

BOAT Name MARIA-ELECTRA Sail Nr GRE-8793	GPH 647.6	HULL Length Overall 10.725m Maximum Beam 3.466m Displacement 5,786kg Draft 1.926m Plan Review IMS Reg. Division Cruiser/Racer Dynamic Allowance 0.331% Hull Construction Cored Carbon Rudder No Crew Arm Extension
GENERAL Class X-362 Designer N. JEPPESEN Builder X-YACHTS Series 10/1993 Age 04/1998 Age Allowance 0.487% Offset File H216.BOF - 21/11/1995 16:33:10 Measurement by - 22/05/2003		IMSL 9.766m VCGD -0.098m Sink 19.49kg/mm RL 8.227m VCGM 0.005m WS 26.03m² LSM0 9.780m Displacement/Length ratio 6.1853



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SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	627.4			698.5		
Time on Time	0.9563			0.9663		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	749.8	571.8	506.2	968.4	704.8	604.2
Time on Time	0.9003	1.1805	1.3334	0.6970	0.9577	1.1171

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1097.6	910.5	801.9	736.2	711.0	700.4	700.1
52°	714.0	603.5	542.0	514.3	502.0	497.2	494.7
60°	673.2	573.4	524.7	502.4	490.0	483.8	480.0
75°	645.6	552.3	512.4	492.4	477.9	466.3	454.3
90°	654.6	555.0	511.3	487.2	475.2	460.2	434.7
110°	675.2	555.5	504.1	478.9	457.2	437.6	415.6
120°	695.2	570.2	510.4	483.1	460.5	437.8	399.5
135°	767.1	622.3	538.5	499.8	476.6	454.5	411.0
150°	902.6	713.4	604.7	535.1	500.3	478.6	437.3
Run VMG	1042.2	823.7	697.4	612.1	552.7	511.7	468.0

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Crew Weight
Default **667kg**
Maximum **667kg**
Minimum* **500kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring
ToD ToT
Non Spin GPH **676.5 0.8869**
Non Spin OSN **654.8 0.9163**

Selected Courses							
Windward / Leeward	1069.9	867.1	749.6	674.1	631.8	606.1	584.1
Circular Random	897.8	722.6	627.9	572.5	538.4	516.5	490.4
Coastal / Long Distance	1067.1	814.3	674.8	589.5	547.6	516.4	467.4
Non Spinnaker	950.2	759.5	655.2	593.5	555.3	530.8	501.6

Sails Limitations	
Headsails	Spinnakers
5	4

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	43.1°	41.3°	41.3°	39.9°	39.0°	38.6°	39.0°
Beat VMG	3.28	3.95	4.49	4.89	5.06	5.14	5.14
52°	5.04	5.96	6.64	7.00	7.17	7.24	7.28
60°	5.35	6.28	6.86	7.17	7.35	7.44	7.50
75°	5.58	6.52	7.03	7.31	7.53	7.72	7.92
90°	5.50	6.49	7.04	7.39	7.58	7.82	8.28
110°	5.33	6.48	7.14	7.52	7.87	8.23	8.66
120°	5.18	6.31	7.05	7.45	7.82	8.22	9.01
135°	4.69	5.79	6.68	7.20	7.55	7.92	8.76
150°	3.99	5.05	5.95	6.73	7.20	7.52	8.23
Run VMG	3.45	4.37	5.16	5.88	6.51	7.04	7.69
Gybe Angles	146.0°	150.0°	152.0°	156.0°	173.0°	180.0°	180.0°

Class Division Length
CDL = **8.994**

Storm Sails Areas
Heavy Weather Jib **27.75**
Storm Jib (JL=9.32) **10.28**
Storm Trysail **9.08**

Owner

BOAT	
Name MARIA-ELECTRA File GR8793	Sail Nr GRE-8793 Data in meters/kilograms
RIG	
Forestay Tension Aft	Spreaders 2
Inner Stay Fixed	Runners/Checkstays 0
Carbon Mast No	Jib Furler No
Fiber Rigging No	Main Furler No
Non-Circular Rigging No	
Articulated Bowsprit No	
P 12.110	E 4.280 MDT1 0.110 MW 0.165
IG 14.228	J 3.940 MDL1 0.205 GO 0.195
ISP 14.208	SFJ 0.340 MDT2 0.110 BD 0.132
BAS 1.658	SPL 3.940 MDL2 0.165 MWT 158.00
FSD 0.032	TPS TL 1.600 MCG 4.470

INCLINING TEST AND FREEBOARDS			
Inclining Test Current Inclining			
Flotation date 03/06/1998		SG 1.0270	
FFM 1.202	FF 1.197	SFFP 0.619	
FAM 0.971	FA 0.976	SAFP 9.526	
W1 17.0	PD1 100.0	WD 10.500	
W2 34.0	PD2 199.8	GSA 1.0	
W3 51.0	PD3 299.9	RSA 1.0	
W4 68.0	PD4 399.8	PLM 9000.0	
LCF from stem on CL / on sheer		6.047 / 6.282	
Maximum beam station from stem		6.784	
RM Measured		140.6kg-m	
RM Default		133.2kg-m	
Limit of positive stability / Stab.Index		114.8° / 117.1	
Freeboard at mast at 4.280		1.082	



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MIZZEN RIG AND SAILS	
N/A	

PROPELLER			
Installation Strut	PRD 0.460		
Type Folding 2 blades	PBW 0.123		
Twin Screw No	PIPA 0.0033		
ST1 0.033	ST3 0.178	ST5 0.300	
ST2 0.178	ST4 0.108	EDL 1.760	

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COMMENTS	
ex "SUGAR TOO", ex "EXCAPE"	

MOVABLE BALLAST	
N/A	

CENTERBOARD	
N/A	

SAILS (Maximum Areas)						
Mainsail	MHB	MUW	MTW	MHW	MQW	Area Area (r) Formula
	0.14	0.86	1.56	2.65	3.54	30.17 30.71 P/8 · (E + 2·MQW+ 2·MHW + 1.5·MTW + MUW + 0.5·MHB)
Symmetric	SLU	SLE	SL	SHW	SFL	82.07 SL · (SFL + 4·SHW) / 6
	13.99	13.99	13.99	7.08	6.88	
Asymmetric	Not Available					

HEADSAILS												
Area = 0.1125·HLU · (1.445·HLP + 2·HQW + 2·HHW + 1.5·HTW + HUW + 0.5·HHB)												
HHB	HUW	HTW	HHW	HQW	HLP	HLU	Area	Btn	Flying	Meas.Date	Material	Comment
0.08	0.69	1.34	2.68	4.09	5.51	14.35	39.14	No	08/05/2020	Polyest		
0.06	0.68	1.33	2.69	4.01	5.16	14.22	37.69	No	29/05/2020	Polyest		
					3.86		29.22	No	22/05/2003	Kevlar		

MEASUREMENT INVENTORY				
Measurer GRE-9				
Date 03/06/1998				
Comment				
Internal Ballast total = 0.0				
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>
4	Anchor	40.0	9.80	
4	Chain	17.0	9.80	CHAIN & ROPE
4	Tools	6.0	6.20	
<i>Id</i>	<i>Item</i>	<i>Maker</i>	<i>Model</i>	
1	Engine	YANMAR	27 Kp	
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Description</i>	

MEASUREMENT INVENTORY									
<i>Id</i>	<i>Item</i>	<i>Tank Use</i>	<i>Tank Type</i>	<i>Capcty</i>	<i>Dist.</i>	<i>VCG</i>	<i>Condtn</i>	<i>Description</i>	
1	Tank	FUEL	STEEL	80.0	7.40			EMPTY	
2	Tank	WATER	STEEL	180.0	5.80			EMPTY	
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG</i>	<i>Description</i>				
1	Battery	28.0	6.70		2 X 70 Ah				
2	Battery	14.0	7.30		1 X 70 Ah				

