

GPH = **641.9** CDL = **8.626**

BOAT

Class **First 34.7**
Designer **Farr**
Builder **Beneteau**
Age Date **06/2007**
Series Date **10/2005**
Offset File **FIRST347.off**

HULL

Length Overall **9.980 m**
Maximum Beam **3.372 m**
Draft **1.994 m**
Displacement **4,536 kg**
DLR **6.3597**
IMS Division **Cruiser/Racer**
Dynamic Allowance **0.196%**
Age Allowance **0.487%**

PROPELLER

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

CREW

Maximum weight **700 kg**
Minimum weight **525 kg * when applied**
Non Manual Power **No**
Crew Arm Extension

SAIL AREAS (m²)

	Measured	Rated
Mainsail	33.82	34.48
Headsail Luffed	26.01	26.01
Headsail Flying		
Symmetric	76.96	76.96
Asymmetric		

SAIL LIMITATIONS

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

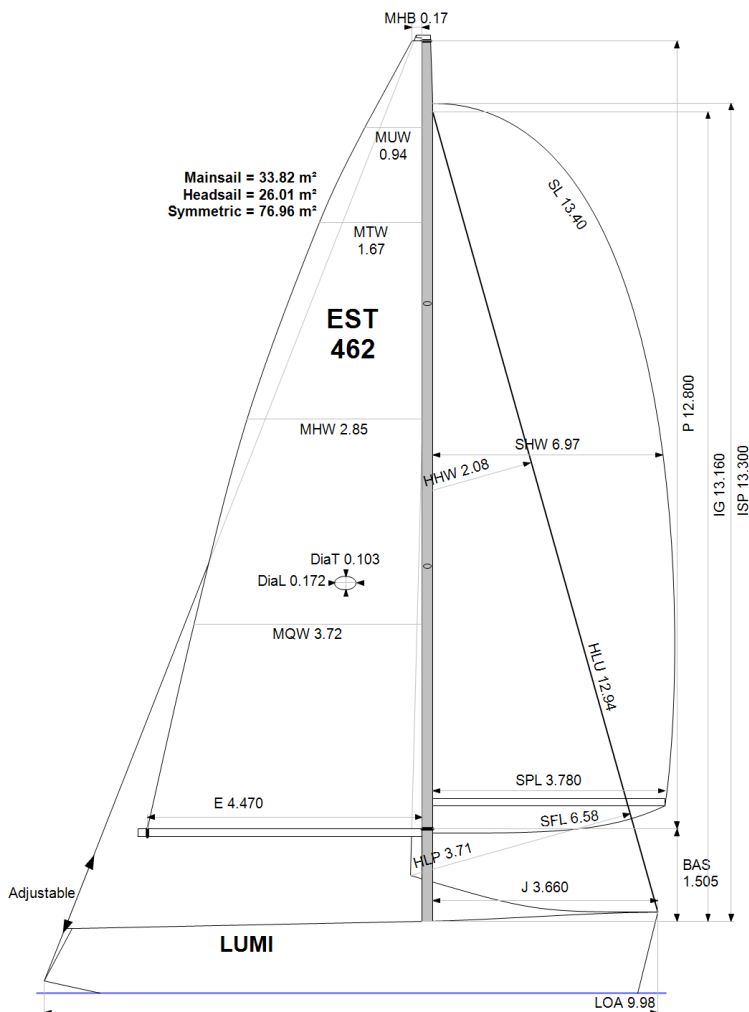
STABILITY

Righting Moment **101.8 kg·m**
Stability Index **127.0**

COMMENTS

Ex. Matilda 3

OWNER



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°	41.1°	39.4°	39.0°	39.0°	39.0°
Beat VMG	3.29	3.96	4.51	4.87	5.01	5.05	5.10
52°	5.05	5.99	6.61	6.93	7.07	7.13	7.17
60°	5.34	6.29	6.81	7.09	7.26	7.34	7.38
75°	5.58	6.52	6.97	7.24	7.48	7.68	7.86
90°	5.52	6.58	7.11	7.39	7.55	7.83	8.32
110°	5.56	6.68	7.20	7.60	8.01	8.32	8.73
120°	5.39	6.53	7.12	7.52	7.96	8.41	9.18
135°	4.88	6.00	6.81	7.25	7.64	8.07	9.04
150°	4.13	5.19	6.13	6.83	7.24	7.60	8.42
Run VMG	3.57	4.49	5.31	6.03	6.65	7.10	7.81
Gybe Angles	145.0°	150.0°	151.0°	158.0°	180.0°	180.0°	180.0°

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

Time Allowances in secs/NM							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1095.0	908.4	797.8	738.7	719.3	712.4	705.5
52°	713.6	601.5	544.3	519.5	509.0	505.1	502.3
60°	673.6	572.1	528.5	507.5	495.6	490.3	487.7
75°	645.4	552.3	516.8	497.0	481.1	468.7	457.8
90°	652.2	547.0	506.5	487.4	477.0	459.9	432.9
110°	647.5	539.3	500.0	473.8	449.6	432.8	412.5
120°	667.4	551.2	505.6	478.5	452.4	428.0	392.1
135°	737.5	600.4	528.6	496.7	471.5	445.9	398.4
150°	872.2	694.2	587.3	526.7	497.4	473.8	427.6
Run VMG	1007.1	801.6	677.4	597.2	541.3	507.0	460.8
Selected Courses							
Windward / Leeward	1051.1	855.0	737.6	668.0	630.3	609.7	583.2
All purpose	808.4	666.5	591.9	550.7	526.3	510.5	487.5

Single Number Scoring Options		
Course	Time On Distance	Time On Time
Windward / Leeward	702.1	0.8545
All purpose	571.3	1.0502

Custom scoring options for Estonia

Single Number	Time On Distance	Time On Time
Coastal/Long Distance	623.2	0.9628
Triple Number Coastal/Long Distance Low	737.5	0.8136
Triple Number Coastal/Long Distance Medium	568.0	1.0564
Triple Number Coastal/Long Distance High	505.8	1.1862
Triple Number Windward/Leeward Low	953.0	0.6296
Triple Number Windward/Leeward Medium	697.4	0.8604
Triple Number Windward/Leeward High	604.9	0.9919

Performance Curve	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Coastal/Long Distance	1046.7	802.2	665.6	586.8	547.6	516.9	465.9

Data in meters/kilograms (Metric)

HULL AND APPENDAGES

Class	First 34.7	LOA	9.980	VCGD	-0.112
Measurement	06/06/2018	Max. Beam	3.372	VCGM	-0.092
Measurer		Draft	1.994	RM Measured (kg·m)	101.8
HIN		Displacement	4,536	RM Default (kg·m)	98.3
Plan review		Wetted area	21.99	Limit of positive stability(°)	127.7
Hull construction	Cored	IMS L	9.092	Stability Index	127.0
Carbon Rudder	No	LSM0	8.934		
Light stanchions	No	Acc. length	9.980		
Trim tab	No	Sink (kg/mm)	16.38		

PROPELLER

Propeller Type	Folding 2 blades	PRD	0.410	EDL	1.790	ST3	0.185
Installation	Strut	PBW	0.118	ST1	0.035	ST4	0.100
Twin screw	No			ST2	0.185	ST5	0.280
PIPA	0.0030						

RIG

Forestay tension	Aft	P	12.800	E	4.470
Inner stay	None Fitted	IG	13.160	J	3.660
Carbon mast	Yes	ISP	13.300	BAS	1.505
Headsail furler	No	MDT1	0.103	FSD	0.033
Mainsail furler	No	MDL1	0.172	SFJ	0.000
Articulated bowsprit	No	MDT2	0.103	SPL	3.780
Non-circular rigging	No	MDL2	0.140	TPS	
Fiber rigging	No	TL	1.000	BD	0.132
Runners/Checkstays	0	MW	0.172	MWT	106.00
Spreaders	2	GO	0.197	MCG	4.740

FLOTATION AND STABILITY

Inclining Test	Poles Inclining	SFFP	0.172	SAFP	9.530	W1	67.7	PD1	544.4	WD	10.370
Flotation Date	05/07/2021	FFM	1.302	FAM	1.032	W2	67.7	PD2	543.2	PLM	9000.00
Measurer		FF	1.308	FA	1.044	W3	67.7	PD3	540.3	GSA	1.0
Comment	Pirita	LCFcl	5.382	LCFsh	5.619	W4	67.7	PD4	545.3	RSA	1.0
		SG	1.0000	HBI	1.168						

MEASUREMENT INVENTORY

Id	Tank	Type	Capacity	LCG	VCG	Condition	Description
1	Water	Neopreg bag	55.0	2.60		2.0	Water
2	Fuel	Plastic	75.0	7.55		40.0	Disele tank
Id	Item	Description	Weight	LCG	VCG		
1	Battery	Battery 80Ah ports		3.75			
2	Battery	Battery 180Ah st.port		4.05			
1	Miscellaneous	Autohelm Raymarine, port		8.90			
2	Miscellaneous	Air heater		8.90			
3	Miscellaneous	Audio at chart tabel					
4	Miscellaneous	Freezer					



MAINSAIL

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Maker	Material	Comment
4a	0.17	0.94	1.67	2.85	3.72	33.82		10/10/2016	NorthSails	Unknown	

HEADSAIL

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Btn	Flying	FT	Area	Measurer	Meas.Date	Maker	Material	Comment
9b	0.12	0.63	1.16	2.08	2.96	3.71	12.94	Yes	No		26.01		05/07/2021	North Sails	Unknown	Jib Light
8a	0.10	0.58	1.09	2.05	2.94	3.75	13.00	No	No		25.83		10/10/2016	NorthSails	Unknown	Medium 2016
7a	0.11	0.58	1.09	2.06	2.94	3.75	12.93	No	No		25.73		13/06/2017		Unknown	Blast reacher
5b	0.10	0.58	1.08	2.02	2.90	3.72	12.95	No	No		25.44		13/06/2017		Unknown	Light 2013
3	0.10	0.48	0.89	1.74	2.62	3.55	12.54	No	No		22.17		14/12/2007		Unknown	
10	0.08	0.45	0.82	1.63	2.56	3.51	12.84	No	No		21.91		11/05/2021	WB	Unknown	

SYMMETRIC SPINNAKER

Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Maker	Material	Comment
6	13.40	13.40	13.40	6.97	6.58	76.96		03/07/2021		Unknown	
3	13.40	13.40	13.40	6.95	6.60	76.83				Unknown	S2
5a	13.28	13.28	13.28	6.88	6.72	75.78		05/07/2021	North Sails	Unknown	S1,5
4	13.24	13.24	13.24	6.46	6.90	72.25		06/11/2017		Unknown	S3
1	13.10	13.10	13.10	6.63	6.28	71.61		04/06/2014	NorthSails	Unknown	
2	13.15	13.15	13.15	6.48	6.44	70.92				Unknown	
3	13.40	13.40	13.40	5.28	6.95	62.69				Unknown	