

BOAT Name Oxygen Sail Nr BUL-225	GPH 623.5	HULL Length Overall 7.509m Maximum Beam 2.490m Displacement 821kg Draft 1.522m IMS Reg. Division Sportboat Dynamic Allowance 0.000% Fwd Accommodation No Hull Construction Cored Carbon Rudder Yes Crew Arm Extension 0.50
GENERAL Class MELGES 24 OD Designer REICHEL/PUGH Builder ROWEN Series 12/1992 Age 11/1999 Age Allowance 0.487% Offset File melg24.OD - 15/08/2019 11:16:09 Measurement by - 19/03/1996		IMSL 7.249m VCGD 0.050m Sink 8.71kg/mm RL 7.823m VCGM 0.030m WS 10.47m² LSM0 6.753m Displacement/Length ratio 2.6660



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SCORING OPTIONS						
Time on Distance	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
	605.1			690.0		
Time on Time	0.9915			0.9783		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	714.4	556.3	472.6	917.6	696.6	591.5
Time on Time	0.9449	1.2134	1.4282	0.7356	0.9690	1.1412

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1070.1	877.0	783.9	755.0	747.0	745.0	738.8
52°	699.2	595.4	555.4	535.3	526.2	521.8	507.3
60°	659.5	576.1	537.3	507.7	496.0	490.0	472.4
75°	627.3	562.8	518.8	473.0	450.6	439.6	423.6
90°	622.3	546.6	510.3	468.7	420.4	395.3	374.8
110°	612.2	534.6	469.9	434.2	405.6	380.8	323.1
120°	627.3	544.1	478.7	416.6	382.5	359.4	308.8
135°	703.7	579.8	517.9	456.4	396.5	344.3	270.0
150°	833.1	659.2	575.3	522.0	465.8	412.1	292.9
Run VMG	962.0	761.1	664.8	602.7	537.9	475.8	338.2

Certificate
Number **022/19**
ORC Ref **BUL10026178**
Issued On **15/08/2019**
VPP Ver. **2019 1.01**
Valid until **31/12/2019**

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

Special Scoring

	ToD	ToT
Double H.GPH	653.2	0.9186
Double H.OSN	640.6	0.9366
Non Spin GPH	670.2	0.8953
Non Spin OSN	648.7	0.9249

Selected Courses							
Windward / Leeward	1016.0	819.1	724.3	678.9	642.4	610.4	538.5
Circular Random	858.9	695.4	606.3	551.6	513.7	484.0	435.2
Coastal / Long Distance	1010.6	771.6	654.6	580.7	530.2	487.6	407.3
Non Spinnaker	936.5	751.4	650.1	589.0	548.5	518.8	473.3

Sails Limitations

Headsails	Spinnakers
5	3

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°	41.6°	39.0°	37.3°	37.1°	37.1°	37.7°
Beat VMG	3.36	4.10	4.59	4.77	4.82	4.83	4.87
52°	5.15	6.05	6.48	6.72	6.84	6.90	7.10
60°	5.46	6.25	6.70	7.09	7.26	7.35	7.62
75°	5.74	6.40	6.94	7.61	7.99	8.19	8.50
90°	5.79	6.59	7.05	7.68	8.56	9.11	9.60
110°	5.88	6.73	7.66	8.29	8.88	9.45	11.14
120°	5.74	6.62	7.52	8.64	9.41	10.02	11.66
135°	5.12	6.21	6.95	7.89	9.08	10.46	13.33
150°	4.32	5.46	6.26	6.90	7.73	8.74	12.29
Run VMG	3.74	4.73	5.42	5.97	6.69	7.57	10.64
Gybe Angles	144.0°	148.0°	151.5°	148.5°	145.0°	144.5°	140.9°

Class Division Length
CDL = **7.537**

Storm Sails Areas

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

Owner

BOAT	
Name Oxygen	Sail Nr BUL-225
File BUL225	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS		
Inclining Test Enter VCG directly		
Flotation date 27/01/2016	SG 1.0250	
VCGDe 0.050		
FFM 0.876	FF 0.876	SFFP 0.130
FAM 0.587	FA 0.587	SAFP 7.370
LCF from stem on CL / on sheer		4.188 / 4.325
Maximum beam station from stem		4.470
RM Measured		25.3kg-m
RM Default		27.0kg-m
Limit of positive stability / Stab.Index		103.2° / 94.7
Freeboard at mast at 2.706		0.799



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RIG					
Forestay Tension Aft	Spreaders 1				
Inner Stay None Fitted	Runners 0				
Carbon Mast Yes	Jumper Struts None				
Taper Hollows No	Jib Furler No				
Fiber Rigging No	Main Furler No				
Lenticular Rigging No	Without Backstay No				
Articulated Bowsprit 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		
FSP 0.000	TPS 4.106	TL 1.578	MCG 3.150		

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MIZZEN RIG AND SAILS
N/A

PROPELLER
Type No Propeller

COMMENTS
LIFELINE TENSION ACC CLASSRULE

MOVABLE BALLAST
N/A

CENTERBOARD
N/A



SAILS (Maximum Areas)									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	0.180	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	SLU	SLE	SL	SHW	SFL	Area	Formula		
on centerline	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)												
HHB	HUW	HTW	HHW	HQW	HLP	HLU	Area	Btn	Fly	Meas.Date	Material	Comment
0.05	0.40	0.76	1.42	2.09	2.78	8.56	12.14					CLASS RULES

MEASUREMENT INVENTORY				
Measurer				
Date				
Comment				
<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>		

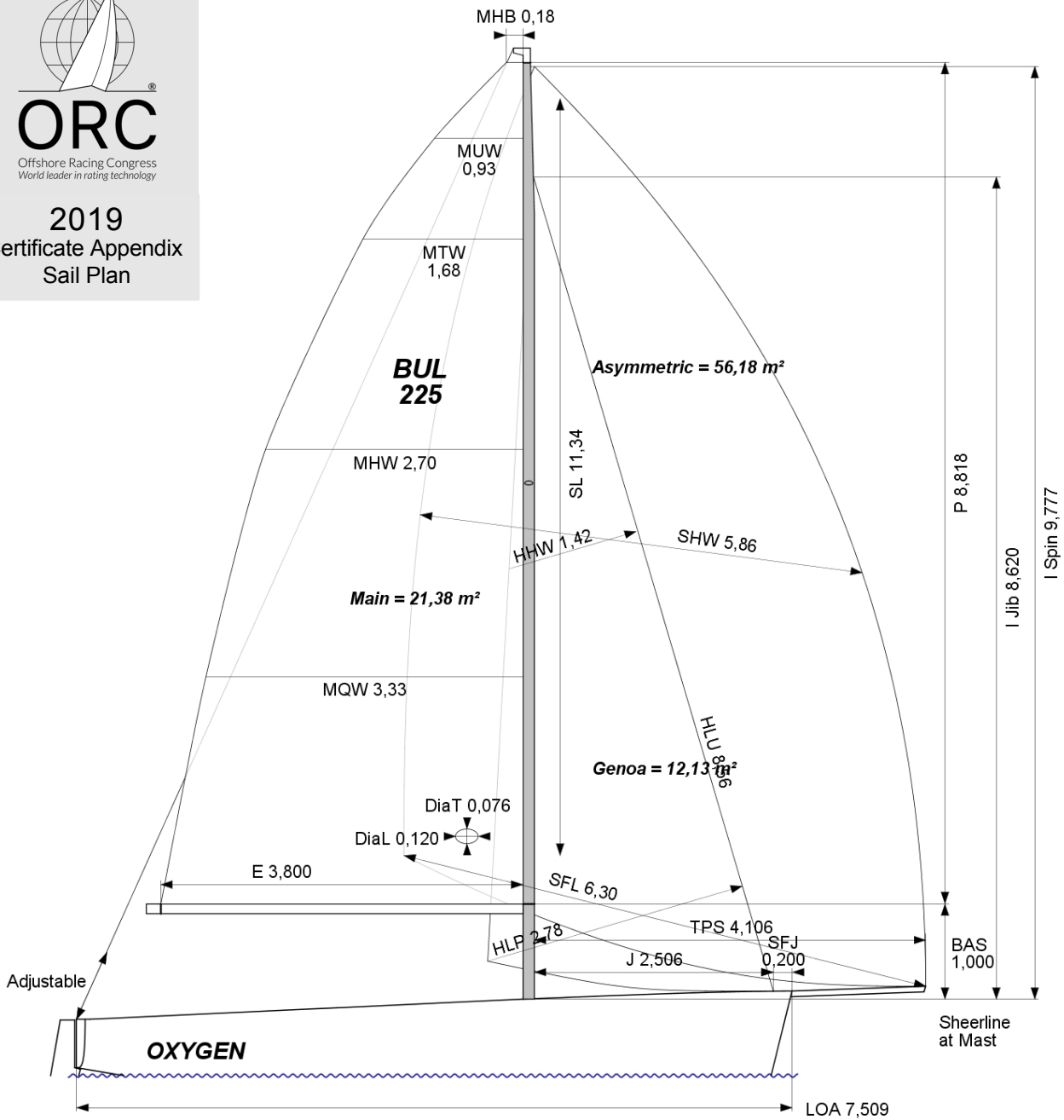
MEASUREMENT INVENTORY				
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>



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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	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
H	0.05	0.40	0.76	1.42	2.09	2.78	8.56	111%	12.14			OD				CLASS RULES
SYMMETRIC SPINNAKERS (0)																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
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				