



World Leader in Rating Technology

2016 ORC Club Certificate

Rating Office

PATRICIO D. GUTIERREZ
C. GRIERSON Y
COSTANERASUR
Y.C.A



Certificate

Number **324204**
Issued On **15/01/2016**
ORC Ref **ARG00001515**
VPP Ver. **2016 1.00**
Valid until **31/12/2016**

Crew Weight

Declared **525kg**
Default* **715kg**
Non Manual Pwr **No**

Special Scoring

ToD ToT
Non Spin GPH **690,5 0,8689**
Non Spin OSN **667,3 0,8991**
N/S Perf. Line **43,6 0,684**

Sails Limitations

Headsails **6** Spinnakers **3**
Dacron Sails

Spinnaker configuration
Symmetric: **No**
Asymmetric: **Yes 97,66**
Flying H/S: **No**
Spin. Pole: **Yes**

Class Division Length

CDL = **8,946**

Stability

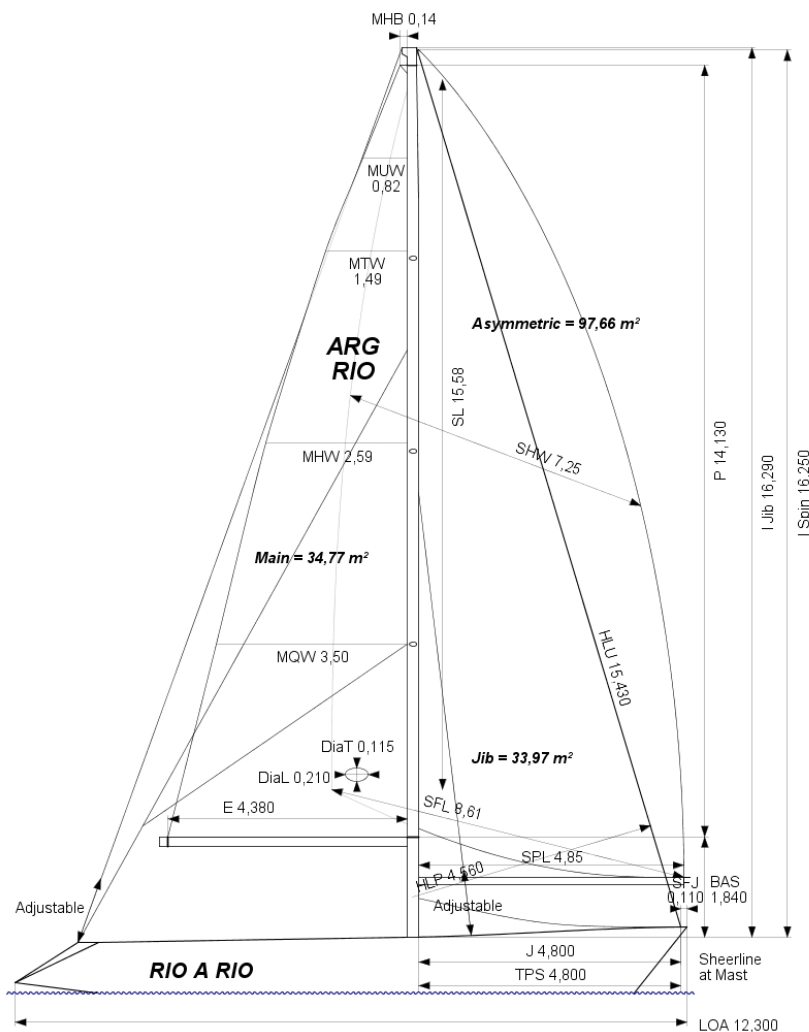
LPS (Estimated): **106,6°**
Stability Index: **110,6**
OSR Category: **N/A**

Owner

ENRIQUE DIETEL

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

Signature



BOAT		GPH		HULL	
Name	RIO A RIO	650,2	Data File	RIOARIO.dxt	LOA 12,300m
Sail Nr	ARG-RIO		Offset File	ERRANTE2.OFF	MB 3,850m
			Displacement	8.294kg	Draft 1,979m
CLASS			IMS Division	Cruiser/Racer	Dynamic All. 0,399%
Class	F&C 40		Fwd Accom.	Yes	Construction Cored
Designer	GERMAN FRERS		Fiber Rigging	No	Aramid Core No
Builder	AST. F&C		Crew Arm Ex		Carbon Rudder No
Series	11/1986		Light Stanchions		
Age Date	11/1986		IMSL	10,300m	VCGD 0,123m Sink 21,89kg/mm
Age Allowance	0,487%		RL	7,590m	VCGM 0,101m WS 30,14m²
COMMENTS			LSM0	10,265m	Displacement/Length ratio 7,6681
YCA			Water Ballast 0 Trim Tab No		
PROPELLER			CENTERBOARD		
Installation	Strut	PRD 0,465			
Type	Folding 2 blades	PBW 0,125	N/A		
		PIPA 0,0035			



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ORC Club Certificate Appendix

BOAT

Name **RIO A RIO**
Sail Nr **ARG-RIO**

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TIME ALLOWANCES

Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1165,3	957,1	845,3	766,5	718,2	697,5	683,4
52°	752,9	630,2	555,5	512,2	492,7	483,3	477,2
60°	706,5	595,0	526,6	495,2	479,1	469,3	461,7
75°	670,2	565,3	507,5	482,7	467,5	455,5	437,9
90°	661,9	546,4	492,3	471,5	463,5	455,4	432,1
110°	657,2	540,4	489,6	465,8	446,8	432,2	415,4
120°	679,2	559,2	497,6	471,1	451,5	432,5	402,0
135°	754,0	614,6	529,7	488,8	466,5	447,8	411,2
150°	891,3	704,4	597,9	527,7	489,1	468,0	433,0
Run VMG	1029,2	813,4	689,7	603,6	544,4	501,3	458,8

Selected Courses

Windward / Leeward	1097,3	885,3	767,5	685,0	631,3	599,4	571,1
Circular Random	910,5	729,3	630,1	571,0	534,1	510,0	481,6
Ocean for PCS	903,4	716,1	611,2	547,5	507,2	480,3	444,5
Non Spinnaker	984,6	781,5	668,3	599,6	556,0	527,7	495,0

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	44,1°	42,4°	42,0°	42,7°	41,3°	40,2°	40,1°
Beat VMG	3,09	3,76	4,26	4,70	5,01	5,16	5,27
52°	4,78	5,71	6,48	7,03	7,31	7,45	7,54
60°	5,10	6,05	6,84	7,27	7,51	7,67	7,80
75°	5,37	6,37	7,09	7,46	7,70	7,90	8,22
90°	5,44	6,59	7,31	7,64	7,77	7,91	8,33
110°	5,48	6,66	7,35	7,73	8,06	8,33	8,67
120°	5,30	6,44	7,23	7,64	7,97	8,32	8,96
135°	4,77	5,86	6,80	7,37	7,72	8,04	8,75
150°	4,04	5,11	6,02	6,82	7,36	7,69	8,31
Run VMG	3,50	4,43	5,22	5,96	6,61	7,18	7,85
Gybe Angles	145,8°	150,4°	152,2°	154,2°	169,3°	180,0°	180,0°