

<b>BOAT</b> Name <b>DIRECTO</b> Sail Nr <b>EST 998</b>	<b>GPH</b> <b>625.7</b>	<b>HULL</b> Length Overall <b>10.300m</b> Maximum Beam <b>3.536m</b> Displacement <b>4,606kg</b> Draft <b>1.903m</b> IMS Reg. Division <b>Cruiser/Racer</b> Dynamic Allowance <b>0.099%</b> Fwd Accommodation <b>Yes</b> Hull Construction <b>Cored</b> Carbon Rudder <b>No</b> Crew Arm Extension
<b>GENERAL</b> Class <b>ITALIA 9.98</b> Designer <b>POLLI</b> Builder <b>ITALIA YACHTS</b> Series <b>09/2014</b> Age <b>10/2016</b> Age Allowance <b>0.130%</b> Offset File <b>IY998mp.off - 04/11/2015 14:00:04</b> Measurement by <b>A.Tetsmann - 24/04/2018</b>		IMSL <b>9.425m</b> VCGD <b>0.082m</b> Sink <b>17.74kg/mm</b> RL <b>8.375m</b> VCGM <b>0.076m</b> WS <b>23.54m<sup>2</sup></b> LSM0 <b>9.152m</b> Displacement/Length ratio <b>6.0086</b>



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SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	<b>607.2</b>			<b>680.3</b>		
Time on Time	<b>0.9881</b>			<b>0.9923</b>		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	<b>720.2</b>	<b>553.1</b>	<b>492.6</b>	<b>930.5</b>	<b>682.1</b>	<b>595.7</b>
Time on Time	<b>0.9372</b>	<b>1.2205</b>	<b>1.3704</b>	<b>0.7254</b>	<b>0.9896</b>	<b>1.1331</b>

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	<b>1071.8</b>	<b>884.7</b>	<b>778.7</b>	<b>729.7</b>	<b>714.1</b>	<b>709.6</b>	<b>704.6</b>
52°	<b>700.0</b>	<b>585.7</b>	<b>527.9</b>	<b>504.9</b>	<b>496.5</b>	<b>493.2</b>	<b>490.0</b>
60°	<b>661.6</b>	<b>557.7</b>	<b>511.8</b>	<b>491.9</b>	<b>481.3</b>	<b>476.8</b>	<b>475.4</b>
75°	<b>632.9</b>	<b>538.9</b>	<b>500.9</b>	<b>479.9</b>	<b>463.3</b>	<b>451.2</b>	<b>443.1</b>
90°	<b>639.1</b>	<b>534.8</b>	<b>493.0</b>	<b>475.1</b>	<b>457.8</b>	<b>439.4</b>	<b>413.9</b>
110°	<b>635.4</b>	<b>525.9</b>	<b>484.3</b>	<b>456.2</b>	<b>431.7</b>	<b>417.8</b>	<b>395.6</b>
120°	<b>652.0</b>	<b>536.5</b>	<b>490.0</b>	<b>460.5</b>	<b>432.5</b>	<b>407.7</b>	<b>374.6</b>
135°	<b>718.2</b>	<b>581.8</b>	<b>512.0</b>	<b>479.9</b>	<b>452.5</b>	<b>425.8</b>	<b>373.8</b>
150°	<b>852.9</b>	<b>676.0</b>	<b>569.9</b>	<b>510.0</b>	<b>480.5</b>	<b>455.2</b>	<b>407.1</b>
Run VMG	<b>984.8</b>	<b>780.6</b>	<b>657.7</b>	<b>579.4</b>	<b>526.9</b>	<b>492.1</b>	<b>443.5</b>

**Certificate**

Number **Est998**  
ORC Ref **EST00000235**  
Issued On **21/06/2018**  
VPP Ver. **2018 1.00**  
Valid until **31/12/2018**

**Crew Weight**

Default **607kg**  
Maximum **723kg**  
Minimum\* **542kg**  
*\*when applied by the NoR and SI*  
Non Manual Pwr **No**

**Special Scoring**

	ToD	ToT
Double H.GPH	<b>630.2</b>	<b>0.9521</b>
Double H.OSN	<b>614.4</b>	<b>0.9766</b>
Non Spin GPH	<b>659.1</b>	<b>0.9103</b>
Non Spin OSN	<b>638.7</b>	<b>0.9395</b>

Selected Courses							
Windward / Leeward	<b>1028.3</b>	<b>832.6</b>	<b>718.2</b>	<b>654.5</b>	<b>620.5</b>	<b>600.9</b>	<b>574.0</b>
Circular Random	<b>864.4</b>	<b>696.6</b>	<b>606.7</b>	<b>554.8</b>	<b>522.9</b>	<b>502.0</b>	<b>474.9</b>
Coastal / Long Distance	<b>1024.0</b>	<b>781.4</b>	<b>647.6</b>	<b>572.7</b>	<b>533.6</b>	<b>502.2</b>	<b>450.8</b>
Non Spinnaker	<b>923.8</b>	<b>738.7</b>	<b>638.3</b>	<b>579.4</b>	<b>543.3</b>	<b>519.8</b>	<b>490.5</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>43.9°</b>	<b>42.2°</b>	<b>41.5°</b>	<b>40.1°</b>	<b>40.3°</b>	<b>40.4°</b>	<b>40.6°</b>
Beat VMG	<b>3.36</b>	<b>4.07</b>	<b>4.62</b>	<b>4.93</b>	<b>5.04</b>	<b>5.07</b>	<b>5.11</b>
52°	<b>5.14</b>	<b>6.15</b>	<b>6.82</b>	<b>7.13</b>	<b>7.25</b>	<b>7.30</b>	<b>7.35</b>
60°	<b>5.44</b>	<b>6.45</b>	<b>7.03</b>	<b>7.32</b>	<b>7.48</b>	<b>7.55</b>	<b>7.57</b>
75°	<b>5.69</b>	<b>6.68</b>	<b>7.19</b>	<b>7.50</b>	<b>7.77</b>	<b>7.98</b>	<b>8.12</b>
90°	<b>5.63</b>	<b>6.73</b>	<b>7.30</b>	<b>7.58</b>	<b>7.86</b>	<b>8.19</b>	<b>8.70</b>
110°	<b>5.67</b>	<b>6.85</b>	<b>7.43</b>	<b>7.89</b>	<b>8.34</b>	<b>8.62</b>	<b>9.10</b>
120°	<b>5.52</b>	<b>6.71</b>	<b>7.35</b>	<b>7.82</b>	<b>8.32</b>	<b>8.83</b>	<b>9.61</b>
135°	<b>5.01</b>	<b>6.19</b>	<b>7.03</b>	<b>7.50</b>	<b>7.96</b>	<b>8.46</b>	<b>9.63</b>
150°	<b>4.22</b>	<b>5.33</b>	<b>6.32</b>	<b>7.06</b>	<b>7.49</b>	<b>7.91</b>	<b>8.84</b>
Run VMG	<b>3.66</b>	<b>4.61</b>	<b>5.47</b>	<b>6.21</b>	<b>6.83</b>	<b>7.31</b>	<b>8.12</b>
Gybe Angles	<b>145.2°</b>	<b>149.1°</b>	<b>150.5°</b>	<b>157.4°</b>	<b>175.5°</b>	<b>180.0°</b>	<b>180.0°</b>

**Class Division Length**

CDL = **8.901**

**Storm Sails Areas**

Heavy Weather Jib **25.63**  
Storm Jib (JL=8.96) **9.49**  
Storm Trysail **10.99**

**Owner**

<b>BOAT</b>	
Name <b>DIRECTO</b>	Sail Nr <b>EST 998</b>
File <b>Est0998</b>	Data in <b>meters/kilograms</b>

<b>INCLINING TEST AND FREEBOARDS</b>			
Inclining Test <b>Current Inclining</b>			
Flotation date <b>03/07/2017</b>		SG <b>1.0000</b>	
FFM <b>1.243</b>	FF <b>1.250</b>	SFFP <b>0.000</b>	
FAM <b>0.626</b>	FA <b>0.633</b>	SAFP <b>10.300</b>	
W1 <b>55.0</b>	PD1 <b>196.0</b>	WD <b>10.900</b>	
W2 <b>55.0</b>	PD2 <b>197.0</b>	GSA <b>12.6</b>	
W3 <b>55.0</b>	PD3 <b>197.0</b>	RSA <b>4298.7</b>	
W4 <b>55.0</b>	PD4 <b>198.0</b>	PLM <b>2005.0</b>	
LCF from stem on CL / on sheer		<b>5.584 / 5.813</b>	
Maximum beam station from stem		<b>7.304</b>	
RM Measured		<b>106.5kg-m</b>	
RM Default		<b>114.3kg-m</b>	
Limit of positive stability / Stab.Index		<b>118.4° / 115.6</b>	
Freeboard at mast at 4.315		<b>1.219</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>13.080</b>	E <b>4.800</b>	MDT1 <b>0.120</b>	MW <b>0.183</b>
IG <b>13.720</b>	J <b>4.215</b>	MDL1 <b>0.185</b>	GO <b>0.201</b>
ISP <b>13.832</b>	SFJ <b>0.100</b>	MDT2 <b>0.120</b>	BD <b>0.220</b>
BAS <b>1.500</b>	SPL <b>4.210</b>	MDL2 <b>0.155</b>	MWT <b>144.10</b>
FSP <b>0.076</b>	TPS	TL <b>0.800</b>	MCG <b>4.990</b>



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**IMS Measurement Certificate**

<b>Certificate</b>	
Number <b>Est998</b>	ORC Ref <b>EST00000235</b>
Issued On <b>21/06/2018</b>	
VPP Ver. <b>2018 1.00</b>	
Valid until <b>31/12/2018</b>	

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

<b>PROPELLER</b>			
Installation <b>Strut</b>	PRD <b>0.380</b>		
Type <b>Folding 2 blades</b>	PBW <b>0.100</b>		
Twin Screw <b>No</b>	PIPA <b>0.0039</b>		
ST1 <b>0.065</b>	ST3 <b>0.180</b>	ST5 <b>0.343</b>	
ST2 <b>0.180</b>	ST4 <b>0.110</b>	EDL <b>1.250</b>	

<b>COMMENTS</b>	

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

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



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<b>SAILS (Maximum Areas)</b>									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	0.360	1.05	1.77	2.96	3.90	36.63	37.33	P/8 · (E + 2·MQW + 2·MHW + 1.5·MTW + MUW + 0.5·MHB)	
Symmetric	SLU	SLE	SL	SHW	SFL	88.84		SL · (SFL + 4·SHW) / 6	
	13.76	13.76	13.76	7.81	7.50				
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>
0.12	0.74	1.37	2.41	3.36	4.40	13.57	31.68	Y		24/04/2018	Unknow	Light 3DL
0.11	0.71	1.32	2.44	3.45	4.39	13.40	31.46	Y		24/04/2018	Unknow	JibTop 3DL
0.12	0.73	1.36	2.39	3.33	4.36	13.47	31.17	Y		24/04/2018	Unknow	Medium 3Di
0.08	0.59	1.13	2.22	3.29	4.35	13.57	29.97	Y		22/11/2016	Unknow	Heavy

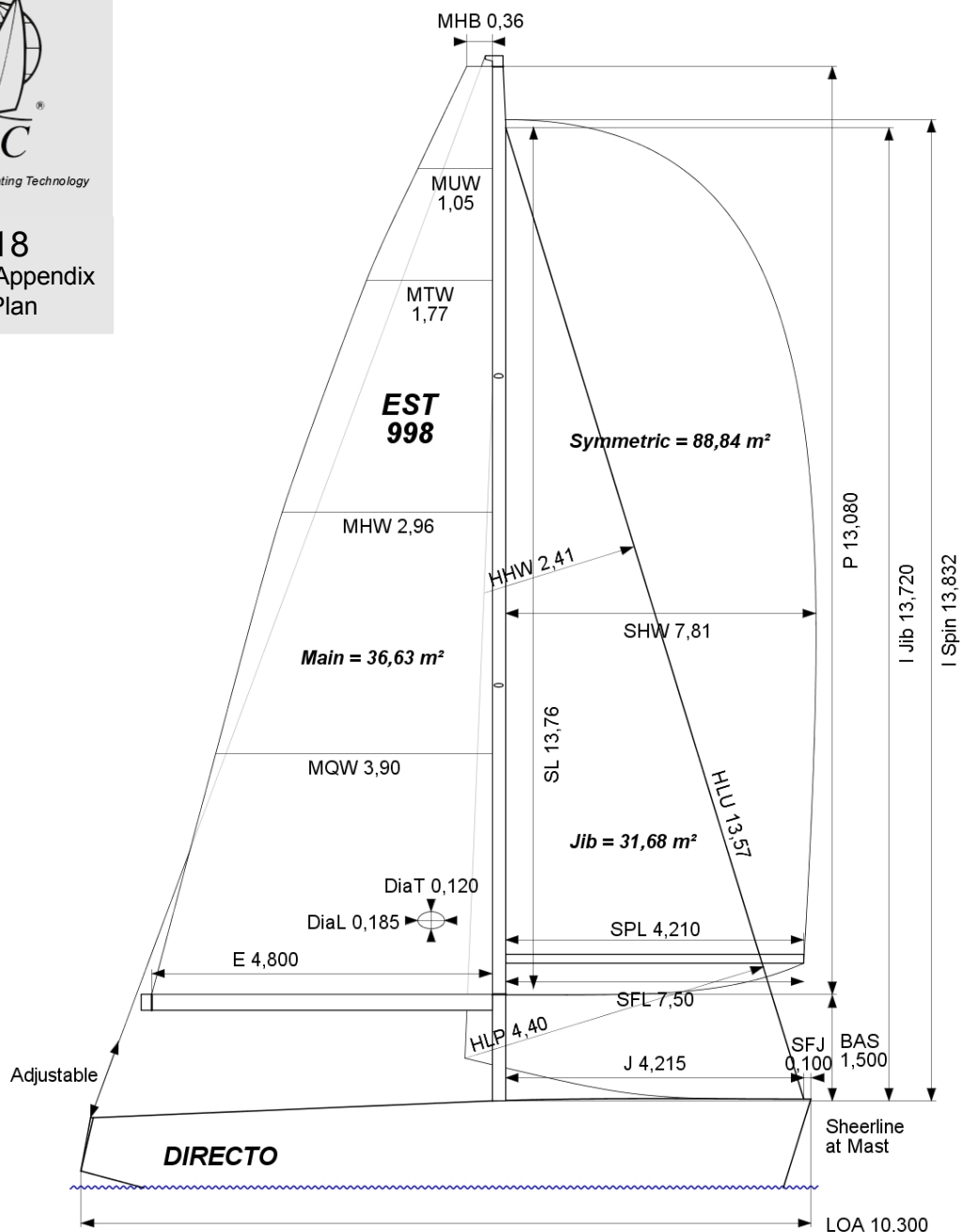
<b>MEASUREMENT INVENTORY</b>				
Measurer <b>Arvet Tetsmann EST 1</b>				
Date <b>03/07/2017</b>				
Comment				
<b>Id</b>	<b>Item</b>	<b>Weight</b>	<b>Distance</b>	<b>VCG Description</b>
<b>Id</b>	<b>Item</b>	<b>Maker</b>	<b>Model</b>	
1	Engine	Volvo-Penta	D1	
<b>Id</b>	<b>Item</b>	<b>Weight Description</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>
1	Tank	Water	PVC	110.0	4.30		0-0 Water
2	Tank	Diesel	PVC	61.0	7.50		40-0 Diesel
3	Tank	Waste	PVC	25.0	7.60		0-0 Waste
<b>Id</b>	<b>Item</b>	<b>Weight</b>	<b>Distance</b>	<b>VCG Description</b>			
1	Battery		4.30	70 Ah			
2	Battery		4.30	70 Ah			



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Sail Plan



**SAILS INVENTORY**

**MAINSAIL (1)**

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment
1	0.360	1.05	1.77	2.96	3.90	36.63	EST 1	13/07/2017	NORTH	Unknown	

**HEADSAILS (4)**

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
1b	0.12	0.74	1.37	2.41	3.36	4.40	13.57	104%	31.68	Y		EST 7	24/04/2018	NS	Unknown	Light 3DL
4b	0.11	0.71	1.32	2.44	3.45	4.39	13.40	104%	31.46	Y		EST 7	24/04/2018	NS	Unknown	JibTop 3DL
2b	0.12	0.73	1.36	2.39	3.33	4.36	13.47	103%	31.17	Y		EST 7	24/04/2018	NS	Unknown	Medium 3Di
3	0.08	0.59	1.13	2.22	3.29	4.35	13.57	103%	29.97	Y		Sizil	22/11/2016	NORTH	Unknown	Heavy

**SYMMETRIC SPINNAKERS (3)**

Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment
2	13.76	13.76	13.76	7.81	7.50	88.84	Hemamali	23/11/2016	NORTH	Nylon	S2
1	13.86	13.86	13.86	7.68	7.58	88.47	Hemamali	23/11/2016	NORTH	Nylon	S1.5
3	13.76	13.76	13.76	7.19	7.60	83.39	Hemamali	22/11/2016	NORTH	Unknown	S3

**ASYMMETRIC SPINNAKERS (0)**

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