

BOAT Name OLD JUG Sail Nr M32 187	GPH 561.2	HULL Length Overall 9.680m Maximum Beam 2.944m Displacement 2,042kg Draft 2.096m IMS Reg. Division Performance Dynamic Allowance 0.001% Fwd Accommodation No Hull Construction Cored Carbon Rudder Yes Crew Arm Extension IMSL 9.242m VCGD -0.119m Sink 13.09kg/mm RL 9.271m VCGM -0.150m WS 17.01m² LSM0 8.899m Displacement/Length ratio 2.8976
GENERAL Class MELGES 32 MOD Designer REICHEL/PUGH Builder MELGES Series 06/2003 Age 05/2008 Age Allowance 0.487% Offset File I187.off - 19/06/2017 14:08:12 Measurement by - 26/06/2017		



2019
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Rating Office

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SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	548.8			616.8		
Time on Time	1.0934			1.0943		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	622.6	506.3	443.5	797.1	626.5	539.2
Time on Time	1.0841	1.3332	1.5221	0.8468	1.0775	1.2518

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	904.7	751.6	708.5	693.5	681.3	672.2	678.2
52°	594.1	520.5	503.1	495.3	490.6	481.0	478.0
60°	562.6	506.4	486.8	476.6	470.3	460.1	451.5
75°	541.3	495.0	462.2	444.0	433.7	427.5	408.1
90°	543.7	494.5	456.7	422.2	401.7	390.2	376.9
110°	537.1	479.0	447.5	421.6	399.1	372.8	325.9
120°	548.0	480.8	433.2	404.7	383.2	358.0	316.2
135°	618.0	508.1	456.6	405.2	357.7	325.4	283.9
150°	738.2	588.8	511.6	463.2	417.2	369.1	280.6
Run VMG	852.4	679.9	591.7	534.9	481.7	426.2	324.0

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Number **142310**
ORC Ref **GER20040696**
Issued On **26/04/2019**
VPP Ver. **2019 1.01**
Valid until **01/01/2020**

Crew Weight

Default **583kg**
Maximum **615kg**
Minimum* **461kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Double H.GPH	588.8	1.0190
Double H.OSN	582.6	1.0299
Non Spin GPH	602.8	0.9954
Non Spin OSN	589.6	1.0176

Selected Courses							
Windward / Leeward	878.6	715.7	650.1	614.2	581.5	549.2	501.1
Circular Random	755.0	618.6	546.7	503.9	474.8	452.6	418.1
Coastal / Long Distance	875.9	676.1	588.1	532.2	492.7	454.6	395.6
Non Spinnaker	827.0	670.0	585.7	535.6	503.0	479.7	446.4

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	42.5°	39.9°	37.9°	37.7°	37.2°	36.8°	38.1°
Beat VMG	3.98	4.79	5.08	5.19	5.28	5.36	5.31
52°	6.06	6.92	7.16	7.27	7.34	7.48	7.53
60°	6.40	7.11	7.39	7.55	7.65	7.82	7.97
75°	6.65	7.27	7.79	8.11	8.30	8.42	8.82
90°	6.62	7.28	7.88	8.53	8.96	9.23	9.55
110°	6.70	7.52	8.05	8.54	9.02	9.66	11.04
120°	6.57	7.49	8.31	8.90	9.39	10.06	11.39
135°	5.83	7.08	7.88	8.88	10.07	11.06	12.68
150°	4.88	6.11	7.04	7.77	8.63	9.75	12.83
Run VMG	4.22	5.30	6.08	6.73	7.47	8.45	11.11
Gybe Angles	142.4°	145.8°	150.8°	149.5°	146.0°	144.1°	145.2°

Class Division Length

CDL = **9.257**

Storm Sails Areas

Heavy Weather Jib **20.87**
Storm Jib (JL=8.09) **7.73**
Storm Trysail **10.31**

Owner

BOAT	
Name OLD JUG	Sail Nr M32 187
File M32187	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS			
Inclining Test Current Inclining			
Flotation date 14/06/2017		SG 1.0020	
FFM 0.944	FF 0.949	SFFP 0.457	
FAM 0.663	FA 0.666	SAFP 9.490	
W1 40.6	PD1 422.7	WD 7.500	
W2 40.6	PD2 439.2	GSA 1.0	
W3 40.6	PD3 441.2	RSA 1.0	
W4 40.6	PD4 439.4	PLM 9000.0	
LCF from stem on CL / on sheer		5.299 / 5.481	
Maximum beam station from stem		6.272	
RM Measured		55.1kg·m	
RM Default		63.2kg·m	
Limit of positive stability / Stab.Index		116.1° / 109.9	
Freeboard at mast at 3.430		0.894	



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RIG			
Forestay Tension Aft	Spreaders 2		
Inner Stay None Fitted	Runners 0		
Carbon Mast Yes	Jumper Struts None		
Taper Hollows No	Jib Furler No		
Fiber Rigging Yes	Main Furler No		
Lenticular Rigging No	Without Backstay No		
Articulated Bowsprit No			
P 12.940	E 4.550	MDT1 0.098	MW 0.180
IG 12.337	J 3.290	MDL1 0.180	GO 0.205
ISP 14.560	SFJ 0.140	MDT2 0.075	BD 0.153
BAS 1.255	SPL 0.000	MDL2 0.132	MWT 86.00
FSP 0.068	TPS 4.850	TL 2.100	MCG 4.690

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MIZZEN RIG AND SAILS	
N/A	

PROPELLER	
Type No Propeller	

COMMENTS	
EX ITA 187	

MOVABLE BALLAST	
N/A	



CENTERBOARD	
N/A	

SAILS (Maximum Areas)									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	1.010	1.48	2.13	3.14	3.95	38.72	39.78	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				
	16.36	13.99	15.18	8.87	9.04	112.60		AS · (SFL + 4·SHW) / 6	

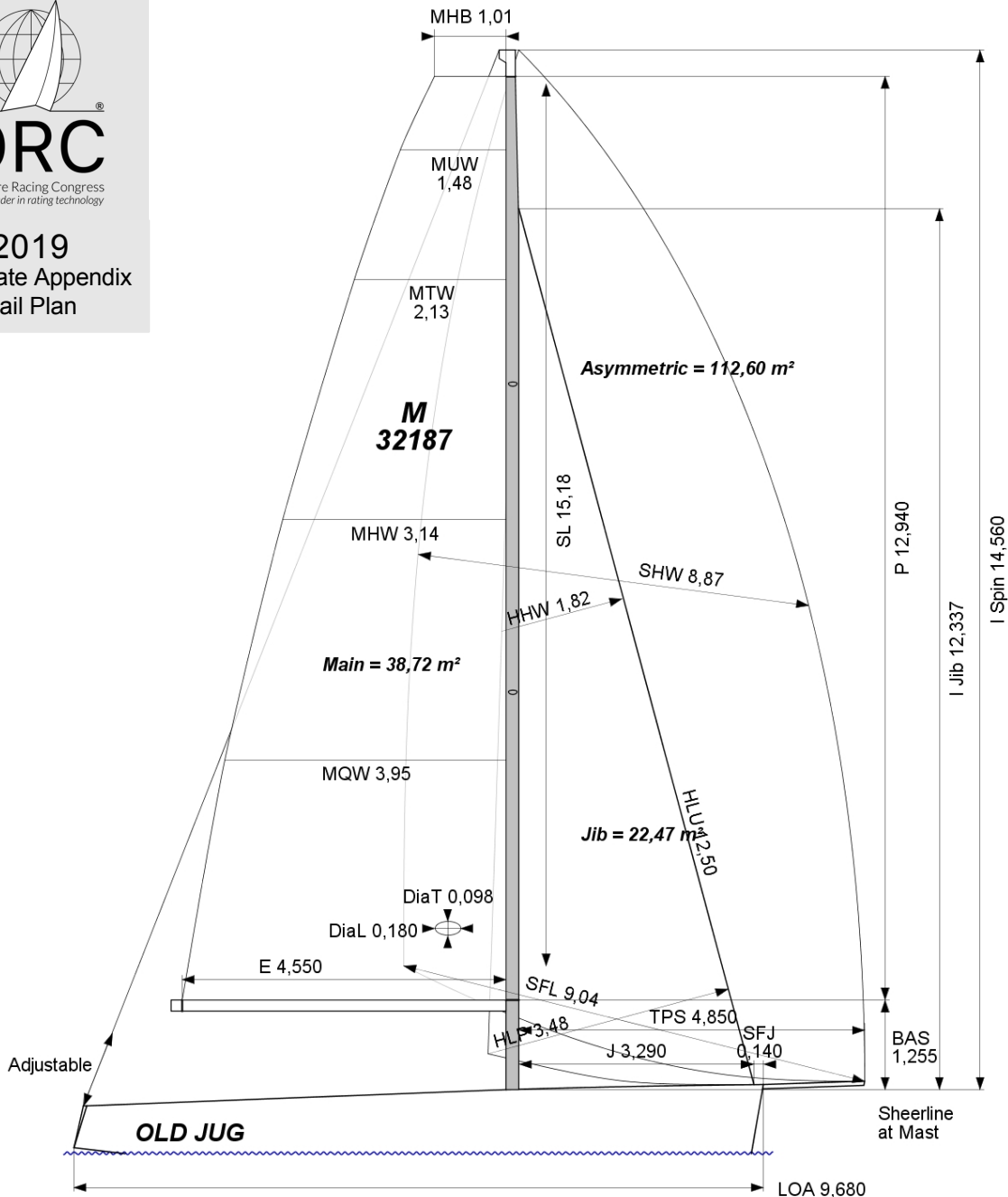
HEADSAILS												
Area = 0.1125·HLU · (1.445·HLP + 2·HQW + 2·HHW + 1.5·HTW + HUW + 0.5·HHB)												
HHB	HUW	HTW	HHW	HQW	HLP	HLU	Area	Btn	Fly	Meas.Date	Material	Comment
0.09	0.52	0.99	1.82	2.63	3.48	12.50	22.47	Y	N	14/06/2017	Carbon	J L 17
0.07	0.52	0.98	1.82	2.61	3.47	12.44	22.25	N	N	23/06/2016	Unknow	
0.07	0.48	0.92	1.73	2.54	3.45	12.37	21.46	N	N	23/06/2016	Unknow	
0.10	0.42	0.78	1.60	2.47	3.37	11.46	18.89	N	N	23/06/2016	Unknow	
0.05	0.38	0.71	1.41	2.08	2.71	11.95	16.63	N	N	15/06/2017	Nylon	STAY SAIL

MEASUREMENT INVENTORY				
Measurer FIV 120				
Date 14/06/2017				
Comment				
Id	Item	Weight	Distance	VCG Description
Id	Item	Maker	Model	
A	Engine	TOHATSU	10 HP	
Id	Item	Weight Description		

MEASUREMENT INVENTORY							
Id	Item	Tank Use	Tank Type	Capcty	Dist.	VCG	Condtn Description
A	Tank	ACQUA	NEOP	75.0	5.03	0.00	0-0 VUOTO
B	Tank	BENZINA	PVC	15.0	6.73	0.00	0-0 VUOTO
Id	Item	Weight	Distance	VCG Description			
A	Ballast	49.5	5.35	0.00 DX N.16 LASTRE FERRO			
B	Ballast	49.5	5.35	0.00 SX N.16 LASTRE FERRO			
A	Battery	24.0	6.70	0.00 N.2 45 Amp/h			
B	Battery	21.0	7.00	0.00 N.1 95 Amp/h			
A	Misc	0.0	0.00	0.00 MOTORE NEL SUO ALLOGGIAMENTO			



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Certificate Appendix
Sail Plan



SAILS INVENTORY

MAINSAIL (2)

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment
159217	1.01	1.48	2.13	3.14	3.95	38.68		15/05/2018	NORTH	Carbon	MAIN 2018
B	1.00	1.47	2.10	3.15	3.95	38.61		26/06/2017	N/S	Unknown	

HEADSAILS (5)

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
A	0.09	0.52	0.99	1.82	2.63	3.48	12.50	106%	22.47	Y	N		14/06/2017	NORTH	Carbon	J L 17
E	0.07	0.52	0.98	1.82	2.61	3.47	12.44	105%	22.25	N	N		23/06/2016		Unknown	
B	0.07	0.48	0.92	1.73	2.54	3.45	12.37	105%	21.46	N	N		23/06/2016		Unknown	
C	0.10	0.42	0.78	1.60	2.47	3.37	11.46	102%	18.89	N	N		23/06/2016		Unknown	
D	0.05	0.38	0.71	1.41	2.08	2.71	11.95	82%	16.63	N	N		15/06/2017	OLIMPIC	Nylon	STAY SAIL

SYMMETRIC SPINNAKERS (0)

Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment
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ASYMMETRIC SPINNAKERS (4)

Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment
C	16.36	13.99	15.18	8.87	9.04	112.60	asym		20/04/2017	OLIMPIC	Nylon	A1,5
159210	16.51	14.34	15.43	8.81	8.30	111.94	asym		15/05/2018	NORTH	Nylon	A4 2018
D	16.06	13.00	14.53	8.04	9.21	100.19	asym		15/06/2017	OLIMPIC	Nylon	A1
B	15.14	14.25	14.70	4.62	6.08	60.16	asym		23/06/2016		Unknown	