

GPH = **611.8** CDL = **9.103**

**BOAT**

Class **First 35**  
Designer **Bruce Farr**  
Builder **Beneteau**  
Age Date **04/2010**  
Series Date **02/2009**  
Offset File **FIRST35-EST935.off**

**HULL**

Length Overall **10.660 m**  
Maximum Beam **3.636 m**  
Draft **2.033 m**  
Displacement **5,423 kg**  
DLR **6.3427**  
IMS Division **Cruiser/Racer**  
Dynamic Allowance **0.082%**  
Age Allowance **0.390%**

**PROPELLER**

Installation **Strut**  
Type **Folding 2 blades**  
Diameter **0.410m**

**CREW**

Maximum weight **715 kg**  
Minimum weight **536 kg \* when applied**  
Non Manual Power **No**  
Crew Arm Extension

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

	Measured	Rated
Mainsail	<b>44.07</b>	<b>45.02</b>
Headsail Luffed	<b>31.71</b>	<b>31.71</b>
Headsail Flying		
Symmetric	<b>106.54</b>	<b>106.54</b>
Asymmetric		

**SAIL LIMITATIONS**

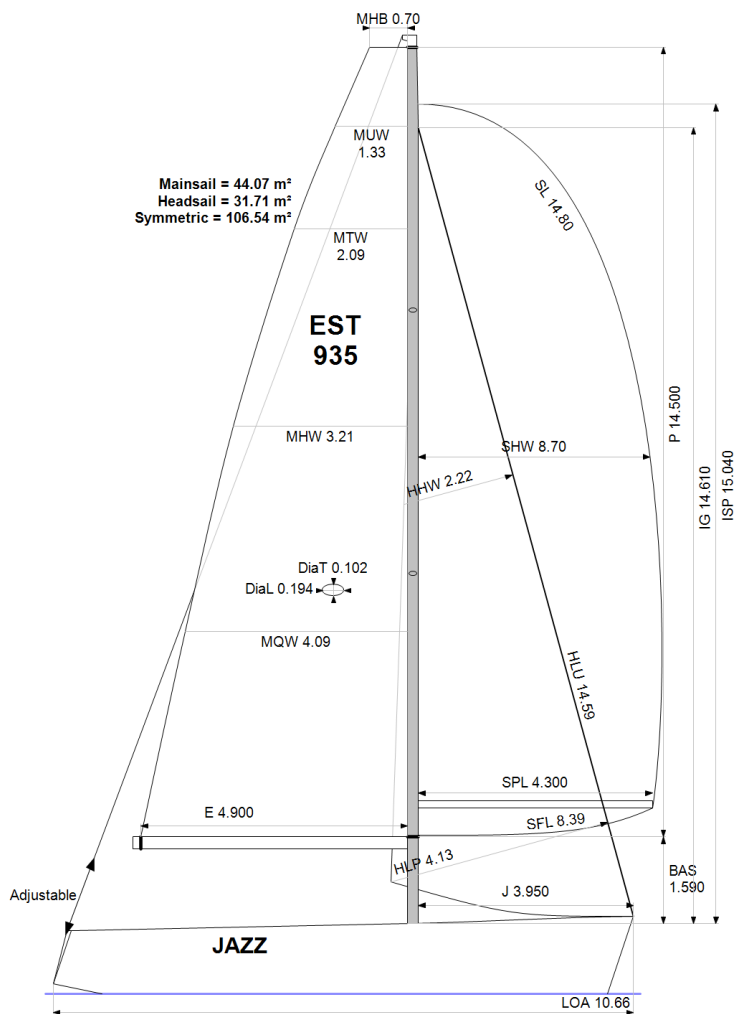
Headsails **5**  
Spinnakers **4**

**STABILITY**

Righting Moment **126.9 kg·m**  
Stability Index **123.5**

**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	42.8°	41.6°	40.5°	39.4°	39.0°	39.0°	40.1°
Beat VMG	3.49	4.22	4.76	4.99	5.08	5.10	5.16
52°	5.35	6.35	6.94	7.17	7.25	7.29	7.38
60°	5.68	6.63	7.14	7.37	7.46	7.51	7.61
75°	5.95	6.85	7.28	7.57	7.78	7.90	8.00
90°	5.89	6.91	7.37	7.63	7.93	8.21	8.58
110°	5.92	7.03	7.56	7.97	8.27	8.51	8.93
120°	5.77	6.92	7.49	7.94	8.43	8.85	9.39
135°	5.22	6.42	7.20	7.65	8.11	8.60	9.79
150°	4.39	5.49	6.50	7.20	7.62	8.04	8.99
Run VMG	3.81	4.76	5.63	6.36	6.97	7.44	8.24
Gybe Angles	141.0°	148.5°	150.5°	158.0°	180.0°	180.0°	180.0°

Time Allowances in secs/NM							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1030.7	852.5	756.3	721.2	709.3	705.6	697.5
52°	672.6	567.2	518.9	502.1	496.4	494.0	487.7
60°	634.2	542.6	504.5	488.7	482.3	479.2	473.3
75°	605.1	525.7	494.3	475.9	462.9	455.6	450.3
90°	611.6	520.9	488.5	472.0	454.2	438.3	419.4
110°	607.7	511.9	476.3	451.8	435.6	423.3	403.1
120°	624.4	520.1	480.7	453.2	427.1	406.8	383.4
135°	689.9	560.8	500.2	470.8	444.1	418.4	367.8
150°	819.2	655.3	553.7	499.8	472.3	447.6	400.6
Run VMG	945.9	756.7	639.0	565.9	516.3	484.1	436.7
Selected Courses							
Windward / Leeward	988.3	804.6	697.6	643.6	612.8	594.8	567.1
All purpose	759.4	628.7	562.3	529.4	508.3	494.8	472.7

Single Number Scoring Options		
Course	Time On Distance	Time On Time
Windward / Leeward	672.9	0.8917
All purpose	546.9	1.0971

### Custom scoring options for Estonia

Single Number	Time On Distance	Time On Time
Coastal/Long Distance	596.2	1.0064
Triple Number Coastal/Long Distance Low	694.0	0.8645
Triple Number Coastal/Long Distance Medium	543.3	1.1043
Triple Number Coastal/Long Distance High	489.9	1.2247
Triple Number Windward/Leeward Low	896.5	0.6693
Triple Number Windward/Leeward Medium	667.3	0.8991
Triple Number Windward/Leeward High	588.9	1.0188

Performance Curve	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Coastal/Long Distance	984.1	755.6	630.9	564.7	528.6	499.6	451.5



Data in meters/kilograms (Metric)

**HULL AND APPENDAGES**

Class	<b>First 35</b>	LOA	<b>10.660</b>	VCGD	<b>-0.011</b>
Measurement	<b>04/10/2010</b>	Max. Beam	<b>3.636</b>	VCGM	<b>-0.001</b>
Measurer		Draft	<b>2.033</b>	RM Measured (kg·m)	<b>126.9</b>
HIN		Displacement	<b>5,423</b>	RM Default (kg·m)	<b>134.4</b>
Plan review		Wetted area	<b>26.04</b>	Limit of positive stability(°)	<b>124.3</b>
Hull construction	<b>Solid</b>	IMS L	<b>9.653</b>	Stability Index	<b>123.5</b>
Carbon Rudder	<b>No</b>	LSM0	<b>9.491</b>		
Light stanchions		Acc. length	<b>10.660</b>		
Trim tab	<b>No</b>	Sink (kg/mm)	<b>18.98</b>		

**PROPELLER**

Propeller Type	<b>Folding 2 blades</b>	PRD	<b>0.410</b>	EDL	<b>2.190</b>	ST3	<b>0.180</b>
Installation	<b>Strut</b>	PBW	<b>0.110</b>	ST1	<b>0.040</b>	ST4	<b>0.110</b>
Twin screw	<b>No</b>			ST2	<b>0.180</b>	ST5	<b>0.280</b>
PIPA	<b>0.0033</b>						

**RIG**

Forestay tension	<b>Aft</b>	P	<b>14.500</b>	E	<b>4.900</b>
Inner stay	<b>None Fitted</b>	IG	<b>14.610</b>	J	<b>3.950</b>
Carbon mast	<b>Yes</b>	ISP	<b>15.040</b>	BAS	<b>1.590</b>
Headsail furler	<b>No</b>	MDT1	<b>0.102</b>	FSD	<b>0.038</b>
Mainsail furler	<b>No</b>	MDL1	<b>0.194</b>	SFJ	<b>0.000</b>
Articulated bowsprit	<b>No</b>	MDT2	<b>0.069</b>	SPL	<b>4.300</b>
Non-circular rigging	<b>No</b>	MDL2	<b>0.160</b>	TPS	<b>0.000</b>
Fiber rigging	<b>Yes</b>	TL	<b>1.410</b>	BD	<b>0.220</b>
Runners/Checkstays	<b>0</b>	MW	<b>0.185</b>	MWT	<b>120.00</b>
Spreaders	<b>2</b>	GO	<b>0.200</b>	MCG	<b>5.280</b>

**FLOTATION AND STABILITY**

Inclining Test	<b>Poles Inclining</b>	SFFP	<b>0.422</b>	SAFP	<b>10.320</b>	W1	<b>76.5</b>	PD1	<b>567.2</b>	WD	<b>11.950</b>
Flotation Date	<b>24/07/2021</b>	FFM	<b>1.401</b>	FAM	<b>1.089</b>	W2	<b>76.5</b>	PD2	<b>566.5</b>	PLM	<b>9000.00</b>
Measurer		FF	<b>1.408</b>	FA	<b>1.098</b>	W3	<b>76.5</b>	PD3	<b>567.8</b>	GSA	<b>1.0</b>
Comment		LCFcl	<b>5.819</b>	LCFsh	<b>6.068</b>	W4	<b>76.5</b>	PD4	<b>568.2</b>	RSA	<b>1.0</b>
		SG	<b>1.0000</b>	HBI	<b>1.288</b>						

**MEASUREMENT INVENTORY**

Id	Tank Type	Capacity	LCG	VCG	Condition	Description
1	<b>Water plastic</b>	<b>100.0</b>	<b>4.60</b>		<b>0-0</b>	<b>Portside</b>
2	<b>Fuel Plastic</b>	<b>75.0</b>	<b>8.65</b>		<b>15-0</b>	<b>center</b>
Id	Item Description	Weight	LCG	VCG		
1	<b>Battery 90 Ah portside lithium</b>		<b>8.20</b>			
2	<b>Battery 70 Ah engine room</b>		<b>6.60</b>			
1	<b>Miscellaneous Autohelm</b>		<b>10.00</b>			
2	<b>Miscellaneous heater</b>		<b>10.00</b>			
3	<b>Miscellaneous Oven removed</b>					



#### MAINSAIL

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Maker	Material	Comment
1a	0.70	1.33	2.09	3.21	4.09	44.07		08/06/2021	North Sails	Unknown	2021

#### HEADSAIL

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Btn	Flying	FT	Area	Measurer	Meas.Date	Maker	Material	Comment
3a	0.08	0.66	1.25	2.22	3.17	4.13	14.59	Yes	No		31.71		08/06/2021	North Sails	Unknown	Light 2021
2a	0.11	0.66	1.22	2.21	3.14	4.13	14.58	Yes	No		31.51		08/06/2021	North Sails	Unknown	Medium 2021
5	0.04	0.80	1.60	2.93	3.77	4.08	11.82	No	Inner		29.94		02/07/2021		Unknown	Staysail
4	0.09	0.60	1.16	2.17	3.15	4.14	13.81	Yes	No		29.53		08/06/2021	North Sails	Unknown	Med/cruise
1	0.09	0.58	1.09	2.08	3.07	4.07	14.09	Yes	No		29.23		08/02/2021	North Sails	Unknown	Heavy 2021

#### SYMMETRIC SPINNAKER

Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Maker	Material	Comment
2	14.80	14.80	14.80	8.70	8.39	106.54		01/03/2021	North Sails	Unknown	S2 2021
1	14.94	14.94	14.94	8.51	8.51	105.95		06/03/2021	North sails	Unknown	S1,5 2021
3	14.43	14.43	14.43	7.18	7.10	86.15		10/04/2019		Unknown	S2