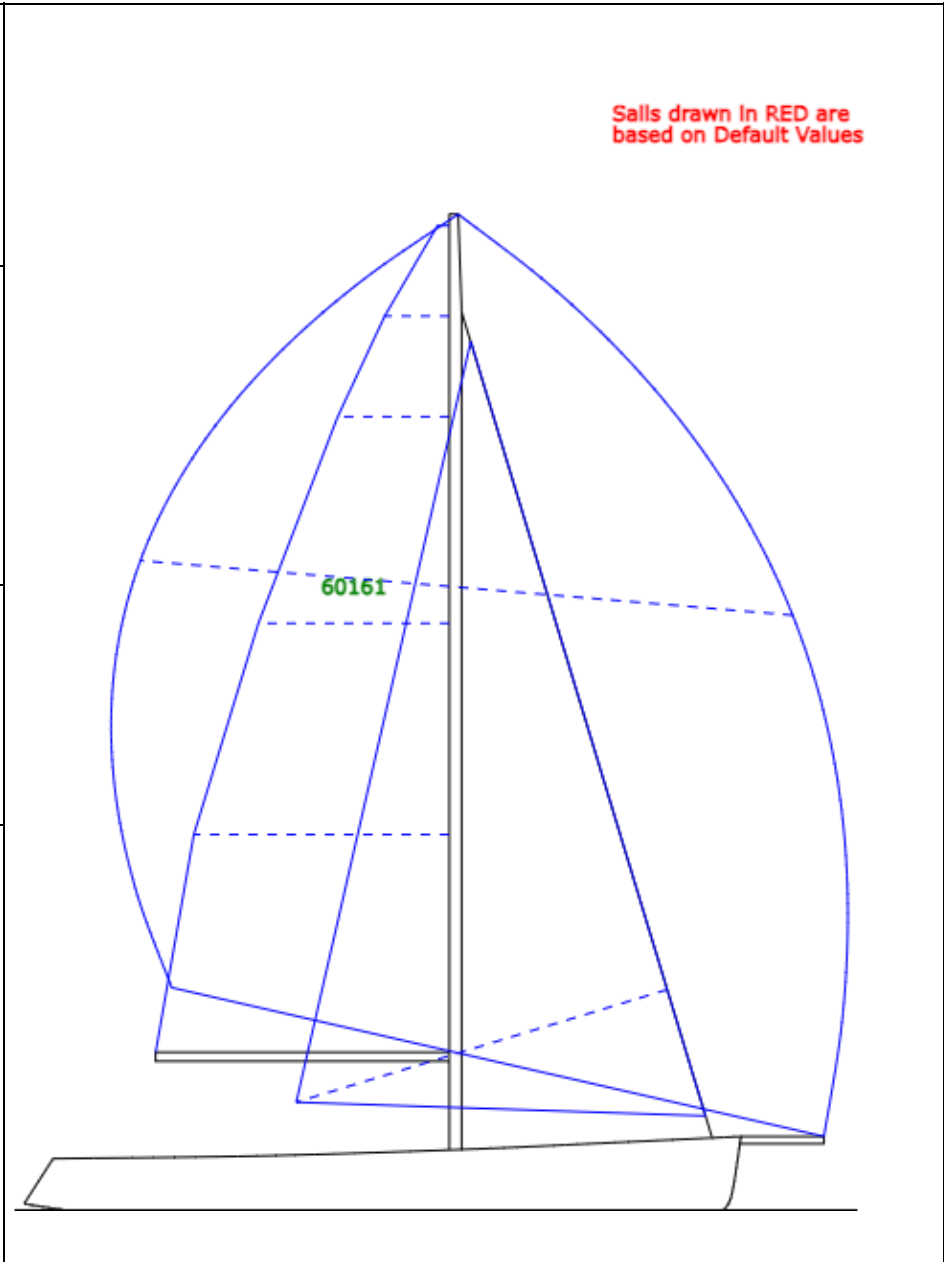


Flashheart J/100 60161

Spinnaker	GPH: 0.871 / 608.0	IR#: 0.876 / 612.1	PHRF BM: 75.9
Non-Spin	GPH: 0.811 / 653.5	IR#: 0.844 / 635.1	PHRF BM: 98.9

Class:	J/100
Configuration:	
Sail Number:	60161
Year Built:	2005
Builder:	J BOATS
Owner(s):	Cattle, David
Certificate #:	EZ11243
Valid Year:	2024
Type:	Renew Cert
Issue Date:	2024-03-22
Exp.Date:	2024-12-31
Offsets_file:	J100.OFF
Cert Group:	ORR-Ez SOCAL
Comment:	
Rig Type:	Sloop
Forestay:	Fractional
Keel Type:	Fin with Bulb
Prop Type:	Folding
Prop Install:	Exposed
Prop Blades:	2
LOA:	32.97 ft
LWL:	29.00 ft
Rated Length:	31.35 ft
Beam Max:	9.21 ft
Draft:	5.77 ft
Disp Empty:	7013 lbs
Disp Sailing:	8508 lbs
Crew:	1189 lbs
Water Ballast:	0 lbs
Wetted Area:	220.6 ft ²
LPS:	116.5 °
RM20:	411.7 ft-lbs
Stab Index:	118 °



Spinnaker:	Asymmetrical tacked centerline on bow, sprit or prod
Genoa/Jib Leech:	No Roach - Leech is straight
Large Roach Headsail:	No
Jib Furler:	Yes Above Deck
Main Roller Furling:	No

Rig Dimensions	Mainsail Meas.	Jib/Genoa Meas.	Asymmetric Spin. Meas.
IG: 38.50 ft	HB: 0.54 ft	LP: 17.82 ft	ASLU: 49.75 ft
ISP: 43.00 ft	MGT: 2.97 ft	LPG %: 155.0 %	ASLE: 41.72 ft
J: 11.50 ft	MGU: 5.13 ft	J Luff: 38.16 ft	AMG: 29.99 ft
P: 38.00 ft	MGM: 8.78 ft	J Leech: 36.57 ft	ASF: 29.99 ft
E: 13.50 ft	MGL: 11.75 ft	Area: 340.0 ft ²	Area: 1142.9 ft ²
TPS: 16.66 ft	Area: 318.1 ft ²		

Flashheart J/100 60161

Spinnaker

Polar Time Allowances

True Wind Speed	4 kts	6 kts	8 kts	10 kts	12 kts	16 kts	20 kts	24 kts
Opt Beat Angle	46.3	45.3	44.2	41.2	39.0	36.9	36.6	37.0
Beat VMG	1,512.41	1,082.87	877.04	784.57	738.90	698.87	685.01	680.83
52°	948.99	688.98	567.22	529.05	511.21	494.15	485.48	481.57
60°	855.96	634.53	535.89	505.70	490.65	475.13	466.64	462.34
75°	766.30	582.83	508.79	478.92	463.66	442.80	430.98	423.75
90°	697.40	541.25	485.65	459.35	441.18	416.87	401.75	391.43
110°	698.54	536.09	473.67	444.64	423.60	391.62	367.27	351.50
120°	722.80	552.20	484.93	448.20	419.94	383.00	352.96	335.02
135°	940.51	663.14	534.01	488.67	456.40	400.51	337.92	310.75
150°	1,151.88	812.13	646.31	561.22	506.61	443.02	391.44	330.89
165°	1,284.76	905.81	720.87	625.96	560.01	480.24	428.26	369.07
Run VMG	1,330.08	937.77	746.30	648.04	579.77	495.11	439.52	382.08
Opt Run Angle	133.2	135.5	138.5	147.0	156.2	172.8	172.5	145.4

Benchmark Ratings

	TOT (Spin)	TOD (Spin)
GPH	0.871	608.0
IR#	0.876	612.1

Performance Metrics

SA/D Dnwind:	56.100
SA/D Average:	40.69
SA/D Upwind:	25.270
D/Length:	123.2
Ave Perf Screen:	33.000
DnWind Perf	45.5
Screen:	

PCS Ratings

	4 kts	6 kts	8 kts	10 kts	12 kts	16 kts	20 kts	24 kts
RANDOM LEG	1,155.0	828.8	673.1	591.7	544.3	494.1	465.2	444.4
W50/L50	1,446.5	1,029.5	828.1	726.6	667.6	603.3	567.4	536.2
W60/L40	1,465.4	1,044.6	841.7	740.8	683.8	623.9	592.3	566.5
MOSTLY WW	1,557.5	1,111.3	896.4	784.5	721.6	663.5	640.5	629.4
MOSTLY LW	1,227.7	872.5	700.6	606.3	547.4	477.9	432.9	395.8
MOSTLY REACH	1,052.3	759.3	620.5	549.8	508.8	464.4	437.4	421.5

Non-Spinnaker

Polar Time Allowances

True Wind Speed	4 kts	6 kts	8 kts	10 kts	12 kts	16 kts	20 kts	24 kts
Opt Beat Angle	46.3	45.3	44.2	41.2	39.0	36.9	36.6	37.0
Beat VMG	1,512.41	1,082.87	877.04	784.57	738.90	698.87	685.01	680.83
52°	948.99	688.98	567.22	529.05	511.21	494.15	485.48	481.57
60°	855.96	634.53	535.89	505.70	490.65	475.13	466.64	462.34
75°	767.87	583.53	508.84	478.92	464.89	448.63	438.59	431.85
90°	759.73	578.66	506.10	470.58	449.44	429.83	416.74	406.87
110°	861.70	638.02	538.03	497.03	468.21	422.81	395.26	380.30
120°	990.78	714.20	583.03	524.49	490.42	441.09	399.14	371.80
135°	1,364.26	928.29	710.89	599.22	534.69	468.74	422.25	377.97
150°	1,673.33	1,107.05	823.99	675.82	581.12	489.64	438.38	394.51
165°	1,703.98	1,141.34	860.03	698.41	596.20	491.47	435.08	387.20
Run VMG	1,728.53	1,157.18	871.54	707.02	603.09	496.58	440.01	392.25
Opt Run Angle	172.0	172.1	172.1	172.2	172.1	172.8	172.5	171.5

Benchmark Ratings

	TOT (Non-Spin)	TOD (Non-Spin)
GPH	0.811	653.5
IR#	0.844	635.1

Performance Metrics

SA/D:	25.27
D/Length:	123.2
Perf Screen:	20.5

PCS Ratings

	4 kts	6 kts	8 kts	10 kts	12 kts	16 kts	20 kts	24 kts
RANDOM LEG	1,299.9	918.6	733.0	633.7	575.1	515.2	484.8	464.7
W50/L50	1,637.7	1,136.9	889.5	757.1	680.4	604.3	567.9	541.6
W60/L40	1,617.7	1,130.5	890.9	765.3	694.1	624.7	592.6	570.8
MOSTLY WW	1,594.2	1,133.0	909.9	792.7	726.5	665.6	642.4	632.3
MOSTLY LW	1,481.4	1,025.0	798.9	672.1	593.2	504.3	453.6	417.5
MOSTLY REACH	1,191.6	847.4	681.1	593.4	542.1	489.4	461.4	441.9

Flashheart J/100 60161

Spinnaker

Standard 5 Winds

	TOT (Spin)					TOD (Spin)				
	V.Light <5	Light 5-7	Lt/Med 7-9	Medium 9-15	Heavy >15	V.Light <5	Light 5-7	Lt/Med 7-9	Medium 9-15	Heavy >15
RANDOM LEG	0.451	0.588	0.746	0.894	1.112	1,155.0	885.6	697.9	582.0	467.9
W50/L50	0.439	0.576	0.737	0.888	1.115	1,446.5	1,101.4	861.4	714.5	569.0
W60/L40	0.442	0.580	0.740	0.887	1.090	1,465.4	1,117.2	875.7	730.1	594.2
MOSTLY WW	0.441	0.578	0.738	0.888	1.066	1,557.5	1,188.4	930.7	773.8	644.5
MOSTLY LW	0.431	0.566	0.728	0.894	1.214	1,227.7	933.6	726.5	591.7	435.5
MOSTLY REACH	0.461	0.599	0.755	0.897	1.101	1,052.3	810.7	643.2	541.4	441.1

Standard Single Wind

	TOT (Spin) Single	TOD (Spin) Single
RANDOM LEG	0.868	599.5
W50/L50	0.861	737.1
W60/L40	0.859	754.5
MOSTLY WW	0.856	803.0
MOSTLY LW	0.872	606.3
MOSTLY REACH	0.872	556.7

Legacy 4 Winds

	TOT (Spin)				TOD (Spin)			
	V.Light	Light	Medium	Heavy	V.Light	Light	Medium	Heavy
RANDOM LEG	0.416	0.658	0.874	1.029	1,155.0	730.6	549.8	467.2
W50/L50	0.407	0.651	0.872	1.034	1,446.5	903.4	674.3	568.6
W60/L40	0.410	0.654	0.870	1.012	1,465.4	917.9	690.6	593.7
MOSTLY WW	0.404	0.645	0.862	0.978	1,557.5	975.9	730.1	643.5
MOSTLY LW	0.396	0.637	0.878	1.118	1,227.7	763.0	553.4	434.9
MOSTLY REACH	0.428	0.670	0.877	1.023	1,052.3	672.2	513.5	440.2

Non-Spinnaker

Standard 5 Winds

	TOT (Non-Spin)					TOD (Non-Spin)				
	V.Light <5	Light 5-7	Lt/Med 7-9	Medium 9-15	Heavy >15	V.Light <5	Light 5-7	Lt/Med 7-9	Medium 9-15	Heavy >15
RANDOM LEG	0.400	0.529	0.683	0.837	1.066	1,299.9	983.8	761.8	621.7	488.2
W50/L50	0.388	0.520	0.684	0.855	1.111	1,637.7	1,221.4	927.8	742.3	571.3
W60/L40	0.400	0.534	0.697	0.861	1.087	1,617.7	1,213.0	928.9	752.4	596.0
MOSTLY WW	0.431	0.567	0.727	0.879	1.062	1,594.3	1,212.4	945.2	781.3	646.8
MOSTLY LW	0.357	0.480	0.636	0.809	1.153	1,481.4	1,101.8	832.0	653.3	458.5
MOSTLY REACH	0.407	0.535	0.686	0.833	1.046	1,191.6	906.7	707.3	583.1	464.2

Standard Single Wind

	TOT (Non-Spin) Single	TOD (Non-Spin) Single
RANDOM LEG	0.809	643.4
W50/L50	0.821	772.7
W60/L40	0.827	783.0
MOSTLY WW	0.846	811.7
MOSTLY LW	0.784	674.5
MOSTLY REACH	0.806	602.5

Legacy 4 Winds

	TOT (Non-Spin)				TOD (Non-Spin)			
	V.Light	Light	Medium	Heavy	V.Light	Light	Medium	Heavy
RANDOM LEG	0.370	0.600	0.826	0.986	1,299.9	801.0	582.3	487.4
W50/L50	0.359	0.600	0.852	1.031	1,637.7	980.1	690.1	570.4
W60/L40	0.371	0.613	0.854	1.009	1,617.7	979.3	703.2	595.2
MOSTLY WW	0.395	0.634	0.856	0.975	1,594.3	992.2	735.4	645.7
MOSTLY LW	0.328	0.552	0.808	1.063	1,481.4	880.3	601.8	457.3
MOSTLY REACH	0.378	0.607	0.821	0.972	1,191.6	742.3	548.4	463.5

Flashheart J/100 60161

Spinnaker

PHRF Benchmark

75.9

Aligned Ratings are based on the Farr
 40 MH as Scratch Boat.

PHRF Single Wind

RANDOM LEG	79.0
W50/L50	102.4
W60/L40	106.7
MOSTLY WW	115.9
MOSTLY LW	77.5
MOSTLY REACH	71.2

PHRF 5 Winds

	V.Light <5	Light 5-7	Lt/Med 7-9	Medium 9-15	Heavy >15
RANDOM LEG	166.1	123.4	93.2	74.3	64.8
W50/L50	239.0	172.8	125.0	94.9	81.1
W60/L40	245.9	178.7	130.2	99.2	84.1
MOSTLY WW	250.9	186.4	140.1	109.8	90.2
MOSTLY LW	165.9	122.6	92.0	72.8	64.5
MOSTLY REACH	145.5	108.7	82.7	67.3	59.5

Non-Spinnaker

PHRF Benchmark

98.9

Aligned Ratings are based on the Farr
 40 MH as Scratch Boat.

PHRF Single Wind

RANDOM LEG	122.9
W50/L50	138.0
W60/L40	135.2
MOSTLY WW	124.6
MOSTLY LW	145.7
MOSTLY REACH	117.0

PHRF 5 Winds

	V.Light <5	Light 5-7	Lt/Med 7-9	Medium 9-15	Heavy >15
RANDOM LEG	311.0	221.6	157.1	114.0	85.1
W50/L50	430.2	292.8	191.4	122.7	83.4
W60/L40	398.2	274.5	183.4	121.5	85.9
MOSTLY WW	287.7	210.4	154.6	117.3	92.5
MOSTLY LW	419.6	290.8	197.5	134.4	87.5
MOSTLY REACH	284.8	204.7	146.8	109.0	82.6