



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

**2020  
ORC Club  
Certificate**

**Rating Office**

**Offshore  
Racing  
Congress**



**Certificate**

Number **CP1/20**  
Issued On **19/06/2020**  
ORC Ref **03090000L1M**  
VPP Ver. **2020 1.02**  
Valid until **31/12/2020**

**Crew Weight**

Default 575kg  
Maximum **450kg**  
Minimum\* **338kg**  
*\*when applied by the NoR and SI*  
Non Manual Pwr **No**

**Special Scoring**

	ToD	ToT
Non Spin GPH	<b>664.4</b>	<b>0.9031</b>
Non Spin OSN	<b>644.6</b>	<b>0.9309</b>

**Sails Limitations**

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

**Asymmetric on centerline**

**Spinnaker configuration**  
Symmetric: **No**  
Asymmetric: **Yes 102.43**  
Flying H/S: **No**  
Spin. Pole: **No**

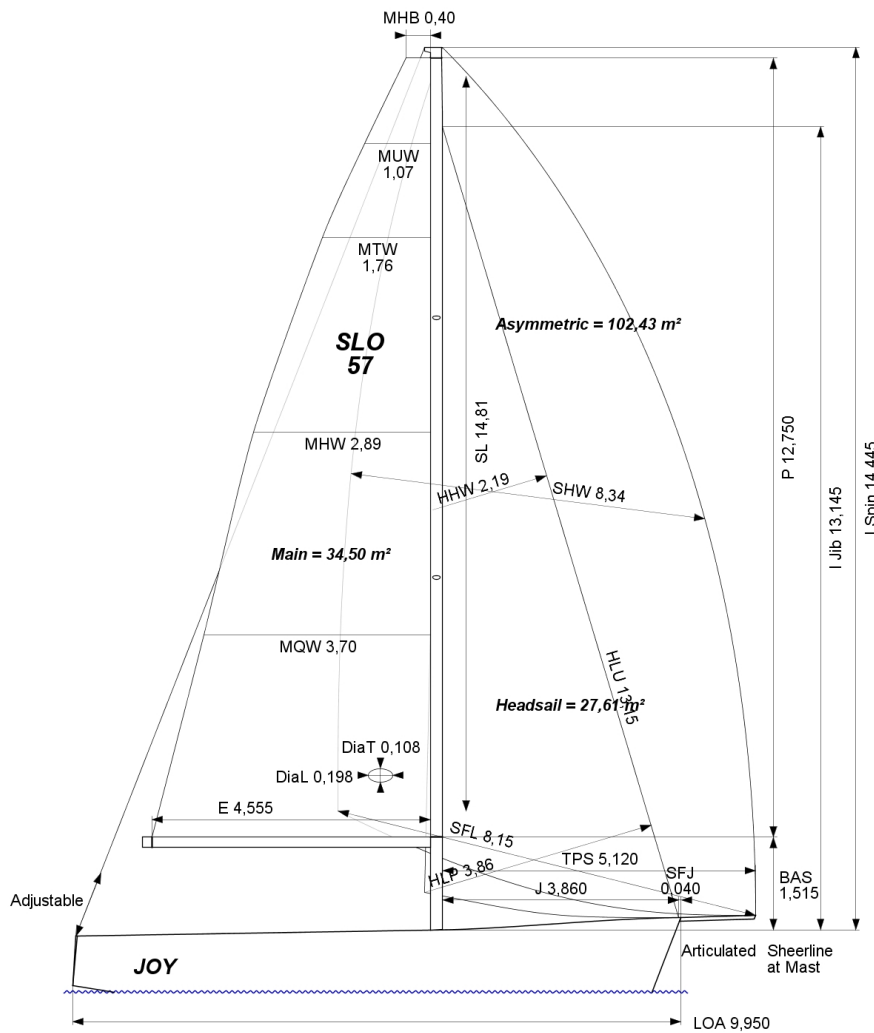
**Class Division Length**

**CDL = 8.681**

**Stability (Estimated)**

Limit Positive Stab.: **113.8°**  
Stability Index: **110.6**

**Owner**



BOAT	GPH	HULL
Name <b>Joy</b> Sail Nr <b>SLO 57</b>	<b>623.3</b>	Data File <b>SLO57</b> LOA <b>9.950m</b> Offset File <b>J99.OFF</b> MB <b>3.428m</b> Displacement <b>3,963kg</b> Draft <b>1.986m</b>
<b>CLASS</b> Class <b>J-99</b> Designer <b>Johnstone</b> Builder <b>J-Composites</b> Series <b>04/2019, CIN FR-JBC99048B020</b> Age Date <b>05/2020</b> Age Allowance <b>0.033%</b>		IMS Division <b>Cruiser/Racer</b> Dynamic All. <b>0.133%</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>9.105m</b> VCGD <b>-0.111m</b> Sink <b>16.38kg/mm</b> RL <b>8.255m</b> VCGM <b>0.013m</b> WS <b>21.40m<sup>2</sup></b> LSM0 <b>8.813m</b> Displacement/Length ratio <b>5.7897</b>
<b>PROPELLER</b> Installation <b>Strut</b> PRD <b>0.380</b> Type <b>Folding 2 blades</b> PBW <b>0.100</b> PIPA <b>0.0038</b>		Water Ballast <b>0</b> Trim Tab <b>No</b> BLR Index <b>0.0000</b>
		<b>CENTERBOARD</b> <b>N/A</b>
<b>SCORING OPTIONS</b>		
	<b>COASTAL / LONG DISTANCE</b>	<b>WINDWARD / LEEWARD</b>
Time on Distance	<b>607.8</b>	<b>684.1</b>
Time on Time	<b>0.9872</b>	<b>0.9867</b>
Triple Number	Low Medium High	Low Medium High
Time on Distance	<b>703.0 554.6 502.1</b>	<b>907.5 684.2 611.0</b>
Time on Time	<b>0.9602 1.2170 1.3444</b>	<b>0.7438 0.9866 1.1048</b>

# 2020

## ORC Club Certificate Appendix

BOAT							
Name	<b>Joy</b>	Certificate Number			<b>CP1/20</b>		
Sail Nr	<b>SLO 57</b>	Issued On			<b>19/06/2020</b>		

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	<b>1056.7</b>	<b>872.5</b>	<b>772.9</b>	<b>734.9</b>	<b>722.9</b>	<b>719.7</b>	<b>708.2</b>
52°	<b>691.4</b>	<b>582.6</b>	<b>532.6</b>	<b>514.8</b>	<b>508.8</b>	<b>506.2</b>	<b>499.0</b>
60°	<b>653.3</b>	<b>558.1</b>	<b>518.3</b>	<b>501.4</b>	<b>494.1</b>	<b>490.5</b>	<b>484.4</b>
75°	<b>624.5</b>	<b>541.0</b>	<b>507.5</b>	<b>488.1</b>	<b>473.9</b>	<b>464.8</b>	<b>458.4</b>
90°	<b>615.0</b>	<b>524.5</b>	<b>499.4</b>	<b>483.9</b>	<b>464.6</b>	<b>447.3</b>	<b>425.8</b>
110°	<b>604.3</b>	<b>515.5</b>	<b>481.7</b>	<b>457.9</b>	<b>442.5</b>	<b>429.4</b>	<b>405.8</b>
120°	<b>619.2</b>	<b>522.7</b>	<b>485.4</b>	<b>454.9</b>	<b>427.9</b>	<b>410.5</b>	<b>382.8</b>
135°	<b>692.5</b>	<b>561.1</b>	<b>504.9</b>	<b>474.1</b>	<b>443.8</b>	<b>414.9</b>	<b>353.5</b>
150°	<b>818.9</b>	<b>654.2</b>	<b>557.2</b>	<b>510.6</b>	<b>486.7</b>	<b>465.2</b>	<b>411.0</b>
Run VMG	<b>945.5</b>	<b>755.4</b>	<b>643.3</b>	<b>588.8</b>	<b>554.2</b>	<b>513.7</b>	<b>465.5</b>
Selected Courses							
Windward / Leeward	<b>1001.1</b>	<b>814.0</b>	<b>708.1</b>	<b>661.9</b>	<b>638.6</b>	<b>616.7</b>	<b>586.9</b>
Circular Random	<b>848.0</b>	<b>688.6</b>	<b>605.0</b>	<b>558.0</b>	<b>529.5</b>	<b>510.3</b>	<b>482.6</b>
Coastal / Long Distance	<b>995.6</b>	<b>764.1</b>	<b>641.0</b>	<b>577.2</b>	<b>542.4</b>	<b>512.4</b>	<b>460.4</b>
Non Spinnaker	<b>926.8</b>	<b>742.8</b>	<b>643.6</b>	<b>586.0</b>	<b>550.6</b>	<b>527.3</b>	<b>496.1</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>42.8°</b>	<b>41.3°</b>	<b>40.5°</b>	<b>39.0°</b>	<b>38.8°</b>	<b>39.4°</b>	<b>39.4°</b>
Beat VMG	<b>3.41</b>	<b>4.13</b>	<b>4.66</b>	<b>4.90</b>	<b>4.98</b>	<b>5.00</b>	<b>5.08</b>
52°	<b>5.21</b>	<b>6.18</b>	<b>6.76</b>	<b>6.99</b>	<b>7.08</b>	<b>7.11</b>	<b>7.21</b>
60°	<b>5.51</b>	<b>6.45</b>	<b>6.95</b>	<b>7.18</b>	<b>7.29</b>	<b>7.34</b>	<b>7.43</b>
75°	<b>5.76</b>	<b>6.65</b>	<b>7.09</b>	<b>7.38</b>	<b>7.60</b>	<b>7.75</b>	<b>7.85</b>
90°	<b>5.85</b>	<b>6.86</b>	<b>7.21</b>	<b>7.44</b>	<b>7.75</b>	<b>8.05</b>	<b>8.45</b>
110°	<b>5.96</b>	<b>6.98</b>	<b>7.47</b>	<b>7.86</b>	<b>8.13</b>	<b>8.38</b>	<b>8.87</b>
120°	<b>5.81</b>	<b>6.89</b>	<b>7.42</b>	<b>7.91</b>	<b>8.41</b>	<b>8.77</b>	<b>9.41</b>
135°	<b>5.20</b>	<b>6.42</b>	<b>7.13</b>	<b>7.59</b>	<b>8.11</b>	<b>8.68</b>	<b>10.18</b>
150°	<b>4.40</b>	<b>5.50</b>	<b>6.46</b>	<b>7.05</b>	<b>7.40</b>	<b>7.74</b>	<b>8.76</b>
Run VMG	<b>3.81</b>	<b>4.77</b>	<b>5.60</b>	<b>6.11</b>	<b>6.50</b>	<b>7.01</b>	<b>7.73</b>
Gybe Angles	<b>144.0°</b>	<b>147.8°</b>	<b>149.0°</b>	<b>150.8°</b>	<b>174.0°</b>	<b>177.0°</b>	<b>177.0°</b>