

### BOWL TECHNICAL DATA

Bowl Size	6DRELC	6DRMC	6RKLC	6RKHC	6EM	6GM	6GH
Pump Shaft Diameter - Inches	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Bowl Weight, 1st Stage - Lbs.	100	100	100	100	50	60	60
Bowl Weight, Ea. Add. Stage - Lbs.	25	25	25	25	15	16	16
Allowable Shaft Stretch - Inches	0.36	0.36	0.50	0.50	0.27	0.25	0.25
Maximum Working Pressure - PSI	530	530	530	530	826	400	400
Maximum Hydro Pressure - PSI	795	795	795	795	1239	600	600
Impeller Eye Area - Sq. In.	2.86	3.38	3.88	4.32	4.10	6.28	6.28
Rotor Weight 1st/add stages - K <sub>a</sub>	8.0 / 3.3	8.4 / 3.7	8.3 / 3.6	7.9 / 3.2	4.0 / 4.0	9.3/3.8	9.3/3.8
Maximum Sphere Size - Inches	0.34	0.34	0.28	0.34	0.43	0.34	0.34
Thrust Factor - K <sub>t</sub>	1.50	1.60	2.40	2.50	1.74	2.20	2.10
WR <sup>2</sup>	0.03	0.03	0.03	0.03	0.05	0.03	0.03
Running Position (above seat) - In.	0.187	0.187	0.250	0.125	0.200	0.125	0.125
Submergence - In.	13	16	21	27	30	28	32
Max. Bowl Brg Clearance - In. Diam.	0.009	0.009	0.009	0.009	0.014	0.009	0.009
Max Wear Ring Clearance - In. Diam.	0.018	0.018	0.018	0.018	0.018	0.018	0.018
Max Bowl O.D. - In.	5.63	5.63	5.63	5.63	5.50	5.50	5.50
Suct Bell O.D. - In.	5.50	5.50	5.50	5.50	NA	5.50	5.50

Bowl Size	7EM	7CL	7CM	7CEH	8URHC	8EM	8RL
Pump Shaft Diameter - Inches	1.000	1.000	1.000	1.000	1.188	1.188	1.188
Bowl Weight, 1st Stage - Lbs.	71	84	84	84	107	82	140
Bowl Weight, Ea. Add. Stage - Lbs.	22	30	30	30	37	31	45
Allowable Shaft Stretch - Inches	0.39	0.25	0.25	0.25	0.44	0.37	0.375
Maximum Working Pressure - PSI	823	400	400	400	800	804	400
Maximum Hydro Pressure - PSI	1234	600	600	600	1200	1206	600
Impeller Eye Area - Sq. In.	6.05	7.56	7.56	7.56	4.11	6.93	10.4
Rotor Weight 1st/add stages - K <sub>a</sub>	4.4 / 4.4	9.7/4.7	9.7/4.7	9.7/4.7	17.3 / 7.7	5.25 / 5.25	19.0/11.0
Maximum Sphere Size - Inches	0.50	0.44	0.44	0.44	0.41	0.56	0.56
Thrust Factor - K <sub>t</sub>	2.56	3.70	3.00	3.70	2.20	2.32	4.30
WR <sup>2</sup>	0.09	0.1	0.16	0.1	0.13	0.17	0.16
Running Position (above seat) - In.	0.200	0.125	0.125	0.125	0.250	0.200	0.125
Submergence - In.	30	24	26	32	14	32	19
Max. Bowl Brg Clearance - In. Diam.	0.014	0.009	0.009	0.009	0.009	0.014	0.009
Max Wear Ring Clearance - In. Diam.	0.018	0.018	0.018	0.018	0.018	0.018	0.018
Max Bowl O.D. - In.	6.50	7.13	7.13	7.13	7.75	7.70	7.63
Suct Bell O.D. - In.	NA	7.50	7.50	7.50	7.50	8.00	9.50

Bowl Size	8RM	8RH	8TM	8TH	10EM	10TLC	10THC
Pump Shaft Diameter - Inches	1.188	1.188	1.188	1.188	1.437	1.500	1.500
Bowl Weight, 1st Stage - Lbs.	140	140	110	110	180	200	200
Bowl Weight, Ea. Add. Stage - Lbs.	45	45	32	32	49	73	73
Allowable Shaft Stretch - Inches	0.375	0.375	0.3	0.3	0.63	0.44	0.44
Maximum Working Pressure - PSI	400	400	350	350	475	450	450
Maximum Hydro Pressure - PSI	600	600	525	525	712	675	675
Impeller Eye Area - Sq. In.	10.40	10.40	12.90	12.90	11.19	16.53	19.53
Rotor Weight 1st/add stages - K <sub>a</sub>	19.0/11.0	19.0/11.0	18.2/8.7	18.2 / 8.7	15.8/15.8	34.6/18.3	32.2/15.9
Maximum Sphere Size - Inches	0.56	0.56	0.68	0.68	0.68	0.63	0.94
Thrust Factor - K <sub>t</sub>	4.30	4.30	3.00	2.50	3.80	6.00	10.00
WR <sup>2</sup>	0.16	0.16	0.16	0.16	0.52	0.63	0.54
Running Position (above seat) - In.	0.125	0.125	0.125	0.125	0.200	0.250	0.250
Submergence - In.	20	20	40	48	33	26	36
Max. Bowl Brg Clearance - In. Diam.	0.009	0.009	0.009	0.009	0.014	0.013	0.013
Max Wear Ring Clearance - In. Diam.	0.018	0.018	0.018	0.018	0.018	0.023	0.023
Max Bowl O.D. - In.	7.63	7.63	7.75	7.75	9.63	9.88	9.88
Suct Bell O.D. - In.	9.50	9.50	7.50	7.50	10.00	9.50	9.50

### BOWL TECHNICAL DATA

Bowl Size	10RKLC	10RKHC	10RKEH	10RKHS	10FHM	10FHH	11EM
Pump Shaft Diameter - Inches	1.500	1.500	1.500	1.500	1.688	1.688	1.437
Bowl Weight, 1st Stage - Lbs.	185	185	185	185	270	270	240
Bowl Weight, Ea. Add. Stage - Lbs.	67	67	67	67	110	110	75
Allowable Shaft Stretch - Inches	0.920	0.560	0.680	0.860	0.375	0.375	0.680
Maximum Working Pressure - PSI	530	700	700	700	300	300	488
Maximum Hydro Pressure - PSI	795	1050	1050	1050	450	450	732
Impeller Eye Area - Sq. In.	10.15	11.36	11.63	19.50	29.70	29.70	14.86
Rotor Weight 1st/add stages - K <sub>a</sub>	30.8/14.5	30.5/14.2	29.3/12.7	10.2/10.2	41.0/41.0	41.0/41.0	22.0/22.0
Maximum Sphere Size - Inches	0.47	0.63	0.84	0.63	0.75	1.25	0.81
Thrust Factor - K <sub>t</sub>	3.40	4.00	4.00	4.00	11.30	11.30	5.02
WR <sup>2</sup>	0.44	0.432	0.37	0.43	0.84	0.84	1.03
Running Position (above seat) - In.	0.437	0.437	0.437	0.437	0.125	0.125	0.200
Submergence - In.	25	30	20	30	23	23	34
Max. Bowl Brg Clearance - In. Diam.	0.013	0.013	0.013	0.013	0.013	0.013	0.014
Max Wear Ring Clearance - In. Diam.	0.023	0.023	0.023	0.023	0.023	0.023	0.018
Max Bowl O.D. - In.	9.75	9.75	9.75	9.75	9.75	9.75	10.86
Suct Bell O.D. - In.	9.50	9.50	9.50	9.50	11.50	11.50	11.38

Bowl Size	11EH	12RKBL	12RKBM	12RKBH	12RKBEH	12TLC	12THC
Pump Shaft Diameter - Inches	1.437	1.687	1.687	1.687	1.687	1.687	1.687
Bowl Weight, 1st Stage - Lbs.	236	278	278	278	278	328	328
Bowl Weight, Ea. Add. Stage - Lbs.	115	105	105	105	105	123	123
Allowable Shaft Stretch - Inches	0.80	0.70	0.70	0.70	0.70	0.50	0.50
Maximum Working Pressure - PSI	488	580	580	580	580	410	410
Maximum Hydro Pressure - PSI	732	870	870	870	870	615	615
Impeller Eye Area - Sq. In.	22.40	16.40	16.40	16.40	16.40	28.30	29.63
Rotor Weight 1st/add stages - K <sub>a</sub>	33.0/33.0	42.2/21.5	43.6/22.4	43.5/22.3	45.6/24.3	50.1/29.8	47.3/27.0
Maximum Sphere Size - Inches	0.88	0.88	0.88	0.88	0.88	1.12	1.06
Thrust Factor - K <sub>t</sub>	8.71	6.00	5.20	6.20	5.50	8.50	8.00
WR <sup>2</sup>	1.90	0.95	1.00	1.00	1.12	1.52	1.28
Running Position (above seat) - In.	0.200	0.312	0.312	0.312	0.312	0.125	0.125
Submergence - In.	30	20	25	25	27	33	46
Max. Bowl Brg Clearance - In. Diam.	0.014	0.013	0.013	0.013	0.013	0.013	0.013
Max Wear Ring Clearance - In. Diam.	0.018	0.023	0.023	0.023	0.023	0.023	0.023
Max Bowl O.D. - In.	11.48	11.75	11.75	11.75	11.75	11.75	11.75
Suct Bell O.D. - In.	11.38	11.50	11.50	11.50	11.50	11.50	11.50

Bowl Size	12EM	12RL	12RM	12RH	12FHL	12FHM	12FHH
Pump Shaft Diameter - Inches	1.687	1.938	1.938	1.938	1.938	1.938	1.938
Bowl Weight, 1st Stage - Lbs.	290	410	410	410	240	240	240
Bowl Weight, Ea. Add. Stage - Lbs.	105	145	145	145	130	130	130
Allowable Shaft Stretch - Inches	0.920	0.375	0.375	0.375	0.560	0.560	0.560
Maximum Working Pressure - PSI	380	400	400	400	400	400	400
Maximum Hydro Pressure - PSI	570	600	600	600	600	600	600
Impeller Eye Area - Sq. In.	19.40	25.50	25.50	25.50	27.50	37.40	37.40
Rotor Weight 1st/add stages - K <sub>a</sub>	29.5/29.5	58.0/31.0	58.0/31.0	58.0/31.0	51.0/27.0	51.0/27.0	51.0/27.0
Maximum Sphere Size - Inches	0.94	0.75	0.75	0.75	0.75	1.5	0.75
Thrust Factor - K <sub>t</sub>	6.33	9.40	9.40	9.40	13.20	13.20	13.20
WR <sup>2</sup>	1.62	1.30	1.30	1.30	1.68	1.68	1.68
Running Position (above seat) - In.	0.200	0.125	0.125	0.125	0.125	0.125	0.125
Submergence - In.	33	22	23	24	24	30	30
Max. Bowl Brg Clearance - In. Diam.	0.014	0.014	0.014	0.014	0.014	0.014	0.014
Max Wear Ring Clearance - In. Diam.	0.018	0.023	0.023	0.023	0.023	0.023	0.023
Max Bowl O.D. - In.	12.26	11.38	11.38	11.38	11.50	11.50	11.50
Suct Bell O.D. - In.	13.00	13.00	13.00	13.00	13.00	13.00	13.00

### BOWL TECHNICAL DATA

Bowl Size	12DEH	13CL	13CM	13EH	14RL/14RM	14RH	14M
Pump Shaft Diameter - Inches	1.687	1.687	1.687	1.687	2.188	2.188	1.938
Bowl Weight, 1st Stage - Lbs.	280	278	278	327	700	700	376
Bowl Weight, Ea. Add. Stage - Lbs.	120	116	116	157	265	265	138
Allowable Shaft Stretch - Inches	1.00	0.64	0.64	0.80	0.70	0.70	0.93
Maximum Working Pressure - PSI	400	400	400	380	400	400	433
Maximum Hydro Pressure - PSI	600	600	600	570	600	600	649
Impeller Eye Area - Sq. In.	34.94	25.50	25.50	28.40	41.20	41.20	24.80
Rotor Weight 1st/add stages - K <sub>a</sub>	18.0/18.0	46.5/25.7	46.5/25.7	43.3/43.3	95.0/53.0	95.0/53.0	37.5
Maximum Sphere Size - Inches	0.88	1.00	1.00	1.00	1.25 / 1.00	1.25	1.00
Thrust Factor - K <sub>t</sub>	12.50	13.50	15.20	12.02	15.50	15.50	8.41
WR <sup>2</sup>	1.40	1.45	1.45	3.11	4.15	4.15	3.55
Running Position (above seat) - In.	0.125	0.125	0.125	0.20	0.125	0.125	0.200
Submergence - In.	48	33	41	34	30	33	36
Max. Bowl Brg Clearance - In. Diam.	0.013	0.013	0.013	0.014	.010/.011	.010/.011	0.014
Max Wear Ring Clearance - In. Diam.	0.023	0.023	0.023	0.018	0.023	0.023	0.018
Max Bowl O.D. - In.	11.75	12.63	12.63	12.90	14.25	14.25	14.00
Suct Bell O.D. - In.	11.50	11.50	11.50	13.00	17.00	17.00	14.75

Bowl Size	14FHM/ 14FHH	15EH	16GM	17EM	17EH	18GL	18GM
Pump Shaft Diameter - Inches	2.188	1.937	2.187	2.187	2.187	2.187	2.187
Bowl Weight, 1st Stage - Lbs.	650	469	400	600	664	500	500
Bowl Weight, Ea. Add. Stage - Lbs.	240	200	250	250	274	350	350
Allowable Shaft Stretch - Inches	0.56	0.86	0.44	0.88	0.81	0.38	0.38
Maximum Working Pressure - PSI	400	476	300	460	452	300	300
Maximum Hydro Pressure - PSI	600	714	450	690	678	450	450
Impeller Eye Area - Sq. In.	56.00	37.80	51.20	56.95	50.47	59.00	59.00
Rotor Weight 1st/add stages - K <sub>a</sub>	85/45	53.4	98.4/61.3	65	70.1	131.0/93.0	131.0/93.0
Maximum Sphere Size - Inches	1.25	1.31	1.42	1.38	1.48	1.62	1.62
Thrust Factor - K <sub>t</sub>	23.20	14.47	22.00	21.08	18.54	27	27
WR <sup>2</sup>	2.90	4.91	7.20	7.50	7.62	10.20	10.20
Running Position (above seat) - In.	0.125	0.200	0.125	0.200	0.200	0.125	0.125
Submergence - In.	36 / 38	34	32	26	25	40	44
Max. Bowl Brg Clearance - In. Diam.	.010/.011	0.014	.010/.011	0.014	0.014	.010/.011	.010/.011
Max Wear Ring Clearance - In. Diam.	0.023	0.018	0.023	0.028	0.026	0.023	0.023
Max Bowl O.D. - In.	13.63	15.00	16.25	16.92	16.92	17.37	17.38
Suct Bell O.D. - In.	17	14.75	17.25	18	16.75	17.25	17.25

Bowl Size	19GM	19GH	20TML	21EH	22GM	22GH	23EHL
Pump Shaft Diameter - Inches	2.187	2.187	2.187	2.437	2.687	2.687	2.438
Bowl Weight, 1st Stage - Lbs.	610	610	698	900	1200	1200	961
Bowl Weight, Ea. Add. Stage - Lbs.	350	350	529	435	550	550	695
Allowable Shaft Stretch - Inches	0.62	0.62	0.44	0.94	0.56	0.56	0.88
Maximum Working Pressure - PSI	300	300	RTF	465	350	350	RTF
Maximum Hydro Pressure - PSI	450	450	RTF	697	525	525	RTF
Impeller Eye Area - Sq. In.	69.50	82.80	97.47	77.50	91.44	91.44	147.40
Rotor Weight 1st/add stages - K <sub>a</sub>	100.0/80.0	100.0/80.0	138.5/138.5	88.0/88.0	167.0/119.0	167/119	155/155
Maximum Sphere Size - Inches	1.25	1.25	RTF	1.62	1.42	1.42	1.89
Thrust Factor - K <sub>t</sub>	32	31	49	28.49	40	44.00	69.00
WR <sup>2</sup>	7.45	7.45	19.20	16.93	22.00	22.0	36.4
Running Position (above seat) - In.	0.125	0.125	0.12	0.12	0.250	0.25	0.10
Submergence - In.	32	32	36	31	30	30	44
Max. Bowl Brg Clearance - In. Diam.	.010/.011	.010/.011	.014	.017	.010/.011	.010/.011	.017
Max Wear Ring Clearance - In. Diam.	0.027	0.027	0.029	0.028	0.027	0.027	0.031
Max Bowl O.D. - In.	18.50	18.50	21.50	19.56	21.50	21.50	23.00
Suct Bell O.D. - In.	17.5/22.5	17.5/22.5	24.00	20.75	22.50	22.50	29.00

### BOWL TECHNICAL DATA

Bowl Size	23EHM	23EHH	24GM	27EM	27EML	30GM LT	30GM HVY
Pump Shaft Diameter - Inches	2.438	2.438	2.687	3.187	3.187	3.187	3.187
Bowl Weight, 1st Stage - Lbs.	961	961	1300	1388	1388	1860	1860
Bowl Weight, Ea. Add. Stage - Lbs.	695	695	680	940	940	1057	1057
Allowable Shaft Stretch - Inches	0.88	0.88	0.44	1.25	1.25	1.00	1.00
Maximum Working Pressure - PSI	RTF	RTF	RTF	377	377	300	RTF
Maximum Hydro Pressure - PSI	RTF	RTF	RTF	565	565	450	RTF
Impeller Eye Area - Sq. In.	145.60	145.60	115.00	139.36	139.36	146.12	146.12
Rotor Weight 1st/add stages - K <sub>a</sub>	155/155	155/155	217/217	225/225	225/225	177/177	177/177
Maximum Sphere Size - Inches	1.67	1.88	1.88	2.75	2.75	1.81	1.81
Thrust Factor - K <sub>t</sub>	69.00	69.00	48.00	48.63	48.63	70.00	70.00
WR <sup>2</sup>	36.4	36.4	40.0	60.0	60.0	48.0	48.0
Running Position (above seat) - In.	0.10	0.10	0.25	0.12	0.12	0.25	0.25
Submergence - In.	44	44	40	42	42	40	40
Max. Bowl Brg Clearance - In. Diam.	.017	.017	.010/.011	.010/.015	.010/.015	.010/.011	.010/.011
Max Wear Ring Clearance - In. Diam.	0.031	0.031	0.027	0.031	0.031	0.027	0.027
Max Bowl O.D. - In.	23.00	23.00	24.00	26.60	26.60	27.75	27.75
Suct Bell O.D. - In.	29.00	29.00	22.50	28.11	28.11	27.00	27.00

Bowl Size	30GH LT	30GH HVY	31EM	33EHH	34EH LT	34EH HVY	36GM
Pump Shaft Diameter - Inches	3.187	3.187	3.687	3.687	2.437	3.188	3.437
Bowl Weight, 1st Stage - Lbs.	1860	1860	1750	2279	3500	3500	2580
Bowl Weight, Ea. Add. Stage - Lbs.	1057	1057	1200	1765	1400	1400	2150
Allowable Shaft Stretch - Inches	1.00	1.00	1.00	1.25	0.38	0.38	1.20
Maximum Working Pressure - PSI	300	RTF	485	RTF	363	363	300
Maximum Hydro Pressure - PSI	450	RTF	727	RTF	544	544	450
Impeller Eye Area - Sq. In.	174.0	174.0	168.0	293.4	227.0	227.0	258.9
Rotor Weight 1st/add stages - K <sub>a</sub>	177/177	177/177	285/285	479/479	305/305	305/305	417/417
Maximum Sphere Size - Inches	2.36	2.36	3.25	2.36	3.25	3.25	2.41
Thrust Factor - K <sub>t</sub>	65.00	65.00	62.04	137.00	111.00	111.00	120.00
WR <sup>2</sup>	56.0	56.0	83.2	174.0	171.0	171.0	195.0
Running Position (above seat) - In.	0.25	0.25	0.18	0.18	0.18	0.18	0.25
Submergence - In.	47	47	47	58	80	80	39
Max. Bowl Brg Clearance - In. Diam.	.010/.011	.010/.011	.012/.018	.012/.018	.012/.018	.012.018	0.013
Max Wear Ring Clearance - In. Diam.	0.027	0.027	0.034	0.033	0.032	0.032	0.027
Max Bowl O.D. - In.	27.75	27.75	29.56	32.25	34.75	34.75	35.75
Suct Bell O.D. - In.	27.00	27.00	31.30	41.50	32.00	32.00	40.00

Bowl Size	36GH	38HH	38HOH	42RKHC	44GM	44GH	57EH
Pump Shaft Diameter - Inches	3.437	3.437	3.437	3.687	3.687	3.687	5.500
Bowl Weight, 1st Stage - Lbs.	2580	4000	4000	5905	8411	8411	11,500
Bowl Weight, Ea. Add. Stage - Lbs.	2150	2370	2370	3352	4657	4657	8800
Allowable Shaft Stretch - Inches	1.20	1.12	0.76	1.00	1.50	1.50	RTF
Maximum Working Pressure - PSI	300	320	320	310	300	350	318
Maximum Hydro Pressure - PSI	450	480	480	465	450	525	477
Impeller Eye Area - Sq. In.	308.4	205.0	205.00	270.00	361.29	480.00	832.6
Rotor Weight 1st/add stages - K <sub>a</sub>	417/417	320/320	320	425	687	707	1850
Maximum Sphere Size - Inches	2.41	2.50	2.50	1.50	2.85	3.75	3.2
Thrust Factor - K <sub>t</sub>	115.00	86.00	74	100	175	159	364
WR <sup>2</sup>	195.0	160.0	170	300	440	480	1440
Running Position (above seat) - In.	0.25	0.50	0.500	0.005	0.625	0.625	0.25
Submergence - In.	44	32	32	48	44	43	114
Max. Bowl Brg Clearance - In. Diam.	0.013	0.013	0.013	0.014	0.014	0.014	RTF
Max Wear Ring Clearance - In. Diam.	0.027	0.027	0.027	0.027	0.027	0.027	RTF
Max Bowl O.D. - In.	35.75	34.25	34.25	40.00	43.00	43.00	56.00
Suct Bell O.D. - In.	40.00	34.25	34.25	43.00	43.00	43.00	58.00

**ENCLOSING TUBE AND THREADED LINESHAFT TECHNICAL DATA**

Enclosing Tube		1-1/2"	2"	2-1/2"		3"	
Lineshaft Size		1"	1-1/4"	1-1/2"	1-11/16"	1-15/16"	2-3/16"
<b>Tube Technical Data</b>							
Schedule Number		80	80	80		80	
Maximum Setting (Feet)		RTF	RTF	RTF		RTF	
Outside Diameter (Inches)		1.900	2.375	2.875		3.500	
Inside Diameter (Inches)		1.500	1.939	2.323		2.900	
Wall Thickness (Inches)		.200	.218	.276		.300	
Weight Per Foot (Lbs./Ft.)		3.63	5.02	7.66		10.25	
Connector Bearing Length (Inches)		3-7/8	4-3/4	5		5-1/4	
Connector Bearing Weight (Lbs.)		1.5	3	5		7.5	
<b>Shaft Technical Data</b>							
Exact Lengths	5 Foot Section	5'0"	5'0"	5'0"	5'0"	5'0"	5'0"
	10 Foot Section	10'0"	10'0"	10'0"	10'0"	10'0"	10'0"
	20 Foot Section	20'0"	20'0"	20'0"	20'0"	20'0"	20'0"
Weight Per Foot (Lbs./Ft.)		2.76	4.18	6.01	7.60	10.02	12.78
Shaft Coupling Weight (Lbs.)		.5	1.6	1.8	2.3	4.5	5.6
Open Lineshaft Sleeve Thickness (Inches)		.093	.093	.093	.093	.093	.093
Open Lineshaft Sleeve Length (Inches)		7	7	7	7	7	7
Open Lineshaft Sleeve Weight (Lbs.)		.6	.7	.9	1.0	1.2	1.3
Open Lineshaft Bearing and Retainer Weight (Lbs.)	4" Column	1.4	1.4	N/A	N/A	N/A	N/A
	5" Column	2.2	2.2	2.6	N/A	N/A	N/A
	6" Column	2.7	2.7	2.9	2.9	N/A	N/A
	8" Column	3.7	3.7	4.2	4.2	4.8	N/A
	10" Column	6.9	6.9	6.9	6.9	6.9	6.9
	12" Column	9.8	9.8	9.8	9.8	9.8	9.8
	14" Column	16.0	16.0	16.0	16.0	16.0	16.0
	16" Column	N/A	N/A	26.5	26.5	26.5	26.5
20" Column & Larger		N/A	N/A	N/A	N/A	N/A	N/A

**ENCLOSING TUBE, THREADED LINESHAFT, BEARING AND RETAINER TECHNICAL DATA**

Enclosing Tube		3-1/2"	4"	5"			6"
Lineshaft Size		2-7/16"	2-11/16"	2-15/16"	3-3/16"	3-7/16"	3-11/16"
<b>Tube Technical Data</b>							
Schedule Number		80	80	80			80
Maximum Setting (Feet)		RTF	RTF	RTF			RTF
Outside Diameter (Inches)		4.000	4.500	5.563			6.625
Inside Diameter (Inches)		3.364	3.826	4.813			5.761
Wall Thickness (Inches)		.318	.337	.375			.432
Weight Per Foot (Lbs./Ft.)		12.50	14.98	20.78			28.57
Connector Bearing Length (Inches)		5-1/2	5-3/4	6			7-1/4
Connector Bearing Weight (Lbs.)		9	12	23			39
<b>Shaft Technical Data</b>							
Exact Lengths	5 Foot Section	5'0"	5'0"	5'0"	5'0"	5'0"	5'0"
	10 Foot Section	10'0"	10'0"	10'0"	10'0"	10'0"	10'0"
	20 Foot Section	20'0"	20'0"	20'0"	20'0"	20'0"	20'0"
Weight Per Foot (Lbs./Ft.)		15.87	19.31	23.06	27.16	31.58	36.35
Shaft Coupling Weight (Lbs.)		5.6	13	18	22	28	36
Open Lineshaft Sleeve Thickness (Inches)		.125	.125	.125	.125	.125	.125
Open Lineshaft Sleeve Length (Inches)		7	8.125	8.875	9.125	9.500	9.750
Open Lineshaft Sleeve Weight (Lbs.)		1.6	2.5	3.0	3.4	3.8	4.1
<b>Bearing and Retainer Technical Data</b>							
Open Lineshaft Bearing and Retainer Weight (Lbs.)	4" Column	N/A	N/A	N/A	N/A	N/A	N/A
	5" Column	N/A	N/A	N/A	N/A	N/A	N/A
	6" Column	N/A	N/A	N/A	N/A	N/A	N/A
	8" Column	N/A	N/A	N/A	N/A	N/A	N/A
	10" Column	7.5	N/A	N/A	N/A	N/A	N/A
	12" Column	10.5	N/A	N/A	N/A	N/A	N/A
	14" Column	16.0	16.0	N/A	N/A	N/A	N/A
	16" Column	26.5	26.5	26.5	N/A	N/A	N/A
	20" Column & Larger	N/A	Bearing Retainers For These Sizes Are Fabricated In The Column				

**ENCLOSING TUBE AND KEYED LINESHAFT TECHNICAL DATA**

Enclosing Tube		3-1/2"		4"		5"	
Lineshaft Size		1-11/16"	1-15/16"	2-3/16"	2-7/16"	2-11/16	2-15/16
<b>Tube Technical Data</b>							
Schedule Number		80		80		80	
Maximum Setting (Feet)		RTF		RTF		RTF	
Outside Diameter (Inches)		4.000		4.500		5.563	
Inside Diameter (Inches)		3.364		3.826		4.813	
Wall Thickness (Inches)		.318		.337		.375	
Weight Per Foot (Lbs./Ft.)		12.50		14.98		20.78	
Connector Bearing Length (Inches)		5-1/2		5-3/4		6	
Connector Bearing Weight (Lbs.)		9		12		23	
<b>Shaft Technical Data</b>							
Exact Lengths	5 Foot Section	5'0"	5'0"	5'0"	5'0"	5'0"	5'0"
	10 Foot Section	10'0"	10'0"	10'0"	10'0"	10'0"	10'0"
	20 Foot Section	20'0"	20'0"	20'0"	20'0"	20'0"	20'0"
Weight Per Foot (Lbs./Ft.)		7.60	10.02	12.78	15.87	19.31	23.06
Shaft Coupling Weight (Lbs.)		20.3	24.7	27.6	45.5	48.3	50.1
Open Lineshaft Sleeve Thickness (Inches)		.093	.093	.093	.122	.125	.125
Open Lineshaft Sleeve Length (Inches)		7	7	7	7	8.125	8.875
Open Lineshaft Sleeve Weight (Lbs.)		1.0	1.2	1.3	1.6	2.5	3.0
Open Lineshaft Bearing and Retainer Weight (Lbs.)	4" Column	N/A	N/A	N/A	N/A	N/A	N/A
	5" Column	N/A	N/A	N/A	N/A	N/A	N/A
	6" Column	2.9	N/A	N/A	N/A	N/A	N/A
	8" Column	4.2	4.8	N/A	N/A	N/A	N/A
	10" Column	6.9	6.9	6.9	7.5	N/A	N/A
	12" Column	9.8	9.8	9.8	10.5	N/A	N/A
	14" Column	16.0	16.0	16.0	16.0	16.0	N/A
	16" Column	26.5	26.5	26.5	26.5	26.5	26.5
	20" Column & Larger	N/A	Bearing Retainers For These Sizes Are Fabricated In The Column				

**ENCLOSING TUBE AND KEYED LINESHAFT TECHNICAL DATA**

Enclosing Tube		6"		
Lineshaft Size	3-3/16"	3-7/16	3-11/16	
<b>Tube Technical Data</b>				
Schedule Number	80			
Maximum Setting (Feet)	RTF			
Outside Diameter (Inches)	6.625			
Inside Diameter (Inches)	5.761			
Wall Thickness (Inches)	.432			
Weight Per Foot (Lbs./Ft.)	28.57			
Connector Bearing Length (Inches)	5-1/2			
Connector Bearing Weight (Lbs.)	9			
<b>Shaft Technical Data</b>				
Exact Lengths	5 Foot Section	5'0"	5'0"	5'0"
	10 Foot Section	10'0"	10'0"	10'0"
	20 Foot Section	20'0"	20'0"	20'0"
Weight Per Foot (Lbs./Ft.)	27.16	31.58	36.35	
Shaft Coupling Weight (Lbs.)	50.1	52.76	54.6	
Open Lineshaft Sleeve Thickness (Inches)	.125	.125	.125	
Open Lineshaft Sleeve Length (Inches)	9.125	9.500	9.750	
Open Lineshaft Sleeve Weight (Lbs.)	3.4	3.8	4.1	
Open Lineshaft Bearing and Retainer Weight (Lbs.)	4" Column	N/A	N/A	N/A
	5" Column	N/A	N/A	N/A
	6" Column	N/A	N/A	N/A
	8" Column	N/A	N/A	N/A
	10" Column	N/A	N/A	N/A
	12" Column	N/A	N/A	N/A
	14" Column	N/A	N/A	N/A
	16" Column	N/A	N/A	N/A
20" Column & Larger	Bearing Retainers For These Sizes Are Fabricated In The Column			

**COLUMN TECHNICAL DATA**

Data	4"	5"	6"	8"	10"	12"	14"
<b>.250 WALL PIPE</b>							
Schedule Number	N/A	N/A	N/A	20	20	20	10
Outside Diameter (Inches)	N/A	N/A	6.625	8.625	10.750	12.750	14.000
Inside Diameter (Inches)	N/A	N/A	6.125	8.125	10.250	12.250	13.500
Wall Thickness (Inches)	N/A	N/A	.250	.250	.250	.250	.250
Weight Per Foot (Lbs./Ft.)	N/A	N/A	17.02	22.36	28.04	33.38	36.71

<b>AWWA STANDARD WALL PIPE</b>							
Schedule Number	40	40	40	30	N/A	N/A	30
Outside Diameter (Inches)	4.500	5.563	6.625	8.625	10.750	12.750	14.000
Inside Diameter (Inches)	4.026	5.047	6.065	8.071	10.192	12.000	13.250
Wall Thickness (Inches)	.237	.258	.280	.277	.279	.375	.375
Weight Per Foot (Lbs./Ft.)	10.79	14.62	18.97	24.70	31.20	49.56	54.60

<b>.250 WALL AND AWWA STANDARD WALL PIPE</b>									
Exact Column Lengths	Open Lineshaft Construction	5' Section	4'11-1/2"	4'11-1/4"	4'11-1/4"	4'11-1/4"	4'11-1/4"	4'11-1/4"	4'11-1/4"
		10' Section	9'11-1/2"	9'11-1/4"	9'11-1/4"	9'11-1/4"	9'11-1/4"	9'11-1/4"	9'11-1/4"
	Enclosed Lineshaft Construction	5' Section	5'0"	5'0"	5'0"	5'0"	5'0"	5'0"	5'0"
		10' Section	10'0"	10'0"	10'0"	10'0"	10'0"	10'0"	10'0"
		20' Section	20'0"	20'0"	20'0"	20'0"	20'0"	5'0"	20'0"
Coupling Outside Diameter (Inches)		5.00		6.25	7.31	9.56	11.69	13.88	15.00
Coupling Weight (Lbs.)		5.65		10.74	12.70	23.90	32.58	47.21	62.00
Flange Outside Diameter (Inches)		6.63		7.63	9.25	11.75	13.88	16.38	17.63
Flange Weight (Lbs.)		6.01		7.68	11.72	17.98	21.73	29.81	35.60

Data	16"	18"	20"	24"	30"	36"
<b>.250 WALL PIPE</b>						
Schedule Number	10	10	10	10	N/A	N/A
Outside Diameter (Inches)	16.000	18.000	20.000	24.000	N/A	N/A
Inside Diameter (Inches)	15.500	17.500	19.500	23.500	N/A	N/A
Wall Thickness (Inches)	.250	.250	.250	.250	N/A	N/A
Weight Per Foot (Lbs./Ft.)	42.05	47.39	52.73	63.41	N/A	N/A

<b>AWWA STANDARD WALL PIPE</b>						
Schedule Number	30	N/A	20	20	N/A	N/A
Outside Diameter (Inches)	16.000	18.000	20.000	24.000	30.000	36.000
Inside Diameter (Inches)	15.250	17.250	19.250	23.250	29.250	32.250
Wall Thickness (Inches)	.375	.375	.375	.375	.375	.375
Weight Per Foot (Lbs./Ft.)	62.50	70.53	78.60	94.62	119.00	143.34

<b>.250 WALL AND AWWA STANDARD WALL PIPE</b>								
Exact Column Lengths	Open Lineshaft Construction	5' Section	4'11-1/4"	5'0"	5'0"	5'0"	5'0"	5'0"
		10' Section	9'11-1/4"	10'0"	10'0"	10'0"	10'0"	10'0"
	Enclosed Lineshaft Construction	5' Section	5'0"	5'0"	5'0"	5'0"	5'0"	5'0"
		10' Section	10'0"	10'0"	10'0"	10'0"	10'0"	10'0"
		20' Section	20'0"	20'0"	20'0"	20'0"	20'0"	
Flange Outside Diameter		20.00		22.00	24.250	28.500	34.500	40.500
Flange Weight (Lbs.)		44.72		49.69	63.72	86.71	131.11	155.50

## DISCHARGE HEADS TECHNICAL DATA

### SDC AND LADC DISCHARGE HEADS

DATA		12X4 LADC	16-1/2x6 SDC	16-1/2x 8 SDC	16-1/2x10 SDC	20x12 SDC
Discharge Flange Size (Inches)		4	6	8	10	12
Available Threaded Column Size (Inches)		4	6	8	10	12
Available Flanged Column Size (Inches)		N/A	N/A	N/A	N/A	N/A
NEMA Driver "AK" Size (Inches)		8-1/4	8-1/4, 13-1/2	8-1/4, 13-1/2	8-1/4, 13-1/2	13-1/2
Maximum Discharge Pressure (PSI) (Non-Shock Rating At Room Temperature)	125 lb. Flange	175	175	175	175	175
	250 lb. Flange	400	N/A	N/A	N/A	N/A
Weight (Including Packing Box) (Lbs.)		311	432	456	499	657

**Reference: Assembly Drawing 110MA002 and 110MA004**

### LAD DISCHARGE HEADS

DATA		16-1/2x6	16-1/2x8	20x10
Discharge Flange Size (Inches)		6	8	10
Available Threaded Column Size (Inches)		4,6,8,10,12	4,6,8,10,12	4,6,8,10,12
Available Flanged Column Size (Inches)		4,6,8,10	4,6,8,10	4,6,8,10
NEMA Driver "AK" Size (Inches)		8-1/2, 13-1/2	8-1/4, 13-1/2	13-1/2
Maximum Discharge Pressure (PSI) (Non-Shock Rating At Room Temperature)	125 lb. Flange	175	175	175
	250 lb. Flange	400*	400*	400*
Weight (Including Packing Box) (Lbs.)		487	544	682

**Reference: Assembly Drawing 110MA001**

### LV DISCHARGE HEADS

DATA		20X12	24-1/2X14
Discharge Flange Size (Inches)		12	14
Available Threaded Column Size (Inches)		10,12	12,14
Available Flanged Column Size (Inches)		10,12	12,14
NEMA Driver "AK" Size (Inches)		13-1/2	13-1/2
Maximum Discharge Pressure (PSI) (Non-Shock Rating At Room Temperature)	125 lb. Flange	175	175
	250 lb. Flange	N/A	N/A
Weight (Including Packing Box) (Lbs.)		1015	1660

**Reference: Assembly Drawing 110MA003**

**\*ON WATER LUBRICATED APPLICATIONS, A 400 PSI PACKING BOX IS INCLUDED.**

## DISCHARGE HEADS TECHNICAL DATA

### LS DISCHARGE HEADS

Data		12x4	12x6	16-1/2x6	12x8	16-1/2x8	20x8	12x10
Discharge Flange Size (Inches)		4	6	6	8	8	8	10
Available Threaded Column Size (Inches)		4,6	4,6,8	4,6,8	6,8,10	4,6,8,10	4,6,8,10	8,10,12
Available Flanged Column Size (Inches)		4,6	4,6,8	4,6,8	6,8,10	4,6,8,10	4,6,8,10	8,10,12
NEMA Driver "AK" Size (Inches)		8-1/4	13-1/2	13-1/2	8-1/4	13-1/2	13-1/2	8-1/4
Maximum Discharge Pressure (PSI) (Non-Shock Rating At Room Temp)	150 lb. Flange	175	175	175	175	175	175	175
	300 lb. Flange	400*	400*	400*	400*	400*	400*	400*
Weight (Including Packing Box) (Lbs.)		313	324	341	342	366	426	448

Data		16-1/2x10	20x10	12x12	16-1/2x12	20x12	12x14
Discharge Flange Size (Inches)		10	10	10	12	12	14
Available Threaded Column Size (Inches)		8,10,12	8,10,12	8,10,12	10,12	10,12	14
Available Flanged Column Size (Inches)		8,10,12	8,10,12	8,10,12	10,12	10,12	14
NEMA Driver "AK" Size (Inches)		13-1/2	13-1/2	8-1/4	13-1/2	13-1/2	8-1/4
Maximum Discharge Pressure (PSI) (Non-Shock Rating At Room Temp)	150 lb. Flange	175	175	175	175	175	175
	300 lb. Flange	400*	400*	400*	400*	400*	400*
Weight (Including Packing Box) (Lbs.)		457	518	551	617	678	706

Data		16-1/2x14	20x14	24-1/2x14	12x16	16-1/2x16
Discharge Flange Size (Inches)		14	14	16	16	16
Available Threaded Column Size (Inches)		14	14	16	16	16
Available Flanged Column Size (Inches)		14	14	16	16	16
NEMA Driver "AK" Size (Inches)		13-1/2	13-1/2	13-1/2	8-1/4	13-1/2
Maximum Discharge Pressure (PSI) (Non-Shock Rating At Room Temp)	150 lb. Flange	175	175	175	175	175
	300 lb. Flange	400*	400*	400*	400*	400*
Weight (Including Packing Box) (Lbs.)		754	791	855	895	902

Data		20x16	24-1/2x16
Discharge Flange Size (Inches)		16	16
Available Threaded Column Size (Inches)		16	16
Available Flanged Column Size (Inches)		16	16
NEMA Driver "AK" Size (Inches)		13-1/2	13-1/2
Maximum Discharge Pressure (PSI) (Non-Shock Rating At Room Temp)	150 lb. Flange	175	175
	300 lb. Flange	400*	400*
Weight (Including Packing Box) (Lbs.)		1006	1088

**Reference: Assembly Drawing 110MA012 and 110MA013**

**\*ON WATER LUBRICATED APPLICATIONS, A 400 PSI PACKING BOX IS INCLUDED.**

## DISCHARGE HEADS TECHNICAL DATA

### FSC DISCHARGE HEADS

Data		12x8	16-1/2x8	20x8	12X10	16-1/2x10	20X10
Discharge Flange Size (Inches)		8	8	8	10	10	10
Available Threaded Column Size (Inches)		8	8	8	10	10	10
Available Flanged Column Size (Inches)		8	8	8	10	10	10
NEMA Driver "AK" Size (Inches)		8-1/4	13-1/2	13-1/2	8-1/4	13-1/2	13-1/2
Maximum Discharge Pressure (PSI) (Non-Shock Rating At Room Temp)	150 lb. Flange	175	175	175	175	175	175
	300 lb. Flange	400*	400*	400*	400*	400*	400*
Weight (Including Packing Box) (Lbs.)		370	420	485	486	492	557

Data		12X12	16-1/2X12	20X12	12X14	16-1/2X14	20X14
Discharge Flange Size (Inches)		12	12	12	14	14	14
Available Threaded Column Size (Inches)		12	12	12	14	14	14
Available Flanged Column Size (Inches)		12	12	12	14	14	14
NEMA Driver "AK" Size (Inches)		8-1/4	13-1/2	13-1/2	8-1/4	13-1/2	13-1/2
Maximum Discharge Pressure (PSI) (Non-Shock Rating At Room Temp)	150 lb. Flange	175	175	175	175	175	175
	300 lb. Flange	400*	400*	400*	400*	400*	400*
Weight (Including Packing Box) (Lbs.)		605	671	732	786	834	871

Data		24-1/2X14	12X16	16-1/2X16	20x16	24-1/2x16
Discharge Flange Size (Inches)		14	16	16	16	16
Available Threaded Column Size (Inches)		14	N/A	N/A	N/A	N/A
Available Flanged Column Size (Inches)		14	16	16	16	16
NEMA Driver "AK" Size (Inches)		13-1/2	8-1/4	13-1/2	22	22
Maximum Discharge Pressure (PSI) (Non-Shock Rating At Room Temp)	150 lb. Flange	175	175	175	175	175
	300 lb. Flange	400*	400*	400*	400*	400*
Weight (Including Packing Box) (Lbs.)		934	992	1000	1103	1185

**Reference: Assembly Drawing 110MA006 and 110MA007**

**\*ON WATER LUBRICATED APPLICATIONS A 400 PSI PACKING BOX IS INCLUDED.**

## DISCHARGE HEADS TECHNICAL DATA

### L HEADS

Data		12x4	16-1/2x4	12x6	16-1/2x6	12x8	16-1/2x8
Discharge Flange Size (Inches)		4	4	6	6	8	8
Available Threaded Column Size (Inches)		4	4	6	6	8	8
Available Flanged Column Size (Inches)		4	4	6	6	8	8
Available Base Flange Size (Inches)		12, 14	12, 14, 16	12, 14, 16	12, 14, 16	16	16, 18, 20
NEMA Driver "AK" Size (Inches)		8-1/4	13-1/2	8-1/4	13-1/2	8-1/4	13-1/2
Maximum Discharge Pressure (PSI) (Non-Shock Rating At Room Temperature)	150 lb. Flange	175	175	175	175	175	175
	300 lb. Flange	400*	400*	400*	400*	400*	400*
Weight (Including Packing Box) (Lbs.)		497	537	535	575	502	605

Data		20x8	16-1/2x10	20x10	24-1/2x10	16-1/2x12
Discharge Flange Size (Inches)		8	10	10	10	12
Available Threaded Column Size (Inches)		8	10	10	10	12
Available Flanged Column Size (Inches)		8	10	10	10	12
Available Base Flange Size (Inches)		16, 18, 20	18, 20, 24	18, 20, 24	24	20, 24, 30
NEMA Driver "AK" Size (Inches)		13-1/2	13-1/2	13-1/2	13-1/2	13-1/2
Maximum Discharge Pressure (PSI) (Non-Shock Rating At Room Temperature)	150 lb. Flange	175	175	175	175	175
	300 lb. Flange	400*	400*	400*	400*	400*
Weight (Including Packing Box) (Lbs.)		615	696	728	802	871

Data		20x12	24-1/2x12	16-1/2x14	20x14	24-1/2x14
Discharge Flange Size (Inches)		12	12	14	14	14
Available Threaded Column Size (Inches)		12	12	14	14	14
Available Flanged Column Size (Inches)		12	12	14	14	14
Available Base Flange Size (Inches)		20, 24, 30	24, 30	24, 30, 36	30, 36	24, 30, 36
NEMA Driver "AK" Size (Inches)		13-1/2	13-1/2	13-1/2	13-1/2	13-1/2
Maximum Discharge Pressure (PSI) (Non-Shock Rating At Room Temperature)	150 lb. Flange	175	175	175	175	175
	300 lb. Flange	400*	400*	400*	400*	400*
Weight (Including Packing Box) (Lbs.)		930	995	1718	1750	1815

Data		16-1/2x16	20x16	24-1/2x16	30-1/2x16
Discharge Flange Size (Inches)		16	16	16	16
Available Threaded Column Size (Inches)		NA	NA	NA	NA
Available Flanged Column Size (Inches)		16	16	16	16
Available Base Flange Size (Inches)		30, 36	30, 36	30, 36	36
NEMA Driver "AK" Size (Inches)		13-1/2	13-1/2	13-1/2	22
Maximum Discharge Pressure (PSI) (Non-Shock Rating At Room Temperature)	150 lb. Flange	175	175	175	175
	300 lb. Flange	400*	400*	400*	400*
Weight (Including Packing Box) (Lbs.)		1802	1840	1955	1970

**Reference: Assembly Drawing 110MA012**

**\*ON WATER LUBRICATED APPLICATIONS A 400 PSI PACKING BOX IS INCLUDED.**

## DISCHARGE HEADS TECHNICAL DATA

### T HEADS

Data		12x4	16-1/2x4	12x6	16-1/2x6	12x8	16-1/2x8
Discharge Flange Size (Inches)		4	4	6	6	8	8
Available Suction Flange Size (Inches)		6	6	8	8,10	10	10,12
Available Flanged Column Size (Inches)		4	4	6	6	8	8
Available Base Flange Size (inches)		12,14	12,14	12,14,16	12,14,16	16	16,18,20
NEMA Driver "AK" Size (Inches)		8-1/4	13-1/2	8-1/4	13-1/2	8-1/4	13-1/2
Maximum Discharge Pressure (PSI) (Non-Shock Rating At Room Temperature)	150 lb. Flange	175	175	175	175	175	175
	300 lb. Flange	400*	400*	400*	400*	400*	400*
Weight (Including Packing Box) (Lbs.)		560	600	599	639	577	840

Data		20x8	16-1/2x10	20x10	24-1/2x10	16-1/2x12
Discharge Flange Size (Inches)		8	10	10	10	12
Suction Flange Size (Inches)		10,12	12,14	12,14	12,14	14,16,20
Available Flanged Column Size (Inches)		8	10	10	10	12
Available Base Flange Size (inches)		16,18,20	18,20,24	18,20,24	24	20,24,30
NEMA Driver "AK" Size (Inches)		13-1/2	13-1/2	13-1/2	13-1/2	13-1/2
Maximum Discharge Pressure (PSI) (Non-Shock Rating At Room Temperature)	150 lb. Flange	175	175	175	175	175
	300 lb. Flange	400*	400*	400*	400*	400*
Weight (Including Packing Box) (Lbs.)		855	967	972	1082	1115

Data		20x12	24-1/2x12	16-1/2x14	20x14	24-1/2x14
Discharge Flange Size (Inches)		12	12	14	14	14
Suction Flange Size (Inches)		14,16,20	14,16,20	16,20,24	16,20,24	16,20,24
Available Flanged Column Size (Inches)		12	12	14	14	10
Available Base Flange Size (inches)		20,24,30	24,30	24,30,36	24,30,36	30,36
NEMA Driver "AK" Size (Inches)		13-1/2	13-1/2	13-1/2	13-1/2	13-1/2
Maximum Discharge Pressure (PSI) (Non-Shock Rating At Room Temperature)	150 lb. Flange	175	175	175	175	175
	300 lb. Flange	400*	400*	400*	400*	400*
Weight (Including Packing Box) (Lbs.)		1130	1240	2723	2730	2840

Data		16-1/2x16	20x16	24-1/2x16	30-1/2x16
Discharge Flange Size (Inches)		16	16	16	16
Suction Flange Size (Inches)		20,24,30	20,24,30	20,24,30	24,30
Available Flanged Column Size (Inches)		16	16	16	16
Available Base Flange Size (inches)		30,36	30,36	30,36	30,36
NEMA Driver "AK" Size (Inches)		13-1/2	13-1/2	13-1/2	22
Maximum Discharge Pressure (PSI) (Non-Shock Rating At Room Temperature)	150 lb. Flange	175	175	175	175
	300 lb. Flange	400*	400*	400*	400*
Weight (Including Packing Box) (Lbs.)		2755	2762	2872	3050

**Reference: Assembly Drawing 110MA014**

**\*ON WATER LUBRICATED APPLICATIONS A 400 PSI PACKING BOX IS INCLUDED.**

## DISCHARGE HEADS TECHNICAL DATA

### BB AND UF HEADS

Data		12x4	12x6	16-1/2x6	12x8	16-1/2x8
Discharge Flange Size (Inches)		4	6	6	8	8
Available Threaded Column Size (Inches)		4	6	6	8	8
Available Flanged Column Size (Inches)		4	6	6	8	8
NEMA Driver "AK" Size (Inches)		8-1/4	8-1/4	13-1/2	8-1/4	13-1/2
Maximum Discharge Pressure (PSI) (Non-Shock Rating At Room Temperature)	150 lb. Flange	175	175	175	175	175
	300 lb. Flange	400*	400*	400*	400*	400*
Weight (Including Packing Box) (Lbs.)		406	464	574	576	686

Data		12x10	16-1/2x10	20x10	12x12	16-1/2x12
Discharge Flange Size (Inches)		10	10	10	12	12
Available Threaded Column Size (Inches)		10	10	10	12	12
Available Flanged Column Size (Inches)		10	10	10	12	12
NEMA Driver "AK" Size (Inches)		8-1/4	13-1/2	13-1/2	8-1/4	13-1/2
Maximum Discharge Pressure (PSI) (Non-Shock Rating At Room Temperature)	150 lb. Flange	175	175	175	175	175
	300 lb. Flange	400*	400*	400*	400*	400*
Weight (Including Packing Box) (Lbs.)		780	890	964	845	955

Data		20x12	12x14	16-1/2x14	20x14	24-1/2x14
Discharge Flange Size (Inches)		12	14	14	14	14
Available Threaded Column Size (Inches)		12	14	14	14	14
Available Flanged Column Size (Inches)		12	14	14	14	14
NEMA Driver "AK" Size (Inches)		13-1/2	8-1/4	13-1/2	13-1/2	13-1/2
Maximum Discharge Pressure (PSI) (Non-Shock Rating At Room Temperature)	150 lb. Flange	175	175	175	175	175
	300 lb. Flange	400*	400*	400*	400*	400*
Weight (Including Packing Box) (Lbs.)		1030	1015	1090	1200	1405

Data		12x16	16-1/2x16	20x16	24-1/2x16
Discharge Flange Size (Inches)		16	16	16	16
Available Threaded Column Size (Inches)		16	16	16	16
Available Flanged Column Size (Inches)		16	16	16	16
NEMA Driver "AK" Size (Inches)		8-1/4	13-1/2	13-1/2	13-1/2
Maximum Discharge Pressure (PSI) (Non-Shock Rating At Room Temperature)	150 lb. Flange	175	175	175	175
	300 lb. Flange	400*	400*	400*	400*
Weight (Including Packing Box) (Lbs.)		1181	1291	1366	1571

**Reference: Assembly Drawings 110MA008, 110MA009, 110MA010, and 110MA011**

**\*ON WATER LUBRICATED APPLICATIONS A 400 PSI PACKING BOX IS INCLUDED.**

## PACKING BOX TECHNICAL DATA

Data		1"	1-1/4"	1-1/2"	1-11/16"	1-15/16"	2-3/16"
Inside Diameter of Box (Inches)		1-15/16"	2-3/16"	2-7/16"	2-5/8"	2-7/8"	3-1/8"
Depth of Box (Inches)	Standard 175 PSI	1-5/8"	1-5/8"	1-5/8"	1-5/8"	1-5/8"	1-5/8"
	Optional 400 PSI	2-3/8"	2-3/8"	2-3/8"	2-3/8"	2-3/8"	2-3/8"
Outside Diameter of Sleeve (Inches)		1-3/16"	1-7/16"	1-11/16"	1-7/8"	2-1/8"	2-3/8"
Packing Size (Inches)		3/8"	3/8"	3/8"	3/8"	3/8"	3/8"
Rings Per Box		4	4	4	4	4	4
Bearing Length (Inches)		2	2-1/2	2-3/4	3	3-1/2	3-3/4
Gland Bolt Size (Inches)		1/2x2-3/4	1/2x2-3/4	1/2x2-3/4	1/2x2-3/4	1/2x2-3/4	1/2x2-3/4
Maximum Working Pressure (PSI)	Standard	175	175	175	175	175	175
	Optional	400	400	400	400	400	400

Data		2-7/16"	2-11/16"	2-15/16"	3-3/16"	3-7/16"	3-11/16"
Inside Diameter of Box (Inches)		3-5/8"	3-15/16"	4-3/16"	4-7/16"	4-11/16"	4-15/16"
Depth of Box (Inches)	Standard 175 PSI	2-1/4"	2-1/4"	2-1/4"	2-1/4"	2-1/4"	2-1/4"
	Optional 400 PSI	3-1/4"	3-1/4"	3-1/4"	3-1/4"	3-1/4"	3-1/4"
Outside Diameter of Sleeve (Inches)		2-5/8"	2-15/16"	3-3/16"	3-7/16"	3-11/16"	3-15/16"
Packing Size (Inches)		1/2	1/2	1/2	1/2	1/2	1/2
Rings Per Box		4	4	4	4	4	4
Bearing Length (Inches)		4-1/4	5	3-3/4	RTF	RTF	RTF
Gland Bolt Size (Inches)		1/2x2-3/4	1/2x2-3/4	1/2x2-3/4	1/2x2-3/4	1/2x2-3/4	1/2x2-3/4
Maximum Working Pressure (PSI)	Standard	175	175	175	175	175	175
	Optional	400	400	400	400	400	400