



ORC

Offshore Racing Congress
World leader in rating technology

2020
ORC Club One
Design Certificate

Rating Office

Offshore
Racing
Congress



Certificate

Number **8186.1**
Issued On **24/09/2020**
ORC Ref **03570000QTK**
VPP Ver. **2020 1.00**
Valid until **31/12/2020**

Crew Weight

Default 539kg
Maximum **512kg**
Minimum* **384kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Non Spin GPH	654.4	0.9169
Non Spin OSN	636.6	0.9426

Sails Limitations

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

Spinnaker configuration

Symmetric: **Yes** **74.57**
Asymmetric: **No**
Flying H/S: **No**
Spin. Pole: **Yes**

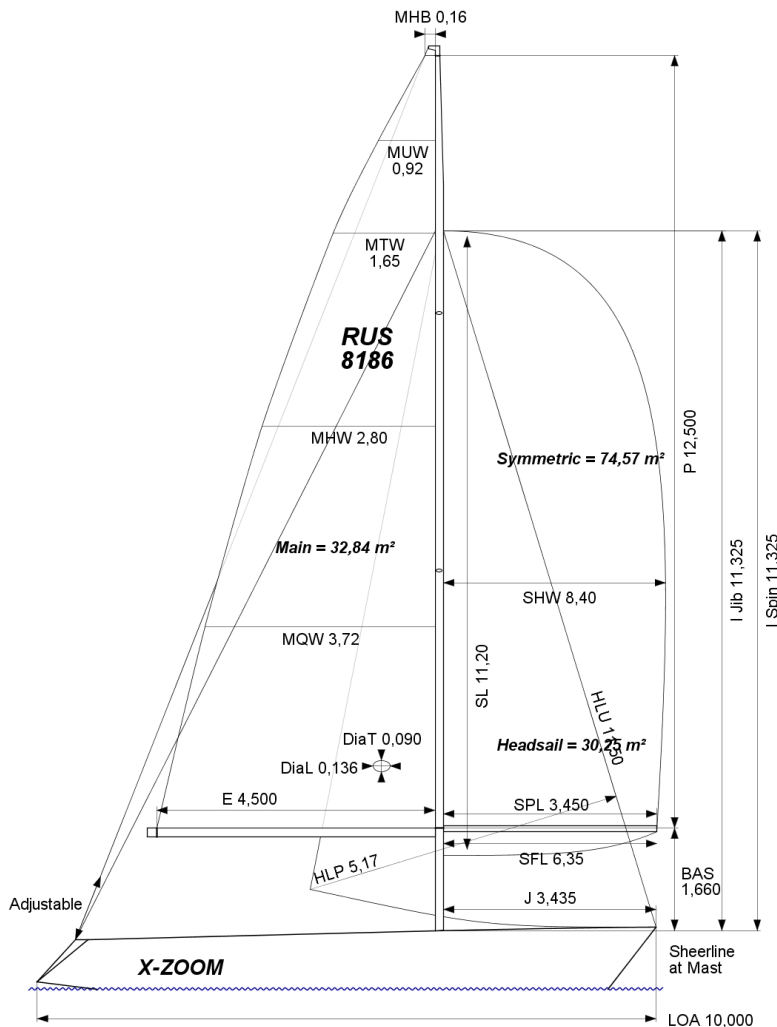
Class Division Length

CDL = 8.519

Stability (Measured)

Limit Positive Stab.: **114.0°**
Stability Index: **111.8**

Owner



BOAT		GPH	HULL			
Name X-ZOOM Sail Nr RUS 8186		621.8	Data File RU8186_X-ZOOM	LOA 10.000m		
			Offset File x99.OD	MB 2.992m		
			Displacement 2,982kg	Draft 1.788m		
CLASS			IMS Division Cruiser/Racer	Dynamic All. 0.000%		
Class X-99			Plan Review	Construction Cored		
Designer NIELS JEPPESEN			Fiber Rigging No	Aramid Core No		
Builder X-YACHTS			Crew Arm Ex	Carbon Rudder No		
Series 04/1985				Light Stanchions No		
Age Date 01/1986			IMSL 8.673m	VCGD -0.060m	Sink 13.62kg/mm	
Age Allowance 0.487%			RL 8.375m	VCGM -0.008m	WS 18.38m²	
COMMENTS			LSM0 8.422m	Displacement/Length ratio 4.9919		
BASED ON CLASS RULES			Water Ballast 0	Trim Tab No		
			BLR Index 0.0000			
PROPELLER			CENTERBOARD			
Installation Strut	PRD 0.356		N/A			
Type Folding 2 blades	PBW 0.090					
	PIPA 0.0035					
SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	607.0			678.7		
Time on Time	0.9885			0.9946		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	697.5	555.3	499.2	902.2	679.9	602.1
Time on Time	0.9678	1.2156	1.3521	0.7482	0.9928	1.1210

2020

ORC Club Certificate Appendix

BOAT	
Name X-Zoom	Certificate Number 8186.1
Sail Nr RUS 8186	Issued On 24/09/2020

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	985.8	818.8	753.2	729.7	719.0	718.7	712.0
52°	649.3	557.4	529.9	520.6	515.9	513.2	507.9
60°	615.4	541.4	517.1	506.6	500.8	497.4	491.4
75°	590.4	530.8	504.9	486.8	475.9	469.1	463.4
90°	596.4	530.6	502.5	478.9	458.3	443.4	430.3
110°	620.8	529.4	492.8	462.6	443.1	427.1	402.4
120°	642.0	537.8	498.2	463.7	432.1	407.7	376.5
135°	721.2	582.3	520.3	486.9	453.3	420.7	352.9
150°	872.3	690.2	577.3	519.8	488.8	457.7	396.8
Run VMG	1007.3	797.0	666.6	586.1	534.0	501.4	443.9
Selected Courses							
Windward / Leeward	996.5	807.9	709.9	657.9	626.5	610.1	577.9
Circular Random	843.2	686.5	604.2	557.1	528.1	508.1	479.3
Coastal / Long Distance	997.6	761.3	643.9	578.2	540.4	510.1	458.3
Non Spinnaker	900.1	727.0	634.9	581.8	549.1	527.2	496.9

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	42.0°	40.9°	39.0°	38.3°	37.9°	38.3°	38.3°
Beat VMG	3.65	4.40	4.78	4.93	5.01	5.01	5.06
52°	5.54	6.46	6.79	6.91	6.98	7.01	7.09
60°	5.85	6.65	6.96	7.11	7.19	7.24	7.33
75°	6.10	6.78	7.13	7.40	7.56	7.67	7.77
90°	6.04	6.78	7.16	7.52	7.85	8.12	8.37
110°	5.80	6.80	7.31	7.78	8.13	8.43	8.95
120°	5.61	6.69	7.23	7.76	8.33	8.83	9.56
135°	4.99	6.18	6.92	7.39	7.94	8.56	10.20
150°	4.13	5.22	6.24	6.93	7.37	7.87	9.07
Run VMG	3.57	4.52	5.40	6.14	6.74	7.18	8.11
Gybe Angles	144.0°	149.0°	149.8°	159.0°	180.0°	180.0°	180.0°