



ORC
Offshore Racing Congress
World leader in rating technology

**2020
ORC Club
Certificate**

Rating Office

**Offshore
Racing
Congress**



Certificate

Number **Est004**
Issued On **29/05/2020**
ORC Ref **03580000J3T**
VPP Ver. **2020 1.02**
Valid until **31/12/2020**

Crew Weight

Default 463kg
Maximum **450kg**
Minimum* **338kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Non Spin GPH	787.4	0.7620
Non Spin OSN	759.8	0.7897

Sails Limitations

Headsails **5** Spinnakers **4**
Woven Polyester

Spinnaker configuration
Symmetric: **Yes 65.89**
Asymmetric: **No**
Flying H/S: **No**
Spin. Pole: **Yes**

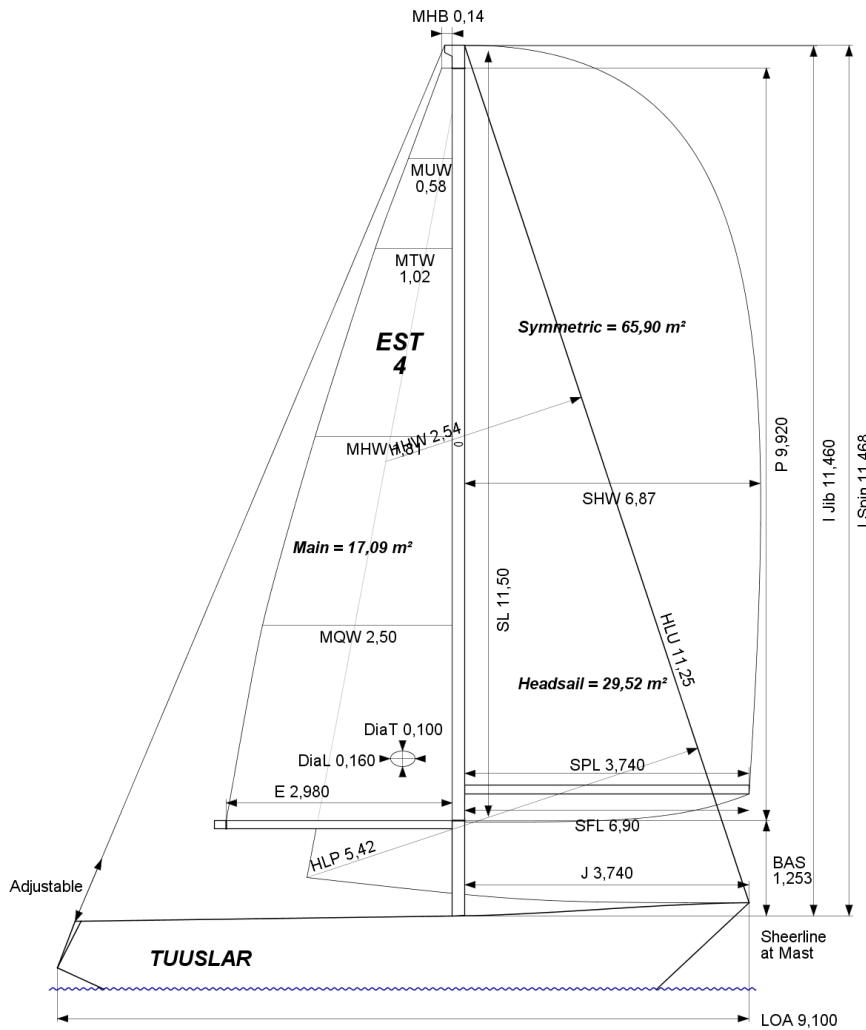
Class Division Length

CDL = 6.566

Stability (Estimated)

Limit Positive Stab.: **114.2°**
Stability Index: **114.4**

Owner



BOAT		GPH		HULL			
Name Tuuslar Sail Nr EST 4		749.1		Data File Est0004	LOA 9.100m		
				Offset File GR0044.BOF	MB 3.058m		
				Displacement 3,848kg	Draft 1.590m		
				IMS Division Cruiser/Racer	Dynamic All. 0.496%		
				Plan Review	Construction Solid		
				Fiber Rigging No	Aramid Core No		
				Crew Arm Ex	Carbon Rudder No		
					Light Stanchions No		
				IMSL 7.418m	VCGD -0.119m	Sink 12.45kg/mm	
				RL 5.713m	VCGM 0.056m	WS 17.85m²	
				LSMO 7.567m	Displacement/Length ratio 8.8810		
				Water Ballast 0	Trim Tab No		
				BLR Index 0.0000			
				CENTERBOARD			
				N/A			
				PROPELLER			
Installation	Shaft exposed	PRD	0.381				
Type	Solid 2 blades	PBW	0.125				
		PIPA	0.0158				
SCORING OPTIONS							
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD			
Time on Distance	725.4			808.9			
Time on Time	0.8271			0.8344			
Triple Number	Low	Medium	High	Low	Medium	High	
Time on Distance	869.2	660.3	587.2	1118.8	815.7	701.5	
Time on Time	0.7766	1.0223	1.1496	0.6033	0.8275	0.9622	

2020

ORC Club Certificate Appendix

BOAT			
Name	Tuuslar	Certificate Number	Est004
Sail Nr	EST 4	Issued On	29/05/2020

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1310.9	1090.3	966.5	883.4	846.4	833.9	839.3
52°	851.1	719.4	640.0	602.1	584.7	578.0	576.4
60°	803.3	680.0	614.1	585.2	569.3	560.8	557.0
75°	773.3	652.1	596.5	571.4	554.8	541.8	527.2
90°	782.5	647.7	584.0	559.3	549.6	534.9	508.7
110°	762.2	626.5	571.7	544.0	521.3	503.9	487.3
120°	784.8	639.8	576.8	546.9	521.8	499.0	469.5
135°	860.6	699.2	602.0	563.3	537.5	512.8	471.1
150°	1001.3	795.6	671.1	596.1	562.7	538.9	494.8
Run VMG	1156.2	918.1	774.0	676.0	609.6	571.7	525.7
Selected Courses							
Windward / Leeward	1233.5	1004.2	870.2	779.7	728.0	702.8	682.5
Circular Random	1039.9	836.3	726.1	661.9	623.0	599.0	572.5
Coastal / Long Distance	1225.8	941.5	781.1	681.6	631.9	597.0	544.4
Non Spinnaker	1107.5	884.8	762.6	690.1	645.6	617.5	586.4

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°	42.0°	41.8°	40.9°	40.5°	40.9°
Beat VMG	2.75	3.30	3.72	4.07	4.25	4.32	4.29
52°	4.23	5.00	5.63	5.98	6.16	6.23	6.25
60°	4.48	5.29	5.86	6.15	6.32	6.42	6.46
75°	4.66	5.52	6.04	6.30	6.49	6.64	6.83
90°	4.60	5.56	6.16	6.44	6.55	6.73	7.08
110°	4.72	5.75	6.30	6.62	6.91	7.14	7.39
120°	4.59	5.63	6.24	6.58	6.90	7.21	7.67
135°	4.18	5.15	5.98	6.39	6.70	7.02	7.64
150°	3.60	4.52	5.36	6.04	6.40	6.68	7.28
Run VMG	3.11	3.92	4.65	5.33	5.91	6.30	6.85
Gybe Angles	148.0°	151.5°	151.0°	159.0°	180.0°	180.0°	180.0°