

Rating Office
Hellenic Sailing Federation
Offshore Committee
Επιτροπή
Ανοικτής Θαλάσσης
Ελληνικής
Ιστιοπλοϊκής Ομοσπονδίας



Certificate
Number **00343**
Issued On **06/06/2020**
ORC Ref **03420000K2D**
VPP Ver. **2020 1.02**
Valid until **28/02/2021**

Crew Weight

Default	611kg
Maximum	700kg
Minimum*	525kg

**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

ToD	ToT
Non Spin GPH 692.4	0.8666
Non Spin OSN 669.2	0.8966

Sails Limitations

Headsails **5** Spinnakers **4**
Woven Polyester

Spinnaker configuration
Symmetric: **Yes** **74.77**
Asymmetric: **No**
Flying H/S: **No**
Spin. Pole: **Yes**

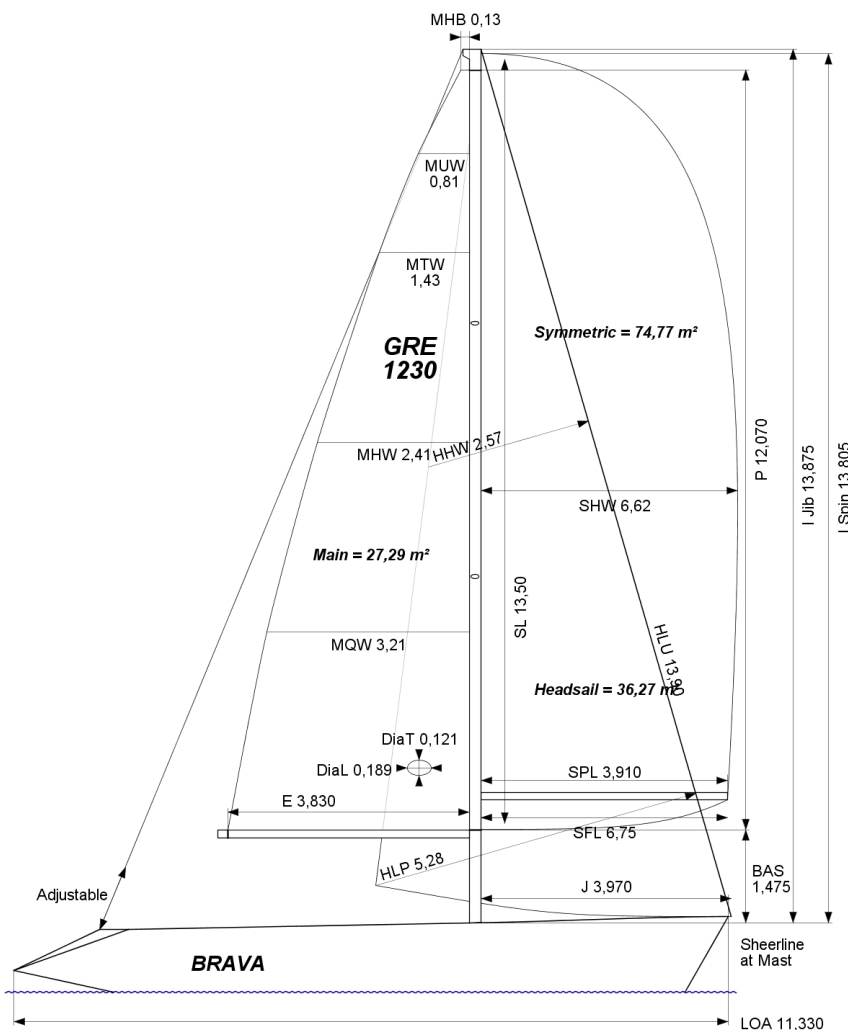
Class Division Length

CDL = 8.568

Stability (Measured)

Limit Positive Stab.: **106.4°**
Stability Index: **106.4**

Owner



BOAT		GPH		HULL					
Name BRAVA Sail Nr GRE-1230		662.0		Data File GR1230	LOA 11.330m				
				Offset File NSANTG.OFF	MB 3.604m				
				Displacement 5,565kg	Draft 1.797m				
CLASS				IMS Division Cruiser/Racer	Dynamic All. 0.354%				
Class FEELING 1090 ST.EX				Plan Review	Construction Solid				
Designer PH. HARLE				Fiber Rigging No	Aramid Core No				
Builder KIRIE				Crew Arm Ex	Carbon Rudder No				
Series 01/1987				Light Stanchions No					
Age Date 01/1990				IMSL 9.457m	VCGD 0.107m	Sink 18.68kg/mm			
Age Allowance 0.487%				RL 7.684m	VCGM 0.184m	WS 24.38m²			
COMMENTS				LSM0 9.199m	Displacement/Length ratio 7.1490				
Freeboards raised 1mm due to 20 Ltr Fuel in tank				Water Ballast 0	Trim Tab No				
				BLR Index 0.0000					
PROPELLER				CENTERBOARD					
Installation Shaft exposed	PRD 0.442	NA							
Type Folding 2 blades	PBW 0.108								
	PIPA 0.0054								
SCORING OPTIONS									
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD					
Time on Distance	640.5			716.9					
Time on Time	0.9367			0.9416					
Triple Number	Low	Medium	High	Low	Medium	High			
Time on Distance	775.7	582.4	510.6	1004.3	725.0	614.6			
Time on Time	0.8702	1.1590	1.3219	0.6721	0.9310	1.0982			

BOAT	
Name BRAVA	Sail Nr GRE-1230
File GR1230	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS					
Inclining Test Current Inclining					
Flotation date 15/03/2007				SG 1.0280	
FFM	1.160	FF	1.197	SFFP	0.337
FAM	0.983	FA	0.970	SAFP	9.514
W1	84.5	PD1	282.0	WD	10.731
W2	84.5	PD2	282.0	GSA	41.9
W3	84.5	PD3	282.0	RSA	6082.1
W4	84.5	PD4	282.0	PLM	2104.0
LCF from stem on CL / on sheer				5.834 / 6.099	
Maximum beam station from stem				6.770	
RM Measured				117.6kg-m	
RM Default				121.4kg-m	
Limit of positive stability / Stab.Index				106.4° / 106.4	
Freeboard at mast at 0.000				1.102	



ORC
Offshore Racing Congress
World leader in rating technology

2020
Measurements
Datasheet

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	12.070	E	3.830	MDT1	0.121
IG	13.875	J	3.970	MDL1	0.189
ISP	13.805	SFJ	-0.050	MDT2	0.121
BAS	1.475	SPL	3.910	MDL2	0.189
FSD	0.040	TPS		TL	0.000
				MW	0.189
				GO	0.209
				BD	0.125
				MWT	
				MCG	

MIZZEN RIG AND SAILS	
N/A	

PROPELLER			
Installation	Shaft exposed	PRD	0.442
Type	Folding 2 blades	PBW	0.108
Twin Screw	No	PIPA	0.0054
PSA	18.200	PHL	0.125
PSD	0.030	ST1	0.023
PHD	0.077	ST2	0.093
		ST3	0.103
		ST4	0.045
		ST5	0.225
		ESL	0.912

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COMMENTS	
Freeboards raised 1mm due to 20 Ltr Fuel in tank	

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	0.13	0.81	1.43	2.41	3.21	27.30					* Copied from legacy					
HEADSAILS (1)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Flying	Measurer	Meas.Date	Manufacture	Material	Comment
2	0.05	0.66	1.28	2.57	3.91	5.28	13.90	133%	36.27		No		11/04/2007			Unknown
SYMMETRIC SPINNAKERS (1)																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
1	13.50	13.50	13.50	6.62	6.75	74.77		16/04/2009		Nylon						
ASYMMETRIC SPINNAKERS (0)																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				

MEASUREMENT INVENTORY				
Measurer GRE-21				
Date 15/03/2007				
Comment				
Internal Ballast total = 0.0				
Id	Item	Weight	Distance	VCG Description
2a	Anchor	10.0	0.70	BRUCE
2b	Anchor	10.0	8.80	DANFORD
2a	Chain	95.0	0.70	70m 8mm
2b	Chain	20.0	8.80	15m 8mm
4a	Tools	5.0	6.50	
4b	Tools	6.4	6.50	
Id	Item	Maker	Model	
5	Engine	YANMAR	3GM30F,	
Id	Item	Weight	Description	

MEASUREMENT INVENTORY								
Id	Item	Tank Use	Tank Type	Capcty	Dist.	VCG	Condtn	Description
6a	Tank	FUEL	INOX	55.0	8.30			0-0
6b	Tank	WATER	PVC HARD	150.0	4.30			0-0
6c	Tank	WATER	PVC HARD	150.0	4.30			0-0
Id	Item	Weight	Distance	VCG Description				
3a	Battery	75.0	8.00	3 x 100 Ah				
9a	Misc	20.0	1.00	ANCHOR WINDLASS 1000W				
9c	Misc	10.0	6.60	WATER HEATER				

2020

ORC Club Certificate Appendix

BOAT	
Name BRAVA	Certificate Number 00343
Sail Nr GRE-1230	Issued On 06/06/2020

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1154.7	955.6	840.4	761.8	729.8	718.2	719.3
52°	746.5	627.0	556.0	521.1	505.8	500.3	498.1
60°	701.6	591.1	533.1	506.4	492.2	485.1	481.3
75°	671.1	565.1	517.2	494.3	478.5	466.3	454.2
90°	678.7	569.6	514.9	487.4	473.5	459.0	434.7
110°	693.5	565.7	506.0	477.9	455.6	436.7	415.1
120°	713.8	582.4	513.2	482.3	458.6	436.9	402.3
135°	785.9	637.4	546.2	501.3	475.7	453.0	412.4
150°	923.0	728.5	616.6	541.3	501.7	477.7	436.5
Run VMG	1065.8	841.2	711.2	621.0	559.1	514.4	466.9
Selected Courses							
Windward / Leeward	1110.3	898.4	775.8	691.4	644.4	616.3	593.1
Circular Random	925.8	742.0	641.5	582.0	545.2	521.8	495.2
Coastal / Long Distance	1105.8	842.3	694.6	599.9	553.1	520.0	470.1
Non Spinnaker	980.2	780.5	670.3	604.3	563.2	536.7	506.2

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	43.5°	42.0°	42.4°	41.3°	40.5°	40.1°	40.9°
Beat VMG	3.12	3.77	4.28	4.73	4.93	5.01	5.00
52°	4.82	5.74	6.47	6.91	7.12	7.20	7.23
60°	5.13	6.09	6.75	7.11	7.31	7.42	7.48
75°	5.36	6.37	6.96	7.28	7.52	7.72	7.93
90°	5.30	6.32	6.99	7.39	7.60	7.84	8.28
110°	5.19	6.36	7.11	7.53	7.90	8.24	8.67
120°	5.04	6.18	7.01	7.46	7.85	8.24	8.95
135°	4.58	5.65	6.59	7.18	7.57	7.95	8.73
150°	3.90	4.94	5.84	6.65	7.18	7.54	8.25
Run VMG	3.38	4.28	5.06	5.80	6.44	7.00	7.71
Gybe Angles	146.0°	150.0°	152.0°	155.0°	170.0°	180.0°	180.0°