

<b>BOAT</b> Name <b>BERENICE</b> Sail Nr <b>ITA-13816</b>	<b>GPH</b> <b>632,0</b>	<b>HULL</b> Length Overall <b>11,710 m</b> Maximum Beam <b>3,944 m</b> Displacement <b>7.540 kg</b> Draft <b>2,425 m</b> IMS Reg. Division <b>Cruiser/Racer</b> Dynamic Allowance <b>0,275%</b> Fwd Accommodation <b>Yes</b> Hull Construction <b>Solid</b> Carbon Rudder <b>No</b> Crew Arm Extension
<b>GENERAL</b> Class <b>SUN FAST 40</b> Designer <b>ANDRIEU</b> Builder <b>JEANNEAU</b> Series <b>06/1998</b> Age <b>09/2001</b> Age Allowance <b>0,487%</b> Offset File <b>F182.OFF - 31/5/1999 08:59:28</b> Measurement by <b>LORETANO-SANNA - 02/05/2014</b>		IMS L <b>10,544</b> VCGD <b>0,082</b> Sink <b>23,57 kg/mm</b> RL <b>8,697</b> VCGM <b>0,063</b> WS <b>31,71 m<sup>2</sup></b>



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<b>SCORING OPTIONS</b>						
	<b>OFFSHORE</b> COASTAL / LONG DISTANCE			<b>INSHORE</b> WINDWARD / LEEWARD		
Time On Distance	<b>611,7</b>			<b>680,8</b>		
Time On Time	<b>0,9809</b>			<b>0,9916</b>		
Performance Line	PLT	PLD		PLT	PLD	
	<b>0,802</b>	<b>83,7</b>		<b>0,725</b>	<b>124,0</b>	
Triple Number	Low	Medium	High	Low	Medium	High
	<b>0,9087</b>	<b>1,2155</b>	<b>1,3918</b>	<b>0,6976</b>	<b>0,9792</b>	<b>1,1741</b>

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<b>TIME ALLOWANCES</b>							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	<b>1102,1</b>	<b>904,3</b>	<b>791,0</b>	<b>716,0</b>	<b>681,2</b>	<b>664,9</b>	<b>653,3</b>
52°	<b>716,5</b>	<b>598,2</b>	<b>527,7</b>	<b>493,3</b>	<b>478,5</b>	<b>472,6</b>	<b>468,0</b>
60°	<b>673,9</b>	<b>566,1</b>	<b>506,8</b>	<b>480,2</b>	<b>466,6</b>	<b>459,4</b>	<b>454,1</b>
75°	<b>641,9</b>	<b>541,7</b>	<b>493,5</b>	<b>471,1</b>	<b>455,9</b>	<b>443,4</b>	<b>429,2</b>
90°	<b>641,9</b>	<b>532,5</b>	<b>483,7</b>	<b>466,4</b>	<b>457,7</b>	<b>443,4</b>	<b>417,6</b>
110°	<b>650,4</b>	<b>534,6</b>	<b>483,3</b>	<b>458,9</b>	<b>437,8</b>	<b>421,2</b>	<b>405,4</b>
120°	<b>674,0</b>	<b>553,6</b>	<b>492,2</b>	<b>465,3</b>	<b>445,0</b>	<b>424,6</b>	<b>394,0</b>
135°	<b>756,1</b>	<b>614,6</b>	<b>529,6</b>	<b>485,9</b>	<b>462,7</b>	<b>443,0</b>	<b>403,5</b>
150°	<b>904,1</b>	<b>710,3</b>	<b>599,5</b>	<b>526,4</b>	<b>486,1</b>	<b>463,5</b>	<b>424,8</b>
Run VMG	<b>1043,9</b>	<b>820,2</b>	<b>689,3</b>	<b>598,5</b>	<b>532,2</b>	<b>491,1</b>	<b>448,1</b>

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VPP Ver. **2015 1.01**  
Valid until **31/12/2015**

<b>Selected Courses</b>							
Windward / Leeward	<b>1073,0</b>	<b>862,2</b>	<b>740,2</b>	<b>657,3</b>	<b>606,7</b>	<b>578,0</b>	<b>550,7</b>
Circular Random	<b>886,3</b>	<b>709,2</b>	<b>612,3</b>	<b>554,9</b>	<b>519,1</b>	<b>495,8</b>	<b>467,1</b>
Ocean for PCS	<b>944,2</b>	<b>740,4</b>	<b>625,9</b>	<b>555,7</b>	<b>510,1</b>	<b>478,5</b>	<b>435,0</b>
Non Spinnaker	<b>949,7</b>	<b>753,3</b>	<b>644,4</b>	<b>578,9</b>	<b>537,8</b>	<b>511,2</b>	<b>479,9</b>

**Crew Weight**

Declared **500 kg**  
Default\* **733 kg**  
Non Manual Pwr **No**

<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>43,4°</b>	<b>41,7°</b>	<b>41,4°</b>	<b>40,4°</b>	<b>38,9°</b>	<b>38,5°</b>	<b>38,2°</b>
Beat VMG	<b>3,27</b>	<b>3,98</b>	<b>4,55</b>	<b>5,03</b>	<b>5,28</b>	<b>5,41</b>	<b>5,51</b>
52°	<b>5,02</b>	<b>6,02</b>	<b>6,82</b>	<b>7,30</b>	<b>7,52</b>	<b>7,62</b>	<b>7,69</b>
60°	<b>5,34</b>	<b>6,36</b>	<b>7,10</b>	<b>7,50</b>	<b>7,72</b>	<b>7,84</b>	<b>7,93</b>
75°	<b>5,61</b>	<b>6,65</b>	<b>7,30</b>	<b>7,64</b>	<b>7,90</b>	<b>8,12</b>	<b>8,39</b>
90°	<b>5,61</b>	<b>6,76</b>	<b>7,44</b>	<b>7,72</b>	<b>7,87</b>	<b>8,12</b>	<b>8,62</b>
110°	<b>5,54</b>	<b>6,73</b>	<b>7,45</b>	<b>7,85</b>	<b>8,22</b>	<b>8,55</b>	<b>8,88</b>
120°	<b>5,34</b>	<b>6,50</b>	<b>7,31</b>	<b>7,74</b>	<b>8,09</b>	<b>8,48</b>	<b>9,14</b>
135°	<b>4,76</b>	<b>5,86</b>	<b>6,80</b>	<b>7,41</b>	<b>7,78</b>	<b>8,13</b>	<b>8,92</b>
150°	<b>3,98</b>	<b>5,07</b>	<b>6,01</b>	<b>6,84</b>	<b>7,41</b>	<b>7,77</b>	<b>8,47</b>
Run VMG	<b>3,45</b>	<b>4,39</b>	<b>5,22</b>	<b>6,02</b>	<b>6,76</b>	<b>7,33</b>	<b>8,03</b>
Gybe Angles	<b>144,6°</b>	<b>150,3°</b>	<b>156,6°</b>	<b>169,3°</b>	<b>173,8°</b>	<b>178,2°</b>	<b>179,1°</b>

**Special Scoring**

	ToD	ToT
Double H.GPH	<b>632,7</b>	<b>0,9484</b>
Double H.OSN	<b>612,9</b>	<b>0,9789</b>
Non Spin GPH	<b>666,1</b>	<b>0,9008</b>
Non Spin OSN	<b>642,0</b>	<b>0,9345</b>
N/S Perf. Line	<b>51,9</b>	<b>0,715</b>

<b>Sails Limitations</b>	
Headsails	Spinnakers
<b>6</b>	<b>3</b>

**Class Division Length**  
CDL = **9,621**

**Storm Sails Areas**


Heavy Weather Jib **34,66**  
Storm Jib (JL=10,42) **12,84**  
Storm Triesail **12,61**

**Owner**

<b>BOAT</b>	
Name <b>BERENICE</b>	Sail Nr <b>ITA-13816</b>
File <b>(0)</b>	Data in <b>meters/kilograms</b>

<b>INCLINING TEST AND FREEBOARDS</b>			
Inclining Test <b>Current Inclining</b>			
Flotation date <b>14/05/2004</b>		SG <b>1,0250</b>	
FFM <b>1,347</b>	FF <b>1,349</b>	SFFP <b>0,626</b>	
FAM <b>1,089</b>	FA <b>1,095</b>	SAFP <b>10,840</b>	
W1 <b>28,250</b>	PD1 <b>58,8</b>	WD <b>11,820</b>	
W2 <b>56,500</b>	PD2 <b>117,5</b>	GSA <b>28,3</b>	
W3 <b>84,750</b>	PD3 <b>176,2</b>	RSA <b>11782,</b>	
W4 <b>113,00</b>	PD4 <b>235,0</b>	PLM <b>2037,0</b>	
LCF from stem on CL / on sheer		<b>6,458 / 6,739</b>	
Maximum beam station from stem		<b>7,414</b>	
RM Measured / Default		<b>202,1 / 195,2</b>	
Limit of positive stability / Stab.Index		<b>114,1° / 115,9</b>	
Freeboard at mast at 4,220		<b>1,227</b>	


<b>RIG</b>			
Forestay Tension <b>Aft</b>	Spreaders <b>3</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>14,860</b>	E <b>4,850</b>	MDT1 <b>0,118</b>	MW <b>0,215</b>
IG <b>15,910</b>	J <b>4,220</b>	MDL1 <b>0,215</b>	GO <b>0,245</b>
ISP <b>16,180</b>	SFJ	MDT2 <b>0,118</b>	BD <b>0,160</b>
BAS <b>1,700</b>	SPL <b>4,200</b>	MDL2 <b>0,215</b>	MWT
FSP <b>0,064</b>	TPS	TL <b>0,000</b>	MCG



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## 2015 Measurements Datasheet

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

<b>PROPELLER</b>			
Installation <b>Shaft exposed</b>	PRD <b>0,450</b>		
Type <b>Feathering 3 blades</b>	PBW <b>0,120</b>		
Twin Screw <b>No</b>	PIPA <b>0,0052</b>		
PSA <b>15,000</b>	PHL <b>0,130</b>	ST3 <b>0,090</b>	ESL <b>1,200</b>
PSD <b>0,030</b>	ST1 <b>0,023</b>	ST4 <b>0,055</b>	
PHD <b>0,068</b>	ST2 <b>0,080</b>	ST5 <b>0,290</b>	

<b>COMMENTS</b>

<b>MOVEABLE BALLAST</b>
N/A

<b>CENTERBOARD</b>
N/A

<b>SAILS (Maximum Areas)</b>						
Mainsail	HB	MGT	MGU	MGM	MGL	Area Area (r) Formula
	0,150	1,07	1,87	3,13	4,05	$P/8 \cdot (E + 2 \cdot MGL + 2 \cdot MGM + 1.5 \cdot MGU + MGT + 0.5 \cdot HB)$
Symmetric	SL	SMG	SF			
	15,80	7,62	7,44	99,86	$SL \cdot (SF + 4 \cdot SMG) / 6$	
<b>Asymmetric</b> Not Available						

<b>HEADSAILS</b>												
Area = 0.1125·JL·(1.445·LPG+2·JGL+2·JGM+1.5·JGU+JGT+0.5·JH)												
JH	JGT	JGU	JGM	JGL	LPG	JL	Area	Btn	Fly	Meas.Date	Material	Comment
0,05	0,53	1,09	2,14	3,20	4,19	15,79	33,62	N	N	02/05/2014	Unknow	

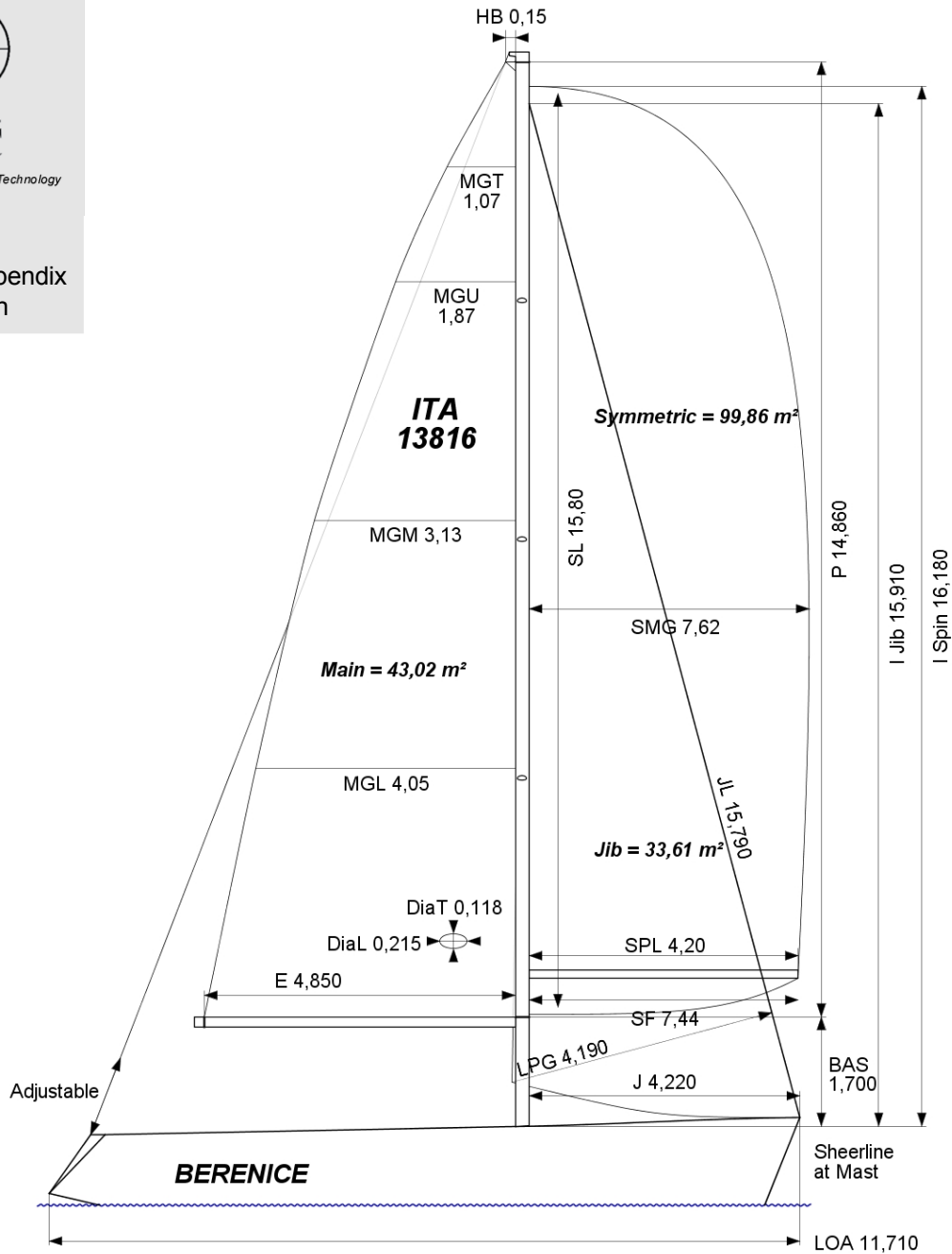
<b>MEASUREMENT INVENTORY</b>				
Measurer <b>SANNA78</b>				
Date <b>14/05/2004</b>				
Comment				
Id	Item	Weight	Distance	VCG Description
A	Anchor	15,0	4,37	0,00 BRUCE
A	Tools	10,0	6,07	0,00
Id	Item	Maker	Model	
A	Engine	VOLVO	2040	
Id	Item	Weight	Description	
A	Deck-Gear	20,0		

<b>MEASUREMENT INVENTORY</b>							
Id	Item	Tank Use	Tank Type	Capcty	Dist.	VCG	Condtn Description
A	Tank	GASOLIO	PVC	136,0	9,22	0,00	50,0 LT
B	Tank	ACQUA	PVC	160,0	9,32	0,00	0,0 VUOTO
C	Tank	ACQUA	PVC	160,0	2,62	0,00	0,0 VUOTO
Id	Item	Weight	Distance	VCG	Description		
A	Battery	0,0	8,82	0,00	2 DA 110 AH		
B	Battery	0,0	8,82	0,00	2 DA 110 AH		
A	Misc	4,0	11,00	0,00	BOMBOLA GPL		
B	Misc	0,0	11,00	0,00	BOMBOLA GPL		



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**2015**  
Certificate Appendix  
Sail Plan



**SAILS INVENTORY**

**MAINSAIL**

Id	HB	MGT	MGU	MGM	MGL	Area	Measurer	Meas.Date	Manufacture	Material	Comment
A	0,150	1,07	1,87	3,13	4,05	43,02	SANNA	07/05/2013	MURA	Unknown	

**HEADSAILS**

Id	JH	JGT	JGU	JGM	JGL	LPG	JL	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
A	0,05	0,53	1,09	2,14	3,20	4,19	15,79	99%	33,62	N	N	SANNA	02/05/2014		Unknown	

**SYMMETRIC SPINNAKERS**

Id	SL	SMG	SF	Area	Measurer	Meas.Date	Manufacture	Material	Comment
ORC	15,80	7,62	7,44	99,86					* Copied from legacy *

**ASYMMETRIC SPINNAKERS**

Id	SLU	SLE	ASL	AMG	ASF	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment
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