



ORC

Offshore Racing Congress
World leader in rating technology

**2020
ORC Club
Certificate**

Rating Office

EYU
Purje 8
11911, Tallinn
Estonia

Certificate

Number **Est970**
Issued On **5/18/2020**
ORC Ref **03580001FR**
VPP Ver. **2020 1.02**
Valid until **31/12/2020**

Crew Weight

Default 414kg
Maximum **414kg**
Minimum* **311kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Non Spin GPH	796.9	0.7529
Non Spin OSN	767.3	0.7820

Sails Limitations

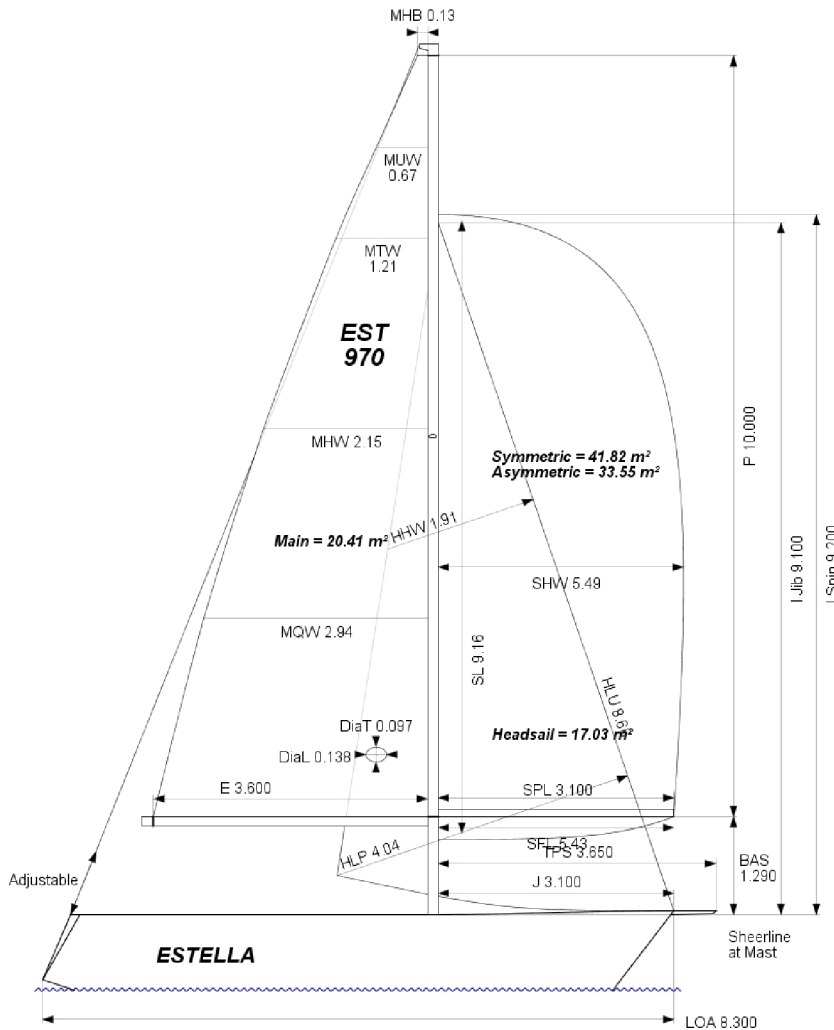
Headsails **5** Spinnakers **4**
Woven Polyester
Asymmetric on centerline
Spinnaker configuration
Symmetric: **Yes** **41.82**
Asymmetric: **Yes** **35.91**
Flying H/S: **No**
Spin. Pole: **Yes**

Class Division Length

CDL = 6.268

Stability (Estimated)

Limit Positive Stab.: **117.5°**
Stability Index: **115.7**



BOAT		GPH		HULL			
Name	ESTELLA	763.7	Data File	Est0970	LOA	8.300m	
Sail Nr	EST 970		Offset File	fenix3.off	MB	2.894m	
			Displacement	2,950kg	Draft	1.573m	
CLASS							
Class	FENIX	IMS Division Cruiser/Racer Dynamic All. 0.455%					
Designer	Pelle Petterson	Plan Review Construction Solid					
Builder	Pelle Petterson AB	Fiber Rigging No Aramid Core No					
Series	01/1981	Crew Arm Ex Carbon Rudder No					
Age Date	01/1985	Light Stanchions No					
Age Allowance	0.487%	IMSL	7.101m	VCGD	0.071m	Sink	11.44kg/mm
		RL	5.433m	VCGM	0.058m	WS	16.85m²
		LSM0	7.004m Displacement/Length ratio				
COMMENTS		Water Ballast Trim Tab No					
		BLR Index 0.0000					
PROPELLER		CENTERBOARD					
Installation	Strut	PRD	0.340				
Type	Folding 2 blades	PIPA	0.0030				
		N/A					
SCORING OPTIONS							
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD			
Time on Distance	739.8			824.9			
Time on Time	0.8110			0.8183			
Triple Number	Low	Medium	High	Low	Medium	High	
Time on Distance	891.1	672.9	590.1	1156.0	834.3	706.1	
Time on Time	0.7575	1.0031	1.1439	0.5839	0.8091	0.9560	

BOAT	
Name ESTELLA	Sail Nr EST 970
File Est0970	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS			
Inclining Test Club Estimated VCG			
Flotation date 21/10/2019		SG	
FFM	FF	1.035	SFFP 0.649
FAM	FA	0.991	SAFP 7.803
LCF from stem on CL / on sheer		4.628 / 4.828	
Maximum beam station from stem		5.374	
RM Measured		50.6kg·m	
RM Default		49.1kg·m	
Limit of positive stability / Stab.Index		117.5° / 115.7	
Freeboard at mast at 3.100		0.988	



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2020
Measurements
Datasheet

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	10.000	E	3.600	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	3.650	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
ST2	0.170	ST4	0.098
ST5	0.250	EDL	1.600

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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	0.13	0.67	1.21	2.15	2.94	20.42	EST 1	24/04/2018	Reval Sails	Polyester						
HEADSAILS (2)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Flying	Measurer	Meas.Date	Manufacture	Material	Comment
1	0.05	0.48	0.93	1.91	2.96	4.04	8.66	130%	17.03	No	EST 7	EST 7	01/02/2020	Resen Sails	Polyest	
2	0.07	0.36	0.68	1.34	2.00	2.67	8.72	86%	11.73	No	EST 1	EST 1	16/05/2017	Gransegel	Polyest	
SYMMETRIC SPINNAKERS (2)																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
1	9.16	9.16	9.16	5.49	5.43	41.82	EST 7	04/04/2019	Rolly Tasker	Nylon						
2	9.05	9.05	9.05	5.33	5.10	39.86	EST 1	16/05/2017	Gransegel	Nylon						
ASYMMETRIC SPINNAKERS (1)																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				
1	9.34	8.53	8.94	4.55	4.33	33.56	asym	EST 7	16/05/2020	Rolly Tasker	Nylon					

2020

ORC Club Certificate Appendix

BOAT			
Name	ESTELLA	Certificate Number	Est970
Sail Nr	EST 970	Issued On	5/18/2020

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1358.7	1127.3	999.0	905.9	849.6	832.4	840.4
52°	877.7	737.7	657.8	613.9	591.3	581.2	579.3
60°	826.6	696.5	628.5	595.9	576.6	565.0	559.8
75°	792.4	668.7	607.9	579.2	562.1	547.5	528.6
90°	768.3	636.9	583.1	555.7	534.6	521.5	507.9
110°	767.2	635.0	581.0	552.2	526.0	502.9	468.8
120°	793.6	653.1	589.2	559.1	533.0	507.6	467.5
135°	887.4	721.5	620.6	578.4	551.7	526.1	480.3
150°	1035.4	818.8	691.3	611.7	575.8	551.0	504.3
Run VMG	1195.6	942.6	793.9	688.0	618.4	580.9	533.3
Selected Courses							
Windward / Leeward	1277.1	1034.9	896.5	797.0	734.0	706.7	686.8
Circular Random	1065.6	855.3	740.4	672.2	630.0	603.4	574.0
Coastal / Long Distance	1269.0	968.2	802.6	695.6	637.1	600.0	546.2
Non Spinnaker	1123.8	896.9	771.8	697.0	650.5	621.1	588.9

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	44.6°	43.5°	42.8°	42.0°	40.5°	39.8°	41.3°
Beat VMG	2.65	3.19	3.60	3.97	4.24	4.32	4.28
52°	4.10	4.88	5.47	5.86	6.09	6.19	6.21
60°	4.36	5.17	5.73	6.04	6.24	6.37	6.43
75°	4.54	5.38	5.92	6.22	6.40	6.58	6.81
90°	4.69	5.65	6.17	6.48	6.73	6.90	7.09
110°	4.69	5.67	6.20	6.52	6.84	7.16	7.68
120°	4.54	5.51	6.11	6.44	6.75	7.09	7.70
135°	4.06	4.99	5.80	6.22	6.53	6.84	7.50
150°	3.48	4.40	5.21	5.89	6.25	6.53	7.14
Run VMG	3.01	3.82	4.53	5.23	5.82	6.20	6.75
Gybe Angles	146.0°	153.5°	155.0°	168.0°	180.0°	180.0°	180.0°