

<b>BOAT</b> Name <b>Aurora Pirnar</b> Sail Nr <b>SLO 3839</b>	<b>GPH</b> <b>612.3</b>	<b>HULL</b> Length Overall <b>10.600m</b> Maximum Beam <b>3.250m</b> Displacement <b>4,672kg</b> Draft <b>2.183m</b> IMS Reg. Division <b>Cruiser/Racer</b> Dynamic Allowance <b>0.010%</b> Fwd Accommodation <b>Yes</b> Hull Construction <b>Cored</b> Carbon Rudder <b>No</b> Crew Arm Extension
<b>GENERAL</b> Class <b>X-35 OD MOD.</b> Designer <b>Jeppesen</b> Builder <b>X-Yachts</b> Series <b>09/2005</b> Age <b>05/2007</b> Age Allowance <b>0.422%</b> Offset File <b>X35.OFF - 17/12/2005 11:51:04</b> Measurement by <b>MORASSUTTI - 13/06/2011</b>		IMSL <b>9.513m</b> VCGD <b>0.075m</b> Sink <b>17.84kg/mm</b> RL <b>8.946m</b> VCGM <b>0.054m</b> WS <b>23.32m<sup>2</sup></b> LSM0 <b>9.338m</b> Displacement/Length ratio <b>5.7377</b>



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SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	<b>595.5</b>			<b>663.7</b>		
Time on Time	<b>1.0075</b>			<b>1.0171</b>		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	<b>694.8</b>	<b>543.8</b>	<b>489.6</b>	<b>892.1</b>	<b>664.4</b>	<b>585.0</b>
Time on Time	<b>0.9715</b>	<b>1.2412</b>	<b>1.3787</b>	<b>0.7566</b>	<b>1.0160</b>	<b>1.1539</b>

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	<b>1003.9</b>	<b>832.9</b>	<b>738.7</b>	<b>706.0</b>	<b>695.3</b>	<b>691.9</b>	<b>680.5</b>
52°	<b>665.6</b>	<b>560.5</b>	<b>516.1</b>	<b>501.5</b>	<b>496.6</b>	<b>494.4</b>	<b>487.3</b>
60°	<b>633.4</b>	<b>540.3</b>	<b>504.5</b>	<b>489.4</b>	<b>483.4</b>	<b>480.6</b>	<b>473.8</b>
75°	<b>610.0</b>	<b>527.6</b>	<b>495.9</b>	<b>477.3</b>	<b>464.3</b>	<b>457.7</b>	<b>452.5</b>
90°	<b>617.3</b>	<b>525.4</b>	<b>491.4</b>	<b>475.0</b>	<b>456.1</b>	<b>440.0</b>	<b>422.5</b>
110°	<b>620.8</b>	<b>519.9</b>	<b>482.5</b>	<b>456.7</b>	<b>438.5</b>	<b>425.7</b>	<b>406.4</b>
120°	<b>638.3</b>	<b>530.2</b>	<b>488.2</b>	<b>459.5</b>	<b>432.5</b>	<b>409.8</b>	<b>384.3</b>
135°	<b>705.0</b>	<b>573.7</b>	<b>510.1</b>	<b>479.5</b>	<b>452.5</b>	<b>425.6</b>	<b>372.1</b>
150°	<b>834.7</b>	<b>665.2</b>	<b>563.9</b>	<b>508.9</b>	<b>480.4</b>	<b>455.4</b>	<b>406.5</b>
Run VMG	<b>963.9</b>	<b>768.1</b>	<b>650.1</b>	<b>576.3</b>	<b>524.4</b>	<b>491.3</b>	<b>443.0</b>

**Certificate**

Number **I10/18**  
ORC Ref **SLO00003729**  
Issued On **20/09/2018**  
VPP Ver. **2018 1.00**  
Valid until **31/12/2018**

**Crew Weight**

Default 624kg  
Maximum **670kg**  
Minimum\* **503kg**  
*\*when applied by the NoR and SI*  
Non Manual Pwr **No**

**Special Scoring**

	ToD	ToT
Double H.GPH	<b>618.1</b>	<b>0.9708</b>
Double H.OSN	<b>603.6</b>	<b>0.9940</b>
Non Spin GPH	<b>644.3</b>	<b>0.9312</b>
Non Spin OSN	<b>625.5</b>	<b>0.9593</b>

Selected Courses							
Windward / Leeward	<b>983.9</b>	<b>800.5</b>	<b>694.4</b>	<b>641.2</b>	<b>609.9</b>	<b>591.6</b>	<b>561.8</b>
Circular Random	<b>836.7</b>	<b>678.1</b>	<b>594.3</b>	<b>546.5</b>	<b>517.5</b>	<b>498.3</b>	<b>471.7</b>
Coastal / Long Distance	<b>981.9</b>	<b>753.5</b>	<b>629.9</b>	<b>564.4</b>	<b>528.7</b>	<b>499.9</b>	<b>452.0</b>
Non Spinnaker	<b>894.3</b>	<b>718.7</b>	<b>624.4</b>	<b>569.8</b>	<b>536.5</b>	<b>514.6</b>	<b>485.8</b>

**Sails Limitations**

Headsails	Spinnakers
<b>5</b>	<b>3</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>42.1°</b>	<b>41.0°</b>	<b>39.7°</b>	<b>38.3°</b>	<b>38.2°</b>	<b>38.2°</b>	<b>38.1°</b>
Beat VMG	<b>3.59</b>	<b>4.32</b>	<b>4.87</b>	<b>5.10</b>	<b>5.18</b>	<b>5.20</b>	<b>5.29</b>
52°	<b>5.41</b>	<b>6.42</b>	<b>6.97</b>	<b>7.18</b>	<b>7.25</b>	<b>7.28</b>	<b>7.39</b>
60°	<b>5.68</b>	<b>6.66</b>	<b>7.14</b>	<b>7.36</b>	<b>7.45</b>	<b>7.49</b>	<b>7.60</b>
75°	<b>5.90</b>	<b>6.82</b>	<b>7.26</b>	<b>7.54</b>	<b>7.75</b>	<b>7.87</b>	<b>7.96</b>
90°	<b>5.83</b>	<b>6.85</b>	<b>7.33</b>	<b>7.58</b>	<b>7.89</b>	<b>8.18</b>	<b>8.52</b>
110°	<b>5.80</b>	<b>6.92</b>	<b>7.46</b>	<b>7.88</b>	<b>8.21</b>	<b>8.46</b>	<b>8.86</b>
120°	<b>5.64</b>	<b>6.79</b>	<b>7.37</b>	<b>7.83</b>	<b>8.32</b>	<b>8.79</b>	<b>9.37</b>
135°	<b>5.11</b>	<b>6.28</b>	<b>7.06</b>	<b>7.51</b>	<b>7.96</b>	<b>8.46</b>	<b>9.67</b>
150°	<b>4.31</b>	<b>5.41</b>	<b>6.38</b>	<b>7.07</b>	<b>7.49</b>	<b>7.91</b>	<b>8.86</b>
Run VMG	<b>3.73</b>	<b>4.69</b>	<b>5.54</b>	<b>6.25</b>	<b>6.87</b>	<b>7.33</b>	<b>8.13</b>
Gybe Angles	<b>144.7°</b>	<b>148.9°</b>	<b>151.3°</b>	<b>158.3°</b>	<b>180.0°</b>	<b>180.0°</b>	<b>180.0°</b>

**Class Division Length**

CDL = **9.230**

**Storm Sails Areas**


Heavy Weather Jib **28.66**  
Storm Jib (JL=9.47) **10.61**  
Storm Trysail **11.89**

**Owner**

<b>BOAT</b>	
Name <b>Aurora Pirnar</b> File <b>SLO3839</b>	Sail Nr <b>SLO 3839</b> Data in <b>meters/kilograms</b>

<b>INCLINING TEST AND FREEBOARDS</b>		
Inclining Test <b>Current Inclining</b>		
Flotation date <b>30/03/2011</b>	SG <b>1.0240</b>	
FFM <b>1.315</b>	FF <b>1.321</b>	SFFP <b>0.075</b>
FAM <b>0.965</b>	FA <b>0.966</b>	SAFP <b>10.275</b>
W1 <b>68.3</b>	PD1 <b>524.3</b>	WD <b>11.200</b>
W2 <b>68.3</b>	PD2 <b>540.4</b>	GSA <b>1.0</b>
W3 <b>68.3</b>	PD3 <b>527.2</b>	RSA <b>1.0</b>
W4 <b>68.3</b>	PD4 <b>536.5</b>	PLM <b>9000.0</b>
LCF from stem on CL / on sheer		<b>6.004 / 6.198</b>
Maximum beam station from stem		<b>7.300</b>
RM Measured		<b>113.2kg·m</b>
RM Default		<b>122.2kg·m</b>
Limit of positive stability / Stab.Index		<b>115.1° / 116.4</b>
Freeboard at mast at 4.186		<b>1.100</b>

<b>RIG</b>	
Forestay Tension <b>Aft</b>	Spreaders <b>2</b>
Inner Stay <b>None Fitted</b>	Runners <b>0</b>
Carbon Mast <b>No</b>	Jumper Struts <b>None</b>
Taper Hollows <b>No</b>	Jib Furler <b>No</b>
Fiber Rigging <b>No</b>	Main Furler <b>No</b>
Lenticular Rigging <b>No</b>	Without Backstay <b>No</b>
Articulated Bowsprit <b>No</b>	
P <b>13.900</b>	E <b>4.890</b> MDT1 <b>0.125</b> MW <b>0.184</b>
IG <b>14.500</b>	J <b>4.186</b> MDL1 <b>0.184</b> GO <b>0.204</b>
ISP <b>14.520</b>	SFJ MDT2 <b>0.122</b> BD <b>0.220</b>
BAS <b>1.745</b>	SPL <b>4.170</b> MDL2 <b>0.140</b> MWT <b>168.000</b>
FSP <b>0.068</b>	TPS TL <b>1.210</b> MCG <b>4.700</b>




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<b>MIZZEN RIG AND SAILS</b>	
<b>N/A</b>	

<b>PROPELLER</b>		
Installation <b>Strut</b>	PRD <b>0.415</b>	
Type <b>Folding 2 blades</b>	PBW	
Twin Screw <b>No</b>	PIPA <b>0.0033</b>	
ST1 <b>0.042</b>	ST3 <b>0.180</b>	ST5 <b>0.255</b>
ST2 <b>0.180</b>	ST4 <b>0.112</b>	EDL <b>2.390</b>

<b>COMMENTS</b>

<b>MOVABLE BALLAST</b>	
<b>N/A</b>	

<b>CENTERBOARD</b>	
<b>N/A</b>	

<b>SAILS (Maximum Areas)</b>						
Mainsail	MHB	MUW	MTW	MHW	MQW	Area Area (r) Formula
	0.130	0.90	1.68	3.03	3.98	38.91 39.53 P/8 · (E + 2·MQW+ 2·MHW + 1.5·MTW + MUW + 0.5·MHB)
Symmetric	SLU	SLE	SL	SHW	SFL	90.56 SL · (SFL + 4·SHW) / 6
	14.36	14.36	14.36	7.52	7.76	
Asymmetric	Not Available					

<b>HEADSAILS</b>												
Area = 0.1125·HLU · (1.445·HLP + 2·HQW + 2·HHW + 1.5·HTW + HUW + 0.5·HHB)												
<b>HHB</b>	<b>HUW</b>	<b>HTW</b>	<b>HHW</b>	<b>HQW</b>	<b>HLP</b>	<b>HLU</b>	<b>Area</b>	<b>Btn</b>	<b>Fly</b>	<b>Meas.Date</b>	<b>Material</b>	<b>Comment</b>
0.10	0.65	1.20	2.26	3.31	4.42	14.39	32.42	Y		13/03/2017	Unknow	
0.08	0.61	1.16	2.23	3.27	4.41	14.39	31.99			22/03/2011	Unknow	
0.09	0.63	1.19	2.26	3.30	4.36	14.24	31.84	Y		18/09/2018	Carbon	
0.10	0.48	0.91	1.82	2.84	3.90	14.19	26.90	Y		11/03/2017	Unknow	

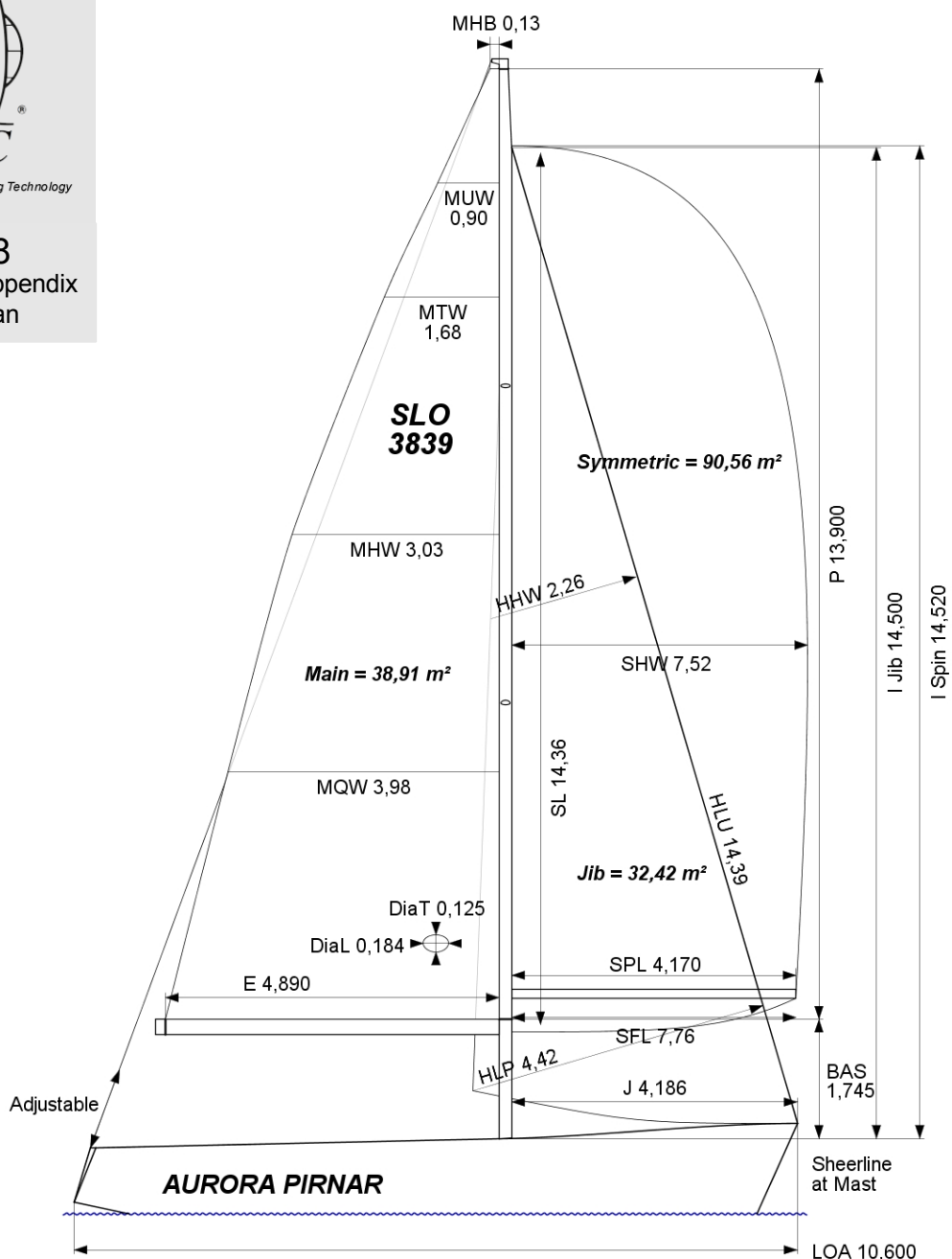
<b>MEASUREMENT INVENTORY</b>				
Measurer <b>MORASSUTTI 136</b>				
Date <b>30/03/2011</b>				
Comment <b>CALMA VENTO+MOTO ONDOSO</b>				
<b>Id</b>	<b>Item</b>	<b>Weight</b>	<b>Distance</b>	<b>VCG Description</b>
A4	Anchor	40.0	6.65	BRUCE
F4	Tools	6.5	5.77	PVC-BOX
<b>Id</b>	<b>Item</b>	<b>Maker</b>	<b>Model</b>	
E1	Engine	YAN MAR	RCD-2YM15	
<b>Id</b>	<b>Item</b>	<b>Weight</b>	<b>Description</b>	
DG	Deck-Gear	44.5		
S4	Fwd-Items	42.5	SAFETY-	

<b>MEASUREMENT INVENTORY</b>						
<b>Id</b>	<b>Item</b>	<b>Tank Use</b>	<b>Tank Type</b>	<b>Capcty</b>	<b>Dist.</b>	<b>VCG Condtn Description</b>
T2	Tank	WATER	PVC	150.0	5.40	0.0 EMPTY
T1	Tank	FUEL	INOX	60.0	6.10	7.0
<b>Id</b>	<b>Item</b>	<b>Weight</b>	<b>Distance</b>	<b>VCG</b>	<b>Description</b>	
BT3	Ballast	4.0	4.28		LEAD BARS ,CORRECTOR W. CLASS X-35	
BT2	Ballast	2.0	5.47		LEAD ,CORRECTOR W. CLASS X-35 OD	
BT1	Ballast	210.0	6.21		LEAD BARS IN BILGE	
B2	Battery	18.4	5.10		55 AH - ENGINE	
B1	Battery	46.8	4.80		120 AH SERVICE - EQUIPEMENTS	
GS1	Misc	3.0	9.57		GAS BOTTLE - FULL	



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Sail Plan



**SAILS INVENTORY**

**MAINSAIL (1)**

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment
M3	0.130	0.90	1.68	3.03	3.98	38.91	SLO03 Gale	11/09/2018	One Sails	Dacron	

**HEADSAILS (4)**

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
J2E	0.10	0.65	1.20	2.26	3.31	4.42	14.39	106%	32.42	Y		DEN 212	13/03/2017	Elwstroom	Nylon	Unknow
G1	0.08	0.61	1.16	2.23	3.27	4.41	14.39	105%	31.99			MORASS	22/03/2011	MILLENNIU		Unknow
G1O	0.09	0.63	1.19	2.26	3.30	4.36	14.24	104%	31.84	Y		SLO03	18/09/2018	One Sails	Carbon	
J3E	0.10	0.48	0.91	1.82	2.84	3.90	14.19	93%	26.90	Y		DEN 212	11/03/2017	Elwstroom		Unknow

**SYMMETRIC SPINNAKERS (4)**

Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment
S1E	14.36	14.36	14.36	7.52	7.76	90.56	DEN 212	21/04/2017	Elwstroom	Nylon	
S2E	14.36	14.36	14.36	7.51	7.75	90.44	DEN 212	21/04/2017	Elwstroom	Nylon	
S2	14.20	14.20	14.20	7.50	7.43	88.58	ESP 410	18/06/2011		Unknown	
S1	14.21	14.21	14.21	7.49	7.42	88.53	MORASS 136	22/03/2011	MILLENNIU	Unknown	

**ASYMMETRIC SPINNAKERS (0)**

Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment
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