



ORC
Offshore Racing Congress
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2020
ORC Club
Certificate

Rating Office

Offshore
Racing
Congress



Certificate

Number **US6044**
Issued On **28/05/2020**
ORC Ref **53410000201**
VPP Ver. **2020 1.02**
Valid until **31/12/2020**

Crew Weight

Default 638kg
Maximum **638kg**
Minimum* **479kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Non Spin GPH	669.0	0.8969
Non Spin OSN	651.2	0.9214

Sails Limitations

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

Asymmetric on centerline

Spinnaker configuration
Symmetric: **No**
Asymmetric: **Yes 109.28**
Flying H/S: **No**
Spin. Pole: **No**

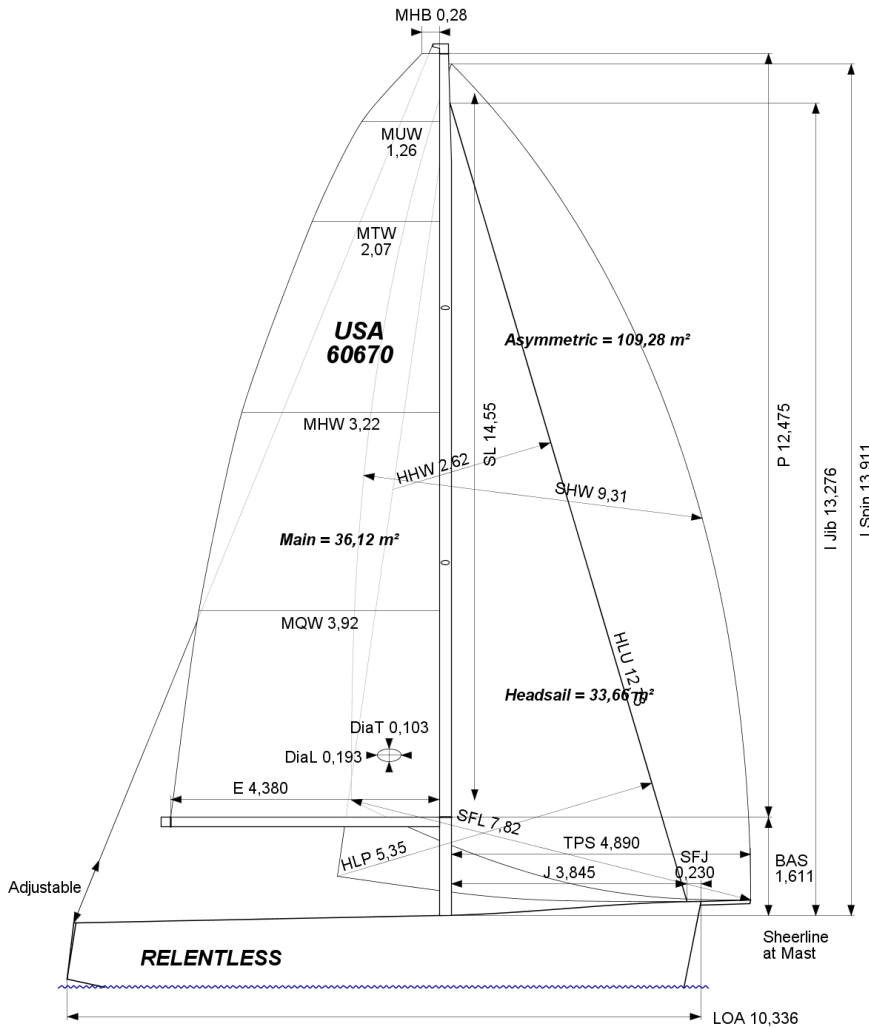
Class Division Length

CDL = 8.741

Stability (Measured)

Limit Positive Stab.: **114.9°**
Stability Index: **117.6**

Owner



BOAT		GPH	HULL			
Name Relentless Sail Nr USA 60670		633.8	Data File US6044	LOA 10.336m		
			Offset File SAL35SKCL.off	MB 3.276m		
			Displacement 5,292kg	Draft 1.742m		
			IMS Division Cruiser/Racer	Dynamic All. 0.116%		
			Plan Review	Construction Solid		
			Fiber Rigging No	Aramid Core No		
			Crew Arm Ex	Carbon Rudder No		
				Light Stanchions No		
			IMSL 9.654m	VCGD 0.279m	Sink 18.41kg/mm	
			RL 7.835m	VCGM 0.100m	WS 23.90m²	
			LSM0 9.485m	Displacement/Length ratio 6.2017		
			Water Ballast 0	Trim Tab No		
			BLR Index 0.0000			
COMMENTS						
PROPELLER		CENTERBOARD				
Installation Strut	PRD 0.421	N/A				
Type Folding 2 blades	PBW 0.102					
	PIPA 0.0034					
SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	618.8			697.5		
Time on Time	0.9696			0.9677		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	719.6	562.4	511.2	934.3	698.3	621.8
Time on Time	0.9380	1.2003	1.3203	0.7225	0.9666	1.0856

2020

ORC Club Certificate Appendix

BOAT							
Name	Relentless	Certificate Number			US6044		
Sail Nr	USA 60670	Issued On			28/05/2020		

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1088.2	905.8	799.2	754.4	737.5	732.0	733.3
52°	704.3	593.9	536.8	515.6	508.4	505.4	504.6
60°	659.6	562.7	519.3	501.1	493.6	490.0	488.8
75°	625.7	541.1	506.8	488.7	476.2	468.6	462.8
90°	630.7	533.7	498.4	484.1	468.2	453.6	433.8
110°	618.6	520.7	485.4	462.7	446.4	435.3	415.7
120°	634.4	528.0	488.8	463.0	438.3	417.9	394.6
135°	712.2	572.2	507.0	478.7	453.6	428.3	381.4
150°	838.3	671.2	565.4	512.5	489.4	471.7	430.9
Run VMG	968.0	775.0	652.9	591.3	558.7	515.5	471.2
Selected Courses							
Windward / Leeward	1028.1	840.4	726.0	672.8	648.1	623.7	602.3
Circular Random	865.3	701.4	614.9	566.3	537.5	519.5	497.4
Coastal / Long Distance	1022.1	787.1	654.0	584.9	549.2	518.3	471.2
Non Spinnaker	930.8	747.3	648.2	590.7	555.9	534.0	508.4

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	43.9°	43.1°	42.0°	41.3°	40.5°	40.5°	40.9°
Beat VMG	3.31	3.97	4.50	4.77	4.88	4.92	4.91
52°	5.11	6.06	6.71	6.98	7.08	7.12	7.13
60°	5.46	6.40	6.93	7.18	7.29	7.35	7.37
75°	5.75	6.65	7.10	7.37	7.56	7.68	7.78
90°	5.71	6.75	7.22	7.44	7.69	7.94	8.30
110°	5.82	6.91	7.42	7.78	8.07	8.27	8.66
120°	5.67	6.82	7.36	7.77	8.21	8.61	9.12
135°	5.05	6.29	7.10	7.52	7.94	8.41	9.44
150°	4.29	5.36	6.37	7.02	7.36	7.63	8.35
Run VMG	3.72	4.65	5.51	6.09	6.44	6.98	7.64
Gybe Angles	145.0°	148.0°	147.5°	150.5°	174.0°	177.0°	178.0°