



ORC
Offshore Racing Congress
World leader in rating technology

2020
ORC Club
Certificate

Rating Office

Offshore
Racing
Congress



Certificate

Number **054/20**
Issued On **04/08/2020**
ORC Ref **03850000NUT**
VPP Ver. **2020 1.02**
Valid until **31/12/2020**

Crew Weight

Default 590kg
Maximum **350kg**
Minimum* **263kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Non Spin GPH	722.7	0.8302
Non Spin OSN	700.4	0.8567

Sails Limitations

Headsails **1** Spinnakers **4**
Woven Polyester

Spinnaker configuration
Symmetric: **Yes 90.55**
Asymmetric: **No**
Flying H/S: **No**
Spin. Pole: **Yes**

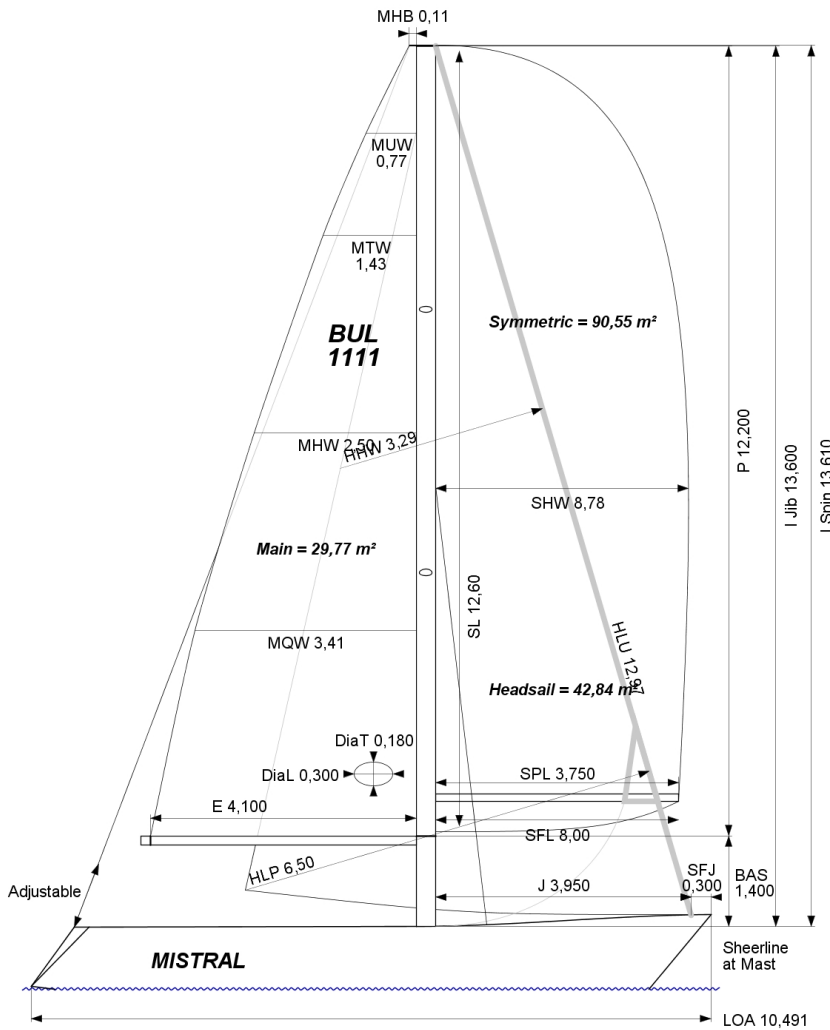
Class Division Length

CDL = 7.790

Stability (Estimated)

Limit Positive Stab.: **117.7°**
Stability Index: **123.3**

Owner



BOAT	GPH	HULL
Name Mistral Sail Nr BUL 1111	693.4	Data File BUL1111 LOA 10.491m Offset File K13789.OFF MB 3.396m Displacement 6,988kg Draft 1.965m
CLASS Class Nicholson 345 Mod Designer Holland Builder Samsonov Series 05/1979 Age Date 05/1985 Age Allowance 0.487%		IMS Division Cruiser/Racer Dynamic All. 0.531% Plan Review Construction Solid Fiber Rigging No Aramid Core No Crew Arm Ex Carbon Rudder No Light Stanchions No
COMMENTS +359888602630 Vn 4355		IMSL 8.913m VCGD -0.009m Sink 17.53kg/mm RL 6.666m VCGM -0.035m WS 25.72m² LSM0 8.973m Displacement/Length ratio 9.6725
PROPELLER Installation Shaft non exposed PRD 0.300 Type Solid 2 blades PBW 0.150 PIPA 0.0094		Water Ballast 0 Trim Tab No BLR Index 0.0000
		CENTERBOARD N/A
SCORING OPTIONS		
	COASTAL / LONG DISTANCE	WINDWARD / LEEWARD
Time on Distance	673.7	750.9
Time on Time	0.8907	0.8989
Triple Number	Low Medium High	Low Medium High
Time on Distance	794.8 614.1 550.1	1021.3 757.1 656.0
Time on Time	0.8493 1.0992 1.2270	0.6609 0.8916 1.0290

2020

ORC Club Certificate Appendix

BOAT	
Name Mistral	Certificate Number 054/20
Sail Nr BUL 1111	Issued On 04/08/2020

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1173.4	981.6	876.6	817.8	791.8	778.4	775.3
52°	768.2	656.0	590.5	559.6	545.3	539.2	535.9
60°	728.5	623.5	569.1	543.2	530.0	523.6	519.3
75°	698.4	599.8	552.9	530.2	516.4	506.1	495.6
90°	702.3	600.5	548.1	526.3	510.8	498.0	476.9
110°	707.1	588.3	535.4	510.7	492.5	481.5	465.4
120°	723.9	599.1	540.2	512.8	492.2	472.7	449.2
135°	789.7	650.6	565.3	527.1	504.6	484.1	446.1
150°	930.4	741.5	629.1	560.5	527.0	506.0	467.6
Run VMG	1074.3	856.1	725.5	637.2	576.3	537.2	495.7
Selected Courses							
Windward / Leeward	1123.8	918.8	801.0	727.5	684.0	657.8	635.5
Circular Random	952.9	770.6	672.8	616.2	582.0	560.5	536.0
Coastal / Long Distance	1118.9	863.3	721.3	636.0	591.8	559.3	511.4
Non Spinnaker	1005.3	807.8	700.5	637.6	599.0	574.4	545.7

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	43.1°	40.9°	41.6°	40.9°	40.5°	40.1°	40.1°
Beat VMG	3.07	3.67	4.11	4.40	4.55	4.62	4.64
52°	4.69	5.49	6.10	6.43	6.60	6.68	6.72
60°	4.94	5.77	6.33	6.63	6.79	6.88	6.93
75°	5.15	6.00	6.51	6.79	6.97	7.11	7.26
90°	5.13	5.99	6.57	6.84	7.05	7.23	7.55
110°	5.09	6.12	6.72	7.05	7.31	7.48	7.73
120°	4.97	6.01	6.66	7.02	7.31	7.62	8.01
135°	4.56	5.53	6.37	6.83	7.13	7.44	8.07
150°	3.87	4.86	5.72	6.42	6.83	7.11	7.70
Run VMG	3.35	4.21	4.96	5.65	6.25	6.70	7.26
Gybe Angles	147.0°	151.5°	151.0°	159.0°	180.0°	180.0°	180.0°