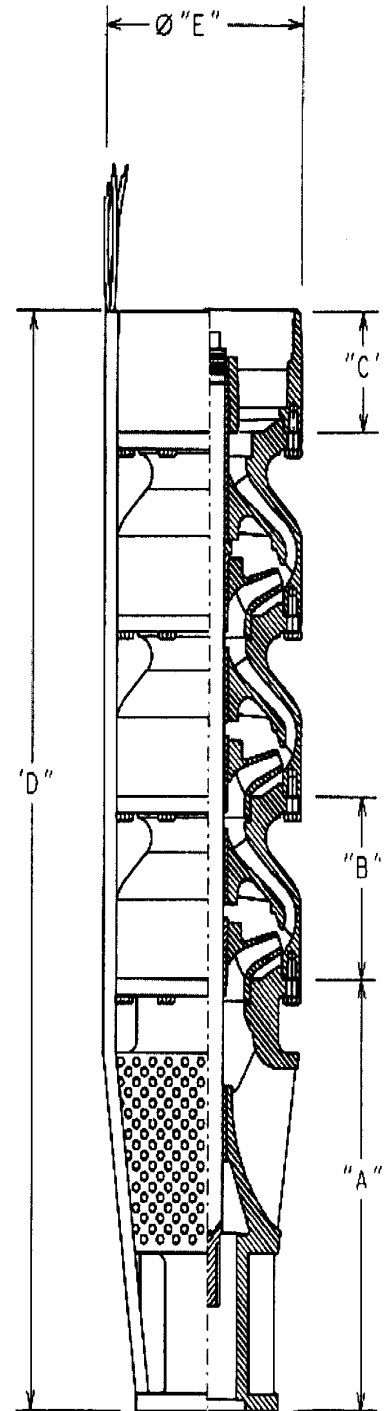


**Submersible Pump Data**

MODEL	NEMA	"A"	"B"	"C"	One Stage "D"	"E"	One Stage Shaft Length	Disch. Size	First Stage Weight	Add'l Stage Weight
5C	4	8.25	4.63	3.06	15.94	5.64	12.88	3,4	44	13
	6	10.56			18.25		13.63		49	
5T	4	8.25	4.81	3.06	16.13	5.64	13.06	3,4	44	13
	6	10.56			18.44		13.81		49	
5WA	4	8.38	4.00	3.06	15.44	5.64	13.25	3,4	44	13
	6	10.56			17.63		13.75		49	
6C	4	8.44			17.31		13.63		50	
	6	10.56	5.13	3.75	19.44	6.28	14.25	3,4,5	55	17
	8	12.50			21.38		15.38		60	
6DH	4	4.94	5.50	3.75	14.19	5.94	10.63	3,4,5	41	16
	6	9.75			19.00		13.75		53	
6RA	6	10.56	3.75	3.75	18.06	5.94	12.88	3,4	90	20
7C	6	12.88	6.38	3.63	22.88	7.50	18.50	5,6	75	28
	8	14.56			24.56		19.25		87	
7RA	6	8.44	4.50	3.63	16.56	7.90	11.50	3,4	105	28
7T	6	12.88	7.09	3.63	23.59	7.50	19.06	5,6	78	31
	8	14.56			25.28		19.94		90	
7WA	6	12.88	5.50	3.63	22.00	7.50	17.75	5,6	68	30
	8	14.56			23.69		18.50		80	
8DH	6	12.88	7.38	3.63	23.88	7.90	19.25	5,6	125	34
	8	14.56			25.56		20.13		137	
8I	6	12.88	6.38	3.63	22.88	7.90	18.13	5,6	90	33
	8	14.56			24.56		18.88		102	
8RA	6	12.88	5.00	3.63	21.50	7.90	17.25	4,5,6	165	36
	8	14.56			23.19		18.13		177	
8RJ	6	12.88	6.50	3.63	23.00	7.90	17.50	5,6	90	34
	8	14.56			24.69		18.88		102	
9RA	6	12.88	5.50	3.63	22.00	7.90	17.50	4,5,6	185	46
	8	14.56			23.69		18.50		197	
9RC	6	15.13			28.13		24.25		194	
	8	13.25	8.50	4.50	26.25	9.81	21.50	5,6,8	206	64
	10	13.25			26.25		20.50		206	
9T	6	15.13			28.88		25.00		200	
	8	13.25	9.25	4.50	27.00	9.81	22.25	5,6,8	212	70
	10	13.25			27.00		21.25		212	
9WA	6	15.13			26.25		22.38		158	
	8	13.25	6.63	4.50	24.38	9.81	19.63	5,6,8	170	58
	10	13.25			24.38		18.63		170	
10DH	8	13.25			27.00		22.00		185	
	10	13.25	9.25	4.50	27.00	10.00	22.00	6,8	190	65
	12	13.25			27.00		21.00		190	
10RA	6	15.13			26.25		22.38		280	
	8	13.25	6.63	4.50	24.38	10.00	19.63	4,6,8	285	76
	10	13.25			24.38		18.63		285	
10RJ	6	15.13			28.03		23.38		187	
	8	13.25	8.40	4.50	26.15	10.00	20.75	6,8	192	60
	10	13.25			26.15		19.75		192	
10WA	6	15.13			27.25		23.38		183	
	8	13.25	7.63	4.50	25.38	10.00	20.63	4,6,8	188	56
	10	13.25			25.38		19.63		188	

(All dimensions are in inches and weights in lbs.)

**SPECIFICATIONS AER SUBJECT TO CHANGE WITHOUT NOTICE**

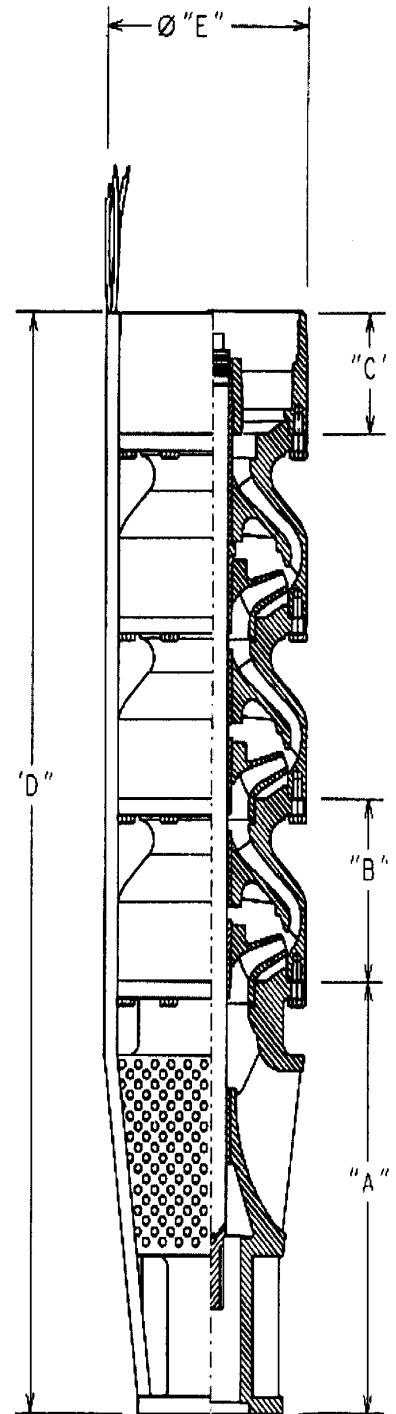


**Submersible Pump Data**

MODEL	NEMA	"A"	"B"	"C"	One Stage "D"	"E"	One Stage Shaft Length	Disch. Size	First Stage Weight	Add'l Stage Weight
11C	8	13.25			28.25		23.75			
	10	13.25	9.88	5.13	28.25	11.50	23.75	6,8,10	285	97
	12	13.25			28.25		22.75			
11RA	6	14.44			28.31		24.25			
	8	13.25	8.00	5.88	27.13	12.10	22.25	6,8,10	415	103
	10	13.25			27.13		21.25			
11WA	8	13.25			27.13		23.00			90
	10	13.25	8.75	5.13	27.13	11.50	23.00	5,6,8	275	
	12	13.25			27.13		22.00			
12C	8	19.00			36.25		30.25			
	10	19.00	11.00	6.25	36.25	12.10	30.25	6,8,10	345	124
	12	19.00			36.25		29.25			
12DH	8	19.00			36.50		31.25			
	10	19.00	11.25	6.25	36.50	12.10	31.25	6,8,10	360	129
	12	19.00			36.50		30.25			
12FR	8	16.50			35.25		30.00			
	10	16.50	12.50	6.25	35.25	12.10	30.00	10	350	129
	12	16.50			35.25		29.00			
12WA	8	13.25			28.13		23.25			
	10	13.25	9.00	5.88	28.13	12.10	23.25	6,8,10	250	95
	12	13.25			28.13		22.25			
12RJ	8	19.00			34.48		29.63			
	10	19.00	9.60	5.88	34.48	12.10	29.63	6,8,10	310	95
	12	19.00			34.48		28.63			
13C	8	20.00			37.38		32.50			
	10	20.00	11.13	6.25	37.38	13.75	32.50	8,10	425	150
	12	20.00			37.38		31.50			
13RA	8	20.00			34.75		29.50			
	10	20.00	9.50	5.25	34.75	13.75	29.50	8,10	505	164
	12	20.00			34.75		28.50			
14F	10	21.00			43.25		37.38			
	12	21.00	13.63	8.63	43.25	14.50	36.38	10,12	680	195
	14	21.00			43.25		36.38			
14H 14RH	10	21.00			43.25		37.38			
	12	21.00	13.63	8.63	43.25	14.50	36.38	10,12	680	195
	14	21.00			43.25		36.38			
14RJ	10	20.00			36.75		31.50			
	12	20.00	11.50	5.25	36.75	14.00	30.50	10,12	445	155
	14	21.00			37.75		31.50			

(All dimensions are in inches and weights in lbs.)

**SPECIFICATIONS AER SUBJECT TO CHANGE WITHOUT NOTICE**





**Submersible Cable Selection**

**SINGLE PHASE — MAXIMUM CABLE LENGTH  
(MOTOR TO SERVICE ENTRANCE)**

MOTOR RATING		COPPER WIRE SIZE (A)										
VOLTS	HP	14	12	10	8	6	4	2	0	00	000	0000
230	5			216	315	490	750	1142	1540			
	7½				270	362	553	842	1136	1420		
	10					250	425	650	875	1100		

**THREE PHASE — MAXIMUM CABLE LENGTH  
(MOTOR TO SERVICE ENTRANCE)**

MOTOR RATING		COPPER WIRE SIZE (A)										
VOLTS	HP	14	12	10	8	6	4	2	0	00	000	0000
230	5		250	390	620	960	1470	2230				
	7½			290	450	700	1070	1630	2200			
	10				340	520	800	1220	1640	2050		
	15					360	550	830	1130	1410	1680	
	20						420	640	860	1070	1280	1510
	25						340	520	700	870	1040	1230
460	30						420	570	710	850	1000	
	5	630	1000	1570	2470							
	7½	460	730	1150	1800	2810						
	10		550	850	1340	2090	3190					
	15			590	920	1430	2190	3340				
	20				700	1100	1670	2550	3440			
	25				570	890	1360	2070	2800	3500		
	30					730	1110	1690	2280	2850	3400	
	40						850	1300	1750	2190	2610	3070
	50						680	1040	1400	1750	2090	2450
	60							870	1180	1470	1760	2070
	75								950	1190	1420	1670
	100									890	1060	1240
125										1475	1875	
150											1525	

(A) For Aluminum Conductor Lengths — Multiply Lengths Above by 0.5. Maximum Allowable Length of Aluminum is Considerably Shorter Than Copper Wire of the Same Size.





# Goulds Model VAS Supplemental Data

## 3B.1A3

January 1, 1983  
(Sup. 3B.3W, 7/3/78)

### Column Friction Loss Chart

**SUBMERSIBLE PUMPS**  
Loss in Feet Per 100 ft. of Column  
0-2000 GPM

U.S. Gallons/Min.	COLUMN SIZE — INCHES							U.S. Gallons/Min.	
	2½	3	4	5	6	8	10		12
25									25
30									30
35	1.15								35
40	1.47								40
45	1.84								45
50	2.23	.76							50
60	3.14	1.06							60
70	4.18	1.41							70
80	5.36	1.82							80
90	6.70	2.26							90
100	8.19	2.76	.72						100
120	11.5	3.88	1.1						120
140	15.5	5.19	1.35						140
160	20.0	6.69	1.71	.56					160
180	25.2	8.40	2.41	.70					180
200	30.7	10.25	2.61	.85					200
220	37.1	12.3	3.13	1.01	.41				220
240	43.8	14.5	3.69	1.19	.48				240
260		16.9	4.30	1.38	.56				260
280		19.5	4.95	1.55	.65				280
300		22.1	5.62	1.82	.73				300
350		30.0	7.54	2.43	.98				350
400			9.75	3.13	1.25	.32			400
450			12.25	3.91	1.56	.40			450
500			14.95	4.78	1.91	.48			500
600				6.76	2.69	.69			600
700				9.10	3.60	.92	.29		700
800				11.75	4.63	1.17	.38		800
900				14.82	5.81	1.46	.47	.20	900
1000				18.15	7.10	1.79	.58	.24	1000
1100					8.52	2.15	.69	.29	1100
1200					10.1	2.53	.81	.34	1200
1300					11.7	2.94	.94	.40	1300
1400					13.58	3.39	1.10	.46	1400
1500						3.88	1.23	.52	1500
1600						4.39	1.39	.59	1600
1700						4.93	1.56	.66	1700
1800						5.51	1.75	.73	1800
1900						6.10	1.93	.81	1900
2000						6.73	2.14	.89	2000

(Over)

**3B.1A3**January 1, 1983  
(Sup. 3B.3W, 7/3/78)**Goulds Model VAS  
Supplemental Data****FRICITION LOSS PER 100' OF PLASTIC PIPE**

GPM	3"		4"		6"		8"		10"	
	Ft.	Lbs.	Ft.	Lbs.	Ft.	Lbs.	Ft.	Lbs.	Ft.	Lbs.
1										
2										
3										
4										
5										
6										
8										
10										
15										
20	.13	.056								
25	.19	.083								
30	.26	.114								
35	.35	.151	.09	.041						
40	.44	.191	.12	.052						
45	.55	.239	.15	.064						
50	.66	.288	.17	.076						
60	.93	.406	.25	.107						
70	1.24	.540	.33	.143						
80	1.58	.687	.41	.180						
90	1.98	.861	.52	.224						
100	2.42	1.05	.63	.272	.08	.036				
125	3.80	1.65	.95	.415	.13	.055				
150	5.15	2.24	1.33	.580	.18	.077				
175	6.90	3.00	1.78	.774	.23	.102				
200	8.90	3.87	2.27	.985	.30	.130				
250			3.36	1.46	.45	.195	.12	.051		
300			4.85	2.11	.63	.275	.17	.072		
350			6.53	2.84	.84	.367	.22	.095		
400					1.08	.471	.28	.121		
500					1.66	.720	.42	.182	.14	.059
550					1.98	.861	.50	.219	.16	.071
600					2.35	1.02	.59	.258	.19	.083
700							.79	.343	.26	.112
800							1.02	.443	.33	.143
900							1.27	.554	.41	.179
950									.46	.198
1000									.50	.218

**GOULDS PUMPS, INC.**  
TEXAS DIVISION

LITHO IN U.S.A.