



ORC
Offshore Racing Congress
World leader in rating technology

**2019
ORC Club
Certificate**

Rating Office

**EYU
Purje 8
11911, Tallinn
Estonia**

Certificate

Number **EST571**
Issued On **4/25/2019**
ORC Ref **EST0000495**
VPP Ver. **2019 1.01**
Valid until **12/31/2019**

Crew Weight

Default 649kg
Maximum **650kg**
Minimum* **488kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Double H.GPH	637.5	0.9411
Double H.OSN	620.5	0.9670
Non Spin GPH	662.0	0.9063
Non Spin OSN	641.2	0.9357

Sails Limitations

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

Spinnaker configuration

Symmetric: **Yes** **91.37**
Asymmetric: **No**
Flying H/S: **No**
Spin. Pole: **Yes**

Class Division Length

CDL = 9.145

Stability (Measured)

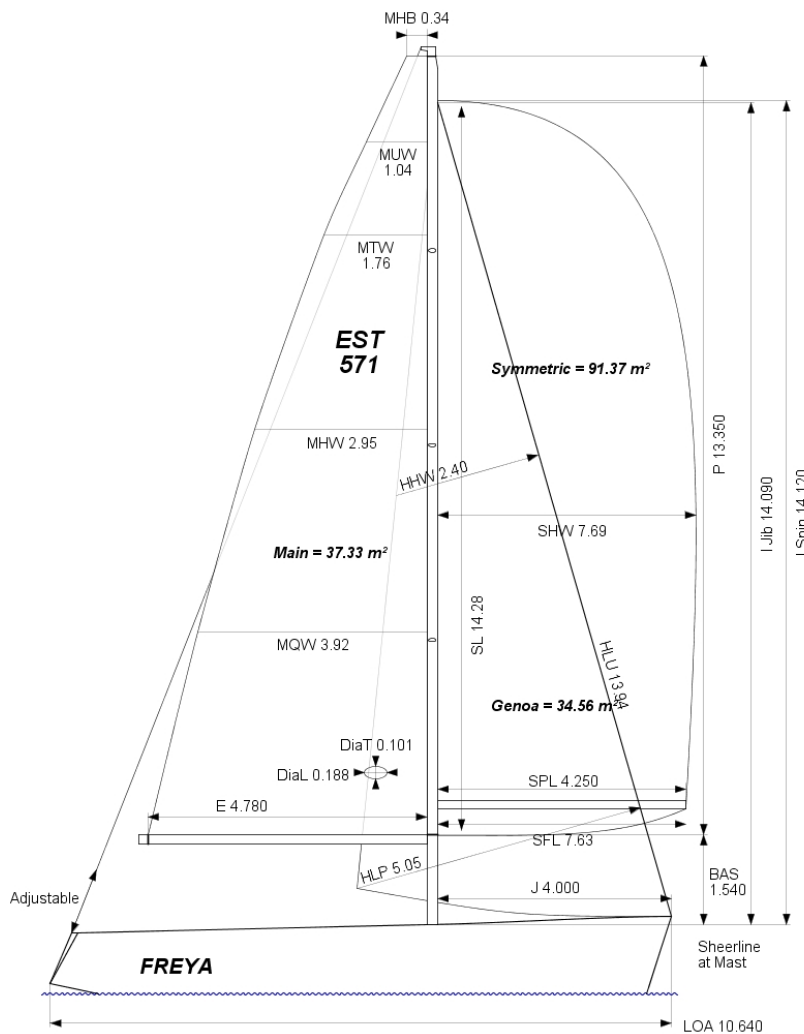
Limit Positive Stab.: **113.4°**
Stability Index: **115.8**

Owner

OÜ FREYA TEENINDUS
Lina 24, Pärnu
Estonia
PJK

I certify that I understand my responsibilities under ORC Rules and Regulations

Signature



BOAT		GPH		HULL		
Name	FREYA			Data File	Est0571	
Sail Nr	EST 571			Offset File	F196.BOF	
		630.3		Displacement	5,792kg	
				LOA	10.640m	
				MB	3.458m	
				Draft	2.233m	
CLASS				IMS Division	Cruiser/Racer	
Class	First 36.7			Dynamic All.	0.188%	
Designer	B.Farr			Fwd Accom.	Yes	
Builder	Beneteau S.A.			Construction	Solid	
Series	01/2001			Fiber Rigging	No	
Age Date	07/2008			Crew Arm Ex	No	
Age Allowance	0.487%			Carbon Rudder	No	
				Light Stanchions		
				IMSL	9.630m	
				VCGD	0.136m	
				Sink	19.45kg/mm	
				RL	8.659m	
				VCGM	0.114m	
				WS	25.46m²	
				LSM0	9.595m	
				Displacement/Length ratio	6.5568	
COMMENTS				Water Ballast	0	
				Trim Tab	No	
				BLR Index	0.0000	
PROPELLER				CENTERBOARD		
Installation	Strut	PRD	0.410			
Type	Folding 2 blades	PBW	0.130			
		PIPA	0.0027			
				N/A		
SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	611.7			679.6		
Time on Time	0.9808			0.9932		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	722.4	558.2	499.8	930.4	683.1	593.4
Time on Time	0.9344	1.2093	1.3505	0.7255	0.9881	1.1376

BOAT	
Name FREYA	Sail Nr EST 571
File Est0571	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS			
Inclining Test Current Inclining			
Flotation date 18/05/2009		SG 1.0020	
FFM 1.315	FF 1.330	SFFP 0.367	
FAM 1.040	FA 1.051	SAFP 10.162	
W1 76.0	PD1 209.0	WD 10.610	
W2 76.0	PD2 210.0	GSA 12.6	
W3 76.0	PD3 211.0	RSA 4298.7	
W4 76.0	PD4 210.0	PLM 2005.0	
LCF from stem on CL / on sheer		5.886 / 6.109	
Maximum beam station from stem		6.980	
RM Measured		134.3kg·m	
RM Default		139.9kg·m	
Limit of positive stability / Stab.Index		113.4° / 115.8	
Freeboard at mast at 4.000		1.183	



ORC
Offshore Racing Congress
World leader in rating technology

2019
Measurements
Datasheet

RIG			
Forestay Tension Aft	Spreaders 3		
Inner Stay None Fitted	Runners 0		
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 13.350	E 4.780	MDT1 0.101	MW 0.188
IG 14.090	J 4.000	MDL1 0.188	GO 0.207
ISP 14.120	SFJ	MDT2 0.101	BD
BAS 1.540	SPL 4.250	MDL2 0.150	MWT 150.00
FSP 0.070	TPS	TL 0.220	MCG 5.050

MIZZEN RIG AND SAILS	
N/A	

PROPELLER			
Installation Strut	PRD 0.410		
Type Folding 2 blades	PBW 0.130		
Twin Screw No	PIPA 0.0027		
ST1 0.042	ST3	ST5 0.280	
ST2	ST4 0.090	EDL 2.450	

Certificate	
Number EST571	
ORC Ref EST00000495	
Issued On 4/25/2019	
VPP Ver. 2019 1.01	
Valid until 12/31/2019	

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					
4	0.34	1.04	1.76	2.95	3.92	37.33	EST 1	29/07/2015		Unknown						
HEADSAILS (1)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
4	0.15	0.63	1.16	2.40	3.75	5.05	13.94	126%	34.57			EST1	13/05/2012		Unknow	
SYMMETRIC SPINNAKERS (1)																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
3	14.28	14.28	14.28	7.69	7.63	91.37	EST 1	19/05/2011		Unknown						
ASYMMETRIC SPINNAKERS (0)																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				

2019

ORC Club Certificate Appendix

BOAT	
Name FREYA	Certificate Number EST571
Sail Nr EST 571	Issued On 4/25/2019

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1052.4	877.2	772.3	717.6	699.5	692.5	689.6
52°	692.9	587.7	531.8	508.8	500.0	496.3	494.9
60°	657.0	561.6	517.8	497.8	487.6	483.4	480.9
75°	630.5	543.7	507.7	488.4	474.5	464.5	456.6
90°	638.1	543.8	499.9	483.3	469.9	454.8	432.2
110°	642.9	534.9	493.1	469.1	448.4	435.2	418.2
120°	661.3	546.2	498.5	472.9	449.7	427.7	399.3
135°	728.3	594.9	521.7	489.4	466.3	443.2	400.1
150°	863.7	688.1	582.8	520.0	490.3	468.6	426.3
Run VMG	997.4	794.5	672.5	591.7	536.6	500.7	457.7
Selected Courses							
Windward / Leeward	1024.9	835.8	722.4	654.6	618.0	596.6	573.6
Circular Random	866.5	700.4	611.5	560.1	529.0	509.1	485.0
Coastal / Long Distance	1022.1	785.6	652.6	576.0	538.2	509.3	463.8
Non Spinnaker	923.9	740.8	641.4	583.2	547.4	524.5	496.7

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	42.5°	40.7°	40.3°	38.7°	37.8°	37.7°	38.1°
Beat VMG	3.42	4.10	4.66	5.02	5.15	5.20	5.22
52°	5.20	6.13	6.77	7.08	7.20	7.25	7.27
60°	5.48	6.41	6.95	7.23	7.38	7.45	7.49
75°	5.71	6.62	7.09	7.37	7.59	7.75	7.88
90°	5.64	6.62	7.20	7.45	7.66	7.92	8.33
110°	5.60	6.73	7.30	7.67	8.03	8.27	8.61
120°	5.44	6.59	7.22	7.61	8.01	8.42	9.02
135°	4.94	6.05	6.90	7.36	7.72	8.12	9.00
150°	4.17	5.23	6.18	6.92	7.34	7.68	8.44
Run VMG	3.61	4.53	5.35	6.08	6.71	7.19	7.87
Gybe Angles	145.2°	149.8°	150.8°	157.3°	175.0°	180.0°	180.0°