

APH ToD: **595.6** CDL: **6.580**

APH ToT: **1.0075** CertNo: **24/1**

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 (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**

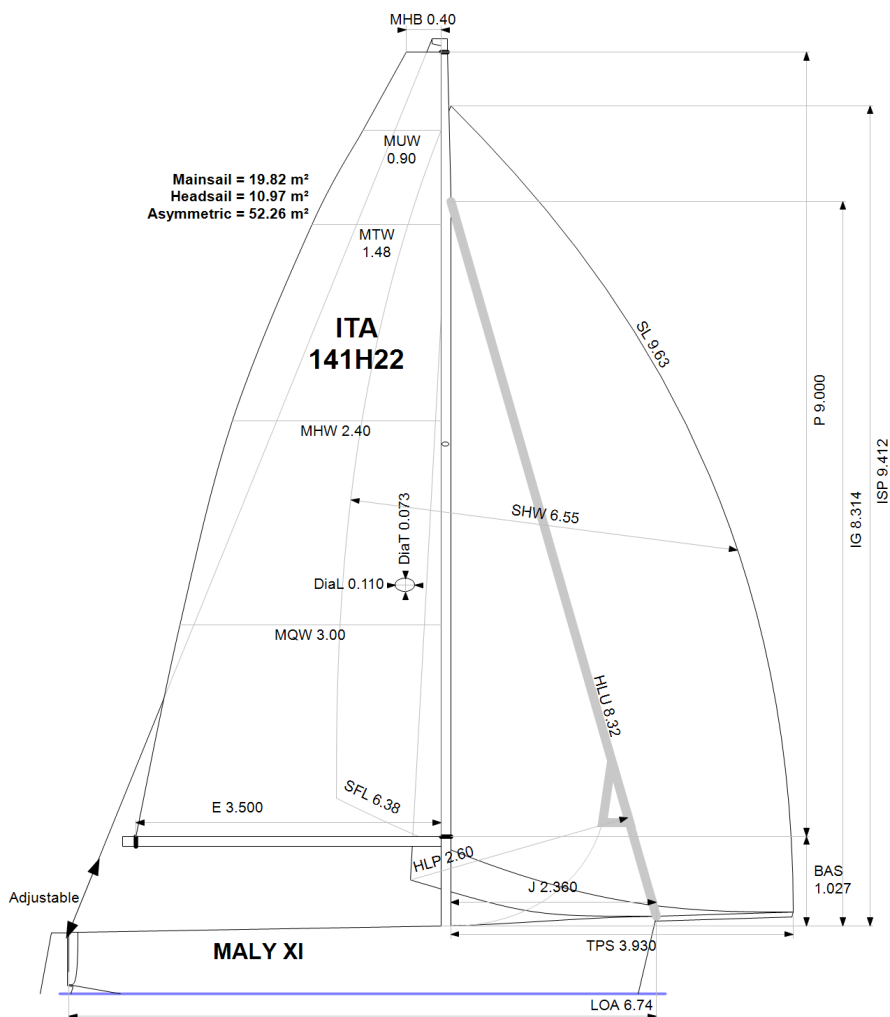
SAIL LIMITS

Headsails **1** * 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	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt	24 kt
Beat Angles	42.9°	40.2°	37.8°	37.8°	38.0°	38.3°	39.3°	41.3°
Beat VMG	3.30	3.95	4.30	4.40	4.45	4.46	4.44	4.31
52°	4.99	5.73	6.07	6.22	6.31	6.37	6.44	6.38
60°	5.23	5.90	6.27	6.48	6.61	6.70	6.80	6.79
75°	5.38	6.03	6.50	6.88	7.11	7.28	7.52	7.62
90°	5.51	6.16	6.52	7.04	7.53	7.89	8.40	8.73
110°	5.60	6.40	7.04	7.49	7.91	8.32	9.27	10.55
120°	5.46	6.32	7.08	7.83	8.44	8.99	10.17	11.57
135°	4.96	5.93	6.66	7.47	8.45	9.63	12.16	13.77
150°	4.22	5.27	5.99	6.61	7.30	8.18	11.51	14.58
Run VMG	3.65	4.56	5.19	5.72	6.32	7.08	9.97	12.63
Gybe Angles	144.4°	148.9°	149.9°	148.0°	145.3°	143.7°	143.7°	148.0°

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	1091.3	910.7	837.3	817.5	809.5	806.8	810.3	836.2
52°	721.7	628.4	592.9	578.9	570.5	564.9	559.2	564.7
60°	688.1	610.2	574.1	555.4	544.5	537.0	529.1	529.9
75°	668.9	597.0	554.1	523.1	506.5	494.2	478.9	472.3
90°	653.2	584.4	551.9	511.3	478.0	456.1	428.8	412.2
110°	643.2	562.6	511.2	480.6	454.9	432.5	388.2	341.4
120°	658.9	569.9	508.5	459.6	426.7	400.5	353.8	311.2
135°	726.4	607.2	540.4	482.1	426.1	373.7	296.1	261.5
150°	853.1	683.5	601.1	544.9	493.2	440.3	312.7	246.9
Run VMG	985.0	789.2	694.1	629.2	569.5	508.4	361.0	285.1
Selected Courses								
Windward / Leeward	1038.2	850.0	765.7	723.3	689.5	657.6	585.7	560.7
All purpose	804.8	680.0	619.9	583.5	555.1	530.5	484.0	463.6

Single Number Scoring Options		
Course	Time On Distance	Time On Time
Windward / Leeward	740.0	0.8108
All purpose	595.6	1.0075

Data in meters/kilograms (Metric)

HULL AND APPENDAGES (Lightship Trim)

Class	H22	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(°)	N/A
Hull construction	Cored	Wetted area	9.08	Stability Index	N/A
Carbon Rudder	No	IMS L	6.486	Default crew weight	347
Light stanchions	No	LSM0	6.184	Declared crew weight	310
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	Foil
Mainsail furler	No	MDL1	0.110	SFJ	
Articulated bowsprit	No	MDT2	0.064	SPL	
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	
Spreaders	1			MCG	
Rotating mast	No				

FLOTATION AND STABILITY

Calculation method **VCG entered directly**
VCG entered **-0.105**
Flotation Date **21/07/2014**

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	1.48	2.40	3.00	19.82	24/03/2023	

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	

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: **633.7** CDL: **6.577**

APH ToT: **0.9469** CertNo: 24/1

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

SAIL AREAS (m²)

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

STORM SAIL AREAS (m²)

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

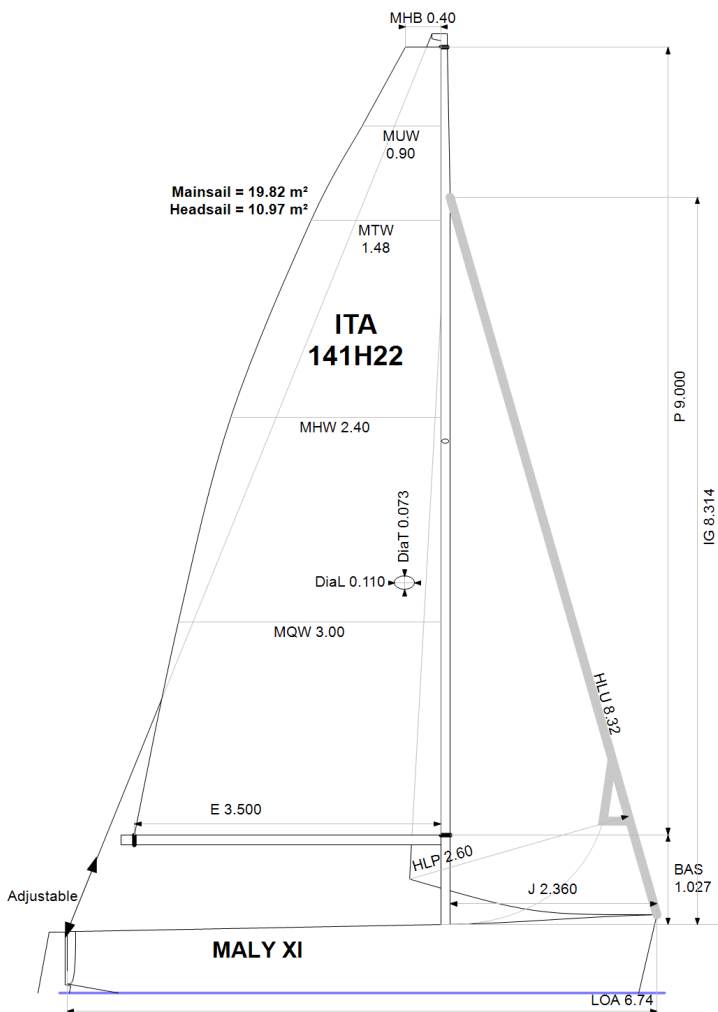
SAIL LIMITS

Headsails **1** * Woven polyester sails
Spinnakers **0** * No spinnaker pole aboard

STABILITY

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

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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°	37.8°	37.8°	38.0°	38.2°	39.3°	41.3°
Beat VMG	3.30	3.96	4.30	4.40	4.45	4.46	4.44	4.30
52°	4.99	5.73	6.07	6.22	6.31	6.37	6.44	6.37
60°	5.24	5.90	6.28	6.49	6.61	6.71	6.81	6.79
75°	5.39	6.04	6.51	6.89	7.11	7.29	7.52	7.63
90°	5.30	6.01	6.53	7.05	7.55	7.91	8.41	8.75
110°	4.79	5.72	6.28	6.87	7.53	8.28	9.71	10.73
120°	4.50	5.49	6.09	6.64	7.23	7.97	9.90	12.34
135°	3.91	4.93	5.70	6.21	6.73	7.31	8.77	11.74
150°	3.31	4.26	5.09	5.73	6.19	6.65	7.73	9.13
Run VMG	2.87	3.73	4.56	5.30	5.87	6.33	7.33	8.61
Gybe Angles	145.7°	173.0°	174.8°	176.6°	178.6°	178.4°	177.5°	176.6°



Club
Certificate
Non Spinnaker
2024

Boat
MALY XI
ITA-141H22

FEDERAZIONE ITALIANA VELA
Distr.:UVAI www.uvai.it
Tel. + 39068841273
E-mail segreteria@uvai.it



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	1090.2	910.0	837.3	817.6	809.8	807.1	810.6	836.9
52°	720.9	627.9	592.6	578.8	570.4	564.8	559.1	564.8
60°	687.3	609.8	573.6	555.1	544.3	536.7	528.9	529.8
75°	668.1	596.5	553.4	522.6	506.0	493.7	478.5	471.8
90°	678.9	599.1	551.1	510.4	477.1	455.4	428.1	411.4
110°	751.8	629.8	572.8	524.2	477.9	434.8	370.6	335.5
120°	799.5	656.1	590.8	542.6	497.7	451.5	363.5	291.6
135°	920.5	730.4	631.9	579.5	534.7	492.8	410.6	306.7
150°	1087.4	844.5	707.3	628.1	581.8	541.5	466.0	394.5
Run VMG	1255.7	964.8	789.5	679.3	613.3	569.2	490.9	418.2
Selected Courses								
Windward / Leeward	1172.9	937.4	813.4	748.5	711.5	688.1	650.7	627.5
All purpose	894.4	738.2	659.0	614.4	584.3	560.5	522.2	494.9

Single Number Scoring Options		
Course	Time On Distance	Time On Time
Windward / Leeward	783.3	0.7660
All purpose	633.7	0.9469



Data in meters/kilograms (Metric)

HULL AND APPENDAGES (Lightship Trim)

Class	H22	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(°)	N/A
Hull construction	Cored	Wetted area	9.08	Stability Index	N/A
Carbon Rudder	No	IMS L	6.482	Default crew weight	347
Light stanchions	No	LSM0	6.184	Declared crew weight	310
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		BAS	1.027
Single headsail furler	Yes	MDT1	0.073	FSD	Foil
Mainsail furler	No	MDL1	0.110	SFJ	
Articulated bowsprit	No	MDT2	0.064	SPL	
Non-circular rigging	No	MDL2	0.076	WPL	
Fiber rigging	No	TL	1.650	TPS	
Adjustable mast foot	No	MW	0.110	BD	0.115
Runners/Checkstays	0	GO	0.134	MWT	
Spreaders	1			MCG	
Rotating mast	No				

FLOTATION AND STABILITY

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



Club
Certificate
Non Spinnaker
2024

Boat
MALY XI
ITA-141H22

FEDERAZIONE ITALIANA VELA
Distr.:UVAI www.uvai.it
Tel. + 39068841273
E-mail segreteria@uvai.it



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	1.48	2.40	3.00	19.82	24/03/2023	

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	

APH ToD: **603.6** CDL: **6.189**

APH ToT: **0.9940** CertNo: **24/1**

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 **170 kg** (default)
Minimum weight **120 kg** *when applied
Non Manual Power **No**
Crew Arm Extension

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**

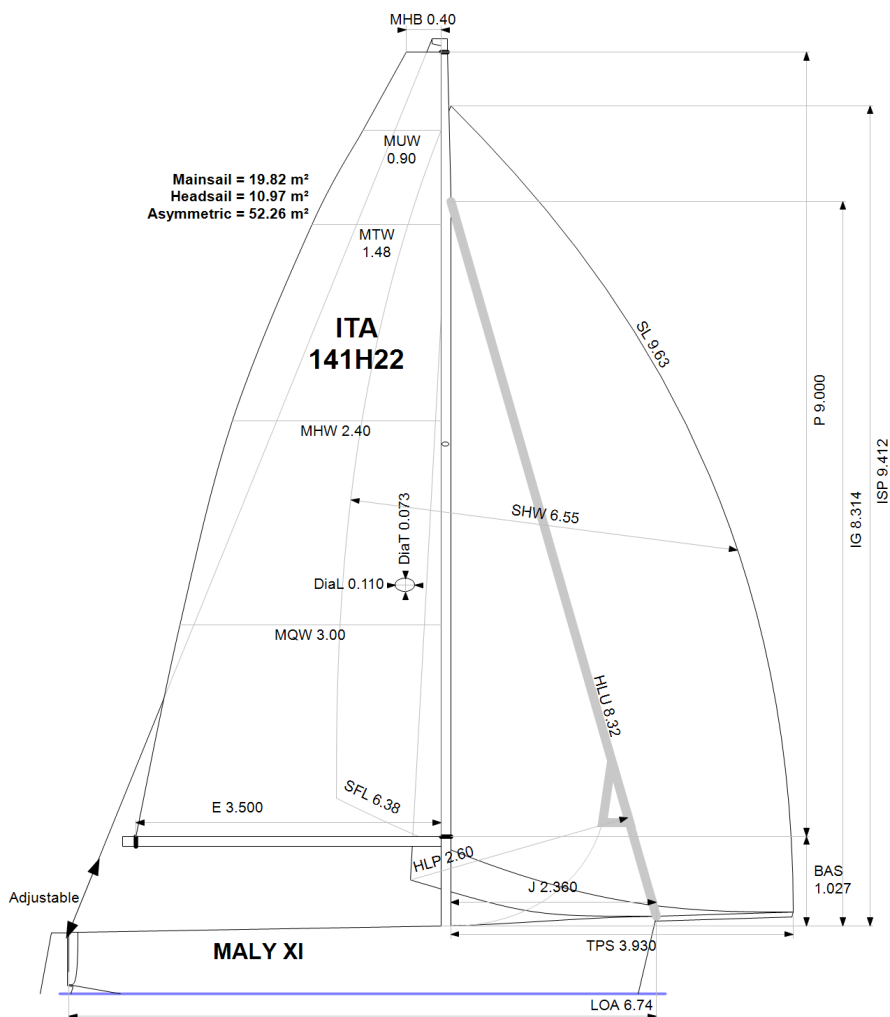
SAIL LIMITS

Headsails **1** * 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	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt	24 kt
Beat Angles	42.2°	39.8°	39.0°	39.2°	39.6°	40.8°	42.2°	45.6°
Beat VMG	3.39	3.94	4.10	4.16	4.17	4.18	4.10	3.84
52°	5.10	5.73	5.91	6.01	6.06	6.10	6.10	5.93
60°	5.35	5.93	6.14	6.26	6.35	6.42	6.46	6.33
75°	5.53	6.11	6.49	6.70	6.86	6.98	7.11	7.11
90°	5.52	6.12	6.65	7.07	7.36	7.60	7.96	8.17
110°	5.68	6.40	6.85	7.24	7.62	8.11	9.09	9.75
120°	5.59	6.42	7.10	7.63	8.13	8.61	9.56	10.54
135°	5.10	6.06	6.86	7.78	8.77	9.70	11.36	12.87
150°	4.33	5.40	6.12	6.83	7.70	8.74	11.94	14.78
Run VMG	3.75	4.68	5.30	5.91	6.67	7.57	10.34	12.81
Gybe Angles	144.0°	149.3°	150.5°	147.8°	145.3°	144.3°	147.0°	150.4°



Club
Certificate
Double Handed
2024

Boat
MALY XI
ITA-141H22

FEDERAZIONE ITALIANA VELA
Distr.:UVAI www.uvai.it
Tel. + 39068841273
E-mail segreteria@uvai.it



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	1061.4	914.2	877.0	865.2	862.6	861.9	877.1	937.2
52°	705.4	628.5	608.6	599.3	594.2	589.7	589.9	607.2
60°	673.3	607.4	586.3	574.8	567.2	561.1	557.3	568.7
75°	651.5	588.9	554.9	537.5	524.9	515.8	506.5	506.1
90°	652.2	588.0	541.5	509.0	488.8	473.6	452.5	440.6
110°	634.1	562.5	525.4	497.1	472.7	443.7	396.0	369.1
120°	644.0	561.1	507.0	472.1	443.1	418.0	376.4	341.6
135°	705.5	593.9	524.5	463.0	410.4	371.1	316.9	279.7
150°	831.0	666.3	588.0	527.1	467.3	411.9	301.5	243.6
Run VMG	959.6	769.4	678.7	608.7	539.6	475.6	348.1	281.0
Selected Courses								
Windward / Leeward	1010.5	841.8	777.8	736.9	701.1	668.8	612.6	609.1
All purpose	786.2	674.8	626.3	594.0	567.6	544.5	508.5	502.4

Single Number Scoring Options		
Course	Time On Distance	Time On Time
Windward / Leeward	749.1	0.8010
All purpose	603.6	0.9940



Data in meters/kilograms (Metric)

HULL AND APPENDAGES (Lightship Trim)

Class	H22	LOA	6.740	VCGD	-0.105
Measurement	21/07/2004	Max. Beam	2.494	VCGM	-0.094
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Light stanchions	No	LSM0	6.184	Declared crew weight	N/A
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
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Single headsail furler	Yes	MDT1	0.073	FSD	Foil
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Adjustable mast foot	No	MW	0.110	BD	0.115
Runners/Checkstays	0	GO	0.134	MWT	
Spreaders	1			MCG	
Rotating mast	No				

FLOTATION AND STABILITY

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



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	1.48	2.40	3.00	19.82	24/03/2023	

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	

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	