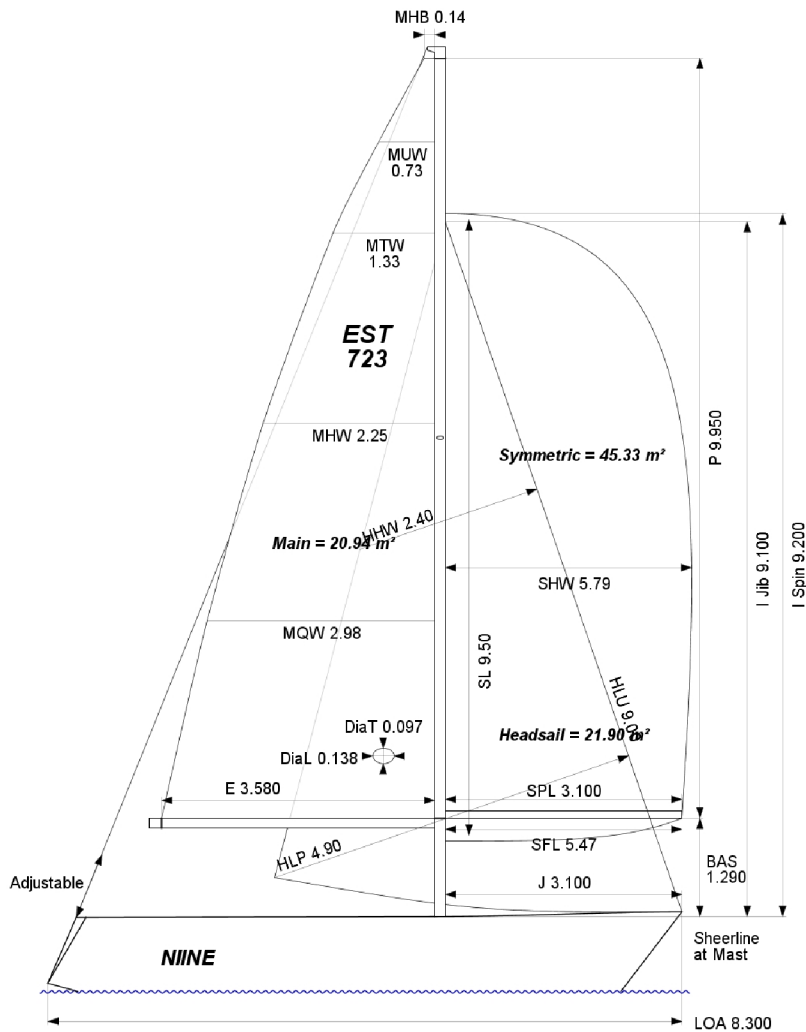




ORC
Offshore Racing Congress
World leader in rating technology

2020
ORC Club
Certificate

Rating Office

Estonian Yachting Union
Purje 8, maja 3
11911 Tallinn
Estonia



ESTONIAN
YACHTING
UNION

Certificate

Number **044/20**
Issued On **05/06/2020**
ORC Ref **03880000K05**
VPP Ver. **2020 1.02**
Valid until **31/12/2020**

Crew Weight

Default 419kg
Maximum **410kg**
Minimum* **308kg**
*when applied by the NoR and SI
Non Manual Pwr **No**

Special Scoring

ToD ToT
Non Spin GPH **774.0 0.7752**
Non Spin OSN **747.3 0.8029**

Sails Limitations

Headsails **5** Spinnakers **4**

Spinnaker configuration

Symmetric: **Yes 45.33**
Asymmetric: **No**
Flying H/S: **No**
Spin. Pole: **Yes**

Class Division Length

CDL = 6.525

Stability (Estimated)

Limit Positive Stab.: **117.7°**
Stability Index: **116.5**

BOAT		GPH	HULL	
Name	Niine	749.2	Data File	EST723 LOA 8.300m
Sail Nr	EST-723		Offset File	fenix3.off MB 2.894m
CLASS			Displacement	3,060kg Draft 1.582m
Class	FENIX		IMS Division	Cruiser/Racer Dynamic All. 0.464%
Designer	Rootsi		Plan Review	Construction Solid
Builder	Rootsi		Fiber Rigging	No Aramid Core No
Series	01/1981		Crew Arm Ex	Carbon Rudder No
Age Date	01/1983			Light Stanchions No
Age Allowance	0.487%		IMSL	7.141m VCGD 0.067m Sink 11.65kg/mm
COMMENTS			RL	5.909m VCGM 0.046m WS 17.08m²
PROPELLER			LSM0	7.058m Displacement/Length ratio 8.7031
Installation	Strut PRD 0.340		Water Ballast	0 Trim Tab No
Type	Folding 2 blades PIPA 0.0030		BLR Index	0.0000
CENTERBOARD			N/A	

SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	726.0			807.5		
Time on Time	0.8264			0.8359		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	868.1	660.7	587.3	1122.6	813.6	700.4
Time on Time	0.7776	1.0216	1.1493	0.6013	0.8296	0.9637

BOAT Name Niine Sail Nr EST-723 File EST723 Data in meters/kilograms		INCLINING TEST AND FREEBOARDS Inclining Test Club Estimated VCG Flotation date 05/06/2020 SG 1.0245 FFM 1.036 FF 1.036 SFFP 0.649 FAM 0.972 FA 0.972 SAFF 7.803 LCF from stem on CL / on sheer 4.657 / 4.860 Maximum beam station from stem 5.374 RM Measured 52.9kg·m RM Default 51.4kg·m Limit of positive stability / Stab.Index 117.7° / 116.5 Freeboard at mast at 3.100 0.983	
RIG Forestay Tension Aft Spreaders 1 Inner Stay None Fitted Runners/Checkstays 0 Carbon Mast No Jib Furler No Fiber Rigging No Main Furler No Non-Circular Rigging No Articulated Bowsprit No P 9.950 E 3.580 MDT1 0.097 MW 0.000 IG 9.100 J 3.100 MDL1 0.138 GO 0.000 ISP 9.200 SFJ MDT2 0.000 BD BAS 1.290 SPL 3.100 MDL2 0.000 MWT FSD TPS 0.000 TL 0.000 MCG			
MIZZEN RIG AND SAILS N/A		PROPELLER Installation Strut PRD 0.340 Type Folding 2 blades PBW Twin Screw No PIPA 0.0030 ST1 0.048 ST3 0.170 ST5 0.250 ST2 0.170 ST4 0.098 EDL 1.600	
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	0.73	1.33	2.25	2.98	20.94										
HEADSAILS (3)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Flying	Measurer	Meas.Date	Manufacture	Material	Comment
3	0.07	0.61	1.20	2.40	3.65	4.90	9.00	158%	21.90		No	EST1		North	Unknown	
2	0.05	0.51	1.00	2.05	3.19	4.95	9.26	160%	20.49		No					
1	0.06	0.46	0.89	1.83	2.86	3.97	9.30	128%	17.73		No					
SYMMETRIC SPINNAKERS (2)																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
2	9.50	9.50	9.50	5.79	5.47	45.34				Unknown						
1	9.32	9.32	9.32	4.76	4.82	37.07				Unknown						
ASYMMETRIC SPINNAKERS (0)																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				



ORC
Offshore Racing Congress
World leader in rating technology

2020
Measurements
Datasheet



EJL
ESTONIAN
YACHTING
UNION

2020

ORC Club Certificate Appendix

BOAT			
Name	Niine	Certificate Number	044/20
Sail Nr	EST-723	Issued On	05/06/2020

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1284.4	1072.2	950.3	868.6	835.7	825.5	833.9
52°	834.8	707.2	634.7	600.6	585.0	579.6	578.4
60°	787.6	669.2	612.3	585.6	570.4	563.0	560.0
75°	755.8	643.3	596.7	573.3	555.7	541.9	529.2
90°	764.0	635.8	582.4	556.4	540.3	532.3	505.3
110°	759.5	630.3	578.8	550.4	524.4	501.8	476.6
120°	786.1	647.7	586.5	556.5	530.0	504.7	465.8
135°	890.6	716.9	614.9	575.0	548.6	522.8	477.4
150°	1033.4	816.5	686.3	607.1	572.8	548.2	501.5
Run VMG	1193.3	940.3	789.5	682.5	614.7	578.4	530.9
Selected Courses							
Windward / Leeward	1238.8	1006.3	869.9	775.6	725.2	702.0	682.4
Circular Random	1039.2	836.1	726.3	662.2	623.4	599.1	571.6
Coastal / Long Distance	1234.3	943.5	781.9	681.0	631.8	598.6	544.1
Non Spinnaker	1081.5	866.9	750.0	681.0	638.8	612.2	583.2

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	43.5°	41.6°	42.0°	40.9°	39.8°	39.4°	40.9°
Beat VMG	2.80	3.36	3.79	4.14	4.31	4.36	4.32
52°	4.31	5.09	5.67	5.99	6.15	6.21	6.22
60°	4.57	5.38	5.88	6.15	6.31	6.39	6.43
75°	4.76	5.60	6.03	6.28	6.48	6.64	6.80
90°	4.71	5.66	6.18	6.47	6.66	6.76	7.13
110°	4.74	5.71	6.22	6.54	6.86	7.17	7.55
120°	4.58	5.56	6.14	6.47	6.79	7.13	7.73
135°	4.04	5.02	5.85	6.26	6.56	6.89	7.54
150°	3.48	4.41	5.25	5.93	6.28	6.57	7.18
Run VMG	3.02	3.83	4.56	5.27	5.86	6.22	6.78
Gybe Angles	149.0°	154.0°	154.0°	167.0°	180.0°	180.0°	180.0°