

GPH = **596.3** CDL = **9.659**

**BOAT**

Class **J-112E**  
Designer **JOHNSTONE**  
Builder **J-BOATS**  
Age Date **05/2020**  
Series Date **10/2015**  
Offset File **J112-EST113.off**

**HULL**

Length Overall **11.000 m**  
Maximum Beam **3.598 m**  
Draft **2.054 m**  
Displacement **5,313 kg**  
DLR **5.3869**  
IMS Division **Cruiser/Racer**  
Dynamic Allowance **0.134%**  
Age Allowance **0.195%**

**PROPELLER**

Installation **Strut**  
Type **Folding 2 blades**  
Diameter **0.425m**

**CREW**

Maximum weight **760 kg**  
Minimum weight **570 kg \* when applied**  
Non Manual Power **No**  
Crew Arm Extension

**SAIL AREAS (m<sup>2</sup>)**

	Measured	Rated
Mainsail	<b>40.03</b>	<b>41.00</b>
Headsail Luffed	<b>34.52</b>	<b>34.52</b>
Headsail Flying		

Symmetric  
Asymmetric **124.87 124.87**  
*\* All asymmetric spinnakers with SHW/SFL > 85%*

**SAIL LIMITATIONS**

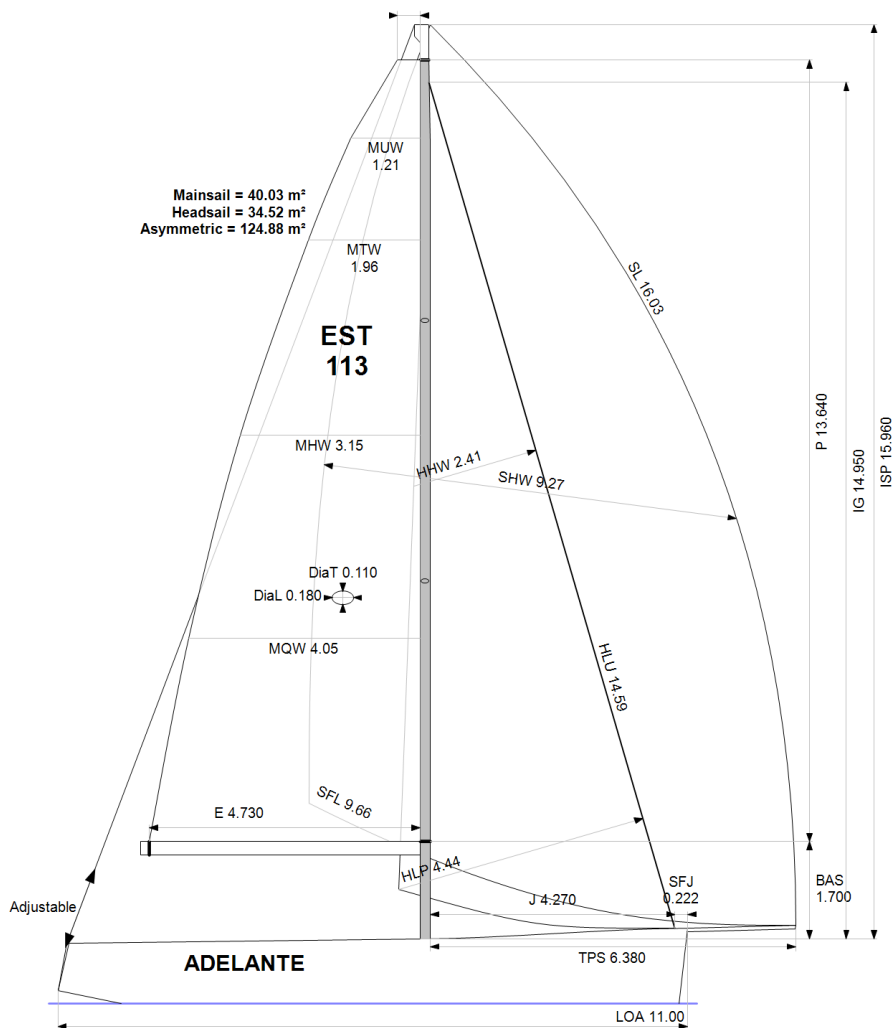
Headsails **5**  
Spinnakers **4**

**STABILITY**

Righting Moment **132.2 kg·m**  
Stability Index **123.1**

**OWNER**

*The owner certifies that he/she understands his/her responsibilities under ORC Rule and Regulations.*



Rated boat velocities in knots

Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat Angles	43.1°	41.6°	40.5°	39.4°	39.0°	38.6°	38.3°
Beat VMG	3.51	4.27	4.88	5.18	5.31	5.36	5.48
52°	5.40	6.45	7.11	7.39	7.50	7.56	7.65
60°	5.74	6.76	7.31	7.58	7.72	7.80	7.88
75°	6.02	6.99	7.46	7.77	8.03	8.23	8.39
90°	6.01	7.14	7.59	7.82	8.14	8.48	8.99
110°	6.13	7.27	7.82	8.28	8.60	8.88	9.42
120°	5.98	7.17	7.75	8.28	8.82	9.29	10.00
135°	5.35	6.64	7.44	7.93	8.47	9.05	10.59
150°	4.52	5.67	6.70	7.37	7.72	8.09	9.10
Run VMG	3.92	4.91	5.80	6.39	6.71	7.25	8.02
Gybe Angles	144.0°	147.0°	148.5°	150.8°	152.0°	176.5°	177.0°

Time Allowances in secs/NM							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1025.9	842.6	738.4	694.9	678.5	671.7	657.3
52°	666.5	558.4	506.5	487.0	479.9	476.4	470.5
60°	626.8	532.7	492.7	475.0	466.2	461.7	457.0
75°	598.2	515.1	482.5	463.3	448.2	437.6	429.1
90°	598.8	503.9	474.4	460.6	442.2	424.6	400.7
110°	587.1	495.0	460.4	434.8	418.5	405.4	382.3
120°	601.7	502.0	464.5	435.0	408.0	387.6	360.1
135°	672.8	541.8	483.7	453.9	425.0	397.7	339.8
150°	795.6	635.1	537.5	488.2	466.4	444.8	395.7
Run VMG	918.7	733.3	620.6	563.3	536.2	496.3	449.0
Selected Courses							
Windward / Leeward	972.3	788.0	679.5	629.1	607.3	584.0	553.1
All purpose	745.7	613.9	546.8	514.2	495.8	480.2	454.5

Single Number Scoring Options		
Course	Time On Distance	Time On Time
Windward / Leeward	659.6	0.9097
All purpose	532.2	1.1274

### Custom scoring options for Estonia

Single Number	Time On Distance	Time On Time
Coastal/Long Distance	580.2	1.0341
Triple Number Coastal/Long Distance Low	679.8	0.8826
Triple Number Coastal/Long Distance Medium	528.8	1.1347
Triple Number Coastal/Long Distance High	474.5	1.2646
Triple Number Windward/Leeward Low	880.2	0.6817
Triple Number Windward/Leeward Medium	653.7	0.9179
Triple Number Windward/Leeward High	578.3	1.0376

Performance Curve	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Coastal/Long Distance	966.9	739.1	614.2	548.8	514.9	484.2	434.6



Data in meters/kilograms (Metric)

**HULL AND APPENDAGES**

Class	<b>J-112E</b>	LOA	<b>11.000</b>	VCGD	<b>-0.059</b>
Measurement	<b>28/05/2020</b>	Max. Beam	<b>3.598</b>	VCGM	<b>-0.106</b>
Measurer		Draft	<b>2.054</b>	RM Measured (kg·m)	<b>132.2</b>
HIN		Displacement	<b>5.313</b>	RM Default (kg·m)	<b>127.9</b>
Plan review		Wetted area	<b>25.85</b>	Limit of positive stability(°)	<b>123.5</b>
Hull construction	<b>Cored</b>	IMS L	<b>10.094</b>	Stability Index	<b>123.1</b>
Carbon Rudder	<b>No</b>	LSM0	<b>9.954</b>		
Light stanchions	<b>No</b>	Acc. length	<b>11.000</b>		
Trim tab	<b>No</b>	Sink (kg/mm)	<b>18.90</b>		

**PROPELLER**

Propeller Type	<b>Folding 2 blades</b>	PRD	<b>0.425</b>	EDL	<b>2.140</b>	ST3	<b>0.180</b>
Installation	<b>Strut</b>	PBW	<b>0.100</b>	ST1	<b>0.065</b>	ST4	<b>0.090</b>
Twin screw	<b>No</b>			ST2	<b>0.180</b>	ST5	<b>0.300</b>
PIPA	<b>0.0031</b>						

**RIG**

Forestay tension	<b>Aft</b>	P	<b>13.640</b>	E	<b>4.730</b>
Inner stay	<b>None Fitted</b>	IG	<b>14.950</b>	J	<b>4.270</b>
Carbon mast	<b>Yes</b>	ISP	<b>15.960</b>	BAS	<b>1.700</b>
Headsail furler	<b>No</b>	MDT1	<b>0.110</b>	FSD	<b>0.038</b>
Mainsail furler	<b>No</b>	MDL1	<b>0.180</b>	SFJ	<b>0.222</b>
Articulated bowsprit	<b>No</b>	MDT2	<b>0.102</b>	SPL	
Non-circular rigging	<b>No</b>	MDL2	<b>0.146</b>	TPS	<b>6.380</b>
Fiber rigging	<b>No</b>	TL	<b>1.460</b>	BD	<b>0.237</b>
Runners/Checkstays	<b>0</b>	MW	<b>0.173</b>	MWT	<b>108.00</b>
Spreaders	<b>2</b>	GO	<b>0.198</b>	MCG	<b>4.290</b>

**FLOTATION AND STABILITY**

Inclining Test	<b>Poles Inclining</b>	SFFP	<b>0.488</b>	SAFP	<b>10.805</b>	W1	<b>79.0</b>	PD1	<b>589.5</b>	WD	<b>12.540</b>
Flotation Date	<b>25/07/2021</b>	FFM	<b>1.297</b>	FAM	<b>1.043</b>	W2	<b>79.0</b>	PD2	<b>590.0</b>	PLM	<b>9000.00</b>
Measurer		FF	<b>1.304</b>	FA	<b>1.051</b>	W3	<b>79.0</b>	PD3	<b>590.8</b>	GSA	<b>1.0</b>
Comment	<b>Pirita</b>	LCFcl	<b>5.851</b>	LCFsh	<b>6.088</b>	W4	<b>79.0</b>	PD4	<b>589.7</b>	RSA	<b>1.0</b>
		SG	<b>1.0000</b>	HBI	<b>1.129</b>						

**MEASUREMENT INVENTORY**

Id	Tank	Type	Capacity	LCG	VCG	Condition	Description
1	Water	Neopren bag	100.0	2.00		<del>0.0</del>	At the bow
2	Fuel	Plastic	80.0	8.27		<del>45.0</del>	Starport aft cabin
Id	Item	Description	Weight	LCG	VCG		
1	Ballast	Centerline	28.9	3.02			
2	Ballast	Centerline	108.4	2.52			
3	Ballast	Centerline	66.7	3.52			
4	Ballast	Centerline	87.0	4.07			
5	Ballast	Centerline	29.3	4.50			
6	Ballast	Centerline	108.4	5.27			
7	Ballast		88.5	5.72			
<b>Total ballast</b>			<b>517.2</b>				
Id	Item	Description	Weight	LCG	VCG		
1	Battery	2x165ah starport side		4.73			
2	Miscellaneous	Air heater, port aft cabin		8.27			
1	Miscellaneous	autopilot		10.00			



**MAINSAIL**

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Maker	Material	Comment
1b	0.40	1.21	1.96	3.15	4.05	40.03		21/07/2020	One sails	Unknown	2019

**HEADSAIL**

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Btn	Flying	FT	Area	Measurer	Meas.Date	Maker	Material	Comment
1a	0.16	0.79	1.39	2.41	3.42	4.44	14.59	Yes	No		34.52		20/07/2019	One sails	Unknown	J1
2a	0.17	0.77	1.37	2.37	3.40	4.44	14.62	Yes	No		34.31		20/07/2019	One Sails	Unknown	J2
4a	0.05	0.87	1.76	3.30	4.23	4.62	12.00	No	Inner		34.11		02/07/2019	One Sails	Unknown	Staysail
8	0.03	0.87	1.71	3.12	4.08	4.44	11.46	No	Inner		31.28		24/03/2021	OneSails	Unknown	SS 2021
3a	0.13	0.51	0.97	1.99	3.13	4.33	13.79	Yes	No		28.74		03/05/2019	One sails	Unknown	J3
7	0.11	0.58	1.09	2.18	2.30	4.34	13.41	Yes	No		26.40		22/02/2021	OneSails	Unknown	J3 2021

**ASYMMETRIC SPINNAKER**

Id	SLU	SLE	SL	SHW	SFL	Ratio	Area	Measurer	Meas.Date	Maker	Material	Comment
5a	18.00	14.06	16.03	9.27	9.66	96%	124.87		20/07/2021	OneSails	Unknown	A4 2021
8a	17.84	14.00	15.92	9.20	9.66	95%	123.27		20/07/2021	OneSails	Unknown	A2 2021
1a	17.57	15.01	16.29	8.95	8.93	100%	121.44				Unknown	A-1
4a	17.50	14.60	16.05	7.39	7.70	96%	99.67				Unknown	A-3