



**2020 ORC Club Certificate**

**Rating Office**  
 Estonian Yachting Union  
 Purje 8, maja 3  
 11911 Tallinn  
 Estonia

**Certificate**  
 Number **004/20**  
 Issued On **05/06/2020**  
 ORC Ref **03880000JTO**  
 VPP Ver. **2020 1.02**  
 Valid until **31/12/2020**

**Crew Weight**

Default	318kg
Maximum	315kg
Minimum*	230kg

\*when applied by the NoR and SI  
 Non Manual Pwr **No**

**Special Scoring**

ToD	ToT
Non Spin GPH <b>740.7</b>	<b>0.8100</b>
Non Spin OSN <b>717.7</b>	<b>0.8360</b>

**Sails Limitations**  
 Headsails **5** Spinnakers **4**

**Spinnaker configuration**  
 Symmetric: **Yes** **31.53**  
 Asymmetric: **No**  
 Flying H/S: **No**  
 Spin. Pole: **Yes**

**Class Division Length**  
 CDL = **6.405**

**Stability (Estimated)**  
 Limit Positive Stab.: **115.1°**  
 Stability Index: **107.4**

<b>BOAT</b> Name <b>PILLE-RIIN</b> Sail Nr <b>EST 24</b>	<b>GPH</b> <b>718.7</b>	<b>HULL</b> Data File <b>EST24</b> LOA <b>7.620m</b> Offset File <b>Polari19.off</b> MB <b>2.692m</b> Displacement <b>1,738kg</b> Draft <b>1.934m</b>
<b>CLASS</b> Class <b>Polaris 17</b> Designer <b>SET</b> Builder <b>SET</b> Series <b>06/1984</b> Age Date <b>01/1990</b> Age Allowance <b>0.487%</b>		IMS Division <b>Performance</b> Dynamic All. <b>0.018%</b> Plan Review Construction <b>Solid</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>6.126m</b> VCGD <b>-0.060m</b> Sink <b>8.42kg/mm</b> RL <b>6.693m</b> VCGM <b>-0.063m</b> WS <b>11.05m²</b> LSM0 <b>5.817m</b> Displacement/Length ratio <b>8.8298</b>
<b>PROPELLER</b> Type <b>No Propeller</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>699.1</b>	<b>771.1</b>
Time on Time	<b>0.8583</b>	<b>0.8754</b>
Triple Number	Low Medium High	Low Medium High
Time on Distance	<b>808.3 641.0 580.2</b>	<b>1032.4 772.0 685.2</b>
Time on Time	<b>0.8351 1.0530 1.1633</b>	<b>0.6538 0.8743 0.9851</b>

# 2020

## ORC Club Certificate Appendix

<b>BOAT</b>	
Name	<b>PILLE-RIIN</b>
Certificate Number	<b>004/20</b>
Sail Nr	<b>EST 24</b>
Issued On	<b>05/06/2020</b>

<b>TIME ALLOWANCES</b>							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	<b>1130.8</b>	<b>952.7</b>	<b>854.6</b>	<b>816.2</b>	<b>804.5</b>	<b>800.6</b>	<b>801.9</b>
52°	<b>757.4</b>	<b>654.5</b>	<b>614.7</b>	<b>596.7</b>	<b>588.3</b>	<b>584.1</b>	<b>583.0</b>
60°	<b>722.8</b>	<b>636.5</b>	<b>603.3</b>	<b>584.1</b>	<b>572.0</b>	<b>566.0</b>	<b>562.6</b>
75°	<b>700.8</b>	<b>624.6</b>	<b>593.7</b>	<b>570.7</b>	<b>552.2</b>	<b>539.3</b>	<b>529.6</b>
90°	<b>710.0</b>	<b>618.9</b>	<b>581.3</b>	<b>554.6</b>	<b>539.0</b>	<b>524.7</b>	<b>501.4</b>
110°	<b>723.7</b>	<b>620.4</b>	<b>580.5</b>	<b>548.1</b>	<b>520.4</b>	<b>498.0</b>	<b>474.1</b>
120°	<b>753.7</b>	<b>634.6</b>	<b>589.3</b>	<b>556.9</b>	<b>527.1</b>	<b>501.8</b>	<b>458.6</b>
135°	<b>840.9</b>	<b>689.3</b>	<b>614.7</b>	<b>579.6</b>	<b>548.7</b>	<b>520.9</b>	<b>473.1</b>
150°	<b>987.0</b>	<b>785.8</b>	<b>667.3</b>	<b>608.9</b>	<b>576.8</b>	<b>547.8</b>	<b>498.4</b>
Run VMG	<b>1139.6</b>	<b>906.5</b>	<b>765.3</b>	<b>668.6</b>	<b>612.7</b>	<b>580.5</b>	<b>526.6</b>
<b>Selected Courses</b>							
Windward / Leeward	<b>1135.2</b>	<b>929.6</b>	<b>809.9</b>	<b>742.4</b>	<b>708.6</b>	<b>690.5</b>	<b>664.3</b>
Circular Random	<b>974.2</b>	<b>793.5</b>	<b>698.2</b>	<b>643.9</b>	<b>611.2</b>	<b>590.0</b>	<b>563.0</b>
Coastal / Long Distance	<b>1135.6</b>	<b>877.5</b>	<b>739.2</b>	<b>663.1</b>	<b>624.0</b>	<b>592.6</b>	<b>538.3</b>
Non Spinnaker	<b>1013.3</b>	<b>821.2</b>	<b>719.0</b>	<b>660.2</b>	<b>624.5</b>	<b>601.5</b>	<b>572.7</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>40.9°</b>	<b>40.1°</b>	<b>37.9°</b>	<b>36.8°</b>	<b>36.4°</b>	<b>36.4°</b>	<b>36.8°</b>
Beat VMG	<b>3.18</b>	<b>3.78</b>	<b>4.21</b>	<b>4.41</b>	<b>4.48</b>	<b>4.50</b>	<b>4.49</b>
52°	<b>4.75</b>	<b>5.50</b>	<b>5.86</b>	<b>6.03</b>	<b>6.12</b>	<b>6.16</b>	<b>6.17</b>
60°	<b>4.98</b>	<b>5.66</b>	<b>5.97</b>	<b>6.16</b>	<b>6.29</b>	<b>6.36</b>	<b>6.40</b>
75°	<b>5.14</b>	<b>5.76</b>	<b>6.06</b>	<b>6.31</b>	<b>6.52</b>	<b>6.68</b>	<b>6.80</b>
90°	<b>5.07</b>	<b>5.82</b>	<b>6.19</b>	<b>6.49</b>	<b>6.68</b>	<b>6.86</b>	<b>7.18</b>
110°	<b>4.97</b>	<b>5.80</b>	<b>6.20</b>	<b>6.57</b>	<b>6.92</b>	<b>7.23</b>	<b>7.59</b>
120°	<b>4.78</b>	<b>5.67</b>	<b>6.11</b>	<b>6.46</b>	<b>6.83</b>	<b>7.17</b>	<b>7.85</b>
135°	<b>4.28</b>	<b>5.22</b>	<b>5.86</b>	<b>6.21</b>	<b>6.56</b>	<b>6.91</b>	<b>7.61</b>
150°	<b>3.65</b>	<b>4.58</b>	<b>5.40</b>	<b>5.91</b>	<b>6.24</b>	<b>6.57</b>	<b>7.22</b>
Run VMG	<b>3.16</b>	<b>3.97</b>	<b>4.70</b>	<b>5.38</b>	<b>5.88</b>	<b>6.20</b>	<b>6.84</b>
Gybe Angles	<b>148.0°</b>	<b>153.0°</b>	<b>156.0°</b>	<b>180.0°</b>	<b>180.0°</b>	<b>180.0°</b>	<b>180.0°</b>