



ORC
Offshore Racing Congress
World leader in rating technology

2020
ORC Club
Certificate

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

Certificate
Number **00934**
Issued On **27/03/2020**
ORC Ref **03420000F9I**
VPP Ver. **2020 1.01**
Valid until **28/02/2021**

Crew Weight

Default	699kg
Maximum	340kg
Minimum*	255kg

**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

ToD	ToT
Non Spin GPH 690.2	0.8693
Non Spin OSN 667.0	0.8996

Sails Limitations

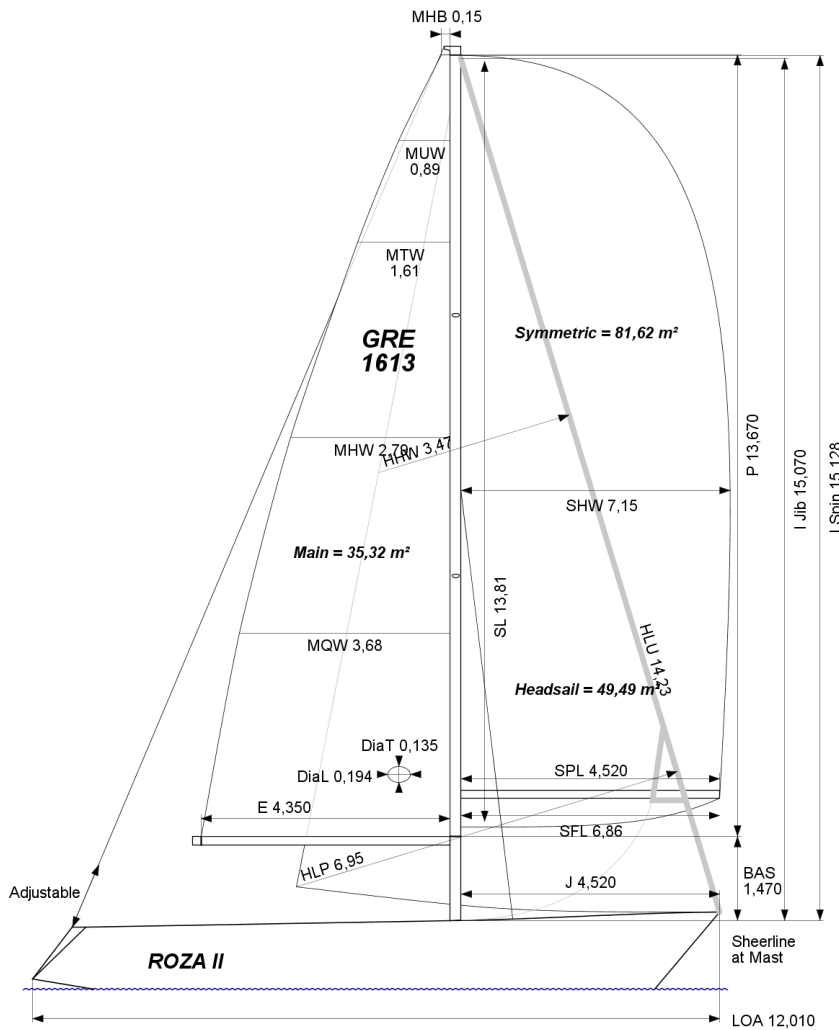
Headsails **1** Spinnakers **4**
Woven Polyester

Spinnaker configuration
Symmetric: **Yes** **81.62**
Asymmetric: **No**
Flying H/S: **No**
Spin. Pole: **Yes**

Class Division Length
CDL = 8.822

Stability (Estimated)
Limit Positive Stab.: **119.2°**
Stability Index: **122.9**

Owner



BOAT Name ROZA II Sail Nr GRE-1613		GPH 666.0	HULL Data File GR1613 LOA 12.010m Offset File IF405.OFF MB 3.942m Displacement 8,392kg Draft 2.197m					
CLASS Class FIRST 405 Designer BERRET JEAN Builder BENETEAU Series 03/1987 Age Date 03/1987 Age Allowance 0.487%			IMS Division Cruiser/Racer Dynamic All. 0.477% Plan Review Construction Solid Fiber Rigging No Aramid Core No Crew Arm Ex Carbon Rudder No Light Stanchions No					
COMMENTS Builder's displacement			IMSL 10.030m VCGD -0.063m Sink 21.65kg/mm RL 7.614m VCGM -0.023m WS 30.63m² LSM0 10.109m Displacement/Length ratio 8.1235 Water Ballast 0 Trim Tab No BLR Index 0.0000					
PROPELLER Installation Shaft exposed PRD 0.430 Type Solid 2 blades PIPA 0.0193			CENTERBOARD N/A					
SCORING OPTIONS								
Time on Distance	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD				
	644.2			720.6				
Time on Time	0.9314			0.9367				
Triple Number	Low	Medium	High	Low	Medium	High		
	783.6	584.8	512.4	1014.7	729.5	614.6		
Time on Distance	0.8614	1.1542	1.3174	0.6652	0.9253	1.0983		
Time on Time	0.8614	1.1542	1.3174	0.6652	0.9253	1.0983		

BOAT	
Name ROZA II	Sail Nr GRE-1613
File GR1613	Data in meters/kilograms

RIG	
Forestay Tension Aft	Spreaders 2
Inner Stay Fixed	Runners/Checkstays 0
Carbon Mast No	Jib Furler Yes
Fiber Rigging No	Main Furler No
Non-Circular Rigging No	
Articulated Bowsprit No	
P 13.670	E 4.350 MDT1 0.135 MW
IG 15.070	J 4.520 MDL1 0.194 GO
ISP 15.128	SFJ 0.000 MDT2 BD
BAS 1.470	SPL 4.520 MDL2 MWT
FSD 0.030	TPS TL -3.000 MCG

INCLINING TEST AND FREEBOARDS	
Inclining Test Club Estimated VCG	
Flotation date 19/01/2013	SG 1.0247
FFM 1.338	FF 1.338 SFFP 0.610
FAM 1.076	FA 1.076 SAFF 11.075
LCF from stem on CL / on sheer	6.545 / 6.779
Maximum beam station from stem	7.088
RM Measured	176.0kg-m
RM Default	170.9kg-m
Limit of positive stability / Stab.Index	119.2° / 122.9
Freeboard at mast at 4.520	1.203



2020
Measurements
Datasheet

MIZZEN RIG AND SAILS	
N/A	

PROPELLER	
Installation Shaft exposed	PRD 0.430
Type Solid 2 blades	PBW
Twin Screw No	PIPA 0.0193
PSA	PHL ST3 ESL
PSD	ST1 ST4
PHD	ST2 ST5

Certificate

Number **00934**
ORC Ref **03420000F9I**
Issued On **27/03/2020**
VPP Ver. **2020 1.01**
Valid until **28/02/2021**



COMMENTS	
Builder's displacement	

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	0.15	0.89	1.61	2.79	3.68	35.32		20/02/2015	ZOUGANELI	Dacron						
HEADSAILS (2)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Flying	Measurer	Meas.Date	Manufacture	Material	Comment
2	0.03	0.88	1.73	3.47	5.22	6.95	14.23	154%	49.49	No			04/03/2017		Dacron	
1	0.03	0.82	1.62	3.26	4.90	6.55	14.23	145%	46.50	No			20/02/2015		Dacron	
SYMMETRIC SPINNAKERS (2)																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
2	13.81	13.81	13.81	7.15	6.86	81.62		09/03/2019	QUANTUM	Nylon	AP					
1	14.00	14.00	14.00	6.73	6.90	78.92		04/03/2017		Polyester						
ASYMMETRIC SPINNAKERS (0)																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				

2020

ORC Club Certificate Appendix

BOAT	
Name	ROZA II
Sail Nr	GRE-1613
Certificate Number	00934
Issued On	27/03/2020

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1153.5	945.6	833.5	765.3	731.5	716.9	712.1
52°	747.2	627.6	554.4	519.2	504.0	497.6	493.9
60°	704.2	595.3	530.8	503.7	490.2	483.2	478.4
75°	672.2	569.0	514.8	491.4	477.5	467.4	455.5
90°	678.2	572.3	513.8	488.4	473.0	460.3	439.6
110°	707.1	578.9	509.3	480.2	460.9	443.9	424.1
120°	729.0	594.9	517.2	484.2	463.7	445.8	413.2
135°	807.7	652.0	556.2	503.7	478.1	458.9	422.3
150°	953.2	744.1	628.0	550.8	503.5	479.4	443.6
Run VMG	1100.7	859.2	723.7	631.2	564.7	515.8	468.9
Selected Courses							
Windward / Leeward	1127.1	902.4	778.6	698.2	648.1	616.3	590.5
Circular Random	934.4	747.3	645.1	584.6	547.4	523.7	497.1
Coastal / Long Distance	1124.4	847.3	696.9	603.9	555.0	521.7	473.3
Non Spinnaker	978.4	778.3	667.9	602.1	561.2	534.9	504.6

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	43.5°	42.0°	41.3°	42.0°	40.9°	40.1°	40.1°
Beat VMG	3.12	3.81	4.32	4.70	4.92	5.02	5.06
52°	4.82	5.74	6.49	6.93	7.14	7.23	7.29
60°	5.11	6.05	6.78	7.15	7.34	7.45	7.53
75°	5.36	6.33	6.99	7.33	7.54	7.70	7.90
90°	5.31	6.29	7.01	7.37	7.61	7.82	8.19
110°	5.09	6.22	7.07	7.50	7.81	8.11	8.49
120°	4.94	6.05	6.96	7.44	7.76	8.07	8.71
135°	4.46	5.52	6.47	7.15	7.53	7.85	8.53
150°	3.78	4.84	5.73	6.54	7.15	7.51	8.12
Run VMG	3.27	4.19	4.97	5.70	6.38	6.98	7.68
Gybe Angles	147.0°	150.0°	153.0°	154.0°	166.0°	180.0°	180.0°