

APH ToD: **595.4** CDL: **6.493**

APH ToT: **1.0078** CertNo: **24/1**

BOAT

Class **H22 ONE DESIGN**
Designer **HUMPHREYS**
Builder **Lion Yachts SIA**
Age date
Series date **01/2002**
Offset file **H22.OD**
Data file **1132H22**

HULL

Length Overall **6.740 m**
Maximum Beam **2.494 m**
Draft **1.517 m**
Displacement **789 kg**
DLR **3.3378**
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** (declared)
Minimum weight **150 kg** * when applied
Non Manual Power **No**
Crew Arm Extension **Loose or no lifelines**

SAIL AREAS (m²)

	Measured	Rated
Mainsail	19.82	20.45
Headsail Luffed	10.97	10.97
Headsail Flying		
Symmetric		
Asymmetric	52.26	52.26

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

STORM SAIL AREAS (m²)

Trysail **5.52**
Storm Jib **3.53**
Heavy Weather Jib **9.53**

SAIL LIMITS

Headsails **1**
Spinnakers **4**

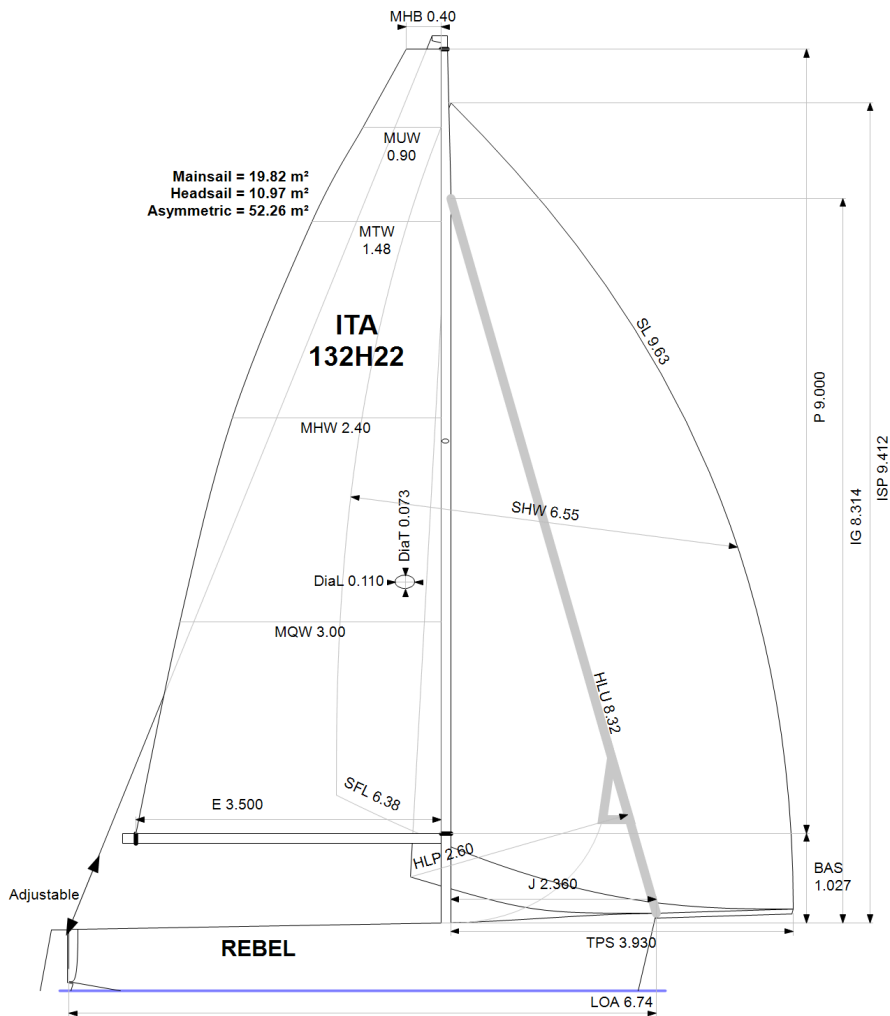
STABILITY

Righting Moment **18.4 kg·m**
Stability Index **103.7**

COMMENTS

Intestatario: Renzulli Antonio

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	42.9°	40.2°	38.3°	38.7°	39.0°	39.4°	40.6°	43.0°
Beat VMG	3.33	3.97	4.27	4.35	4.37	4.38	4.34	4.18
52°	5.04	5.75	6.07	6.20	6.28	6.33	6.38	6.30
60°	5.28	5.92	6.28	6.48	6.59	6.68	6.77	6.74
75°	5.43	6.06	6.53	6.91	7.12	7.30	7.53	7.62
90°	5.54	6.17	6.56	7.09	7.59	7.95	8.46	8.80
110°	5.63	6.43	7.07	7.52	7.95	8.37	9.40	10.67
120°	5.50	6.35	7.13	7.89	8.48	9.05	10.24	11.63
135°	4.98	5.95	6.70	7.53	8.55	9.78	12.21	13.81
150°	4.24	5.29	6.01	6.65	7.37	8.28	11.66	14.71
Run VMG	3.67	4.58	5.21	5.76	6.38	7.17	10.10	12.74
Gybe Angles	144.4°	148.9°	150.1°	148.0°	145.1°	143.6°	144.1°	148.3°



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	1081.7	907.2	842.7	827.6	823.0	822.5	828.6	861.4
52°	714.9	625.8	592.8	580.7	573.6	568.8	563.9	571.8
60°	682.0	607.7	572.8	555.9	545.9	538.9	531.5	533.8
75°	663.6	594.3	551.3	521.3	505.4	493.3	478.0	472.4
90°	649.5	583.1	548.5	507.5	474.2	452.7	425.4	408.9
110°	639.7	559.9	509.0	478.6	452.7	430.1	382.8	337.4
120°	655.1	567.0	505.2	456.5	424.3	397.9	351.4	309.6
135°	722.2	604.6	537.3	477.9	421.3	368.0	294.9	260.7
150°	848.7	680.1	598.7	541.6	488.4	434.7	308.8	244.8
Run VMG	980.0	785.3	691.2	625.4	564.0	502.0	356.5	282.6
Selected Courses								
Windward / Leeward	1030.9	846.2	766.9	726.5	693.5	662.2	592.5	572.0
All purpose	799.2	677.1	619.2	583.9	556.0	531.7	486.4	468.5

Single Number Scoring Options		
Course	Time On Distance	Time On Time
Windward / Leeward	742.1	0.8086
All purpose	595.4	1.0078



Data in meters/kilograms (Metric)

HULL AND APPENDAGES (Lightship Trim)

Class	H22 ONE DESIGN	LOA	6.740	VCGD	-0.105
Measurement	21/07/2004	Max. Beam	2.494	VCGM	-0.094
HIN		Draft	1.517	RM Rated (kg·m)	18.4
Plan review		Displacement	789	Limit of positive stability(°)	112.5
Hull construction	Cored	Wetted area	9.08	Stability Index	103.7
Carbon Rudder	No	IMS L	6.475	Default crew weight	347
Light stanchions	No	LSM0	6.184	Declared crew weight	280
Trim tab	No	Acc. length	6.740		
		Sink (kg/mm)	7.41		

PROPELLER

Propeller Type	No Propeller
Hydro generator	No

RIG

Forestay tension	Aft	P	9.000	E	3.500
Inner stay	None Fitted	IG	8.314	J	2.360
Mast material	Aluminum	ISP	9.412	BAS	1.027
Single headsail furler	Yes	MDT1	0.073	FSD	0.000
Mainsail furler	No	MDL1	0.110	SFJ	
Articulated bowsprit	No	MDT2	0.064	SPL	0.000
Non-circular rigging	No	MDL2	0.076	WPL	
Fiber rigging	No	TL	1.650	TPS	3.930
Adjustable mast foot	No	MW	0.110	BD	0.115
Runners/Checkstays	0	GO	0.134	MWT	32.00
Spreaders	1			MCG	3.884
Rotating mast	No				

FLOTATION AND STABILITY

Calculation method	Poles inclining	SFFP	0.480	SAFP	6.650	W1	18.0	PD1	520.5	WD	6.740
Flotation Date	21/07/2014	FFM	0.875	FAM	0.625	W2	18.0	PD2	518.9	PLM	9000.00
		FF	0.879	FA	0.627	W3	18.0	PD3	519.0	GSA	1.0
		LCFcl	3.794	LCFsh	3.984	W4	18.0	PD4	518.5	RSA	1.0
		SG	1.0000	HBI	0.780					RM	18.4



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>
ORC	0.40	0.90	1.48	2.40	3.00	19.82		* Copied from legacy *

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	0.04	0.00	0.00	0.00	0.00	2.60	8.32	No	No	10.97		CR

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>
ORC	10.55	8.70	9.63	6.55	6.38	103%	52.26		CR