

GPH = **651.5** CDL = **8.370**

BOAT

Class **X-99 mod**
Designer **NIELS JEPPESEN**
Builder **X-YACHTS**
Age Date **01/1986**
Series Date **04/1985**
Offset File **X99.OD.OFF**

HULL

Length Overall **9.960 m**
Maximum Beam **2.990 m**
Draft **1.792 m**
Displacement **3,027 kg**
DLR **4.9892**
IMS Division **Cruiser/Racer**
Dynamic Allowance **0.234%**
Age Allowance **0.487%**

PROPELLER

Installation **No Propeller**
Type **N/A**
Diameter **N/A**

CREW

Maximum weight **575 kg**
Minimum weight **431 kg * when applied**
Non Manual Power **No**
Crew Arm Extension

SAIL AREAS (m²)

	Measured	Rated
Mainsail	25.34	25.79
Headsail Luffed	24.93	24.93
Headsail Flying		
Symmetric	55.28	55.28
Asymmetric	59.40	59.40

* 1 asymmetric(s) with SHW/SFL < 85%

SAIL LIMITATIONS

Headsails **5**
Spinnakers **4 * Asymmetric SHALL NOT be tacked on the pole**

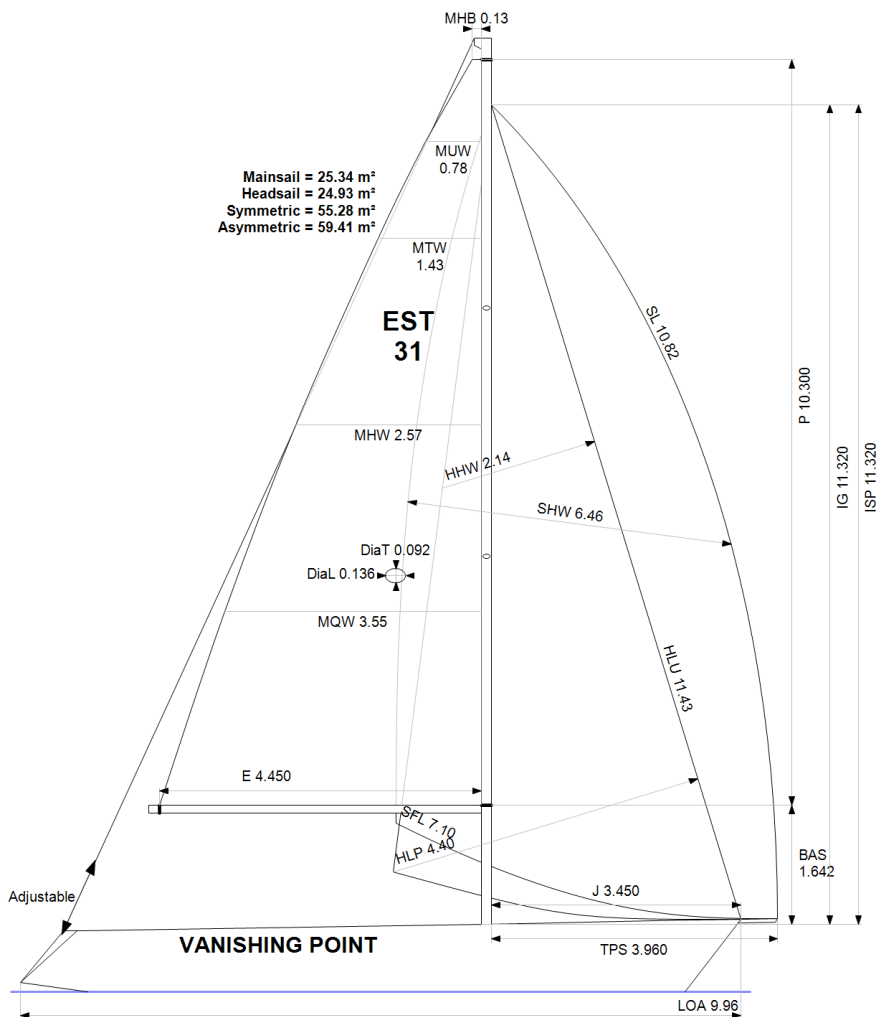
STABILITY

Righting Moment **63.5 kg·m**
Stability Index **N/A**

COMMENTS

Owner declaration 3028kg Internal ballast
108kg (dist. 4.5m) Displacement with outboard engine

OWNER



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°	42.0°	40.9°	39.0°	38.3°	38.3°	38.3°
Beat VMG	3.24	3.94	4.50	4.84	4.98	5.03	5.04
52°	4.99	5.96	6.56	6.85	6.98	7.05	7.08
60°	5.30	6.26	6.75	7.02	7.19	7.28	7.35
75°	5.53	6.47	6.90	7.19	7.47	7.70	7.91
90°	5.45	6.48	7.02	7.37	7.62	7.91	8.48
110°	5.41	6.54	7.09	7.55	8.05	8.52	9.19
120°	5.23	6.37	6.99	7.44	7.96	8.53	9.78
135°	4.67	5.81	6.65	7.12	7.56	8.07	9.31
150°	3.95	5.01	5.92	6.64	7.08	7.48	8.43
Run VMG	3.42	4.34	5.13	5.84	6.46	6.94	7.72
Gybe Angles	145.0°	147.5°	147.5°	157.5°	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	1111.5	913.4	800.6	743.3	723.5	715.3	714.4
52°	722.0	604.0	549.0	525.6	515.5	510.9	508.7
60°	679.8	575.5	533.7	513.0	500.4	494.2	490.1
75°	650.6	556.3	521.7	500.4	482.0	467.4	455.4
90°	660.4	555.2	513.1	488.3	472.7	455.0	424.6
110°	665.0	550.1	507.7	476.9	447.4	422.8	391.7
120°	688.5	565.1	515.2	483.8	452.3	422.0	367.9
135°	770.3	619.7	541.4	505.9	476.3	446.3	386.6
150°	911.4	718.7	608.1	541.9	508.5	481.5	427.1
Run VMG	1052.4	829.9	702.2	616.7	557.1	518.9	466.4
Selected Courses							
Windward / Leeward	1081.9	871.7	751.4	680.0	640.3	617.1	590.4
All purpose	828.7	678.1	601.2	557.8	530.6	512.1	485.4

Single Number Scoring Options		
Course	Time On Distance	Time On Time
Windward / Leeward	714.8	0.8394
All purpose	578.4	1.0373

Custom scoring options for Estonia

Single Number	Time On Distance	Time On Time
Coastal/Long Distance	631.7	0.9498
Triple Number Coastal/Long Distance Low	753.4	0.7964
Triple Number Coastal/Long Distance Medium	575.5	1.0426
Triple Number Coastal/Long Distance High	506.7	1.1842
Triple Number Windward/Leeward Low	976.7	0.6143
Triple Number Windward/Leeward Medium	709.8	0.8453
Triple Number Windward/Leeward High	612.9	0.9790

Performance Curve	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Coastal/Long Distance	1079.0	818.1	677.5	595.1	552.6	518.7	460.2