



ORC

Offshore Racing Congress
World leader in rating technology

**2020
ORC Club
Certificate**

Rating Office

EYU
Purje 8
11911, Tallinn
Estonia

Certificate

Number **Est328**
Issued On **5/30/2020**
ORC Ref **03580000JFW**
VPP Ver. **2020 1.02**
Valid until **31/12/2020**

Crew Weight

Default 337kg
Maximum **400kg**
Minimum* **300kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

ToD ToT
Non Spin GPH **775.2 0.7740**
Non Spin OSN **748.3 0.8018**

Sails Limitations

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

Spinnaker configuration

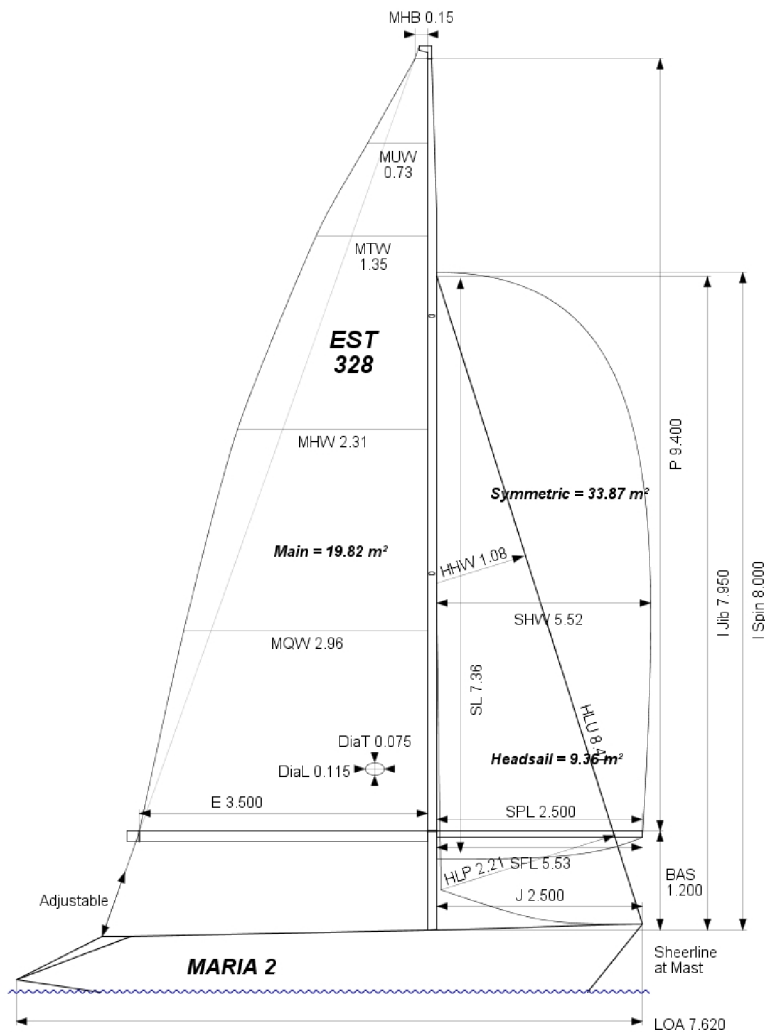
Symmetric: **Yes 33.87**
Asymmetric: **No**
Flying H/S: **No**
Spin. Pole: **Yes**

Class Division Length

CDL = 6.148

Stability (Estimated)

Limit Positive Stab.: **112.7°**
Stability Index: **106.6**



BOAT		GPH	HULL			
Name MARIA 2 Sail Nr EST 328		744.1	Data File Est0328	LOA 7.620m		
			Offset File G2.BOF	MB 2.706m		
			Displacement 1,892kg	Draft 1.589m		
CLASS			IMS Division Performance	Dynamic All. 0.251%		
Class Polaris			Plan Review	Construction Solid		
Designer SET			Fiber Rigging No	Aramid Core No		
Builder Navico			Crew Arm Ex	Carbon Rudder No		
Series 01/1984				Light Stanchions No		
Age Date 01/1994			IMSL 6.294m	VCGD -0.129m	Sink 8.54kg/mm	
Age Allowance 0.487%			RL 6.000m	VCGM -0.044m	WS 11.93m²	
COMMENTS			LSM0 6.062m	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	722.1			799.5		
Time on Time	0.8309			0.8443		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	853.4	659.5	585.0	1103.7	804.6	694.0
Time on Time	0.7910	1.0235	1.1538	0.6116	0.8389	0.9726

BOAT	
Name MARIA 2	Sail Nr EST 328
File Est0328	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS			
Inclining Test Club Estimated VCG			
Flotation date 11/05/2020		SG	
FFM	FF	0.814	SFFP 0.500
FAM	FA	0.614	SAFP 6.223
LCF from stem on CL / on sheer		4.030 / 4.233	
Maximum beam station from stem		4.630	
RM Measured		31.7kg·m	
RM Default		30.8kg·m	
Limit of positive stability / Stab.Index		112.7° / 106.6	
Freeboard at mast at 2.500		0.756	



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2020
Measurements
Datasheet

RIG			
Forestay Tension	Aft	Spreaders	2
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	9.400	E	3.500
IG	7.950	J	2.500
ISP	8.000	SFJ	0.000
BAS	1.200	SPL	2.500
FSD	-3.000	TPS	0.000
MDT1	0.075	MW	
MDL1	0.115	GO	
MDT2	0.000	BD	
MDL2	0.000	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					
2	0.15	0.73	1.35	2.31	2.96	19.83	EST8	30/05/2020		Unknown						
HEADSAILS (2)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Flying	Measurer	Meas.Date	Manufacture	Material	Comment
2	0.07	0.31	0.56	1.08	1.64	2.21	8.47	88%	9.36	No	EST8	EST8	30/05/2020		Unknown	
3	0.06	0.25	0.45	0.95	1.56	2.20	7.58	88%	7.81	No	EST8	EST8	30/05/2020		Unknown	
SYMMETRIC SPINNAKERS (1)																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
2	7.36	7.36	7.36	5.52	5.53	33.87	EST8	30/05/2020		Unknown						
ASYMMETRIC SPINNAKERS (0)																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				



2020

ORC Club Certificate Appendix

BOAT			
Name	MARIA 2	Certificate Number	Est328
Sail Nr	EST 328	Issued On	5/30/2020

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1265.6	1058.8	938.8	862.0	823.8	812.1	815.6
52°	835.6	702.4	640.4	611.8	595.5	586.4	582.0
60°	792.7	671.0	622.2	598.3	581.0	569.0	560.1
75°	762.5	648.6	605.4	583.6	565.5	547.6	526.1
90°	727.7	621.8	583.4	556.3	536.8	526.6	505.1
110°	732.4	623.1	582.5	551.0	522.5	498.9	470.0
120°	762.0	637.4	591.1	559.6	529.6	503.6	459.8
135°	857.7	701.0	615.7	581.1	551.6	523.6	476.3
150°	1008.8	802.4	677.3	610.3	579.0	551.2	501.6
Run VMG	1164.9	925.3	777.6	674.1	615.4	583.4	530.7
Selected Courses							
Windward / Leeward	1215.3	992.1	858.2	768.1	719.6	697.8	673.1
Circular Random	1024.5	828.0	722.2	660.1	621.8	597.0	566.6
Coastal / Long Distance	1210.3	930.3	775.2	680.6	631.2	596.9	540.8
Non Spinnaker	1079.9	867.0	751.4	683.4	641.4	614.3	581.6

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	42.4°	41.6°	41.3°	39.0°	37.5°	37.3°	38.3°
Beat VMG	2.84	3.40	3.83	4.18	4.37	4.43	4.41
52°	4.31	5.13	5.62	5.88	6.05	6.14	6.19
60°	4.54	5.36	5.79	6.02	6.20	6.33	6.43
75°	4.72	5.55	5.95	6.17	6.37	6.57	6.84
90°	4.95	5.79	6.17	6.47	6.71	6.84	7.13
110°	4.92	5.78	6.18	6.53	6.89	7.22	7.66
120°	4.72	5.65	6.09	6.43	6.80	7.15	7.83
135°	4.20	5.14	5.85	6.20	6.53	6.88	7.56
150°	3.57	4.49	5.32	5.90	6.22	6.53	7.18
Run VMG	3.09	3.89	4.63	5.34	5.85	6.17	6.78
Gybe Angles	149.0°	154.0°	153.5°	172.0°	180.0°	180.0°	180.0°