

Silhouette Beneteau First 40.7 51504

Class: Beneteau First 40.7 Configuration: --- Sail Number: 51504 Year Built: 2000 Builder: BENETEAU Owner(s): Gross, Warren				
Certificate #: EZ11805 Valid Year: 2023 Type: New Cert Issue Date: 2023-08-26 Exp.Date: 2023-12-31 Offsets_file: FIRST407.OFF Cert Group: ORR-Ez SOCAL Comment: ---				
Rig Type: Sloop Forestay: Masthead Keel Type: Fin Prop Type: Folding Prop Install: Exposed Prop Blades: 2				
LOA: 39.30 ft LWL: 34.90 ft Rated Length: 35.10 ft Beam Max: 12.36 ft Draft: 7.90 ft Disp Empty: 15260 lbs Disp Sailing: 17207 lbs Crew: 1400 lbs Water Ballast: lbs Wetted Area: 332.2 ft ² LPS: 120.2 ° RM20: 1174.5 ft-lbs Stab Index: 122 °				
Spinnaker: Both Symmetrical & Asymmetrical flown with spin pole Code Zero: Yes Genoa/Jib Leech: No Roach - Leech is straight Large Roach Headsail: No Jib Furler: No Main Roller Furling: No				
Rig Dimensions IG: 51.60 ft ISP: 51.60 ft J: 14.50 ft P: 48.90 ft E: 17.70 ft SPL: 14.47 ft	Mainsail Meas. HB: 0.71 ft MGT: 3.90 ft MGU: 6.76 ft MGM: 11.65 ft MGL: 15.40 ft Area: 539.5 ft ²	Jib/Genoa Meas. LP: 22.14 ft LPG %: 152.6 % J Luff: 51.18 ft J Leech: 49.30 ft Area: 566.5 ft ²	Asymmetric Spin. Meas. ASLU: 55.50 ft ASLE: 52.70 ft AMG: 26.00 ft ASF: 26.10 ft Area: 1173.1 ft ²	Symmetric Spin. Meas. SL: 50.90 ft SMW: 26.20 ft SF: 26.10 ft Area: 1110.5 ft ²

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Table of Time Allowances (sec/mile)* (at True Wind Angles)

True Wind Speed	4 kts	6 kts	8 kts	10 kts	12 kts	16 kts	20 kts	24 kts
Opt Beat Angle	45.9	45.1	44.2	41.1	38.8	36.6	36.1	36.3
Beat VMG	1,371.0	989.9	809.6	724.3	684.1	649.0	635.7	630.6
52°	869.08	635.66	528.03	495.39	480.74	466.39	458.58	454.61
60°	788.04	589.80	504.19	477.75	465.06	451.77	444.16	439.47
75°	711.57	547.16	484.74	457.47	445.41	427.74	416.53	408.65
90°	696.93	532.85	468.43	442.84	427.19	406.32	392.70	382.55
110°	695.69	534.19	472.32	440.05	416.02	385.95	366.57	352.18
120°	736.45	559.53	487.76	454.68	430.19	387.66	355.09	336.98
135°	1,001.3	696.1	546.32	492.66	461.39	415.98	375.36	327.70
150°	1,226.4	852.6	668.0	564.1	502.43	442.91	402.24	363.58
165°	1,367.8	950.9	745.0	629.2	550.5	467.02	422.05	385.21
Run VMG	1,416.1	984.4	771.3	651.4	569.9	480.8	433.2	396.4
Opt Run Angle	129.9	132.7	136.2	146.8	159.8	172.0	173.7	172.5

* Sec/mile rating assume gybing downwind when target angles are deeper than best VMG angles.

Performance

Metrics

SA/D Dnwind:	41.120
SA/D Average:	33.84
SA/D Upwind:	26.550
D/Length:	177.6
Ave Perf Screen:	19.100
DnWind Perf Screen:	23.2

Standard Ratings

	TOT (Spin)				TOD (Spin)			
	V.Light	Light	Medium	Heavy	V.Light	Light	Medium	Heavy
RANDOM LEG	0.426	0.676	0.902	1.056	1,122.9	707.9	530.4	453.0
W50/L50	0.413	0.668	0.912	1.082	1,418.8	878.2	642.9	542.0
W60/L40	0.423	0.679	0.915	1.064	1,415.1	881.8	654.2	562.4
MOSTLY WW	0.461	0.720	0.923	1.016	1,307.2	837.0	652.6	593.1
MOSTLY LW	0.416	0.658	0.890	1.111	1,136.0	718.0	530.9	425.2

Benchmark Ratings

	TOT (Spin)	TOD (Spin)
GPH	0.897	588.2
IR#	0.909	588.1

ORR-Ez PHRF

TOD (Spin)
51.8

ORR-Ez PHRF are based on the Farr 40 MH as Scratch Boat.

Standard PCS Ratings

	TOD (Spin)							
	4	6	8	10	12	16	20	24
RANDOM LEG	1,123.1	804.9	652.2	571.7	525.1	477.4	451.9	433.6
W50/L50	1,418.1	1,005.1	804.5	698.0	635.4	571.0	539.6	518.4
W60/L40	1,415.1	1,006.4	808.9	705.8	646.9	588.0	560.1	542.1
MOSTLY WW	1,307.1	943.6	771.7	688.9	647.0	607.9	591.2	582.4
MOSTLY LW	1,135.1	815.0	661.7	580.0	525.4	460.4	422.2	396.0

ORR-Ez PHRF Time Allowance 4 Winds

	TOD (Spin)			
	V.Light	Light	Medium	Heavy
RANDOM LEG	132.5	74.6	48.5	49.4
W50/L50	211.9	109.8	56.2	55.6
W60/L40	199.0	107.2	58.1	56.9
MOSTLY WW	140.1	86.3	52.9	51.7
MOSTLY LW	191.5	98.1	53.1	51.1

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True Wind Speed	4 kts	6 kts	8 kts	10 kts	12 kts	16 kts	20 kts	24 kts
Opt Beat Angle	45.9	45.1	44.2	41.1	38.8	36.6	36.1	36.3
Beat VMG	1,371.0	989.9	809.6	724.3	684.1	649.0	635.7	630.6
52°	869.08	635.66	528.03	495.39	480.74	466.39	458.58	454.61
60°	788.04	589.80	504.19	477.75	465.06	451.77	444.16	439.93
75°	711.57	547.16	484.74	457.47	445.41	431.43	422.61	416.47
90°	701.13	541.35	482.30	451.65	432.22	415.68	404.51	396.08
110°	785.27	590.85	508.55	474.78	450.63	413.25	387.65	376.51
120°	895.48	655.76	545.53	497.79	469.42	428.56	394.56	370.87
135°	1,216.13	845.75	662.91	563.86	507.74	451.59	413.22	378.55
150°	1,524.71	1,024.59	774.61	638.97	551.50	470.04	426.50	391.05
165°	1,635.40	1,101.39	834.55	679.09	582.10	479.96	431.10	393.80
Run VMG	1,666.3	1,121.1	848.6	689.6	590.5	485.5	436.1	399.0
Opt Run Angle	172.4	172.3	172.1	171.9	172.1	173.3	173.6	173.0

* Sec/mile rating assume gybing downwind when target angles are deeper than best VMG angles.

Performance

Metrics

SA/D:	26.55
D/Length:	177.6
Perf Screen:	14.9

Standard Ratings

	V.Light	TOT (Non-Spin)			V.Light	TOD (Non-Spin)		
		Light	Medium	Heavy		Light	Medium	Heavy
RANDOM LEG	0.398	0.640	0.869	1.026	1,201.8	747.9	550.4	466.4
W50/L50	0.384	0.637	0.898	1.079	1,525.6	920.8	653.0	543.5
W60/L40	0.399	0.653	0.904	1.062	1,500.0	915.9	662.4	563.6
MOSTLY WW	0.453	0.712	0.920	1.013	1,328.8	846.6	655.1	594.6
MOSTLY LW	0.361	0.599	0.849	1.069	1,309.1	789.4	556.3	441.8

Benchmark Ratings

	TOT (Non-Spin)	TOD (Non-Spin)
GPH	0.856	616.7
IR#	0.890	601.6

ORR-Ez PHRF

TOD (Non-Spin)
65.3

ORR-Ez PHRF are based on the Farr 40 MH as Scratch Boat.

Standard PCS Ratings

	TOD (Non-Spin)							
	4	6	8	10	12	16	20	24
RANDOM LEG	1,207.7	858.1	688.9	598.2	545.2	491.3	464.8	448.2
W50/L50	1,537.1	1,072.7	842.6	718.1	646.0	573.7	541.1	519.7
W60/L40	1,509.1	1,059.1	839.4	721.9	655.5	590.1	561.3	543.1
MOSTLY WW	1,331.7	958.1	780.8	693.6	649.5	609.3	592.7	584.0
MOSTLY LW	1,324.1	921.8	723.5	616.4	551.4	479.1	439.4	410.9

ORR-Ez PHRF Allowance 4 Winds

	TOD (Non-Spin)			
	V.Light	Light	Medium	Heavy
RANDOM LEG	211.4	114.6	68.5	62.8
W50/L50	318.7	152.4	66.3	57.1
W60/L40	283.9	141.3	66.3	58.1
MOSTLY WW	161.7	95.9	55.4	53.2
MOSTLY LW	364.6	169.5	78.5	67.7