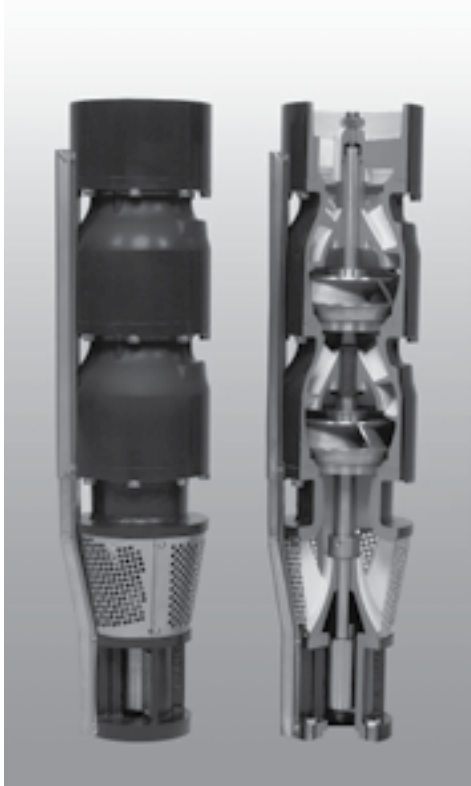


# Submersible Turbine Pumps

## 8" Submersible Turbine Pump 225 GPM



### Features

- 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 abrasive 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

Minimum Well I.D.	8"
Minimum Submergence Above Inlet	10'
Discharge	4" or 6" NPT
Maximum Allowable Amount of Sand	150 ppm

**Note:** Refer to Franklin Electric AIM data for motor cooling requirements.

### Model Number Explanation

Example: 350STS10D8C-0264

- 350 = GPM
- STS = Sub Turbine
- 10 = Horsepower
- D = Ductile Iron
- 8 = 8" Pump
- C = Impeller Trim Configuration
- 02 = Number of Stages
- 6 = 6" Motor Bracket
- 4 = 4" Discharge

### Materials of Construction

Part Name	Common Material Name	Material Spec. Number
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, Disch. & Suction	Bronze	ASTM 8584 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
Upthrust Bolt	300 Stainless Steel	ASTM A666
Taper Lock	416 Stainless Steel	ASTM A582 S41600
Bolting	300 Stainless Steel	ASTM A666

**Note:** Bowl bearing and shaft options available. Contact customer service for available options.

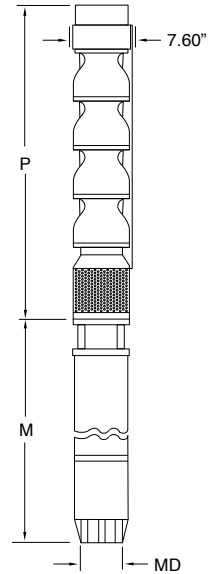
# Submersible Turbine Pumps

## Model 225STS8 Performance

### Dimension Information

HP	Stages	Trim	Motor Size	P	M*	MD*	Motor Wt. lbs.	Pump Wt. lbs.
				inch	inch	inch		
5	1	1C	6"	23.83	22.9	5.44	86	95
7.5	1	1A	6"	23.83	24.2	5.44	99	95
10	2	2C	6"	29.34	25.4	5.44	103	122
15	2	2A	6"	29.34	28.0	5.44	114	122
20	3	2A 1B	6"	34.85	30.6	5.44	126	150
25	4	4B	6"	40.37	33.1	5.44	140	177
30	5	1A 3B 1C	6"	45.88	35.7	5.44	154	204

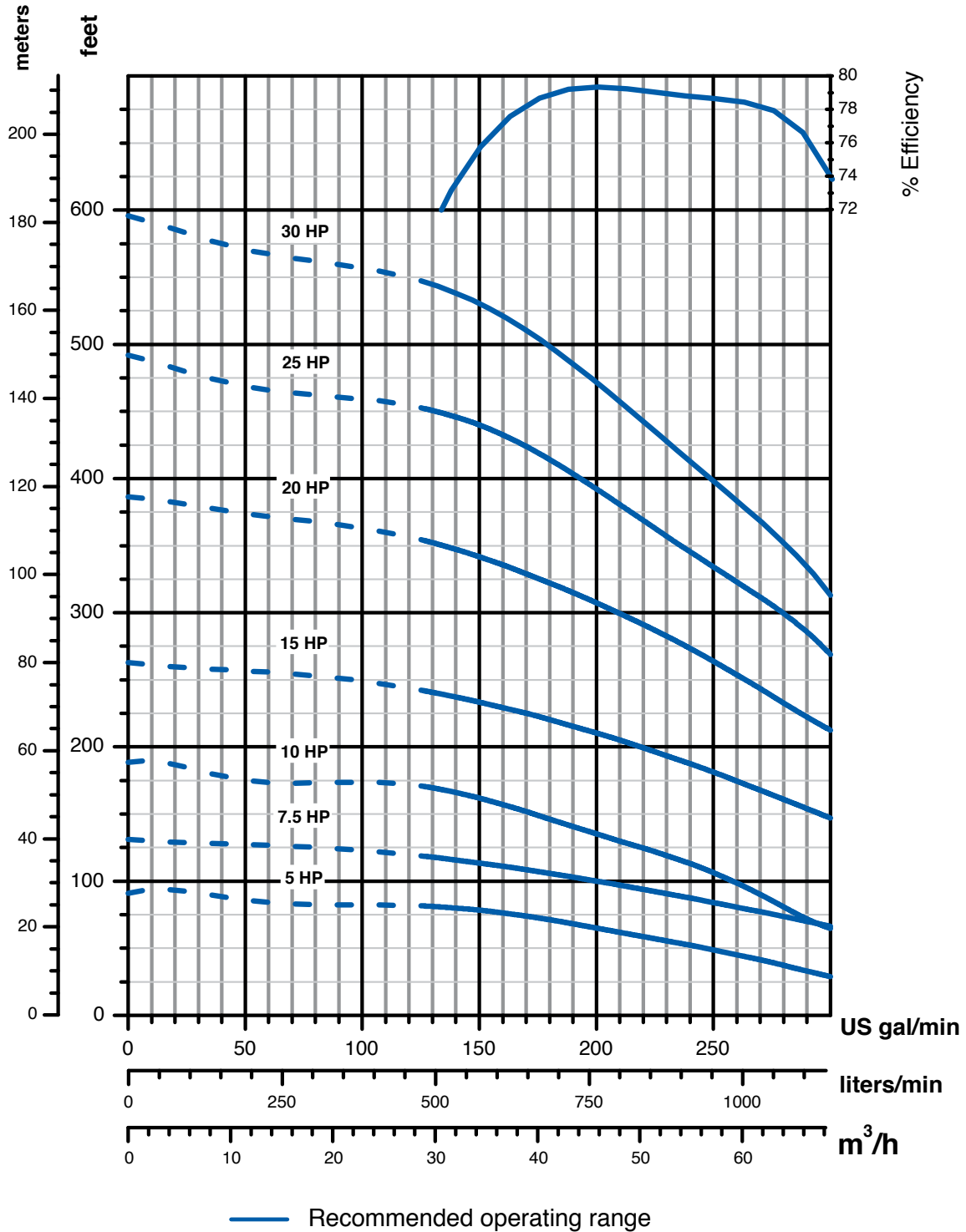
Note: \*MD diameter = Franklin Electric Motor, M = Maximum Length of Franklin Electric Motor



### Order Information

8" Submersible Turbine Pump Ends								
GPM	HP	Stages	Trim Size	Motor Bracket Size	Discharge Size	Order No.	Model No.	Shipping Weight (lbs.)
225	5	1	1C	6"	4" NPT	97080225001	225STS5D8C-0164	111
	5	1	1C	6"	6" NPT	97080225101	225STS5D8C-0166	111
	7.5	1	1A	6"	4" NPT	97080225201	225STS7D8A-0164	111
	7.5	1	1A	6"	6" NPT	97080225301	225STS7D8A-0166	111
	10	2	2C	6"	4" NPT	97080225002	225STS10D8C-0264	140
	10	2	2C	6"	6" NPT	97080225102	225STS10D8C-0266	140
	15	2	2A	6"	4" NPT	97080225202	225STS15D8A-0264	140
	15	2	2A	6"	6" NPT	97080225302	225STS15D8A-0266	140
	20	3	2A 1B	6"	4" NPT	97080225003	225STS20D8X-0364	171
	20	3	2A 1B	6"	6" NPT	97080225103	225STS20D8X-0366	171
	25	4	4B	6"	4" NPT	97080225004	225STS25D8B-0464	198
	25	4	4B	6"	6" NPT	97080225104	225STS25D8B-0466	198
	30	5	1A 3B 1C	6"	4" NPT	97080225005	225STS30D8X-0564	228
	30	5	1A 3B 1C	6"	6" NPT	97080225105	225STS30D8X-0566	228

## Model 225STS8 Performance



**Note:** Performance based on:  
 - Fresh water, 68 °F  
 - 6" motor / 3450 rpm

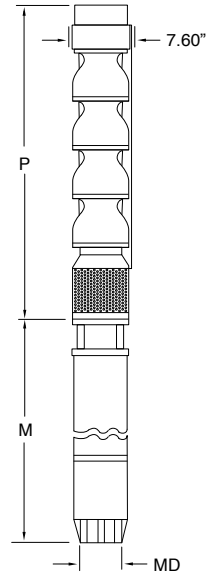
# Submersible Turbine Pumps

## Model 225STS8 Performance

### Dimension Information

HP	Stages	Trim	Motor Size	P	M*	MD*	Motor Wt. lbs.	Pump Wt. lbs.
				inch	inch	inch		
40	6	1A 5B	6"	51.39	40.8	5.44	182	232
40	6	1A 5B	8"	52.77	36.4	7.70	274	254
50	7	6A 1B	6"	56.90	55.3	5.44	263	259
50	7	6A 1B	8"	58.28	39.4	7.70	309	282
60	9	1A 8B	6"	67.93	61.3	5.44	291	313
60	9	1A 8B	8"	69.31	42.1	7.70	344	336
75	10	10A	8"	74.82	47.4	7.70	399	363
100	14	10A 4B	8"	96.87	54.9	7.70	481	473
125	17	17A	8"	113.40	68.8	7.70	644	554

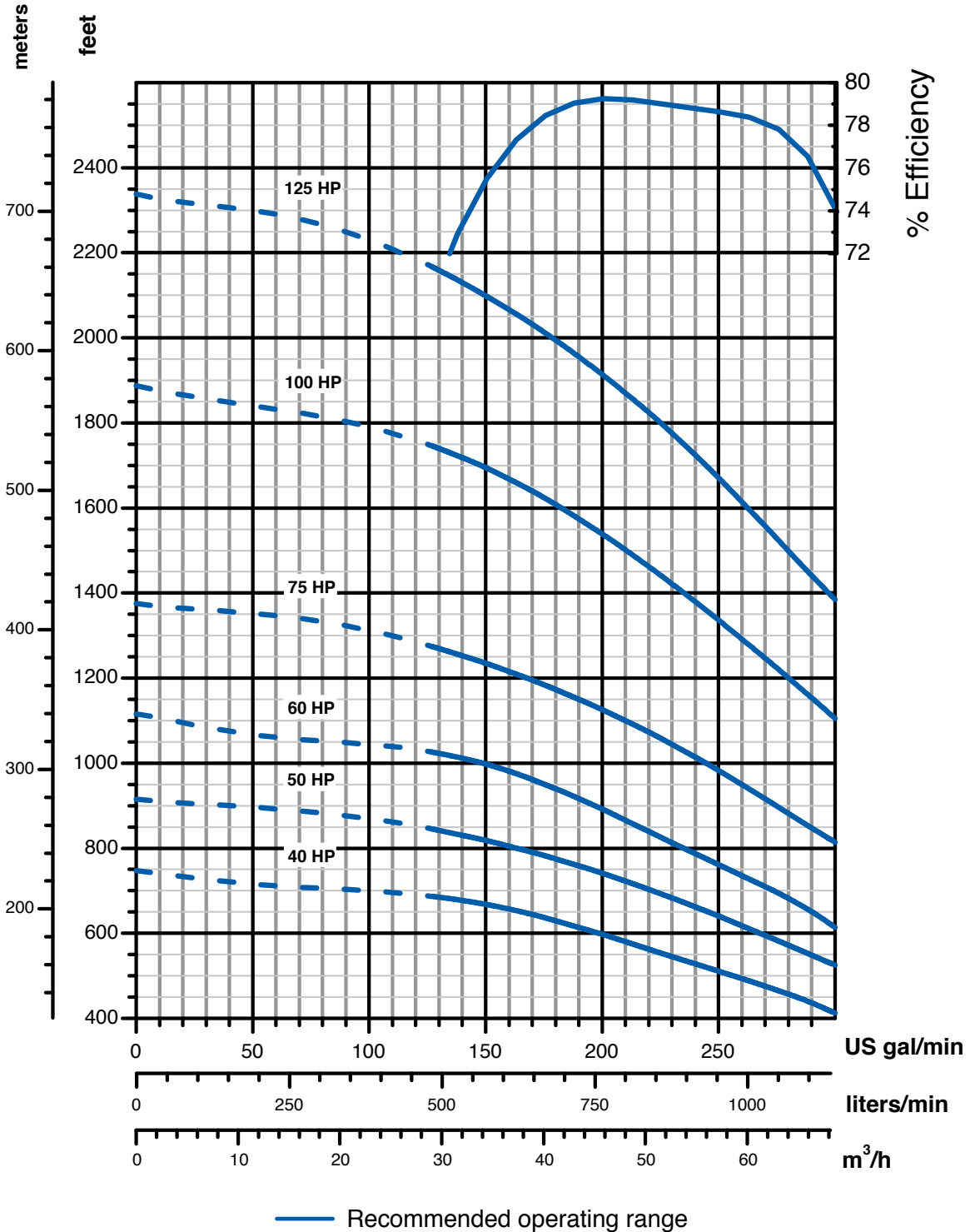
Note: \*MD diameter = Franklin Electric Motor, M = Maximum Length of Franklin Electric Motor



### Order Information

8" Submersible Turbine Pump Ends								
GPM	HP	Stages	Trim Size	Motor Bracket Size	Discharge Size	Order No.	Model No.	Shipping Weight (lbs.)
225	40	6	1A 5B	6"	4" NPT	97080225006	225STS40D8X-0664	260
	40	6	1A 5B	6"	6" NPT	97080225106	225STS40D8X-0666	260
	40	6	1A 5B	8"	4" NPT	97080225806	225STS40D8X-0684	282
	40	6	1A 5B	8"	6" NPT	97080225906	225STS40D8X-0686	282
	50	7	6A 1B	6"	4" NPT	97080225007	225STS50D8X-0764	287
	50	7	6A 1B	6"	6" NPT	97080225107	225STS50D8X-0766	287
	50	7	6A 1B	8"	4" NPT	97080225807	225STS50D8X-0784	310
	50	7	6A 1B	8"	6" NPT	97080225907	225STS50D8X-0786	310
	60	9	1A 8B	6"	4" NPT	97080225009	225STS60D8X-0964	378
	60	9	1A 8B	6"	6" NPT	97080225109	225STS60D8X-0966	378
	60	9	1A 8B	8"	4" NPT	97080225809	225STS60D8X-0984	401
	60	9	1A 8B	8"	6" NPT	97080225909	225STS60D8X-0986	401
	75	10	10A	8"	4" NPT	97080225810	225STS75D8A-1084	440
	75	10	10A	8"	6" NPT	97080225910	225STS75D8A-1086	440
	100	14	10A 4B	8"	4" NPT	97080225814	225STS100D8X-1484	562
	100	14	10A 4B	8"	6" NPT	97080225914	225STS100D8X-1486	562
125	17	17A	8"	4" NPT	97080225817	225STS125D8A-1784	662	
125	17	17A	8"	6" NPT	97080225917	225STS125D8A-1786	662	

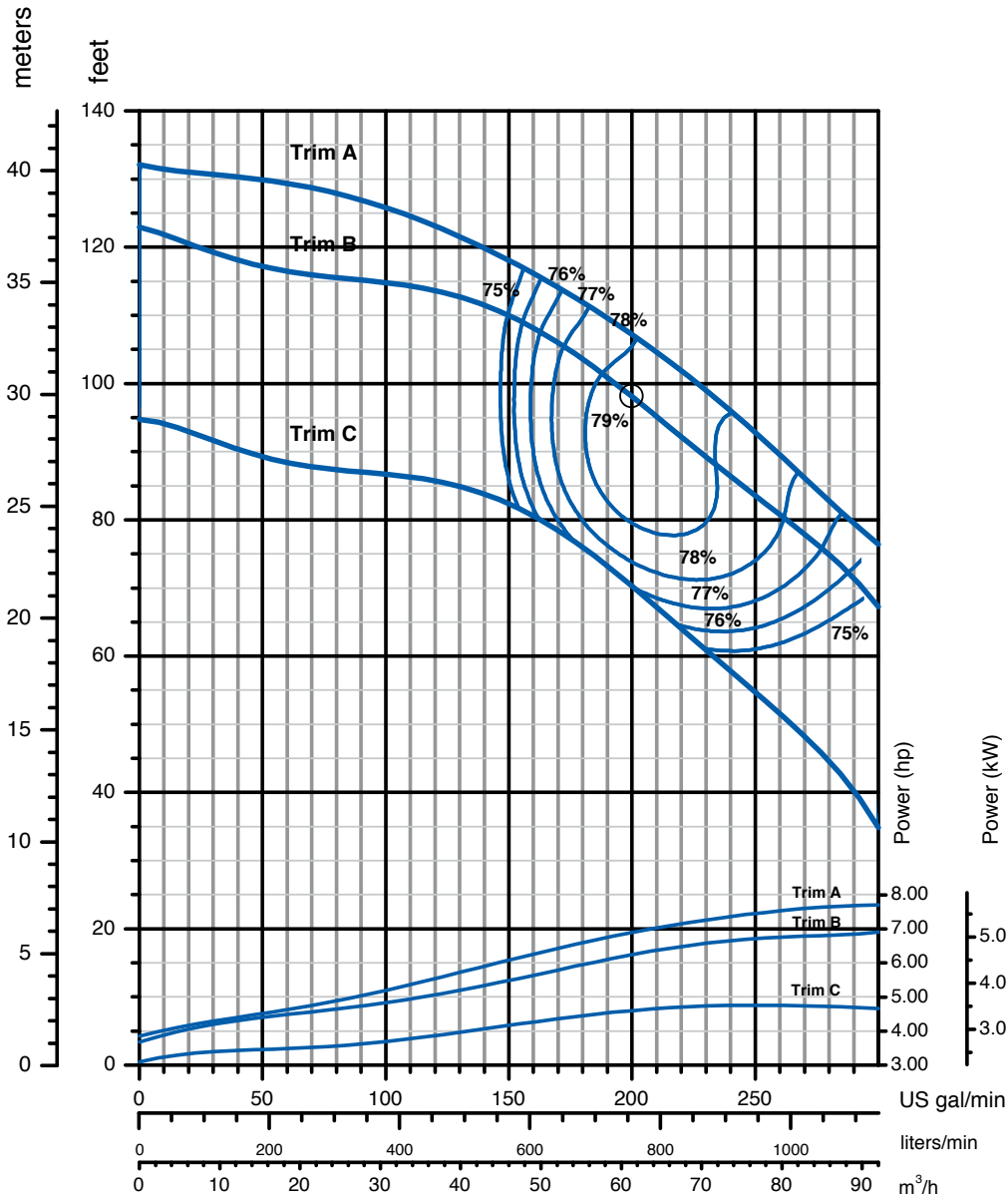
## Model 225STS8 Performance



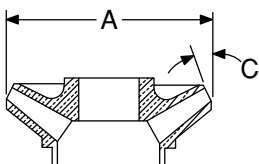
**Note:** Performance based on:  
 -Fresh water, 68 °F  
 -6" motor / 3450 rpm  
 -8" motor / 3520 rpm

## Model 225STS8 Performance

### Single Stage Performance



**Note:** Efficiencies are typical, not guaranteed. Efficiency correction required for low stage count pumps.  
 (1-stage 5%, 2-stage 3%, 3-stage 1%)  
 Bowl #13 begins transition to double-bolted (8 bolts @ bottom, 16 bolts @ top)  
 Nominal RPM: 3450

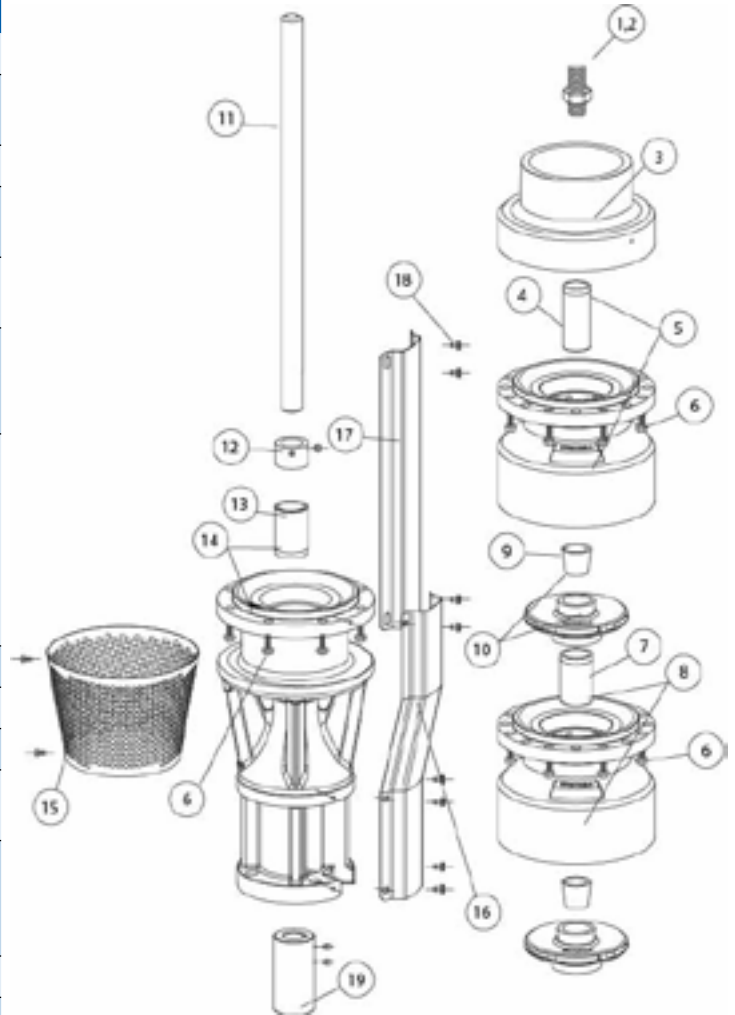


### Impeller Dimensions

Trim	Diameter (in)	C Angle
A	5.705"	20 °
B	5.561"	20 °
C	5.083"	20 °

## 225STS8 Repair Parts List

Item No.	Part Description	Part Number	Qty. Per
1, 2	Uphrust Bolt/Nut Kit	305471553	1
3	Discharge 4" NPT (No Top Bearing) (225-700)	305471976	1
	Discharge 6" NPT (No Top Bearing) (225-700)	305471977	
4	Top Bearing - Bronze (Included in 5)	305471990	As Req.
5	Top Bowl with Bronze Bearing	305471991	As Req.
	Top Bowl with Bronze Bearing XP	305471992	
6	Bowl Bolt Kit (8 pcs.)*	305471549	As Req.
	Bowl Bolt Kit (500 pcs.)	305471551	
7	8" Bowl Bearing - Rubber (Included in 8)	305471400	As Req.
	8" Bowl Bearing - Viton (Included in 8)	305471401	
	8" Bowl Bearing - Bronze (Included in 8)	305471379	
8	Bowl and Bearing Assembly - Bronze	305471528	As Req.
	Bowl and Bearing Assembly XP - Bronze	305471531	
	Bowl and Bearing Assembly - Rubber	305471527	
	Bowl and Bearing Assembly XP - Rubber	305471530	
	Bowl and Bearing Assembly - Viton	305471529	
	Bowl and Bearing Assembly XP - Viton	305471532	
9	Taper Lock Collet Kit (Included in 10)	305471371	As Req.
12	Sand Cap w/ Set Screws	305471373	1
13	Motor Bracket Bearing - Bronze (Included in 14)	305471379	1
14	6" Motor Bracket with Bronze Bearing	305471438	As Req.
	8" Motor Bracket with Bronze Bearing	305471435	
15	Suction Screen with Screws for 6" Motor Bracket	305471375	1
	Suction Screen with Screws for 8" Motor Bracket	305471376	
18	Cable Guard Screw Kit	305471000	1
19	8" x 6" Motor Coupling	305471403	1
	8" x 8" Motor Coupling	305471404	
	6" Motor Bolt Kit	305352901	1
	8" Motor Bolt Kit	305352902	
	Nameplate with Drive Screws	305418901	1
	Owner's Manual	106089101	1



\* Pumps of 13 stages or more require double bolting.  
Two bolt kits per stage will be required for the 13th stage and above.

Impeller				
Item No.	Description	Diameter (in)	Angle (Degrees)	Kit w/ Collet
10	A Trim	5.705	20 °	305471578
	B Trim	5.561	20 °	305471579
	C Trim	5.083	20 °	305471580

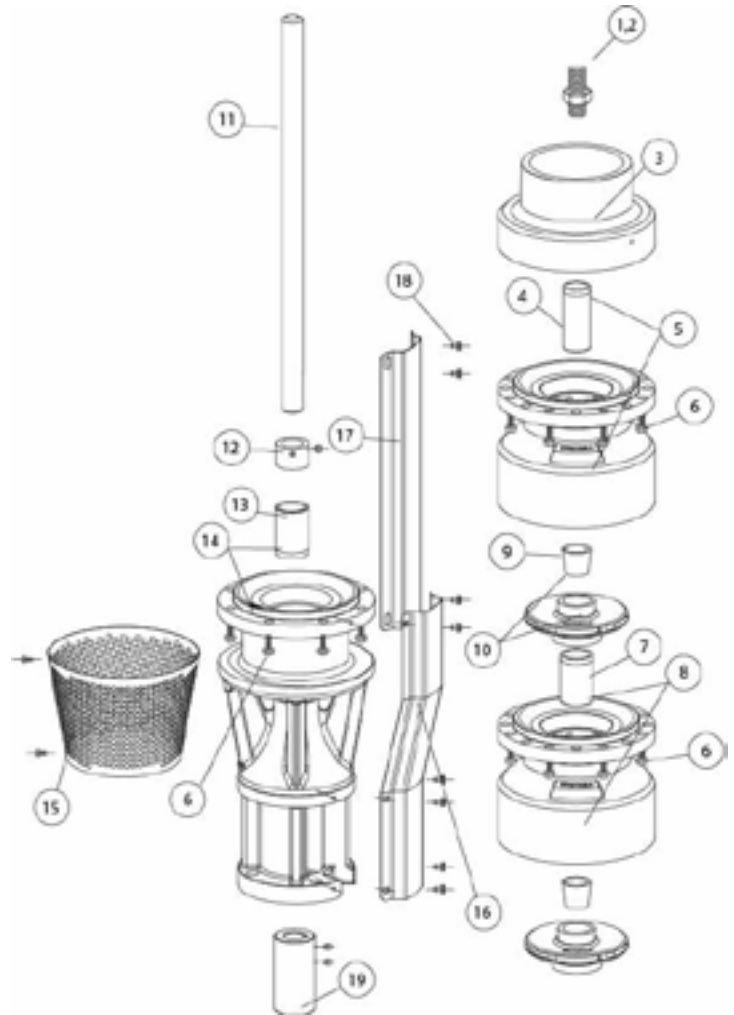
**Note:** Shaft and cable guard information located on the next page.

# Submersible Turbine Pumps

## 225STS8 Repair Parts List

8" x 6" Shaft 8" Pump with 6" Motor Bracket				
Item No.	Stages	Length (in)	Shaft Part Number	
			416 SS	Chrome Hardened
11	1	17.92	305472005	305472104
	2	23.43	305472007	305472106
	3	28.94	305472009	305472108
	4	34.46	305472011	305472110
	5	39.97	305472013	305472112
	6	45.48	305472015	305472114
	7	50.99	305472017	305472116
	8	56.50	305472019	305472118
	9	62.02	305472021	305472120
	10	67.53	305472023	305472122
	11	73.04	305472025	305472124
	12	78.55	305472027	305472126
	13	84.06	305472029	305472128
	14	89.58	305472031	305472130
	15	95.09	305472033	305472132

8" x 6" Cable Guard (Pre-Cut) 8" Pump with 6" Motor Bracket				
Item No.	Stages	Length (in)	Cable Guard Part Number	
			Bracket	Pump
16, 17	1	7.87	305471001	305471790
	2	13.38	305471001	305471793
	3	18.89	305471001	305471796
	4	24.46	305471001	305471799
	5	29.97	305471001	305471801
	6	35.48	305471001	305471804
	7	40.99	305471001	305471806
	8	46.51	305471001	305471838
	9	52.02	305471001	305471853
	10	57.53	305471001	305471839
	11	63.04	305471001	305471872
	12	68.55	305471001	305471843
	13	74.06	305471001	305471874
	14	79.57	305471001	305471876
	15	85.09	305471001	305471844



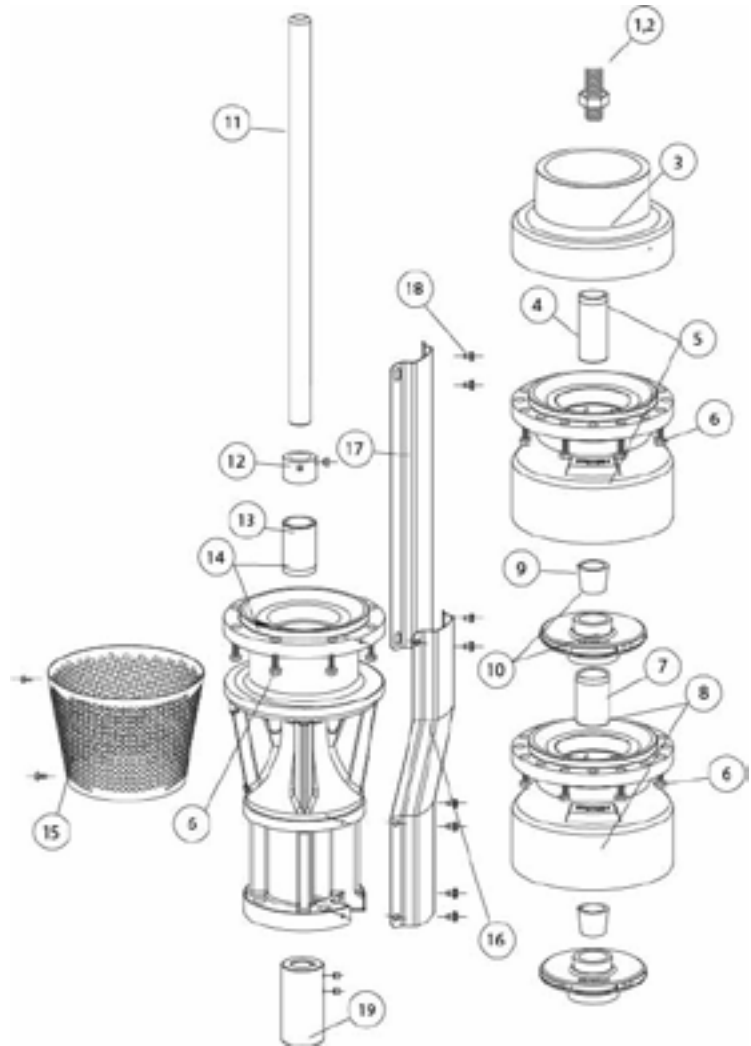


# Submersible Turbine Pumps

## 225STS8 Repair Parts List

8" x 8" Shaft 8" Pump with 8" Motor Bracket				
Item No.	Stages	Length (in)	Shaft Part Number	
			416 SS	Chrome Hardened
11	1	18.72	305472006	305472105
	2	23.93	305472008	305472107
	3	29.45	305472010	305472109
	4	34.96	305472012	305472111
	5	40.47	305472014	305472113
	6	45.98	305472016	305472115
	7	51.49	305472018	305472117
	8	57.01	305472020	305472119
	9	62.52	305472022	305472121
	10	68.03	305472024	305472123
	11	73.54	305472026	305472125
	12	79.05	305472028	305472127
	13	84.57	305472030	305472129
	14	90.08	305472032	305472131
	15	95.59	305472034	305472133
	16	101.10	305472035	305472134
	17	106.61	305472036	305472135
	18	112.13	305472037	305472136

8" x 8" Cable Guard (Pre-cut) 8" Pump with 8" Motor Bracket			
Item No.	Stages	Length (in)	Part Number
17	1	22.37	305471864
	2	27.88	305471868
	3	33.39	305471870
	4	38.90	305471830
	5	44.41	305471832
	6	49.92	305471835
	7	55.43	305471837
	8	60.95	305471808
	9	66.46	305471810
	10	71.97	305471812
	11	77.48	305471815
	12	82.99	305471817
	13	88.50	305471877
	14	94.02	305471841
	15	99.53	305471842
	16	105.04	305471840
	17	110.55	305471878
	18	116.07	305471824



8" Cable Guard			
Item No.	Description	Length (in)	Part Number
17	Cable Guard (10' Section)	120	305471789
16	Cable Guard 6" Motor Bracket Section*	14.125	305471001

\* Must have for 6" Motor Bracket

8" 416 SS Shaft (Double Keyed)	
Part Number	Length (ft)
305471367	4
305471368	6
305471369	8
305471370	10







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