



ORC
Offshore Racing Congress
World leader in rating technology

2020
ORC Club
Certificate

Rating Office

Offshore
Racing
Congress



Certificate

Number **138/20**
Issued On **04/08/2020**
ORC Ref **03880000NW9**
VPP Ver. **2020 1.02**
Valid until **31/12/2020**

Crew Weight

Default 679kg
Maximum **770kg**
Minimum* **578kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Non Spin GPH	636.0	0.9434
Non Spin OSN	617.6	0.9716

Sails Limitations

Headsails **5** Spinnakers **4**

Asymmetric on centerline

Spinnaker configuration
Symmetric: **No**
Asymmetric: **Yes 119.60**
Flying H/S: **No**
Spin. Pole: **Yes**

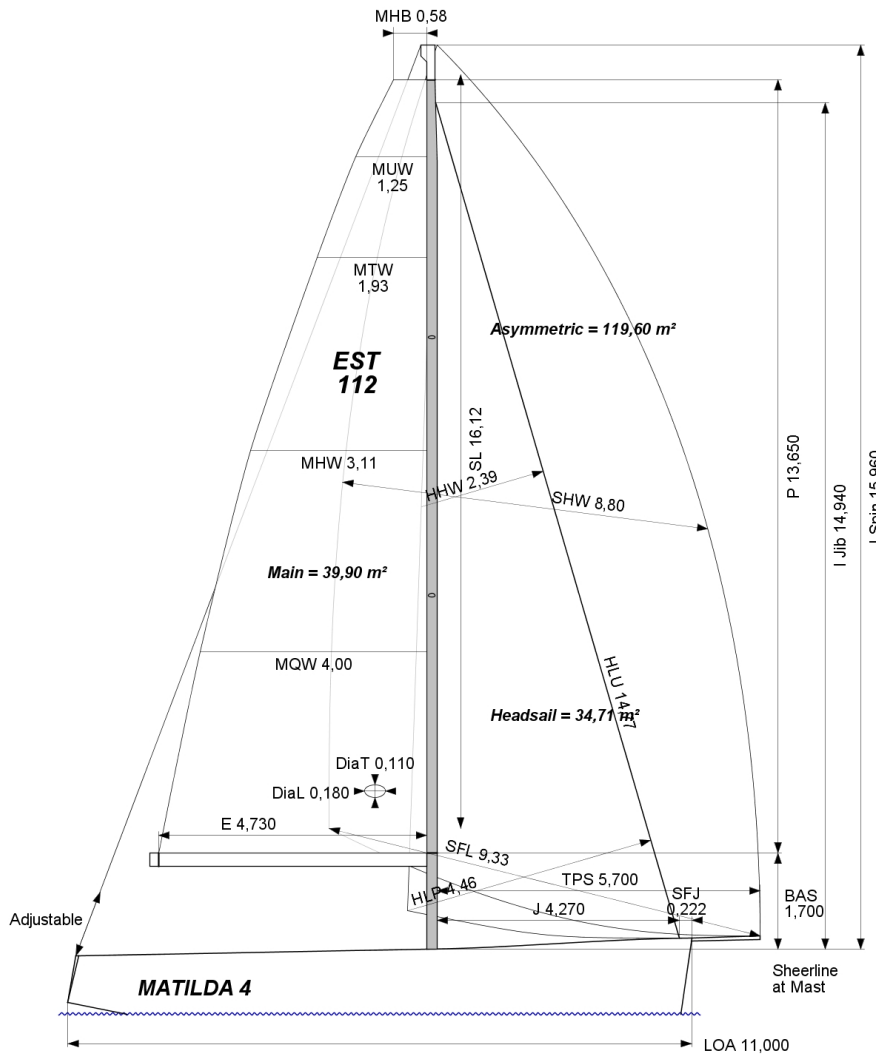
Class Division Length

CDL = 9.621

Stability (Measured)

Limit Positive Stab.: **120.9°**
Stability Index: **120.3**

Owner



BOAT		GPH	HULL			
Name Matilda 4 Sail Nr EST-112		598.5	Data File EST112	LOA 11.000m		
			Offset File J112E NK.off	MB 3.596m		
			Displacement 5,254kg	Draft 2.049m		
CLASS			IMS Division Cruiser/Racer	Dynamic All. 0.128%		
Class J-112E			Plan Review	Construction Cored		
Designer JOHNSTONE			Fiber Rigging No	Aramid Core No		
Builder J-BOATS			Crew Arm Ex	Carbon Rudder No		
Series 10/2015				Light Stanchions No		
Age Date 07/2019			IMSL 10.068m	VCGD -0.010m	Sink 18.87kg/mm	
Age Allowance 0.163%			RL 9.187m	VCGM -0.053m	WS 25.70m²	
COMMENTS			LSM0 9.907m	Displacement/Length ratio 5.4034		
			Water Ballast 0	Trim Tab No		
			BLR Index 0.0000			
PROPELLER			CENTERBOARD			
Installation Strut	PRD 0.380					
Type Folding 2 blades	PBW 0.100					
	PIPA 0.0031					
		N/A				
SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	582.6			655.8		
Time on Time	1.0298			1.0293		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	681.2	530.9	477.3	882.7	656.6	581.3
Time on Time	0.9909	1.2715	1.4143	0.7647	1.0280	1.1611

2020

ORC Club Certificate Appendix

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TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1022.2	839.9	737.5	696.7	681.2	675.1	661.6
52°	664.0	557.0	506.9	488.2	481.5	478.3	472.2
60°	624.4	531.9	493.2	476.0	467.9	463.7	458.8
75°	596.1	514.8	483.0	464.1	449.6	439.8	432.1
90°	599.1	505.2	475.0	461.4	443.1	425.9	402.8
110°	588.9	497.0	462.5	437.2	420.1	407.7	384.1
120°	604.9	504.7	467.1	438.4	411.1	389.2	361.9
135°	678.6	546.6	487.1	457.5	429.4	402.1	345.4
150°	804.0	641.1	542.4	492.3	470.4	448.9	400.6
Run VMG	928.4	740.3	626.3	568.1	540.1	498.3	451.3
Selected Courses							
Windward / Leeward	975.3	790.1	681.9	632.4	610.6	586.7	556.4
Circular Random	819.8	663.4	580.6	533.6	504.9	485.5	458.1
Coastal / Long Distance	970.6	741.2	616.3	551.3	517.6	486.7	437.1
Non Spinnaker	890.3	712.4	616.0	559.5	524.5	501.4	471.1

Velocity Prediction in Knots for True Wind Speeds							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat Angles	43.1°	41.8°	40.5°	39.0°	39.0°	38.6°	38.6°
Beat VMG	3.52	4.29	4.88	5.17	5.28	5.33	5.44
52°	5.42	6.46	7.10	7.37	7.48	7.53	7.62
60°	5.77	6.77	7.30	7.56	7.69	7.76	7.85
75°	6.04	6.99	7.45	7.76	8.01	8.19	8.33
90°	6.01	7.13	7.58	7.80	8.12	8.45	8.94
110°	6.11	7.24	7.78	8.23	8.57	8.83	9.37
120°	5.95	7.13	7.71	8.21	8.76	9.25	9.95
135°	5.30	6.59	7.39	7.87	8.38	8.95	10.42
150°	4.48	5.62	6.64	7.31	7.65	8.02	8.99
Run VMG	3.88	4.86	5.75	6.34	6.67	7.22	7.98
Gybe Angles	144.0°	147.0°	148.5°	150.5°	152.5°	176.5°	177.5°