

APH ToD: **620.5** CDL: **7.432**

APH ToT: **0.9670** CertNo: 24/1

BOAT

Class **Etap 32 S**
Designer **Harlé**
Builder **Etap**
Age date **05/2006**
Series date **01/1981**
Offset file **H107.BOF**
Data file **STELLA19**

HULL

Length Overall **9.840 m**
Maximum Beam **3.316 m**
Draft **1.763 m**
Displacement **3,699 kg**
DLR **8.4006**
IMS Division **Cruiser/Racer**
Dynamic Allowance **0.320%**
Age Allowance **0.487%**

PROPELLER

Installation **Strut**
Type **Folding 3 blades**
Diameter **0.410m**

CREW

Maximum weight **380 kg** (declared)
Minimum weight **250 kg** *when applied
Non Manual Power **No**
Crew Arm Extension

SAIL AREAS (m²)

	Measured	Rated
Mainsail	26.29	26.73
Headsail Luffed	26.20	26.20
Headsail Flying		
Symmetric	53.89	53.89
Asymmetric	52.12	52.12

(All asymmetric spinnakers with SHW/SFL > 85%)

STORM SAIL AREAS (m²)

Trysail **8.06**
Storm Jib **6.13**
Heavy Weather Jib **16.53**

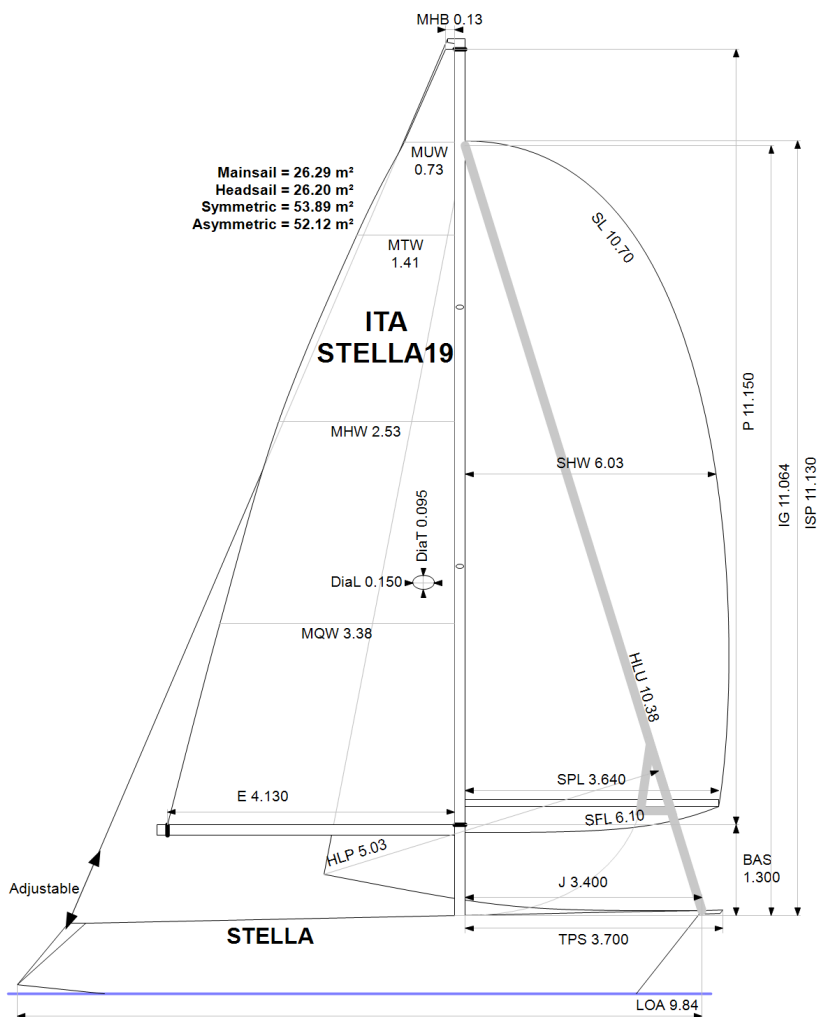
SAIL LIMITS

Headsails **1** * Woven polyester sails
Spinnakers **4** * Asymmetric SHALL NOT be tacked on the pole

STABILITY

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

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	43.9°	41.7°	40.3°	39.1°	38.7°	39.1°	39.9°	41.8°
Beat VMG	3.10	3.76	4.22	4.48	4.59	4.64	4.62	4.49
52°	4.75	5.61	6.12	6.39	6.52	6.58	6.61	6.58
60°	5.02	5.85	6.31	6.56	6.70	6.77	6.83	6.82
75°	5.20	6.02	6.46	6.72	6.90	7.03	7.17	7.24
90°	5.10	6.03	6.56	6.85	7.04	7.16	7.45	7.63
110°	5.07	6.08	6.63	6.97	7.26	7.53	7.98	8.29
120°	4.89	5.93	6.55	6.91	7.23	7.55	8.21	8.92
135°	4.38	5.44	6.21	6.68	7.02	7.34	8.03	8.99
150°	3.72	4.75	5.62	6.28	6.70	7.02	7.64	8.40
Run VMG	3.22	4.11	4.89	5.56	6.14	6.57	7.19	7.79
Gybe Angles	145.3°	150.2°	153.8°	160.3°	174.1°	178.6°	179.2°	179.0°

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	1162.8	957.2	853.6	802.7	784.0	776.3	779.6	802.3
52°	757.9	641.6	587.8	563.3	551.9	547.2	544.3	547.2
60°	717.3	615.4	570.6	549.1	537.6	532.0	527.3	527.6
75°	692.5	598.0	557.2	535.9	522.0	512.2	502.3	497.5
90°	706.2	596.8	549.0	525.9	511.6	502.6	483.0	471.8
110°	710.3	592.3	543.2	516.5	495.7	478.0	451.1	434.3
120°	736.3	607.2	549.8	520.7	497.6	476.9	438.2	403.4
135°	821.9	662.1	579.5	538.9	512.8	490.4	448.4	400.6
150°	968.0	758.4	640.4	573.4	537.5	513.1	471.3	428.7
Run VMG	1117.7	875.5	736.4	647.5	586.7	547.7	501.0	462.3
Selected Courses								
Windward / Leeward	1140.2	916.3	795.0	725.1	685.4	662.0	640.3	632.3
All purpose	876.9	719.3	640.0	597.4	573.6	558.3	538.3	526.0

Single Number Scoring Options		
Course	Time On Distance	Time On Time
Windward / Leeward	760.5	0.7890
All purpose	620.5	0.9670

Data in meters/kilograms (Metric)

HULL AND APPENDAGES (Lightship Trim)

Class	Etap 32 S	LOA	9.840	VCGD	-0.166
Measurement	01/10/2019	Max. Beam	3.316	VCGM	0.000
HIN		Draft	1.763	RM Rated (kg·m)	69.5
Plan review		Displacement	3,699	Limit of positive stability(°)	N/A
Hull construction	Cored	Wetted area	18.91	Stability Index	N/A
Carbon Rudder	No	IMS L	7.944	Default crew weight	466
Light stanchions	No	LSM0	7.607	Declared crew weight	380
Trim tab	No	Acc. length	9.840		
		Sink (kg/mm)	13.35		

PROPELLER

Propeller Type	Folding 3 blades				
Installation	Strut	PRD	0.410	EDL	2.000
Twin screw	No	PBW		ST1	0.045
Hydro generator	No	PIPA	0.0034	ST2	0.170
				ST3	0.170
				ST4	0.170
				ST5	0.300

RIG

Forestay tension	Aft	P	11.150	E	4.130
Inner stay	None Fitted	IG	11.064	J	3.400
Mast material	Aluminum	ISP	11.130	BAS	1.300
Single headsail furler	Yes	MDT1	0.095	FSD	No Foil
Mainsail furler	No	MDL1	0.150	SFJ	
Articulated bowsprit	No	MDT2		SPL	3.640
Non-circular rigging	No	MDL2		WPL	
Fiber rigging	No	TL	No Taper	TPS	3.700
Adjustable mast foot	No	MW	0.150	BD	
Runners/Checkstays	0	GO	0.150	MWT	
Spreaders	2			MCG	
Rotating mast	No				

FLOTATION AND STABILITY

Calculation method	VCG entered directly
VCG entered	-0.166
Flotation Date	01/10/2019

MAINSAIL

<i>Id</i>	<i>MHB</i>	<i>MUW</i>	<i>MTW</i>	<i>MHW</i>	<i>MQW</i>	<i>Area</i>	<i>Meas.Date</i>	<i>Comment</i>
A	0.13	0.73	1.41	2.53	3.38	26.29	01/10/2019	

HEADSAIL

<i>Id</i>	<i>HHB</i>	<i>HUW</i>	<i>HTW</i>	<i>HHW</i>	<i>HQW</i>	<i>HLP</i>	<i>HLU</i>	<i>Btn</i>	<i>Flying FT</i>	<i>Area</i>	<i>Meas.Date</i>	<i>Comment</i>
A	0.02	0.00	0.00	0.00	0.00	5.03	10.38	No	No	26.20	01/10/2019	

SYMMETRIC SPINNAKER

<i>Id</i>	<i>SLU</i>	<i>SLE</i>	<i>SL</i>	<i>SHW</i>	<i>SFL</i>	<i>Area</i>	<i>Meas.Date</i>	<i>Comment</i>
A	10.70	10.70	10.70	6.03	6.10	53.89	01/10/2019	

ASYMMETRIC SPINNAKER

<i>Id</i>	<i>SLU</i>	<i>SLE</i>	<i>SL</i>	<i>SHW</i>	<i>SFL</i>	<i>Ratio</i>	<i>Area</i>	<i>Meas.Date</i>	<i>Comment</i>
A	10.70	9.84	10.27	6.09	6.09	100%	52.12	01/10/2019	

CRUISER/RACER REQUIREMENTS*

Accommodation length	9.8 m	Table area	0.44 m²	Headroom	1.69 m
Minimum number of berths	4	Personal gear stowage	0.16 m³	Fresh water capacity	76 l
Minimum number of seats in cockpit	4	Food stowage	0.24 m³	Fuel capacity	46 l

*This list refers to the calculated requirements. See IMS Appendix 1 for the complete list of requirements.