



ORC
Offshore Racing Congress
World leader in rating technology

2020 ORC Club Certificate

Rating Office

EYU
Purje 8
11911, Tallinn
Estonia

Certificate

Number **EST633**
Issued On **5/28/2020**
ORC Ref **03580000J2K**
VPP Ver. **2020 1.02**
Valid until **31/12/2020**

Crew Weight

Default 643kg
Maximum **644kg**
Minimum* **483kg**
*when applied by the NoR and SI
Non Manual Pwr **No**

Special Scoring

ToD ToT
Non Spin GPH **660.3 0.9087**
Non Spin OSN **639.7 0.9379**

Sails Limitations

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

Spinnaker configuration

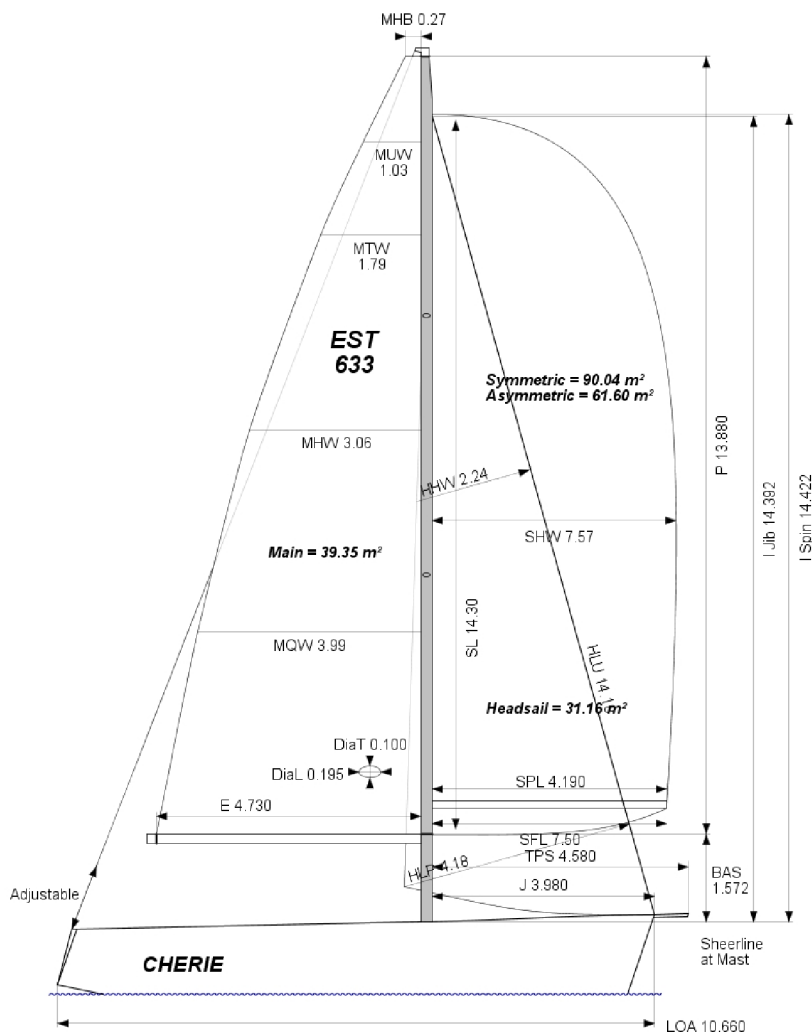
Symmetric: **Yes 90.04**
Asymmetric: **Yes 71.46**
Flying H/S: **No**
Spin. Pole: **Yes**

Class Division Length

CDL = **9.103**

Stability (Measured)

Limit Positive Stab.: **121.2°**
Stability Index: **121.1**



BOAT			GPH		HULL		
Name Cherie Sail Nr EST 633			623.7		Data File Est0633 Offset File F242.OFF Displacement 5,612kg	LOA 10.660m MB 3.636m Draft 2.200m	
CLASS					IMS Division Cruiser/Racer Plan Review Fiber Rigging No Crew Arm Ex		
Class First 35 Designer Farr Builder Beneteau Series 08/2009 Age Date 04/2010 Age Allowance 0.357%					Dynamic All. 0.190% Construction Solid Aramid Core No Carbon Rudder No Light Stanchions		
COMMENTS					IMSL 9.708m VCGD 0.046m Sink 19.30kg/mm RL 8.521m VCGM 0.046m WS 26.10m		
Kaal 5612kg dekl. 27.05.20					LSM0 9.536m Displacement/Length ratio		
PROPELLER					Water Ballast Trim Tab No BLR Index 0.0000		
Installation Strut Type Folding 2 blades					PRD 0.434 PIPA 0.0030		
CENTERBOARD							
N/A							
SCORING OPTIONS							
		COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance		607.1			679.0		
Time on Time		0.9882			0.9941		
Triple Number		Low	Medium	High	Low	Medium	High
Time on Distance		714.1	552.4	494.2	929.5	681.5	592.9
Time on Time		0.9452	1.2219	1.3659	0.7262	0.9904	1.1385

BOAT						
Name Cherie		Sail Nr EST 633				
File Est0633		Data in meters/kilograms				
RIG						
Forestay Tension		Aft		Spreaders		2
Inner Stay		None Fitted		Runners/Checkstays		0
Carbon Mast		Yes		Jib Furler		No
Fiber Rigging		No		Main Furler		No
Non-Circular Rigging		No				
Articulated Bowsprit		No				
P	13.880	E	4.730	MDT1	0.100	MW 0.180
IG	14.392	J	3.980	MDL1	0.195	GO 0.195
ISP	14.422	SFJ	0.000	MDT2	0.090	BD
BAS	1.572	SPL	4.190	MDL2	0.145	MWT 124.00
FSD	0.033	TPS	4.580	TL	0.780	MCG 4.080

INCLINING TEST AND FREEBOARDS					
Inclining Test Current Inclining					
Flotation date		06/05/2010		SG	1.0020
FFM	1.396	FF	1.412	SFFP	0.422
FAM	1.072	FA	1.075	SAFP	10.320
W1	80.0	PD1	501.3	WD	9.990
W2	80.0	PD2	501.7	GSA	1.0
W3	80.0	PD3	500.2	RSA	1.0
W4	80.0	PD4	498.6	PLM	9000.0
LCF from stem on CL / on sheer				5.855 / 6.111	
Maximum beam station from stem				6.761	
RM Measured				125.8kg·m	
RM Default				133.8kg·m	
Limit of positive stability / Stab.Index				121.2° / 121.1	
Freeboard at mast at 3.980				1.282	



2020 Measurements Datasheet

MIZZEN RIG AND SAILS	
	N/A

PROPELLER					
Installation	Strut		PRD		0.434
Type	Folding 2 blades		PBW		
Twin Screw	No		PIPA		0.0030
ST1	0.035	ST3	0.180	ST5	0.280
ST2	0.180	ST4	0.100	EDL	2.030

Certificate
Number **EST633**
ORC Ref **03580000J2K**
Issued On **5/28/2020**
VPP Ver. **2020 1.02**
Valid until **31/12/2020**

COMMENTS	
Kaal	5612kg dekl. 27.05.20

MOVABLE BALLAST	
	N/A

CENTERBOARD	
	N/A

SAILS INVENTORY																
MAINSAIL (1)																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
4a	0.27	1.03	1.79	3.06	3.99	39.35	EST 7	01/05/2018	NorthSails	Unknown						
HEADSAILS (1)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Flying	Measurer	Meas.Date	Manufacture	Material	Comment
6a	0.10	0.66	1.24	2.24	3.22	4.18	14.18	105%	31.16		No	EST 7	01/05/2018	NorthSails	Unknow	Light
SYMMETRIC SPINNAKERS (5)																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
5	14.30	14.30	14.30	7.57	7.50	90.05	Hemamali	06/11/2017		Unknown	light					
3	14.24	14.24	14.24	7.55	7.47	89.41	EST 2	09/05/2011	North	Unknown	valge					
2	14.30	14.30	14.30	7.50	7.50	89.38		11/02/2010	North	Unknown	S4					
1	14.30	14.30	14.30	7.50	7.50	89.38		11/02/2010	North	Unknown	S2					
ASYMMETRIC SPINNAKERS (1)																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				
1	14.23	13.23	13.73	5.06	6.68	61.61	asy76	Hemamali	30/11/2018		Unknown	A5				

MEASUREMENT INVENTORY					
Measurer Veiko Rosme EST 2					
Date 06/05/2010					
Comment					
Internal Ballast total = 0.0					
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG</i>	<i>Description</i>
4	Anchor	42.0			center area
4	Tools	40.0	5.90		starboard
<i>Id</i>	<i>Item</i>	<i>Maker</i>			<i>Model</i>
1	Engine	YANMAR			3YM30
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Description</i>		
4	Deck Gear	49.0			

MEASUREMENT INVENTORY								
<i>Id</i>	<i>Item</i>	<i>Tank Use</i>	<i>Tank Type</i>	<i>Capcty</i>	<i>Dist.</i>	<i>VCG</i>	<i>Condtn</i>	<i>Description</i>
1	Tank	Water	plastic	100.0	4.60		0-0	portside
2	Tank	Water	plastic	100.0	4.60		0-0	starboard
3	Tank	Fuel	plastic	75.0	8.65		0-0	center
4	Tank	Waste	plastic	80.0	8.50		0-0	starboard
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>				
1	Battery		8.20	90 Ah portside				
2	Battery		6.60	70 Ah engine room				
1	Misc		4.50	Water Heater Nautic Boiler 25 LI				

2020

ORC Club Certificate Appendix

BOAT			
Name	Cherie	Certificate Number	EST633
Sail Nr	EST 633	Issued On	5/28/2020

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1063.1	878.7	773.2	723.4	707.7	702.5	691.7
52°	694.6	585.9	529.0	506.4	498.6	495.4	490.8
60°	656.1	558.6	513.7	494.1	485.0	481.3	478.1
75°	613.6	526.1	493.7	479.4	469.6	460.1	453.3
90°	591.9	512.1	481.9	462.0	446.6	437.3	425.8
110°	618.0	523.2	486.3	461.9	440.8	420.8	389.3
120°	653.4	538.2	491.3	465.3	441.0	418.5	381.6
135°	723.2	587.4	514.9	482.5	458.3	434.0	388.7
150°	857.7	680.7	575.2	513.4	483.4	460.7	416.4
Run VMG	990.4	786.0	663.7	584.5	529.9	493.8	449.0
Selected Courses							
Windward / Leeward	1026.7	832.4	718.5	654.0	618.8	598.1	570.3
Circular Random	857.6	693.0	605.1	554.5	523.6	503.3	476.8
Coastal / Long Distance	1023.1	780.4	647.3	571.8	533.5	504.5	455.8
Non Spinnaker	924.5	739.8	639.5	580.9	544.9	521.5	491.8

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°	39.2°	38.6°	38.6°	39.0°
Beat VMG	3.39	4.10	4.66	4.98	5.09	5.12	5.20
52°	5.18	6.14	6.80	7.11	7.22	7.27	7.33
60°	5.49	6.44	7.01	7.29	7.42	7.48	7.53
75°	5.87	6.84	7.29	7.51	7.67	7.83	7.94
90°	6.08	7.03	7.47	7.79	8.06	8.23	8.45
110°	5.82	6.88	7.40	7.79	8.17	8.56	9.25
120°	5.51	6.69	7.33	7.74	8.16	8.60	9.43
135°	4.98	6.13	6.99	7.46	7.85	8.29	9.26
150°	4.20	5.29	6.26	7.01	7.45	7.81	8.65
Run VMG	3.63	4.58	5.42	6.16	6.79	7.29	8.02
Gybe Angles	145.0°	149.0°	151.0°	157.0°	175.0°	180.0°	180.0°