

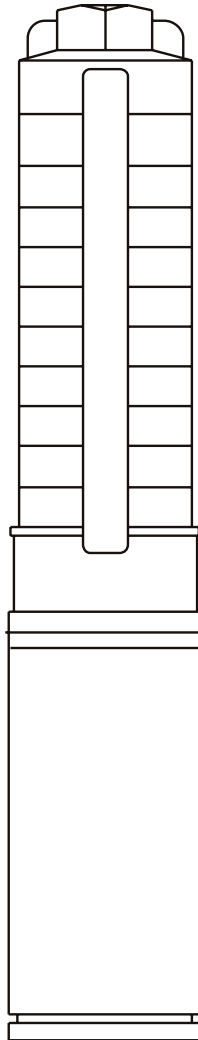


4770 SERIES

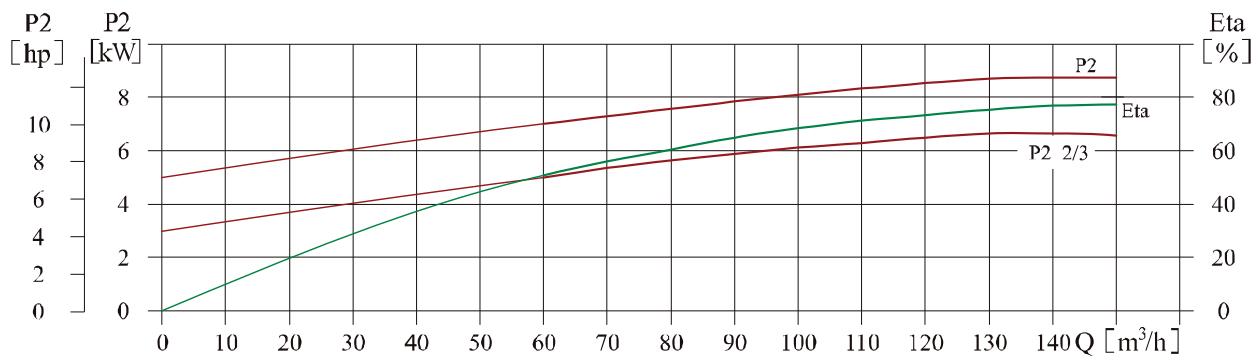
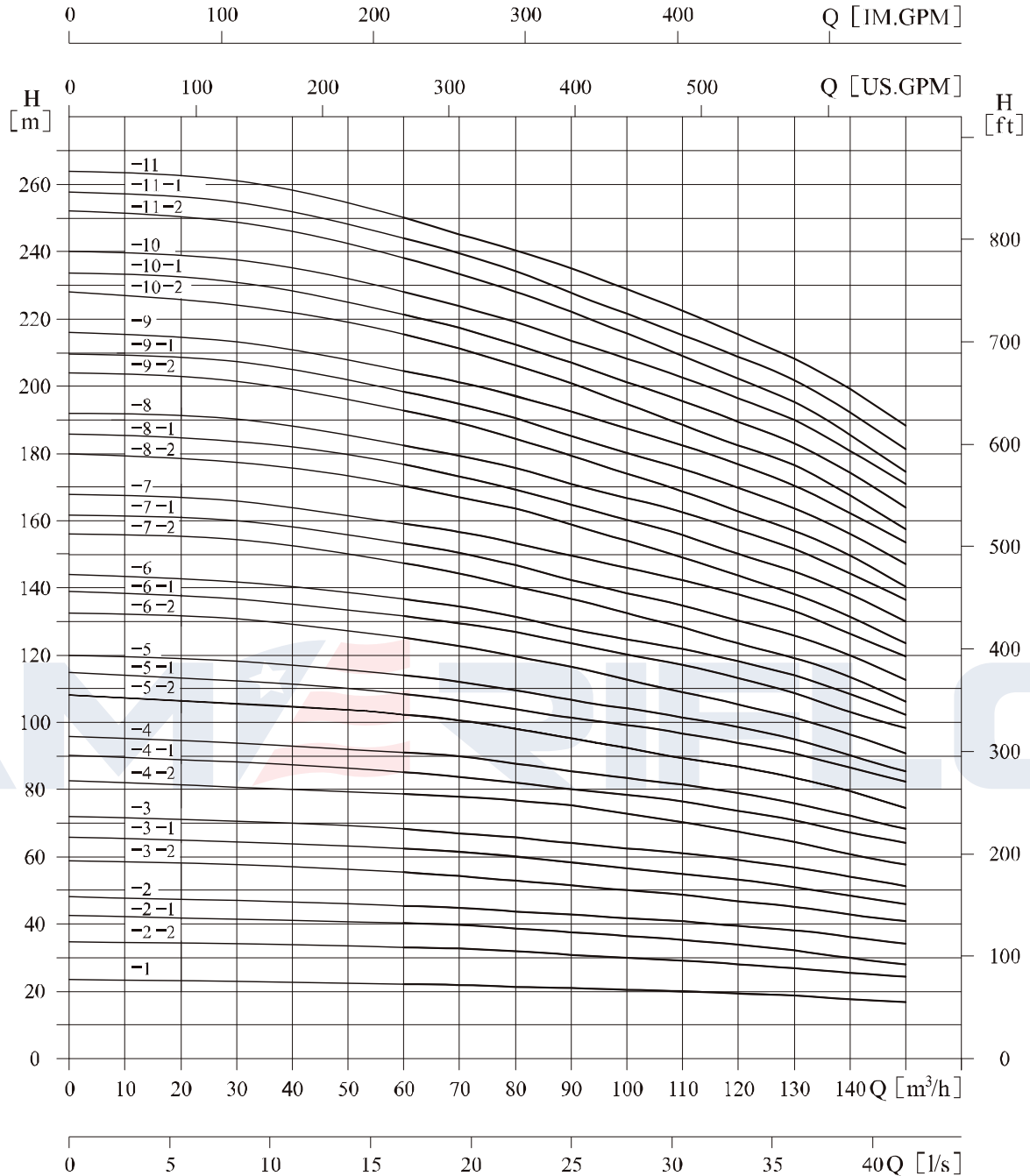
SUBMERSIBLE TURBINE PUMPS

ST120

ENGINEERING INFORMATION



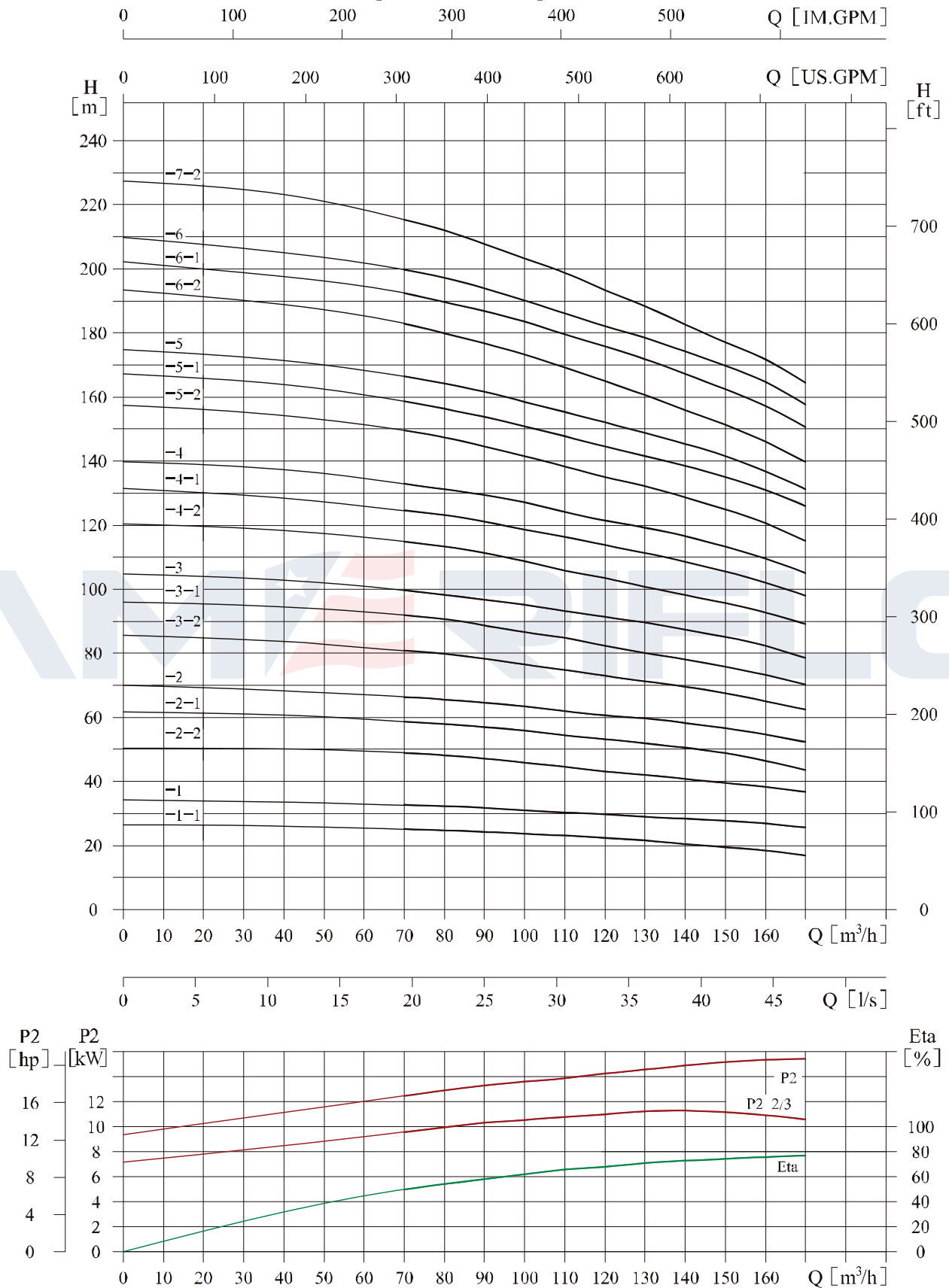
ST120 (6" NPT) 2900 RPM



MODEL ST120 - PERFORMANCE TABLE (2900 RPM)

MODEL	SPEED	MOTOR HP	FLOW GPM	260	300	350	400	450	500	575	600	650
ST120-1	2900	15	HEAD (PSI)	34	33	33	32	31	29	28	27	25
ST120-2-2		20		51	50	48	45	44	41	25	37	36
ST120-2-1		25		61	61	59	58	55	52	49	45	42
ST120-2		30		69	68	67	65	64	59	58	55	52
ST120-3-2		40		83	83	80	77	76	71	68	65	61
ST120-3-1		40		95	94	91	88	85	82	77	74	70
ST120-3		40		103	102	100	97	94	89	86	82	77
ST120-4-2		50		120	117	114	111	108	102	98	92	88
ST120-4-1		50		129	127	124	121	117	112	108	102	97
ST120-4		50		138	136	133	130	126	120	115	109	103
ST120-5-2		60		155	153	148	144	139	132	127	120	114
ST120-5-1		60		164	162	158	153	150	142	138	132	124
ST120-5		75		173	170	167	162	158	150	144	136	129
ST120-6-2		75		189	186	180	177	171	159	153	145	92
ST120-6-1		75		198	197	192	188	182	171	165	156	148
ST120-6		100		206	205	198	194	189	179	173	164	155
ST120-7-2		100		223	218	214	207	201	186	180	171	161
ST120-7-1		100		232	227	221	216	210	197	191	182	171
ST120-7		100		241	236	232	226	220	209	201	191	182
ST120-8-2		100		258	253	248	239	232	217	209	200	186
ST120-8-1		100		267	262	255	247	241	227	220	209	197
ST120-8		100		274	273	265	258	251	239	232	218	208
ST120-9-2		125		292	286	279	271	264	247	238	227	212
ST120-9-1		125		300	295	289	280	273	258	248	247	223
ST120-9		125		309	306	300	291	283	270	261	247	233
ST120-10-2		125		327	320	312	303	295	277	268	255	239
ST120-10-1		125		335	329	321	312	303	288	277	264	248
ST120-10		150		345	339	332	323	314	300	289	273	259
ST120-11-2		150		361	353	345	336	326	306	297	282	265
ST120-11-1		150		370	362	355	345	335	317	306	291	274
ST120-11		150		379	371	365	356	345	329	318	301	285

ST120 (6" NPT) 3500 RPM

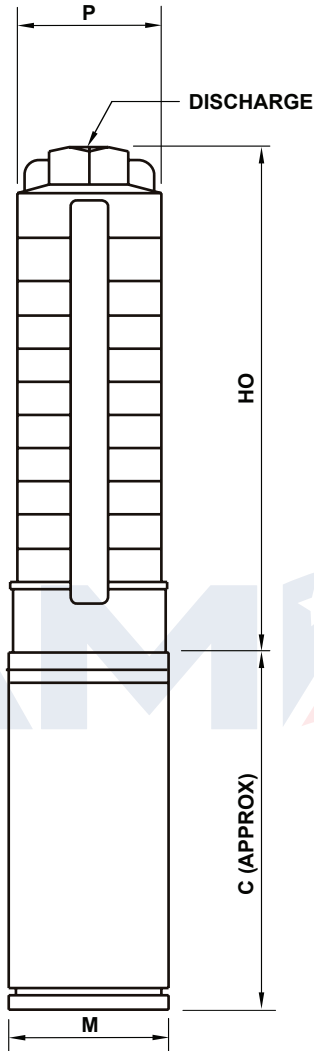


MODEL ST120 - PERFORMANCE TABLE (3500 RPM)

MODEL	SPEED	MOTOR	FLOW	300	350	400	450	500	575	600	650	700
		HP	GPM									
ST120-1-1	3500	20	HEAD (PSI)	38	37	36	36	33	33	31	30	28
ST120-1		25		49	48	48	47	45	29	42	42	39
ST120-2-2		40		73	73	71	70	65	64	62	61	55
ST120-2-1		40		89	88	86	85	80	79	77	74	71
ST120-2		50		100	100	98	95	92	91	88	86	83
ST120-3-2		60		123	121	118	117	111	108	106	102	98
ST120-3-1		60		139	138	135	132	124	121	118	115	111
ST120-3		75		152	148	147	144	138	136	132	129	124
ST120-4-2		100		174	171	168	164	156	153	148	145	141
ST120-4-1		100		189	186	183	180	173	168	165	161	155
ST120-4		100		201	198	195	192	185	180	177	171	167
ST120-5-2		100		227	223	220	215	205	200	194	189	183
ST120-5-1		125		241	236	232	229	220	215	211	205	198
ST120-5		125		251	248	245	241	230	226	220	215	206
ST120-6-2		125		277	273	268	262	250	244	236	229	221
ST120-6-1		150		292	288	283	279	267	261	253	245	238
ST120-6		150		303	298	294	288	276	270	264	258	250
ST120-7-2		150		326	321	315	308	294	285	277	268	248

MODEL ST120 - SUBMERSIBLE TURBINE, NEMA MOTOR

GENERAL ARRANGEMENT DRAWING



ST120

MODEL	DIS-CHARGE	C	HO	M	P	WEIGHT
						LBS
ST120-1	6 NPT	42.938	22.000	6 / 8	9.000	290
ST120-1-1	6 NPT	40.500	22.000	6 / 8	9.000	279
ST120-2-2	6 NPT	48.413	28.375	6 / 8	9.000	363
ST120-2-1	6 NPT	52.375	28.375	6 / 8	9.000	394
ST120-2	6 NPT	61.875	28.375	6 / 8	9.000	425
ST120-3-2	6 NPT	48.875	34.625	6 / 8	9.000	475
ST120-3-1	6 NPT	48.875	34.625	6 / 8 / 10	9.000	475
ST120-3	6 NPT	53.938	34.625	6 / 8 / 10	9.000	510
ST120-4-2	6 NPT	58.625	40.938	6 / 8 / 10	9.000	598
ST120-4-1	6 NPT	58.625	40.938	6 / 8 / 10	9.000	598
ST120-4	6 NPT	60.625	40.938	6 / 8 / 10	9.000	620
ST120-5-2	6 NPT	60.625	47.250	8 / 10	9.000	638
ST120-5-1	6 NPT	64.750	47.250	8 / 10	9.000	682
ST120-5	6 NPT	64.750	47.250	8 / 10	9.000	700
ST120-6-2	6 NPT	64.750	53.500	8 / 10	9.000	700
ST120-6-1	6 NPT	69.438	53.500	8 / 10	9.000	757
ST120-6	6 NPT	69.438	53.500	8 / 10	9.000	757
ST120-7-2	6 NPT	69.438	59.875	8 / 10	9.000	774
ST120-7-1	6 NPT	58.625	59.875	8 / 10	9.000	768
ST120-7	6 NPT	60.625	59.875	8 / 10	9.000	851
ST120-8-2	6 NPT	60.625	66.188	8 / 10	9.000	869
ST120-8-1	6 NPT	60.625	66.188	8 / 10	9.000	869
ST120-8	6 NPT	60.625	66.188	8 / 10	9.000	869
ST120-9-2	6 NPT	64.750	72.413	8 / 10	9.000	915
ST120-9-1	6 NPT	64.750	72.413	8 / 10	9.000	915
ST120-9	6 NPT	64.750	72.413	8 / 10	9.000	915
ST120-10-2	6 NPT	64.750	78.750	8 / 10	9.000	933
ST120-10-1	6 NPT	64.750	78.750	8 / 10	9.000	933
ST120-10	6 NPT	69.438	78.750	8 / 10	9.000	1014
ST120-11-2	6 NPT	69.438	85.000	8 / 10	9.000	1032
ST120-11-1	6 NPT	69.438	85.000	8 / 10	9.000	1032
ST120-11	6 NPT	69.438	85.000	8 / 10	9.000	1032

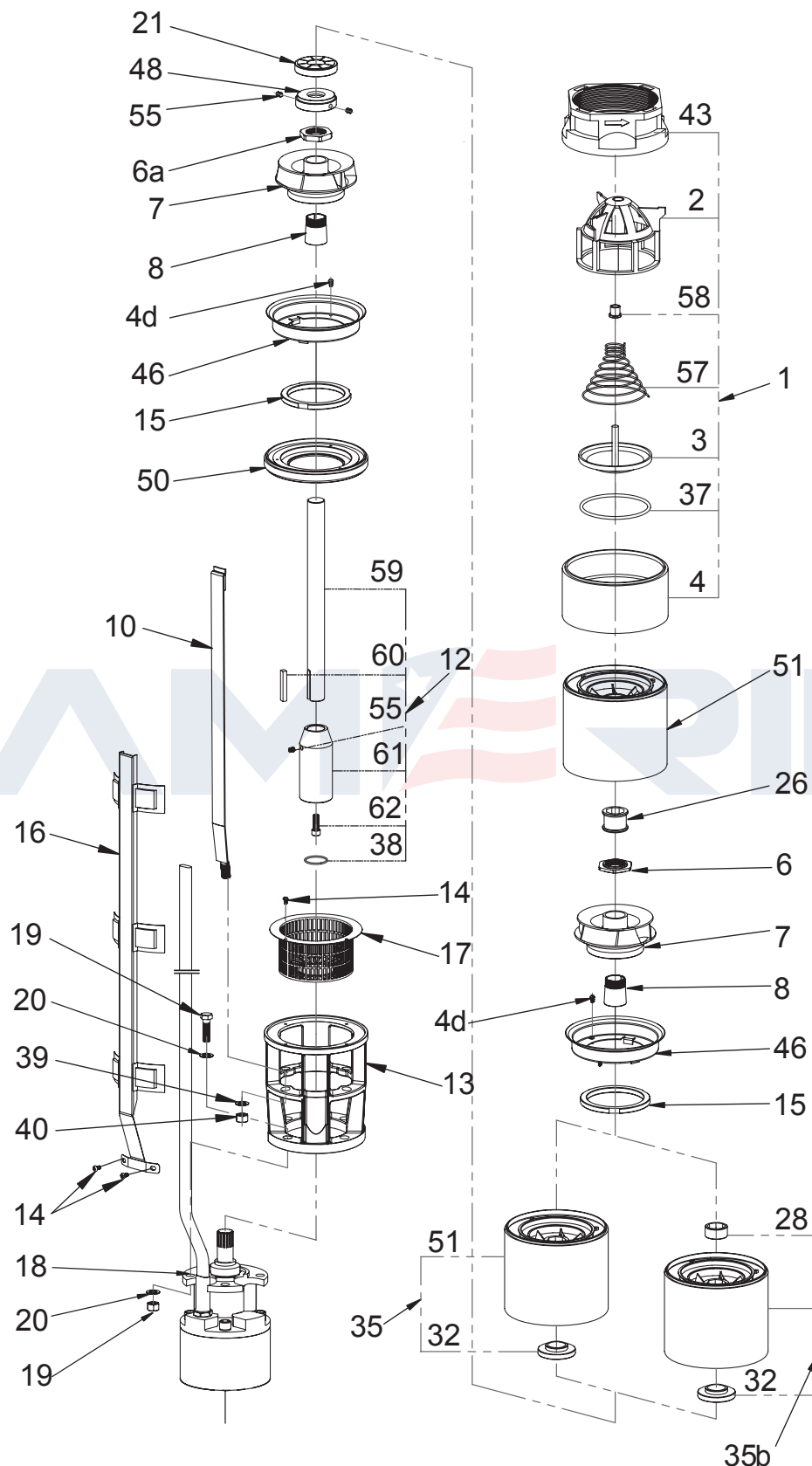
NOTES:

ALL DIMENSIONS ARE IN INCHES [MM] AND MAY VARY ± 0.375 INCHES.

DIMENSION "C" CAN VARY DEPENDING ON MOTOR MANUFACTURER.

THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNLESS CERTIFIED BY AMERIFLO.

MODEL ST120 - SECTIONAL VIEW



- 1 - Check Valve Assembly
- 2 - Check valve Retainer
- 3 - Check Valve
- 4 - Check Valve Body
- 4d - Screw
- 6 - Impeller Nut
- 6a - Inlet impeller Nut
- 7 - Impeller
- 8 - Impeller Collet
- 10 - Straps A (B)
- 12 - Pump Shaft Assembly
- 13 - Motor Bracket
- 14 - Screw
- 15 - Neck Ring
- 16 - Cable Guard
- 17 - Strainer
- 18 - Submersible Motor
- 19 - Bolt & Nut
- 20 - Washer
- 21 - Inlet spacer
- 26 - Shaft Ring
- 28 - Inlet Shaft Ring
- 32 - Inlet Wear Plate
- 35 - Suction Diffuser B
- (For Two Or More Stages)**
- 35b - Suction Diffuser A
- (For One Stage Pump)**
- 37 - O-ring
- 38 - O-ring
- 39 - Washer
- 40 - Nut
- 43 - Discharge
- 46 - Neck Ring Cover
- 48 - Sleeve Washer
- 50 - Inducer
- 51 - Diffuser
- 55 - Screw
- 57 - Spring
- 58 - Sleeve
- 59 - Pump Shaft
- 60 - Key
- 61 - Coupling Part
- 62 - Hexagon Socket Head Screw

MODEL ST120 - SECTIONAL VIEW PART REFERENCE

ITEM NUMBER	PART NAME	MATERIAL	
		ST (304 SS)	ST (316 SS)
1	Discharge Case	304 SS (EN 1.4301)	316 SS (EN 1.4401)
2	Check valve Retainer	304 SS (EN 1.4301)	316 SS (EN 1.4401)
3	Check Valve	304 SS (EN 1.4301)	316 SS (EN 1.4401)
4	Check Valve Body	304 SS (EN 1.4301)	316 SS (EN 1.4401)
4d	Discharge Diffuser	304 SS (EN 1.4301)	316 SS (EN 1.4401)
6	Impeller Nut	304 SS (EN 1.4301)	316 SS (EN 1.4401)
6a	Impeller Nut	304 SS (EN 1.4301)	316 SS (EN 1.4401)
7	Impeller	304 SS (EN 1.4301)	316 SS (EN 1.4401)
8	impeller Collet	304 SS (EN 1.4301)	316 SS (EN 1.4401)
10	Straps	304 SS (EN 1.4301)	316 SS (EN 1.4401)
12	Shaft	304 SS (EN 1.4301)	316 SS (EN 1.4401)
13	Motor Bracket	304 SS (EN 1.4301)	316 SS (EN 1.4401)
14	Screw	A2-70 UNI 7323	
15	Neck Ring	304 SS (EN 1.4301)	316 SS (EN 1.4401)
16	Cable Guard	304 SS (EN 1.4301)	316 SS (EN 1.4401)
18	Submersible Motor	304 SS (EN 1.4301)	316 SS (EN 1.4401)
19	Nut	A2-70 UNI 7323	
20	Washer	A2-70 UNI 7323	
21	Inlet Spacer	304 SS (EN 1.4301)	316 SS (EN 1.4401)
26	Shaft Ring	FPM	
28	Inlet Shaft Ring	FPM	
32	Inlet Wear Plate	FPM	
35	Suction Diffuser	304 SS (EN 1.4301)	316 SS (EN 1.4401)
35b	Suction Diffuser	304 SS (EN 1.4301)	316 SS (EN 1.4401)
37	O-Ring	FPM	
38	O-Ring	FPM	
39	Washer	A2-70 UNI 7323	
40	Nut	304 SS (EN 1.4301)	316 SS (EN 1.4401)
43	Discharge	304 SS (EN 1.4301)	316 SS (EN 1.4401)
46	Discharge Cover	304 SS (EN 1.4301)	316 SS (EN 1.4401)
48	Sleeve Washer	A2-70 UNI 7323	
50	Inducer	304 SS (EN 1.4301)	316 SS (EN 1.4401)
51	Diffuser	304 SS (EN 1.4301)	316 SS (EN 1.4401)
55	Screw	A2-70 UNI 7323	
57	Spring	A2-70 UNI 7323	
58	Sleeve	304 SS (EN 1.4301)	316 SS (EN 1.4401)
59	Shaft	304 SS (EN 1.4301)	316 SS (EN 1.4401)
60	Key	304 SS (EN 1.4301)	316 SS (EN 1.4401)
61	Coupling	304 SS (EN 1.4301)	316 SS (EN 1.4401)
62	Socket Head Screw	A2-70 UNI 7323	

MODEL ST120 - ENGINEERING INFORMATION

RATED FLOW:	528.3 GPM [120 M³/HR]
FLOW RANGE:	264.2 - 748.5 GPM [60.0 - 170.0 M³/HR]
MAXIMUM PRESSURE:	363 PSI [25 BAR]
MAXIMUM POWER:	14.8 - 147.5 HP [11.0 - 110.0 KW]
MAXIMUM EFFICIENCY:	77%

