

SUBMERSIBLE TURBINE PUMPS

5" STS SERIES - 120 GPM



FEATURES

- 100% Franklin Electric factory wet tested with test results shipped with each pump
- Premium ductile iron casting for longer life and higher pressures
- Longer discharge and motor bracket bearings for increased pump life
- Spiral cutlass rubber intermediate bearings designed for harsh environments
- 416 stainless steel pump shaft ground and polished for maximum durability
- Investment cast stainless steel impellers for maximum abrasion resistance
- Custom pumps available



SPECIFICATIONS

- 6" minimum well I.D.
- 10' minimum submergence above inlet
- 3"/4" NPT discharge
- 675 psi standard maximum working pressure

APPLICATIONS

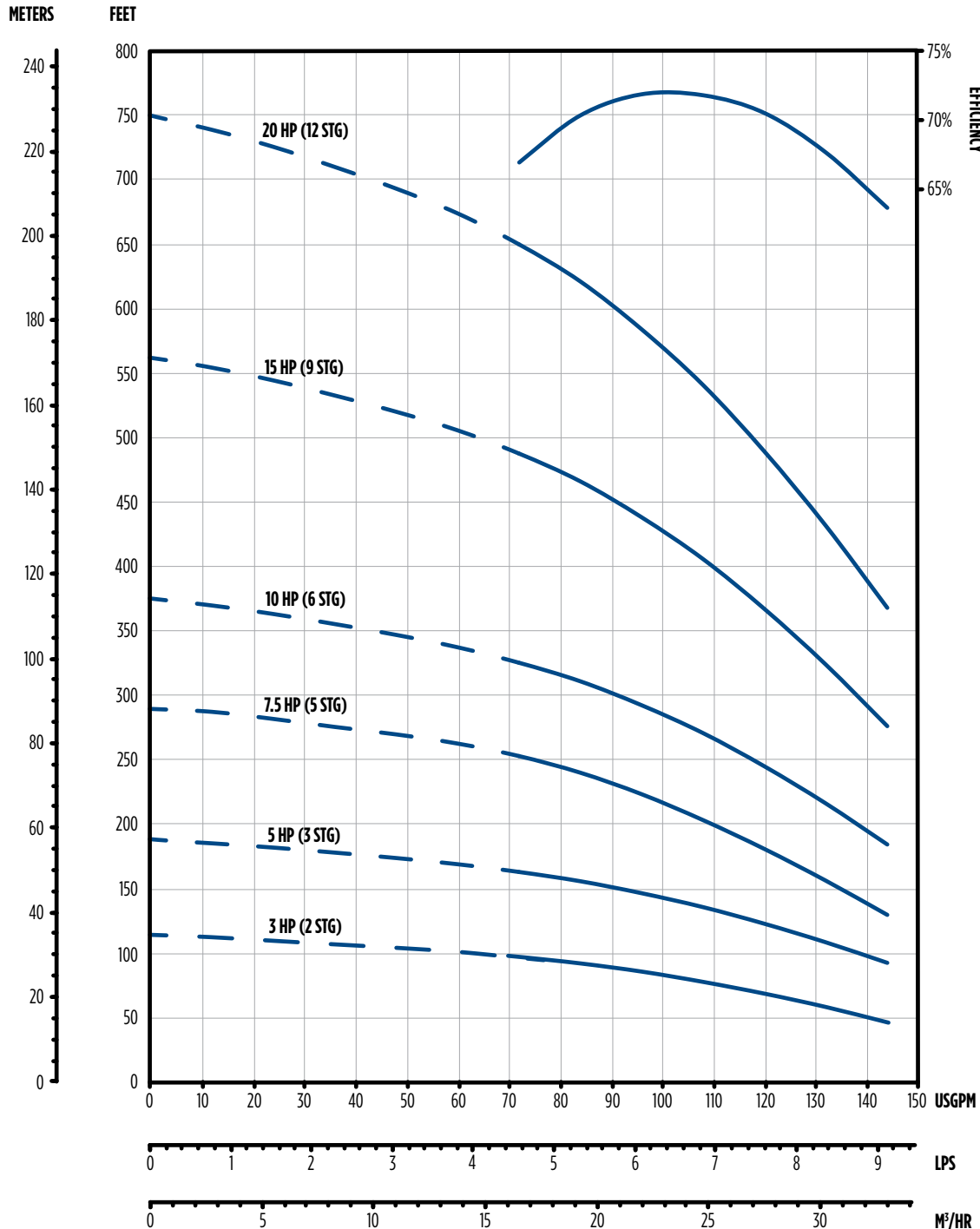
- Irrigation
- Agricultural
- Industrial
- Municipal
- Commercial

SUBMERSIBLE TURBINE PUMPS

5" STS SERIES - 120 GPM



PERFORMANCE



— RECOMMENDED OPERATING RANGE

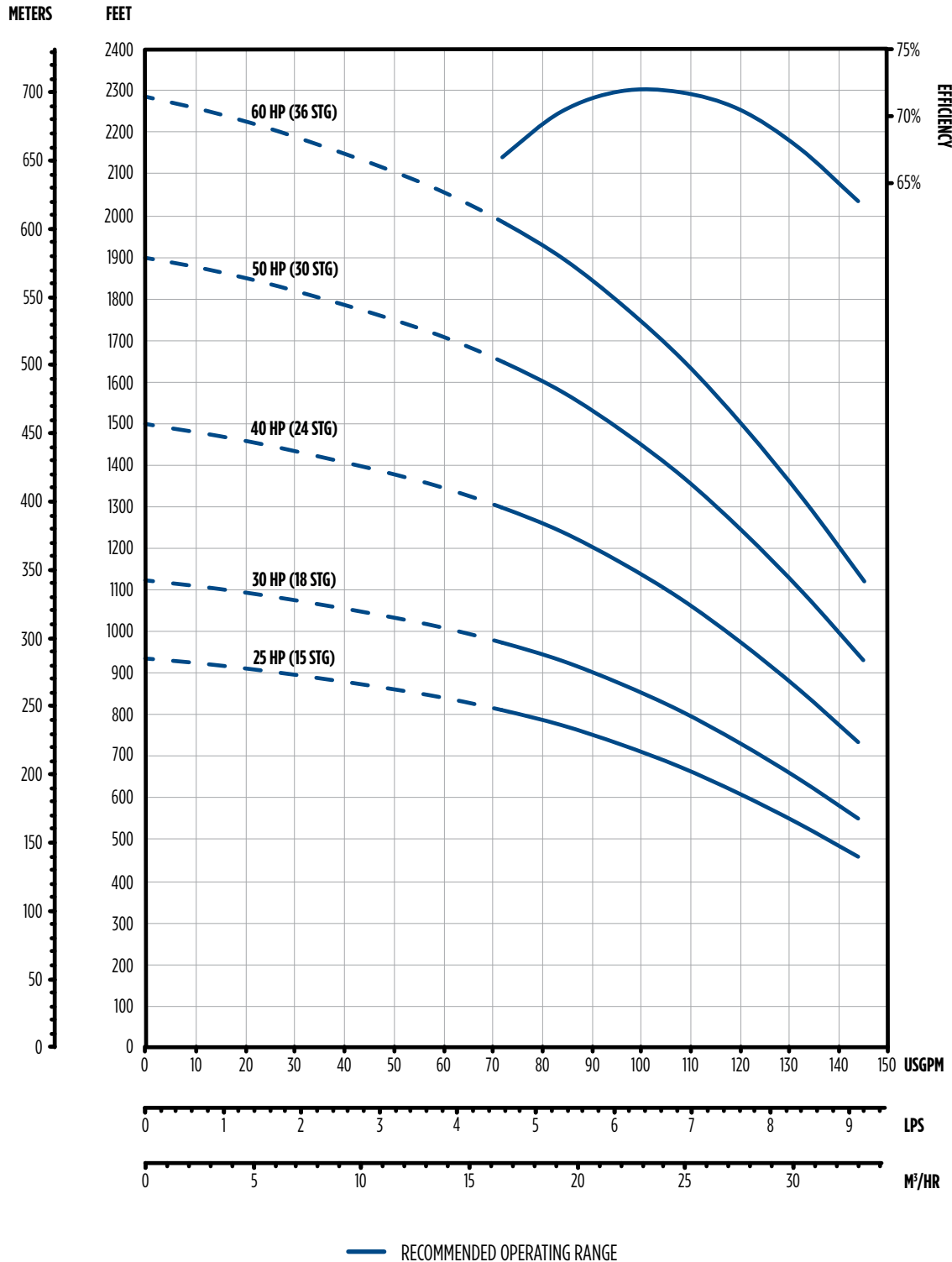
NOTE: Performance based on 68 °F fresh water; 6" 5-40 hp motor at 3450 rpm

SUBMERSIBLE TURBINE PUMPS

5" STS SERIES - 120 GPM



PERFORMANCE



NOTE: Performance based on 68 °F fresh water; 6" 5-40 hp motor at 3450 rpm; 6" 50 hp motor at 3475 rpm; 6" 60 hp motor at 3480 rpm

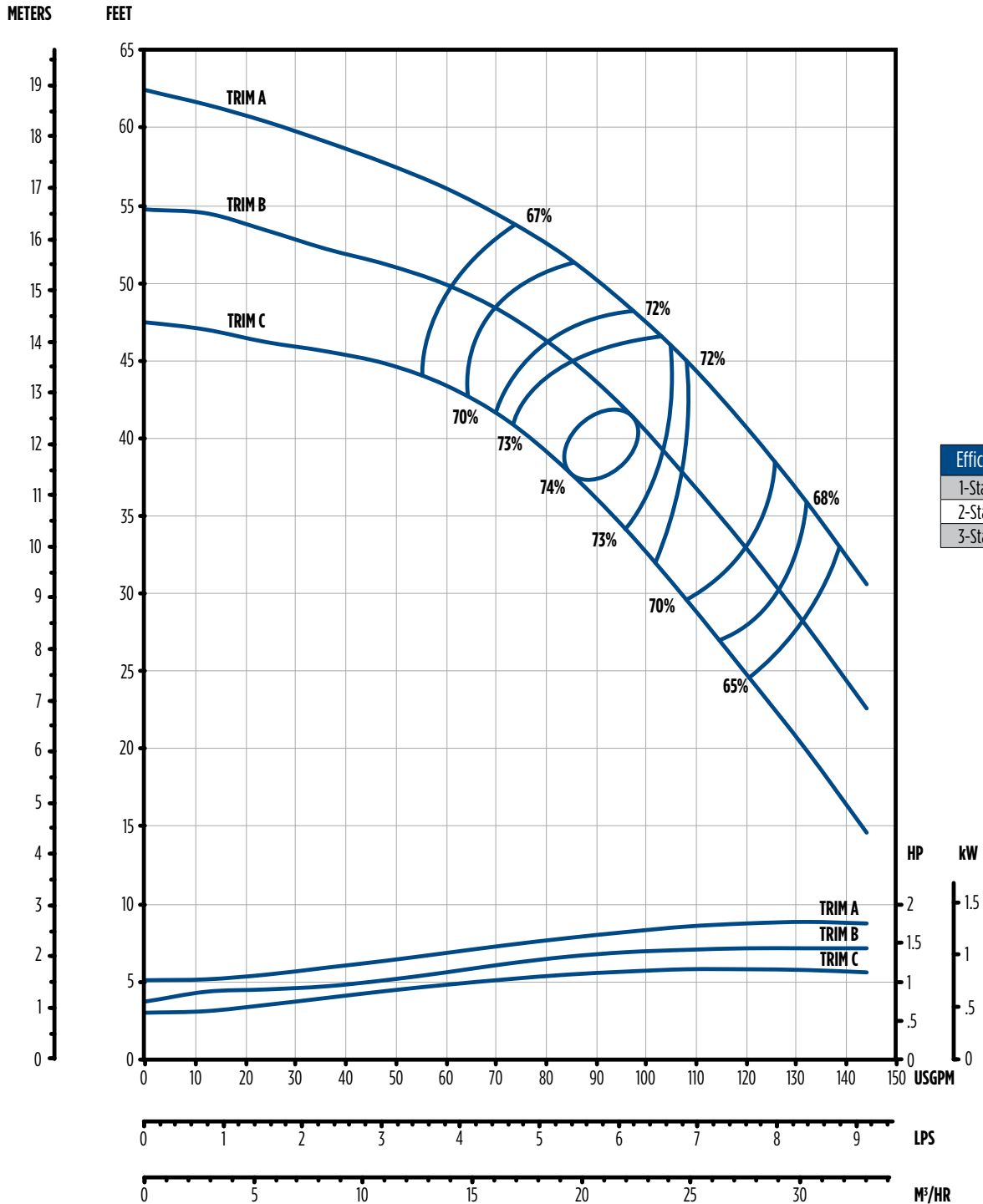
SUBMERSIBLE TURBINE PUMPS

5" STS SERIES - 120 GPM



DIMENSIONS

SINGLE-STAGE



NOTE: Efficiencies are typical and not guaranteed. Efficiency correction required for low stage count. Pumps are intentionally designed to utilize some portion of the motor's 1.15 service factor. Nominal RPM is 3450.

SUBMERSIBLE TURBINE PUMPS

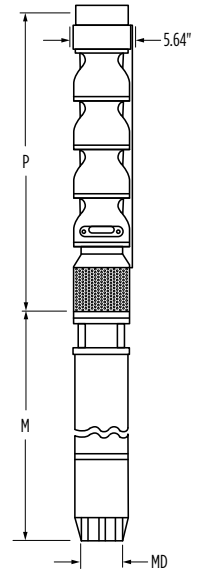
5" STS SERIES - 120 GPM



DIMENSIONS

Power		Stages	Trim	Motor Size	Pump Length		MD*		Motor Wt.		Pump Wt.	
HP	kW				in	mm	in	mm	lbs	kg	lbs	kg
3	2.2	2	1A 1B	4"	20.9	530	3.75	95	41.0	18.6	49.1	22.0
5	3.7	3	3A	6"	26.1	663	5.44	138	86.0	39	57.7	26.2
7.5	5.5	5	2A 3B	6"	34.1	866	5.44	138	99.0	44.9	74.9	34.0
10	7.5	6	6A	6"	38.1	968	5.44	138	103.4	46.9	83.5	37.9
15	11	9	9A	6"	50.1	1273	5.44	138	114.0	51.7	109.3	46.9
20	15	12	12A	6"	62.1	1577	5.44	138	126.1	57.2	135.1	61.3
25	18.5	15	15A	6"	74.1	1882	5.44	138	140.0	63.5	160.9	73.0
30	22	18	18A	6"	86.1	2187	5.44	138	154.1	69.9	186.7	84.7
40	30	24	24A	6"	110.1	2797	5.44	138	182.1	82.6	238.3	108.1
50	37	30	30A	6"	134.1	3406	5.44	138	263.5	119.5	289.9	131.5
60	45	36	36A	6"	158.1	4016	5.44	138	291.5	132.2	341.5	154.9

NOTE: *MD diameter = Franklin Electric Motor, M = Maximum Length of Franklin Electric Motor



DIMENSIONS

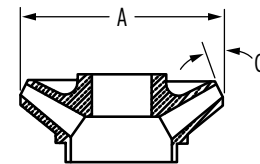
PUMP ENDS

Power		Stages	Trim	Motor Size	Discharge	Order No.	Description	Shipping Wt.	
HP	kW							lbs	kg
3	2.2	2	1A 1B	4"	3" NPT	97050120002	120STS3D5X-0243	64	29.0
5	3.7	3	3A	6"		97050120103	120STS5D5A-0363	70	31.8
5	3.7	3	3A	4"		97050120003	120STS5D5A-0343	70	31.8
7.5	5.5	5	2A 3B	6"		97050120105	120STS7D5X-0563	89	40.4
7.5	5.5	5	2A 3B	4"		97050120005	120STS7D5X-0543	89	40.4
10	7.5	6	6A	6"		97050120106	120STS10D5A-0663	98	44.5
10	7.5	6	6A	4"		97050120006	120STS10D5A-0643	98	44.5
15	11	9	9A	6"		97050120109	120STS15D5A-0963	126	57.2
20	15	12	12A	6"		97050120112	120STS20D5A-1263	154	69.9
25	18.5	15	15A	6"		97050120115	120STS25D5A-1563	207	93.9
30	22	18	18A	6"		97050120118	120STS30D5A-1863	243	110.2
40	30	24	24A	6"		97050120124	120STS40D5A-2463	313	142
50	37	30	30A	6"		97050120130	120STS50D5A-3063	390	176.9
60	45	36	36A	6"		97050120136	120STS60D5A-3663	442	200.5

DIMENSIONS

IMPELLER

Trim	A Diameter	C Angle
A	4.055" / 103.0 mm	15.5 °
B	3.866" / 98.2 mm	15.5 °
C	3.681" / 93.5 mm	15.5 °



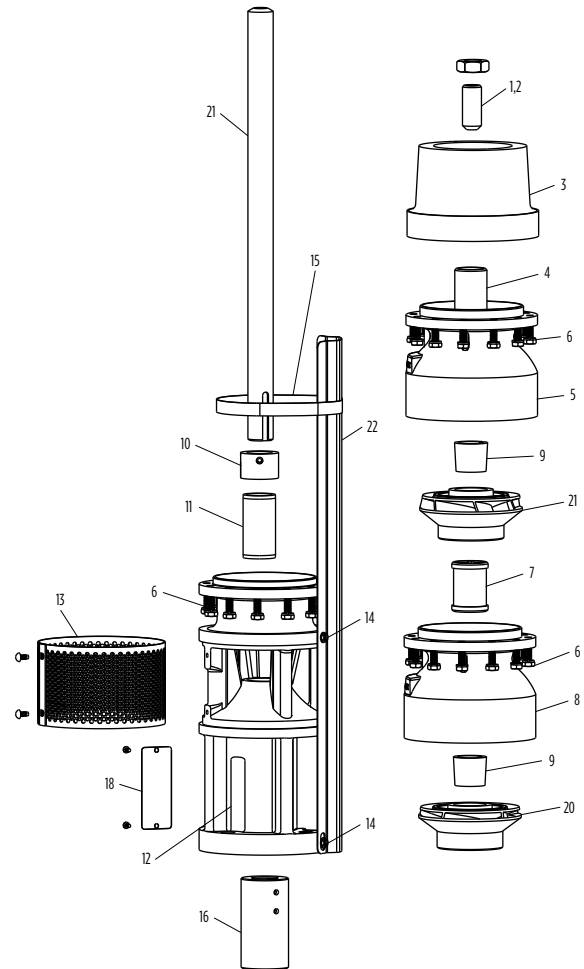
SUBMERSIBLE TURBINE PUMPS

5" STS SERIES - 120 GPM



REPAIR PARTS

Item No.	Part Description	Part No.	Qty. Per
1,2	Uphrust Bolt/Nut Kit	305471553	1
3	3" NPT Discharge (no top bearing)	305472203	1
	4" NPT Discharge (no top bearing)	305472205	
4	Top Bearing, Bronze (included in 5)	305472207	As Req.
5	Top Bowl w/Bronze Top Bearing	305472208	As Req.
6	Bowl Bolt Kit (12 pieces)	305472210	As Req.
	Bowl Bolt Kit (1000 pieces)	305471550	
7	5"/6" Bowl Bearing, Bronze (included in 8)	305471387	As Req.
	5"/6" Bowl Bearing, Rubber (included in 8)	305471398	
	5"/6" Bowl Bearing, FKM (included in 8)	305471399	
8	Bowl and Bearing Assembly, Bronze	305472211	As Req.
	Bowl and Bearing Assembly, Rubber	305472212	
	Bowl and Bearing Assembly, FKM	305472213	
	Bowl Only (no bearing installed)	305472214	
9	Taper Lock Collet Kit (included in 10)	305471372	As Req.
10	Sand Cap w/Set Screws	305471374	1
11	Motor Bracket Bearing, Bronze (included in 14)	305471389	1
12	4" Motor Bracket w/Bronze Bearing	305472463	As Req.
	6" Motor Bracket w/Bronze Bearing	305472220	
13	Suction Screen w/Drive Screws	305472222	1
14	5" Cable Guard Screw Kit (4 pieces)	305472241	1
15	5" Cable Guard Clamp	305472243	1
16	4" Motor Coupling	305471002	1
	6" Motor Coupling	305471402	
17	4" Motor Nut Kit	305360901	1
	6" Motor Bolt Kit	305352901	
18	Nameplate w/Drive Screws	305418901	1
19	Owner's Manual	106089101	1



REPAIR PARTS

IMPELLER

Item No.	Description	Diameter		Angle	Kit w/ Collet
		in	mm		
20	A Trim	4.055	103.0	15.5°	305472223
	B Trim	3.866	98.2		305472224
	C Trim	3.681	93.5		305472225

NOTE: Shaft and cable guard information located on the following pages

SUBMERSIBLE TURBINE PUMPS

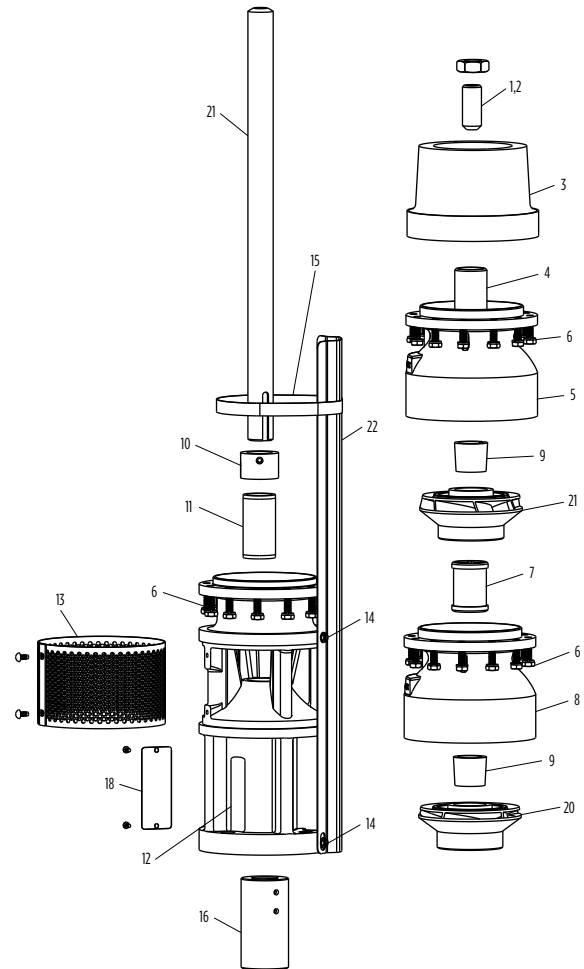
5" STS SERIES - 120 GPM



REPAIR PARTS

5" x 6" Shaft - 5" Pump w/6" Motor Bracket

Item No.	Stages	Length		Shaft Part No.	
		in	mm	416 SS	Chrome Hardened
21	1	13.14	334	305472244	305472283
	2	17.14	435	305472245	305472284
	3	21.14	537	305472246	305472285
	4	25.14	639	305472247	305472286
	5	29.14	740	305472248	305472287
	6	33.14	842	305472249	305472288
	7	37.14	943	305472250	305472289
	8	41.14	1045	305472251	305472290
	9	45.14	1147	305472252	305472291
	10	49.14	1248	305472253	305472292
	11	53.14	1350	305472254	305472293
	12	57.14	1451	305472255	305472294
	13	61.14	1553	305472256	305472295
	14	65.14	1655	305472257	305472296
	15	69.14	1756	305472258	305472297
	16	73.14	1858	305472259	305472298
	17	77.14	1959	305472260	305472299
	18	81.14	2061	305472261	305472300
	19	85.14	2163	305472262	305472301
	20	89.14	2264	305472263	305472302
	21	93.14	2366	305472264	305472303
	22	97.14	2467	305472265	305472304
	23	101.14	2569	305472266	305472305
	24	105.14	2671	305472267	305472306
	25	109.14	2772	305472268	305472307
	26	113.14	2874	305472269	305472308
	27	117.14	2975	305472270	305472309
	28	121.14	3077	305472271	305472310
	29	125.14	3179	305472272	305472311
	30	129.14	3280	305472273	305472312
	31	133.14	3382	305472274	305472313
	32	137.14	3483	305472275	305472314
	33	141.14	3585	305472276	305472315
	34	145.14	3687	305472277	305472316
	35	149.14	3788	305472278	305472317
	36	153.14	3890	305472279	305472318
	37	157.14	3991	305472280	305472319
	38	161.14	4093	305472281	305472320
	39	165.14	4195	305472282	305472321



5" & 6" 416 SS Shaft (Double Keyed)

Part No.	Length	
	ft	m
305471363	4	1.21
305471364	6	1.83
305471365	8	2.44
305471366	10	3.05

SUBMERSIBLE TURBINE PUMPS

5" STS SERIES - 120 GPM



REPAIR PARTS

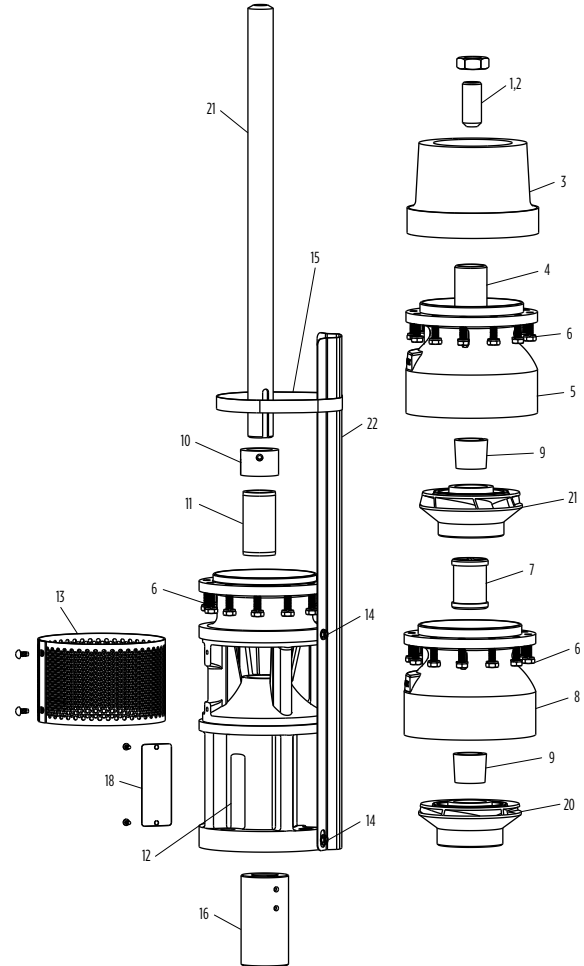
5" x 6" Cable Guard (Precut) - 5" Pump w/6" Motor Bracket

Item No.	Stages	Length		Cable Guard No.	
		in	mm	Order No.	2nd Piece (As Req.)
22	1	16.31	414	305472388	
	2	20.31	516	305472389	
	3	24.31	617	305472390	
	4	28.31	719	305472391	
	5	32.31	821	305472392	
	6	36.31	922	305472393	
	7	40.31	1024	305472394	
	8	44.31	1125	305472395	
	9	48.31	1227	305472396	
	10	52.31	1329	305472397	
	11	56.31	1430	305472398	
	12	60.31	1532	305472399	
	13	64.31	1633	305472400	
	14	68.31	1735	305472401	
	15	72.31	1837	305472402	
	16	76.31	1938	305472403	
	17	80.31	2040	305472404	
	18	84.31	2141	305472405	
	19	88.31	2243	305472406	
	20	92.31	2345	305472407	
	21	96.31	2446	305472408	
	22	100.31	2548	305472409	
	23	104.31	2649	305472410	
	24	108.31	2751	305472411	
	25	112.31	2853	305472412	
	26	116.31	2954	305472413	
	27	120.00	3048	305472414	
	28	20.81*	529*	305472445	305472415
	29	24.81*	630*	305472445	305472416
	30	28.81*	732*	305472445	305472417
	31	32.81*	833*	305472445	305472418
	32	36.81*	935*	305472445	305472419
	33	40.81*	1037*	305472445	305472420
	34	44.81*	1138*	305472445	305472421
	35	48.81*	1240*	305472445	305472422
	36	52.81*	1341*	305472445	305472423
	37	56.81*	1443*	305472445	305472424
	38	60.81*	1545*	305472445	305472425
	39	64.81*	1646*	305472445	305472426

*Cable guard length equals the length of the second piece

5" Cable Guard (Bulk)

Item No.	Description	Length		Part No.
		in	mm	
22	Cable Guard (10' Section)	120	3048	305472242



SUBMERSIBLE TURBINE PUMPS

5" STS SERIES - 120 GPM



MATERIALS

Part Name	Common Material Name	Material Specification No.
Discharge Bracket	Ductile iron	ASTM A536 65-45-12
Top Bowl	Ductile iron	ASTM A536 65-45-12
Intermediate Bowl	Ductile iron	ASTM A536 65-45-12
Bearings, Discharge, and Suction	Bronze	ASTM B584 C89835
Impeller	304 Stainless steel	ASTM A743/A743M CF8
Pump Shaft	416 Stainless steel	ASTM A582 S41600
Suction Bracket	Ductile iron	ASTM A536 65-45-12
Bowl Bearing	Rubber	Rubber
Sand Collar	300 Stainless steel	ASTM A666
Suction Screen	302 Stainless steel	ASTM A240 S30200
Cable Guard	300 Stainless steel	ASTM A666
Shaft Coupling	416 Stainless steel	ASTM A582 S41600
Uphrust Bolt	300 Stainless steel	ASTM A666
Taper Lock	416 Stainless steel	ASTM A582 S41600
Bolting	300 Stainless steel	ASTM A666
Cable Guard Clamp	300 Stainless steel	-

NOTE: Bowl bearing and shaft options available; Contact customer service for available options

NOTES

5" STS SERIES - 120 GPM



NOTES

5" STS SERIES - 120 GPM





Franklin Electric