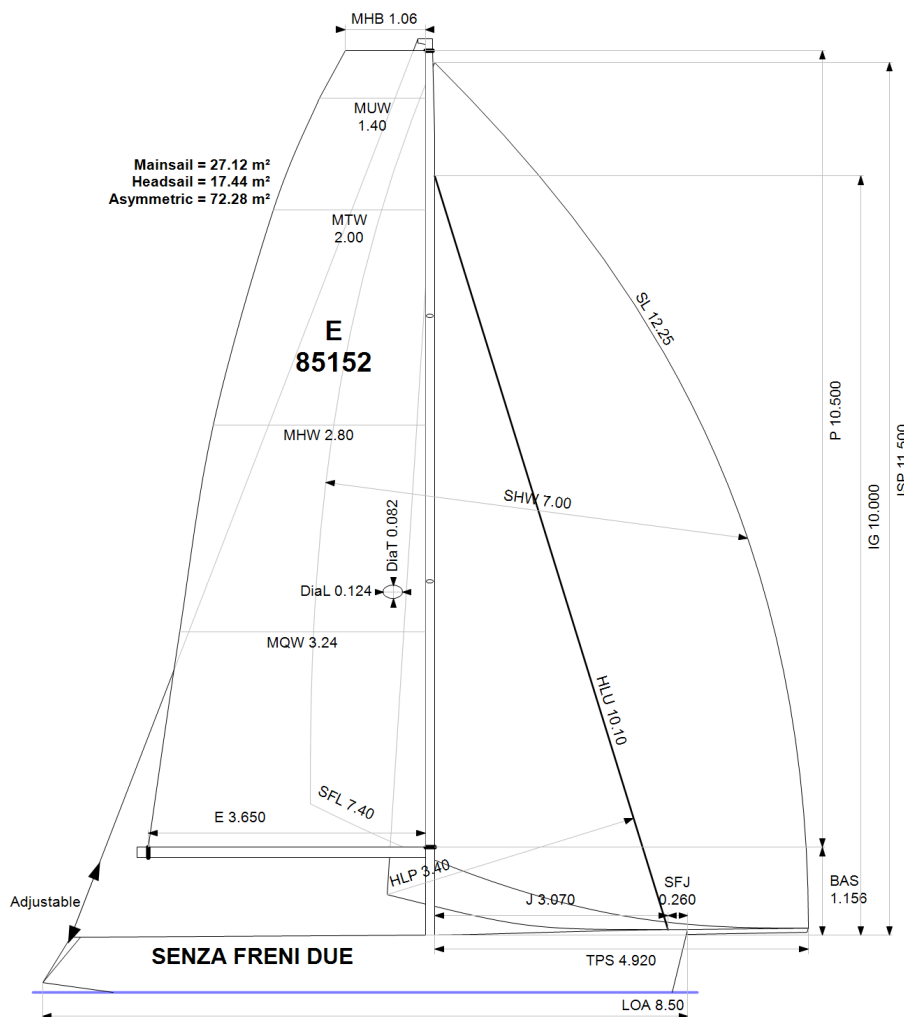


APH ToD: **548.2** CDL: **7.420**

APH ToT: **1.0946** CertNo: **149092**



BOAT

Class **ESSE 850**
Designer **FELCI**
Builder **PROTEUS YACHTS**
Age date **01/2013**
Series date **01/2004**
Offset file **S850.OD.OFF**
Data file **E85152**

HULL

Length Overall **8.500 m**
Maximum Beam **2.190 m**
Draft **1.999 m**
Displacement **1,222 kg**
DLR **3.0976**
IMS Division **Sportboat**
Dynamic Allowance **0.000%**
Age Allowance **0.487%**

PROPELLER

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

CREW

Maximum weight **210 kg** (declared)
Minimum weight **120 kg** *when applied
Non Manual Power **No**
Crew Arm Extension **Loose or no lifelines**

SAIL AREAS (m²)

	Measured	Rated
Mainsail	27.12	28.06
Headsail Luffed	17.44	17.44

Headsail Flying
Symmetric
Asymmetric **72.28** **72.28**
(All asymmetric spinnakers with SHW/SFL > 85%)

STORM SAIL AREAS (m²)

Trysail **6.71**
Storm Jib **5.14**
Heavy Weather Jib **13.87**

SAIL LIMITS

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

STABILITY

Righting Moment **N/A**
Stability Index **N/A**

COMMENTS

ONE-DESIGN CLUB CERTIFICATE

The owner and any other person in charge is responsible that boat is complying with her certificate in accordance with RRS 78.1 and ORC Rule 304.

Rated boat velocities in knots

Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt	24 kt
Beat Angles	42.1°	40.1°	39.9°	40.7°	41.1°	41.4°	42.7°	45.6°
Beat VMG	3.86	4.32	4.48	4.53	4.55	4.56	4.48	4.21
52°	5.83	6.35	6.54	6.63	6.69	6.73	6.71	6.52
60°	6.12	6.61	6.80	6.93	7.02	7.08	7.10	6.96
75°	6.30	6.91	7.20	7.41	7.58	7.70	7.83	7.81
90°	6.20	6.97	7.52	7.86	8.15	8.39	8.76	9.01
110°	6.19	6.95	7.42	7.86	8.59	9.15	10.00	10.63
120°	6.07	7.06	7.69	8.22	8.76	9.29	10.42	11.32
135°	5.50	6.69	7.61	8.64	9.59	10.34	11.81	13.32
150°	4.63	5.86	6.75	7.59	8.64	9.85	12.91	15.40
Run VMG	4.01	5.07	5.86	6.58	7.48	8.53	11.18	13.70
Gybe Angles	142.7°	147.0°	151.2°	148.6°	146.2°	145.3°	148.5°	152.1°

Time Allowances in secs/NM								
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt	24 kt
Beat VMG	931.7	832.5	803.8	794.2	790.6	790.1	803.9	854.5
52°	617.5	567.0	550.6	542.8	538.0	534.9	536.2	551.8
60°	588.5	544.9	529.2	519.8	513.1	508.7	506.8	517.0
75°	571.6	520.7	500.0	485.7	475.1	467.3	460.0	460.7
90°	580.3	516.5	478.9	458.0	441.6	428.8	410.9	399.6
110°	582.0	517.9	485.4	457.8	419.1	393.2	359.9	338.8
120°	593.0	510.2	468.4	438.0	411.1	387.7	345.5	317.9
135°	654.6	538.2	473.0	416.9	375.4	348.1	304.9	270.4
150°	777.2	614.8	533.0	474.0	416.8	365.4	278.8	233.8
Run VMG	897.4	709.9	614.8	547.3	481.3	421.9	321.9	262.8
Selected Courses								
Windward / Leeward	914.6	771.2	709.3	670.8	635.9	606.0	562.9	558.6
All purpose	708.3	612.4	569.0	540.1	514.5	494.3	466.6	461.1

Single Number Scoring Options		
Course	Time On Distance	Time On Time
Windward / Leeward	681.9	0.8799
All purpose	548.2	1.0946

Custom scoring options for Germany

Scoring Option	Time On Time
Triple Number Coastal/Long Distance Low	0.9086
Triple Number Coastal/Long Distance Medium	1.0922
Triple Number Coastal/Long Distance High	1.2271
Triple Number Windward/Leeward Low	0.7118
Triple Number Windward/Leeward Medium	0.8781
Triple Number Windward/Leeward High	1.0045

Performance Curve	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt	24 kt
Coastal/Long Distance	912.9	726.3	639.4	580.9	537.3	498.6	435.7	423.8