each size pump based on 20 (6096.0) feet suction lift at sea level. Greater suction lift is permissible but the performance will be altered slightly.
- Two pumps can be connected in series, thereby developing twice the head of a single pump requiring twice the horsepower. Usually the arrangement calls for both pumps mounted on one side of the motor; however, by using an extended shaft motor one pump can be mounted on either side.
- Pump efficiency can be computed by this formula  

$$\frac{\text{G.P.M.} \times \text{total head for water} \times \text{specific gravity}}{3960 \times \text{B.H.P.}}$$
- Performance based on pumping clear water at normal temperatures.
- Liquids of higher viscosity than water require slightly additional B.H.P.; also pump capacity is slightly reduced. Where viscosity exceeds 600" Saybolt Universal, refer to factory for recommendations.

SUCTION & DISCHARGE SIZES		
PUMP SIZE	SUCTION	DISCHARGE
J5-P5	2 (51)	1-1/2 (38)
D5T-I5T	1-1/4 (32)	1-1/4 (32)

**AURORA SERIES 110**

SELECTION TABLE

1750 R.P.M.

PUMP SIZES G6 THROUGH K6T

PUMP SIZE	TOTAL DYNAMIC HEAD	PSI	4.4	8.6	13	17.3	21.5	26	30	34.5	43	50	54	65	73.5	86.5	99.5	108	130	151.5	173	195	216.5	238
		(BARS)	(0.3)	(0.6)	(0.9)	(1.2)	(1.5)	(1.8)	(2.1)	(2.4)	(3.0)	(3.4)	(3.7)	(4.5)	(5.1)	(6.0)	(6.9)	(7.4)	(9.0)	(10.4)	(11.9)	(13.4)	(14.9)	(16.4)
		FEET (METERS)	10 (3)	20 (6)	30 (9)	40 (12)	50 (15)	60 (18)	70 (21)	80 (24)	100 (30)	115 (35)	125 (38)	150 (46)	170 (52)	200 (61)	230 (70)	250 (76)	300 (91)	350 (107)	400 (122)	450 (137)	500 (152)	550 (168)
G6	G.P.M.	105.0	102.0	97.0	92.5	90.0	88.0	83.0	80.0	74.0	69.0	67.0	60.5	56.0	50.0	42.0	40.0	30.0						
	M <sup>3</sup> /HR	(23.8)	(23.2)	(22.0)	(21.0)	(20.4)	(20.0)	(18.8)	(18.2)	(16.8)	(15.7)	(15.2)	(13.7)	(12.7)	(11.4)	(9.5)	(9.1)	(6.8)						
	B.H.P.	1.8	1.9	2.1	2.3	2.5	2.7	3.0	3.5	4.0	5.0	5.1	6.0	7.0	7.5	7.9	8.0	10.1						
H6	G.P.M.	131.0	127.0	123.0	118.0	116.0	111.0	109.0	102.0	98.0	93.0	89.0	81.0	75.0	60.0	30.0								
	M <sup>3</sup> /HR	(29.8)	(28.8)	(27.9)	(26.8)	(26.3)	(25.2)	(24.8)	(23.2)	(22.3)	(21.1)	(20.2)	(18.4)	(17.0)	(13.6)	(6.8)								
	B.H.P.	2.0	2.4	2.6	2.9	3.0	3.2	3.5	3.9	4.8	5.4	5.9	7.0	7.6	8.4	9.9								
J6	G.P.M.	174.0	167.0	157.0	151.0	146.0	141.0	135.0	128.0	120.0	111.0	108.0	97.5	87.0	73.0	58.0								
	M <sup>3</sup> /HR	(39.5)	(37.9)	(35.7)	(34.3)	(33.2)	(32.0)	(30.7)	(29.1)	(27.3)	(25.2)	(24.5)	(22.1)	(19.8)	(16.6)	(13.2)								
	B.H.P.	2.9	3.2	3.5	3.8	4.2	4.9	5.3	6.0	6.8	7.4	8.0	8.6	10.0	12.0	12.3								
K6	G.P.M.	203.0	191.0	178.0	170.0	163.0	157.0	152.0	145.0	135.0	130.0	124.0	114.0	106.0	98.0	69.0								
	M <sup>3</sup> /HR	(46.1)	(43.4)	(40.4)	(38.6)	(37.0)	(35.7)	(34.5)	(32.9)	(30.7)	(29.5)	(28.2)	(25.9)	(24.1)	(22.3)	(15.7)								
	B.H.P.	3.0	3.5	4.0	4.5	5.0	5.5	5.9	6.5	7.5	8.0	8.3	9.8	10.5	11.5	13.0								
D6T	G.P.M.	48.5	47.7	47.0	46.0	45.0	44.6	44.0	43.2	42.2	40.5	39.5	38.6	37.9	36.5	34.5	32.8	31.0	28.0	26.3	23.2	21.5	18.3	
	M <sup>3</sup> /HR	(11.0)	(10.8)	(10.7)	(10.4)	(10.2)	(10.1)	(10.0)	(9.8)	(9.6)	(9.2)	(9.0)	(8.8)	(8.6)	(8.3)	(7.8)	(7.4)	(7.0)	(6.4)	(6.0)	(5.3)	(4.9)	(4.2)	
	B.H.P.	1.3	1.5	1.8	2.0	2.2	2.4	2.5	2.6	2.7	2.8	2.8	2.9	3.0	3.5	3.7	4.0	4.7	5.2	5.5	6.5	7.2	7.9	
E6T	G.P.M.	64.0	63.0	62.5	62.0	60.5	59.0	58.0	57.5	56.5	55.5	55.0	52.5	51.0	49.0	46.0	45.0	41.5	39.0	36.0	32.0	29.0	26.0	
	M <sup>3</sup> /HR	(14.5)	(14.3)	(14.2)	(14.1)	(13.7)	(13.4)	(13.2)	(13.1)	(12.8)	(12.6)	(12.5)	(11.9)	(11.6)	(11.1)	(10.4)	(10.2)	(9.4)	(8.9)	(8.2)	(7.3)	(6.6)	(5.9)	
	B.H.P.	2.0	2.5	3.0	3.5	4.0	4.5	4.9	5.2	5.5	5.7	5.9	6.2	6.5	7.0	7.5	8.0	9.0	10.0	11.0	12.0	13.0	15.0	
F6T	G.P.M.	68.5	68.0	67.5	67.0	66.0	65.0	64.0	63.0	62.0	61.0	60.5	59.0	57.5	55.0	52.5	51.0	47.0	43.0	39.0	34.0	30.0	23.0	
	M <sup>3</sup> /HR	(15.6)	(15.4)	(15.3)	(15.2)	(15.0)	(14.8)	(14.5)	(14.3)	(14.1)	(13.9)	(13.7)	(13.4)	(13.1)	(12.5)	(11.9)	(11.6)	(10.7)	(9.8)	(8.9)	(7.7)	(6.8)	(5.2)	
	B.H.P.	6.2	6.5	6.7	6.0	7.0	7.2	7.4	7.5	7.6	7.6	7.6	8.0	8.1	8.2	8.5	9.5	10.0	11.0	12.0	13.0	13.5	14.9	
G6T	G.P.M.	103.0	101.0	100.0	98.0	94.0	92.0	91.0	89.0	87.0	84.0	82.0	78.0	75.0	72.0	67.5	65.0	59.0	52.5	48.0	43.0	37.0	32.0	
	M <sup>3</sup> /HR	(23.4)	(22.9)	(22.7)	(22.3)	(21.3)	(20.9)	(20.7)	(20.2)	(19.8)	(19.1)	(18.6)	(17.7)	(17.0)	(16.4)	(15.3)	(14.8)	(13.4)	(11.9)	(10.9)	(9.8)	(8.4)	(7.3)	
	B.H.P.	2.5	2.8	3.1	3.5	3.9	4.1	4.3	4.7	5.5	5.8	6.0	7.0	7.8	8.5	9.5	10.0	12.0	13.5	14.5	15.9	17.0	19.5	
H6T	G.P.M.	128.0	125.0	123.0	121.0	120.0	118.0	117.0	114.0	110.5	108.0	105.0	102.0	98.0	94.0	89.0	85.0	78.0	70.0	62.0	43.0	27.0		
	M <sup>3</sup> /HR	(29.1)	(28.4)	(27.9)	(27.5)	(27.3)	(26.8)	(26.6)	(25.9)	(25.1)	(24.5)	(23.8)	(23.2)	(22.3)	(21.3)	(20.2)	(19.3)	(17.7)	(14.1)	(9.8)	(6.1)			
	B.H.P.	3.5	3.9	4.5	4.8	5.0	5.2	5.7	6.0	6.5	7.0	7.5	8.0	8.5	9.8	11.0	11.5	13.0	15.2	17.3	18.0			
J6T	G.P.M.	175.0	170.0	165.0	161.0	157.5	152.0	150.0	148.0	140.5	137.0	134.0	127.0	122.0	116.0	109.0	104.0	95.0	83.0	70.5	55.0	32.0		
	M <sup>3</sup> /HR	(39.7)	(38.6)	(37.5)	(36.6)	(35.8)	(34.5)	(34.1)	(33.6)	(31.9)	(31.1)	(30.4)	(28.8)	(27.7)	(26.3)	(24.8)	(23.6)	(21.6)	(18.8)	(16.0)	(12.5)	(7.3)		
	B.H.P.	5.0	5.5	5.9	6.2	6.5	7.0	7.5	8.0	9.0	9.8	10.0	10.5	12.0	13.0	14.5	15.0	17.0	19.5	22.0	24.5	26.0		
K6T	G.P.M.	206.0	202.0	195.0	189.0	183.0	180.0	176.0	170.0	164.0	159.0	155.0	149.0	140.0	135.0	127.0	124.0	114.0	105.0	95.0	78.0	31.0		
	M <sup>3</sup> /HR	(46.8)	(45.9)	(44.3)	(42.9)	(41.6)	(40.9)	(40.0)	(38.6)	(37.2)	(36.1)	(35.2)	(33.8)	(31.8)	(30.7)	(28.8)	(28.2)	(25.9)	(23.8)	(21.6)	(17.7)	(7.0)		
	B.H.P.	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0	12.5	14.0	15.0	17.0	17.5	19.8	22.0	24.0	26.0	26.0		

NOTES:

- Above table shows the operating range of each size pump based on 20 (6096.0) feet suction lift at sea level. Greater suction lift is permissible but the performance will be altered slightly.
- Two pumps can be connected in series, thereby developing twice the head of a single pump requiring twice the horsepower. Usually the arrangement calls for both pumps mounted on one side of the motor; however, by using an extended shaft motor one pump can be mounted on either side.
- Pump efficiency can be computed by this formula  

$$\frac{\text{G.P.M.} \times \text{total head for water} \times \text{specific gravity}}{3960 \times \text{B.H.P.}}$$
- Performance based on pumping clear water at normal temperatures.
- Liquids of higher viscosity than water require slightly additional B.H.P.; also pump capacity is slightly reduced. Where viscosity exceeds 600" Saybolt Universal, refer to factory for recommendations.

SUCTION & DISCHARGE SIZES		
PUMP SIZE	SUCTION	DISCHARGE
G6-K6	3 (76)	2-1/2 (63)
D6T-F6T	2-1/2 (63)	2 (51)
G6T-K6T	3 (76)	2-1/2 (64)