

**2019
ORC Club
Certificate**

Rating Office
EYU
Purje 8
11911, Tallinn
Estonia

Certificate

Number **Est990**
Issued On **7/29/2019**
ORC Ref **EST00000806**
VPP Ver. **2019 1.01**
Valid until **12/31/2019**

Crew Weight

Default 539kg
Maximum **544kg**
Minimum* **408kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Double H.GPH	636.8	0.9422
Double H.OSN	623.4	0.9625
Non Spin GPH	650.4	0.9225
Non Spin OSN	633.2	0.9476

Sails Limitations

Headsails **5** Spinnakers **3**

Spinnaker configuration

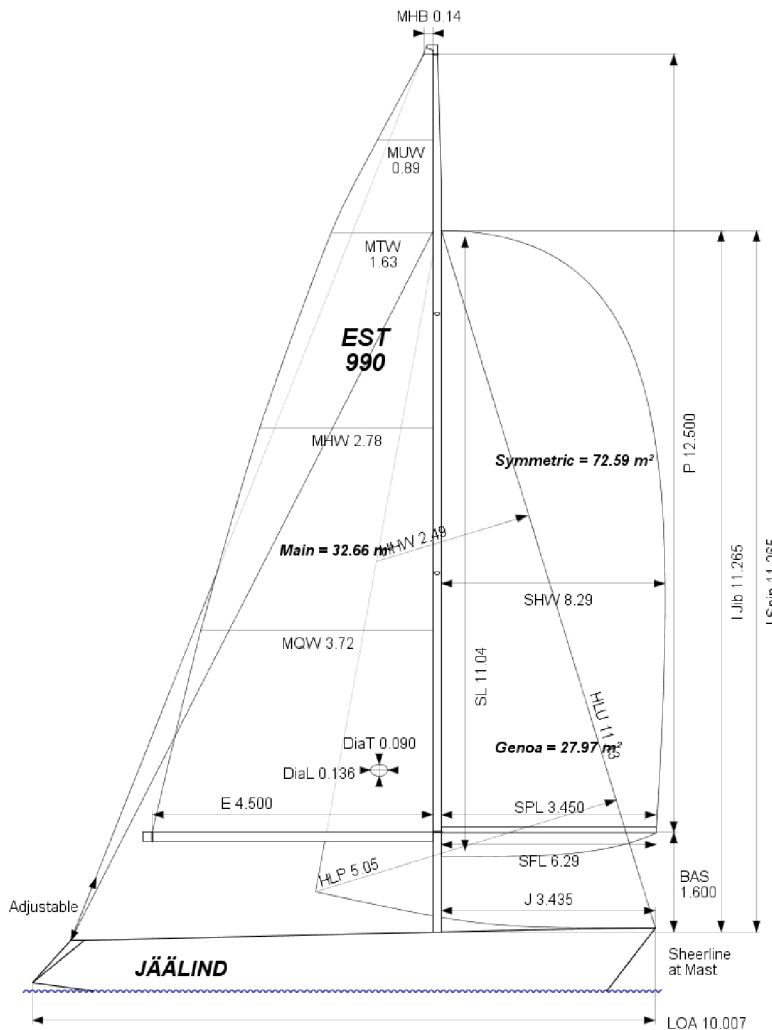
Symmetric: **Yes** **72.59**
Asymmetric: **No**
Flying H/S: **No**
Spin. Pole: **Yes**

Class Division Length

CDL = 8.624

Stability (Measured)

Limit Positive Stab.: **114.1°**
Stability Index: **111.8**



BOAT		GPH	HULL			
Name JÄÄLIND Sail Nr EST 990		622.7	Data File Est0990	LOA 10.007m		
			Offset File X99.OD.OFF	MB 2.992m		
			Displacement 2,982kg	Draft 1.788m		
CLASS						
Class X-99		IMS Division Dynamic All. 0.000%				
Designer N.Jeppesen		Fwd Accom. Yes Construction				
Builder x-Jachts		Fiber Rigging No Aramid Core No				
Series 04/1985		Crew Arm Ex Carbon Rudder No				
Age Date 01/1986		Light Stanchions No				
Age Allowance 0.487%		IMSL 8.673m VCGD -0.060m Sink 13.62kg/mm				
		RL 8.574m VCGM -0.008m WS 18.38m²				
		LSM0 8.422m Displacement/Length ratio 4.9919				
COMMENTS		Water Ballast 0 Trim Tab No				
		BLR Index 0.0000				
PROPELLER		CENTERBOARD				
Installation Strut		PRD 0.356				
Type Folding 2 blades		PBW 0.090				
		PIPA 0.0035				
		N/A				
SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	606.7			677.1		
Time on Time	0.9889			0.9970		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	703.2	554.7	496.7	910.1	678.1	597.5
Time on Time	0.9599	1.2169	1.3589	0.7417	0.9954	1.1297

BOAT	
Name JÄÄLIND	Sail Nr EST 990
File Est0990	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS			
Inclining Test Current Inclining			
Flotation date 29/07/2015		SG 1.0250	
FFM 0.997	FF 0.997	SFFP 0.303	
FAM 0.802	FA 0.802	SAFP 9.175	
W1 41.0	PD1 222.0	WD 9.370	
W2 41.0	PD2 220.0	GSA 12.6	
W3 41.0	PD3 223.0	RSA 4298.7	
W4 41.0	PD4 220.0	PLM 2005.0	
LCF from stem on CL / on sheer		5.445 / 5.615	
Maximum beam station from stem		6.027	
RM Measured		60.7kg·m	
RM Default		65.8kg·m	
Limit of positive stability / Stab.Index		114.1° / 111.8	
Freeboard at mast at 3.435		0.946	



ORC
Offshore Racing Congress
World leader in rating technology

2019
Measurements
Datasheet

RIG			
Forestay Tension Aft	Spreaders 2		
Inner Stay None Fitted	Runners 1		
Carbon Mast No	Jumper Struts None		
Taper Hollows No	Jib Furler No		
Fiber Rigging No	Main Furler No		
Lenticular Rigging No	Without Backstay No		
Articulated Bowsprit No			
P 12.500	E 4.500	MDT1 0.090	MW 0.136
IG 11.265	J 3.435	MDL1 0.136	GO 0.136
ISP 11.265	SFJ 0.000	MDT2 0.060	BD 0.140
BAS 1.600	SPL 3.450	MDL2 0.080	MWT 77.60
FSP 0.000	TPS	TL 2.100	MCG 3.950

MIZZEN RIG AND SAILS	
N/A	

PROPELLER			
Installation Strut	PRD 0.356		
Type Folding 2 blades	PBW 0.090		
Twin Screw No	PIPA 0.0035		
ST1 0.065	ST3 0.180	ST5 0.256	
ST2 0.180	ST4 0.110	EDL 1.075	

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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	0.89	1.63	2.78	3.72	32.67	EST 5	18/07/2019		Unknown						
HEADSAILS (3)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
2	0.07	0.65	1.25	2.49	3.75	5.05	11.13	147%	27.97			EST 5	18/07/2019		Unknown	
1	0.08	0.65	1.24	2.41	3.68	5.09	11.09	148%	27.56			EST 5	18/07/2019		Unknown	
3	0.07	0.41	0.76	1.48	2.32	3.23	11.14	94%	17.36	Y		EST 5	18/07/2019		Unknown	
SYMMETRIC SPINNAKERS (2)																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
1	11.04	11.04	11.04	8.29	6.29	72.59	EST 5	18/07/2019		Unknown						
2	11.14	11.14	11.14	8.08	6.29	71.69	EST 5	18/07/2019		Unknown						
ASYMMETRIC SPINNAKERS (0)																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				

2009

ORC Club Certificate Appendix

BOAT			
Name	JÄÄLIND	Certificate Number	Est990
Sail Nr	EST 990	Issued On	7/29/2019

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	997.3	824.4	746.9	721.1	709.5	706.3	700.4
52°	656.3	559.9	528.2	517.5	512.1	509.2	504.1
60°	622.0	543.6	516.4	503.8	497.2	493.4	488.2
75°	596.8	532.7	505.6	486.2	472.7	465.2	458.7
90°	606.9	534.2	505.3	481.8	459.8	443.0	426.6
110°	624.6	530.7	493.9	463.2	441.6	426.9	404.0
120°	646.4	539.9	499.9	465.8	433.8	407.2	378.7
135°	725.8	586.5	522.4	489.4	456.2	424.1	356.8
150°	879.7	695.4	581.0	521.8	491.1	460.5	400.5
Run VMG	1015.8	803.0	670.8	588.8	536.1	503.2	446.4
Selected Courses							
Windward / Leeward	1006.6	813.7	708.9	655.0	622.8	604.7	573.4
Circular Random	848.6	689.1	604.8	556.4	526.4	505.9	477.1
Coastal / Long Distance	1007.5	766.6	643.5	576.5	538.5	507.2	456.8
Non Spinnaker	897.2	723.7	631.0	577.2	543.8	521.2	490.7

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	42.2°	40.9°	38.8°	37.8°	37.3°	37.4°	37.3°
Beat VMG	3.61	4.37	4.82	4.99	5.07	5.10	5.14
52°	5.48	6.43	6.82	6.96	7.03	7.07	7.14
60°	5.79	6.62	6.97	7.15	7.24	7.30	7.37
75°	6.03	6.76	7.12	7.41	7.62	7.74	7.85
90°	5.93	6.74	7.12	7.47	7.83	8.13	8.44
110°	5.76	6.78	7.29	7.77	8.15	8.43	8.91
120°	5.57	6.67	7.20	7.73	8.30	8.84	9.51
135°	4.96	6.14	6.89	7.36	7.89	8.49	10.09
150°	4.09	5.18	6.20	6.90	7.33	7.82	8.99
Run VMG	3.54	4.48	5.37	6.11	6.72	7.15	8.06
Gybe Angles	144.3°	148.8°	149.4°	158.4°	180.0°	180.0°	180.0°