



ORC
Offshore Racing Congress
World leader in rating technology

**2020
ORC Club
Certificate**

Rating Office

EYU
Purje 8
11911, Tallinn
Estonia

Certificate

Number **Est029**
Issued On **5/27/2020**
ORC Ref **03580000IVT**
VPP Ver. **2020 1.02**
Valid until **31/12/2020**

Crew Weight

Default 291kg
Maximum **290kg**
Minimum* **205kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

ToD ToT
Non Spin GPH **798.1 0.7518**
Non Spin OSN **771.3 0.7779**

Sails Limitations

Headsails **5** Spinnakers **4**
Woven Polyester

Spinnaker configuration

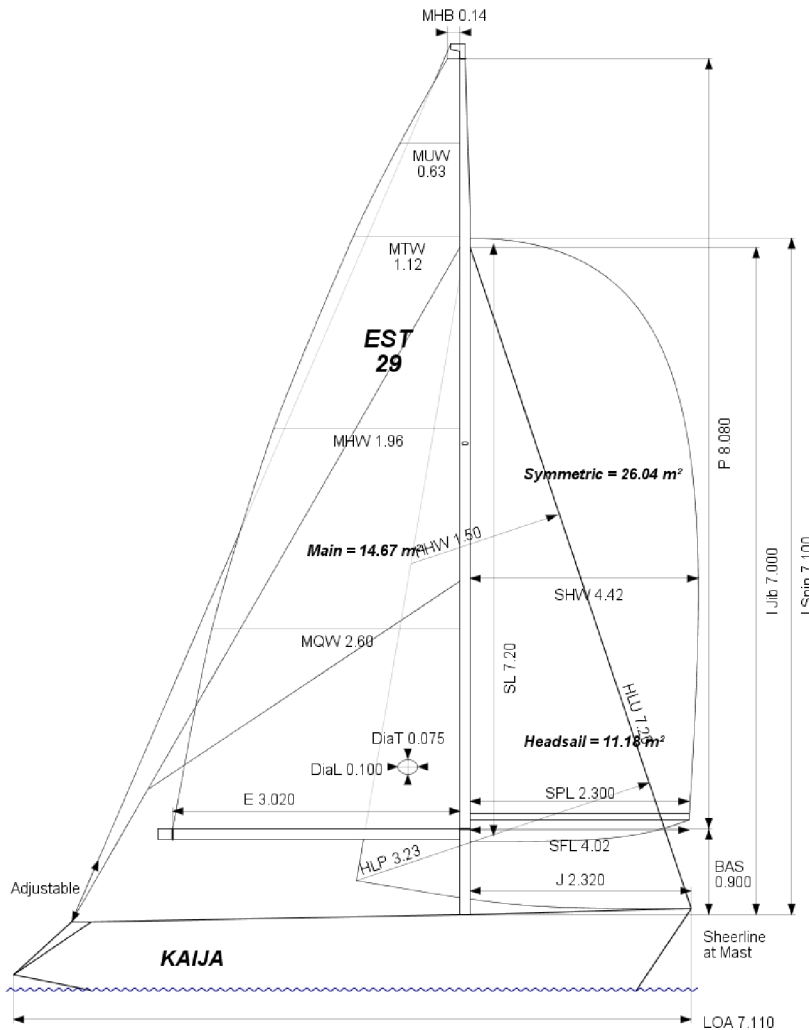
Symmetric: **Yes 26.04**
Asymmetric: **No**
Flying H/S: **No**
Spin. Pole: **Yes**

Class Division Length

CDL = 5.724

Stability (Estimated)

Limit Positive Stab.: **111.8°**
Stability Index: **103.6**



BOAT		GPH		HULL						
Name KAIJA		772.5		Data File Est0029		LOA 7.110m				
Sail Nr EST29				Offset File Opty71_EST29.o		MB 2.494m				
				Displacement 1,300kg		Draft 1.472m				
CLASS				IMS Division Cruiser/Racer		Dynamic All. 0.295%				
Class OPTY 71 A				Plan Review		Construction Solid				
Designer				Fiber Rigging No		Aramid Core No				
Builder Teliga				Crew Arm Ex		Carbon Rudder No				
Series 07/1978						Light Stanchions No				
Age Date 01/1986				IMSL 5.827m		VCGD 0.013m		Sink 7.29kg/mm		
Age Allowance 0.487%				RL 5.621m		VCGM 0.003m		WS 9.72m²		
COMMENTS				LSM0 5.467m		Displacement/Length ratio				
				Water Ballast		Trim Tab No				
				BLR Index 0.0000						
PROPELLER				CENTERBOARD						
Type No Propeller				N/A						
SCORING OPTIONS										
	COASTAL / LONG DISTANCE						WINDWARD / LEEWARD			
Time on Distance	750.0						830.2			
Time on Time	0.8000						0.8131			
Triple Number	Low	Medium	High	Low	Medium	High	Low	Medium	High	
Time on Distance	879.8	685.8	614.9	1130.1	833.2	732.4				
Time on Time	0.7672	0.9843	1.0977	0.5973	0.8101	0.9216				

BOAT	
Name KAIJA	Sail Nr EST29
File Est0029	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS			
Inclining Test Club Estimated VCG			
Flotation date 23/10/2019		SG	
FFM	FF 0.840	SFFP	0.552
FAM	FA 0.642	SAFP	6.288
LCF from stem on CL / on sheer		3.682 / 3.877	
Maximum beam station from stem		4.085	
RM Measured		21.2kg·m	
RM Default		20.6kg·m	
Limit of positive stability / Stab.Index		111.8° / 103.6	
Freeboard at mast at 2.320		0.789	



2020
Measurements
Datasheet

RIG			
Forestay Tension	Aft	Spreaders	1
Inner Stay	None Fitted	Runners/Checkstays	2
Carbon Mast	No	Jib Furler	No
Fiber Rigging	No	Main Furler	No
Non-Circular Rigging	No		
Articulated Bowsprit			
P	8.080	E	3.020
IG	7.000	J	2.320
ISP	7.100	SFJ	
BAS	0.900	SPL	2.300
FSD	0.030	TPS	
MDT1	0.075	MW	
MDL1	0.100	GO	
MDT2		BD	
MDL2		MWT	
TL	-2.000	MCG	

MIZZEN RIG AND SAILS	
N/A	

PROPELLER	
Type No Propeller	

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COMMENTS	

MOVABLE BALLAST	
N/A	

CENTERBOARD	
N/A	

SAILS INVENTORY																
MAINSAIL (1)																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
1	0.14	0.63	1.12	1.96	2.60	14.67										
HEADSAILS (2)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Flying	Measurer	Meas.Date	Manufacture	Material	Comment
2	0.04	0.36	0.71	1.50	2.34	3.23	7.20	139%	11.18		No					
1	0.04	0.33	0.64	1.37	2.26	3.21	6.90	138%	10.26		No					
SYMMETRIC SPINNAKERS (2)																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
2	7.20	7.20	7.20	4.42	4.02	26.04										
1	7.20	7.20	7.20	3.92	3.60	23.14										
ASYMMETRIC SPINNAKERS (0)																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				

2020

ORC Club Certificate Appendix

BOAT			
Name	KAIJA	Certificate Number	Est029
Sail Nr	EST29	Issued On	5/27/2020

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1273.1	1071.0	955.1	890.7	866.0	860.2	874.7
52°	842.3	714.3	661.9	636.7	622.1	615.9	615.2
60°	800.4	685.9	645.1	622.3	605.6	595.1	590.7
75°	771.3	669.4	631.6	607.9	586.9	569.6	552.7
90°	770.9	656.0	614.1	584.7	562.4	551.4	526.2
110°	773.5	656.9	612.7	579.3	548.7	523.2	490.9
120°	803.3	671.6	621.7	587.9	555.9	527.2	480.0
135°	906.5	736.6	647.1	609.9	578.4	548.2	494.7
150°	1050.9	836.5	705.3	639.9	606.6	577.0	523.0
Run VMG	1213.5	962.7	810.6	702.3	643.7	610.4	554.3
Selected Courses							
Windward / Leeward	1243.3	1016.9	882.8	796.5	754.9	735.3	714.5
Circular Random	1057.9	857.1	749.8	687.9	650.3	626.3	597.5
Coastal / Long Distance	1240.3	956.0	800.5	708.5	661.5	626.8	568.1
Non Spinnaker	1101.7	888.7	774.1	707.5	666.8	640.8	610.0

Velocity Prediction in Knots for True Wind Speeds							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat Angles	41.6°	41.6°	40.5°	38.4°	37.9°	37.9°	39.4°
Beat VMG	2.83	3.36	3.77	4.04	4.16	4.19	4.12
52°	4.27	5.04	5.44	5.65	5.79	5.85	5.85
60°	4.50	5.25	5.58	5.79	5.94	6.05	6.09
75°	4.67	5.38	5.70	5.92	6.13	6.32	6.51
90°	4.67	5.49	5.86	6.16	6.40	6.53	6.84
110°	4.65	5.48	5.88	6.21	6.56	6.88	7.33
120°	4.48	5.36	5.79	6.12	6.48	6.83	7.50
135°	3.97	4.89	5.56	5.90	6.22	6.57	7.28
150°	3.43	4.30	5.10	5.63	5.93	6.24	6.88
Run VMG	2.97	3.74	4.44	5.13	5.59	5.90	6.49
Gybe Angles	149.5°	154.5°	155.0°	180.0°	180.0°	180.0°	180.0°