

MARINE PROPELLER SHAFT END DIMENSIONS

APPROVED S.A.E. STANDARD DIMENSIONS FOR SHAFTS 3/4 TO 3 INCHES IN DIAMETER

Nom Shaft Dia.	Diameter Small End B		Taper Length C	Keyway Width D		Keyway Side Depth E		Keyway Fillet Radius R	Thread F		End of Taper to End of Thd		Undercut		Dia. of Pin end		Lgth. of Pin end M	Cotter-Pin Hole N	Cotter-Pin, Q		Nuts d Plain thick, T	Jamb thick, W	Keyway Length X	
	Min.	Max.		Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.			Min.	Max.				Min.
3/4	0.624	0.626	2	0.1865	0.1875	0.095	0.097	1/32	1/2	13	1 1/16	1 1/2	1 1/2	1/16	1/16	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1 1/2
7/8	0.725	0.728	2 1/2	0.249	0.250	0.125	0.127	1/32	3/4	10	1 1/8	1 1/2	1 1/2	1/16	1/16	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	2 1/2
1	0.827	0.829	2 3/4	0.249	0.250	0.125	0.127	1/32	3/4	10	1 1/8	1 1/2	1 1/2	1/16	1/16	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	2 1/2
1 1/8	0.929	0.931	3	0.249	0.250	0.125	0.127	1/32	3/4	10	1 1/8	1 1/2	1 1/2	1/16	1/16	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	2 1/2
1 1/4	1.030	1.032	3 1/2	0.3115	0.3125	0.157	0.160	1/16	1	8	1 1/8	1 1/2	1 1/2	1/16	1/16	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	2 1/2
1 1/2	1.132	1.134	3 3/4	0.3115	0.3125	0.157	0.160	1/16	1	8	1 1/8	1 1/2	1 1/2	1/16	1/16	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	2 1/2
1 3/4	1.233	1.235	4 1/4	0.374	0.375	0.189	0.192	1/16	1 1/4	7	2 1/4	2 1/2	2 1/2	1/16	1/16	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	2 1/2
2	1.437	1.439	5	0.4365	0.4375	0.219	0.222	1/16	1 1/2	6	2 1/2	2 1/2	2 1/2	1/16	1/16	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	2 1/2
2 1/4	1.640	1.642	5 3/4	0.499	0.500	0.251	0.254	1/16	1 1/2	6	2 1/2	2 1/2	2 1/2	1/16	1/16	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	2 1/2
2 1/2	1.843	1.845	6 1/2	0.5610	0.5625	0.281	0.284	3/32	1 3/4	5	3	3	3	1/16	1/16	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	2 1/2
2 3/4	2.046	2.048	7 1/4	0.6235	0.625	0.312	0.315	3/32	1 3/4	5	3	3	3	1/16	1/16	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	2 1/2
3	2.257	2.259	7 3/4	0.6835	0.685	0.343	0.346	3/32	2	4 1/2	3 1/2	4	4	1/16	1/16	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	2 1/2
3 1/4	2.460	2.462	8 1/2	0.7485	0.750	0.311	0.314	3/32	2 1/4	4 1/2	3 1/2	4 1/2	4 1/2	1/16	1/16	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	2 1/2

DIMENSIONS OF SHAFTS FROM 3/4 TO 8 INCHES IN DIAMETER

Nom Shaft Dia.	Diameter Small End B		Taper Length C	Keyway Width D		Keyway Side Depth E		Keyway Fillet Radius R	Thread F		End of Taper to End of Thd		Undercut		Dia. of Pin end		Lgth. of Pin end M	Cotter-Pin Hole N	Cotter-Pin, Q	Nuts d Plain thick, T		Jamb thick, W	Keyway Length X	
	Min.	Max.		Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.				Min.	Max.			Min.
3/4	2.663	2.665	9 1/2	0.7485	0.750	0.311	0.314	1/8	2 1/2	4	4 3/8	2 1/2	2 1/2	1/16	1/16	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	8 1/2
3 1/2	2.866	2.868	10 1/2	0.8735	0.875	0.310	0.313	1/8	2 1/2	4	4 3/8	2 1/2	2 1/2	1/16	1/16	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	9 1/4
3 3/4	3.069	3.071	10 3/4	0.8735	0.875	0.310	0.313	1/8	2 1/2	4	4 3/8	2 1/2	2 1/2	1/16	1/16	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	10
4	3.272	3.274	11 1/4	0.9885	1.000	0.309	0.312	1/8	3	4	5	5 1/2	5 1/2	1/16	1/16	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	10 1/2
4 1/2	3.827	3.829	10 3/4	1.123	1.125	0.373	0.376	5/32	3 1/4	4	5	5	5	1/16	1/16	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	9 3/4
5	4.249	4.251	12 1/4	1.248	1.250	0.434	0.437	3/16	4	4	6 1/4	6 1/4	6 1/4	1/16	1/16	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	10 1/4
5 1/2	4.671	4.673	13 1/4	1.248	1.250	0.435	0.438	3/16	4	4	6 1/4	6 1/4	6 1/4	1/16	1/16	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	10 1/4
*6	4.791	4.793	14 1/2	1.373	1.375	0.493	0.496	7/32	4 1/4	4	7 1/2	8 1/2	8 1/2	1/16	1/16	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	10 1/4
*6 1/2	5.187	5.189	15 3/4	1.373	1.375	0.494	0.497	7/32	4 1/2	4	8 1/4	9 1/4	9 1/4	1/16	1/16	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	10 1/4
*7	5.582	5.584	17 1/2	1.498	1.500	0.555	0.558	1/4	5	4	9	10	10	1/16	1/16	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	10 1/4
*7 1/2	5.978	5.980	18 1/4	1.498	1.500	0.556	0.559	1/4	5 1/2	4	9 1/2	10 1/2	10 1/2	1/16	1/16	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	10 1/4
*8	6.374	6.376	19 1/2	1.748	1.750	0.553	0.556	1/4	5 3/4	4	9 3/4	10 3/4	10 3/4	1/16	1/16	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	10 1/4

* 6" through 8" shaft has 1 inch per foot taper, 1/2" per inch taper. Angle with centerline is 2' 23 9".

a Keyway shall be cut parallel to taper.

b Fillets are recommended for keyways in shafts through 2" in diameter. Fillets are mandatory for shafts above 2" in diameter.

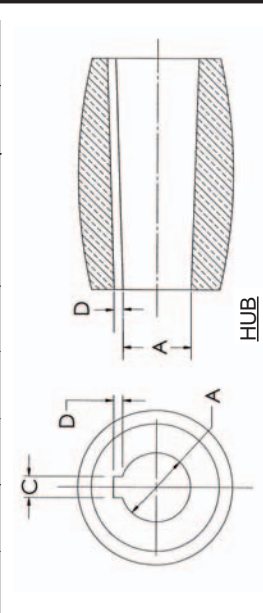
c Threads are Unified and American Standard, Class 3A.

d Nuts are to be unfinished stock, American Standard B18.2.

e The shaft sleeve shown is recommended practice, but the use of a sleeve is optional.

MARINE PROPELLERS HUB BORE DIMENSIONS

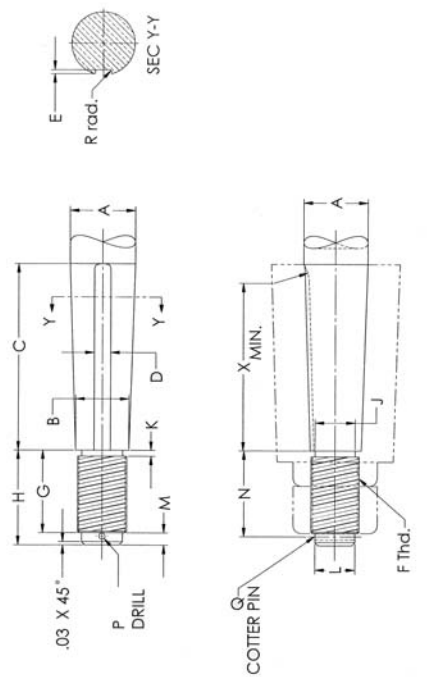
Std. Taper	Dia. Small End "A"		Keyway Width "C"		Keyway Side Depth "D"	
	Min.	Max.	Min.	Max.	Min.	Max.
3/4	0.608	0.610	0.1865	0.1875	0.098	0.100
1	0.710	0.712	0.249	0.250	0.129	0.131
1 1/8	0.812	0.814	0.249	0.250	0.129	0.131
1 1/4	0.913	0.915	0.249	0.250	0.129	0.131
1 1/2	1.015	1.017	0.3115	0.3125	0.162	0.164
1 3/4	1.116	1.118	0.3115	0.3125	0.161	0.164
2	1.218	1.220	0.374	0.375	0.195	0.198
2 1/4	1.421	1.423	0.4365	0.4375	0.226	0.229
2 1/2	1.624	1.626	0.499	0.500	0.259	0.262
2 3/4	1.827	1.829	0.561	0.5625	0.291	0.294
3	2.030	2.032	0.6235	0.625	0.322	0.325
3 1/4	2.233	2.235	0.6855	0.6875	0.353	0.356
3 1/2	2.436	2.439	0.7485	0.750	0.384	0.387
3 3/4	2.640	2.642	0.8115	0.8125	0.415	0.418
4	2.843	2.845	0.8745	0.875	0.446	0.449
4 1/4	3.046	3.048	0.9375	0.9375	0.477	0.480
4 1/2	3.249	3.251	1.0005	1.0005	0.508	0.511
4 3/4	3.452	3.454	1.0635	1.0635	0.539	0.542
5	3.655	3.657	1.1265	1.1265	0.570	0.573
5 1/4	3.858	3.860	1.1895	1.1895	0.601	0.604
5 1/2	4.061	4.063	1.2525	1.2525	0.632	0.635
*6	4.264	4.266	1.3155	1.3155	0.663	0.666
*6 1/2	4.467	4.469	1.3785	1.3785	0.694	0.697
*7	4.670	4.672	1.4415	1.4415	0.725	0.728
*7 1/2	4.873	4.875	1.5045	1.5045	0.756	0.759
*8	5.076	5.078	1.5675	1.5675	0.787	0.790



PROPELLER BORING

To insure retention of inherent factory accuracy, order your propeller factory-bored whenever possible. When bored in the field, propellers should be bored to the pilot hole, NOT to the hub or blade edges.

* 6" through 8" shaft has 1 inch per foot taper, 1/2" per inch taper. Angle with centerline is 2' 23 9".



Overseas specifications on request.