



ORC
Offshore Racing Congress
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**2020
ORC Club
Certificate**

Rating Office

**Offshore
Racing
Congress**



Certificate

Number **200270**
Issued On **19/07/2020**
ORC Ref **03390000MPI**
VPP Ver. **2020 1.01**
Valid until **31/03/2021**

Crew Weight

Default 440kg
Maximum **440kg**
Minimum* **330kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Non Spin GPH	704.0	0.8523
Non Spin OSN	680.9	0.8811

Sails Limitations

Headsails **5** Spinnakers **4**

Spinnaker configuration

Symmetric: **Yes** 53.21
Asymmetric: **No**
Flying H/S: **No**
Spin. Pole: **Yes**

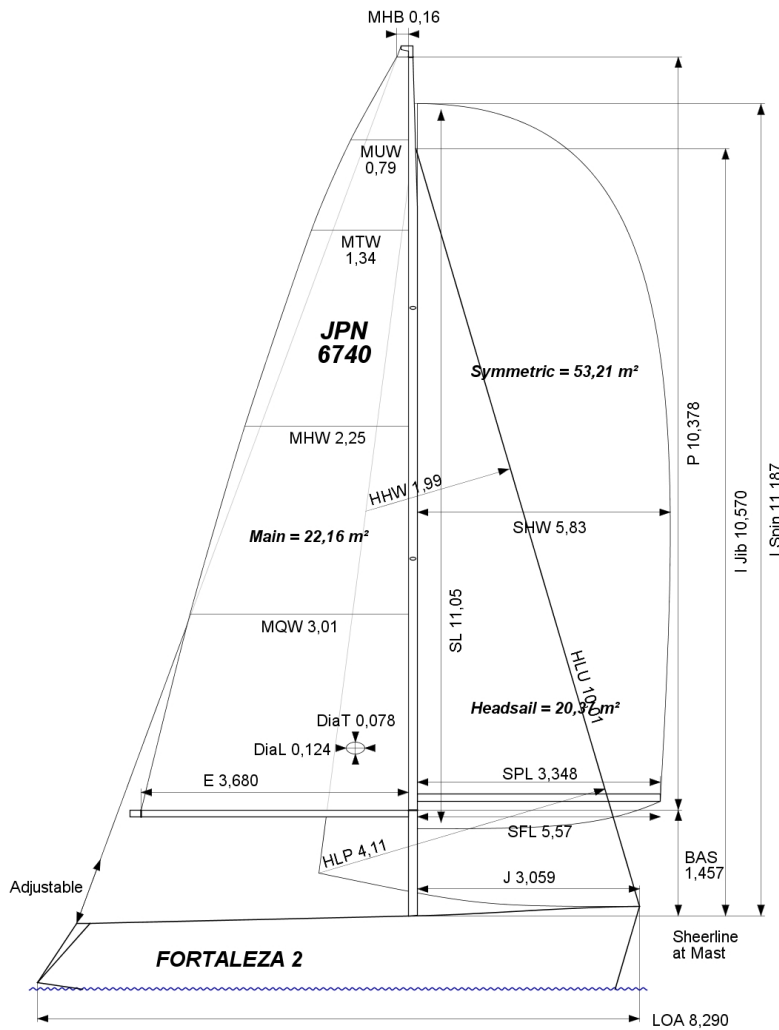
Class Division Length

CDL = 7.676

Stability (Estimated)

Limit Positive Stab.: **123.6°**
Stability Index: **118.8**

Owner



BOAT	GPH	HULL
Name FORTALEZA 2 Sail Nr JPN6740	669.5	Data File JC200270 LOA 8.290m Offset File JCBAI26L.off MB 2.781m Displacement 2,186kg Draft 1.847m
CLASS Class AIOLOS 26+1 Designer I.YOKOYAMA Builder TY SEISAKUSHO Series 10/2006 Age Date 12/2010 Age Allowance 0.455%		IMS Division Cruiser/Racer Dynamic All. 0.133% Plan Review Construction Solid Fiber Rigging No Aramid Core No Crew Arm Ex Carbon Rudder No Light Stanchions
COMMENTS Change from Cert NO.JC190270		IMSL 7.681m VCGD -0.066m Sink 11.56kg/mm RL 7.669m VCGM -0.072m WS 14.87m² LSM0 7.306m Displacement/Length ratio 5.6055
PROPELLER Installation Strut PRD 0.381 Type Folding 2 blades PBW 0.101 PIPA 0.0031		Water Ballast 0 Trim Tab No BLR Index 0.0000
		CENTERBOARD NA
SCORING OPTIONS		
	COASTAL / LONG DISTANCE	WINDWARD / LEEWARD
Time on Distance	649.3	721.0
Time on Time	0.9241	0.9363
Triple Number	Low Medium High	Low Medium High
Time on Distance	762.5 594.8 530.1	978.8 721.8 634.1
Time on Time	0.8852 1.1349 1.2734	0.6896 0.9351 1.0645

2020

ORC Club Certificate Appendix

BOAT	
Name	FORTALEZA 2
Certificate Number	200270
Sail Nr	JPN6740
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TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1110.4	922.3	811.5	762.5	748.6	744.0	745.4
52°	731.1	621.6	573.5	553.1	545.5	542.1	540.9
60°	693.7	599.1	561.2	540.7	529.8	525.0	523.2
75°	668.5	583.9	551.2	527.8	507.9	495.8	488.0
90°	677.8	578.4	540.1	522.0	500.5	478.7	452.4
110°	674.2	571.3	531.2	496.9	469.3	453.3	426.0
120°	695.3	581.6	537.5	502.4	468.8	438.3	398.9
135°	769.4	627.0	561.7	527.0	493.2	460.8	390.7
150°	909.1	721.1	613.6	558.3	526.6	495.3	435.1
Run VMG	1049.7	832.7	704.9	625.3	569.1	536.1	478.0
Selected Courses							
Windward / Leeward	1080.1	877.5	758.2	693.9	658.9	640.1	611.7
Circular Random	917.3	743.0	650.0	596.1	562.7	540.3	509.9
Coastal / Long Distance	1077.0	826.0	689.6	615.0	574.6	541.2	486.9
Non Spinnaker	978.9	786.3	682.3	621.6	584.0	559.2	527.7

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	42.0°	40.7°	39.0°	37.1°	36.6°	36.4°	37.1°
Beat VMG	3.24	3.90	4.44	4.72	4.81	4.84	4.83
52°	4.92	5.79	6.28	6.51	6.60	6.64	6.66
60°	5.19	6.01	6.41	6.66	6.79	6.86	6.88
75°	5.38	6.17	6.53	6.82	7.09	7.26	7.38
90°	5.31	6.22	6.67	6.90	7.19	7.52	7.96
110°	5.34	6.30	6.78	7.24	7.67	7.94	8.45
120°	5.18	6.19	6.70	7.17	7.68	8.21	9.03
135°	4.68	5.74	6.41	6.83	7.30	7.81	9.22
150°	3.96	4.99	5.87	6.45	6.84	7.27	8.27
Run VMG	3.43	4.32	5.11	5.76	6.33	6.71	7.53
Gybe Angles	146.0°	150.0°	153.0°	164.0°	180.0°	180.0°	180.0°