

APH ToD: **591.9** CDL: **6.579**

APH ToT: **1.0137** CertNo: **25/1**

### BOAT

Class **H22**  
Designer **Humphreys**  
Builder **Lion Yachts Sia**  
Age date **06/2004**  
Series date **01/2002**  
Offset file **H22.OD.OFF**  
Data file **1141H22**

### 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 **310 kg** (declared)  
Minimum weight **180 kg** \* when applied  
Non Manual Power **No**  
Crew Arm Extension

### SAIL AREAS (m<sup>2</sup>)

	Measured	Rated
Mainsail	<b>19.99</b>	<b>20.66</b>
Headsail Luffed	<b>10.97</b>	<b>10.97</b>
Headsail Flying		
Symmetric		
Asymmetric	<b>52.26</b>	<b>52.26</b>

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

### STORM SAIL AREAS (m<sup>2</sup>)

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

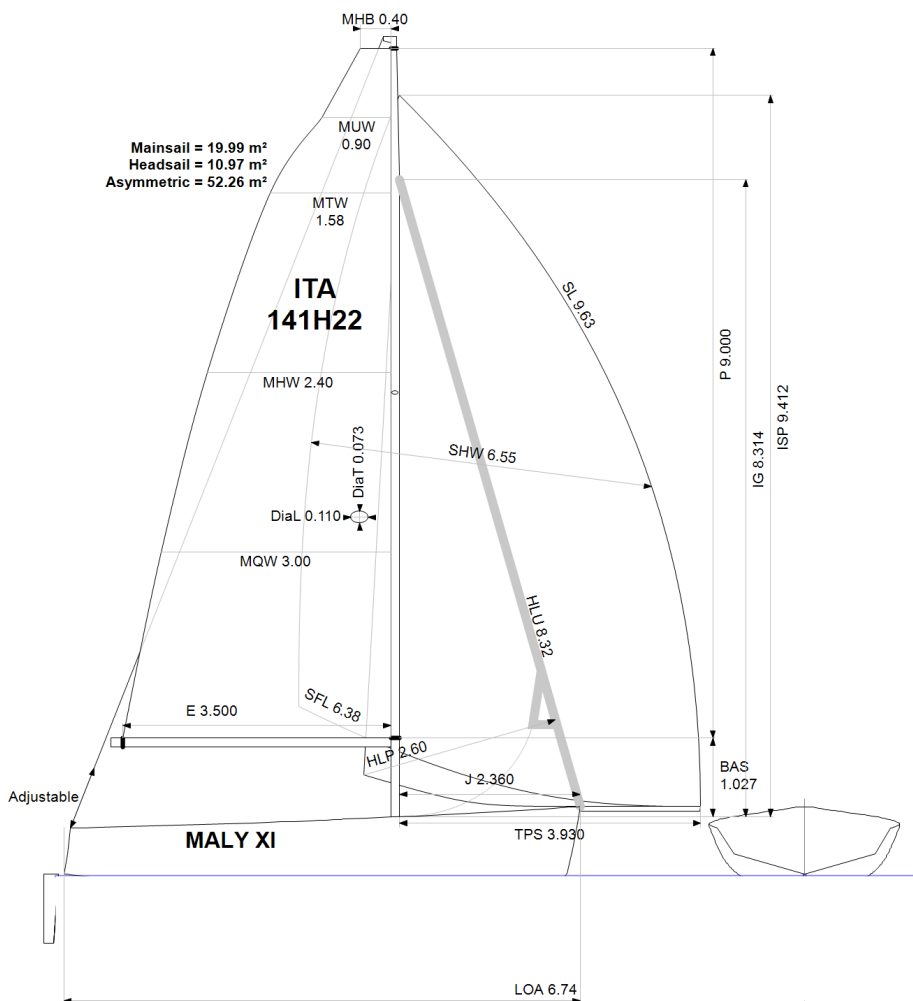
### SAIL LIMITS

Headsails **5** \* One set on the forestay  
\* Woven polyester sails  
Spinnakers **4**

### 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	4 kt	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt	24 kt
Beat Angles	42.8°	42.8°	40.1°	37.8°	37.8°	37.9°	38.2°	39.3°	41.4°
Beat VMG	2.42	3.31	3.96	4.30	4.40	4.44	4.46	4.44	4.30
52°	3.81	5.00	5.74	6.08	6.22	6.31	6.37	6.43	6.37
60°	4.07	5.25	5.91	6.28	6.48	6.61	6.70	6.80	6.79
75°	4.22	5.40	6.04	6.51	6.89	7.11	7.28	7.51	7.61
90°	4.31	5.55	6.20	6.55	7.05	7.54	7.89	8.39	8.73
110°	4.36	5.66	6.48	7.16	7.65	8.11	8.55	9.40	10.54
120°	4.24	5.54	6.40	7.20	8.00	8.64	9.23	10.53	11.99
135°	3.74	5.04	5.98	6.72	7.55	8.56	9.83	12.44	14.04
150°	3.02	4.27	5.31	6.04	6.70	7.41	8.30	11.73	14.81
Run VMG	2.62	3.70	4.60	5.25	5.81	6.41	7.19	10.16	12.83
Gybe Angles	143.9°	143.9°	149.2°	152.5°	150.5°	147.0°	145.0°	143.8°	148.3°

Time Allowances in secs/NM									
Wind Velocity	4 kt	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt	24 kt
Beat VMG	1487.4	1087.5	908.4	837.0	817.6	810.0	807.4	811.2	838.1
52°	945.7	719.3	627.4	592.6	579.0	570.7	565.2	559.6	565.5
60°	884.7	686.0	609.4	573.6	555.4	544.7	537.3	529.5	530.5
75°	852.9	667.0	596.1	553.2	522.8	506.6	494.4	479.3	472.8
90°	834.5	648.9	580.5	549.7	510.3	477.5	456.0	429.0	412.5
110°	825.5	635.5	555.4	502.8	470.6	444.1	421.2	382.9	341.4
120°	849.3	649.3	562.3	500.3	450.3	416.7	390.2	341.9	300.2
135°	963.4	714.8	602.2	535.7	476.8	420.6	366.2	289.4	256.5
150°	1193.5	843.5	678.2	596.1	537.2	486.1	433.9	306.9	243.0
Run VMG	1376.0	973.9	783.1	686.1	620.1	561.3	501.0	354.4	280.6
Selected Courses									
Windward / Leeward	1431.1	1030.7	845.7	761.5	718.8	685.6	654.2	582.8	559.4
All purpose	1075.2	798.7	676.2	616.5	579.9	551.5	526.9	481.3	462.3

Single Number Scoring Options		
Course	Time On Distance	Time On Time
Windward / Leeward	735.8	0.8155
All purpose	591.9	1.0137

Data in meters/kilograms (Metric)

**HULL AND APPENDAGES (Lightship Trim)**

Class	<b>H22</b>	LOA	<b>6.740</b>	VCGD	<b>-0.105</b>
Measurement	<b>21/07/2004</b>	Max. Beam	<b>2.494</b>	VCGM	<b>-0.094</b>
HIN		Draft	<b>1.517</b>	RM Rated (kg·m)	<b>18.4</b>
Plan review		Displacement	<b>789</b>	Limit of positive stability(°)	<b>N/A</b>
Hull construction	<b>Cored</b>	Wetted area	<b>9.08</b>	Stability Index	<b>N/A</b>
Carbon rudder	<b>No</b>	IMS L	<b>6.486</b>	Default crew weight	<b>347</b>
Light stanchions	<b>No</b>	LSM0	<b>6.184</b>	Declared crew weight	<b>310</b>
Trim tab	<b>No</b>	Acc. length	<b>6.740</b>		
		Sink (kg/mm)	<b>7.41</b>		

**PROPELLER**

Propeller Type	<b>No Propeller</b>
Hydro generator	<b>No</b>

**RIG**

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

**FLOTATION AND STABILITY**

Calculation method	<b>VCG entered directly</b>
VCG entered	<b>-0.105</b>
Flotation Date	<b>21/07/2014</b>

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**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	0.40	0.90	1.58	2.40	3.00	19.99	24/03/2025	

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**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	24/03/2023	

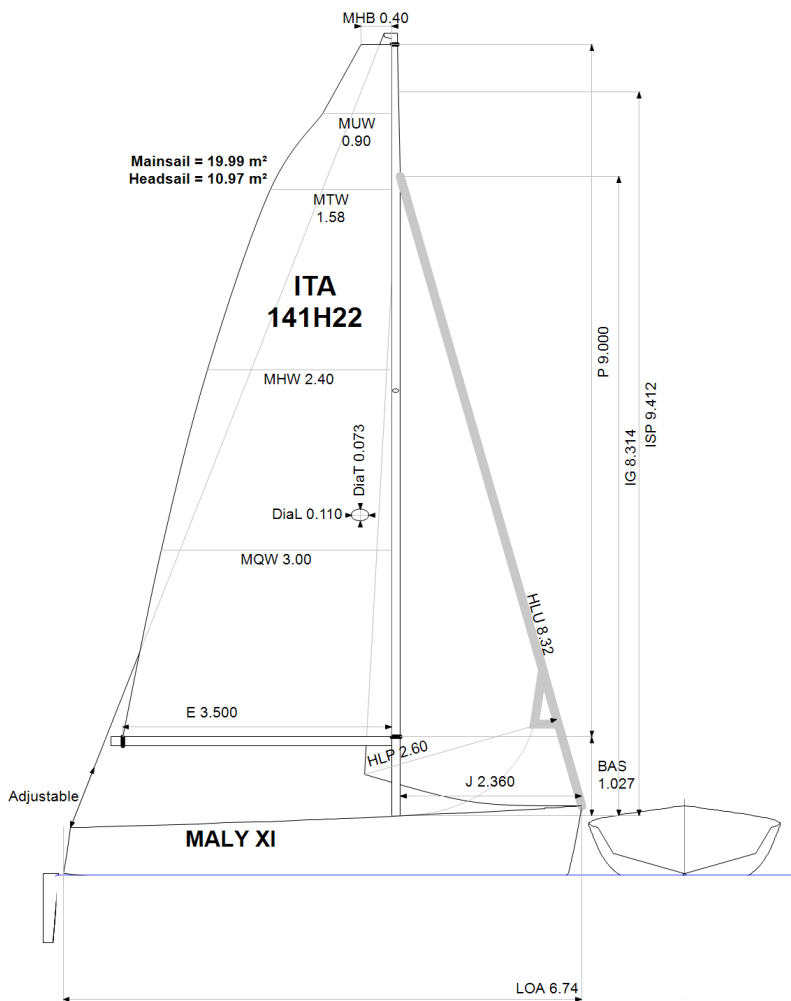
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**ASYMMETRIC SPINNAKER**

<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	10.55	8.70	9.63	6.55	6.38	103%	52.26	24/03/2023	

APH ToD: **634.9** CDL: **6.318**

APH ToT: **0.9451** CertNo: **25/1**



#### BOAT

Class **H22**  
Designer **Humphreys**  
Builder **Lion Yachts Sia**  
Age date **06/2004**  
Series date **01/2002**  
Offset file **H22.OD.OFF**  
Data file **141H22**

#### 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 **210 kg** (declared)  
Minimum weight **130 kg** \* when applied  
Non Manual Power **No**  
Crew Arm Extension

#### SAIL AREAS (m<sup>2</sup>)

	Measured	Rated
Mainsail	<b>19.99</b>	<b>20.66</b>
Headsail Luffed	<b>10.97</b>	<b>10.97</b>
Headsail Flying		
Symmetric		
Asymmetric		

#### STORM SAIL AREAS (m<sup>2</sup>)

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

#### SAIL LIMITS

Headsails **1** \* One set on the forestay  
\* Zero set flying  
\* Woven polyester sails  
Spinnakers **0** \* No spinnaker pole aboard

#### 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	4 kt	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt	24 kt
Beat Angles	42.1°	42.1°	39.7°	38.6°	38.6°	39.5°	39.9°	41.3°	44.3°
Beat VMG	2.50	3.38	3.98	4.18	4.24	4.27	4.27	4.21	3.99
52°	3.91	5.09	5.76	5.98	6.08	6.14	6.19	6.21	6.06
60°	4.16	5.34	5.95	6.20	6.34	6.44	6.51	6.57	6.47
75°	4.35	5.51	6.11	6.54	6.78	6.95	7.09	7.24	7.27
90°	4.28	5.46	6.11	6.64	7.13	7.46	7.72	8.10	8.35
110°	3.64	4.92	5.83	6.42	7.03	7.76	8.47	9.33	9.98
120°	3.33	4.62	5.61	6.21	6.80	7.49	8.30	10.24	11.56
135°	2.79	4.00	5.05	5.80	6.34	6.90	7.56	9.24	12.42
150°	2.31	3.37	4.36	5.20	5.83	6.30	6.80	8.02	9.63
Run VMG	2.01	2.92	3.78	4.62	5.38	5.95	6.44	7.55	8.97
Gybe Angles	145.6°	145.6°	147.4°	173.0°	175.7°	177.9°	177.5°	176.6°	174.8°

Time Allowances in secs/NM									
Wind Velocity	4 kt	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt	24 kt
Beat VMG	1439.8	1063.6	904.6	861.5	848.3	844.1	843.6	854.3	903.2
52°	921.5	706.7	624.5	602.1	592.0	586.2	581.8	579.8	593.9
60°	865.7	674.6	605.0	580.3	567.6	559.2	553.2	547.7	556.3
75°	827.6	653.2	589.4	550.8	531.3	517.8	507.8	497.5	495.3
90°	841.8	659.6	589.5	541.8	505.1	482.3	466.3	444.3	431.2
110°	988.4	731.2	617.2	560.8	511.7	464.2	425.3	385.8	360.6
120°	1080.4	778.8	641.4	579.4	529.3	480.8	433.6	351.5	311.3
135°	1288.9	899.8	713.2	620.2	568.3	522.0	476.1	389.6	289.9
150°	1559.1	1067.1	825.2	692.0	617.2	571.0	529.4	448.9	374.0
Run VMG	1787.7	1232.1	952.8	778.6	669.5	605.0	558.9	476.7	401.1
Selected Courses									
Windward / Leeward	1612.3	1147.9	928.7	820.1	758.9	724.5	701.3	665.5	652.2
All purpose	1195.9	874.1	727.9	658.6	617.7	589.9	567.2	533.3	515.2

Single Number Scoring Options		
Course	Time On Distance	Time On Time
Windward / Leeward	790.3	0.7592
All purpose	634.9	0.9451

Data in meters/kilograms (Metric)

**HULL AND APPENDAGES (Lightship Trim)**

Class	<b>H22</b>	LOA	<b>6.740</b>	VCGD	<b>-0.105</b>
Measurement	<b>21/07/2004</b>	Max. Beam	<b>2.494</b>	VCGM	<b>-0.094</b>
HIN		Draft	<b>1.517</b>	RM Rated (kg·m)	<b>18.4</b>
Plan review		Displacement	<b>789</b>	Limit of positive stability(°)	<b>N/A</b>
Hull construction	<b>Cored</b>	Wetted area	<b>9.08</b>	Stability Index	<b>N/A</b>
Carbon rudder	<b>No</b>	IMS L	<b>6.439</b>	Default crew weight	<b>347</b>
Light stanchions	<b>No</b>	LSM0	<b>6.184</b>	Declared crew weight	<b>210</b>
Trim tab	<b>No</b>	Acc. length	<b>6.740</b>		
		Sink (kg/mm)	<b>7.41</b>		

**PROPELLER**

Propeller Type	<b>No Propeller</b>
Hydro generator	<b>No</b>

**RIG**

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

**FLOTATION AND STABILITY**

Calculation method	<b>VCG entered directly</b>
VCG entered	<b>-0.105</b>
Flotation Date	<b>21/07/2014</b>



Non Spin/HSF  
Club Certificate  
2025

MALY XI  
ITA-141H22

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**MAINSAIL**

<i><b>Id</b></i>	<i><b>MHB</b></i>	<i><b>MUW</b></i>	<i><b>MTW</b></i>	<i><b>MHW</b></i>	<i><b>MQW</b></i>	<i><b>Area</b></i>	<i><b>Meas.Date</b></i>	<i><b>Comment</b></i>
A	0.40	0.90	1.58	2.40	3.00	19.99	24/03/2025	

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**HEADSAIL**

<i><b>Id</b></i>	<i><b>HHB</b></i>	<i><b>HUW</b></i>	<i><b>HTW</b></i>	<i><b>HHW</b></i>	<i><b>HQW</b></i>	<i><b>HLP</b></i>	<i><b>HLU</b></i>	<i><b>Btn</b></i>	<i><b>Flying FT</b></i>	<i><b>Area</b></i>	<i><b>Meas.Date</b></i>	<i><b>Comment</b></i>
A	0.04	0.00	0.00	0.00	0.00	2.60	8.32	No	No	10.97	24/03/2023	



APH ToD: **596.5** CDL: **6.320**

APH ToT: **1.0059** CertNo: **25/1**

**BOAT**

Class **H22**  
Designer **Humphreys**  
Builder **Lion Yachts Sia**  
Age date **06/2004**  
Series date **01/2002**  
Offset file **H22.OD.OFF**  
Data file **1141H22**

**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 **210 kg** (declared)  
Minimum weight **120 kg** \* when applied  
Non Manual Power **No**  
Crew Arm Extension

**SAIL AREAS (m<sup>2</sup>)**

	Measured	Rated
Mainsail	<b>19.99</b>	<b>20.66</b>
Headsail Luffed	<b>10.97</b>	<b>10.97</b>

Headsail Flying  
Symmetric  
Asymmetric **52.26** **52.26**  
*(All asymmetric spinnakers with SHW/SFL > 85%)*

**STORM SAIL AREAS (m<sup>2</sup>)**

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

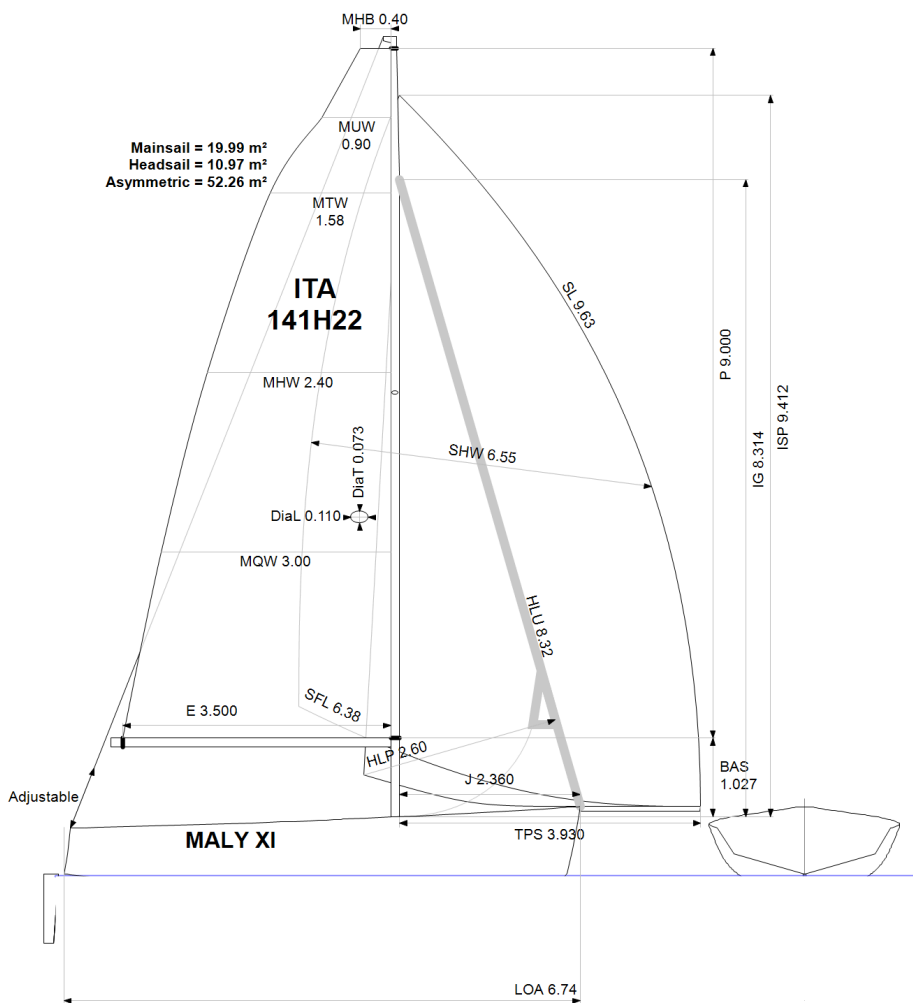
**SAIL LIMITS**

Headsails **5** \* One set on the forestay  
\* Woven polyester sails  
Spinnakers **4**

**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	4 kt	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt	24 kt
Beat Angles	42.1°	42.1°	39.7°	38.6°	38.6°	39.4°	39.8°	41.2°	44.1°
Beat VMG	2.50	3.38	3.98	4.18	4.24	4.27	4.27	4.22	3.99
52°	3.90	5.09	5.76	5.98	6.08	6.14	6.19	6.21	6.07
60°	4.16	5.33	5.94	6.20	6.34	6.43	6.50	6.57	6.48
75°	4.35	5.51	6.10	6.52	6.77	6.94	7.08	7.23	7.27
90°	4.44	5.56	6.10	6.63	7.10	7.44	7.70	8.09	8.34
110°	4.42	5.73	6.50	7.04	7.48	7.90	8.30	9.18	9.97
120°	4.32	5.64	6.49	7.24	7.88	8.42	8.95	10.03	11.24
135°	3.84	5.14	6.07	6.87	7.79	8.84	9.99	11.89	13.42
150°	3.07	4.35	5.40	6.13	6.84	7.67	8.69	12.03	15.02
Run VMG	2.67	3.77	4.68	5.33	5.93	6.64	7.53	10.42	13.01
Gybe Angles	143.5°	143.5°	149.2°	152.5°	150.1°	146.3°	144.0°	146.3°	150.3°

Time Allowances in secs/NM									
Wind Velocity	4 kt	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt	24 kt
Beat VMG	1440.4	1064.4	905.4	861.7	848.3	843.9	843.4	853.6	901.6
52°	922.0	707.3	625.2	602.4	592.3	586.4	581.9	579.6	593.3
60°	865.7	675.1	605.7	580.8	568.0	559.6	553.6	547.8	556.0
75°	828.4	653.7	590.0	551.9	532.0	518.6	508.4	497.7	495.4
90°	810.1	647.1	589.9	542.8	506.9	483.7	467.6	444.9	431.5
110°	814.5	628.7	553.9	511.6	481.6	455.8	433.8	392.0	360.9
120°	832.5	638.5	555.0	497.1	457.0	427.7	402.3	358.8	320.2
135°	937.3	700.0	592.6	524.1	461.9	407.3	360.4	302.7	268.3
150°	1171.3	827.8	666.4	587.3	525.9	469.2	414.2	299.2	239.7
Run VMG	1350.4	955.9	769.5	675.9	607.2	541.8	478.2	345.5	276.7
Selected Courses									
Windward / Leeward	1394.7	1010.1	837.4	768.8	727.8	692.8	660.8	599.5	589.2
All purpose	1047.7	784.8	671.5	619.7	586.1	559.2	536.1	497.4	487.1

Single Number Scoring Options		
Course	Time On Distance	Time On Time
Windward / Leeward	741.0	0.8098
All purpose	596.5	1.0059

Data in meters/kilograms (Metric)

**HULL AND APPENDAGES (Lightship Trim)**

Class	<b>H22</b>	LOA	<b>6.740</b>	VCGD	<b>-0.105</b>
Measurement	<b>21/07/2004</b>	Max. Beam	<b>2.494</b>	VCGM	<b>-0.094</b>
HIN		Draft	<b>1.517</b>	RM Rated (kg·m)	<b>18.4</b>
Plan review		Displacement	<b>789</b>	Limit of positive stability(°)	<b>N/A</b>
Hull construction	<b>Cored</b>	Wetted area	<b>9.08</b>	Stability Index	<b>N/A</b>
Carbon rudder	<b>No</b>	IMS L	<b>6.443</b>	Default crew weight	<b>170</b>
Light stanchions	<b>No</b>	LSM0	<b>6.184</b>	Declared crew weight	<b>210</b>
Trim tab	<b>No</b>	Acc. length	<b>6.740</b>		
		Sink (kg/mm)	<b>7.41</b>		

**PROPELLER**

Propeller Type	<b>No Propeller</b>
Hydro generator	<b>No</b>

**RIG**

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

**FLOTATION AND STABILITY**

Calculation method	<b>VCG entered directly</b>
VCG entered	<b>-0.105</b>
Flotation Date	<b>21/07/2014</b>

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**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	0.40	0.90	1.58	2.40	3.00	19.99	24/03/2025	

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**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	24/03/2023	

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**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	10.55	8.70	9.63	6.55	6.38	103%	52.26	24/03/2023	