



ORC
Offshore Racing Congress
World leader in rating technology

2019
ORC Club
Certificate

Rating Office

Centre de Calcul FFVoile
52 Rue Sénac de Meilhan
17000 - La Rochelle
France



Certificate

Number **19129a**
Issued On **01/03/2019**
ORC Ref **FRA00013970**
VPP Ver. **2019 1.01**
Valid until **29/02/2020**

Crew Weight

Default 574kg
Maximum **574kg**
Minimum* **431kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Non Spin GPH	662.4	0.9058
Non Spin OSN	643.9	0.9318

Sails Limitations

Headsails **5** Spinnakers **3**

Spinnaker configuration

Symmetric: **Yes 104.44**
Asymmetric: **Yes 95.33**
Flying H/S: **No**
Spin. Pole: **Yes**

Class Division Length

CDL = 8.709

Stability (Estimated)

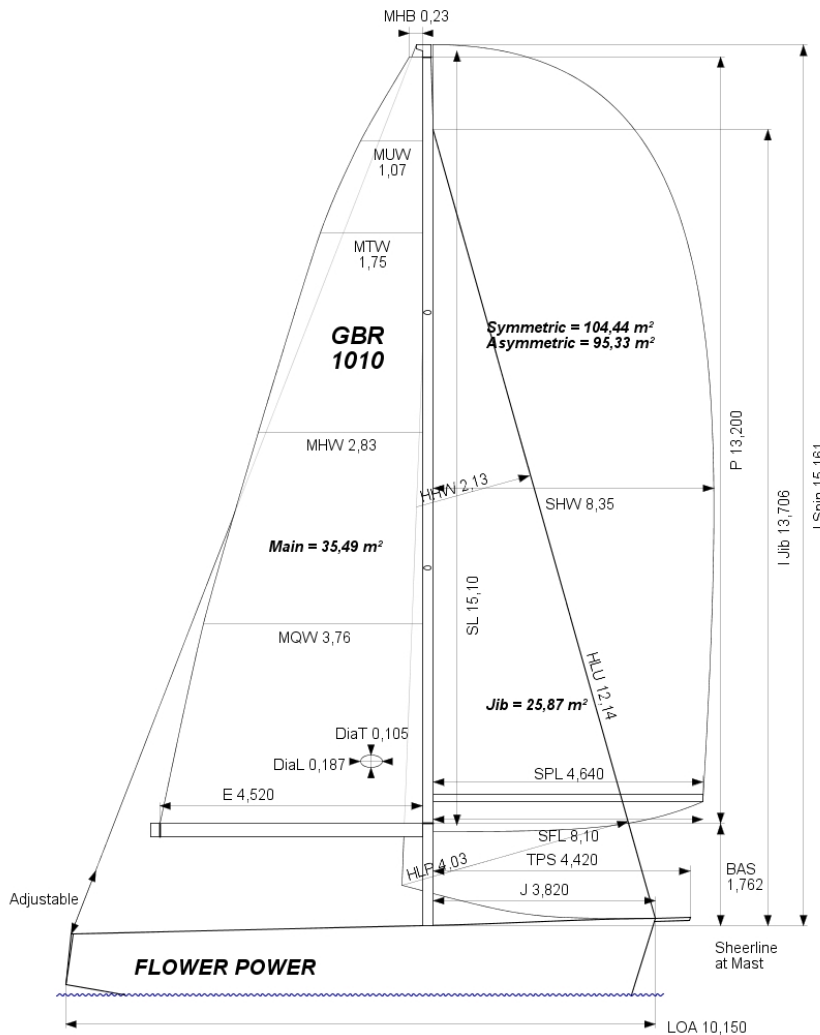
Limit Positive Stab.: **137.5°**
Stability Index: **137.1**

Owner

OLSTHOORN Karel
1800 Route de Pierrefeu,
83400 - HYERES

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

Signature



BOAT		GPH	HULL			
Name FLOWER POWER Sail Nr GBR- 1010		619.3	Data File GBR1010N	LOA 10.150m		
			Offset File MAT1010v0.OFF	MB 3.314m		
			Displacement 4,380kg	Draft 1.964m		
CLASS			IMS Division Performance	Dynamic All. 0.187%		
Class MAT 1010 (N°001)			Fwd Accom. No	Construction Cored		
Designer MILLS Mark			Fiber Rigging No	Aramid Core No		
Builder M.A.T (TURKEY)			Crew Arm Ex	Carbon Rudder No		
Series 01/2011, CIN 1825				Light Stanchions No		
Age Date 03/2011			IMSL 9.204m	VCGD -0.215m	Sink 15.48kg/mm	
Age Allowance 0.260%			RL 8.213m	VCGM -0.213m	WS 22.11m²	
COMMENTS			LSMO 8.799m	Displacement/Length ratio 6.4295		
IDEM 2018 DSPL = +29 Kg YANMAR SD20 Pas de porte ni de matelas From MAT1010.dxt			Water Ballast 0	Trim Tab No		
			BLR Index 0.0000			
PROPELLER			CENTERBOARD			
Installation Strut	PRD 0.400	N/A				
Type Folding 2 blades	PIPA 0.0032					
SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	603.1			674.3		
Time on Time	0.9948			1.0010		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	701.2	550.6	495.6	905.6	674.5	596.5
Time on Time	0.9626	1.2260	1.3621	0.7454	1.0007	1.1316

BOAT	
Name FLOWER POWER	Sail Nr GBR- 1010
File GBR1010N	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS	
Inclining Test Enter VCG directly	
Flotation date 01/01/2013	SG 1.0257
VCGDe -0.215	
FFM 1.300	FF 1.300 SFFP 0.390
FAM 1.043	FA 1.043 SAFP 10.019
LCF from stem on CL / on sheer 5.448 / 5.665	
Maximum beam station from stem 6.838	
RM Measured 90.9kg·m	
RM Default 90.4kg·m	
Limit of positive stability / Stab.Index 137.5° / 137.1	
Freeboard at mast at 3.820 1.182	



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Measurements
Datasheet

RIG	
Forestay Tension Aft	Spreaders 2
Inner Stay None Fitted	Runners 0
Carbon Mast No	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 13.200	E 4.520 MDT1 0.105 MW 0.187
IG 13.706	J 3.820 MDL1 0.187 GO 0.214
ISP 15.161	SFJ 0.000 MDT2 0.105 BD 0.220
BAS 1.762	SPL 4.640 MDL2 0.149 MWT 152.00
FSP 0.072	TPS 4.420 TL 1.100 MCG 6.861

MIZZEN RIG AND SAILS	
N/A	

PROPELLER	
Installation Strut	PRD 0.400
Type Folding 2 blades	PBW
Twin Screw No	PIPA 0.0032
ST1 0.040	ST3 0.240
ST2 0.112	ST4 0.112 EDL 1.910

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COMMENTS	
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MOVABLE BALLAST	
N/A	

CENTERBOARD	
N/A	

SAILS INVENTORY																
MAINSAIL (1)																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
M4		1.07	1.75	2.83	3.76	35.49	Declaration	27/02/2018		Unknown						
HEADSAILS (1)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
G4	0.13	0.78	1.27	2.13		4.03	12.14	105%	25.87			Declaration	27/02/2018		Unknown	
SYMMETRIC SPINNAKERS (1)																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
S3	15.10	15.10	15.10	8.35	8.10	104.45	Declaration	27/02/2018		Unknown						
ASYMMETRIC SPINNAKERS (1)																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				
A2	16.00	14.24	15.12	7.35	8.43	95.34	asym	Declaration	27/02/2018		Unknown					

2019

ORC Club Certificate Appendix

BOAT	
Name	FLOWER POWER
Certificate Number	19129a
Sail Nr	GBR- 1010
Issued On	01/03/2019

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1069.8	883.4	781.0	736.8	723.4	719.9	712.2
52°	695.2	585.5	532.1	511.8	504.7	501.7	497.6
60°	654.6	558.0	516.8	498.6	489.6	485.7	483.2
75°	623.9	538.6	505.4	486.2	471.8	461.2	453.4
90°	610.6	522.0	495.7	483.4	465.5	448.3	423.2
110°	601.4	513.5	481.0	457.4	442.3	431.3	407.9
120°	617.7	520.3	483.9	455.5	430.2	411.3	385.4
135°	681.5	553.5	500.7	471.6	442.8	414.9	357.1
150°	803.2	642.3	546.4	500.2	473.0	446.4	394.7
Run VMG	927.4	741.7	629.5	563.6	516.6	486.3	436.3
Selected Courses							
Windward / Leeward	998.6	812.5	705.2	650.2	620.0	603.1	574.3
Circular Random	845.0	685.4	601.2	553.1	523.9	504.3	476.9
Coastal / Long Distance	991.5	762.2	638.3	572.1	535.5	506.2	456.1
Non Spinnaker	926.0	741.3	641.4	583.4	548.1	525.2	496.2

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°	41.9°	41.2°	40.0°	40.0°	40.0°	40.4°
Beat VMG	3.37	4.08	4.61	4.89	4.98	5.00	5.05
52°	5.18	6.15	6.77	7.03	7.13	7.18	7.23
60°	5.50	6.45	6.97	7.22	7.35	7.41	7.45
75°	5.77	6.68	7.12	7.40	7.63	7.81	7.94
90°	5.90	6.90	7.26	7.45	7.73	8.03	8.51
110°	5.99	7.01	7.48	7.87	8.14	8.35	8.83
120°	5.83	6.92	7.44	7.90	8.37	8.75	9.34
135°	5.28	6.50	7.19	7.63	8.13	8.68	10.08
150°	4.48	5.60	6.59	7.20	7.61	8.07	9.12
Run VMG	3.88	4.85	5.72	6.39	6.97	7.40	8.25
Gybe Angles	142.5°	147.7°	151.8°	159.3°	180.0°	180.0°	180.0°