



World Leader in Rating Technology

## 2018 ORC Club Certificate

### Rating Office

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



### Certificate

Number **017/18**  
Issued On **08/06/2018**  
ORC Ref **HUN10014568**  
VPP Ver. **2018 1.00**  
Valid until **31/12/2018**

### Crew Weight

Default 753kg  
Maximum **450kg**  
Minimum\* **338kg**  
*\*when applied by the NoR and SI*  
Non Manual Pwr **No**

### Special Scoring

ToD ToT  
Non Spin GPH **657.9 0.9120**  
Non Spin OSN **635.5 0.9441**

### Sails Limitations

Headsails **5** Spinnakers **3**  
  
**Spinnaker configuration**  
Symmetric: **No**  
Asymmetric: **Yes 125.64**  
Flying H/S: **No**  
Spin. Pole: **No**

### Class Division Length

**CDL = 9.645**

### Stability (Estimated)

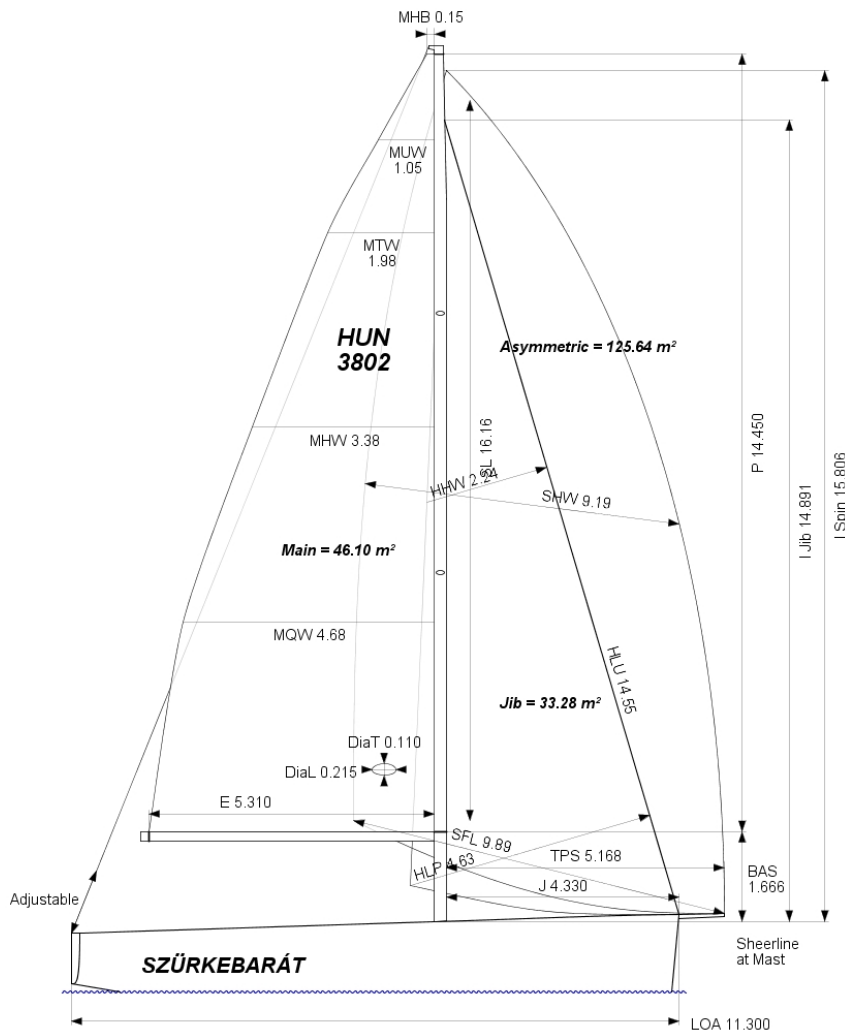
Limit Positive Stab.: **119.8°**  
Stability Index: **123.7**

### Owner

Zoltan Feind  
Kertalja u. 16  
8000 Székesfehérvár  
HUNGARY

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

Signature



BOAT	GPH	HULL
Name <b>Szürkebarát</b> Sail Nr <b>HUN-3802</b>	<b>616.8</b>	Data File <b>HUN3802</b> LOA <b>11.300m</b> Offset File <b>DEH38-</b> MB <b>3.758m</b> Displacement <b>7,590kg</b> Draft <b>2.033m</b>
<b>CLASS</b> Class <b>Dehler 38CS</b> Designer <b>Judel/Wrolijk</b> Builder <b>Hanse</b> Series <b>01/2013</b> Age Date <b>06/2013</b> Age Allowance <b>0.163%</b>		IMS Division <b>Cruiser/Racer</b> Dynamic All. <b>0.228%</b> Fwd Accom. <b>Yes</b> Construction <b>Cored</b> Fiber Rigging <b>No</b> Aramid Core <b>No</b> Crew Arm Ex Carbon Rudder <b>No</b> Light Stanchions <b>No</b>
<b>COMMENTS</b>		IMSL <b>10.693m</b> VCGD <b>0.127m</b> Sink <b>23.41kg/mm</b> RL <b>8.596m</b> VCGM <b>0.029m</b> WS <b>30.78m<sup>2</sup></b> LSM0 <b>10.654m</b> Displacement/Length ratio <b>6.2763</b>
<b>PROPELLER</b> Installation <b>Strut</b> PRD <b>0.435</b> Type <b>Folding 2 blades</b> PBW <b>0.135</b> PIPA <b>0.0040</b>		Water Ballast <b>0</b> Trim Tab <b>No</b> BLR Index <b>0.0000</b>
<b>SCORING OPTIONS</b>		<b>CENTERBOARD</b>  <b>N/A</b>
	<b>COASTAL / LONG DISTANCE</b>	<b>WINDWARD / LEEWARD</b>
Time on Distance	<b>598.8</b>	<b>673.7</b>
Time on Time	<b>1.0020</b>	<b>1.0019</b>
Triple Number	Low Medium High	Low Medium High
Time on Distance	<b>711.5 544.4 487.2</b>	<b>922.6 677.8 589.6</b>
Time on Time	<b>0.9487 1.2400 1.3855</b>	<b>0.7316 0.9958 1.1449</b>



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## ORC Club Certificate Appendix

BOAT	
Name	<b>Szürkebarát</b>
Certificate Number	<b>017/18</b>
Sail Nr	<b>HUN-3802</b>
Issued On	<b>08/06/2018</b>

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	<b>1085.6</b>	<b>891.9</b>	<b>783.0</b>	<b>720.2</b>	<b>694.6</b>	<b>683.9</b>	<b>674.3</b>
52°	<b>706.3</b>	<b>591.1</b>	<b>524.1</b>	<b>494.0</b>	<b>481.7</b>	<b>476.9</b>	<b>474.2</b>
60°	<b>666.8</b>	<b>561.2</b>	<b>504.6</b>	<b>480.5</b>	<b>468.6</b>	<b>463.3</b>	<b>459.9</b>
75°	<b>637.5</b>	<b>538.7</b>	<b>491.4</b>	<b>470.0</b>	<b>456.3</b>	<b>446.3</b>	<b>436.6</b>
90°	<b>620.6</b>	<b>516.2</b>	<b>476.0</b>	<b>464.2</b>	<b>453.0</b>	<b>439.2</b>	<b>416.0</b>
110°	<b>611.0</b>	<b>506.4</b>	<b>467.1</b>	<b>445.5</b>	<b>429.5</b>	<b>418.5</b>	<b>400.2</b>
120°	<b>627.1</b>	<b>517.2</b>	<b>472.1</b>	<b>448.1</b>	<b>425.9</b>	<b>405.1</b>	<b>382.1</b>
135°	<b>698.8</b>	<b>565.5</b>	<b>494.2</b>	<b>463.8</b>	<b>441.8</b>	<b>419.2</b>	<b>376.7</b>
150°	<b>825.4</b>	<b>658.3</b>	<b>557.3</b>	<b>499.9</b>	<b>475.2</b>	<b>456.3</b>	<b>421.8</b>
Run VMG	<b>953.1</b>	<b>760.1</b>	<b>643.5</b>	<b>577.2</b>	<b>545.5</b>	<b>503.2</b>	<b>456.2</b>
Selected Courses							
Windward / Leeward	<b>1019.3</b>	<b>826.0</b>	<b>713.2</b>	<b>648.7</b>	<b>620.1</b>	<b>593.5</b>	<b>565.3</b>
Circular Random	<b>852.9</b>	<b>686.8</b>	<b>597.9</b>	<b>546.8</b>	<b>515.9</b>	<b>496.1</b>	<b>471.5</b>
Coastal / Long Distance	<b>1012.7</b>	<b>773.5</b>	<b>640.1</b>	<b>563.3</b>	<b>526.3</b>	<b>495.1</b>	<b>448.9</b>
Non Spinnaker	<b>931.1</b>	<b>741.0</b>	<b>636.6</b>	<b>574.7</b>	<b>536.3</b>	<b>511.5</b>	<b>481.5</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>43.6°</b>	<b>41.9°</b>	<b>41.4°</b>	<b>40.9°</b>	<b>40.0°</b>	<b>39.6°</b>	<b>39.3°</b>
Beat VMG	<b>3.32</b>	<b>4.04</b>	<b>4.60</b>	<b>5.00</b>	<b>5.18</b>	<b>5.26</b>	<b>5.34</b>
52°	<b>5.10</b>	<b>6.09</b>	<b>6.87</b>	<b>7.29</b>	<b>7.47</b>	<b>7.55</b>	<b>7.59</b>
60°	<b>5.40</b>	<b>6.41</b>	<b>7.13</b>	<b>7.49</b>	<b>7.68</b>	<b>7.77</b>	<b>7.83</b>
75°	<b>5.65</b>	<b>6.68</b>	<b>7.33</b>	<b>7.66</b>	<b>7.89</b>	<b>8.07</b>	<b>8.25</b>
90°	<b>5.80</b>	<b>6.97</b>	<b>7.56</b>	<b>7.76</b>	<b>7.95</b>	<b>8.20</b>	<b>8.65</b>
110°	<b>5.89</b>	<b>7.11</b>	<b>7.71</b>	<b>8.08</b>	<b>8.38</b>	<b>8.60</b>	<b>9.00</b>
120°	<b>5.74</b>	<b>6.96</b>	<b>7.63</b>	<b>8.03</b>	<b>8.45</b>	<b>8.89</b>	<b>9.42</b>
135°	<b>5.15</b>	<b>6.37</b>	<b>7.28</b>	<b>7.76</b>	<b>8.15</b>	<b>8.59</b>	<b>9.56</b>
150°	<b>4.36</b>	<b>5.47</b>	<b>6.46</b>	<b>7.20</b>	<b>7.58</b>	<b>7.89</b>	<b>8.54</b>
Run VMG	<b>3.78</b>	<b>4.74</b>	<b>5.59</b>	<b>6.24</b>	<b>6.60</b>	<b>7.15</b>	<b>7.89</b>
Gybe Angles	<b>144.2°</b>	<b>148.0°</b>	<b>147.5°</b>	<b>149.6°</b>	<b>152.1°</b>	<b>176.0°</b>	<b>178.1°</b>