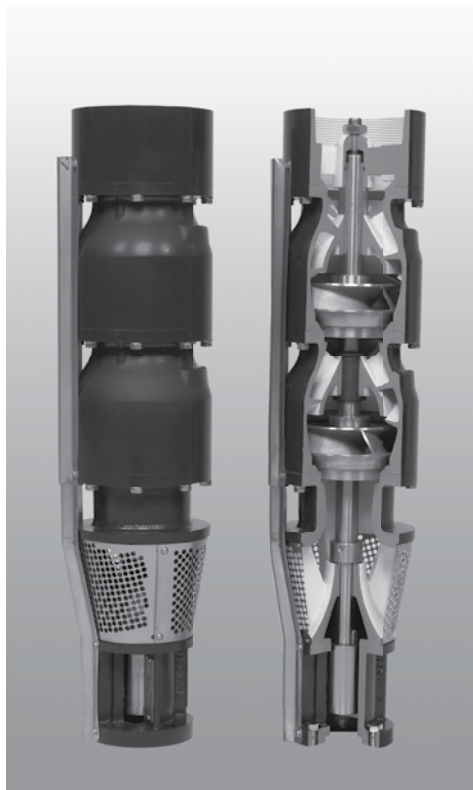


Submersible Turbine Pumps

8" Submersible Turbine Pump

450 GPM



FPS
*STS*series

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

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

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.

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

Submersible Turbine Pumps

Model 450STS8 Performance

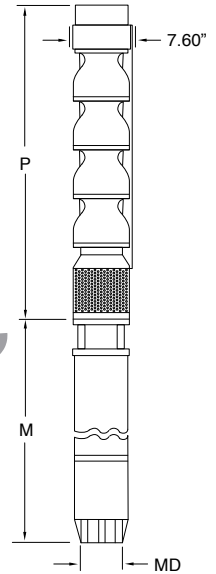
Dimension Information

HP	Stages	Trim	Motor Size	P	M*	MD*	Motor Wt.	Pump Wt.
				inch	inch	inch	lbs.	lbs.
10	1	1C	6"	24.7	25.4	5.44	103	94
15	1	1B	6"	24.7	28.0	5.44	114	94
20	1	1A	6"	24.7	30.6	5.44	126	94
25	2	2B	6"	31.1	33.1	5.44	140	124
30	2	1A 1B	6"	31.1	35.7	5.44	154	124
40	3	1A 2B	6"	37.5	40.8	5.44	182	154
40	3	1A 2B	8"	38.8	36.4	7.70	274	178

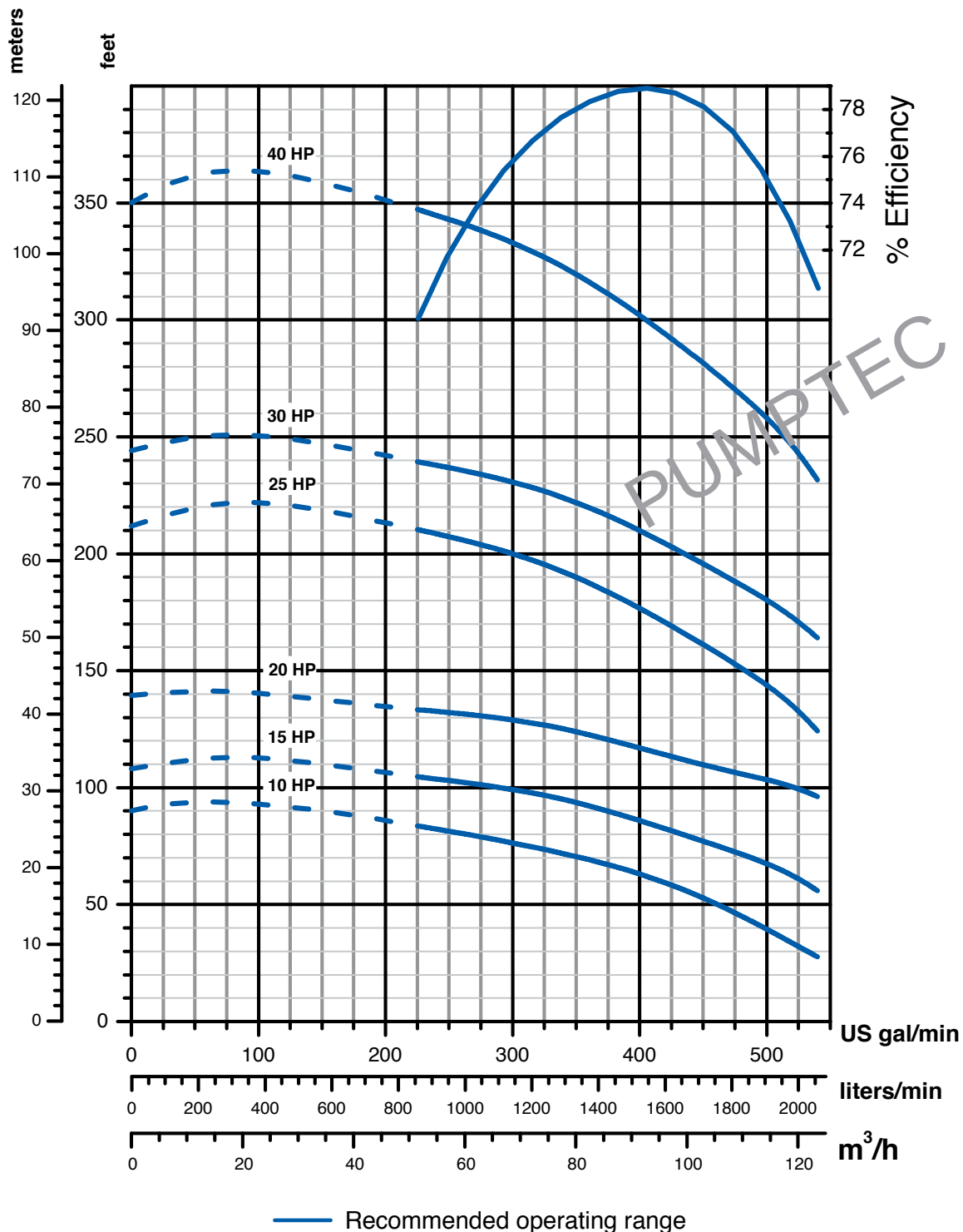
Note: *MD diameter = Franklin Electric Motor, M = Maximum Length of Franklin Electric Motor

Order Information

8" Submersible Turbine Pump Ends								
GPM	HP	Stages	Trim Size	Motor Bracket Size	Discharge Size	Order No.	Model No.	Shipping Weight (lbs.)
450	10	1	1C	6"	4" NPT	97080450001	450STS10D8C-0164	110
	10	1	1C	6"	6" NPT	97080450101	450STS10D8C-0166	110
	15	1	1B	6"	4" NPT	97080450201	450STS15D8B-0164	110
	15	1	1B	6"	6" NPT	97080450301	450STS15D8B-0166	110
	20	1	1A	6"	4" NPT	97080450401	450STS20D8A-0164	110
	20	1	1A	6"	6" NPT	97080450501	450STS20D8A-0166	110
	25	2	2B	6"	4" NPT	97080450002	450STS25D8B-0264	142
	25	2	2B	6"	6" NPT	97080450102	450STS25D8B-0266	142
	30	2	1A 1B	6"	4" NPT	97080450202	450STS30D8X-0264	142
	30	2	1A 1B	6"	6" NPT	97080450302	450STS30D8X-0266	142
	40	3	1A 2B	6"	4" NPT	97080450003	450STS40D8X-0364	175
	40	3	1A 2B	6"	6" NPT	97080450103	450STS40D8X-0366	175
	40	3	1A 2B	8"	4" NPT	97080450603	450STS40D8X-0384	199
	40	3	1A 2B	8"	6" NPT	97080450703	450STS40D8X-0386	199



Model 450STS8 Performance



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

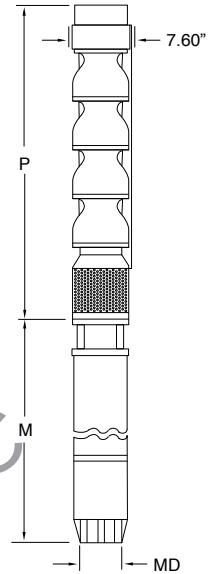
Submersible Turbine Pumps

Model 450STS8 Performance

Dimension Information

HP	Stages	Trim	Motor Size	P	M*	MD*	Motor Wt.	Pump Wt.
				inch	inch	inch	lbs.	lbs.
50	3	3A	6"	37.5	55.3	5.44	263	154
50	3	3A	8"	38.8	39.4	7.70	309	178
60	4	2A 2B	6"	43.8	61.3	5.44	291	184
60	4	2A 2B	8"	45.2	42.1	7.70	344	238
75	5	3A 1B 1C	8"	51.6	47.4	7.70	399	266
100	6	5A 1B	8"	58.0	54.9	7.70	481	295
125	8	5A 3B	8"	58.0	68.8	7.70	644	295

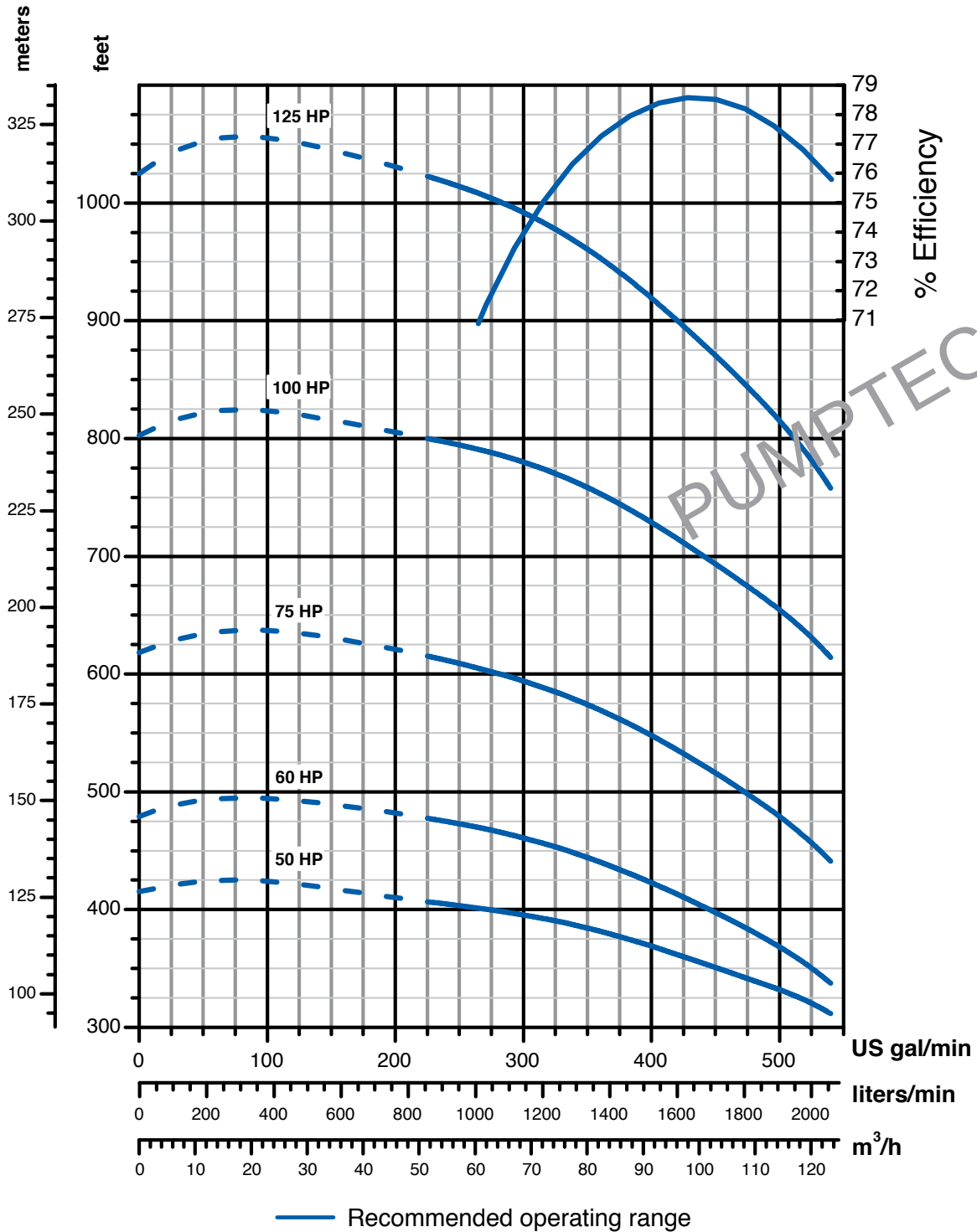
Note: *MD diameter = Franklin Electric Motor, **M** = Maximum Length of Franklin Electric Motor



Order Information

8" Submersible Turbine Pump Ends								
GPM	HP	Stages	Trim Size	Motor Bracket Size	Discharge Size	Order No.	Model No.	Shipping Weight (lbs.)
450	50	3	3A	6"	4" NPT	97080450203	450STS50D8A-0364	175
	50	3	3A	6"	6" NPT	97080450303	450STS50D8A-0366	175
	50	3	3A	8"	4" NPT	97080450803	450STS50D8A-0384	199
	50	3	3A	8"	6" NPT	97080450903	450STS50D8A-0386	199
	60	4	2A 2B	6"	4" NPT	97080450004	450STS60D8X-0464	208
	60	4	2A,2B	6"	6" NPT	97080450104	450STS60D8X-0466	208
	60	4	2A 2B	8"	4" NPT	97080450804	450STS60D8X-0484	232
	60	4	2A 2B	8"	6" NPT	97080450904	450STS60D8X-0486	232
	75	5	3A 1B 1C	8"	4" NPT	97080450805	450STS75D8X-0584	266
	75	5	3A 1B 1C	8"	6" NPT	97080450905	450STS75D8X-0586	266
	100	6	5A 1B	8"	4" NPT	97080450806	450STS100D8X-0684	295
	100	6	5A 1B	8"	6" NPT	97080450906	450STS100D8X-0686	295
	125	8	5A 3B	8"	4" NPT	97080450808	450STS125D8X-0884	357
	125	8	5A 3B	8"	6" NPT	97080450908	450STS125D8X-0886	357

Model 450STS8 Performance

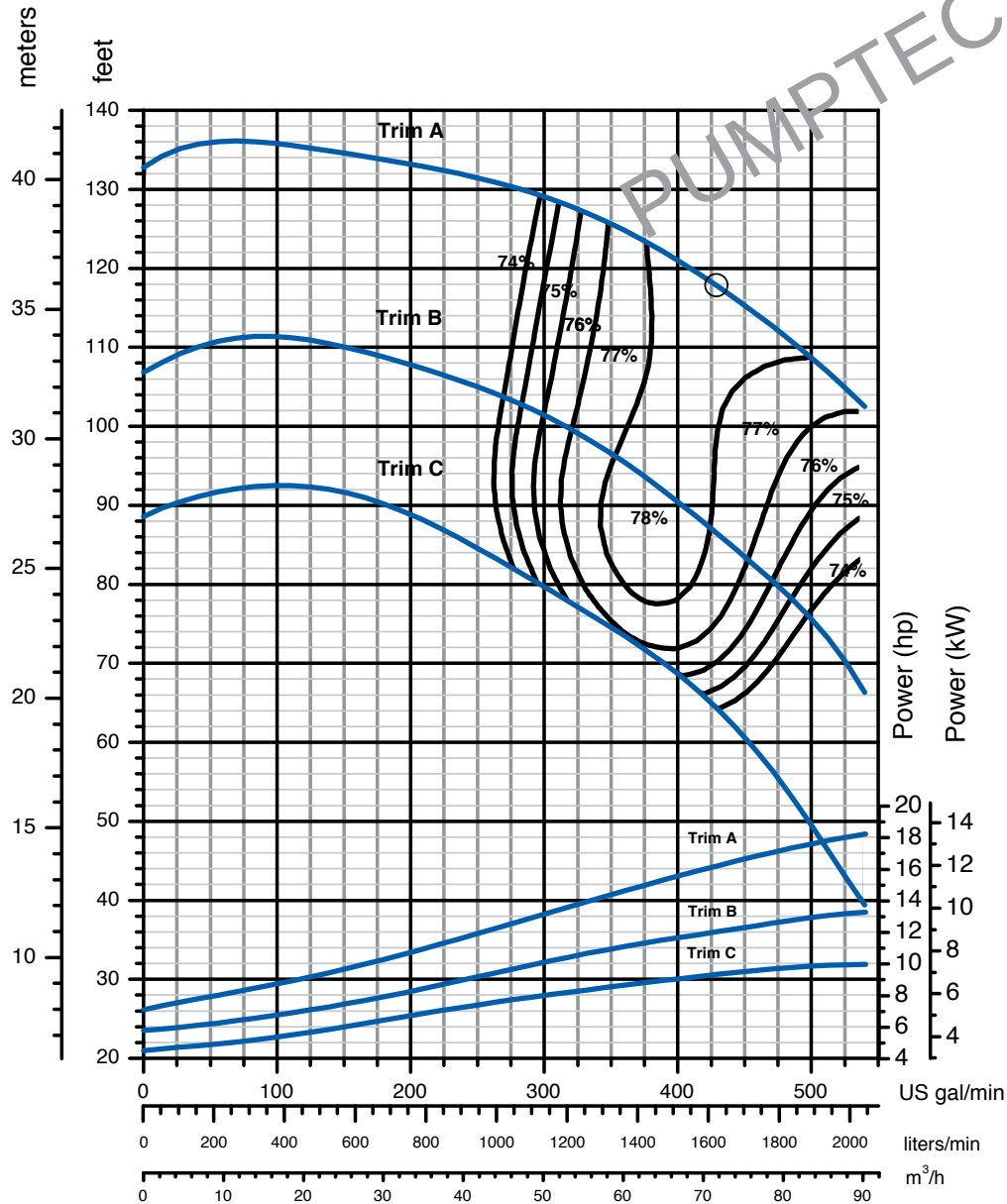


Note: Performance based on:

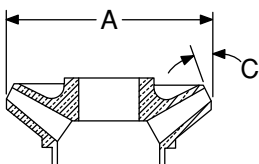
- Fresh water, 68 °F
- 6" motor / 3450 rpm
- 8" motor / 3520 rpm

Model 450STS8 Performance

Single Stage Performance



Note: Efficiencies are typical, not guaranteed. Efficiency correction required for low stage count pumps.
 (1-stage 7% and 2-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	5.720"	20 °
B	5.302"	20 °
C	4.835"	20 °