

GPH = **624.0** CDL = **9.018**

BOAT

Class **First 35**
Designer **Farr**
Builder **Beneteau**
Age Date **04/2010**
Series Date **08/2009**
Offset File **FIRST35-EST633.off**

HULL

Length Overall **10.660 m**
Maximum Beam **3.636 m**
Draft **2.032 m**
Displacement **5,487 kg**
DLR **6.3771**
IMS Division **Cruiser/Racer**
Dynamic Allowance **0.162%**
Age Allowance **0.390%**

PROPELLER

Installation **Strut**
Type **Folding 2 blades**
Diameter **0.434m**

CREW

Maximum weight **650 kg**
Minimum weight **488 kg * when applied**
Non Manual Power **No**
Crew Arm Extension

SAIL AREAS (m²)

	Measured	Rated
Mainsail	40.09	41.08
Headsail Luffed	31.87	31.87
Headsail Flying		
Symmetric	95.24	95.24
Asymmetric		

SAIL LIMITATIONS

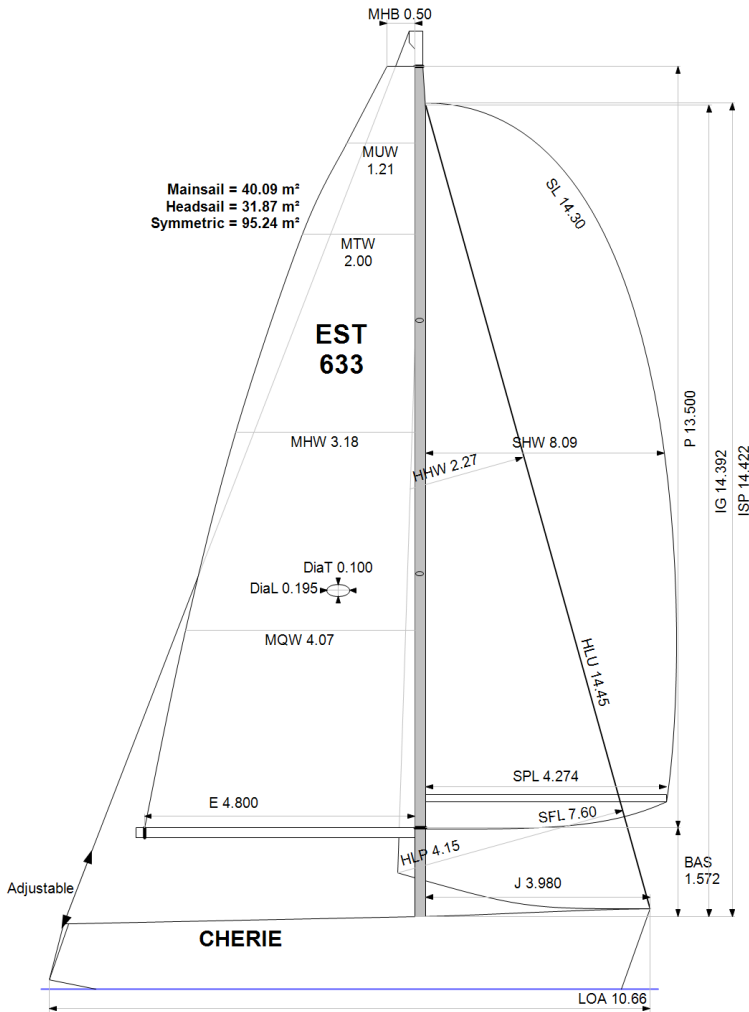
Headsails **5**
Spinnakers **4**

STABILITY

Righting Moment **126.7 kg·m**
Stability Index **121.1**

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°	41.8°	40.9°	39.8°	39.4°	39.4°	40.1°
Beat VMG	3.38	4.09	4.65	4.93	5.03	5.07	5.14
52°	5.20	6.18	6.83	7.12	7.21	7.26	7.34
60°	5.53	6.49	7.04	7.31	7.43	7.48	7.54
75°	5.80	6.73	7.20	7.49	7.70	7.85	7.95
90°	5.74	6.75	7.31	7.54	7.82	8.10	8.51
110°	5.73	6.88	7.44	7.85	8.20	8.43	8.84
120°	5.57	6.75	7.37	7.80	8.25	8.70	9.28
135°	5.05	6.22	7.06	7.52	7.94	8.40	9.43
150°	4.26	5.35	6.34	7.08	7.51	7.89	8.75
Run VMG	3.69	4.64	5.49	6.23	6.85	7.34	8.09
Gybe Angles	145.0°	149.0°	150.5°	157.0°	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	1064.1	879.2	774.5	730.1	715.2	710.7	700.6
52°	691.7	582.7	527.2	506.0	499.0	496.0	490.5
60°	651.2	554.8	511.3	492.7	484.8	481.3	477.2
75°	620.5	535.0	499.9	480.9	467.5	458.9	452.8
90°	627.2	533.7	492.8	477.3	460.3	444.6	423.3
110°	628.1	523.2	483.6	458.9	438.8	426.9	407.1
120°	645.7	533.1	488.2	461.7	436.4	413.9	388.0
135°	712.7	578.5	509.6	478.5	453.6	428.7	381.8
150°	845.7	672.4	567.7	508.4	479.6	456.4	411.2
Run VMG	976.5	776.4	655.2	578.0	525.4	490.7	445.2
Selected Courses							
Windward / Leeward	1020.3	827.8	714.9	654.0	620.3	600.7	572.9
All purpose	783.1	645.6	573.2	536.8	514.2	500.3	478.2

Single Number Scoring Options		
Course	Time On Distance	Time On Time
Windward / Leeward	685.7	0.8750
All purpose	556.2	1.0788

Custom scoring options for Estonia

Single Number	Time On Distance	Time On Time
Coastal/Long Distance	607.0	0.9884
Triple Number Coastal/Long Distance Low	714.3	0.8400
Triple Number Coastal/Long Distance Medium	552.3	1.0863
Triple Number Coastal/Long Distance High	495.5	1.2109
Triple Number Windward/Leeward Low	924.1	0.6493
Triple Number Windward/Leeward Medium	680.3	0.8819
Triple Number Windward/Leeward High	595.2	1.0081

Performance Curve	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Coastal/Long Distance	1015.9	776.9	644.9	572.9	535.2	505.4	456.7

Data in meters/kilograms (Metric)

HULL AND APPENDAGES

Class	First 35	LOA	10.660	VCGD	0.037
Measurement	08/05/2017	Max. Beam	3.636	VCGM	0.042
Measurer		Draft	2.032	RM Measured (kg·m)	126.7
HIN		Displacement	5,487	RM Default (kg·m)	132.6
Plan review		Wetted area	25.82	Limit of positive stability(°)	121.7
Hull construction	Solid	IMS L	9.682	Stability Index	121.1
Carbon Rudder	No	LSM0	9.511		
Light stanchions		Acc. length	10.660		
Trim tab	No	Sink (kg/mm)	19.20		

PROPELLER

Propeller Type	Folding 2 blades	PRD	0.434	EDL	2.030	ST3	0.180
Installation	Strut	PBW		ST1	0.035	ST4	0.100
Twin screw	No			ST2	0.180	ST5	0.280
PIPA	0.0030						

RIG

Forestay tension	Aft	P	13.500	E	4.800
Inner stay	None Fitted	IG	14.392	J	3.980
Carbon mast	Yes	ISP	14.422	BAS	1.572
Headsail furler	No	MDT1	0.100	FSD	0.033
Mainsail furler	No	MDL1	0.195	SFJ	0.000
Articulated bowsprit	No	MDT2	0.090	SPL	4.274
Non-circular rigging	No	MDL2	0.145	TPS	
Fiber rigging	No	TL	0.780	BD	
Runners/Checkstays	0	MW	0.180	MWT	124.00
Spreaders	2	GO	0.195	MCG	4.080

FLOTATION AND STABILITY

Inclining Test	Poles Inclining	SFFP	0.422	SAFP	10.320	W1	79.0	PD1	602.1	WD	12.290
Flotation Date	27/05/2021	FFM	1.409	FAM	1.071	W2	79.0	PD2	605.6	PLM	9000.00
Measurer		FF	1.416	FA	1.080	W3	79.0	PD3	602.8	GSA	1.0
Comment		LCFcl	5.852	LCFsh	6.106	W4	79.0	PD4	603.0	RSA	1.0
		SG	1.0000	HBI	1.286						

MEASUREMENT INVENTORY

Id	Tank Type	Capacity	LCG	VCG	Condition	Description
1	Water plastic	100.0	4.60			0-0 portside
2	Water plastic	100.0	4.60			0-0 starboard
3	Fuel plastic	75.0	8.65			15-0 center
4	Waste Plastic	80.0	8.50			0-0 starboard
Id	Item Description	Weight	LCG	VCG		
1	Battery 90 Ah portside		8.20			
2	Battery 70 Ah engine room		6.60			

MAINSAIL

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Maker	Material	Comment
5	0.50	1.21	2.00	3.18	4.07	40.09		30/01/2021	North	Unknown	
4a	0.27	1.03	1.79	3.06	3.99	38.39		01/05/2018	NorthSails	Unknown	

HEADSAIL

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Btn	Flying	FT	Area	Measurer	Meas.Date	Maker	Material	Comment
9	0.12	0.72	1.30	2.27	3.17	4.15	14.45	No	No		31.87		18/01/2021	North Sails	Unknown	Ligth /medium
8	0.12	0.70	1.25	2.23	3.15	4.14	14.40	Yes	No		31.39		15/02/2021	North Sails	Unknown	Medium /heavy
7	0.09	0.58	1.09	2.10	3.12	4.12	13.56	No	No		28.45		14/12/2019	North Sails	Unknown	Heavy

SYMMETRIC SPINNAKER

Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Maker	Material	Comment
6	14.30	14.30	14.30	8.09	7.60	95.24		16/01/2021	North Sails	Unknown	S-2
7	14.50	14.50	14.50	7.87	7.84	95.02		16/01/2021	North Sails	Unknown	S1-5
5	14.30	14.30	14.30	7.57	7.50	90.04		06/11/2017		Unknown	light
1	14.30	14.30	14.30	7.50	7.50	89.38		11/02/2010	North	Unknown	S2
2	14.30	14.30	14.30	7.50	7.50	89.38		11/02/2010	North	Unknown	S4