



ORC
Offshore Racing Congress
World leader in rating technology

2020
ORC Club
Certificate

Rating Office

Offshore
Racing
Congress



Certificate

Number **039/20**
Issued On **18/06/2020**
ORC Ref **03850000L05**
VPP Ver. **2020 1.02**
Valid until **31/12/2020**

Crew Weight

Default 819kg
Maximum **850kg**
Minimum* **638kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Non Spin GPH	614.4	0.9766
Non Spin OSN	596.9	1.0052

Sails Limitations

Headsails **6** Spinnakers **4**

Asymmetric on centerline

Spinnaker configuration
Symmetric: **Yes** 127.03
Asymmetric: **Yes** 87.25
Flying H/S: **No**
Spin. Pole: **Yes**

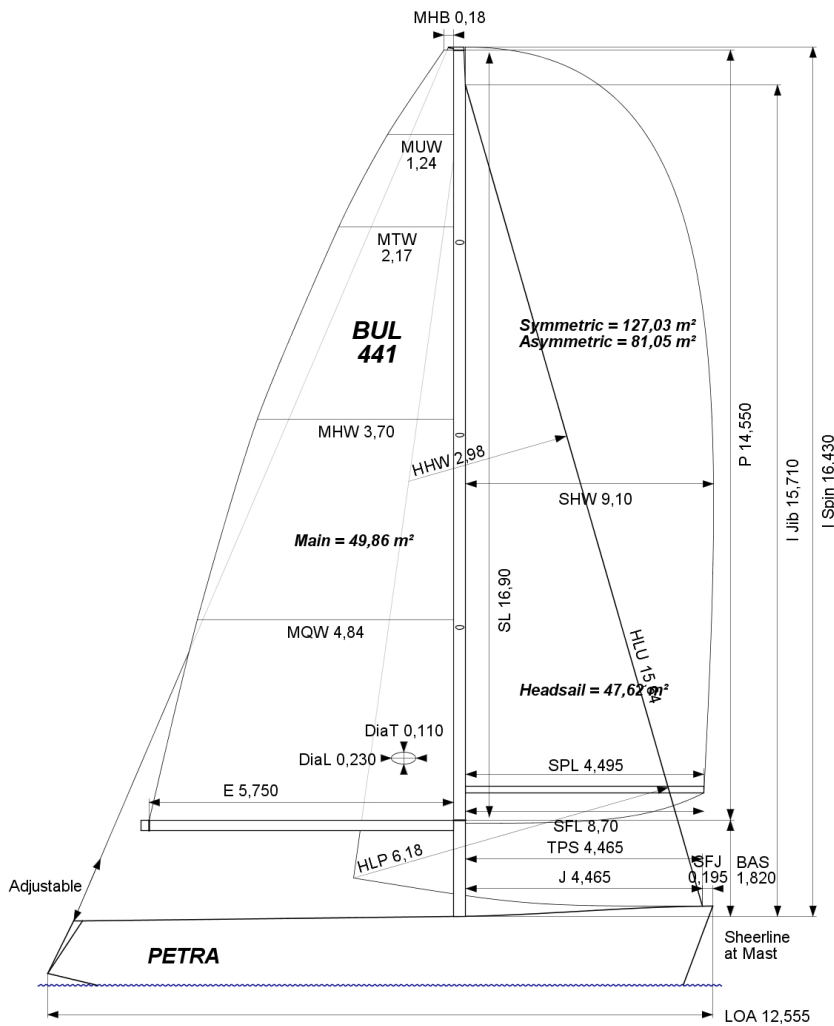
Class Division Length

CDL = 10.642

Stability (Measured)

Limit Positive Stab.: **114.0°**
Stability Index: **118.3**

Owner



BOAT		GPH		HULL		
Name Petra Sail Nr BUL-441		581.9		Data File BUL441	LOA 12.555m	
				Offset File BA42MDK3.OFF	MB 3.760m	
				Displacement 7,854kg	Draft 2.454m	
CLASS				IMS Division Cruiser/Racer	Dynamic All. 0.074%	
Class Bavaria 42 Match				Plan Review	Construction Cored	
Designer J&J Design				Fiber Rigging No	Aramid Core No	
Builder BAVARIA YACHT				Crew Arm Ex	Carbon Rudder No	
Series 01/2004				Light Stanchions No		
Age Date 01/2004				IMSL 11.302m	VCGD 0.071m	
Age Allowance 0.487%				RL 9.990m	VCGM 0.138m	
				WS 32.13m²		
COMMENTS				LSM0 11.299m	Displacement/Length ratio 5.4447	
Measured with solid locker doors				Water Ballast 0	Trim Tab No	
				BLR Index 0.0000		
PROPELLER				CENTERBOARD		
Installation Strut	PRD 0.490	NA				
Type Folding 2 blades	PBW 0.135					
	PIPA 0.0038					
SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	566.0			632.1		
Time on Time	1.0601			1.0678		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	668.0	515.1	459.7	866.1	635.2	550.9
Time on Time	1.0105	1.3105	1.4682	0.7794	1.0627	1.2252

2020

ORC Club Certificate Appendix

BOAT	
Name Petra	Certificate Number 039/20
Sail Nr BUL-441	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	977.1	806.5	710.4	668.1	650.9	643.1	636.0
52°	640.9	539.1	488.1	469.2	462.6	459.3	456.8
60°	605.9	515.3	474.8	457.9	450.8	447.1	444.5
75°	578.9	497.9	463.5	447.9	435.8	428.8	422.4
90°	567.0	485.0	453.2	434.6	421.6	413.3	398.1
110°	590.1	496.0	455.8	433.2	414.7	395.3	366.6
120°	617.8	507.2	460.2	435.0	412.0	392.0	362.4
135°	682.6	551.6	481.5	450.2	427.2	403.7	358.9
150°	809.1	646.3	543.6	481.6	452.2	430.7	387.8
Run VMG	934.2	746.3	627.6	551.0	503.4	466.7	423.1
Selected Courses							
Windward / Leeward	955.7	776.4	669.0	609.6	577.2	554.9	529.6
Circular Random	801.4	647.0	564.5	516.8	487.5	468.4	443.7
Coastal / Long Distance	953.5	728.8	603.1	532.7	497.2	469.7	426.0
Non Spinnaker	859.4	688.2	595.2	540.6	506.9	484.8	457.1

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	42.8°	41.3°	40.5°	39.0°	38.3°	37.9°	37.9°
Beat VMG	3.68	4.46	5.07	5.39	5.53	5.60	5.66
52°	5.62	6.68	7.38	7.67	7.78	7.84	7.88
60°	5.94	6.99	7.58	7.86	7.99	8.05	8.10
75°	6.22	7.23	7.77	8.04	8.26	8.40	8.52
90°	6.35	7.42	7.94	8.28	8.54	8.71	9.04
110°	6.10	7.26	7.90	8.31	8.68	9.11	9.82
120°	5.83	7.10	7.82	8.28	8.74	9.18	9.93
135°	5.27	6.53	7.48	8.00	8.43	8.92	10.03
150°	4.45	5.57	6.62	7.48	7.96	8.36	9.28
Run VMG	3.85	4.82	5.74	6.53	7.15	7.71	8.51
Gybe Angles	141.0°	148.0°	148.5°	155.0°	166.0°	180.0°	180.0°