

BOAT Name Aria Sail Nr SLO 753	GPH 620.2	HULL Length Overall 7.509m Maximum Beam 2.490m Displacement 821kg Draft 1.522m Plan Review IMS Reg. Division Sportboat Dynamic Allowance 0.000% Hull Construction Cored Carbon Rudder Yes Crew Arm Extension 0.50
GENERAL Class MELGES 24 OD Designer REICHEL/PUGH Builder Devoti Sailing Series 12/1992 Age 05/2008 Age Allowance 0.487% Offset File melg24.OD - 10/01/2020 00:00:00 Measurement by - 19/03/1996		IMSL 7.240m VCGD 0.050m Sink 8.70kg/mm RL 7.719m VCGM 0.030m WS 10.46m² LSM0 6.754m Displacement/Length ratio 2.6648



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SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	602.5			688.4		
Time on Time	0.9958			0.9805		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	711.1	553.2	469.8	913.6	695.4	590.3
Time on Time	0.9493	1.2201	1.4369	0.7388	0.9707	1.1434

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1068.2	876.9	785.9	760.0	753.6	751.8	746.4
52°	695.6	593.6	553.6	534.4	525.9	521.9	507.2
60°	655.0	574.4	533.6	505.3	494.1	488.4	470.5
75°	623.6	560.0	514.1	466.6	446.2	435.9	417.4
90°	620.1	543.9	506.2	460.3	412.1	390.3	371.0
110°	609.3	531.0	464.4	429.9	399.0	375.8	314.7
120°	623.8	540.7	472.4	410.4	378.2	355.7	302.3
135°	697.6	577.0	512.8	448.5	388.9	335.0	266.8
150°	826.3	654.0	571.8	516.3	457.3	403.9	285.4
Run VMG	954.1	755.1	660.9	596.2	528.1	466.4	329.6

Certificate
Number **OP1/20**
ORC Ref **03090000J3D**
Issued On **28/05/2020**
VPP Ver. **2020 1.00**
Valid until **31/12/2020**

Crew Weight
Default **393kg**
Maximum **375kg**
Minimum* **281kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring
ToD ToT
Non Spin GPH **670.7 0.8946**
Non Spin OSN **648.4 0.9253**

Selected Courses							
Windward / Leeward	1011.2	816.0	723.4	678.1	640.8	609.1	538.0
Circular Random	854.5	691.9	603.1	548.5	510.7	481.1	432.5
Coastal / Long Distance	1005.5	768.5	652.5	578.3	527.2	485.0	403.5
Non Spinnaker	937.3	752.0	650.6	589.4	548.8	518.7	472.0

Sails Limitations
Headsails **5** Spinnakers **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	43.5°	42.0°	39.2°	37.9°	37.9°	37.9°	38.4°
Beat VMG	3.37	4.11	4.58	4.74	4.78	4.79	4.82
52°	5.18	6.07	6.50	6.74	6.85	6.90	7.10
60°	5.50	6.27	6.75	7.12	7.29	7.37	7.65
75°	5.77	6.43	7.00	7.72	8.07	8.26	8.63
90°	5.81	6.62	7.11	7.82	8.73	9.22	9.70
110°	5.91	6.78	7.75	8.37	9.02	9.58	11.44
120°	5.77	6.66	7.62	8.77	9.52	10.12	11.91
135°	5.16	6.24	7.02	8.03	9.26	10.75	13.49
150°	4.36	5.50	6.30	6.97	7.87	8.91	12.61
Run VMG	3.77	4.77	5.45	6.04	6.82	7.72	10.92
Gybe Angles	144.0°	148.0°	151.5°	148.3°	145.0°	144.3°	141.6°

Class Division Length
CDL = **7.475**

Storm Sails Areas
Heavy Weather Jib **10.04**
Storm Jib (JL=5.61) **3.72**
Storm Trysail **5.87**

Owner

BOAT	
Name Aria	Sail Nr SLO 753
File SLO753	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS		
Inclining Test Enter VCG directly		
Flotation date 27/01/2016	SG 1.0225	
VCGDe 0.050		
FFM 0.883	FF 0.883	SFFP 0.130
FAM 0.599	FA 0.599	SAFP 7.370
LCF from stem on CL / on sheer		4.181 / 4.315
Maximum beam station from stem		4.470
RM Measured		25.2kg-m
RM Default		26.7kg-m
Limit of positive stability / Stab.Index		103.9° / 95.4
Freeboard at mast at 2.706		0.798



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RIG					
Forestay Tension Aft	Runners/Checkstays 0		Spreaders 1		
Inner Stay None Fitted	Main Furler No		Jib Furler No		
Carbon Mast Yes	Articulated Bowsprit No		Fiber Rigging No		
Non-Circular Rigging No					
P 8.818	E 3.800	MDT1 0.076	MW 0.114		
IG 8.620	J 2.506	MDL1 0.120	GO 0.114		
ISP 9.777	SFJ 0.200	MDT2 0.062	BD 0.103		
BAS 1.000	SPL	MDL2 0.075	MWT 28.00		
FSD 0.000	TPS 4.106	TL 1.578	MCG 3.150		

MIZZEN RIG AND SAILS	
N/A	

PROPELLER	
Type No Propeller	

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Issued On 28/05/2020	
VPP Ver. 2020 1.00	
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COMMENTS	
LIFELINE TENSION ACC CLASSRULE	

MOVABLE BALLAST	
N/A	

COPY ONLY Invalid for Racing

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CENTERBOARD	
N/A	

SAILS (Maximum Areas)									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	0.18	0.93	1.68	2.70	3.33	21.38	22.33	P/8 · (E + 2·MQW+ 2·MHW + 1.5·MTW + MUW + 0.5·MHB)	
Symmetric Not Available									
Asymmetric on centerline	SLU	SLE	SL	SHW	SFL	Area	Formula		
	11.59	11.08	11.34	5.86	6.30	56.18	AS · (SFL + 4·SHW) / 6		

HEADSAILS												
Area = 0.1125·HLU · (1.445·HLP + 2·HQW + 2·HHW + 1.5·HTW + HUW + 0.5·HHB)												
HBB	HUW	HTW	HHW	HQW	HLP	HLU	Area	Btn	Flying	Meas.Date	Material	Comment
0.05	0.40	0.76	1.42	2.09	2.78	8.56	12.14		No			CLASS RULES

MEASUREMENT INVENTORY				
Measurer				
Date 28/08/2019				
Comment				
Internal Ballast total = 0.0				
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>
<i>Id</i>	<i>Item</i>	<i>Maker</i>	<i>Model</i>	
1	Engine	MIN 12kg	OUTBOARD	
<i>Id</i>	<i>Item</i>	<i>Weight Description</i>		

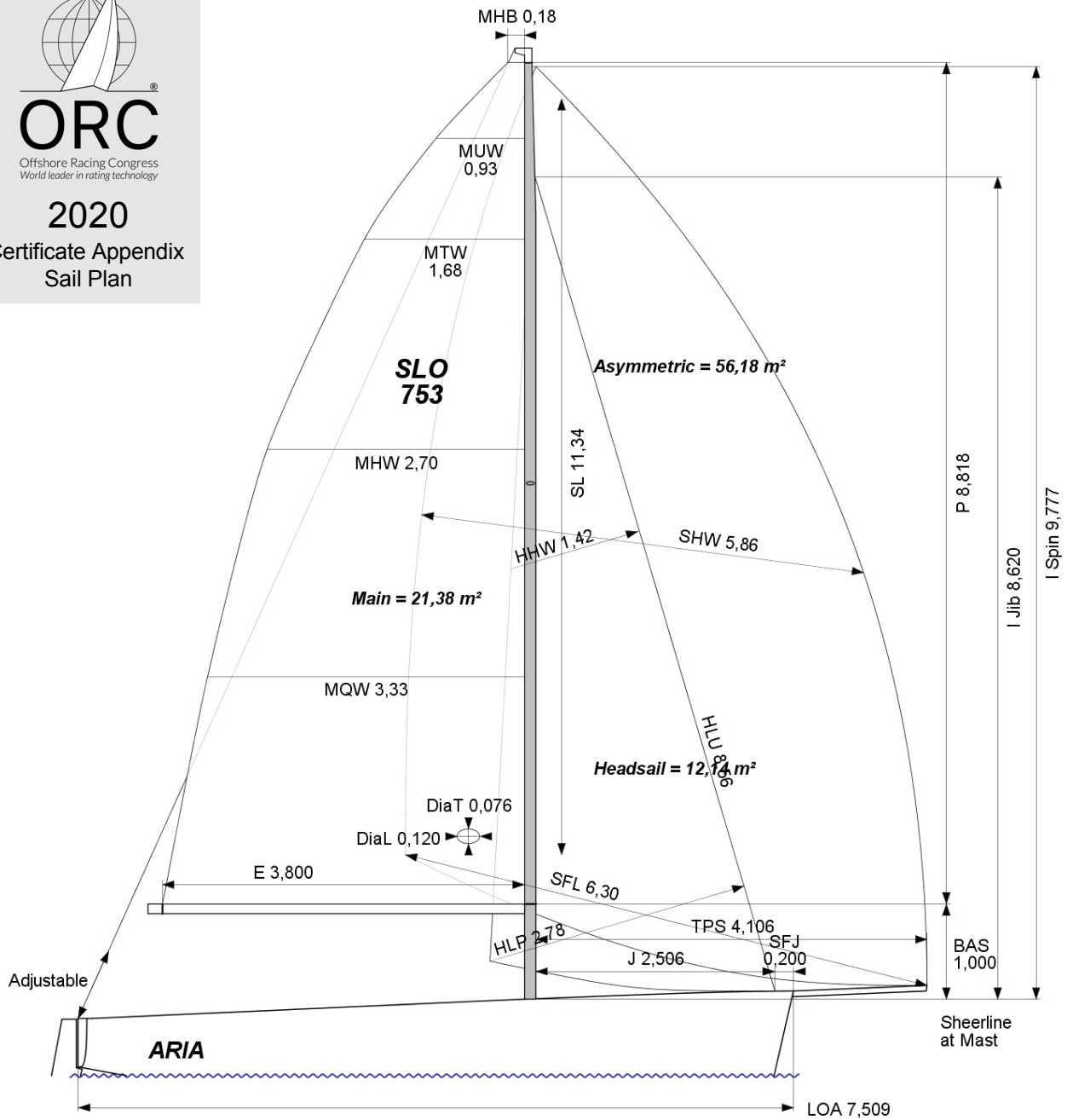
MEASUREMENT INVENTORY				
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>



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Sail Plan



SAILS INVENTORY

MAINSAIL (1)

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment
M	0.18	0.93	1.68	2.70	3.33	21.39	OD				CLASS RULES &

HEADSAILS (1)

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Flying	Measurer	Meas.Date	Manufacture	Material	Comment
H	0.05	0.40	0.76	1.42	2.09	2.78	8.56	111%	12.14	No	OD					CLASS RULES

SYMMETRIC SPINNAKERS (0)

Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment
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ASYMMETRIC SPINNAKERS (1)

Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment
A	11.59	11.08	11.34	5.86	6.30	56.19	asym	OD				CLASS RULES & MEAS