



ORC
Offshore Racing Congress
World leader in rating technology

**2020
ORC Club
Certificate**

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



Certificate
Number **20202b**
Issued On **18/06/2020**
ORC Ref **03360000KWI**
VPP Ver. **2020 1.02**
Valid until **28/02/2021**

Crew Weight

Default	641kg
Maximum	641kg
Minimum*	481kg

*when applied by the NoR and SI
Non Manual Pwr

Special Scoring

ToD	ToT
Non Spin GPH 629.3	0.9534
Non Spin OSN 611.4	0.9814

Sails Limitations

Headsails **5** Spinnakers **4**

Spinnaker configuration

Symmetric: **Yes 104.98**
Asymmetric: **Yes 95.47**
Flying H/S: **No**
Spin. Pole: **Yes**

Class Division Length

CDL = 9.655

Stability (Estimated)

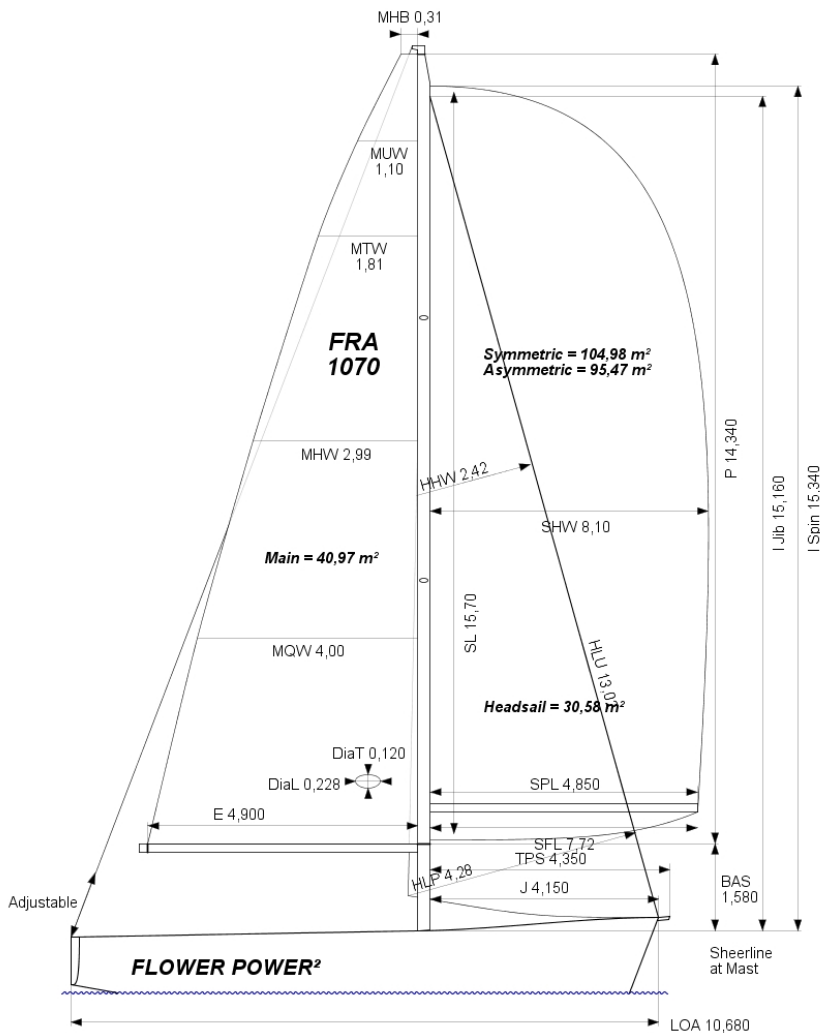
Limit Positive Stab.: **119.7°**
Stability Index: **115.6**

Owner

OSLTHOORN Karel
1800 Route de Pierrefeu
83400 - HYERES

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

Signature



BOAT Name FLOWER POWER² Sail Nr FRA-1070	GPH 591.5	HULL Data File F1070 LOA 10.680m Offset File mat 35_KIL4 .off MB 3.756m Displacement 4,816kg Draft 2.193m
CLASS Class MAT 1070 Designer NIVELY-MURATET Builder M.A.T. Series 01/2018, CIN 2053 Age Date 06/2020 Age Allowance 0.065%		IMS Division Cruiser/Racer Dynamic All. 0.067% Plan Review Construction Cored Fiber Rigging No Aramid Core No Crew Arm Ex Carbon Rudder No Light Stanchions No
COMMENTS Tangon et delphinrière courte SPIS Sy & Asy FSD=0.037 FROM:MAT1070.dxt		IMSL 9.853m VCGD 0.000m Sink 18.61kg/mm RL 9.468m VCGM -0.003m WS 23.82m² LSMO 9.515m Displacement/Length ratio
PROPELLER Installation Strut PRD 0.418 Type Folding 2 blades PBW 0.103 PIPA 0.0033		Water Ballast Trim Tab No BLR Index 0.0000
		CENTERBOARD N/A

SCORING OPTIONS

	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
	Low	Medium	High	Low	Medium	High
Time on Distance	575.2			642.5		
Time on Time	1.0431			1.0506		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	671.8	525.9	469.5	864.9	643.2	565.1
Time on Time	1.0047	1.2836	1.4377	0.7804	1.0494	1.1944

BOAT	
Name FLOWER POWER²	Sail Nr FRA-1070
File F1070	Data in meters/kilograms

RIG			
Forestay Tension Aft	Spreaders 2		
Inner Stay None Fitted	Runners/Checkstays 0		
Carbon Mast No	Jib Furler No		
Fiber Rigging No	Main Furler No		
Non-Circular Rigging No			
Articulated Bowsprit No			
P 14.340	E 4.900	MDT1 0.120	MW 0.228
IG 15.160	J 4.150	MDL1 0.228	GO 0.230
ISP 15.340	SFJ	MDT2 0.100	BD 0.160
BAS 1.580	SPL 4.850	MDL2 0.134	MWT 129.00
FSD 0.037	TPS 4.350	TL 0.530	MCG 4.280

INCLINING TEST AND FREEBOARDS		
Inclining Test Enter VCG directly		
Flotation date 23/10/2018	SG 1.0245	
VCGDe 0.000		
FFM 1.371	FF 1.371	SFFP 0.100
FAM 0.968	FA 0.968	SAFP 10.620
LCF from stem on CL / on sheer		6.013 / 6.262
Maximum beam station from stem		9.450
RM Measured		120.0kg·m
RM Default		115.9kg·m
Limit of positive stability / Stab.Index		119.7° / 115.6
Freeboard at mast at 4.150		1.128



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2020
Measurements
Datasheet

MIZZEN RIG AND SAILS	
N/A	

PROPELLER		
Installation Strut	PRD 0.418	
Type Folding 2 blades	PBW 0.103	
Twin Screw No	PIPA 0.0033	
ST1 0.065	ST3 0.196	ST5 0.300
ST2 0.196	ST4 0.095	EDL 1.723

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COMMENTS	
Tangon et delphinrière courte SPIS Sy & Asy FSD=0.037 FROM:MAT1070.dxt	

MOVABLE BALLAST	
N/A	

CENTERBOARD	
N/A	

SAILS INVENTORY																
MAINSAIL (1)																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
Course	0.31	1.10	1.81	2.99	4.00	40.96	Declaration	16/06/2020	Incidence	Twaron						
HEADSAILS (1)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Flying	Measurer	Meas.Date	Manufacture	Material	Comment
G1	0.20	0.88	1.49	2.42	3.32	4.28	13.02	103%	30.58	Y	No	Declaration	16/06/2020	Incidence	Twaron	
SYMMETRIC SPINNAKERS (2)																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
Léger	15.70	15.70	15.70	8.10	7.72	104.99	Declaration	16/06/2020	Incidence	Nylon						
Médium	15.05	15.05	15.05	8.27	7.98	103.00	Declaration	16/06/2020	Incidence	Nylon						
ASYMMETRIC SPINNAKERS (1)																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				
Léger	15.96	14.22	15.09	7.39	8.40	95.47	asym	Declaration	16/06/2020	Incidence	Nylon					

2020

ORC Club Certificate Appendix

BOAT	
Name FLOWER POWER²	Certificate Number 20202b
Sail Nr FRA-1070	Issued On 18/06/2020

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	990.6	818.1	722.3	686.2	673.6	669.4	657.7
52°	651.1	549.4	503.1	486.2	480.6	478.0	471.3
60°	616.3	528.2	491.4	474.3	467.0	463.4	457.5
75°	590.3	514.0	483.1	463.0	447.4	438.3	431.9
90°	594.1	504.2	473.6	461.2	441.6	422.2	398.7
110°	589.0	499.3	464.3	436.8	418.2	404.2	380.2
120°	606.4	508.3	469.5	439.2	409.5	386.7	357.0
135°	671.2	545.4	489.6	459.8	430.6	401.8	339.2
150°	794.5	635.6	539.8	489.8	461.8	434.9	380.6
Run VMG	917.4	733.9	622.6	554.6	507.2	475.2	424.6
Selected Courses							
Windward / Leeward	954.0	776.0	672.5	620.4	590.4	572.3	541.1
Circular Random	808.9	655.6	574.3	527.4	498.3	478.2	449.5
Coastal / Long Distance	950.3	729.6	609.6	545.7	509.7	480.0	429.7
Non Spinnaker	877.7	703.9	609.8	554.6	520.3	497.5	467.0

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	42.6°	40.9°	39.8°	38.3°	38.1°	37.9°	37.9°
Beat VMG	3.63	4.40	4.98	5.25	5.34	5.38	5.47
52°	5.53	6.55	7.16	7.40	7.49	7.53	7.64
60°	5.84	6.82	7.33	7.59	7.71	7.77	7.87
75°	6.10	7.00	7.45	7.78	8.05	8.21	8.33
90°	6.06	7.14	7.60	7.81	8.15	8.53	9.03
110°	6.11	7.21	7.75	8.24	8.61	8.91	9.47
120°	5.94	7.08	7.67	8.20	8.79	9.31	10.08
135°	5.36	6.60	7.35	7.83	8.36	8.96	10.61
150°	4.53	5.66	6.67	7.35	7.80	8.28	9.46
Run VMG	3.92	4.91	5.78	6.49	7.10	7.58	8.48
Gybe Angles	142.5°	148.0°	151.0°	158.0°	176.0°	180.0°	180.0°