

SECTION 410 PAGE 1
DATED JANUARY 1, 2020
SUPERCEDES PAGE 1
DATED FEBRUARY 18, 2019

LIST PRICES

MODEL 411

HORIZONTAL SINGLE STAGE SPLIT CASE PUMPS

MODELS 412 AND 413

VERTICAL MOUNTED SINGLE STAGE SPLIT CASE PUMPS

F.O.B. NO. AURORA, ILLINOIS
PRICING SUBJECT TO CHANGE WITHOUT NOTICE
REFER TO ENCOMPASS FOR MOST ACCURATE PRICING AND SELECTION TABLES



AURORA[®]

MATERIALS OF CONSTRUCTION

PUMP PART		BRONZE FITTED	ALL IRON	STAINLESS STEEL
CASING		CAST IRON ASTM A48	CAST IRON ASTM A48	ASTM A743 GRADE CF8M
CASING WEARING RING		BRONZE ASTM B62	CAST IRON ASTM A48	ATSM A487
IMPELLER		BRONZE ASTM B584	CAST IRON ASTM A48	ASTM A743 GRADE CF8M
SHAFT	POWER SERIES 1-5	STEEL AISI C1045	STEEL AISI C1045	AISI 416
	POWER SERIES 6B,7	ALLOY STEEL	ALLOY STEEL	AISI 416 HEAT TREATED
SHAFT SLEEVE	PACKING BRONZE	BRONZE HIGH LEAD TIN	STAINLESS STEEL AISI 440C	AISI 440C
	SEAL		STAINLESS STEEL AISI 316	ASTM A743 GRADE CF8M
GLAND		CAST IRON ASTM A48	CAST IRON ASTM A48	ASTM A743 GRADE CF8M
PACKING		INTER WOVEN GRAPHITE IMPREGNATED ACRYLIC		

NOTE:

1. ALL MODEL 412 AND 413 PUMPS ARE FURNISHED WITH JOHN CRANE MECHANICAL SEALS AS STANDARD.

POWER SERIES 1-5 (TYPE 21)

POWER SERIES 6B & 7 (TYPE 1)

2. THE USE OF 316 STAINLESS STEEL SHAFT SLEEVES WITH A 316 STAINLESS STEEL SHAFT IS PROHIBITED DUE TO GALLING. WHEN 316 STAINLESS SLEEVES ARE REQUIRED, AS WITH MECHANICAL SEALS, THE 416 SS SHAFT IS REQUIRED.

LIST PRICE SHEET
MODEL 411
PUMP ONLY

SIZE	BRONZE FITTED			ALL IRON			ALL BRONZE		
	LIST PRICE	CONTROL NUMBER	WT	LIST PRICE	CONTROL NUMBER	WT	LIST PRICE	CONTROL NUMBER	WT
POWER SERIES 1									
2 x 2-1/2 x 9	\$5,352	X400001	145	\$6,424	X400003	145	\$19,677	X400002	175
2 x 2-1/2 x 10	5,352	X400005	145	6,424	X400007	145	19,808	X400006	175
2 x 2-1/2 x 12	6,271	X400009	175	7,560	X400011	175	-	-	-
POWER SERIES 2									
2-1/2 x 3 x 10B	\$7,382	X400013	215	\$8,851	X400015	215	\$21,243	X400014	260
2-1/2 x 3 x 12	8,113	X400017	255	9,222	X400019	255	-	-	-
3 x 4 x 10B	8,113	X400021	260	9,593	X400023	260	25,024	X400022	315
3 x 4 x 10B*	8,113	X401027	260	9,593	X401028	260	-	-	-
3 x 4 x 10C	8,187	X401278	260	9,593	X401280	260	25,024	X401279	315
3 x 4 x 14	9,222	X400025	310	11,070	X400027	310	-	-	-
4 x 5 x 10B	9,152	X400029	310	11,140	X400031	310	-	-	-
POWER SERIES 3									
4 x 5 x 11A	\$9,222	X400033	390	\$11,070	X400035	390	\$25,279	X400034	470
4 x 5 x 11C***	10,727	X400037	390	12,579	X400039	390	26,785	X400038	470
4 x 5 x 11D	9,222	X401550	390	11,070	X401551	390	25,279	X401552	470
4 x 5 x 15	10,335	X400041	415	12,547	X400043	415	25,974	X400042	500
POWER SERIES 4									
4 x 6 x 18B	\$17,342	X400049	560	\$20,666	X400051	560	-	-	-
5 x 6 x 11A	11,625	X400053	455	14,019	X400055	455	-	-	-
5 x 6 x 11C (1750)	11,625	X400057	455	14,019	X400059	455	27,515	X400058	550
5 x 6 x 11C (3500)	11,625	X401252	455	14,019	X401253	455	-	-	-
5 x 6 x 15	12,358	X400061	530	14,756	X400063	530	38,364	X400062	640
5 x 6 x 17	13,653	X400065	635	16,231	X400067	635	38,778	X400066	765
6 x 8 x 11	12,358	X400069	520	14,756	X400071	520	38,851	X400070	625
8 x 8 x 11B	12,547	X400093	605	15,130	X400095	605	39,652	X400094	730
POWER SERIES 4A**									
6 x 8 x 11HH	\$26,772	X401574	RTF	NOT AVAILABLE			NOT AVAILABLE		
POWER SERIES 5A**									
6 x 8 x 14HH	\$19,923	X401570	RTF	NOT AVAILABLE			NOT AVAILABLE		
POWER SERIES 5									
6 x 8 x 15	\$15,870	X400073	585	\$19,184	X400075	585	\$53,311	X400074	705
6 x 8 x 18A	21,402	X400077	800	25,828	X400079	800	63,590	X400078	935
6 x 8 x 18B	21,402	X400081	800	25,828	X400083	800	63,590	X400082	935
6 x 8 x 18C	21,402	X400085	800	25,828	X400087	800	63,590	X400086	935
6 x 8 x 20	21,772	X400089	875	26,199	X400091	875	68,600	X400090	1010
8 x 10 x 12	16,977	X400097	740	20,294	X400099	740	59,658	X400098	890
8 x 10 x 12A	16,977	X401111	740	20,294	X401113	740	60,020	X401112	890
8 x 10 x 15A	18,078	X400101	835	21,772	X400103	835	64,201	X400102	1005
8 x 10 x 15B	18,078	X400105	835	21,772	X400107	835	64,201	X400106	1005
8 x 10 x 17B	20,112	X400109	865	23,987	X400111	865	66,711	X400110	1040

NOTES:

* THIS SELECTION FOR IMPELLERS 7-1/2" DIAMETER AND SMALLER DUCTILE IRON CASINGS FOR WORKING PRESSURE UP 375 P.S.I. ARE NOW AVAILABLE FOR HIGH SUCTION PRESSURE APPLICATIONS, REFER TO FACTORY. FOR PACKED PUMPS WHERE SUCTION PRESSURE EXCEEDS 100 P.S.I., IT IS RECOMMENDED THAT OPT. 4 FOR 440C HARDENED STAINLESS STEEL SHAFT SLEEVES BE UTILIZED FOR IMPROVED SLEEVE WEAR.

REFER TO FACTORY FOR STAINLESS STEEL PUMP PRICING AND AVAILABILITY

** FOR POWER SERIES 4A, 5A, & 7A OPTIONS, DO NOT USE STANDARD PRICING LISTED FOR OPTIONS FROM POWER SERIES 4, 5, OR 7

***THE 4X5X11C WILL CONTINUE TO BE OFFERED IN ONLY NON-OVERLAP AREAS. IN OVERLAP RATINGS, ONLY 4X5X11C WILL CONTINUE TO BE HONORED IN RETROFIT/REPLACEMENT SITUATIONS. PLEASE USE THE 4X5X11D FOR YOUR NEW QUOTATIONS.

LIST PRICE SHEET
MODEL 411
PUMP ONLY

SIZE	BRONZE FITTED			ALL IRON			ALL BRONZE		
	LIST PRICE	CONTROL NUMBER	WT	LIST PRICE	CONTROL NUMBER	WT	LIST PRICE	CONTROL NUMBER	WT
POWER SERIES 6B									
8 x 10 x 21	\$35,323	X401275	1350	\$38,744	X401277	1350	\$95,962	X401276	1620
8 x 10 x 21A	35,323	X401531	1350	38,744	X401533	1350	97,814	X401532	1620
10 x 12 x 12B	37,625	X400113	1425	40,428	X400115	1425	104,824	X400114	1690
10 x 12 x 15B	38,741	X400117	1490	42,438	X400119	1490	112,305	X400118	1770
10 x 12 x 15C	38,741	X400121	1490	42,438	X400123	1490	114,389	X400122	1770
10 x 12 x 18	42,621	X400125	1725	46,125	X400127	1725	116,144	X400126	2000
POWER SERIES 7A**									
10 x 12 x 18D	40,368	X401578	RTF	NOT AVAILABLE			NOT AVAILABLE		
POWER SERIES 7									
8 x 12 x 24	\$35,725	X401597	3400	-	-	-	-	-	-
12 x 14 x 15B	38,741	X400129	2000	\$42,438	X400131	2000	\$160,421	X400130	2400
12 x 14 x 18A	46,492	X401123	2100	51,659	X401125	2100	200,569	X401124	2500
14 x 16 x 18	58,114	X400137	2850	62,725	X400139	2850	211,924	X400138	3300

NOTE: DUCTILE IRON CASINGS FOR WORKING PRESSURE UP TO 375 P.S.I. ARE NOW AVAILABLE FOR HIGH SUCTION PRESSURE APPLICATIONS. REFER TO FACTORY.

FOR PACKED PUMPS WHERE SUCTION PRESSURE EXCEEDS 100 P.S.I., IT IS RECOMMENDED THAT OPT. 6 FOR 440C HARDENED STAINLESS STEEL SHAFT SLEEVES BE UTILIZED FOR IMPROVED SLEEVE WEAR.

MODEL 411B
BOTTOM SUCTION PUMP ONLY

SIZE	BRONZE FITTED			ALL IRON		
	LIST PRICE	CONTROL NUMBER	WT	LIST PRICE	CONTROL NUMBER	WT
POWER SERIES 6B						
10 x 12 x 18	\$53,318	X401451	-	\$57,654	X401452	1675
POWER SERIES 7						
12 x 14 x 15B	48,429	X401455	-	53,047	X401456	1950

STAINLESS STEEL
PUMP ONLY

STAINLESS STEEL			
SIZE	LIST PRICE	CONTROL NUMBER	WT
POWER SERIES 2			
2-1/2 x 3 x 10B	\$46,112	X400016	215
POWER SERIES 5			
6 x 8 x 18A	111,922	X400080	800
6 x 8 x 18B	111,922	X400084	800
6 x 8 x 18C	111,922	X400088	800
6 x 8 x 20	118,586	X400092	875
POWER SERIES 6B			
8 x 10 x 21	120,646	X401465	1350
8 x 10 x 21A	120,646	X401534	1350

ADDITIONS FOR
BOTTOM SUCTION PUMP ONLY

STEEL DRIP RIM BASE			FORMED STEEL BASE	
BASE #	LIST PRICE	WT	LIST PRICE	WT
X	\$6,702	1000	\$4,701	470
Y	7,078	1050	4,960	675

** FOR POWER SERIES 4A, 5A, & 7A OPTIONS, DO NOT USE STANDARD PRICING LISTED FOR OPTIONS FROM POWER SERIES 4, 5, OR 7

LIST PRICE SHEET
MODEL 411
MOTOR FRAME DESIGNATIONS

**N
E
M
A**

**MOTOR FRAME DESIGNATION FOR
 POLYPHASE, SQUIRREL-CAGE,
 DESIGN B, HORIZONTAL
 MOTORS, 60 Hz, CLASS B
 INSULATION SYSTEM, OPEN TYPE 1.15
 S.F. AND TOTALLY- ENCLOSED
 FANCOOLED TYPE 1.0 S.F.**

HP RATING	3600 RPM		1800 RPM		1200 RPM		900 RPM	
	OPEN	TEFC	OPEN	TEFC	OPEN	TEFC	OPEN	TEFC
1/4			56	56	56	56	56	56
1/3			56	56	56	56	56	56
1/2			56	56	56	56	143T	143T
3/4	56	56	56	56	143T	143T	143T	143T
1	56	56	143T	143T	145T	145T	182T	182T
1-1/2	143T	143T	145T	145T	182T	182T	184T	184T
2	145T	145T	145T	145T	184T	184T	213T	213T
3	145T	182T	182T	182T	213T	213T	215T	215T
5	182T	184T	184T	184T	215T	215T	254T	254T
7-1/2	184T	213T	213T	213T	254T	254T	256T	256T
10	213T	215T	215T	215T	256T	256T	284T	284T
15	215T	254T	254T	254T	284T	284T	286T	286T
20	254T	256T	256T	256T	286T	286T	324T	324T
25	256T	284TS	284T	284T	324T	324T	326T	326T
30	284TS	286TS	286T	286T	326T	326T	364T	364T
40	286TS	324TS	324T	324T	364T	364T	365T	365T
50	324TS	326TS	326T	326T	365T	365T	404T	404T
60	326TS	364TS	364TS	364TS	404T	404T	405T	405T
75	364TS	365TS	365TS	365TS	405T	405T	444T	444T
100	365TS	405TS	404TS	405TS	444T	444T	445T	445T
125	404TS	444TS	405TS	444TS	445T	445T		
150	405TS	445TS	444TS	445T				
200	444TS		445T					
250	445TS							

LIST PRICE SHEET
MODEL 411
BASE AND COUPLINGS

		OPEN DRIP PROOF HORSEPOWER																			
POWER SERIES	RPM	3500	1-1/2	2	3	5	7-1/2	10	15	20	25		30		40		50		60		
		1750	1	1-1/2	2	3	5	7-1/2	10	15	20	25		30		40		50		60	
		1150	3/4	1		1-1/2	2	3	5	7-1/2	10	15		20		25		30		30	
MOTOR FRAME		143T	145T	145T	182T	184T	213T	215T	254T	256T	284T	284TS	286T	286TS	324T	324TS	326T	326TS			
1	2 x 2-1/2 x 9 2 x 2-1/2 x 10 2 x 2-1/2 x 12	STEEL BASE																			
		Control	14M	14N	14N	14P	14R	14T	14W	14AA	14AB	14AC	14AC	14MA	14AD	14AE	14AE				
		List	\$701	\$701	\$701	\$701	\$701	\$584	\$584	\$602	\$602	\$764	\$764	\$914	\$764	\$960	\$960				
		Wt	50	50	50	90	90	90	90	100	100	100	100	130	130	130	130				
		COUPLING																			
		Control	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD			
List	\$58	\$58	\$58	\$80	\$80	\$151	\$171	\$188	\$261	\$261	\$188	\$569	\$260	\$569	\$260						
Wt	3	3	3	6	6	6	6	8	10	10	8	21	10	21	10						
2	2-1/2 x 3 x 10 2-1/2 x 3 x 12 3 x 4 x 10 3 x 4 x 14 4 x 5 x 10	STEEL BASE																			
		Control				14BC	14BD	14BE	14BF	14BG	14BH	14BK	14BJ	14BM	14BL	14LL	14BN	14LM	14BP		
		List				\$584	\$584	\$596	\$596	\$960	\$960	\$914	\$914	\$914	\$914	\$995	\$960	\$995	\$960		
		Wt				90	90	90	90	100	100	130	130	130	130	130	130	130	130	130	
		COUPLING																			
		Control				34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	
List				\$80	\$80	\$151	\$188	\$188	\$260	\$260	\$188	\$260	\$260	\$569	\$569	\$569	\$260	\$569			
Wt				6	6	6	8	8	10	10	10	10	10	10	21	10	21	21			
3	4 x 5 x 11 4 x 5 x 15	STEEL BASE																			
		Control						14CP	14CR	14CT	14CW	14DB	14DA	14DD	14DC	14ET	14DE	14FA	14DF		
		List						\$960	\$960	\$960	\$914	\$995	\$995	\$995	\$995	\$995	\$995	\$995	\$995		
		Wt						10	100	100	120	150	150	150	150	150	150	150	150		
		COUPLING																			
		Control							34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	
List							\$151	\$151	\$188	\$260	\$260	\$260	\$569	\$569	\$569	\$260	\$569				
Wt							6	6	8	10	10	10	21	21	21	10	21	21			
4	4 x 6 x 18 5 x 6 x 11 5 x 6 x 15 5 x 6 x 17 6 x 8 x 11 8 x 8 x 11	STEEL BASE																			
		Control						14EL	14EM	14EN	14EP	14ER	14EW	14EW	14EW	14FC	14FB	14FE	14FD		
		List						\$596	\$960	\$914	\$960	\$995	\$995	\$995	\$995	\$1,146	\$1,146	\$1,146	\$1,146		
		Wt						90	90	100	120	150	150	150	150	150	150	150	150		
		COUPLING																			
		Control							34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	
List							\$188	\$188	\$188	\$260	\$260	\$569	\$569	\$569	\$569	\$569	\$569	\$569			
Wt							8	8	8	10	10	21	21	21	21	21	21	21			
5	6 x 8 x 15 6 x 8 x 18 6 x 8 x 20 8 x 10 x 12 8 x 10 x 15 8 x 10 x 17	STEEL BASE																			
		Control								14GN	14GP	14GR	14GR	14GW	14GW	14HB	14HB	14HC	14HC		
		List								\$995	\$995	\$1,146	\$1,146	\$1,146	\$1,146	\$1,146	\$1,146	\$1,146	\$1,146		
		Wt								150	150	150	150	150	150	150	150	160	160		
		COUPLING																			
		Control									34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	
List									\$260	\$260	\$260	\$260	\$569	\$569	\$569	\$569	\$569	\$569			
Wt									10	10	10	10	21	21	21	21	21	21			
6B	8 x 10 x 21 10 x 12 x 12 10 x 12 x 15 10 x 12 x 18	STEEL BASE																			
		Control															14JM	14JM	14JN	14JN	
		List															\$1,394	\$1,394	\$2,542	\$2,542	
		Wt															320	320	320	320	
		COUPLING																			
		Control																34STD	34STD	34STD	34STD
List																\$569	\$569	\$569	\$569		
Wt																21	21	21	21		

LIST PRICE SHEET
MODEL 411
BASE AND COUPLINGS

OPEN DRIP PROOF HORSEPOWER																		
POWER SERIES	RPM	3500	75	100	125	150	200	250										
		1750	60	75	100	125	150	200	250									
		1150	40	50	60	75	100	125	200/250	300								
MOTOR FRAME		364T	364TS	365T	365TS	404T	404TS	405T	405TS	444T	444TS	445T	445TS	447T	447TS	449T	449TS	
2	2-1/2 x 3 x 10 2-1/2 x 3 x 12 3 x 4 x 10 3 x 4 x 14 4 x 5 x 10	STEEL BASE																
		Control	14BR	14BR	14MB	14BT												
		List	\$995	\$995	\$1,181	\$995												
		Wt	150	150	150	150												
		COUPLING																
		Control	34STD	34STD	34STD	34STD												
List	\$912	\$569	\$912	\$912														
Wt	30	21	30	30														
3	4 x 5 x 11 4 x 5 x 15	STEEL BASE																
		Control	14DH	14DG	14DH	14DH	14DJ	14DJ	14DK	14DK	14SB	14SB						
		List	\$1,181	\$995	\$1,181	\$1,181	\$1,499	\$1,499	\$1,499	\$1,499	\$2,469	\$1,516						
		Wt	150	150	150	150	270	270	270	270	310	310						
		COUPLING																
		Control	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD					
List	\$912	\$912	\$912	\$912	\$1,295	\$912	\$1,295	\$1,295	\$1,462	\$1,295								
Wt	30	30	30	35	60	35	60	60	75	75								
4	4 x 6 x 18 5 x 6 x 11 5 x 6 x 15 5 x 6 x 17 6 x 8 x 11 8 x 8 x 11	STEEL BASE																
		Control	14FF	14FF	14FG	14FG	14FH	14FH	14FJ	14FJ	14FK	14FK	14FK	14FK	14SB	14SB	14SB	14SB
		List	\$1,146	\$1,146	\$1,146	\$1,146	\$1,499	\$1,499	\$1,499	\$1,499	\$1,499	\$1,499	\$1,499	\$1,499	\$1,777	\$1,679	\$1,777	\$1,679
		Wt	150	150	150	150	270	270	270	270	270	270	270	270	385	385	385	385
		COUPLING																
		Control	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD
List	\$912	\$912	\$1,295	\$1,295	\$1,295	\$1,295	\$1,547	\$1,547	\$1,547	\$1,547	\$2,182	\$2,182	\$2,827	\$2,827	\$2,827	\$2,827		
Wt	30	30	35	35	35	35	60	60	60	60	110	110	138	138	138	138		
5	6 x 8 x 15 6 x 8 x 18 6 x 8 x 20 8 x 10 x 12 8 x 10 x 15 8 x 10 x 17	STEEL BASE																
		Control	14HE	14HD	14HG	14HF	14HJ	14HH	14HL	14HK	14HN	14HM	14HM	14HM	14SB	14SB	14SB	14SB
		List	\$1,146	\$1,146	\$1,394	\$1,394	\$1,499	\$1,499	\$1,499	\$1,499	\$2,471	\$2,471	\$2,471	\$2,471	\$2,983	\$2,471	\$4,124	\$3,249
		Wt	150	160	160	160	270	270	270	270	270	310	310	310	385	385	450	385
		COUPLING																
		Control	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD
List	\$912	\$912	\$1,295	\$1,295	\$1,547	\$1,295	\$1,547	\$1,547	\$1,547	\$1,547	\$1,547	\$2,182	\$2,182	\$2,755	\$2,182	\$2,819	\$2,819	
Wt	30	30	35	35	60	35	60	60	60	60	110	110	138	110	138	138		
6B	8 x 10 x 21 10 x 12 x 12 10 x 12 x 15 10 x 12 x 18	STEEL BASE																
		Control	14JP	14JP	14JW	14JT	14KB	14KA	14KD	14KC	14KF	14KG	14KH	14KG	14SB	14SB	14SB	14SB
		List	\$2,542	\$2,542	\$2,542	\$2,542	\$2,471	\$2,471	\$2,471	\$2,471	\$2,471	\$2,471	\$2,789	\$2,471	\$2,825	\$2,943	\$2,647	\$2,739
		Wt	385	385	385	385	450	450	450	450	450	450	450	450	450	450	450	450
		COUPLING																
		Control	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD
List	\$912	\$912	\$1,295	\$1,295	\$1,547	\$1,295	\$1,547	\$1,547	\$1,547	\$1,547	\$2,182	\$2,182	\$2,182	\$2,182	\$3,606	\$3,606		
Wt	30	30	36	35	60	35	60	60	60	110	110	110	110	110	138	138		
7	12 x 14 x 15B 12 x 14 x 18A 14 x 16 x 18	STEEL BASE																
		Control					14LA	14LA	14LC	14LC	14LE	14LD	14LG	14LF	14SB	14SB	14SB	14SB
		List					\$2,471	\$2,471	\$2,471	\$2,471	\$2,789	\$2,471	\$2,789	\$2,789	\$2,831	\$2,980	\$2,576	\$2,630
		Wt					450	450	450	450	450	450	450	450	450	450	450	450
		COUPLING																
		Control					34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD
List					\$1,547	\$1,547	\$1,547	\$1,547	\$1,547	\$1,547	\$2,182	\$2,182	\$2,182	\$2,182	\$3,259	\$3,295		
Wt					60	60	60	60	60	60	110	110	110	110	138	138		

LIST PRICE SHEET
MODEL 411
BASE AND COUPLINGS

OPEN DRIP PROOF HORSEPOWER																	
POWER SERIES	RPM	3500	100	125	150	200	250	250/300									
		1750	75	100	125	150	200	200/250	300								
		1150	50	60	75	100	125	200/250									
MOTOR FRAME		365T	365TS	404T	404TS	405T	405TS	444T	444TS	445T	445TS	447T	447TS	449T	449TS		
4A	6x8x11HH	STEEL BASE															
		Control	14SB	14SB	14SB	14SB	14SB	14SB	14SB	14SB	14SB	14SB	14SB	14SB	14SB		
		List	\$1,990	\$1,990	\$3,185	\$3,185	\$3,185	\$3,185	\$3,185	\$3,185	\$3,185	\$3,185	\$3,185	\$3,465	\$3,365		
		Wt	208	208	315	315	315	315	386	386	386	386	386	386	386		
		COUPLING															
		Control	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD		
		List	\$1,295	\$1,295	\$1,547	\$1,295	\$1,547	\$1,547	\$1,547	\$1,547	\$2,182	\$2,182	\$2,755	\$2,182			
		Wt	35	35	60	35	60	60	60	60	110	110	138	110			
		5A	6x8x14HH	STEEL BASE													
Control					14SB	14SB	14SB	14SB	14SB	14SB	14SB	14SB	14SB	14SB	14SB	14SB	
List					\$3,185	\$3,185	\$3,185	\$3,185	\$4,159	\$4,159	\$4,159	\$4,159	\$5,091	\$4,580	\$6,230	\$5,779	
Wt					386	315	386	386	386	386	386	386	450	386	450	450	
COUPLING																	
Control					34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD
List					\$1,547	\$1,295	\$1,547	\$1,547	\$1,547	\$1,547	\$2,182	\$2,182	\$2,755	\$2,182	\$2,819	\$2,819	
Wt					60	35	60	60	60	60	110	110	138	110	138	138	
7A	10x12x18D			STEEL BASE													
		Control					14SB	14SB	14SB	14SB	14SB	14SB	14SB	14SB	14SB	14SB	
		List					\$3,737	\$3,737	\$4,475	\$4,159	\$4,895	\$4,895	\$4,942	\$5,087	\$4,684	\$5,159	
		Wt					386	386	386	386	386	386	450	386	450	450	
		COUPLING															
		Control					34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	
		List					\$1,547	\$1,547	\$1,547	\$1,547	\$2,182	\$2,182	\$2,182	\$2,182	\$3,606	\$3,606	
		Wt					60	60	60	110	110	110	110	110	138	138	

LIST PRICE SHEET
MODEL 412
PUMP ONLY

SIZE	BRONZE FITTED			ALL IRON		
	LIST PRICE	CONTROL NUMBER	WT	LIST PRICE	CONTROL NUMBER	WT
POWER SERIES 1						
2 x 2-1/2 x 9	\$9,324	X400141	215	\$10,497	X400143	215
2 x 2-1/2 x 10	9,324	X400145	215	10,497	X400147	215
2 x 2-1/2 x 12	10,431	X400149	260	11,159	X400151	260
POWER SERIES 2						
2-1/2 x 3 x 10B	11,539	X400153	300	12,636	X400155	300
2-1/2 x 3 x 12	11,898	X400157	360	13,377	X400159	360
3 x 4 x 10B	12,275	X400161	365	13,742	X400163	365
3 x 4 x 10B*	12,275	X401030	365	13,742	X401031	365
3 x 4 x 10C	12,275	X401282	365	13,742	X401284	365
3 x 4 x 14	13,377	X400165	435	15,218	X400167	435
4 x 5 x 10B	12,636	X400169	465	14,482	X400171	465
POWER SERIES 3						
4 x 5 x 11A	13,288	X400173	435	15,130	X400175	435
4 x 5 x 11C***	14,792	X400177	435	16,638	X400179	435
4 x 5 x 11D	13,288	X401555	435	15,130	X401556	435
4 x 5 x 15	14,387	X400181	490	16,977	X400183	490
POWER SERIES 4						
4 x 6 x 18B	21,036	X400189	780	24,724	X400191	780
5 x 6 x 11A	15,878	X400193	580	18,448	X400195	580
5 x 6 x 11C	15,878	X400197	580	18,448	X400199	580
5 x 6 x 11C**	15,878	X401256	580	18,448	X401257	580
5 x 6 x 15	17,342	X400201	735	19,554	X400203	735
5 x 6 x 17	17,711	X400205	855	20,482	X400207	855
6 x 8 x 11	16,231	X400209	655	18,819	X400211	655
8 x 8 x 11B	16,231	X400233	835	18,840	X400235	835
POWER SERIES 5						
6 x 8 x 15	22,143	X400213	735	25,737	X400215	735
6 x 8 x 18A	27,305	X400217	1020	31,733	X400219	1020
6 x 8 x 18B	27,305	X400221	1020	31,733	X400223	1020
6 x 8 x 18C	27,305	X400225	1020	31,733	X400227	1020
6 x 8 x 20	27,679	X400229	1095	N/A	N/A	1095
8 x 10 x 12	23,255	X400237	925	27,012	X400239	925
8 x 10 x 12A	23,255	X401115	925	27,012	X401117	925
8 x 10 x 15A	23,987	X400241	1040	27,857	X400243	1040
8 x 10 x 15B	23,987	X400245	1040	27,857	X400247	1040
8 x 10 x 17B	23,987	X400249	1085	30,444	X400251	1085
POWER SERIES 6B						
10 x 12 x 12B	40,218	X400253	1625	42,438	X400255	1625

NOTES:

* THIS SELECTION FOR IMPELLERS 7-1/2" DIAMETER OR SMALLER

** THIS SELECTION FOR 3500 R.P.M.

DUCTILE IRON CASINGS FOR WORKING PRESSURES UP TO 375 P.S.I. ARE NOW AVAILABLE FOR HIGH SUCTION PRESSURE APPLICATIONS. REFER TO FACTORY.

FOR PACKED PUMPS WHERE SUCTION PRESSURE EXCEEDS 100 P.S.I., IT IS RECOMMENDED THAT OPTION 6 FOR 440C HARDENED STAINLESS STEEL SHAFT SLEEVES BE UTILIZED FOR IMPROVED SLEEVE WEAR.

*** THE 4X5X11C WILL CONTINUE TO BE OFFERED IN ONLY NON-OVERLAP AREAS. IN OVERLAP RATINGS, ONLY 4X5X11C WILL CONTINUE TO BE HONORED IN RETROFIT/REPLACEMENT SITUATIONS. PLEASE USE THE 4X5X11D FOR YOUR NEW QUOTATIONS.

LIST PRICE SHEET
MODEL 413
PUMP ONLY

SIZE	BRONZE FITTED			ALL IRON		
	LIST PRICE	CONTROL	WT	LIST PRICE	CONTROL	WT
POWER SERIES 1						
FRAME 143HP - 256HP						
2 x 2-1/2 x 9	\$10,335	X400281	215	\$11,509	X400283	215
2 x 2-1/2 x 10	10,335	X400285	215	11,509	X400287	215
2 x 2-1/2 x 12	11,437	X400289	260	12,177	X400291	260
FRAME 284HP - 324HP						
2 x 2-1/2 x 9	10,335	X401178	215	11,509	X401181	215
2 x 2-1/2 x 10	10,335	X401179	215	11,509	X401182	215
2 x 2-1/2 x 12	11,437	X401180	260	12,177	X401183	260
POWER SERIES 2						
FRAME 143HP - 256HP						
2-1/2 x 3 x 10B	12,547	X400293	300	13,653	X400295	300
2-1/2 x 3 x 12	12,914	X400297	360	14,387	X400299	360
3 x 4 x 10B	13,288	X400301	365	14,756	X400303	365
3 x 4 x 10B*	13,288	X401033	365	14,756	X401034	365
3 x 4 x 10C	13,288	X401286	365	14,756	X401288	365
3 x 4 x 14	14,387	X400305	435	16,231	X400307	435
4 x 5 x 10B	13,634	X400309	465	15,495	X400311	465
FRAME 284HP - 365HP						
2-1/2 x 3 x 10B	12,547	X401193	300	13,653	X401199	300
2-1/2 x 3 x 12	12,913	X401194	360	14,387	X401200	360
3 x 4 x 10B	13,288	X401195	365	14,756	X401201	365
3 x 4 x 10B*	13,288	X401196	365	14,756	X401202	365
3 x 4 x 10C	13,288	X401290	365	14,756	X401291	365
3 x 4 x 14	14,387	X401197	435	16,231	X401203	435
4 x 5 x 10B	13,653	X401198	465	15,495	X401204	465
POWER SERIES 3						
FRAME 143HP - 256HP						
4 x 5 x 11A	14,387	X400313	435	16,231	X400315	435
4 x 5 x 11C***	15,895	X400317	435	17,738	X400319	435
4 x 5 x 11D	14,387	X401560	435	16,231	X401561	435
4 x 5 x 15	15,495	X400321	490	18,078	X400323	490
FRAME 284HPH - 405HP						
4 x 5 x 11A	14,387	X401214	435	16,231	X401217	435
4 x 5 x 11C	14,387	X401215	435	16,231	X401218	435
4 x 5 x 11D	14,387	X401562	435	16,231	X401563	435
4 x 5 x 15	15,495	X401216	490	18,078	X401219	490
POWER SERIES 4						
FRAME 143HP - 256HP						
4 x 6 x 18B	22,143	X400329	780	25,828	X400331	780
5 x 6 x 11A	16,977	X400333	580	19,554	X400335	580
5 x 6 x 11C	16,977	X400337	580	19,554	X400339	580
5 x 6 x 11C**	16,977	X401260	580	19,554	X401261	580
5 x 6 x 15	18,448	X400341	735	20,666	X400343	735
5 x 6 x 17	18,819	X400345	855	21,584	X400347	855
6 x 8 x 11	17,342	X400349	650	19,920	X400351	650
8 x 8 x 11B	17,342	X400373	835	19,943	X400375	835

NOTES:

* THIS SELECTION FOR IMPELLERS 7-1/2" DIAMETER OR SMALLER

** THIS SELECTION FOR 3500 R.P.M.

*** THE 4X5X11C WILL CONTINUE TO BE OFFERED IN ONLY NON-OVERLAP AREAS. IN OVERLAP RATINGS, ONLY 4X5X11C WILL CONTINUE TO BE HONORED IN RETROFIT/REPLACEMENT SITUATIONS. PLEASE USE THE 4X5X11D FOR YOUR NEW QUOTATIONS.

LIST PRICE SHEET
MODEL 413
PUMP ONLY

SIZE	BRONZE FITTED			ALL IRON		
	LIST PRICE	CONTROL NUMBER	WT	LIST PRICE	CONTROL NUMBER	WT
POWER SERIES 4						
FRAME 284HP - 444HP						
4 x 6 x 18B	\$22,143	X401230	780	\$25,828	X401237	780
5 x 6 x 11A	16,977	X401231	580	19,554	X401238	580
5 x 6 x 11C	16,977	X401232	580	19,554	X401239	580
5 x 6 x 11C**	16,977	X401264	580	19,554	X401265	580
5 x 6 x 15	18,448	X401233	735	20,666	X401240	735
5 x 6 x 17	18,819	X401234	855	21,584	X401241	855
6 x 8 x 11	17,342	X401235	650	19,920	X401242	650
8 x 8 x 11B	17,342	X401236	835	19,943	X401243	835
POWER SERIES 5						
FRAME 284HP - 445HP						
6 x 8 x 15	23,987	X400353	735	27,574	X400355	735
6 x 8 x 18A	29,149	X400357	1020	33,582	X400359	1020
6 x 8 x 18B	29,149	X400361	1020	33,582	X400363	1020
6 x 8 x 18C	29,149	X400365	1020	33,582	X400367	1020
6 x 8 x 20	29,519	X400369	1095	N/A	N/A	1095
8 x 10 x 12	25,092	X400377	925	28,855	X400379	925
8 x 10 x 12A	25,092	X401119	925	28,855	X401121	925
8 x 10 x 15A	25,824	X400381	1040	29,704	X400383	1040
8 x 10 x 15B	25,824	X400385	1040	29,704	X400387	1040
8 x 10 x 17B	28,042	X400389	1085	32,285	X400391	1085
POWER SERIES 6B						
FRAME 284HP - 445HP						
10 x 12 x 12B	42,438	X400393	1625	44,652	X400395	1625

NOTES:

** THIS SELECTION FOR 3500 R.P.M.

DUCTILE IRON CASINGS FOR WORKING PRESSURES UP TO 375 P.S.I. ARE NOW AVAILABLE FOR HIGH SUCTION PRESSURE APPLICATIONS. REFER TO FACTORY.

FOR PACKED PUMPS WHERE SUCTION PRESSURE EXCEEDS 100 P.S.I., IT IS RECOMMENDED THAT OPTION 6 FOR 440C HARDENED STAINLESS STEEL SHAFT SLEEVES BE UTILIZED FOR IMPROVED SLEEVE WEAR.

MAXIMUM MOTOR FRAME SIZE ALLOWED FOR 413 CONSTRUCTION 445HP FOR ODP OR 2000 LBS. WEIGHT LIMIT.

**LIST PRICE SHEET
 MODEL 412C - 413C
 CHAIR MOUNTED PUMP
 AND BASE ONLY**

PUMP SIZE	BRONZE FITTED LIST PRICE	CONTROL NUMBER	ALL IRON LIST PRICE	CONTROL NUMBER	WT
MODEL 412C POWER SERIES 6B					
8 x 10 x 21	RTF	X401466	RTF	X401467	-
10 x 12 x 15B	\$48,154	X401470	51,846	X401471	1980
10 x 12 x 15C	48,154	X401474	51,846	X401475	1980
10 x 12 x 18	51,846	X401478	55,540	X401479	2315
MODEL 413C POWER SERIES 6B					
8 x 10 x 21	RTF	X401482	RTF	X401483	-
10 x 12 x 15B	51,659	X401486	55,348	X401487	2510
10 x 12 x 15C	51,659	X401490	55,348	X401491	2510
10 x 12 x 18	55,348	X401494	59,034	X401495	2845
MODEL 412C POWER SERIES 7					
12 x 14 x 15B	48,154	X401498	51,846	X401499	2610
12 x 14 x 18A	55,959	X401127	61,122	X401129	2710
14 x 16 x 18	67,615	X401506	72,232	X401507	3470
MODEL 413C POWER SERIES 7					
12 x 14 x 15B	51,659	X401510	55,348	X401511	3175
12 x 14 x 18A	59,771	X401131	64,574	X401133	3775
14 x 16 x 18	71,216	X401518	75,831	X401519	4050
MODEL 413C POWER SERIES 5					
8 x 10 x 17B*	RTF	X401522	RTF	X401523	RTF

**MOTOR LIMITATIONS
 CHAIR MOUNTED PUMPS ONLY**

PUMP SIZE	POWER SERIES	MAX. ALLOWABLE HORSEPOWER		MAX. ALLOWABLE MOTOR WEIGHT	
		412C	413C	412C	413C
8 x 10 x 21	6B	400	450	N/A	4600
10 x 12 x 15B, C		350	350	N/A	4600
10 x 12 x 18		500	500	N/A	4600
12 x 14 x 15B	7	400	400	N/A	5500
12 x 14 x 18		700	500	N/A	5500
14 x 16 x 18	7	400	400	N/A	5500
8 x 10 x 17B	5	N/R	300	N/A	3600

NOTE:

N/A - NOT APPLICABLE

MOTOR WEIGHTS ARE FOR TEFC MOTORS

"B" AFTER MODEL NUMBER DENOTES BOTTOM SUCTION PUMP. EXAMPLE 411B vs. 411

"C" AFTER MODEL NUMBER DENOTES CHAIR-MOUNTED PUMP. EXAMPLE 413C vs. 413

RTF = REFER TO FACTORY

N/R - NOT REQUIRED (AVAILABLE IN BARREL DESIGN)

* 8 X 10 X 17B CHAIRMOUNT AVAILABLE WITH 200, 250 & 300 H.P. MOTORS ONLY

LIST PRICE SHEET
MODEL 413
COUPLINGS

POWER SERIES	1			2			3			4			
	FRAME SIZE	LIST PRICE	OPTIO N NO.	WT.	LIST PRICE	OPTIO N NO.	WT.	LIST PRICE	OPTION NO.	WT.	LIST PRICE	OPTION NO.	WT.
143HP	\$25	34STD	3										
145HP	25	34STD	3										
182HP	69	34STD	6	\$69	34STD	6							
184HP	69	34STD	6	69	34STD	6							
213HP	130	34STD	6	130	34STD	6	\$130	34STD	6	\$156	34STD	8	
215HP	179	34STD	6	179	34STD	8	179	34STD	8	156	34STD	8	
254HP	179	34STD	8	179	34STD	8	179	34STD	8	156	34STD	8	
256HP	214	34STD	10	231	34STD	10	231	34STD	10	231	34STD	10	
284HPH	179	34STD	8	231	34STD	10	231	34STD	10	231	34STD	10	
286HPH	214	34STD	10	231	34STD	10	231	34STD	10	231	34STD	10	
324HP	214	34STD	10	231	34STD	10	231	34STD	10	231	34STD	10	
326HP				446	34STD	21	481	34STD	21	481	34STD	21	
364HP				446	34STD	21	621	34STD	30	621	34STD	30	
365HP				621	34STD	30	1216	34STD	35	1216	34STD	35	
404HP							1216	34STD	35	1216	34STD	35	
405HP							1,872	34STD	60	1,872	34STD	60	
444HP										1,787	34STD	60	

POWER SERIES	5			6B			
	FRAME SIZE	LIST PRICE	OPTIO N NO.	WT.	LIST PRIC E	OPTIO N NO.	WT.
143HP							
145HP							
182HP							
184HP							
213HP							
215HP							
254HP							
256HP							
284HPH	\$231	34STD	10	\$231	34STD	10	
286HPH	231	34STD	10	231	34STD	10	
324HP	481	34STD	21	481	34STD	21	
326HP	481	34STD	21	481	34STD	21	
364HP	621	34STD	30	621	34STD	30	
365HP	1393	34STD	35	683	34STD	35	
404HP	1,769	34STD	60	1,769	34STD	60	
405HP	1,872	34STD	60	1,872	34STD	60	
444HP	1,787	34STD	110	1,872	34STD	110	
445HP	2,786	34STD	110	2,786	34STD	110	

N
E
M
A

MOTOR FRAME DESIGNATIONS FOR
 POLYPHASE, SQUIRREL-CAGE
 DESIGN B. VERTICAL MOTORS,
 60Hz, CLASS B INSULATION
 SYSTEM OPEN TYPE 1.15 S.F.
 AND TOTALLY-ENCLOSED
 FANCOOLED TYPE 1.0 S.F.

HP RATING	3600 R.P.M.		1800 R.P.M.		1200 R.P.M.	
	OPEN	TEFC	OPEN	TEFC	OPEN	TEFC
1			143HP	143HP	145HP	145HP
1-1/2	143HP	143HP	145HP	145HP	182HP	182HP
2	145HP	145HP	145HP	145HP	184HP	184HP
3	145HP	182HP	182HP	182HP	213HP	213HP
5	182HP	184HP	184HP	184HP	215HP	215HP
7-1/2	184HP	213HP	213HP	213HP	254HP	254HP
10	213HP	215HP	215HP	215HP	256HP	256HP
15	215HP	254HP	254HP	254HP	284HPH	284HPH
20	254HP	256HP	256HP	256HP	286HPH	286HPH
25	256HP	284HPH	284HPH	284HPH	324HP	324HP
30	284HPH	286HPH	286HPH	286HPH	326HP	326HP
40	286HPH	324HP	324HP	324HP	364HP	364HP
50	324HP	326HP	326HP	326HP	365HP	365HP
60	326HP	364HP	364HP	364HP	404HP	404HP
75	364HP	365HP	365HP	365HP	405HP	405HP
100	365HP	405HP	404HP	405HP	444HP	444HP
125	404HP	445HP	405HP	444HP	445HP	445HP
150	405HP		444HP			
200	444HP					
250						

LIST PRICE SHEET
MODEL 411, 412, 413
OPTIONAL FEATURES

OPT. NO.	DESCRIPTION	LIST PRICE										
		POWER SERIES										
		1	2	3	4	4A	5	5A	6B	7	7A	
2	LUBRICATION, OIL FOR BEARINGS (MODEL 411 ONLY)	\$281	\$281	\$281	\$281	\$281	\$281	\$281	\$281	\$281	\$281	
		2A	2B	2C	2D	2OL	2E	2OL	2F	2G	2OL	
3	SHAFT, STAINLESS STEEL (NOTE 1)	316 S.S.	\$348	\$634	\$867	\$867	-	\$1,269	-	-	-	-
			3A	3B	3C	3D	N/A	3E	N/A	N/A	N/A	N/A
	416 S.S.	\$348	\$634	\$867	\$867	\$3,385	\$1,269	\$3,969	\$3,031	\$3,031	\$5,623	
		3AA	3AB	3AC	3AD	3AH	3AE	3AJ	3F	3G	3AK	
	DOUBLE EXTENDED SHAFT (STEEL)	\$1,293	\$1,437	\$1,586	\$1,729	-	\$1,876	-	\$2,022	\$2,169	-	
		3H	3J	3K	3L	-	3M	-	3N	3P	-	
	FLEXIBLE SHAFT TO FURNISH FLEXIBLE SHAFTING FOR MODEL 412	REFER TO SECTION 1030										
4	SHAFT SLEEVES, STAINLESS STEEL (316) (NOTE 1) (RECOMMENDED FOR USE WITH MECHANICAL SEAL)	\$643	\$843	\$969	\$1,050	\$3,074	\$1,084	\$4,303	\$4,890	\$5,317	\$5,347	
		4A	4B	4C	4D	4AA	4E	4AB	4F	4G	4AC	
	SHAFT SLEEVES, STAINLESS STEEL HARDENED 440C (RECOMMENDED FOR USE WITH PACKING)	\$742	\$908	\$1,048	\$1,089	\$3,380	\$1,193	\$4,732	\$5,246	\$5,450	\$5,882	
		4H	4J	4K	4L	4AD	4M	4AE	4N	4P	4AF	

NOTE 1)

THE USE OF 316 STAINLESS STEEL SHAFT SLEEVES WITH A 316 STAINLESS STEEL SHAFT IS PROHIBITED DUE TO GALLING. WHEN 316 STAINLESS SLEEVES ARE REQUIRED, AS WITH MECHANICAL SEALS, THE 416 SS SHAFT IS REQUIRED.

LIST PRICE SHEET
MODEL 411, 412, 413
OPTIONAL FEATURES

OPTIONAL IMPELLER MATERIAL

For Chlorinated Water, an alternate impeller material should be used in addition to when chlorine content within the water is above 2 PPM, when the pumps are near the chlorine injection point, or history or experience indicates high dezincification risk. Pentair recommends the use of alpha nickel aluminum bronze, (material code 243) or AISI 316 stainless steel (material code 104).

OPTION	SIZE	ALPHA NICKEL ALUMINUM BRONZE (243)		AISI 316 STAINLESS STEEL (104)	
		OPTION NO.	LIST PRICE	OPTION NO.	LIST PRICE
5	POWER SERIES 1				
	2 x 2.5 x 9	5A	\$1,181	5SS	\$2,565
	2 x 2.5 x 10	5B	1,344	5SS	2,912
	2 x 2.5 x 12	5C	1,367	5SS	2,966
	POWER SERIES 2				
	2.5 x 3 x 10B	5D	1,269	5SS	2,753
	2.5 x 3 x 12	5E	1,375	5SS	2,983
	3 x 4 x 10B	5F	1,488	5SS	3,228
	3 x 4 x 10C	5G	1,488	5SS	3,228
	3 x 4 x 14	5H	1,576	5SS	3,419
	4 x 5 x 10B	5J	1,595	5SS	3,462
	POWER SERIES 3				
	4 x 5 x 11A	5K	1,639	5SS	3,560
	4 x 5 x 11C	5L	1,639	5SS	3,560
	4 x 5 x 11D	5BA	1,639	5SS	3,560
	4 x 5 x 15	5M	1,675	5SS	3,637
	POWER SERIES 4				
	4 x 6 x 18B	5N	2,482	5SS	5,384
	5 x 6 x 11A	5P	1,686	5SS	3,658
	5 x 6 x 11C	5Q	1,686	5SS	3,658
	5 x 6 x 15	5R	1,975	5SS	4,286
	5 x 6 x 17	5T	2,039	5SS	4,421
	6 x 8 x 11	5W	1,867	5SS	4,050
	8 x 8 x 11B	5AA	1,911	5SS	4,143
	POWER SERIES 4A				
	6 x 8 x 11HH	5BB	2,243	5SS	5,248
	POWER SERIES 5				
	6 x 8 x 15	5AB	2,855	5SS	6,192
	6 x 8 x 18A	5BC	3,472	5SS	7,534
	6 x 8 x 18B	5AC	3,472	5SS	7,534
	6 x 8 x 18C	5BD	3,472	5SS	7,534
	6 x 8 x 20	5BE	3,686	5SS	7,999
	8 x 10 x 12	5AE	3,254	5SS	7,059
	8 x 10 x 12A	5AF	3,254	5SS	7,059
	8 x 10 x 15A	5AG	3,254	5SS	7,059
	8 x 10 x 15B	5AH	3,254	5SS	7,059
	8 x 10 x 17B	5AJ	3,254	5SS	7,059
	POWER SERIES 5A				
	6 x 8 x 14HH	5BF	2,590	5SS	6,068
	POWER SERIES 6B				
	8 x 10 x 21	5BG	4,290	5SS	9,820
	8 x 10 x 21A	5BH	4,290	5SS	9,820
	10 x 12 x 12B	5BJ	3,429	5SS	7,850
	10 x 12 x 15B	5BK	3,555	5SS	8,131
	10 x 12 x 15C	5BL	3,555	5SS	8,131
10 x 12 x 18	5AK	4,739	5SS	10,849	
POWER SERIES 7A					
10 x 12 x 18D	5BM	4,739	5SS	12,918	
POWER SERIES 7					
8 x 12 x 24	5BP	6,145	5SS	13,333	
12 x 14 x 15B	5BR	3,922	5SS	8,510	
12 x 14 x 18A	5BT	5,925	5SS	12,852	
14 x 16 x 18	5BW	6,451	5SS	14,000	

LIST PRICE SHEET
MODEL 411, 412, 413
OPTIONAL FEATURES

Lead Free* Construction

Adder to comply with the "Reduction of Lead in Drinking Water Act".

"Lead free" is defined as restricting the permissible levels of lead in the wetted surfaces of pipes, pipe fittings, other plumbing fittings and fixtures to a weighted average of not more than 0.25%.

Changes to Materials of Construction:

Shaft Sleeve: 440C SS for packing, 316 SS for Mechanical Seals

Case Wear Rings: 416 SS

Impeller: Low Zinc Silicon Bronze ASTM B584 C87610

Only for use with the 410 Series that have special quoted options, otherwise see dedicated NSF-372 price pages.

Lead Free* Construction		
OPTION NO.	SIZE	LIST PRICE
63LL	POWER SERIES 1	
	2 x 2.5 x 9	\$1,710
	2 x 2.5 x 10	1,861
	2 x 2.5 x 12	1,886
	POWER SERIES 2	
	2.5x 3 x 10B	1,973
	2.5x 3 x 12	2,076
	3 x 4 x 10B	2,186
	3 x 4 x 10C	2,186
	3 x 4 x 14	2,266
	4 x 5 x 10B	2,286
	POWER SERIES 3	
	4 x 5 x 11A	2,442
	4 x 5 x 11C	2,442
	4 x 5 x 11D	2,442
	4 x 5 x 15	2,477
	POWER SERIES 4	
	4 x 6 x 18B	3,317
	5 x 6 x 11A	2,560
	5 x 6 x 11C	2,560
	5 x 6 x 15	2,835
	5 x 6 x 17	2,894
	6 x 8 x 11	2,731
	8 x 8 x 11B	2,771
	POWER SERIES 4A	
	6 x 8 x 11HH	7,497
	POWER SERIES 5	
	6 x 8 x 15	3,703
	6 x 8 x 18A	4,289
	6 x 8 x 18B	4,289
	6 x 8 x 18C	4,289
	6 x 8 x 20	5,175
	8 x 10 x 12	4,080
	8 x 10 x 12A	4,080
	8 x 10 x 15A	4,080
	8 x 10 x 15B	4,080
	8 x 10 x 17B	4,080
	POWER SERIES 5A	
	6 x 8 x 14HH	7,620
	POWER SERIES 6B	
	8 x 10 x 21	5,420
	8 x 10 x 21A	5,420
10 x 12 x 12B	5,656	
10 x 12 x 15B	7,131	
10 x 12 x 15C	7,131	
10 x 12 x 18	7,375	
POWER SERIES 7A		
10 x 12 x 18D	7,375	
POWER SERIES 7		
8 x 12 x 24	8,582	
12 x 14 x 15B	8,582	
12 x 14 x 18A	10,483	

	14 x 16 x 18	10,986
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LIST PRICE SHEET
MODEL 411, 412, 413
OPTIONAL FEATURES

Optional Impeller Materials
Lead Free Construction

For Chlorinated Water, an alternate impeller material should be used in addition to when chlorine content within the water is above 2 PPM, when the pumps are near the chlorine injection point, or history or experience indicates high dezincification risk. Pentair recommends the use of alpha nickel aluminum bronze, (material code 243) or AISI 316 stainless steel (material code 104).

The following adders are to be used when alternate impeller materials are needed and option 63LL has been selected. See Page 15 for impeller material adders are required, option 63LL has NOT been selected.

OPTION	SIZE	ALPHA NICKEL ALUMINUM BRONZE (243)		AISI 316 STAINLESS STEEL (104)	
		OPTION NO.	LIST PRICE	OPTION NO.	LIST PRICE
5	POWER SERIES 1				
	2 x 2.5 x 9	5NAB	\$579	5SS	\$1,823
	2 x 2.5 x 10	5NAB	658	5SS	1,894
	2 x 2.5 x 12	5NAB	670	5SS	2,243
	POWER SERIES 2				
	2.5 x 3 x 10B	5NAB	621	5SS	1,919
	2.5 x 3 x 12	5NAB	674	5SS	2,264
	3 x 4 x 10B	5NAB	730	5SS	2,243
	3 x 4 x 10C	5NAB	730	5SS	3,007
	3 x 4 x 14	5NAB	773	5SS	3,007
	4 x 5 x 10B	5NAB	782	5SS	2,179
	POWER SERIES 3				
	4 x 5 x 11A	5NAB	803	5SS	2,906
	4 x 5 x 11C	5NAB	803	5SS	2,303
	4 x 5 x 11D	5NAB	803	5SS	4,179
	4 x 5 x 15	5NAB	822	5SS	4,179
	POWER SERIES 4				
	4 x 6 x 18B	5NAB	1,215	5SS	5,836
	5 x 6 x 11A	5NAB	826	5SS	3,314
	5 x 6 x 11C	5NAB	826	5SS	3,314
	5 x 6 x 15	5NAB	968	5SS	3,472
	5 x 6 x 17	5NAB	998	5SS	4,555
	6 x 8 x 11	5NAB	915	5SS	3,314
	8 x 8 x 11B	5NAB	935	5SS	3,371
	POWER SERIES 4A				
	6 x 8 x 11HH	5NAB	1,167	5SS	4,419
	POWER SERIES 5				
	6 x 8 x 15	5NAB	1,399	5SS	4,980
	6 x 8 x 18A	5NAB	1,702	5SS	6,146
	6 x 8 x 18B	5NAB	1,702	5SS	6,146
	6 x 8 x 18C	5NAB	1,702	5SS	6,146
	6 x 8 x 20	5NAB	1,807	5SS	6,397
	8 x 10 x 12	5NAB	1,593	5SS	4,980
	8 x 10 x 12A	5NAB	1,593	5SS	5,963
	8 x 10 x 15A	5NAB	1,593	5SS	4,980
	8 x 10 x 15B	5NAB	1,593	5SS	5,963
	8 x 10 x 17B	5NAB	1,593	5SS	5,963
	POWER SERIES 5A				
	6 x 8 x 14HH	5NAB	1,348	5SS	4,916
	POWER SERIES 6B				
	8 x 10 x 21	5NAB	2,102	5SS	7,252
	8 x 10 x 21A	5NAB	2,102	5SS	7,252
	10 x 12 x 12B	5NAB	1,681	5SS	5,203
	10 x 12 x 15B	5NAB	1,741	5SS	6,022
	10 x 12 x 15C	5NAB	1,741	5SS	6,873
10 x 12 x 18	5NAB	2,324	5SS	6,995	
POWER SERIES 7A					
10 x 12 x 18D	5NAB	2,324	5SS	6,159	
POWER SERIES 7					
8 x 12 x 24	5NAB	3,011	5SS	10,891	
12 x 14 x 15B	5NAB	1,920	5SS	8,164	
12 x 14 x 18A	5NAB	2,903	5SS	9,918	
14 x 16 x 18	5NAB	3,162	5SS	10,349	

LIST PRICE SHEET
MODEL 411, 412, 413
OPTIONAL FEATURES

OPT. NO.	DESCRIPTION	LIST PRICE (per pump)									
		POWER SERIES									
		1	2	3*	4	4A	5	5A	6B	7	7A
6	WEARING RINGS, IMPELLER BRONZE	\$177	\$354	\$531	\$703	-	\$879	-	\$1,056	\$1,230	\$1,230
		6A	6B	6C	6D	N/A	6E	N/A	6F	6G	6BH
	CAST IRON	\$703	\$879	\$1,056	\$1,230	-	\$1,409	-	\$1,586	\$1,756	\$1,756
		6H	6J	6K	6L	N/A	6M	N/A	6N	6P	6BJ
	STAINLESS STEEL (316)	\$1,586	\$1,756	\$1,934	\$2,109	-	\$2,287	-	\$2,469	\$2,636	\$2,636
		6R	6T	6W	6AA	N/A	6AB	N/A	6AC	6AD	6BK
7	CASE WEARING RINGS STAINLESS STEEL (416)	\$1,409	\$1,586	\$1,756	\$2,109	\$2,469	\$2,469	\$2,469	\$2,813	\$3,170	\$3,170
		7A	7B	7C	7D	7H	7E	7J	7F	7G	7K
14	BASE, STRUCTURAL STEEL SUITABLE FOR GAS ENGINE, DIESEL ENGINE, OR STEAM TURBINE AND STEEL BASE FOR DOUBLE EXTENDED SHAFT	REFER TO FACTORY									
15	DRIP PAN, (MODEL 411 ONLY) STEEL BASE ONLY	\$319	\$319	\$398	\$398	\$446	\$446	\$446	\$446	\$446	\$446
		15A	15B	15C	15D	15H	15E	15J	15F	15G	15K
16	FLUSH LINES, 1/4" TUBING FROM VOLUTE TO TAPPED OPENINGS AT THE STUFFING BOXES. OPTION 37 ALSO REQUIRED FOR PACKED PUMPS	MODEL 411 ONLY FLUSH LINES ARE STANDARD FOR MODEL 412 & 413									
		BRONZE FITTED	\$156	\$156	\$156	\$156	\$156	\$156	\$156	\$156	\$156
	16A		16B	16C	16D	16BA	16E	16BE	16F	16G	16BH
	ALL IRON (STEEL TUBING)	\$1,010	\$1,010	\$1,010	\$1,010	\$1,010	\$1,010	\$1,010	\$1,010	\$1,010	\$1,010
		16H	16J	16K	16L	16BB	16M	16BF	16N	16P	16BJ
	STAINLESS STEEL (316)	\$1,512	\$1,512	\$1,512	\$1,512	\$1,512	\$1,512	\$1,512	\$1,512	\$1,512	\$1,512
16AA		16AB	16AC	16AD	16BC	16AE	16BG	16AF	16AG	16BK	
19	ABRASIVE SEPARATOR, 1/2" NYLON MOUNTED BETWEEN EACH SEAL BOX AND DISCHARGE VOLUTE (REQUIRES OPT 37 WHEN USED WITH PACKING)	\$1,367	\$1,367	\$1,367	\$1,367	\$1,367	\$1,367	\$1,367	\$1,367	\$1,367	
		19A	19B	19C	19D	19AA	19E	19AC	19F	19G	19AE
	DOXIE TYPE 5 STAINLESS STEEL SEPARATOR WITH ST. STL. BRAIDED HOSE. (REQUIRES OPT 37 WHEN USED WITH PACKING)	\$5,788	\$5,788	\$5,788	\$5,788	\$5,788	\$5,788	\$5,788	\$5,788	\$5,788	\$5,788
		19H	19J	19K	19L	19AB	19M	19AD	19N	19P	19AF

* IMPELLER WEAR RINGS NOT AVAILABLE ON 4x5x11D

LIST PRICE SHEET
MODEL 411, 412, 413
OPTIONAL FEATURES

OPT. NO.	DESCRIPTION	LIST PRICE										
		POWER SERIES										
		1	2	3	4	4A	5	5A	6B	7	7A	
26	VENTING, INCREASE SIZE OF VENT OPENING IN UPPER HALF CASING (411 ONLY)	REFER TO FACTORY										
	PIPE TAP AT SUCTION CHAMBER											
37	LANTERN RINGS, 2 PER PUMP	\$77	\$77	\$77	\$77	\$77	\$77	\$77	\$77	\$317	\$317	\$317
		37A	37B	37C	37D	37H	37E	37J	37F	37G	37K	
38	FLANGES, DRILL FOR 250 LBS. SUCTION AND DISCHARGE	\$446	\$446	\$446	\$446	\$446	\$446	\$446	\$446	\$784	\$784	\$784
		38A	38B	38C	38D	38H	38E	38J	38F	38G	38K	
54	3M SCOTCHKOTE 134-FUSION BONDED CASING (INTERNAL ONLY)	\$1,712	\$1,712	\$1,712	\$1,712	\$2,851	\$2,851	\$2,851	\$2,851	\$4,387	\$4,387	
		54N	54N	54N	54N	54N	54N	54N	54N	54N	54N	
	3M SCOTCHKOTE 134-FUSION BONDED IMPELLER & CASING (INTERNAL ONLY)	\$2,278	\$2,278	\$2,278	\$2,278	\$3,418	\$3,418	\$3,418	\$3,418	\$4,952	\$4,952	
		54P	54P	54P	54P	54P	54P	54P	54P	54P	54P	
3M SCOTCHKOTE 134-FUSION BONDED IMPELLER	\$567	\$567	\$567	\$567	\$567	\$567	\$567	\$567	\$567	\$567		
	54R	54R	54R	54R	54R	54R	54R	54R	54R	54R		
57	PETCOCK, 1/4" IN CASING VENT	\$14	\$14	\$14	\$14	\$14	\$14	\$14	\$14	\$14	\$14	
		57A	57B	57C	57D	57H	57E	57J	57F	57G	57K	
58	ORIFICE BY-PASS, 3/4" STAINLESS STEEL, NIPPLE ONLY	\$135	\$135	-								
		58A	58B	N/A								
59	GLAND EYEBOLTS AND NUTS STAINLESS STEEL	\$323	\$323	\$323	\$323	\$323	\$323	\$323	\$323	\$323	\$323	
		59A	59B	59C	59D	59AA	59E	59AB	59F	59G	59AC	
	GLANDS, BRONZE (PER PUMP)	\$87	\$87	\$127	\$137	N/C	\$155	N/C	\$196	\$196	N/C	
59H		59J	59K	59L	59AD	59M	59AE	59N	59P	59AF		
69	LEFT HAND ROTATION							N/C	69A			

FOR NSF 50 PRICING, SEE DEDICATED NSF 50 PRICE PAGES

NOTE: FOR ENGINEERING TESTS, SPECIAL CALCULATIONS, SPECIAL CURVES, DRAWINGS AND MANUALS, REFER TO SECTION 5000. FOR MOTORS, REFER TO SECTION 1010.

LIST PRICE SHEET
SECTION 410
STEEL DRIP RIM BASES

410 SERIES														
R.P.M. & H.P.			FRAME SIZE	411 P.S. 1			411 P.S. 2			411 P.S. 3				
1150	1750	3500		OPT.	LIST	BASE SIZE	OPT.	LIST	BASE SIZE	OPT.	LIST	BASE SIZE		
1/2	1/2 & 3/4	3/4 & 1	56											
3/4	1	1-1/2	143T	14A	\$896	9 x 33								
1	1-1/2 & 2	2 & 3	145T	14B										
1-1/2	3	5	182T	14C										
2	5	7-1/2	184T	14D					14AF	\$896	9 x 33			
									14AG					
3	7-1/2	10	213T	14E	1159	11 x 36	14AH	1159	11 x 36	14BW	\$1,178	11 x 42		
5	10	15	215T	14F			14AJ			14CA				
7-1/2	15	20	254T	14G	1304	14 x 42	14AK	1,304	14 x 42	14CB	1,304	14 x 42		
10	20	25	256T	14H			14AL			14CC				
		30	284TS	14J			14AM			14CD			1,360	14 x 48
15	25		284T	14J	1,304	14 x 42	14AN	14CE						
		40	286TS	14K	1,304	14 x 42	14AP	1,360	14 x 48	14CF	1,662	18 x 46		
20	30		286T	14K	1,304	14 x 42	14AR			14CG				
		50	324TS	14L	1,662	18 x 46	14AT	1,662	14 x 46	14CH	1,916	18 x 54		
25	40		324T	14L	1,662	18 x 46	14LJ	1,916	18 x 54	14DT				
		60	326TS				14AW	1,662	18 x 46	14CJ				
30	50		326T				14LK	1,916	18 x 54	14EA				
	60	75	364TS				14BA	1,916	18 x 54	14CK				
40			364T				14BA	1,916	18 x 54	14CK	1,916	18 x 54		
	75	100	365TS				14BB	1,916	18 x 54	14CL	1,916	18 x 54		
50			365T				14BB	1,916	18 x 54	14CL	1,916	18 x 54		
	100	125	404TS							14CM	2,345	22 x 54		
60			404T							14CM	2,345	22 x 54		
	125	150	405TS							14CN	2,345	22 x 54		

BASE #	BASE SIZE	WEIGHT
3	9 x 33	55
5	11 x 36	66
6	11 x 42	76
8	14 x 42	106
9	14 x 48	121
11	18 x 46	187
12	18 x 54	218
13	18 x 64	256
15	22 x 54	328
16	22 x 64	386
17	22 x 74	444
18	22 x 82	491

LIST PRICE SHEET
SECTION 410
STEEL DRIP RIM BASES

R.P.M. & H.P.			FRAME SIZE	411 P.S. 4			411 P.S. 5			411 P.S. 6B			411 P.S. 7						
1150	1750	3500		OPT.	LIST	BASE SIZE	OPT.	LIST	BASE SIZE	OPT.	LIST	BASE SIZE	OPT.	LIST	BASE SIZE				
1/2	1/2 & 3/4	3/4 & 1	56																
3/4	1	1-1/2	143T																
1	1-1/2 & 2	2 & 3	145T																
1-1/2	3	5	182T																
2	5	7-1/2	184T																
3	7-1/2	10	213T	14DL	\$1,193	11 x 42													
5	10	15	215T	14DM															
7-1/2	15	20	254T	14DN	1360	14 x 48	14FL	\$1,360	14 x 48										
10	20	25	256T	14DP			14FM												
		30	284TS	14DR	1,662	18 x 46	14FN	1,916	18 x 54										
15	25		284T	14DR	1,662	18 x 46	14FN	1,916	18 x 54										
		40	286TS	14DW	1,662	18 x 46	14FR	1,916	18 x 54										
20	30		286T	14DW	1,662	18 x 46	14FR	1,916	18 x 54										
		50	324TS	14EB	1,916	18 x 54	14FW	1,916	18 x 54										
25	40		324T	14EC			14FW	1,916	18 x 54	14HR	\$2,897	18 x 64							
		60	326TS	14ED			14GA	1,916	18 x 54	14HT	2,897	18 x 64							
30	50		326T	14EE			14GA	1,916	18 x 54	14HT	2,897	18 x 64							
	60	75	364TS	14EF			14GB			14HW	2,897	18 x 64							
40			364T	14EF			1,916	18 x 54	14GC										
	75	100	365TS	14EG	1,916	18 x 54	14GD	2,897	18 x 64	14JB	2,897	18 x 64							
50			365T	14EG	1,916	18 x 54	14GE			14JB									
	100	125	404TS	14EH	2,345	22 x 54	14GF	2,939	22 x 64	14JD	4,358	22 x 74							
60			404T	14EH	2,345	22 x 54	14GG			14JE						14KK	\$4,358	22 x 74	
	125	150	405TS	14EJ	2,345	22 x 54	14GH			14JF						14KM	4,358	22 x 74	
75			405T	14MC	2,939	22 x 64	14GJ			14JG						14KM	4,358	22 x 74	
	150	200	444TS	14EK	2,939	22 x 64	14GK			14JH						14KN			
100			444T	14EK	2,939	22 x 64	14GL			14JJ						14KP	4,821	22 x 82	
150	200	250	445TS	14LH	2,939	22 x 64	14GM	14JK				14KR	4,821	22 x 82					
125	200	250	445T	14LH	2,939	22 x 64	14MD	4,358	22 x 74	14JL	4,702	22 x 82	14KT	4,821	22 x 82				

SECTION 410 PAGE 23
DATED JANUARY 1, 2020
SUPERCEDES PAGE 23
DATED FEBRUARY 18, 2019

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LIST PRICES

MODEL 421 HORIZONTAL TWO STAGE SPLIT CASE PUMPS

MODELS 422 AND 423 VERTICAL MOUNTED TWO STAGE SPLIT CASE PUMPS

MATERIALS OF CONSTRUCTION

PUMP PART		BRONZE FITTED	ALL IRON
CASING		CAST IRON ASTM A48	CAST IRON ASTM A48
		DUCT. IRON ASTM A536 ²	
CASING WEARING RING		BRONZE ASTM B62	CAST IRON ASTM A48
IMPELLER		BRONZE ASTM B584	CAST IRON ASTM A48
SHAFT		STEEL AISI C1045	STEEL AISI C1045
SHAFT SLEEVE	PACKING	BRONZE HIGH LEAD TIN	STAINLESS STEEL AISI 440C
	SEAL		STAINLESS STEEL AISI 316
GLAND		CAST IRON ASTM A48	CAST IRON ASTM A48
PACKING		INTERWOVEN GRAPHITE IMPREGNATED ACRYLIC	

NOTE:

1. ALL MODEL 422 AND 423 PUMPS ARE FURNISHED WITH JOHN CRANE TYPE 21 MECHANICAL SEAL AS STANDARD.
2. FOR 5 x 5 x 12 and 6 x 6 x 12

F.O.B. NO. AURORA, ILLINOIS
 PRICING SUBJECT TO CHANGE WITHOUT NOTICE
 REFER TO ENCOMPASS FOR MOST ACCURATE PRICING AND SELECTION TABLES



AURORA®

LIST PRICE SHEET
MODEL 421
PUMP ONLY

SIZE	BRONZE FITTED			ALL IRON		
	LIST PRICE	CONTROL NUMBER	WT	LIST PRICE	CONTROL NUMBER	WT
POWER SERIES 2						
2x2-1/2x12A	\$10,991	X400501	270	NOT AVAILABLE		
2x2-1/2x12A*	10,991	X401325	270	NOT AVAILABLE		
2x2-1/2x12B	10,991	X400505	270	NOT AVAILABLE		
2-1/2x3x12A	11,809	X400509	290	NOT AVAILABLE		
2-1/2x3x12A*	11,809	X401328	290	NOT AVAILABLE		
POWER SERIES 3						
3x4x14A	14,899	X400513	480	\$16,868	X400515	480
3x4x14B	14,899	X400517	480	16,868	X400519	480
4x5x15	16,940	X400521	570	18,870	X400523	570
POWER SERIES 4A						
5x5x12	18,047	X405150	980	NOT AVAILABLE		
POWER SERIES 4						
5x6x15	21,287	X400525	790	23,221	X400527	790
POWER SERIES 5A						
6x6x12	21,810	X405151	1205	NOT AVAILABLE		
POWER SERIES 5						
6x8x17A	26,247	X400529	1030	29,353	X400531	1030
6x8x17B	26,247	X400533	1030	29,353	X400535	1030

*THESE SELECTIONS ARE FOR PUMPS WITH 9" DIAMETER IMPELLERS AND SMALLER, ALSO FOR PUMPS OPERATING AT 3500 R.P.M.

MODEL 422
PUMP ONLY

SIZE	BRONZE FITTED			ALL IRON		
	LIST PRICE	CONTROL NUMBER	WT	LIST PRICE	CONTROL NUMBER	WT
POWER SERIES 2						
2x2-1/2x12A	\$15,438	X400537	320	NOT AVAILABLE		
2x2-1/2x12A*	15,438	X401331	320	NOT AVAILABLE		
2x2-1/2x12B	15,438	X400541	320	NOT AVAILABLE		
2-1/2x3x12A	16,258	X400545	350	NOT AVAILABLE		
2-1/2x3x12A*	16,258	X401334	350	NOT AVAILABLE		
POWER SERIES 3						
3x4x14A	19,344	X400549	550	\$21,287	X400551	550
3x4x14B	19,344	X400553	550	21,287	X400555	550

*THESE SELECTIONS ARE FOR PUMPS WITH 9" DIAMETER IMPELLERS AND SMALLER, ALSO FOR PUMPS OPERATING AT 3500 R.P.M.

LIST PRICING FOR 422 VERTICAL PUMPS INCLUDES A PAIR OF STANDARD MECHANICAL SEALS. IF DIFFERENT SEALS ARE REQUIRED, DEDUCT LIST PRICE OF OPTION 1 STANDARD SEALS AND ADD IN LIST PRICE OF THE REQUIRED SEALS.

LIST PRICE SHEET
MODEL 423
PUMP ONLY

	BRONZE FITTED			ALL IRON		
SIZE	LIST PRICE	CONTROL NUMBER	WT	LIST PRICE	CONTROL NUMBER	WT
POWER SERIES 2						
FRAME 143HP - 256HP						
2 x 2-1/2 x 12A	\$15,662	X400573	360	NOT AVAILABLE		
2 x 2-1/2 x 12A*	15,662	X401337	360	NOT AVAILABLE		
2 x 2-1/2 x 12B	15,662	X400577	360	NOT AVAILABLE		
2-1/2 x 3 x 12A	16,487	X400581	400	NOT AVAILABLE		
2-1/2 x 3 x 12A*	16,487	X401340	400	NOT AVAILABLE		
FRAME 284HPH - 365HP						
2 x 2-1/2 x 12A	15,662	X401350	360	NOT AVAILABLE		
2 x 2-1/2 x 12A*	15,662	X401351	360	NOT AVAILABLE		
2 x 2-1/2 x 12B	15,662	X401352	360	NOT AVAILABLE		
2-1/2 x 3 x 12A	16,487	X401353	400	NOT AVAILABLE		
2-1/2 x 3 x 12A*	16,487	X401354	400	NOT AVAILABLE		
POWER SERIES 3						
FRAME 143HP - 256HP						
3 x 4 x 14A	19,578	X400585	610	21,518	X400587	610
3 x 4 x 14B	19,578	X400589	610	21,518	X400591	610
FRAME 284HPH - 365HP						
3 x 4 x 14A	19,578	X401355	610	21,518	X401366	610
3 x 4 x 14B	19,578	X401356	610	21,518	X401367	610

*THESE SELECTIONS ARE FOR PUMPS WITH 9" DIAMETER IMPELLERS AND SMALLER.

LIST PRICING FOR 423 VERTICAL PUMPS INCLUDES A PAIR OF STANDARD MECHANICAL SEALS. IF DIFFERENT SEALS ARE REQUIRED, DEDUCT LIST PRICE OF OPTION 1 STANDARD SEALS AND ADD IN LIST PRICE OF THE REQUIRED SEALS.

LIST PRICE SHEET
MODEL 421
BASE & COUPLINGS

ODP HORSEPOWER														
POWER SERIES	R.P.M.	3500	5	7.5	10	15	20	25	30	-	40	-	50	
		1750	3	5	7.5	10	15	20	25	-	30	-	40	
		1150	1.5	2	3	5	7.5	10	15	-	20	-	25	
FRAME SIZE		182T	184T	213T	215T	254T	256T	284T	284TS	286T	286TS	324T	324TS	
2	2x2-1/2x12	STEEL BASE												
		Control	14BT	14BW	14CA	14CB	14CC	14CD	14CF	14CE	14CH	14CG	14CJ	14CJ
		List	\$599	\$599	\$607	\$607	\$941	\$941	\$941	\$941	\$1,028	\$941	\$1,028	\$1,028
	Wt.	50	50	90	90	100	100	100	100	150	100	150	150	
	2-1/2x3x12	COUPLING												
		Control	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD
List		\$82	\$82	\$156	\$194	\$194	\$273	\$273	\$194	\$273	\$273	\$573	\$273	
Wt.	3	3	6	6	6	8	8	6	8	8	21	8		
3	3x4x14 4x5x15	STEEL BASE												
		Control				14CN	14CP	14CR	14CT	14CT	14CW	14CW	14DA	14NA
		List				\$987	\$941	\$1,028	\$1,028	\$1,028	\$1,028	\$1,028	\$1,178	\$1,028
	Wt.				90	100	120	120	120	120	120	150	120	
	3x4x14 4x5x15	COUPLING												
		Control				34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD
List					\$194	\$194	\$273	\$273	\$273	\$273	\$273	\$588	\$588	
Wt.				6	6	8	8	8	8	8	21	21		
5	6x8x17	STEEL BASE												
		Control							14DW	14DW	14EA	14EA	14EB	14EB
		List							\$1,178	\$1,178	\$1,178	\$1,178	\$1,178	\$1,178
	Wt.							150	150	150	150	150	150	
	6x8x17	COUPLING												
		Control							34STD	34STD	34STD	34STD	34STD	34STD
List								\$273	\$273	\$588	\$588	\$588	\$588	
Wt.							8	8	21	21	21	21		

NEMA

MOTOR FRAME DESIGNATIONS FOR POLYPHASE, SQUIRREL-CAGE DESIGNS A & B,
 HORIZONTAL & VERTICAL MOTORS, 60Hz, CLASS B INSULATION SYSTEM,
 OPEN TYPE 1.15 S.F. AND TOTALLY-ENCLOSED FANCOOLED TYPE 1.0 S.F.

HP RATING	3600 R.P.M.		1800 R.P.M.		1200 R.P.M.		900 R.P.M.	
	OPEN	TEFC	OPEN	TEFC	OPEN	TEFC	OPEN	TEFC
1/4			56	56	56	56	56	56
1/3			56	56	56	56	56	56
1/2			56	56	56	56	143T	143T
3/4	56	56	56	56	143T	143T	145T	145T
1	56	56	143T	143T	145T	145T	182T	182T
1-1/2	143T	143T	145T	145T	182T	182T	184T	184T
2	145T	145T	145T	145T	182T	182T	213T	213T
3	145T	182T	182T	182T	213T	213T	215T	215T
5	182T	184T	184T	184T	215T	215T	254T	254T
7-1/2	184T	213T	213T	213T	254T	254T	256T	256T
10	213T	215T	215T	215T	256T	256T	284T	284T
15	215T	254T	254T	254T	284T	284T	286T	286T

HP RATING	3600 R.P.M.		1800 R.P.M.		1200 R.P.M.		900 R.P.M.	
	OPEN	TEFC	OPEN	TEFC	OPEN	TEFC	OPEN	TEFC
20	254T	256T	256T	256T	286T	286T	324T	324T
25	256T	284TS	284T	284T	324T	324T	326T	326T
30	284TS	286TS	286T	286T	326T	326T	364T	364T
40	286TS	324TS	324T	324T	364T	364T	365T	365T
50	324TS	326TS	326T	326T	365T	365T	404T	404T
60	326TS	364TS	364TS	364TS	404T	404T	405T	405T
75	364TS	365TS	365TS	365TS	405T	405T	444T	444T
100	365TS	405TS	404TS	405TS	444T	444T	445T	445T
125	404TS	444TS	405TS	444TS	445T	445T		
150	405TS	445TS	444TS	445T				
200	444TS							
250	445TS							

NOTE: FOR MOTORS, REFER TO SECTION 1010

LIST PRICE SHEET
MODEL 421
BASE & COUPLINGS

ODP HORSEPOWER																			
POWER SERIES	R.P.M.	3500	-	60	-	75	-	100	-	125	-	150	-	200	250	-	300	350	
		1750	50	-	-	60	-	75	-	100	-	125	-	150	200	-	-	-	
		1150	30	-	40	-	50	-	60	-	75	-	100	-	125	-	-	-	
FRAME SIZE		326T	326TS	364T	364TS	365T	365TS	404T	404TS	405T	405TS	444T	444TS	445T	445TS	447TS	449TS		
2	2 x 2-1/2 x 12 2-1/2 x 3 x 12	STEEL BASE																	
		Control	14CK	14CK	14CL	14CL	14CM	14CM											
		List	\$1,028	\$1,028	\$1,028	\$1,028	\$1,028	\$1,028											
		Wt.	150	150	150	150	150	150											
COUPLING																			
Control	34STD	34STD	34STD	34STD	34STD	34STD													
List	\$588	\$588	\$588	\$588	\$774	\$774													
Wt.	21	21	21	21	21	21													
3	3 x 4 x 14 4 x 5 x 15	STEEL BASE																	
		Control	14BD	14DB	14DC	14DC	14DE	14DE	14DG	14DG	14DH	14DH	14NB	14DJ					
		List	\$1,896	\$1,178	\$1,178	\$1,178	\$1,178	\$1,178	\$1,543	\$1,543	\$1,543	\$1,543	\$2,538	\$1,543					
		Wt.	150	150	150	150	150	150	270	270	270	270	385	270					
COUPLING																			
Control	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD						
List	\$588	\$588	\$902	\$902	\$1,279	\$1,279	\$1,279	\$1,279	\$1,279	\$1,532	\$1,532	\$1,532	\$1,532						
Wt.	21	21	30	30	35	35	35	35	35	60	60	60	60						
4A	5 x 5 x 12	STEEL BASE																	
		Control							14EP	14EP	14ER	14ER	14ET	14ET	14EW	14EW	14FA	14FA	
		List							\$2,538	\$2,538	\$2,538	\$2,538	\$2,538	\$2,538	\$2,538	\$2,538	\$2,759	\$2,759	
		Wt.							385	385	385	385	385	385	385	385	450	450	
COUPLING																			
Control							34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD		
List							\$1,279	\$902	\$1,279	\$1,279	\$1,279	\$1,279	\$1,279	\$1,439	\$1,439	\$1,439	\$1,439		
Wt.							35	30	35	35	35	35	35	23	23	23	23		
4	5 x 6 x 15	STEEL BASE																	
		Control	14DK	14DK	14DL	14DL	14NC	14DM	14ND	14DN	14NE	14DP	14NF	14DR	14DT	14DT			
		List	\$1,178	\$1,178	\$1,178	\$1,178	\$1,436	\$1,178	\$2,538	\$1,543	\$2,538	\$1,543	\$2,538	\$1,543	\$2,538	\$2,538			
		Wt.	150	150	150	150	160	150	310	260	310	260	310	260	310	310			
COUPLING																			
Control	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD				
List	\$588	\$588	\$902	\$902	\$1,279	\$1,279	\$1,279	\$1,279	\$1,279	\$1,532	\$1,532	\$1,532	\$1,532	\$1,532					
Wt.	21	21	30	30	35	35	35	35	60	60	60	60	110	110					
5A	6 x 6 x 12	STEEL BASE																	
		Control													14FB	14FC	14FC	14FD	14FE
		List													\$2,538	\$2,538	\$2,538	\$2,759	\$2,759
		Wt.													385	385	385	450	450
COUPLING																			
Control														34STD	34STD	34STD	34STD	34STD	
List														\$1,279	\$1,439	\$1,439	\$1,439	\$1,439	
Wt.														35	23	23	23	23	
5	6 x 8 x 17	STEEL BASE																	
		Control	14EC	14EC	14EE	14ED	14EG	14EF	14EJ	14EH	14EL	14EK	14EM	14EM	14EN	14EN			
		List	\$1,436	\$1,436	\$1,436	\$1,436	\$1,436	\$1,436	\$1,543	\$1,543	\$2,538	\$1,543	\$2,538	\$2,538	\$2,538	\$2,538			
		Wt.	160	160	160	160	160	160	260	260	310	260	310	310	310	310			
COUPLING																			
Control	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD	34STD				
List	\$588	\$588	\$902	\$902	\$1,279	\$902	\$1,484	\$1,279	\$1,532	\$1,532	\$1,532	\$1,532	\$1,532	\$2,159	\$2,159				
Wt.	21	21	30	30	35	30	60	35	60	60	60	60	60	110	110				

LIST PRICE SHEET
SECTION 420
STEEL DRIP RIM BASES

420 SERIES

R.P.M. & H.P.			FRAME SIZE	421 P.S. 2			421 P.S. 3			421 P.S. 4			421 P.S. 5				
1150	1750	3500		OPT.	LIST	BASE SIZE	OPT.	LIST	BASE SIZE	OPT.	LIST	BASE SIZE	OPT.	LIST	BASE SIZE		
1/2	1/2 & 3/4	3/4 & 1	56														
3/4	1	1-1/2	143T														
1	1-1/2 & 2	2 & 3	145T														
1-1/2	3	5	182T	14A	\$888	9 x 33											
2	5	7-1/2	184T	14B													
3	7-1/2	10	213T	14C	1147	11 x 36											
5	10	15	215T	14D	1172	11 x 42	14R	141	11 x 42								
7-1/2	15	20	254T	14E	1293	14 x 42	14T	1347	14 x 48								
10	20	25	256T	14F			14W										
		30	284TS	14G			14AA			1347	14 x 48					14BB	\$2,460
15	25		284T	14H	1347	14 x 48	14AA	1347	14 x 48				14BB	2,460	14 x 56		
		40	286TS	14J			14AB	1347	14 x 48					14BC	2,460	14 x 56	
20	30		286T	14K			14AB	1347	14 x 48					14BC	2,460	14 x 56	
		50	324TS	14L	1646	18 x 46	14AC	1898	14 x 54				14BD	1,896	18 x 54		
25	40		324T	14L	1646	18 x 46	14AC	1898	18 x 54				14BD	1,896	18 x 54		
		60	326TS	14M	1646	18 x 46	14AD	1898	14 x 54	14AM	\$1,898	18 x 54	14BE	2,868	18 x 64		
30	50		326T	14M	1646	18 x 46	14AD	1898	18 x 54	14AM	1,898	18 x 54	14BE	2868	18 x 64		
	60	75	364TS	14N	1646	18 x 46	14AE			14AN	1,898	18 x 54	14BF				
40			364T	14P	1898	18 x 54	14AF			14AN	1,898	18 x 54	14BG				
	75	100	365TS	14P	1898	18 x 54	14AG			14AP	1,898	18 x 54	14BH				
50			365T	14P	1898	18 x 54	14AH			14NJ	2,868	18 x 64	14BJ				
	100	125	404TS				14AJ			2326	22 x 54	14AR	2,909			22 x 64	14BK
60			404T				14NG	2909	22 x 64	14AR	2,909	22 x 64	14BL				
	125	150	405TS				14AK	2326	22 x 54	14AT	2,909	22 x 64	14BM				
75			405T				14NH	2909	22 x 64	14AT	2,909	22 x 64	14BN				
	150	200	444TS				14AL	2909	22 x 64	14AW	2,909	22 x 64	14BP				
100			444T				14AL	2909	22 x 64	14AW	2,909	22 x 64	14BP	2,590	22 x 64		
150	200	250	335TS							14BA	2,909	22 x 64	14BR	2,909	22 x 64		
125	200	250	445T							14NK	4,316	22 x 74	14NL	4,316	22 x 74		

BASE #	BASE SIZE	WEIGHT
3	9 x 33	55
5	11 x 36	66
6	11 x 42	76
8	14 x 42	106
9	14 x 48	121
10	14 x 56	140
11	18 x 46	187
12	18 x 54	218
13	18 x 64	256
15	22 x 54	328
16	22 x 64	386
17	22 x 74	444
18	22 x 82	491

LIST PRICE SHEET
MODEL 423
COUPLINGS

POWER SERIES	2			3		
	LIST PRICE	OPTION NO.	WT.	LIST PRICE	OPTION NO.	WT.
182HP	\$69	34STD	6			
184HP	69	34STD	6			
213HP	129	34STD	6			
215HP	175	34STD	8	\$175	34STD	8
254HP	175	34STD	8	175	34STD	8
256HP	228	34STD	10	228	34STD	10
284HPH	228	34STD	10	228	34STD	10
286HPH	228	34STD	10	228	34STD	10
324HP	228	34STD	10	228	34STD	10
326HP	437	34STD	21	474	34STD	21
364HP	437	34STD	21	616	34STD	30
365HP	616	34STD	30	1205	34STD	35
404HP				1205	34STD	35
405HP				1,851	34STD	60
444HP						

**N
E
M
A**

**MOTOR FRAME DESIGNATIONS FOR
 POLYPHASE, SQUIRREL-CAGE
 DESIGN B. VERTICAL MOTORS,
 60Hz, CLASS B INSULATION
 SYSTEM OPEN TYPE 1.15 S.F.
 AND TOTALLY-ENCLOSED
 FANCOOLED TYPE 1.0 S.F.**

HP RATING	3600 R.P.M.		1800 R.P.M.		1200 R.P.M.	
	OPEN	TEFC	OPEN	TEFC	OPEN	TEFC
1	-	-	143HP	143HP	145HP	145HP
1-1/2	143HP	143HP	145HP	145HP	182HP	182HP
2	145HP	145HP	145HP	145HP	184HP	184HP
3	145HP	182HP	182HP	182HP	213HP	213HP
5	182HP	184HP	184HP	184HP	215HP	215HP
7-1/2	184HP	213HP	213HP	213HP	254HP	254HP
10	213HP	215HP	215HP	215HP	256HP	256HP
15	215HP	254HP	254HP	254HP	284HPH	284HPH
20	254HP	256HP	256HP	256HP	286HPH	286HPH
25	256HP	284HPH	284HPH	284HPH	324HP	324HP
30	284HPH	286HPH	286HPH	286HPH	326HP	326HP
40	286HPH	324HP	324HP	324HP	364HP	364HP
50	324HP	326HP	326HP	326HP	365HP	365HP
60	326HP	364HP	364HP	364HP	404HP	404HP
75	364HP	365HP	365HP	365HP	405HP	405HP
100	365HP	404HP	405HP	405HP	444HP	444HP
125	404HP	405HP	444HP	444HP	445HP	445HP
150	405HP	-	444HP	-	-	-
200	444HP	-	-	-	-	-
250	-	-	-	-	-	-

LIST PRICE SHEET
MODEL 421, 422, 423
OPTIONAL FEATURES

OPT. NO.	DESCRIPTION					LIST PRICE			
						POWER SERIES			
						2	3	4	5
1	MECHANICAL SEALS								
	MODEL	TYPE	SPECIFICATION	CODE	MFG				
	421	21 (FOR BF, AI) (STD. SEAL)	BP ₆₆ 1O ₁₀ 1	753	CRANE	\$ 367	\$ 441	\$ 546	\$ 1,375
						1L	1AB	1AK	1BA
		21	XP ₆₆ 1O ₁₀ 1	764	CRANE	946	1,560	2,003	2,430
						1K	1AA	1AJ	1AW
		1 (HI-WEAR)	B ₃₀ P ₆₆ 1D1	747	CRANE	2,349	2,739	3,103	3,635
						1M	1AC	1AL	1BB
		1 (HI-TEMP)	O ₂₈ P ₆₆ 1D1	769	CRANE	2,349	2,739	3,103	3,635
						1N	1AD	1AM	1BC
		9	QP1C1	762	CRANE	2,154	2,565	2,974	3,333
						1P	1AE	1AN	1BD
		RO	E55330	773	DURA	2,868	3,213	3,479	4,125
						1R	1AF	1AP	1BE
	422 423	21 (FOR BF, AI) (STD. SEAL)	BP ₆₆ 1O ₁₀ 1	753	CRANE	\$ -	\$ -	\$ -	\$ -
						STD	STD	STD	STD
		21	XP ₆₆ 1O ₁₀ 1	764	CRANE	580	1,119	1,457	1,055
						1MF	1ML	1MT	1ND
		1 (HI-WEAR)	B ₃₀ P ₆₆ 1D1	747	CRANE	1,982	2,294	2,555	2,257
						1MG	1MM	1MW	1NE
		1 (HI-TEMP)	O ₂₈ P ₆₆ 1D1	769	CRANE	1,982	2,294	2,555	2,257
						1MH	1MN	1NA	1NF
		9	QP1C1	762	CRANE	1,785	2,120	2,429	1,960
						1MJ	1MP	1NB	1NG
		RO	E55330	773	DURA	2,501	2,770	2,937	2,750
						1MK	1MR	1NC	1NH

NOTES:

1) 5x5x12 (P.S. 4A) AND 6x6x12 (P.S. 5A) ARE AVAILABLE PACKING ONLY, REFER TO FACTORY FOR ALL OTHER OPTIONS

LIST PRICE SHEET
MODEL 421, 422, 423
OPTIONAL FEATURES

OPT. NO.	DESCRIPTION	LIST PRICE				
		POWER SERIES				
		2	3	4	5	
3	SHAFT, STAINLESS STEEL (NOTE 1)	316 S.S.	\$829	\$1,012	\$1,143	\$1,304
			3B	3C	3D	3E
	416 S.S.	829	1,012	1,143	1,304	
		3AB	3AC	3AD	3AE	
	DOUBLE EXTENDED SHAFT (STEEL) (MODEL 421 ONLY)	1,323	1,391	1,444	1,504	
	3J	3K	3L	3M		
	FLEXIBLE SHAFT TO FURNISH FLEXIBLE SHAFTING FOR MODEL 422	REFER TO FACTORY				
4	SHAFT SLEEVE, STAINLESS STEEL (316) (NOTE 1) (RECOMMENDED FOR USE WITH MECHANICAL SEAL)	\$835	\$960	\$1,037	\$1,072	
		4B	4C	4D	4E	
	SHAFT SLEEVES, STAINLESS STEEL HARDENED 440C (RECOMMENDED FOR USE WITH PACKING)	899	1,032	1,079	1,181	
		4J	4K	4L	4M	
6	WEARING RINGS, IMPELLERS (PER PUMP) BRONZE	\$489	\$792	\$991	\$1,189	
		6B	6C	6D	6E	
	CAST IRON	505	792	991	1189	
		6J	6K	6L	6M	
	STAINLESS STEEL (316)	1,090	1,251	1,406	2,267	
		6T	6W	6AA	6AB	
7	WEARING RINGS, CASING, STAINLESS STEEL (416)	\$846	\$846	\$1,218	\$1,597	
		7B	7C	7D	7E	
14	BASE, STRUCTURAL STEEL SUITABLE FOR GAS ENGINE, DIESEL ENGINE, OR STEAM TURBINE AND STEEL BASE PLATE FOR DOUBLE EXTENDED SHAFT.	REFER TO FACTORY				
15	DRIP PAN, (MODEL 421 ONLY) (STEEL BASE ONLY)	\$363	\$363	\$363	\$363	
		15B	15C	15D	15E	
16	FLUSH LINES, 1/4" TUBING FROM VOLUTE TO TAPPED OPENINGS AT THE STUFFING BOXES (OPTION 37 ALSO REQUIRED FOR PACKED PUMPS)	MODEL 421 ONLY FLUSH LINES ARE STANDARD FOR MODELS 422 & 423				
		BRONZE FITTED	\$161	\$161	\$161	\$156
	ALL IRON (STEEL TUBING USED)	1038	1038	1038	1038	
		16J	16K	16L	16M	
19	ABRASIVE SEPARATORS, 1/2" NYLON MOUNTED BETWEEN EACH SEAL BOX AND DISCHARGE VOLUTE (REQUIRES OPT. 37 WHEN USED WITH PACKING)	\$2,804	\$2,804	\$2,804	\$2,804	
		19B	19C	19D	19E	

1.) THE USE OF 316 STAINLESS STEEL SHAFT SLEEVES WITH A 316 STAINLESS STEEL SHAFT IS PROHIBITED DUE TO GALLING. WHEN 316 STAINLESS SLEEVES ARE REQUIRED, AS WITH MECHANICAL SEALS, THE 416 SS SHAFT IS REQUIRED.

LIST PRICE SHEET
MODEL 421, 422, 423
OPTIONAL FEATURES

OPT. NO.	DESCRIPTION	LIST PRICE			
		POWER SERIES			
		2	3	4	5
26	VENTING, (MODEL 421 ONLY) INCREASE SIZE OF VENT OPENING IN UPPER HALF CASING	REFER TO FACTORY			
	SUPPLY PIPE TAP CONNECTIONS IN SUCTION CHAMBERS				
37	LANTERN RING, REQUIRED FOR WATER SEAL AT STUFFING BOX IF PUMP IS OPERATED ON A SUCTION LIFT (REQUIRED AT FIRST STAGE ONLY) PER PUMP	\$49	\$49	\$49	\$49
		37B	37C	37D	37E
	WHEN LANTERN RINGS ARE REQUIRED IN BOTH STUFFING BOXES, PER PUMP	81	81	81	81
		37J	37K	37L	37M
38	FLANGES, DRILL SUCTION FLANGE FOR 250 LB PSI-ASA	\$505	\$505	\$505	\$505
		38B	38C	38D	38E
57	PETCOCKS PRICE INCLUDES 2 PER PUMP	\$25	\$25	\$25	\$25
		57B	57C	57D	57E
58	ORIFIC BY-PASS 3/4" ORIFICE BY-PASS NIPPLE ONLY	\$138	\$138	N/A	N/A
		58B	58C		
59	GLAND EYEBOLTS AND NUTS STAINLESS STEEL	\$339	\$339	\$339	\$339
		59B	59C	59D	59E
	BRONZE GLANDS, ADD PER PUMP	94	129	141	158
		59J	59K	59L	59M
69	LEFT HAND ROTATION	NO CHARGE			69A

NOTE: FOR ENGINEERING TESTS, SPECIAL CALCULATIONS, SPECIAL CURVES, DRAWINGS AND MANUALS,
 REFER TO SECTION 5000. FOR MOTORS REFER TO SECTION 1010.

LIST PRICE SHEET
MODEL 421, 422, 423
OPTIONAL FEATURES

Lead Free* Construction

Adder to comply with the "Reduction of Lead in Drinking Water Act".

**Lead free" is defined as restricting the permissible levels of lead in the wetted surfaces of pipes, pipe fittings, other plumbing fittings and fixtures to a weighted average of not more than 0.25%.

Changes to Materials of Construction:

Shaft Sleeve: 440C SS for packing, 316 SS for Mechanical Seals

Case Wear Rings: 416 SS

Impeller: Low Zinc Silicon Bronze ASTM B584 C87610

Lead Free* Construction		
OPTION NO.	SIZE	LIST PRICE
63LL	POWER SERIES 2	
	2 x 2.5 x 12A	\$2,264
	2 x 2.5 x 12B	2,264
	2.5 x 3 x 12A	2,468
	POWER SERIES 3	
	3 x 4 x 14A	3,681
	3 x 4 x 14B	3,681
	4 x 5 x 15	5,038
	POWER SERIES 4A	
	5 x 5 x 12	6,145
	POWER SERIES 4	
	5 x 6 x 15	5,038
	POWER SERIES 5A	
	6 x 6 x 12	6,145
	POWER SERIES 5	
	6 x 8 x 17A	6,328
	6 x 8 x 17B	6,328

SECTION 430 PAGE 1
DATED JANUARY 1, 2020
SUPERSEDES PAGE 1
DATED FEBRUARY 18, 2019

LIST PRICES
MODEL 431B

HORIZONTAL TWO STAGE DIAGONALLY
SPLIT CASE PUMPS

F.O.B. NORTH AURORA, ILLINOIS
PRICING SUBJECT TO CHANGE WITHOUT NOTICE.
REFER TO ENCOMPASS FOR MOST ACCURATE PRICING AND SELECTION TABLES



AURORA®

LIST PRICE SHEET
431B SERIES
PRICING INSTRUCTIONS

MODEL 431B PUMPS:

To price a basic pump unit, which is comprised of the pump, base, coupling, coupling guard and motor, simply follow the steps in the example below. This example is for a Model 431B, Bronze-fitted, Size 2x4x9, a steel base, coupling, guard and a 40 HP, 3 phase, 3500 RPM, 230/460 volt, ODP motor.

	LIST PRICE	CONTROL/ OPTION
1. Select the appropriate control number and list price for the "Pump Only" from Table 1 Size 2x4x9, Bronze fitted, for use with 3500 RPM motor	\$8,149	X400724
2. Select the required motor frame size from Table 1a for 40 HP, 3500 RPM, ODP motor		286TS
3. Based on the motor frame determined in Table 1a, select the prices and option numbers for coupling and steel base with guard (or steel drip pan) from table 1b and 1d		
Steel base with guard	714	14AB
Coupling	186	34H
4. Select the price and option number from the pump optional features, from table 2, 3, or 4.		
5. Refer to Section 1010 for price and part number of the required motor (horizontal 40 HP, 3500 RPM, 230/460 volt, ODP Enclosure).	2,250	920-6491-812
6. Refer to Section 5000 for price and option number of any testing, engineering calculations or special coating systems which may be required.		

MATERIALS OF CONSTRUCTION

PUMP PART	BRONZE FITTED
CASING	CAST IRON ASTM A48
IMPELLERS	BRONZE ASTM B584
SHAFT	STEEL AISI C1045
CASING WEAR RING	BRONZE ASTM B62
SLEEVE	BRONZE ASTM B62
GLAND	CAST IRON ASTM A48
MECHANICAL SEAL	CARBON VS CERAMIC FACES (STD) OTHER MATERIALS OPTIONALLY AVAILABLE

LIST PRICE SHEET
431B SERIES
PUMP, BASES & COUPLINGS
POWER SERIES 2

TABLE 1

PUMP SIZE	POWER SERIES	BRONZE FITTED		WT
		LIST PRICE	CONTROL NUMBER	
1-1/2 x 3 x 9	2	\$10,947	X400720	300
2 x 4 x 9	2	11,373	X400724	310

- NOTES:** 1) VERTICAL CONSTRUCTION NOT AVAILABLE
 2) FOR CONTINUOUS DUTY APPLICATIONS REFER TO SECTIONB 5030 PAGES 1 THRU 3
 3) FOR MOTORS REFER TO SECTION 1010
 4) ALL BRONZE AND ALL IRON NOT AVAILABLE

TABLE 1A

ODP HORSEPOWER																
RPM	3500	5	7.5	10	15	20	25		30		40		50		60	75
	1750	3	5	7.5	10	15	20									
FRAME SIZE	182T	184T	213T	215T	254T	256T	284T	284TS	286T	286TS	324T	324TS	326T	326TS	364T	364TS

TABLE 1B

STEEL BASE W/GUARD																	
ALL SIZES	CONTROL LIST WT.	14N \$588	14N \$588	14P \$588	14R \$588	14T \$916	14W \$916	14PA \$996	14AA \$916	14AB \$996	14AB \$996	14AC \$996	14AC \$996	14PB \$1,012	14AD \$996	14PC \$1,012	14AE \$996
		50	50	90	90	100	100	150	100	150	150	150	150	170	150	170	150

TABLE 1C

STEEL DRIP RIM BASE W/GUARD																	
ALL SIZES	CONTROL LIST WT.	14B \$940	14B \$940	14C \$1,215	14D \$1,243	14E \$1,375	14F \$1,375	14PD \$1,424	14G \$1,375	14H \$1,424	14H \$1,424	14J \$1,748	14J \$1,748	14PE \$1,849	14K \$1,748	14PF \$1,849	14PG \$1,748
		60	60	70	80	110	110	130	110	130	130	190	190	200	190	200	190

TABLE 1D

COUPLING																	
ALL SIZES	CONTROL LIST WT.	34STD \$85	34STD \$85	34STD \$153	34STD \$192	34STD \$192	34STD \$192	34STD \$259	34STD \$259	34STD \$259	34STD \$259	34STD \$571	34STD \$259	34STD \$571	34STD \$571	34STD \$902	34STD \$571
		3	3	6	6	6	6	8	8	8	8	21	8	21	21	25	21

NOTE: BASE PRICES INCLUDE COUPLING GUARD

NEMA MOTOR FRAME DESIGNATIONS FOR POLYPHASE, SQUIRREL-CAGE, DESIGNS A & B, HORIZONTAL & VERTICAL MOTORS 60Hz, CLASS B INSULATION SYSTEM, OPEN TYPE 1.15 S.F., AND TOTALLY-ENCLOSED FAN-COOLED TYPE 1.0 S.F.

TABLE 1E

HP RATING	3600 RPM		1800 RPM	
	OPEN	TEFC	OPEN	TEFC
1	56	56	143T	143T
1-1/2	143T	143T	145T	145T
2	145T	145T	145T	145T
3	145T	182T	182T	182T
5	182T	184T	184T	184T
7-1/2	184T	213T	213T	213T
10	213T	215T	215T	215T
15	215T	254T	-	-
20	254T	256T		
25	256T	284TS		
30	284TS	286TS		
40	286TS	324TS		
50	324TS	326TS		
60	326TS	364TS		
75	364TS	365TS		

**LIST PRICE SHEET
 431B SERIES
 PUMP, BASES & COUPLINGS
 POWER SERIES 3A**

PUMP SIZE	BRONZE FITTED			WT
	POWER SERIES	LIST PRICE	CONTROL NUMBER	
1-1/2x3x11	3A	\$17,445	X400728	587
2x4x11	3A	18,266	X400732	601

- NOTES:** 1) VERTICAL CONSTRUCTION NOT AVAILABLE
 2) FOR CONTINUOUS DUTY APPLICATIONS REFER TO SECTIONB 5030 PAGES 1 THRU 3
 3) FOR MOTORS REFER TO SECTION 1010
 4) ALL BRONZE AND ALL IRON NOT AVAILABLE

**TABE 2A
 ODP HORSEPOWER**

RPM		FRAME SIZE
1750	3500	
3	5	182T
5	7.5	184T
7.5	10	213T
10	15	215T
15	20	254T
20	25	256T
		284T
25	30	284TS
		286T
	40	286TS
		324T
	50	324TS
		326T
	60	326TS
		364T
	75	364TS
		365T
	100	365TS
		404T
	125	404TS
		405T
	150	405TS

**TABE 2B
 STEEL BASE**

ALL SIZES		
CONTROL	LIST	WT.
14BP	\$674	90
14BP	674	90
14BR	734	100
14BS	734	100
14BT	1161	107
14BW	1161	107
14PH	776	120
14CA	776	107
14CB	826	135
14CB	826	120
14PJ	826	145
14CC	826	135
14PK	826	145
14CD	826	145
14PL	1012	247
14CE	930	145
14PM	1012	247
14CF	930	145
14CG	1012	247
14CG	1012	247
14CH	1012	247
14CH	1012	247

**TABE 2C
 STEEL DRIP RIM BASE**

ALL SIZES		
CONTROL	LIST	WT.
14BA	\$1,243	100
14BA	1,243	100
14BB	1,243	110
14BC	1,243	110
14BD	1,424	120
14BE	1,424	120
14BF	1,424	120
14BF	1,424	120
14PN	1,849	160
14BG	1,424	140
14BH	1,849	160
14BH	1,849	160
14BJ	1,849	170
14BJ	1,849	170
14BK	1,849	170
14BK	1,849	170
14BL	1,849	170
14BL	1,849	170
14PP	2,823	280
14BM	2,257	280
14PR	2,823	280
14BN	2,823	280

**TABE 2D
 COUPLING**

ALL SIZES		
CONTROL	LIST	WT.
34STD	\$153	6
34STD	153	6
34STD	153	6
34STD	153	6
34STD	192	8
34STD	192	8
34STD	192	8
34STD	192	8
34STD	192	8
34STD	259	8
34STD	571	21
34STD	259	8
34STD	571	21
34STD	571	21
34STD	571	21
34STD	571	21
34STD	902	25
34STD	902	25
34STD	902	25
34STD	902	25
34STD	1,279	36
34STD	1,279	36

NOTE: BASE PRICES INCLUDE COUPLING GUARD

NEMA MOTOR FRAME DESIGNATIONS FOR POLYPHASE, SQUIRREL-CAGE, DESIGNS A & B, HORIZONTAL & VERTICAL MOTORS 60Hz, CLASS B INSULATION SYSTEM, OPEN TYPE 1.15 S.F., AND TOTALLY-ENCLOSED FAN-COOLED TYPE 1.0 S.F.

TABLE 2E

HP RATING	3600 RPM		1800 RPM	
	OPEN	TEFC	OPEN	TEFC
3	145T	182T	182T	182T
5	182T	184T	184T	184T
7-1/2	184T	213T	213T	213T
10	213T	215T	215T	215T
15	215T	254T	254T	254T
20	254T	256T	256T	256T
25	256T	284TS	284T	284T
30	284TS	286TS	-	-
40	286TS	324TS	-	-
50	324TS	326TS		
60	326TS	364TS		
75	364TS	365TS		
100	365TS	405TS		
125	404TS	444TS		

LIST PRICE SHEET
MODEL 431B
OPTIONAL FEATURES
POWER SERIES 2

TABLE 3

OPTION	DESCRIPTION					LIST PRICE	OPTION NO.
1	MECHANICAL SEALS						
	TYPE	LIMIT	SPEC	CODE	MFR		
	21 (FOR BF, AI) STANDARD SEAL	WATER TO 225° F MAX.	BP ₆₆ 1O ₁₀ 1	753	CRANE	-	STD.
	21 (HI-TEMP)	WATER TO 250° F MAX.	XP ₆₆ 1O ₁₀ 1	764	CRANE	\$599	1CF
	21 (HI-TEMP)	WATER TO 250° F MAX.	0 ₂₈ P ₆₆ 1D1	769	CRANE	2,056	1CB
	1 (HI-TEMP)	WATER TO 300° F MAX.	0 ₂₈ P ₆₆ 1D1	769	CRANE	2,349	1N
	1 (HI-WEAR)	WATER TO 230° F MAX.	B ₃₀ P ₆₆ 1D1	747	CRANE	2,349	1M
	CARTRIDGE 88SRS	WATER TO 300° F MAX.	CARB. VS. TUNG. CARB.	697	CRANE	9,225	1CD
CARTRIDGE P-50	WATER TO 300° F MAX.	CARB. VS. SIL. CARB.	698	DURA	9,225	1CE	

* INCLUDES LONGER SLEEVES REQUIRED WITH CARTRIDGE SEALS

2	OIL LUBRICATION FOR BEARINGS		372	2J
3	SHAFT, STAINLESS STEEL (NOTE 1)	316 S.S.	812	3B
		416 S.S.	812	3AB
	DOUBLE EXTENDED SHAFT (STEEL)	C1045	1,422	3J
4	SHAFT SLEEVES, STAINLESS STEEL (316) (NOTE 1) RECOMMENDED FOR USE WITH MECHANICAL SEALS		846	4B
	SHAFT SLEEVES, HARDENED STAINLESS STEEL (440C) RECOMMENDED FOR USE WITH PACKING (OPT. 40A MUST BE ADDED)		914	4J
7	WEARING RINGS, CASING, STAINLESS STEEL (416)		846	7B
14	BASE, STRUCTURAL STEEL, SUITABLE FOR GAS ENGINE OR DIESEL ENGINE. STEEL BASE PLATE FOR DOUBLE EXTENDED SHAFT WITH STEAM TURBINE		REFER TO FACTORY	
15	DRIP PAN (STEEL BASE ONLY)		363	15B
16	EXTERNAL FLUSH LINES FOR MECHANICAL SEALS. FLUSH LINES 1/4" TUBING FROM VOLUTE TO TAPPED OPENINGS AT THE SEAL BOX			
		B.F. (CU. TUBING)	161	16B
		ALL IRON (STEEL TUBING)	1038	16J
	FOR FLUSH LINES TO PACKING WITH LANTERN RINGS, REFER TO OPTION 37			

NOTE 1) : THE USE OF 316 STAINLESS STEEL SHAFT SLEEVES WITH A 316 STAINLESS SHAFT IS NOT RECOMMENDED DUE TO THE POSSIBILITY OF GALLING. WHEN 316SS SLEEVES ARE REQUIRED, AS WITH MECHANICAL SEALS, WE WOULD RECOMMEND THE 416SS IF A STAINLESS SHAFT IS SPECIFIED.

LIST PRICE SHEET
MODEL 431B
OPTIONAL FEATURES
POWER SERIES 3A

TABLE 4

OPTION	DESCRIPTION					LIST PRICE	OPTION NO.
1	MECHANICAL SEALS						
	TYPE	LIMIT	SPEC	CODE	MFR		
	1 (FOR BF, AI) STANDARD SEAL	WATER TO 230° F MAX.	BP ₆₆ 1O ₁₀ 1	753	CRANE	-	STD.
	1 (HI-TEMP)	WATER To 300° F MAX.	O28P661D1	769	CRANE	\$2,290	1DA
	1 (HI-WEAR)	WATER TO 230° F MAX.	B30P661D1	747	CRANE	\$2,290	1DB
	CARTRIDGE 88SRS	WATER TO 300° F MAX.	CARB. VS. TUNG. CARB.	697	CRANE	\$8,792	1DD
	CARTRIDGE P-50	WATER TO 300° F MAX.	CARB. VS. SIL. CARB.	698	DURA	\$7,114	1DE

* INCLUDES LONGER SLEEVES REQUIRED WITH CARTRIDGE SEALS

2	OIL LUBRICATION FOR BEARINGS	369	2H
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3	SHAFT, STAINLESS STEEL (NOTE 1)	316 S.S.	2,138	3H
		416 S.S.	2,138	3M

4	SHAFT SLEEVES, STAINLESS STEEL (316) (NOTE 1) RECOMMENDED FOR USE WITH MECHANICAL SEAL	1,783	4R
	SHAFT SLEEVES, HARDENED STAINLESS STEEL (440C) RECOMMENDED FOR USE WITH PACKING (OPT. 40H MUST BE ADDED)	1,783	4T

7	WEARING RINGS, CASING, STAINLESS STEEL (416)	1038	7H
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14	BASE, STRUCTURAL STEEL, SUITABLE FOR GAS ENGINE OR DIESEL ENGINE.	REFER TO FACTORY	
----	---	------------------	--

15	DRIP PAN (STEEL BASE ONLY)	363	15B
----	----------------------------	-----	-----

16	EXTERNAL FLUSH LINES FOR MECHANICAL SEALS. FLUSH LINES			
		B.F. (CU. TUBING)	156	16R
		ALL IRON (STEEL TUBING)	961	16T
FOR FLUSH LINES TO PACKING WITH LANTERN RINGS, REFER TO OPTION 37				

NOTE 1)

THE USE OF 316 STAINLESS STEEL SHAFT SLEEVES WITH A 316 STAINLESS STEEL SHAFT IS PROHIBITED DUE TO GALLING. WHEN 316 STAINLESS SLEEVES ARE REQUIRED, AS WITH MECHANICAL SEALS, THE 416 SS SHAFT IS REQUIRED.

LIST PRICE SHEET
MODEL 431B
OPTIONAL FEATURES
POWER SERIES 2 & 3A

TABLE 4

OPTION	DESCRIPTION	LIST PRICE	OPTION NO.	
19	ABRASIVE SEPARATORS 1/2" NYLON MOUNTED BETWEEN EACH SEAL OR PACKING BOX AND THE DISCHARGE VOLUTE. TEMPERATURE LIMITATIONS 240° F. ABOVE THIS TEMPERATURE, CONSULT FACTORY			
	MECHANICAL SEALS	\$1,369	19AH	
	PACKING REQUIRES ADDITION OF LANTERN RINGS, OPT. 37J & 37AB	P.S.2	1,369	19B
		P.S. 3A	2,020	19AF
26	SUPPLYING PIPE TAP CONNECTIONS AT SUCTION CHAMBERS		REFER TO FACTORY	
37	LANTERN RING, REQUIRED FOR WATER SEAL AT STUFFING BOX, IF PUMP IS OPERATED ON A SUCTION LIFT (REQUIRED ON FIRST STAGE ONLY), PER PUMP. PRICING INCLUDES HIGH TEMPERATURE PACKING, LANTERN RING AND EXTERNAL 1/4" TUBING WATER SEAL LINE FROM VOLUTE TO FIRST STAGE STUFFING BOX			
	B.F. (CU TUBING)	P.S. 2	295	37B
		P.S. 3A	305	37AA
	AI (STEEL TUBING)	P.S. 2	1147	37R
		P.S. 3A	1230	37AC
	WHEN LANTERN RINGS ARE MOUNTED ON BOTH STUFFING BOXES, PER PUMP. PRICING INCLUDES HIGH TEMPERATURE PACKING, LANTERN RINGS AND EXTERNAL 1/4" TUBING WATER SEALS LINES FROM VOLUTE TO BOTH STUFFING BOXES			
	B.F. (CU TUBING)	P.S. 2	388	37J
		P.S. 3A	402	37AB
AI (STEEL TUBING)	P.S. 2	1,448	37T	
	P.S. 3A	1,462	37AD	
38	FLANGES DRILLED FOR 250# LBS. SUCTION AND DISCHARGE	492	38B	
40	HIGH TEMPERATURE PACKING (TO 225° F MAX.). (NOTE: IT IS RECOMMENDED THAT THE BRONZE SLEEVES, WHICH ARE STANDARD ON B.F. AND S.F. CONSTRUCTION, BE CHANGED TO HARDENED 440C STAINLESS STEEL, ADD OPTIONAL 4J OR 4T, ON AI CONSTRUCTION WITH PACKING, THE 440C STAINLESS SLEEVES ARE SUPPLIED AS STANDARD AND NO FURTHER OPTION, EXCEPT THIS ONE IS REQUIRED).	P.S. 2	94	40A
		P.S.3A	100	40H
43	WATER COOLED BEARINGS (PER PUMP) RECOMMENDED FOR TEMPERATURE 250°F	P.S. 2	729	43B
		P.S. 3A	1,716	43H
57	PETCOCKS IN UPPER HALF OF CASING, PRICE INCLUDES TWO PER PUMP		25	57B
58	ORIFICE BY-PASS, 3/4" STAINLESS STEEL, NIPPLE ONLY		136	58B
59	GLAND EYEBOLTS AND NUTS IN STAINLESS STEEL	P.S. 2	322	59B
		P.S. 3A	928	59R
	GLANDS, BRONZE, ADD PER PUMP	P.S. 2	92	59J
		P.S. 3A	383	59T
69	LEFT HAND ROTATION		N/C	69A

NOTE:

- 1) FOR ENGINEERING TESTS, SPECIAL CALCULATIONS, SPECIAL CURVES, DRAWINGS AND MANUALS, REFER TO SECTION 5000.
- 2) FOR MOTORS REFER TO SECTION 1010.
- 3) FOR CONTINUOUS DUTY APPLICATIONS, REFER TO SECTION 5030.