



ORC
Offshore Racing Congress
World leader in rating technology

2020 ORC Club Certificate

Rating Office

EYU
Purje 8
11911, Tallinn
Estonia

Certificate

Number **Est920**
Issued On **4/30/2020**
ORC Ref **03580000HMM**
VPP Ver. **2020 1.01**
Valid until **31/12/2020**

Crew Weight

Default 597kg
Maximum **599kg**
Minimum* **449kg**
*when applied by the NoR and SI
Non Manual Pwr **No**

Special Scoring

ToD ToT
Non Spin GPH **767.0 0.7823**
Non Spin OSN **737.2 0.8139**

Sails Limitations

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

Asymmetric on centerline

Spinnaker configuration

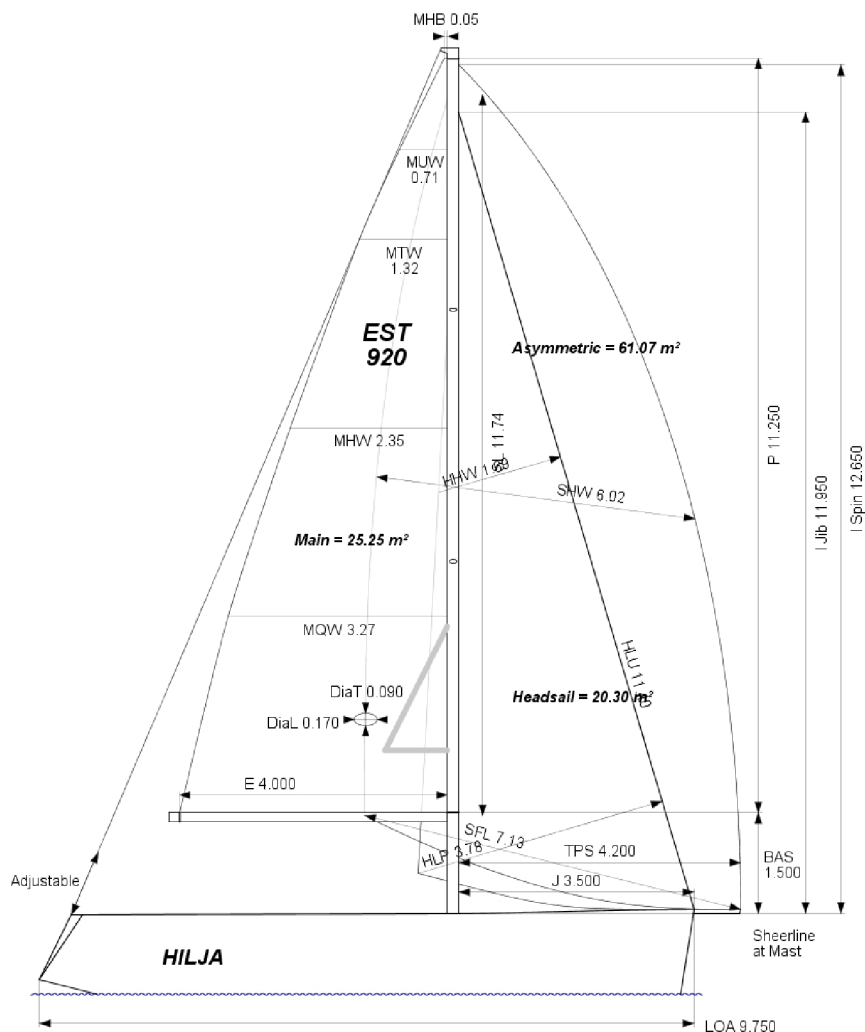
Symmetric: **No**
Asymmetric: **Yes** **61.07**
Flying H/S: **No**
Spin. Pole: **No**

Class Division Length

CDL = 7.392

Stability (Estimated)

Limit Positive Stab.: **118.5°**
Stability Index: **120.2**



BOAT			GPH		HULL		
Name HILJA Sail Nr EST 920			722.5		Data File Est0920 LOA 9.750m Offset File BAV32cr.OFF MB 3.428m Displacement 5,614kg Draft 1.901m		
CLASS					IMS Division Cruiser/Racer Dynamic All. 0.437%		
Class Bavaria 32 CR			Plan Review Construction Cored				
Designer Farr			Fiber Rigging No Aramid Core No				
Builder Bavaria			Crew Arm Ex Carbon Rudder No				
Series 01/2009			Light Stanchions No				
Age Date 01/2011			IMSL 8.990m VCGD 0.142m Sink 17.77kg/mm				
Age Allowance 0.357%			RL 5.792m VCGM 0.098m WS 23.98m				
COMMENTS					LSM0 9.050m Displacement/Length ratio		
					Water Ballast Trim Tab No		
					BLR Index 0.0000		
PROPELLER					CENTERBOARD		
Installation Strut			PRD 0.410		N/A		
Type Folding 2 blades			PBW 0.108				
			PIPA 0.0035				
SCORING OPTIONS							
		COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance		700.6			790.4		
Time on Time		0.8564			0.8540		
Triple Number		Low	Medium	High	Low	Medium	High
Time on Distance		850.7	636.3	546.4	1108.0	807.4	663.8
Time on Time		0.7935	1.0609	1.2353	0.6092	0.8360	1.0168

BOAT										INCLINING TEST AND FREEBOARDS									
Name HILJA					Sail Nr EST 920					Inclining Test Club Estimated VCG									
File Est0920					Data in meters/kilograms					Flotation date 20/11/2019 SG									
FFM					FF 1.252					SFFP 0.214									
FAM					FA 1.180					SAFP 9.114									
RIG Forestay Tension Aft Spreaders 2 Inner Stay None Fitted Runners/Checkstays 0 Carbon Mast No Jib Furler Yes Fiber Rigging No Main Furler Yes Non-Circular Rigging No Articulated Bowsprit										LCF from stem on CL / on sheer 5.179 / 5.412 Maximum beam station from stem 6.555 RM Measured 113.8kg·m RM Default 111.7kg·m Limit of positive stability / Stab.Index 118.5° / 120.2 Freeboard at mast at 3.500 1.202									
P 11.250 E 4.000 MDT1 0.090 MW					IG 11.950 J 3.500 MDL1 0.170 GO					ISP 12.650 SFJ 0.000 MDT2 0.090 BD					BAS 1.500 SPL 0.170 MWT				
FSD 0.036 TPS 4.200 TL 0.000 MCG																			
MIZZEN RIG AND SAILS N/A										PROPELLER Installation Strut PRD 0.410 Type Folding 2 blades PBW 0.108 Twin Screw No PIPA 0.0035 ST1 0.065 ST3 0.190 ST5 0.310 ST2 0.190 ST4 0.098 EDL 2.130									
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	0.05	0.71	1.32	2.35	3.27	25.25	EST8	07/05/2019	Elvstöm	Dacron									
HEADSAILS (1)																			
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Flying	Measurer	Meas.Date	Manufacture	Material	Comment			
1	0.04	0.40	0.79	1.69	2.69	3.78	11.40	108%	20.30	No	EST8	22/05/2019	Elvström	Dacron					
SYMMETRIC SPINNAKERS (0)																			
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment								
ASYMMETRIC SPINNAKERS (1)																			
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment							
1	12.40	11.08	11.74	6.02	7.13	61.07	asy85	EST8	22/05/2019	Sylversen	Nylon								



2020 Measurements Datasheet

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ORC Club Certificate Appendix

BOAT

Name	HILJA	Certificate Number	Est920
Sail Nr	EST 920	Issued On	4/30/2020

TIME ALLOWANCES

Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1335.4	1089.9	963.6	877.4	806.1	759.8	741.4
52°	857.5	712.0	632.9	578.7	545.9	527.4	515.1
60°	804.0	673.6	597.8	553.4	529.3	514.1	499.3
75°	767.8	640.4	566.8	529.7	513.3	502.0	480.6
90°	725.1	599.1	534.6	506.7	489.5	479.0	467.1
110°	719.0	592.5	530.3	502.9	482.5	462.8	430.0
120°	745.0	612.9	539.8	508.4	487.2	466.9	429.1
135°	826.5	670.7	576.3	527.6	502.5	482.8	444.8
150°	969.5	768.2	657.4	584.4	543.9	518.6	485.9
Run VMG	1119.5	887.1	759.1	674.8	628.0	570.8	512.3
Selected Courses							
Windward / Leeward	1227.4	988.5	861.4	776.1	717.1	665.3	626.8
Circular Random	1015.8	812.4	700.3	632.6	589.0	559.9	525.7
Coastal / Long Distance	1216.6	923.5	765.6	662.0	600.7	554.9	499.4
Non Spinnaker	1102.2	871.7	742.1	662.3	610.5	576.2	537.3

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	45.0°	43.5°	42.8°	42.4°	42.0°	40.5°	40.5°
Beat VMG	2.70	3.30	3.74	4.10	4.47	4.74	4.86
52°	4.20	5.06	5.69	6.22	6.59	6.83	6.99
60°	4.48	5.34	6.02	6.51	6.80	7.00	7.21
75°	4.69	5.62	6.35	6.80	7.01	7.17	7.49
90°	4.96	6.01	6.73	7.11	7.35	7.52	7.71
110°	5.01	6.08	6.79	7.16	7.46	7.78	8.37
120°	4.83	5.87	6.67	7.08	7.39	7.71	8.39
135°	4.36	5.37	6.25	6.82	7.16	7.46	8.09
150°	3.71	4.69	5.48	6.16	6.62	6.94	7.41
Run VMG	3.22	4.06	4.74	5.33	5.73	6.31	7.03
Gybe Angles	146.0°	147.0°	146.5°	147.0°	150.0°	175.5°	178.0°