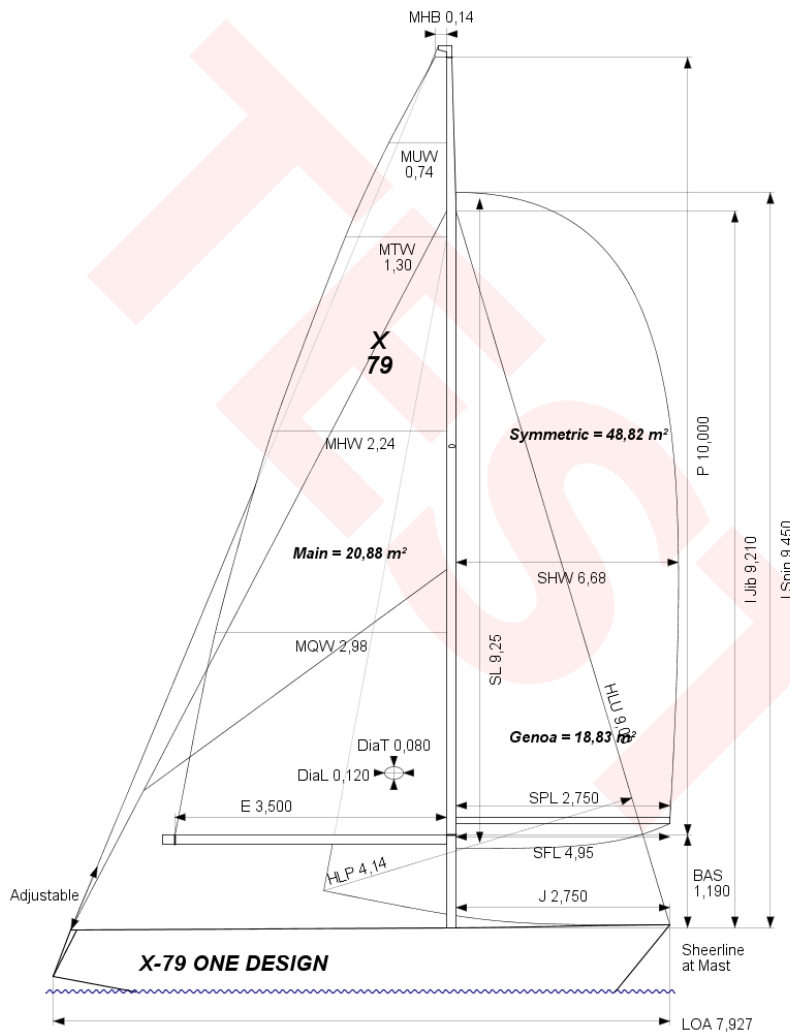




ORC

Offshore Racing Congress
World leader in rating technology

**2019 (Test)
ORC Club One
Design Certificate**



Rating Office

Certificate
Number X79
Issued On 11/04/2019
ORC Ref N/A
VPP Ver. 2019 1.01
Invalid for Racing

Crew Weight
Default 359kg
Maximum 352kg
Minimum* 264kg
<small>*when applied by the NoR and SI</small>
Non Manual Pwr No

Special Scoring
ToD ToT
Double H.GPH 699.5 0.8577
Double H.OSN 684.2 0.8769
Non Spin GPH 714.0 0.8403
Non Spin OSN 692.8 0.8660

Sails Limitations
Headsails 5 Spinnakers 3

Spinnaker configuration
Symmetric: Yes 48.82
Asymmetric: No
Flying H/S: No
Spin. Pole: Yes

Class Division Length
CDL = 6.783

Stability (Estimated)
Limit Positive Stab.: 103.7°
Stability Index: 96.0

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

BOAT Name X-79 ONE DESIGN Sail Nr X79-	GPH 684.2	HULL Data File x79 LOA 7.927m Offset File x79.Od MB 2.844m Displacement 1.552kg Draft 1.358m
CLASS Class X-79 OD Designer JEPPESEN Builder X-YACHTS Series 01/1979 Age Date Age Allowance 0.487%		IMS Division Performance Dynamic All. 0.000% Fwd Accom. No Construction Cored Fiber Rigging No Aramid Core No Crew Arm Ex 0.50 Carbon Rudder No Light Stanchions No
COMMENTS ONE-DESIGN CLUB CERTIFICATE		IMSL 6.567m VCGD 0.051m Sink 9.24kg/mm RL 6.996m VCGM 0.147m WS 12.29m² LSM0 6.336m Displacement/Length ratio 6.1016
PROPELLER Type No Propeller		Water Ballast 0 Trim Tab No BLR Index 0.0000
		CENTERBOARD N/A

SCORING OPTIONS	COASTAL / LONG DISTANCE	WINDWARD / LEEWARD
Time on Distance	665.5	742.7
Time on Time	0.9015	0.9088
Triple Number	Low Medium High	Low Medium High
Time on Distance	773.1 609.8 545.5	994.0 743.1 661.7
Time on Time	0.8731 1.1070 1.2373	0.6791 0.9084 1.0201

2019 (Test)

ORC Club Certificate Appendix

BOAT

Name **X-79 ONE DESIGN** Certificate Number **X79**
Sail Nr **X79-** Issued On **11/04/2019**

TIME ALLOWANCES

Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1115.1	929.3	830.7	798.3	789.0	787.1	796.8
52°	735.8	628.7	587.9	570.8	564.3	561.4	560.4
60°	699.6	608.7	574.9	553.8	544.4	539.7	538.3
75°	668.9	595.7	563.2	535.3	515.5	506.5	500.4
90°	677.0	591.2	551.7	530.2	505.9	484.5	463.5
110°	679.0	585.7	541.2	503.4	475.1	457.7	424.9
120°	701.5	595.9	549.8	510.3	474.9	439.7	387.1
135°	780.1	642.6	575.7	535.8	500.7	466.9	378.6
150°	932.9	739.7	629.4	572.1	535.5	502.6	435.3
Run VMG	1077.2	854.3	722.0	633.5	581.6	546.7	484.7

Selected Courses

Windward / Leeward	1096.2	891.8	776.4	715.9	685.3	666.9	640.7
Circular Random	931.2	757.1	664.7	611.3	578.1	555.7	524.5
Coastal / Long Distance	1094.3	840.2	706.1	633.0	591.9	556.0	495.7
Non Spinnaker	982.1	793.5	692.8	634.6	598.7	575.0	544.0

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	42.5°	41.7°	39.5°	38.2°	38.0°	38.1°	39.2°
Beat VMG	3.23	3.87	4.33	4.51	4.56	4.57	4.52
52°	4.89	5.73	6.12	6.31	6.38	6.41	6.42
60°	5.15	5.91	6.26	6.50	6.61	6.67	6.69
75°	5.38	6.04	6.39	6.73	6.98	7.11	7.19
90°	5.32	6.09	6.52	6.79	7.12	7.43	7.77
110°	5.30	6.15	6.65	7.15	7.58	7.87	8.47
120°	5.13	6.04	6.55	7.06	7.58	8.19	9.30
135°	4.61	5.60	6.25	6.72	7.19	7.71	9.51
150°	3.86	4.87	5.72	6.29	6.72	7.16	8.27
Run VMG	3.34	4.21	4.99	5.68	6.19	6.59	7.43
Gybe Angles	147.4°	150.9°	153.3°	172.6°	180.0°	180.0°	180.0°