



World Leader in Rating Technology

2017 ORC Club Certificate

Rating Office
Hellenic Sailing Federation
Offshore Committee
Επιτροπή
Ανοικτής Θαλάσσης
Ελληνικής
Ιστιοπλοϊκής Ομοσπονδίας



Certificate
 Number **000419**
 Issued On **20/4/2017**
 ORC Ref **GRE01007250**
 VPP Ver. **2017 1.00**
 Valid until **28/2/2018**

Crew Weight
 Declared **450kg**
 Default* **493kg**
 Non Manual Pwr **No**

Special Scoring

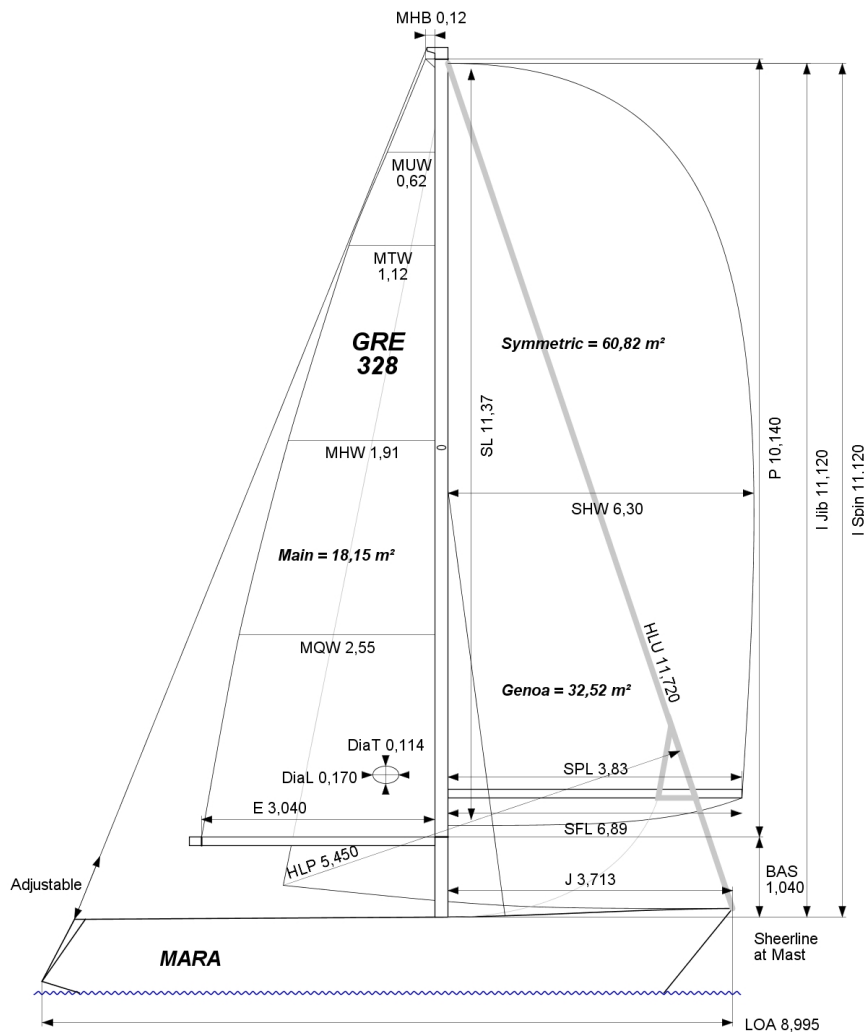
	ToD	ToT
Non Spin GPH	784,5	0,7648
Non Spin OSN	758,0	0,7915

Sails Limitations
 Headsails **1** Spinnakers **3**
Dacron Sails
Spinnaker configuration
 Symmetric: **Yes** **60,82**
 Asymmetric: **No**
 Flying H/S: **No**
 Spin. Pole: **Yes**

Class Division Length
CDL = 6,621

Stability (Estimated)
 Limit Positive Stab.: **114,9°**
 Stability Index: **115,9**

Owner



BOAT		GPH		HULL		
Name	MARA		757,3	Data File	GR328 LOA 8,995m	
Sail Nr	GRE-328			Offset File	H168.BOF MB 3,220m	
				Displacement	4,538kg Draft 1,833m	
CLASS				IMS Division	Cruiser/Racer Dynamic All. 0,630%	
Class	NEREIS 30			Fwd Accom.	Yes Construction Solid	
Designer	VAN DE STADT			Fiber Rigging	No Aramid Core No	
Builder	AKROPRORO			Crew Arm Ex	No Carbon Rudder No	
Series	03/1981			Light Stanchions No		
Age Date	01/1989			IMSL	7,732m VCGD 0,221m Sink 13,74kg/mm	
Age Allowance	0,487%			RL	5,508m VCGM 0,052m WS 19,19m²	
COMMENTS				LSM0	7,911m Displacement/Length ratio 9,1658	
				Water Ballast	0 Trim Tab No	
PROPELLER				CENTERBOARD		
Installation	Shaft exposed	PRD	0,340	N/A		
Type	Solid 3 blades	PIPA	0,0144			
SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time On Distance	733,6			819,2		
Time On Time	0,8179			0,8240		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	887,6	666,9	579,6	1148,5	832,1	692,7
Time on Time	0,7605	1,0121	1,1646	0,5877	0,8112	0,9744

BOAT	
Name MARA	Sail Nr GRE-328
File GR328	Data in meters/kilograms

RIG	
Forestay Tension Aft	Spreaders 1
Inner Stay Fixed	Runners 0
Carbon Mast No	Jumper Struts None
Taper Hollows No	Jib Furler Yes
Fiber Rigging No	Main Furler No
Lenticular Rigging No	Without Backstay No
Articulated Bowsprit No	
P 10,140	E 3,040 MDT1 0,114 MW
IG 11,120	J 3,713 MDL1 0,170 GO
ISP 11,120	SFJ 0,000 MDT2 0,114 BD
BAS 1,040	SPL 3,830 MDL2 0,170 MWT
FSP -3,000	TPS TL 0,000 MCG

INCLINING TEST AND FREEBOARDS			
Inclining Test Club Estimated VCG			
Flotation date 12/04/2001		SG	
FFM 1,095	FF 1,104	SFFP 0,450	
FAM 0,963	FA 0,969	SAFP 8,434	
LCF from stem on CL / on sheer		5,043 / 5,289	
Maximum beam station from stem		5,147	
RM Measured		73,3kg·m	
RM Default		71,2kg·m	
Limit of positive stability / Stab.Index		114,9° / 115,9	
Freeboard at mast at 3,713		0,990	



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Measurements Datasheet

MIZZEN RIG AND SAILS	
N/A	

PROPELLER			
Installation Shaft exposed	PRD 0,340		
Type Solid 3 blades	PBW		
Twin Screw No	PIPA 0,0144		
PSA	PHL	ST3	ESL
PSD	ST1	ST4	
PHD	ST2	ST5	

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COMMENTS	

MOVEABLE BALLAST	
N/A	

CENTERBOARD	
N/A	

SAILS INVENTORY																
MAINSAIL (1)																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
ORC	0,120	0,62	1,12	1,91	2,55	18,15					* Copied from legacy					
HEADSAILS (1)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
ORC						5,45	0,00	147%	32,53							* Copied from legacy *
SYMMETRIC SPINNAKERS (1)																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
ORC	11,37	11,37	11,37	6,30	0,00	60,82					* Copied from legacy *					
ASYMMETRIC SPINNAKERS (0)																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				



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ORC Club Certificate Appendix

BOAT	
Name MARA	Certificate Number 000419
Sail Nr GRE-328	Issued On 20/4/2017

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1339,4	1109,0	987,3	899,7	842,6	814,4	795,8
52°	863,4	727,8	643,8	597,2	574,5	563,3	555,7
60°	809,4	684,9	610,0	576,7	558,2	546,3	537,1
75°	765,6	646,9	587,0	561,2	543,7	529,2	508,1
90°	766,4	648,6	584,5	552,0	535,7	526,1	497,8
110°	788,1	648,4	577,3	546,9	523,8	501,9	479,1
120°	809,8	665,2	585,0	551,9	529,3	507,1	468,7
135°	898,5	726,7	619,3	570,0	544,1	522,4	481,7
150°	1039,7	819,9	694,1	609,0	568,2	544,5	504,5
Run VMG	1200,5	944,9	798,5	695,3	621,5	576,8	531,5

Selected Courses							
Windward / Leeward	1270,0	1026,9	892,9	797,5	732,0	695,6	663,6
Circular Random	1059,6	849,5	734,1	665,1	621,6	593,3	559,3
Ocean for PCS	1298,0	997,0	824,9	718,0	648,1	599,8	535,1
Non Spinnaker	1107,3	883,6	760,0	685,4	638,1	606,9	569,6

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	44,5°	42,7°	42,7°	43,5°	42,1°	40,8°	40,2°
Beat VMG	2,69	3,25	3,65	4,00	4,27	4,42	4,52
52°	4,17	4,95	5,59	6,03	6,27	6,39	6,48
60°	4,45	5,26	5,90	6,24	6,45	6,59	6,70
75°	4,70	5,57	6,13	6,42	6,62	6,80	7,09
90°	4,70	5,55	6,16	6,52	6,72	6,84	7,23
110°	4,57	5,55	6,24	6,58	6,87	7,17	7,51
120°	4,45	5,41	6,15	6,52	6,80	7,10	7,68
135°	4,01	4,95	5,81	6,32	6,62	6,89	7,47
150°	3,46	4,39	5,19	5,91	6,34	6,61	7,14
Run VMG	3,00	3,81	4,51	5,18	5,79	6,24	6,77
Gybe Angles	148,2°	152,2°	154,3°	157,2°	180,0°	180,0°	180,0°