



GPH = **579.1** CDL = **10.458**

BOAT

Class **IMX 40**
Designer **JEPPESEN**
Builder **X-YACHTS**
Age Date **03/2002**
Series Date **01/2000**
Offset File **IMX40.OFF**

HULL

Length Overall **12.100 m**
Maximum Beam **3.780 m**
Draft **2.432 m**
Displacement **7,039 kg**
DLR **5.6641**
IMS Division **Cruiser/Racer**
Dynamic Allowance **0.000%**
Age Allowance **0.487%**

PROPELLER

Installation **Strut**
Type **Folding 3 blades**
Diameter **0.432m**

CREW

Maximum weight **770 kg**
Minimum weight **578 kg * when applied**
Non Manual Power **No**
Crew Arm Extension

SAIL AREAS (m²)

	Measured	Rated
Mainsail	49.93	51.06
Headsail Luffed	52.13	52.13
Headsail Flying		
Symmetric		
Asymmetric	131.61	131.61

* 1 asymmetric(s) with SHW/SFL < 85%

SAIL LIMITATIONS

Headsails **6**
Spinnakers **4**

STABILITY

Righting Moment **174.3 kg·m**
Stability Index **120.8**

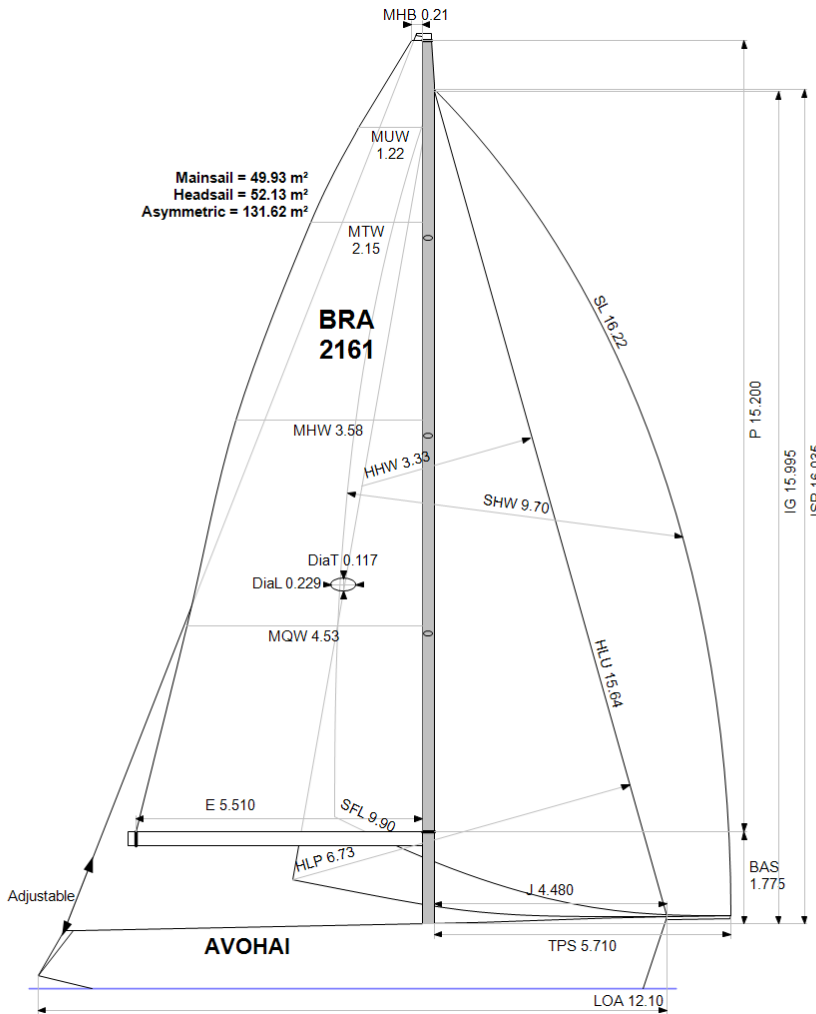
COMMENTS

EX ASA ALUMINIO / ATHOS

OWNER

Lars Grael
Rua Candido Gaffree, 161 Ap 501
R.J. Urca CEP 22291-080

The owner certifies that he/she understands his/her responsibilities under ORC Rule and Regulations.



Rated boat velocities in knots

Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat Angles	42.0°	40.9°	39.8°	38.3°	37.5°	37.5°	37.1°
Beat VMG	3.85	4.64	5.18	5.42	5.54	5.60	5.68
52°	5.83	6.90	7.42	7.61	7.70	7.75	7.80
60°	6.15	7.14	7.59	7.80	7.90	7.96	8.00
75°	6.42	7.31	7.73	8.00	8.20	8.32	8.44
90°	6.36	7.30	7.75	8.06	8.36	8.63	8.97
110°	6.14	7.32	7.88	8.30	8.65	8.93	9.39
120°	5.97	7.19	7.80	8.25	8.74	9.21	9.90
135°	5.36	6.60	7.47	7.94	8.39	8.90	10.07
150°	4.53	5.66	6.67	7.39	7.75	8.09	8.87
Run VMG	3.92	4.90	5.78	6.40	6.76	7.33	8.08
Gybe Angles	144.0°	148.0°	148.5°	150.5°	152.8°	176.0°	178.0°



Time Allowances in secs/NM							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	933.9	775.6	694.6	664.0	650.4	643.4	634.3
52°	617.3	522.0	485.1	472.8	467.4	464.5	461.3
60°	585.3	503.9	474.1	461.5	455.7	452.5	450.0
75°	560.8	492.4	465.7	449.9	438.9	432.7	426.8
90°	565.8	493.3	464.4	446.6	430.6	417.0	401.4
110°	586.7	491.7	456.6	433.7	416.4	403.3	383.5
120°	602.7	500.8	461.7	436.4	411.9	390.9	363.8
135°	671.6	545.2	482.2	453.5	429.1	404.6	357.7
150°	794.6	636.4	539.7	487.3	464.7	444.8	405.7
Run VMG	917.6	734.8	623.2	562.4	532.6	491.4	445.8
Selected Courses							
Windward / Leeward	925.8	755.2	658.9	613.2	591.5	567.4	540.1
All purpose	712.6	592.0	532.0	502.9	486.0	471.4	450.8

Single Number Scoring Options		
Course	Time On Distance	Time On Time
Windward / Leeward	639.6	0.9381
All purpose	519.0	1.1561

Custom scoring options for Brazil

Single Number	Time On Time
Upwind "bolina"	0.8406
Downwind "popa"	0.9750
70% up, 30% down "Ilhabela"	0.8769
30% up, 70% down "Ilhabela-inverso"	0.9304



Data in meters/kilograms (Metric)

HULL AND APPENDAGES

Class	IMX 40	LOA	12.100	VCGD	0.031
Measurement	27/08/2020	Max. Beam	3.780	VCGM	0.020
Measurer	GORDON KUNZE	Draft	2.432	RM Measured (kg·m)	174.3
HIN		Displacement	7.039	RM Default (kg·m)	186.3
Plan review		Wetted area	29.99	Limit of positive stability(°)	118.3
Hull construction	Cored	IMS L	10.809	Stability Index	120.8
Carbon Rudder	No	LSM0	10.751		
Light stanchions	No	Acc. length	12.100		
Trim tab	No	Sink (kg/mm)	22.39		

PROPELLER

Propeller Type	Folding 3 blades	PRD	0.432	EDL	1.620	ST3	0.180
Installation	Strut	PBW		ST1	0.042	ST4	0.112
Twin screw	No			ST2	0.180	ST5	0.274
PIPA	0.0036						

RIG

Forestay tension	Aft	P	15.200	E	5.510
Inner stay	None Fitted	IG	15.995	J	4.480
Carbon mast	Yes	ISP	16.035	BAS	1.775
Headsail furler	No	MDT1	0.117	FSD	0.036
Mainsail furler	No	MDL1	0.229	SFJ	
Articulated bowsprit	No	MDT2	0.100	SPL	
Non-circular rigging	No	MDL2	0.170	TPS	5.710
Fiber rigging	No	TL	0.855	BD	0.270
Runners/Checkstays	0	MW	0.229	MWT	207.00
Spreaders	3	GO	0.245	MCG	4.840

FLOTATION AND STABILITY

Inclining Test	Boom Inclining	SFFP	0.405	SAFP	11.420	W1	100.0	PD1	242.7	WD	5.360
Flotation Date	28/08/2020	FFM	1.360	FAM	1.110	W2	100.0	PD2	241.7	PLM	9000.00
Measurer	GORDON	FF	1.367	FA	1.108	W3	100.0	PD3	243.3	GSA	1.0
Comment		LCFcl	6.714	LCFsh	6.955	W4	100.0	PD4	241.2	RSA	1.0
		SG	1.0230	HBI	1.240	LCFD					

MEASUREMENT INVENTORY

Id	Tank	Type	Capacity	LCG	VCG	Condition	Description
1	DISEL	AÇO	90.0	3.00		34.5	
20	Ballast	20 BARRAS DE CHUMBO	375.0	5.00			
Total ballast			375.0				
Id	Item	Description	Weight	LCG	VCG		
3	Miscellaneous	BATERIAS		7.50			
1	Miscellaneous	BOILER		3.00			
1	Miscellaneous	GUINCHO LEWMAR		12.00			
1	Miscellaneous	FREEZER		7.00			



MAINSAIL

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Maker	Material	Comment
M-1	0.21	1.22	2.15	3.58	4.53	49.93	MANOLO	31/08/2020	NORTH SAIL	Carbon	NEW

HEADSAIL

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Btn	Flying	FT	Area	Measurer	Meas.Date	Maker	Material	Comment
LM	0.05	0.95	1.66	3.33	4.89	6.73	15.64	No	No		52.13	MANOLO	31/08/2020	NORTH SAIL	Carbon	NEW
1.5H	0.08	0.69	1.39	3.02	4.78	6.70	15.51	No	No		49.02	GORDON	29/01/2020	PROLAM-COGNAC	Unknown	
G3	0.07	0.72	1.36	2.52	3.59	4.59	15.70	No	No		38.23	CARLOS	28/10/2020	NORTH	Unknown	

ASYMMETRIC SPINNAKER

Id	SLU	SLE	SL	SHW	SFL	Ratio	Area	Measurer	Meas.Date	Maker	Material	Comment
A1	17.78	14.65	16.22	9.70	9.90	98%	131.61	GORDON	27/08/2020	UK	Polyester	
A2	17.07	14.89	15.98	8.40	10.04	84%	116.23	GORDON	27/09/2020	UK	Polyester	Branco