



World Leader in Rating Technology

## 2016 ORC Club Certificate

### Rating Office

Hungarian Yachting Association  
Istvanmezei ut 1-3  
H-1146 Budapest  
HUNGARY



### Certificate

Number **008/16**  
Issued On **14.4.2016**  
ORC Ref **HUN00062419**  
VPP Ver. **2016 1.01**  
Valid until **31.12.2016**.

### Crew Weight

Declared **588kg**  
Default\* **588kg**  
Non Manual Pwr **No**

### Special Scoring

ToD ToT  
Non Spin GPH **657.3 0.9128**  
Non Spin OSN **638.4 0.9399**  
N/S Perf. Line **8.0 0.592**

### Sails Limitations

Headsails **6** Spinnakers **3**

### Spinnaker configuration

Symmetric: **Yes 92.19**  
Asymmetric: **Yes 118.08**  
Flying H/S: **Yes 50.58**  
Spin. Pole: **Yes**

### Class Division Length

CDL = **8.855**

### Stability

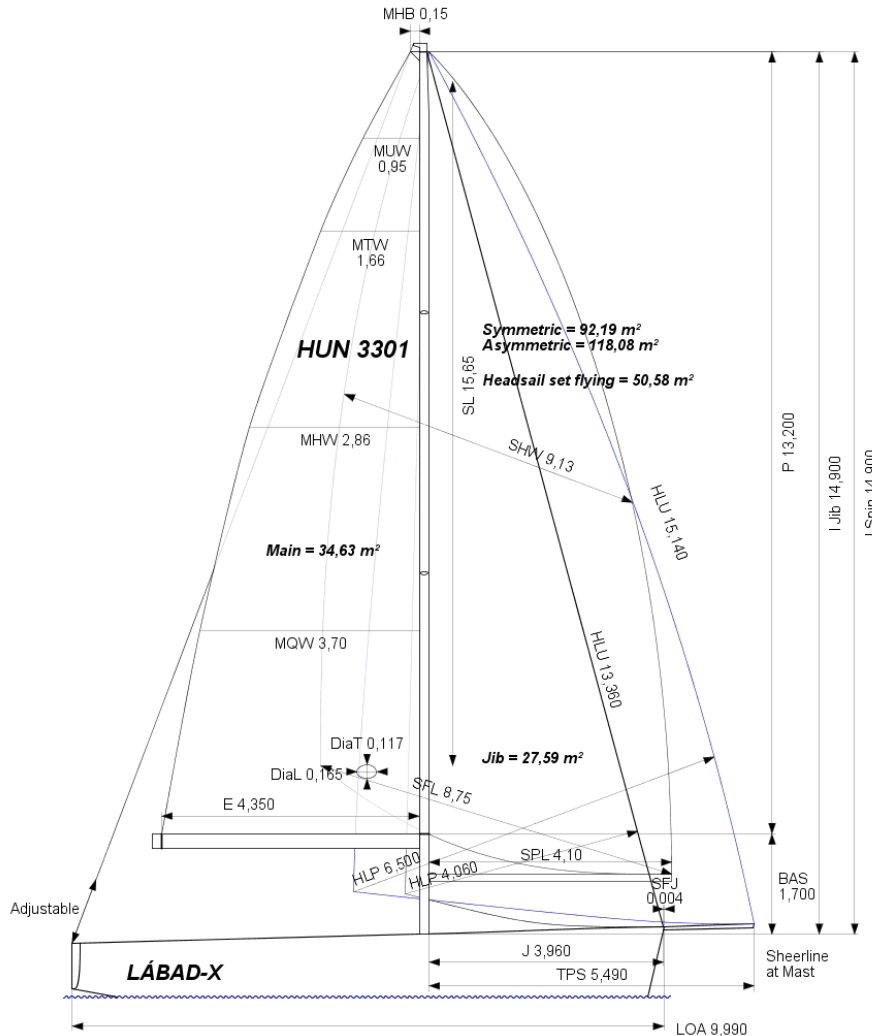
LPS (Estimated): **124.4°**  
Stability Index: **124.2**  
OSR Category: **N/A**

### Owner

Lábady Zsolt  
Mária dűlő 118  
7634 Pécs  
HUNGARY

I certify that I understand my responsibilities under ORC Rules and Regulations

Signature



<b>BOAT</b>		<b>GPH</b>		<b>HULL</b>		
Name <b>Lábad-X</b> Sail Nr <b>HUN 3301</b>		<b>606.1</b>		Data File <b>HUN3301.dxt</b>	LOA <b>9.990m</b>	
				Offset File <b>Xp33-v.OFF</b>	MB <b>3.218m</b>	
				Displacement <b>4,155kg</b>	Draft <b>1.908m</b>	
<b>CLASS</b>				IMS Division <b>Cruiser/Racer</b>	Dynamic All. <b>0.040%</b>	
Class <b>XP 33</b>				Fwd Accom. <b>Yes</b>	Construction <b>Cored</b>	
Designer <b>Jepessen</b>				Fiber Rigging <b>No</b>	Aramid Core <b>No</b>	
Builder <b>X-Yachts</b>				Crew Arm Ex <b>0.00</b>	Carbon Rudder <b>No</b>	
Series <b>09.2011</b>				Light Stanchions <b>No</b>		
Age Date <b>01.2015</b>				IMSL <b>9.217m</b>	VCGD <b>-0.120m</b>	
Age Allowance <b>0.163%</b>				RL <b>8.492m</b>	VCGM <b>-0.123m</b>	
				WS <b>21.84m<sup>2</sup></b>	LSM0 <b>8.949m</b>	
<b>COMMENTS</b>				Displacement/Length ratio <b>5.7976</b>		
				Water Ballast <b>0</b> Trim Tab <b>No</b>		
<b>PROPELLER</b>				<b>CENTERBOARD</b>		
Installation <b>Strut</b>	PRD <b>0.456</b>			<b>N/A</b>		
Type <b>Folding 2 blades</b>	PBW <b>110.000</b>					
	PIPA <b>0.0038</b>					
<b>SCORING OPTIONS</b>						
	<b>OFFSHORE</b>			<b>INSHORE</b>		
	<b>COASTAL / LONG DISTANCE</b>			<b>WINDWARD / LEEWARD</b>		
Time On Distance	<b>593.1</b>			<b>665.4</b>		
Time On Time	<b>1.0116</b>			<b>1.0144</b>		
Performance Line	PLT	PLD		PLT	PLD	
	<b>0.701</b>	<b>45.7</b>		<b>0.922</b>	<b>247.4</b>	
Triple Number	Low	Medium	High	Low	Medium	High
	<b>0.9842</b>	<b>1.2488</b>	<b>1.4093</b>	<b>0.7503</b>	<b>1.0083</b>	<b>1.1619</b>



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# 2016

## ORC Club Certificate Appendix

BOAT	
Name	<b>Lábad-X</b>
Sail Nr	<b>HUN 3301</b>
Certificate Number	<b>008/16</b>
Issued On	<b>14.4.2016.</b>

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	<b>1042.4</b>	<b>866.6</b>	<b>777.1</b>	<b>724.6</b>	<b>701.2</b>	<b>690.2</b>	<b>678.4</b>
52°	<b>664.2</b>	<b>557.6</b>	<b>518.0</b>	<b>502.4</b>	<b>493.7</b>	<b>489.3</b>	<b>483.1</b>
60°	<b>612.1</b>	<b>525.1</b>	<b>498.2</b>	<b>486.5</b>	<b>477.9</b>	<b>472.5</b>	<b>467.3</b>
75°	<b>562.8</b>	<b>503.2</b>	<b>477.7</b>	<b>462.8</b>	<b>453.0</b>	<b>443.6</b>	<b>434.7</b>
90°	<b>554.6</b>	<b>502.7</b>	<b>477.7</b>	<b>454.3</b>	<b>433.9</b>	<b>421.6</b>	<b>404.0</b>
110°	<b>596.6</b>	<b>508.2</b>	<b>473.6</b>	<b>451.5</b>	<b>433.5</b>	<b>408.8</b>	<b>378.6</b>
120°	<b>612.1</b>	<b>516.0</b>	<b>479.3</b>	<b>446.8</b>	<b>419.7</b>	<b>403.4</b>	<b>364.7</b>
135°	<b>684.8</b>	<b>553.5</b>	<b>499.2</b>	<b>468.9</b>	<b>437.9</b>	<b>407.1</b>	<b>340.1</b>
150°	<b>812.0</b>	<b>651.3</b>	<b>550.2</b>	<b>498.6</b>	<b>470.7</b>	<b>442.5</b>	<b>385.2</b>
Run VMG	<b>937.7</b>	<b>752.0</b>	<b>635.2</b>	<b>562.1</b>	<b>515.8</b>	<b>485.3</b>	<b>433.2</b>

Selected Courses							
Windward / Leeward	<b>990.0</b>	<b>809.3</b>	<b>706.2</b>	<b>643.4</b>	<b>608.5</b>	<b>587.8</b>	<b>555.8</b>
Circular Random	<b>826.4</b>	<b>671.6</b>	<b>589.0</b>	<b>540.6</b>	<b>509.9</b>	<b>488.4</b>	<b>457.5</b>
Ocean for PCS	<b>1023.3</b>	<b>793.3</b>	<b>663.6</b>	<b>583.9</b>	<b>531.3</b>	<b>493.5</b>	<b>438.3</b>
Non Spinnaker	<b>923.4</b>	<b>738.0</b>	<b>636.7</b>	<b>576.6</b>	<b>539.0</b>	<b>514.0</b>	<b>481.6</b>

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	<b>45.4°</b>	<b>44.3°</b>	<b>42.6°</b>	<b>40.4°</b>	<b>39.2°</b>	<b>38.8°</b>	<b>38.6°</b>
Beat VMG	<b>3.45</b>	<b>4.15</b>	<b>4.63</b>	<b>4.97</b>	<b>5.13</b>	<b>5.22</b>	<b>5.31</b>
52°	<b>5.42</b>	<b>6.46</b>	<b>6.95</b>	<b>7.17</b>	<b>7.29</b>	<b>7.36</b>	<b>7.45</b>
60°	<b>5.88</b>	<b>6.86</b>	<b>7.23</b>	<b>7.40</b>	<b>7.53</b>	<b>7.62</b>	<b>7.70</b>
75°	<b>6.40</b>	<b>7.15</b>	<b>7.54</b>	<b>7.78</b>	<b>7.95</b>	<b>8.12</b>	<b>8.28</b>
90°	<b>6.49</b>	<b>7.16</b>	<b>7.54</b>	<b>7.92</b>	<b>8.30</b>	<b>8.54</b>	<b>8.91</b>
110°	<b>6.03</b>	<b>7.08</b>	<b>7.60</b>	<b>7.97</b>	<b>8.31</b>	<b>8.81</b>	<b>9.51</b>
120°	<b>5.88</b>	<b>6.98</b>	<b>7.51</b>	<b>8.06</b>	<b>8.58</b>	<b>8.92</b>	<b>9.87</b>
135°	<b>5.26</b>	<b>6.50</b>	<b>7.21</b>	<b>7.68</b>	<b>8.22</b>	<b>8.84</b>	<b>10.59</b>
150°	<b>4.43</b>	<b>5.53</b>	<b>6.54</b>	<b>7.22</b>	<b>7.65</b>	<b>8.14</b>	<b>9.35</b>
Run VMG	<b>3.84</b>	<b>4.79</b>	<b>5.67</b>	<b>6.40</b>	<b>6.98</b>	<b>7.42</b>	<b>8.31</b>
Gybe Angles	<b>140.7°</b>	<b>147.6°</b>	<b>150.0°</b>	<b>158.2°</b>	<b>180.0°</b>	<b>180.0°</b>	<b>180.0°</b>