



World Leader in Rating Technology

2018 ORC Club Certificate

Rating Office
Portsmouth Olympic
Harbour
53 Yonge Street
Kingston, Ontario
Canada K7M 6G4



Certificate

Number **BC8019**
Issued On **5/21/18**
ORC Ref **CAN00000630**
VPP Ver. **2018 1.00**
Valid until **12/31/18**

Crew Weight

Default	762kg
Maximum	635kg
Minimum*	476kg
*when applied by the NoR and SI	
Non Manual Pwr	No

Special Scoring

	ToD	ToT
Double H.GPH	595.5	1.0076
Double H.OSN	580.8	1.0330
Non Spin GPH	617.4	0.9718
Non Spin OSN	600.8	0.9987

Sails Limitations

Headsails **1** Spinnakers **4**

Spinnaker configuration
Symmetric: **Yes** **103.75**
Asymmetric: **Yes** **114.43**
Flying H/S: **No**
Spin. Pole: **Yes**

Class Division Length

CDL = 10.287

Stability (Estimated)

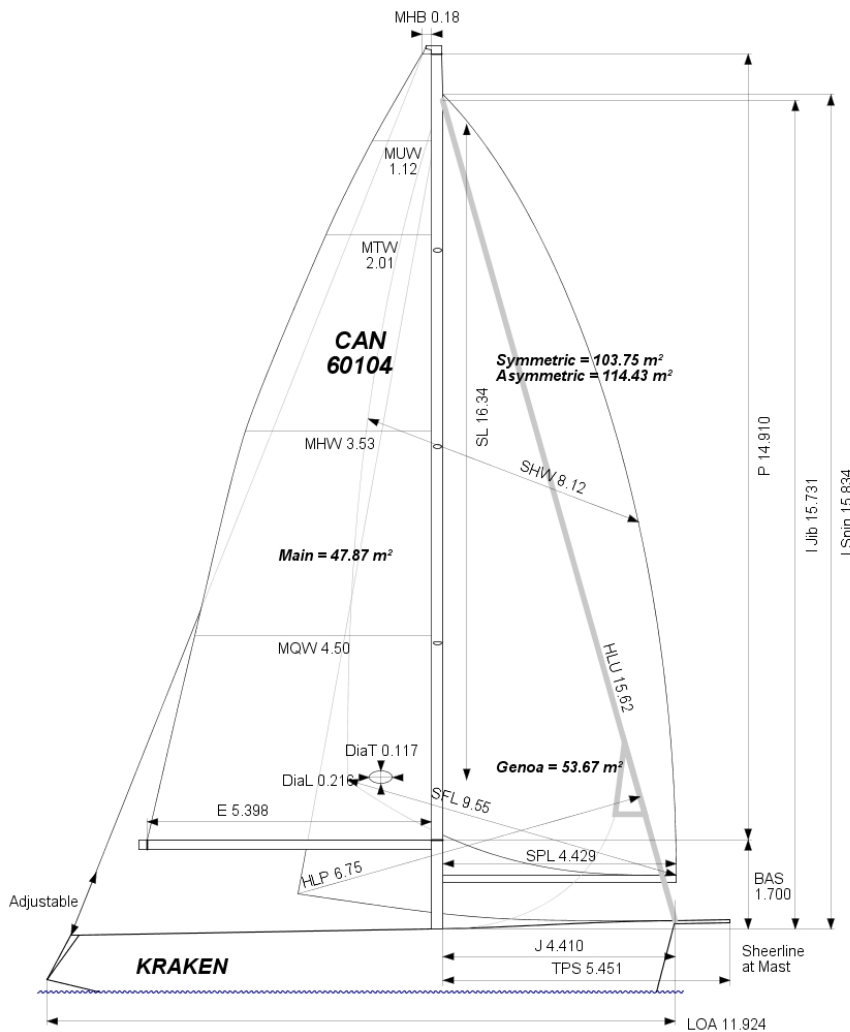
Limit Positive Stab.: **115.3°**
Stability Index: **119.5**

Owner

Mark Malecek
1808 Burrill Ave
North Vancouver, BC
Canada V7K 1M2

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

Signature



BOAT	GPH	HULL
Name Kraken Sail Nr CAN 60104	592.7	Data File Kraken- LOA 11.924m Offset File EFRST407.OFF MB 3.770m Displacement 7,881kg Draft 2.450m
CLASS Class First 40.7 Designer Farr Builder Beneteau Series 12/1997 Age Date 03/2002 Age Allowance 0.487%		IMS Division Cruiser/Racer Dynamic All. 0.032% Fwd Accom. Yes Construction Solid Fiber Rigging No Aramid Core No Crew Arm Ex Carbon Rudder Yes Light Stanchions No
COMMENTS		IMSL 10.820m VCGD -0.150m Sink 23.07kg/mm RL 9.751m VCGM 0.058m WS 30.95m² LSM0 10.740m Displacement/Length ratio 6.3616
PROPELLER Installation Strut PRD 0.435 Type Folding 2 blades PBW 0.110 PIPA 0.0032		Water Ballast 0 Trim Tab No BLR Index 0.0000
		CENTERBOARD N/A

SCORING OPTIONS	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
	Time on Distance	576.6			641.4	
Time on Time	1.0405			1.0525		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	673.9	526.3	473.3	868.3	645.6	561.5
Time on Time	1.0017	1.2826	1.4263	0.7774	1.0456	1.2021

BOAT	
Name Kraken	Sail Nr CAN 60104
File Kraken-CAN60104	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS			
Inclining Test Enter RM directly			
Flotation date 28/02/2016		SG 1.0210	
		RMCe 183.0	
FFM 1.332	FF 1.325	SFFP 0.292	
FAM 1.068	FA 1.084	SAFP 11.313	
LCF from stem on CL / on sheer		6.571 / 6.799	
Maximum beam station from stem		7.502	
RM Measured		183.0kg·m	
RM Default		192.9kg·m	
Limit of positive stability / Stab.Index		115.3° / 119.5	
Freeboard at mast at 4.410		1.184	

RIG			
Forestay Tension Aft	Spreaders 3		
Inner Stay None Fitted	Runners 0		
Carbon Mast No	Jumper Struts None		
Taper Hollows No	Jib Furler Yes		
Fiber Rigging No	Main Furler No		
Lenticular Rigging No	Without Backstay No		
Articulated Bowsprit No			
P 14.910	E 5.398	MDT1 0.117	MW 0.217
IG 15.731	J 4.410	MDL1 0.216	GO 0.245
ISP 15.834	SFJ	MDT2 0.117	BD 0.189
BAS 1.700	SPL 4.429	MDL2 0.180	MWT
FSP -3.000	TPS 5.451	TL 0.690	MCG



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2018 Measurements Datasheet

MIZZEN RIG AND SAILS	
N/A	

PROPELLER			
Installation Strut	PRD 0.435		
Type Folding 2 blades	PBW 0.110		
Twin Screw No	PIPA 0.0032		
ST1 0.045	ST3 0.170	ST5 0.290	
ST2 0.170	ST4 0.100	EDL 2.260	

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COMMENTS	

MOVABLE BALLAST	
N/A	

CENTERBOARD	
N/A	

SAILS INVENTORY																
MAINSAIL (1)																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
ORC	0.183	1.12	2.01	3.53	4.50	47.87					Declared by Owner					
HEADSAILS (1)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
ORC	0.00	0.00	0.00	0.00	0.00	6.75	15.62	153%	53.67	N	N					Declared by Owner
SYMMETRIC SPINNAKERS (1)																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
ORC	15.70	15.70	15.70	7.93	7.93	103.75					Declared by Owner					
ASYMMETRIC SPINNAKERS (2)																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				
A-3	17.60	15.07	16.34	8.12	9.55	114.43	asym	Macdonald	15/03/2016	North	Unknown					
A-1.5	18.20	15.00	16.60	7.86	8.50	110.50	asym	Macdonald	15/03/2016	North	Unknown					

MEASUREMENT INVENTORY				
Measurer Barron				
Date 13/02/2016				
Comment				
Id	Item	Weight	Distance	VCG Description
Id	Item	Weight	Distance	Description

MEASUREMENT INVENTORY									
Id	Item	Tank Use	Tank Type	Capcty	Dist.	VCG	Condn	Description	
	Fuel	Tank	Fuel	Molded	112.4	9.52	0.00	112.4	0.0 off centreline -
Id	Item	Weight	Distance	VCG	Description				
Star	Battery	28.6	7.44	0.00	0.130 off centreline				
Hou	Battery	119.7	8.37	0.00	-0.715 off Centreline				
Wat	Misc	28.0	8.47	0.00	0.780 off centreline				
Rad	Misc	6.8	11.49	3.20					



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2018

ORC Club Certificate Appendix

BOAT	
Name	Kraken
Certificate Number	BC8019
Sail Nr	CAN 60104
Issued On	5/21/18

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	958.8	797.9	711.6	676.2	660.2	651.8	643.6
52°	635.8	536.1	493.8	479.5	473.4	470.3	467.5
60°	604.5	515.3	481.8	468.2	462.3	458.9	456.2
75°	581.2	502.3	473.1	457.8	447.6	441.7	435.9
90°	586.9	504.0	471.6	454.0	439.9	427.9	412.5
110°	610.4	505.8	466.4	445.0	426.5	415.0	397.0
120°	628.7	519.0	472.6	448.8	427.3	406.8	380.0
135°	698.6	569.3	496.8	464.9	443.4	421.7	380.5
150°	826.8	659.4	559.9	496.1	466.1	445.7	405.7
Run VMG	954.7	761.4	646.4	567.1	515.8	478.4	436.9
Selected Courses							
Windward / Leeward	956.8	779.7	679.0	621.7	588.0	565.1	540.2
Circular Random	811.1	656.9	575.2	528.5	500.1	481.7	458.6
Coastal / Long Distance	956.6	733.6	613.6	545.3	510.1	482.4	440.2
Non Spinnaker	855.5	688.5	598.6	546.4	514.3	493.5	467.1

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	42.1°	40.7°	39.9°	38.4°	37.6°	37.1°	37.2°
Beat VMG	3.75	4.51	5.06	5.32	5.45	5.52	5.59
52°	5.66	6.72	7.29	7.51	7.60	7.65	7.70
60°	5.95	6.99	7.47	7.69	7.79	7.84	7.89
75°	6.19	7.17	7.61	7.86	8.04	8.15	8.26
90°	6.13	7.14	7.63	7.93	8.18	8.41	8.73
110°	5.90	7.12	7.72	8.09	8.44	8.67	9.07
120°	5.73	6.94	7.62	8.02	8.42	8.85	9.47
135°	5.15	6.32	7.25	7.74	8.12	8.54	9.46
150°	4.35	5.46	6.43	7.26	7.72	8.08	8.87
Run VMG	3.77	4.73	5.57	6.35	6.98	7.53	8.24
Gybe Angles	144.2°	148.2°	150.1°	155.6°	170.5°	180.0°	180.0°