



ORC
Offshore Racing Congress
World leader in rating technology

**2020
ORC Club
Certificate**

Rating Office

**Offshore
Racing
Congress**



Certificate

Number **115/20**
Issued On **10/07/2020**
ORC Ref **03880000MB9**
VPP Ver. **2020 1.02**
Valid until **31/12/2020**

Crew Weight

Default 604kg
Maximum **620kg**
Minimum* **465kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Non Spin GPH	653.3	0.9184
Non Spin OSN	635.0	0.9449

Sails Limitations

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

Asymmetric on centerline

Spinnaker configuration
Symmetric: **No**
Asymmetric: **Yes 110.40**
Flying H/S: **No**
Spin. Pole: **Yes**

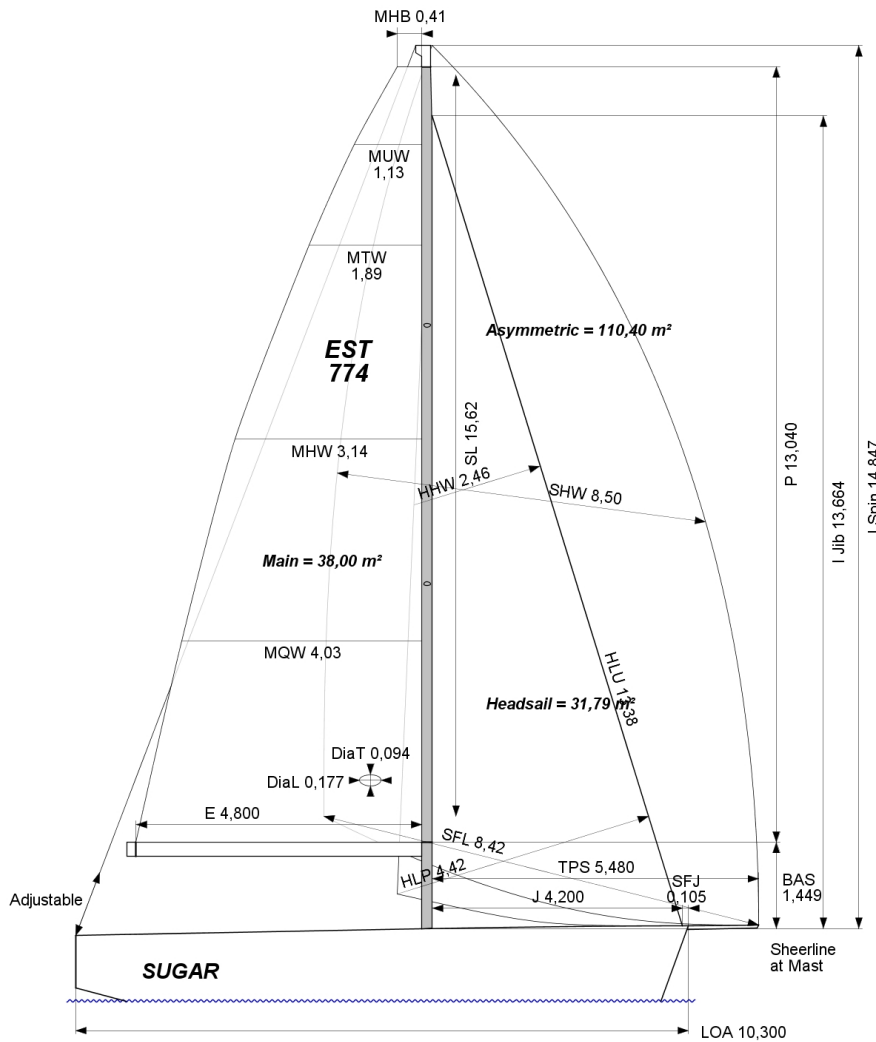
Class Division Length

CDL = 8.874

Stability (Measured)

Limit Positive Stab.: **117.8°**
Stability Index: **114.9**

Owner



BOAT		GPH	HULL			
Name SUGAR		616.8	Data File EST774	LOA 10.300m		
Sail Nr EST-774			Offset File IY98MP.off	MB 3.536m		
			Displacement 4,600kg	Draft 1.902m		
CLASS			IMS Division Cruiser/Racer	Dynamic All. 0.049%		
Class ITALIA 9.98 F			Plan Review	Construction Cored		
Designer POLLI			Fiber Rigging Yes	Aramid Core No		
Builder ITALIA YACHTS			Crew Arm Ex	Carbon Rudder No		
Series 09/2014				Light Stanchions No		
Age Date 04/2016			IMSL 9.402m	VCGD 0.092m	Sink 17.78kg/mm	
Age Allowance 0.195%			RL 8.358m	VCGM 0.087m	WS 23.56m²	
COMMENTS			LSM0 9.122m	Displacement/Length ratio 6.0602		
			Water Ballast 0	Trim Tab No		
			BLR Index 0.0000			
PROPELLER			CENTERBOARD			
Installation Strut	PRD 0.380		N/A			
Type Folding 2 blades	PBW 0.120					
	PIPA 0.0039					
SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	601.5			678.7		
Time on Time	0.9974			0.9946		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	698.4	548.1	495.0	904.3	679.3	605.3
Time on Time	0.9665	1.2315	1.3635	0.7464	0.9936	1.1152

2020

ORC Club Certificate Appendix

BOAT	
Name	SUGAR
Sail Nr	EST-774
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TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1051.2	869.1	770.2	730.4	716.0	711.6	703.8
52°	682.9	575.8	524.9	504.6	497.8	494.9	490.0
60°	642.5	549.3	509.5	491.2	482.8	478.8	474.6
75°	612.0	530.7	498.3	478.5	462.8	453.0	446.2
90°	612.8	519.9	489.0	475.2	456.0	438.0	415.7
110°	601.0	510.2	475.2	448.2	431.7	420.0	397.3
120°	616.6	517.3	479.7	449.6	422.1	401.3	375.1
135°	691.5	557.6	499.1	469.1	440.0	412.9	356.1
150°	817.0	652.5	553.1	504.4	480.7	460.1	411.2
Run VMG	943.4	753.5	638.6	581.7	549.8	508.1	460.8
Selected Courses							
Windward / Leeward	997.3	811.3	704.4	656.1	632.9	609.8	582.3
Circular Random	841.5	682.4	598.6	551.1	522.5	503.4	477.1
Coastal / Long Distance	991.9	761.0	636.1	570.7	535.2	503.9	453.1
Non Spinnaker	910.1	730.1	633.0	576.4	541.6	518.9	489.7

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	43.5°	42.0°	40.9°	39.9°	40.1°	40.1°	40.7°
Beat VMG	3.42	4.14	4.67	4.93	5.03	5.06	5.12
52°	5.27	6.25	6.86	7.13	7.23	7.27	7.35
60°	5.60	6.55	7.07	7.33	7.46	7.52	7.59
75°	5.88	6.78	7.22	7.52	7.78	7.95	8.07
90°	5.87	6.92	7.36	7.58	7.90	8.22	8.66
110°	5.99	7.06	7.58	8.03	8.34	8.57	9.06
120°	5.84	6.96	7.50	8.01	8.53	8.97	9.60
135°	5.21	6.46	7.21	7.67	8.18	8.72	10.11
150°	4.41	5.52	6.51	7.14	7.49	7.82	8.75
Run VMG	3.82	4.78	5.64	6.19	6.55	7.09	7.81
Gybe Angles	144.0°	148.0°	148.5°	150.8°	174.0°	177.0°	177.5°