



ORC
Offshore Racing Congress
World leader in rating technology

2020
ORC Club
Certificate

Rating Office

Estonian Yachting Union
Purje 8, maja 3
11911 Tallinn
Estonia



ESTONIAN
YACHTING
UNION

Certificate

Number **150/20**
Issued On **19/08/2020**
ORC Ref **038800000MU**
VPP Ver. **2020 1.02**
Valid until **31/12/2020**

Crew Weight

Default 458kg
Maximum **180kg**
Minimum* **95kg**
*when applied by the NoR and SI
Non Manual Pwr **No**

Special Scoring

ToD ToT
Non Spin GPH **755.9 0.7938**
Non Spin OSN **733.9 0.8175**

Sails Limitations

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

Spinnaker configuration

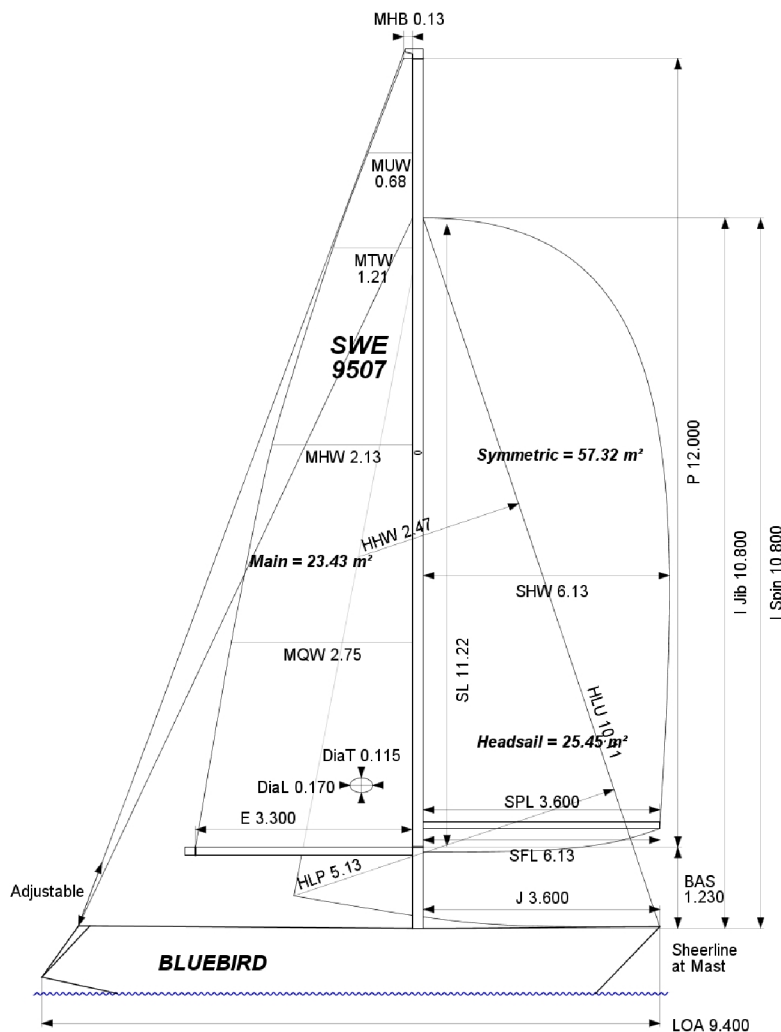
Symmetric: **Yes 57.32**
Asymmetric: **No**
Flying H/S: **No**
Spin. Pole: **Yes**

Class Division Length

CDL = 6.613

Stability (Estimated)

Limit Positive Stab.: **111.9°**
Stability Index: **110.8**



BOAT			GPH		HULL		
Name BLUEBIRD Sail Nr SWE9507			727.1		Data File SWE9507 LOA 9.400m Offset File BIRD32_n.OFF MB 3.140m Displacement 3,800kg Draft 1.640m		
CLASS					IMS Division Cruiser/Racer Dynamic All. 0.432%		
Class BIRDIE 32					Plan Review Construction Solid		
Designer Jan Becker					Fiber Rigging No Aramid Core No		
Builder					Crew Arm Ex Carbon Rudder No		
Series 01/1978					Light Stanchions No		
Age Date 08/1984					IMSL 7.464m VCGD 0.100m Sink 12.45kg/mm		
Age Allowance 0.487%					RL 5.770m VCGM 0.121m WS 18.04m²		
COMMENTS					LSM0 7.521m Displacement/Length ratio 8.9322		
					Water Ballast Trim Tab		
					BLR Index 0.0000		
PROPELLER					CENTERBOARD		
Installation Strut PRD 0.380					N/A		
Type Folding 2 blades PIPA 0.0031							
SCORING OPTIONS							
		COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance		709.0			794.2		
Time on Time		0.8463			0.8499		
Triple Number		Low	Medium	High	Low	Medium	High
Time on Distance		822.3	645.9	590.6	1055.8	797.4	711.7
Time on Time		0.8209	1.0451	1.1429	0.6393	0.8465	0.9484

BOAT Name BLUEBIRD Sail Nr SWE9507 File SWE9507 Data in meters/kilograms		INCLINING TEST AND FREEBOARDS Inclining Test Enter VCG directly Flotation date 19/08/2020 SG 1.0250 VCGDe 0.100 FFM 1.015 FF 1.015 SFFP 0.450 FAM 1.026 FA 1.026 SAFF 8.670 LCF from stem on CL / on sheer 5.067 / 5.260 Maximum beam station from stem 5.402 RM Measured 53.8kg·m RM Default 59.8kg·m Limit of positive stability / Stab.Index 111.9° / 110.8 Freeboard at mast at 3.600 0.998														
RIG Forestay Tension Aft Spreaders 1 Inner Stay None Fitted Runners/Checkstays 1 Carbon Mast No Jib Furler No Fiber Rigging No Main Furler No Non-Circular Rigging No Articulated Bowsprit No P 12.000 E 3.300 MDT1 0.115 MW IG 10.800 J 3.600 MDL1 0.170 GO ISP 10.800 SFJ MDT2 0.115 BD BAS 1.230 SPL 3.600 MDL2 0.170 MWT FSD 0.000 TPS 0.000 TL MCG																
MIZZEN RIG AND SAILS N/A		PROPELLER Installation Strut PRD 0.380 Type Folding 2 blades PBW Twin Screw PIPA 0.0031 ST1 0.048 ST3 0.170 ST5 0.280 ST2 0.170 ST4 0.098 EDL 1.800														
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					
1	0.13	0.68	1.21	2.13	2.75	23.43				Unknown						
HEADSAILS (2)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Flying	Measurer	Meas.Date	Manufacture	Material	Comment
1	0.07	0.64	1.23	2.47	3.75	5.13	10.11	142%	25.45	No	No				Unknown	
2	0.06	0.64	1.25	2.25	3.92	5.33	10.01	148%	25.44	No	No				Unknown	
SYMMETRIC SPINNAKERS (2)																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
2	11.22	11.22	11.22	6.13	6.13	57.32				Unknown						
1	10.75	10.75	10.75	6.19	5.90	54.94				Unknown						
ASYMMETRIC SPINNAKERS (0)																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				



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2020
Measurements
Datasheet

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ORC Club Certificate Appendix

BOAT			
Name	BLUEBIRD	Certificate Number	150/20
Sail Nr	SWE9507	Issued On	19/08/2020

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1201.3	1017.9	925.6	879.1	864.2	862.1	891.7
52°	795.4	680.9	618.6	593.2	584.4	581.3	585.6
60°	757.4	647.9	595.9	574.7	564.8	561.1	561.6
75°	729.1	624.1	579.6	558.9	545.6	536.5	530.4
90°	734.3	614.7	568.1	553.1	537.4	523.9	504.7
110°	723.9	603.9	558.2	533.1	513.6	503.0	488.4
120°	745.8	617.3	563.5	536.3	513.3	492.9	471.0
135°	822.8	677.7	589.3	552.9	527.8	504.4	465.3
150°	965.2	771.6	654.1	583.6	551.5	527.9	484.9
Run VMG	1114.5	889.6	752.8	657.2	592.9	558.0	512.5
Selected Courses							
Windward / Leeward	1157.9	953.8	839.2	768.1	728.6	710.1	702.1
Circular Random	989.8	803.8	705.7	650.4	618.5	600.0	582.5
Coastal / Long Distance	1153.6	895.6	754.9	671.8	628.7	596.8	548.0
Non Spinnaker	1041.5	840.5	732.9	671.2	634.7	613.1	592.5

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	42.0°	40.5°	42.0°	42.4°	42.2°	42.4°	44.1°
Beat VMG	3.00	3.54	3.89	4.10	4.17	4.18	4.04
52°	4.53	5.29	5.82	6.07	6.16	6.19	6.15
60°	4.75	5.56	6.04	6.26	6.37	6.42	6.41
75°	4.94	5.77	6.21	6.44	6.60	6.71	6.79
90°	4.90	5.86	6.34	6.51	6.70	6.87	7.13
110°	4.97	5.96	6.45	6.75	7.01	7.16	7.37
120°	4.83	5.83	6.39	6.71	7.01	7.30	7.64
135°	4.38	5.31	6.11	6.51	6.82	7.14	7.74
150°	3.73	4.67	5.50	6.17	6.53	6.82	7.42
Run VMG	3.23	4.05	4.78	5.48	6.07	6.45	7.02
Gybe Angles	148.0°	153.0°	152.5°	163.0°	180.0°	180.0°	180.0°