

<b>BOAT</b>	<b>GPH</b>	<b>HULL</b>
Name <b>Bianco</b> Sail Nr <b>FIN-11572</b>	<b>623.0</b>	Length Overall <b>10.660m</b> Maximum Beam <b>3.636m</b> Displacement <b>5,670kg</b> Draft <b>2.307m</b> IMS Reg. Division <b>Cruiser/Racer</b> Dynamic Allowance <b>0.194%</b> Fwd Accommodation <b>Yes</b> Hull Construction <b>Solid</b> Carbon Rudder <b>No</b> Crew Arm Extension
<b>GENERAL</b>		IMSL <b>9.738m</b> VCGD <b>0.118m</b> Sink <b>19.30kg/mm</b> RL <b>8.714m</b> VCGM <b>0.114m</b> WS <b>25.94m<sup>2</sup></b> LSM0 <b>9.592m</b> Displacement/Length ratio <b>6.4247</b>
Class <b>First 35</b> Designer <b>Bruce Farr</b> Builder <b>Beneteau</b> Series <b>02/2009</b> Age <b>06/2010</b> Age Allowance <b>0.325%</b> Offset File <b>FIRST 35 FIN KEEL.OFF - 15/11/2012</b> Measurement by - <b>09/04/2019</b>		



**2019**  
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Certificate

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SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	<b>605.4</b>			<b>674.1</b>		
Time on Time	<b>0.9911</b>			<b>1.0013</b>		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	<b>712.9</b>	<b>551.7</b>	<b>494.8</b>	<b>918.4</b>	<b>676.8</b>	<b>589.3</b>
Time on Time	<b>0.9469</b>	<b>1.2235</b>	<b>1.3643</b>	<b>0.7350</b>	<b>0.9974</b>	<b>1.1455</b>

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	<b>1037.2</b>	<b>862.0</b>	<b>761.3</b>	<b>715.3</b>	<b>700.6</b>	<b>695.4</b>	<b>683.4</b>
52°	<b>685.0</b>	<b>579.8</b>	<b>525.5</b>	<b>504.8</b>	<b>497.7</b>	<b>494.6</b>	<b>489.5</b>
60°	<b>650.0</b>	<b>554.7</b>	<b>511.4</b>	<b>492.9</b>	<b>484.7</b>	<b>481.1</b>	<b>477.4</b>
75°	<b>623.5</b>	<b>536.9</b>	<b>501.2</b>	<b>482.4</b>	<b>469.3</b>	<b>460.6</b>	<b>454.4</b>
90°	<b>631.7</b>	<b>533.6</b>	<b>493.2</b>	<b>479.2</b>	<b>463.3</b>	<b>448.3</b>	<b>427.3</b>
110°	<b>631.8</b>	<b>526.0</b>	<b>485.8</b>	<b>462.0</b>	<b>442.1</b>	<b>430.5</b>	<b>411.9</b>
120°	<b>651.5</b>	<b>537.4</b>	<b>491.0</b>	<b>465.4</b>	<b>441.8</b>	<b>419.9</b>	<b>394.2</b>
135°	<b>721.5</b>	<b>587.2</b>	<b>515.3</b>	<b>482.8</b>	<b>459.1</b>	<b>435.2</b>	<b>390.5</b>
150°	<b>856.4</b>	<b>680.3</b>	<b>575.6</b>	<b>513.7</b>	<b>483.7</b>	<b>461.4</b>	<b>417.6</b>
Run VMG	<b>988.9</b>	<b>785.6</b>	<b>664.0</b>	<b>584.9</b>	<b>530.0</b>	<b>493.9</b>	<b>449.7</b>

**Certificate**

Number **11572**  
ORC Ref **FIN00003918**  
Issued On **30/07/2019**  
VPP Ver. **2019 1.01**  
Valid until **31/12/2019**

**Crew Weight**

Default **649kg**  
Maximum **610kg**  
Minimum\* **458kg**  
*\*when applied by the NoR and SI*  
Non Manual Pwr **No**

**Special Scoring**

	ToD	ToT
Double H.GPH	<b>632.3</b>	<b>0.9489</b>
Double H.OSN	<b>615.9</b>	<b>0.9742</b>
Non Spin GPH	<b>656.4</b>	<b>0.9141</b>
Non Spin OSN	<b>636.0</b>	<b>0.9433</b>

Selected Courses							
Windward / Leeward	<b>1013.1</b>	<b>823.8</b>	<b>712.7</b>	<b>650.1</b>	<b>615.3</b>	<b>594.6</b>	<b>566.5</b>
Circular Random	<b>856.1</b>	<b>691.9</b>	<b>604.4</b>	<b>554.1</b>	<b>523.7</b>	<b>503.9</b>	<b>478.0</b>
Coastal / Long Distance	<b>1010.6</b>	<b>774.3</b>	<b>643.9</b>	<b>571.0</b>	<b>534.0</b>	<b>505.1</b>	<b>458.4</b>
Non Spinnaker	<b>916.6</b>	<b>734.5</b>	<b>635.8</b>	<b>578.3</b>	<b>543.0</b>	<b>520.3</b>	<b>491.8</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>42.0°</b>	<b>40.4°</b>	<b>39.7°</b>	<b>38.5°</b>	<b>38.0°</b>	<b>38.0°</b>	<b>38.0°</b>
Beat VMG	<b>3.47</b>	<b>4.18</b>	<b>4.73</b>	<b>5.03</b>	<b>5.14</b>	<b>5.18</b>	<b>5.27</b>
52°	<b>5.26</b>	<b>6.21</b>	<b>6.85</b>	<b>7.13</b>	<b>7.23</b>	<b>7.28</b>	<b>7.35</b>
60°	<b>5.54</b>	<b>6.49</b>	<b>7.04</b>	<b>7.30</b>	<b>7.43</b>	<b>7.48</b>	<b>7.54</b>
75°	<b>5.77</b>	<b>6.70</b>	<b>7.18</b>	<b>7.46</b>	<b>7.67</b>	<b>7.82</b>	<b>7.92</b>
90°	<b>5.70</b>	<b>6.75</b>	<b>7.30</b>	<b>7.51</b>	<b>7.77</b>	<b>8.03</b>	<b>8.42</b>
110°	<b>5.70</b>	<b>6.84</b>	<b>7.41</b>	<b>7.79</b>	<b>8.14</b>	<b>8.36</b>	<b>8.74</b>
120°	<b>5.53</b>	<b>6.70</b>	<b>7.33</b>	<b>7.74</b>	<b>8.15</b>	<b>8.57</b>	<b>9.13</b>
135°	<b>4.99</b>	<b>6.13</b>	<b>6.99</b>	<b>7.46</b>	<b>7.84</b>	<b>8.27</b>	<b>9.22</b>
150°	<b>4.20</b>	<b>5.29</b>	<b>6.25</b>	<b>7.01</b>	<b>7.44</b>	<b>7.80</b>	<b>8.62</b>
Run VMG	<b>3.64</b>	<b>4.58</b>	<b>5.42</b>	<b>6.15</b>	<b>6.79</b>	<b>7.29</b>	<b>8.01</b>
Gybe Angles	<b>145.0°</b>	<b>149.5°</b>	<b>151.2°</b>	<b>157.1°</b>	<b>180.0°</b>	<b>180.0°</b>	<b>180.0°</b>

**Class Division Length**

CDL = **9.227**

**Storm Sails Areas**

Heavy Weather Jib **28.28**  
Storm Jib (JL=9.41) **10.48**  
Storm Trysail **11.76**

**Owner**

<b>BOAT</b>	
Name <b>Bianco</b>	Sail Nr <b>FIN-11572</b>
File <b>L11572</b>	Data in <b>meters/kilograms</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>Yes</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>14.000</b>	E <b>4.800</b> MDT1 <b>0.091</b> MW <b>0.170</b>
IG <b>14.400</b>	J <b>3.960</b> MDL1 <b>0.170</b> GO <b>0.190</b>
ISP <b>14.433</b>	SFJ <b>0.000</b> MDT2 <b>0.088</b> BD <b>0.230</b>
BAS <b>1.593</b>	SPL <b>4.320</b> MDL2 <b>0.129</b> MWT <b>124.00</b>
FSP <b>0.060</b>	TPS TL <b>1.150</b> MCG <b>4.990</b>

<b>INCLINING TEST AND FREEBOARDS</b>			
Inclining Test <b>Current Inclining</b>			
Flotation date <b>07/05/2017</b>		SG <b>1.0050</b>	
FFM <b>1.388</b>	FF <b>1.393</b>	SFFP <b>0.422</b>	
FAM <b>1.075</b>	FA <b>1.083</b>	SAFP <b>10.320</b>	
W1 <b>81.4</b>	PD1 <b>622.2</b>	WD <b>11.705</b>	
W2 <b>81.4</b>	PD2 <b>623.3</b>	GSA <b>1.0</b>	
W3 <b>81.4</b>	PD3 <b>624.9</b>	RSA <b>1.0</b>	
W4 <b>81.4</b>	PD4 <b>623.4</b>	PLM <b>9000.0</b>	
LCF from stem on CL / on sheer		<b>5.833 / 6.085</b>	
Maximum beam station from stem		<b>6.761</b>	
RM Measured		<b>120.3kg·m</b>	
RM Default		<b>134.0kg·m</b>	
Limit of positive stability / Stab.Index		<b>117.7° / 117.7</b>	
Freeboard at mast at 3.960		<b>1.274</b>	



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

<b>PROPELLER</b>			
Installation <b>Strut</b>	PRD <b>0.410</b>		
Type <b>Folding 2 blades</b>	PBW <b>0.124</b>		
Twin Screw <b>No</b>	PIPA <b>0.0032</b>		
ST1 <b>0.040</b>	ST3 <b>0.180</b>	ST5 <b>0.220</b>	
ST2 <b>0.180</b>	ST4 <b>0.111</b>	EDL <b>2.120</b>	

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<b>COMMENTS</b>	
ADVERTISING LICENSE 2019 BY FBSF HIN: 73	

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

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



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<b>SAILS (Maximum Areas)</b>									
<b>Mainsail</b>	<b>MHB</b>	<b>MUW</b>	<b>MTW</b>	<b>MHW</b>	<b>MQW</b>	<b>Area</b>	<b>Area (r)</b>	<b>Formula</b>	
	0.160	1.04	1.81	3.06	3.97	39.72	40.47	P/8 · (E + 2·MQW+ 2·MHW + 1.5·MTW + MUW + 0.5·MHB)	
<b>Symmetric</b>	<b>SLU</b>	<b>SLE</b>	<b>SL</b>	<b>SHW</b>	<b>SFL</b>				
	14.35	14.35	14.35	7.40	7.57	88.90		SL · (SFL + 4·SHW) / 6	
<b>Asymmetric</b>									
Not Available									

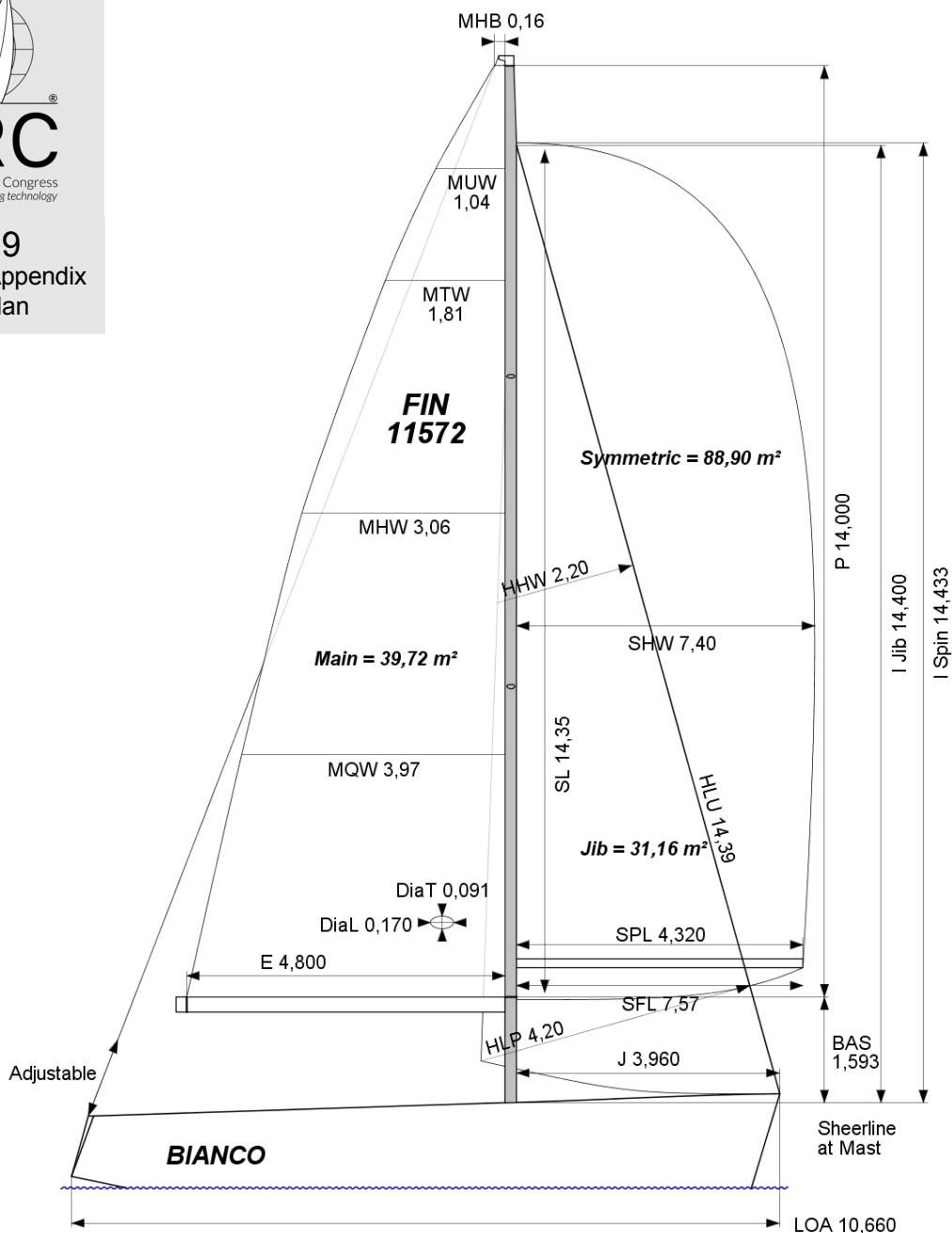
<b>HEADSAILS</b>												
Area = 0.1125·HLU · (1.445·HLP + 2·HQW + 2·HHW + 1.5·HTW + HUW + 0.5·HHB)												
<b>HHB</b>	<b>HUW</b>	<b>HTW</b>	<b>HHW</b>	<b>HQW</b>	<b>HLP</b>	<b>HLU</b>	<b>Area</b>	<b>Btn</b>	<b>Fly</b>	<b>Meas.Date</b>	<b>Material</b>	<b>Comment</b>
0.08	0.59	1.14	2.20	3.22	4.20	14.39	31.16	Y		09/04/2019	Unknow	
0.09	0.58	1.12	2.16	3.18	4.17	14.18	30.33	Y		11/04/2018	Kevlar	Remeasured
0.08	0.58	1.11	2.13	3.16	4.23	13.95	29.78	Y		07/04/2018	Kevlar	10273-002
0.08	0.51	0.96	1.92	2.92	3.92	14.12	27.54			08/06/2011	Unknow	76611
0.10	0.40	0.76	1.58	2.51	3.55	12.56	21.06			04/05/2013	Dacron	

<b>MEASUREMENT INVENTORY</b>				
Measurer				
Date <b>07/05/2017</b>				
Comment				
<b>Id</b>	<b>Item</b>	<b>Weight</b>	<b>Distance</b>	<b>VCG Description</b>
<b>Id</b>	<b>Item</b>	<b>Maker</b>	<b>Model</b>	
7	Engine	YANMAR	3 GM 30	
<b>Id</b>	<b>Item</b>	<b>Weight Description</b>		

<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</b>	<b>Condtn Description</b>
8	Tank FUEL		Steel	75.0	9.20	0.10	15-0
9	Tank WATER		PP	100.0	4.70	0.20	0-0
10	Tank WATER		PP	100.0	4.70	0.20	0-0
11	Tank HOLDING		PP	80.0	8.00	0.60	0-0
12	Tank Boiler			25.0	4.80		0-0
<b>Id</b>	<b>Item</b>	<b>Weight</b>	<b>Distance</b>	<b>VCG Description</b>			
4	Battery		6.60	0.20 48 Ah gel			
5	Battery		8.00	0.20 2 x 75 Ah gel			
11	Misc	15.0	9.90	0.40 Webasto			
	Misc						



**2019**  
Certificate Appendix  
Sail Plan



**SAILS INVENTORY**

MAINSAIL (2)																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
M19	0.45	0.99	1.78	3.04	3.97	39.74		01/04/2019	North Sails	Unknown						
M16	0.16	1.04	1.81	3.06	3.97	39.72		07/04/2018	North Sails	Kevlar	Remeas					
HEADSAILS (5)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
MH19	0.08	0.59	1.14	2.20	3.22	4.20	14.39	106%	31.16	Y			09/04/2019	North Sails	Unknown	Unknown
MH16	0.09	0.58	1.12	2.16	3.18	4.17	14.18	105%	30.33	Y			11/04/2018	North Sails	Kevlar	Remeasured
L15	0.08	0.58	1.11	2.13	3.16	4.23	13.95	107%	29.78	Y			07/04/2018	North Sails	Kevlar	10273-002
H11	0.08	0.51	0.96	1.92	2.92	3.92	14.12	99%	27.54				08/06/2011	NORTH	Unknown	76611
STRM	0.10	0.40	0.76	1.58	2.51	3.55	12.56	90%	21.06				04/05/2013	North Sails	Dacron	
SYMMETRIC SPINNAKERS (4)																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
S1.5-18	14.35	14.35	14.35	7.40	7.57	88.90		06/02/2018	North Sails	Unknown						
S2	14.09	14.09	14.09	7.36	7.15	85.93		27/04/2015	NORTH	Nylon	White					
S4	14.03	14.03	14.03	7.35	7.15	85.47		27/04/2015	NORTH	Nylon	White					
S5	13.85	13.85	13.85	6.86	6.95	79.39		21/04/2017	North Sails	Unknown						
ASYMMETRIC SPINNAKERS (0)																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				