



**ORC**  
Offshore Racing Congress  
World leader in rating technology

**2020  
ORC Club  
Certificate**

**Rating Office**

**Offshore  
Racing  
Congress**



**Certificate**

Number **153/20**  
Issued On **08/09/2020**  
ORC Ref **03880000Q03**  
VPP Ver. **2020 1.02**  
Valid until **31/12/2020**

**Crew Weight**

Default 788kg  
Maximum **850kg**  
Minimum\* **638kg**  
*\*when applied by the NoR and SI*  
Non Manual Pwr **No**

**Special Scoring**

	ToD	ToT
Non Spin GPH	<b>604.5</b>	<b>0.9926</b>
Non Spin OSN	<b>588.4</b>	<b>1.0198</b>

**Sails Limitations**

Headsails **6** Spinnakers **4**

**Spinnaker configuration**  
Symmetric: **Yes** 137.13  
Asymmetric: **No**  
Flying H/S: **No**  
Spin. Pole: **Yes**

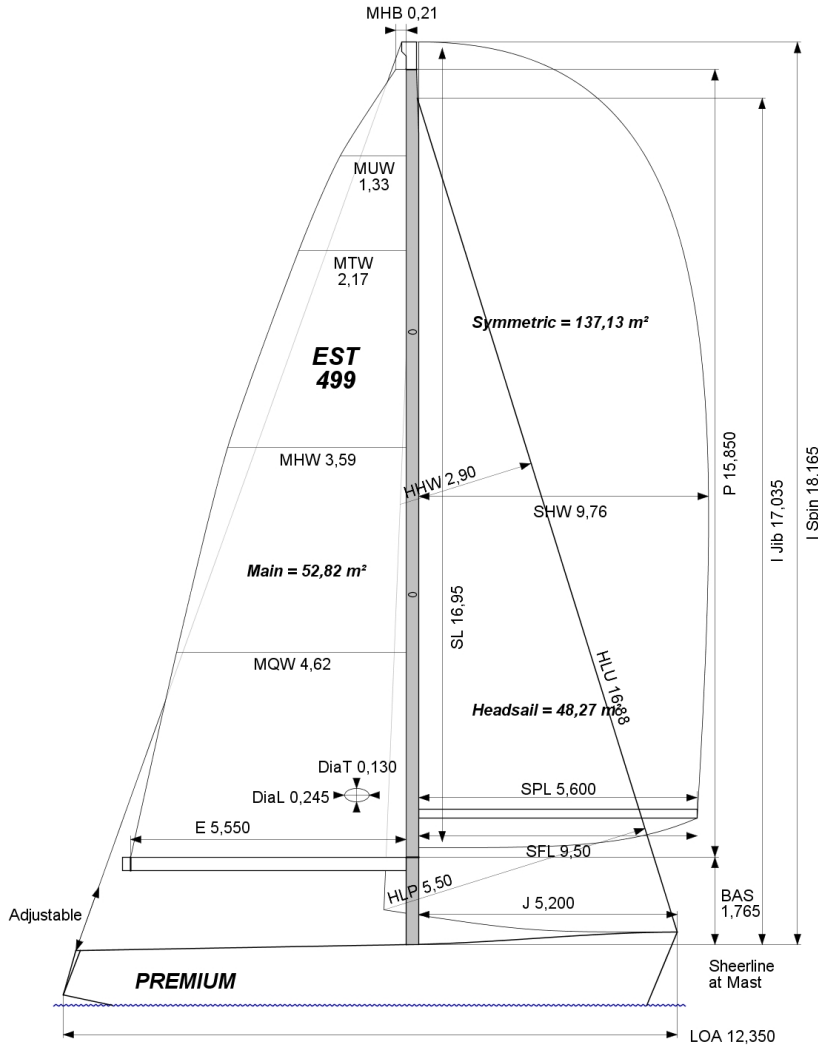
**Class Division Length**

**CDL = 10.584**

**Stability (Measured)**

Limit Positive Stab.: **128.8°**  
Stability Index: **132.6**

**Owner**



BOAT		GPH	HULL			
Name <b>PREMIUM</b> Sail Nr <b>EST 499</b>		<b>570.5</b>	Data File <b>EST 499</b>	LOA <b>12.350m</b>		
			Offset File <b>EST499.off</b>	MB <b>3.646m</b>		
			Displacement <b>6,996kg</b>	Draft <b>2.316m</b>		
<b>CLASS</b>			IMS Division <b>Cruiser/Racer</b>	Dynamic All. <b>0.019%</b>		
Class <b>X-41 mod</b>			Plan Review	Construction <b>Cored</b>		
Designer <b>JEPPESEN</b>			Fiber Rigging <b>No</b>	Aramid Core <b>No</b>		
Builder <b>X YACHTS</b>			Crew Arm Ex	Carbon Rudder <b>No</b>		
Series <b>01/2006</b>			Light Stanchions			
Age Date <b>07/2016</b>			IMSL <b>11.108m</b>	VCGD <b>-0.174m</b>	Sink <b>23.07kg/mm</b>	
Age Allowance <b>0.455%</b>			RL <b>10.071m</b>	VCGM <b>-0.193m</b>	WS <b>32.57m²</b>	
<b>COMMENTS</b>			LSM0 <b>10.990m</b>	Displacement/Length ratio <b>5.2706</b>		
			Water Ballast <b>0</b>	Trim Tab <b>No</b>		
			BLR Index <b>0.0000</b>			
<b>PROPELLER</b>			<b>CENTERBOARD</b>			
Installation <b>Strut</b>	PRD <b>0.430</b>	<b>NA</b>				
Type <b>Folding 2 blades</b>	PBW <b>0.125</b>					
	PIPA <b>0.0032</b>					
<b>SCORING OPTIONS</b>						
	<b>COASTAL / LONG DISTANCE</b>			<b>WINDWARD / LEEWARD</b>		
Time on Distance	<b>554.6</b>			<b>620.4</b>		
Time on Time	<b>1.0818</b>			<b>1.0880</b>		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	<b>650.6</b>	<b>506.1</b>	<b>452.2</b>	<b>840.0</b>	<b>622.6</b>	<b>544.2</b>
Time on Time	<b>1.0375</b>	<b>1.3336</b>	<b>1.4927</b>	<b>0.8036</b>	<b>1.0841</b>	<b>1.2404</b>

# 2020

## ORC Club Certificate Appendix

<b>BOAT</b>	
Name	<b>PREMIUM</b>
Sail Nr	<b>EST 499</b>
Certificate Number	<b>153/20</b>
Issued On	<b>08/09/2020</b>

<b>TIME ALLOWANCES</b>							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	<b>959.2</b>	<b>785.9</b>	<b>697.2</b>	<b>665.4</b>	<b>652.0</b>	<b>642.4</b>	<b>631.1</b>
52°	<b>625.9</b>	<b>522.8</b>	<b>479.3</b>	<b>465.8</b>	<b>460.1</b>	<b>457.3</b>	<b>449.1</b>
60°	<b>589.9</b>	<b>501.2</b>	<b>466.7</b>	<b>453.0</b>	<b>447.1</b>	<b>443.9</b>	<b>435.8</b>
75°	<b>562.6</b>	<b>487.0</b>	<b>457.4</b>	<b>439.9</b>	<b>427.8</b>	<b>421.2</b>	<b>415.2</b>
90°	<b>567.5</b>	<b>488.0</b>	<b>456.7</b>	<b>436.8</b>	<b>418.6</b>	<b>403.1</b>	<b>386.1</b>
110°	<b>582.4</b>	<b>483.5</b>	<b>446.4</b>	<b>423.3</b>	<b>408.7</b>	<b>395.1</b>	<b>374.1</b>
120°	<b>596.5</b>	<b>491.3</b>	<b>450.2</b>	<b>422.5</b>	<b>396.4</b>	<b>379.3</b>	<b>353.9</b>
135°	<b>659.5</b>	<b>531.6</b>	<b>469.4</b>	<b>440.0</b>	<b>412.7</b>	<b>386.0</b>	<b>331.6</b>
150°	<b>779.1</b>	<b>619.3</b>	<b>523.3</b>	<b>470.3</b>	<b>442.4</b>	<b>417.3</b>	<b>368.1</b>
Run VMG	<b>899.6</b>	<b>715.0</b>	<b>604.2</b>	<b>536.3</b>	<b>491.4</b>	<b>457.3</b>	<b>409.3</b>
<b>Selected Courses</b>							
Windward / Leeward	<b>929.4</b>	<b>750.5</b>	<b>650.7</b>	<b>600.8</b>	<b>571.7</b>	<b>549.9</b>	<b>520.2</b>
Circular Random	<b>783.3</b>	<b>633.2</b>	<b>553.6</b>	<b>507.9</b>	<b>479.7</b>	<b>460.5</b>	<b>434.1</b>
Coastal / Long Distance	<b>926.4</b>	<b>705.4</b>	<b>588.5</b>	<b>525.6</b>	<b>490.7</b>	<b>461.9</b>	<b>415.5</b>
Non Spinnaker	<b>844.4</b>	<b>676.5</b>	<b>585.7</b>	<b>532.5</b>	<b>499.5</b>	<b>477.4</b>	<b>448.4</b>

<b>Velocity Prediction in Knots for True Wind Speeds</b>							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat Angles	<b>43.1°</b>	<b>42.0°</b>	<b>40.5°</b>	<b>39.0°</b>	<b>39.0°</b>	<b>38.4°</b>	<b>38.6°</b>
Beat VMG	<b>3.75</b>	<b>4.58</b>	<b>5.16</b>	<b>5.41</b>	<b>5.52</b>	<b>5.60</b>	<b>5.70</b>
52°	<b>5.75</b>	<b>6.89</b>	<b>7.51</b>	<b>7.73</b>	<b>7.82</b>	<b>7.87</b>	<b>8.02</b>
60°	<b>6.10</b>	<b>7.18</b>	<b>7.71</b>	<b>7.95</b>	<b>8.05</b>	<b>8.11</b>	<b>8.26</b>
75°	<b>6.40</b>	<b>7.39</b>	<b>7.87</b>	<b>8.18</b>	<b>8.41</b>	<b>8.55</b>	<b>8.67</b>
90°	<b>6.34</b>	<b>7.38</b>	<b>7.88</b>	<b>8.24</b>	<b>8.60</b>	<b>8.93</b>	<b>9.32</b>
110°	<b>6.18</b>	<b>7.45</b>	<b>8.06</b>	<b>8.51</b>	<b>8.81</b>	<b>9.11</b>	<b>9.62</b>
120°	<b>6.04</b>	<b>7.33</b>	<b>8.00</b>	<b>8.52</b>	<b>9.08</b>	<b>9.49</b>	<b>10.17</b>
135°	<b>5.46</b>	<b>6.77</b>	<b>7.67</b>	<b>8.18</b>	<b>8.72</b>	<b>9.33</b>	<b>10.86</b>
150°	<b>4.62</b>	<b>5.81</b>	<b>6.88</b>	<b>7.66</b>	<b>8.14</b>	<b>8.63</b>	<b>9.78</b>
Run VMG	<b>4.00</b>	<b>5.03</b>	<b>5.96</b>	<b>6.71</b>	<b>7.33</b>	<b>7.87</b>	<b>8.79</b>
Gybe Angles	<b>143.6°</b>	<b>147.0°</b>	<b>150.0°</b>	<b>156.0°</b>	<b>170.0°</b>	<b>180.0°</b>	<b>180.0°</b>