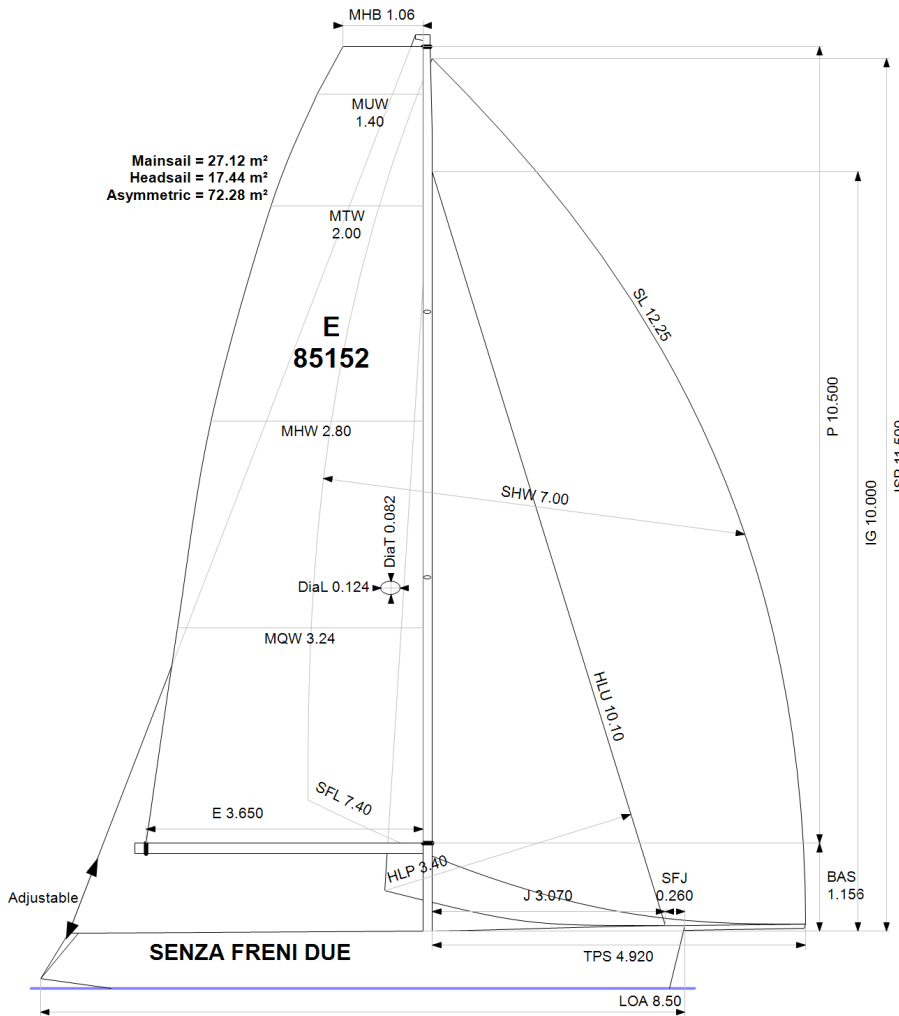


APH: **544.3**

CDL: **7.531**

GPH: **601.6**

CertNo: **149092**



BOAT

Class	ESSE 850
Designer	FELCI
Builder	PROTEUS YACHTS
Age date	01/2013
Series date	06/2004
Offset file	S850.OD
Data file	E85152

HULL

Length Overall	8.500 m
Maximum Beam	2.190 m
Draft	1.999 m
Displacement	1,222 kg
DLR	3.0975
IMS Division	Sportboat
Dynamic Allowance	0.000%
Age Allowance	0.487%

PROPELLER

Installation	No Propeller
Type	N/A
Diameter	N/A

CREW

Maximum weight	280 kg
Minimum weight	195 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	34.7 kg·m
Stability Index	124.1

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
Beat Angles	42.4°	40.0°	39.4°	40.2°	40.6°	41.4°	42.9°
Beat VMG	3.86	4.39	4.55	4.60	4.60	4.57	4.47
52°	5.83	6.42	6.60	6.69	6.74	6.76	6.70
60°	6.11	6.67	6.87	7.00	7.08	7.13	7.11
75°	6.27	6.95	7.29	7.50	7.66	7.78	7.88
90°	6.18	6.95	7.57	7.97	8.26	8.49	8.78
110°	6.19	7.03	7.51	7.95	8.63	9.30	10.06
120°	6.07	7.08	7.79	8.34	8.91	9.47	10.57
135°	5.48	6.68	7.60	8.66	9.72	10.54	12.08
150°	4.62	5.84	6.74	7.57	8.60	9.81	12.95
Run VMG	4.00	5.06	5.85	6.55	7.45	8.50	11.22
Gybe Angles	143.0°	147.1°	151.4°	148.7°	145.8°	144.4°	148.0°

Time Allowances in secs/NM							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	931.5	820.5	791.7	783.3	783.1	787.3	804.9
52°	617.2	561.0	545.1	537.8	534.1	532.8	537.2
60°	589.6	539.9	523.7	514.5	508.6	505.2	506.3
75°	573.8	518.0	494.1	479.9	470.1	462.9	456.9
90°	582.5	517.8	475.4	452.0	435.8	424.2	410.0
110°	581.2	512.1	479.2	452.7	416.9	387.1	358.0
120°	593.0	508.3	462.4	431.5	404.1	380.3	340.5
135°	656.4	539.2	473.8	415.9	370.4	341.7	298.1
150°	779.0	616.1	534.0	475.6	418.7	367.0	277.9
Run VMG	899.6	711.4	615.8	549.2	483.4	423.8	320.9
Selected Courses							
Windward / Leeward	915.5	765.9	703.8	666.3	633.3	605.5	562.9
All purpose	709.2	608.6	564.2	535.4	510.7	491.3	465.2

Single Number Scoring Options		
Course	Time On Distance	Time On Time
Windward / Leeward	678.3	0.8845
All purpose	544.3	1.1023

Custom scoring options for Germany

Scoring Option	Time On Time
Triple Number Coastal/Long Distance Low	0.9106
Triple Number Coastal/Long Distance Medium	1.1011
Triple Number Coastal/Long Distance High	1.2337
Triple Number Windward/Leeward Low	0.7137
Triple Number Windward/Leeward Medium	0.8839
Triple Number Windward/Leeward High	1.0059

Performance Curve	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Coastal/Long Distance	913.9	721.9	634.1	575.8	533.2	495.6	434.1