

Conquest Cal 40 96

Class: Cal 40 Configuration: Sail Number: 96 Year Built: 1967 Builder: Jensen Marine Owner(s): Sanchioli, Jon			
Certificate #: EZ11801 Valid Year: 2023 Type: New Cert Issue Date: 2023-08-20 Exp. Date: 2023-12-31 Offsets_file: US40911A.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: 39.25 ft LWL: 30.17 ft Rated Length: 31.61 ft Beam Max: 10.89 ft Draft: 5.71 ft Disp Empty: 15406 lbs Disp Sailing: 17381 lbs Crew: 1122 lbs Water Ballast: 0 lbs Wetted Area: 336.6 ft ² LPS: 122.3 ° RM20: 1126.1 ft·lbs Stab Index: 129 °			
Spinnaker: Symmetrical flown with spinnaker pole Code Zero: No Genoa/Jib Leech: No Roach - Leech is straight Large Roach Headsail: No Jib Furler: Yes Above Deck Main Roller Furling: No			
Rig Dimensions IG: 46.75 ft ISP: 46.75 ft J: 15.33 ft P: 40.08 ft E: 17.50 ft SPL: 15.33 ft	Mainsail Meas. HB: 0.70 ft MGT: 3.85 ft MGU: 6.65 ft MGM: 11.37 ft MGL: 15.23 ft Area: 439.8 ft ²	Jib/Genoa Meas. LP: 23.76 ft LPG %: 155.0 % J Luff: 46.59 ft J Leech: 44.13 ft Area: 553.6 ft ²	Symmetric Spin. Meas. SL: 46.26 ft SMW: 28.07 ft SF: 27.13 ft Area: 1074.8 ft ²

Conquest Cal 40 96

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	50.5	48.5	46.0	45.8	43.6	40.8	39.7	40.0
Beat VMG	1,752.00	1,255.10	1,017.18	897.85	829.28	765.78	741.41	738.61
52°	1,073.51	776.50	636.46	573.01	545.80	520.89	510.91	507.62
60°	951.90	697.20	580.12	538.16	518.22	497.99	489.30	485.67
75°	838.71	629.03	539.16	505.38	487.30	468.06	456.75	450.41
90°	815.72	609.75	520.41	487.09	469.54	447.95	435.18	427.54
110°	810.83	608.82	522.61	487.94	464.14	431.37	414.05	402.64
120°	869.90	642.49	540.13	502.67	476.61	437.34	405.45	390.50
135°	1,153.20	789.56	617.42	542.02	505.91	458.62	422.54	389.05
150°	1,412.38	966.01	743.80	617.55	545.65	482.33	442.79	409.08
165°	1,575.31	1,077.44	829.60	688.72	595.73	505.49	460.50	426.43
Run VMG	1,630.88	1,115.45	858.86	713.01	616.74	519.68	471.48	436.66
Opt Run Angle	131.6	137.1	145.1	150.7	160.6	172.6	174.4	173.3

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

Performance Metrics

SA/D Dnwind:	36.120
SA/D Average:	29.90
SA/D Upwind:	23.670
D/Length:	245.6
Ave Perf Screen:	12.200
DnWind Perf	14.7
Screen:	

Standard Ratings

	TOT (Spin)				TOD (Spin)			
	V.Light	Light	Medium	Heavy	V.Light	Light	Medium	Heavy
RANDOM LEG	0.360	0.581	0.792	0.933	1,327.5	823.9	604.5	513.0
W50/L50	0.341	0.561	0.788	0.950	1,717.8	1,045.1	743.6	617.1
W60/L40	0.346	0.564	0.782	0.928	1,731.5	1,061.5	764.9	644.6
MOSTLY WW	0.366	0.582	0.772	0.875	1,644.9	1,035.7	780.8	688.6
MOSTLY LW	0.354	0.577	0.801	0.993	1,335.1	818.8	589.5	476.0

Benchmark Ratings

	TOT (Spin)	TOD (Spin)
GPH	0.780	676.3
IR#	0.791	675.8

ORR-Ez PHRF

TOD (Spin)
139.5

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

Standard PCS Ratings

	TOD (Spin)							
	4 kts	6 kts	8 kts	10 kts	12 kts	16 kts	20 kts	24 kts
RANDOM LEG	1,329.2	943.4	756.4	656.5	597.9	538.8	511.0	496.2
W50/L50	1,718.0	1,205.2	953.8	816.5	733.2	649.9	612.6	593.6
W60/L40	1,731.9	1,220.2	970.4	835.5	754.7	674.7	639.9	624.1
MOSTLY WW	1,645.2	1,176.6	951.7	838.3	772.1	709.4	683.8	677.3
MOSTLY LW	1,335.2	940.2	747.2	647.4	581.9	511.4	472.1	448.4
MOSTLY REACH								

ORR-Ez PHRF Time Allowance 4 Winds

	TOD (Spin)			
	V.Light	Light	Medium	Heavy
RANDOM LEG	337.1	190.6	122.6	109.4
W50/L50	510.9	276.7	156.9	130.7
W60/L40	515.4	286.9	168.8	139.1
MOSTLY WW	477.8	285.0	181.1	147.2
MOSTLY LW	390.6	198.9	111.7	101.9

Conquest Cal 40 96

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	50.5	48.5	46.0	45.8	43.6	40.8	39.7	40.0
Beat VMG	1,752.00	1,255.10	1,017.18	897.85	829.28	765.78	741.41	738.61
52°	1,073.51	776.50	636.46	573.01	545.80	520.89	510.91	507.62
60°	951.90	697.20	580.12	538.16	518.22	497.99	489.30	485.67
75°	838.71	629.03	539.16	505.38	487.30	469.42	460.69	455.88
90°	817.40	617.01	533.29	499.93	477.85	453.57	443.01	436.12
110°	914.84	674.98	566.71	523.64	497.08	459.81	432.34	418.52
120°	1,039.77	753.90	619.70	549.65	516.13	472.84	441.61	416.32
135°	1,397.24	957.12	738.13	626.58	555.80	493.32	455.21	425.03
150°	1,675.35	1,120.24	842.68	692.85	600.21	509.94	465.77	432.97
165°	1,768.00	1,184.33	892.53	726.08	624.02	516.09	466.72	431.01
Run VMG	1,793.99	1,201.04	904.61	735.43	631.75	521.88	472.16	436.66
Opt Run Angle	171.7	171.8	171.9	171.9	171.9	173.2	173.6	173.3

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

Performance Metrics

SA/D:	23.67
D/Length:	245.6
Perf Screen:	9.6

Standard Ratings

	TOT (Non-Spin)				TOD (Non-Spin)			
	V.Light	Light	Medium	Heavy	V.Light	Light	Medium	Heavy
RANDOM LEG	0.342	0.555	0.767	0.914	1,400.4	861.4	623.6	523.7
W50/L50	0.329	0.548	0.782	0.950	1,781.0	1,068.9	749.4	617.3
W60/L40	0.336	0.554	0.778	0.928	1,781.8	1,080.5	769.5	644.7
MOSTLY WW	0.363	0.578	0.770	0.874	1,657.8	1,041.6	782.8	689.4
MOSTLY LW	0.322	0.539	0.773	0.965	1,467.4	876.6	611.0	489.4

Benchmark Ratings

	TOT (Non-Spin)	TOD (Non-Spin)
GPH	0.750	703.5
IR#	0.780	686.2

ORR-Ez PHRF

TOD (Non-Spin)
149.9

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

Standard PCS Ratings

	TOD (Non-Spin)							
	4 kts	6 kts	8 kts	10 kts	12 kts	16 kts	20 kts	24 kts
RANDOM LEG	1,407.5	993.3	791.3	682.1	617.4	551.6	521.6	506.1
W50/L50	1,794.3	1,246.9	976.5	828.6	740.6	651.3	612.9	593.5
W60/L40	1,792.6	1,253.6	988.6	845.2	760.6	675.9	640.2	624.1
MOSTLY WW	1,660.7	1,185.9	957.5	841.8	774.4	710.2	684.6	678.2
MOSTLY LW	1,483.6	1,027.6	801.9	677.4	605.3	526.7	486.9	458.7
MOSTLY REACH								

ORR-Ez PHRF Allowance 4 Winds

	TOD (Non-Spin)			
	V.Light	Light	Medium	Heavy
RANDOM LEG	410.0	228.1	141.7	120.1
W50/L50	574.1	300.5	162.7	130.9
W60/L40	565.7	305.9	173.4	139.2
MOSTLY WW	490.7	290.9	183.1	148.0
MOSTLY LW	522.9	256.7	133.2	115.3