



World Leader in Rating Technology

2017 ORC Club Certificate

Rating Office

Žemaites 6
LT-03117 Vilnius
Lithuania
+370 650 28392



Certificate

Number **LT1639**
Issued On **2017-06-23**
ORC Ref **lt00000165**
VPP Ver. **2017 1.00**
Valid until **2017-12-31**

Crew Weight

Declared **515kg**
Default* **555kg**
Non Manual Pwr **No**

Special Scoring

ToD ToT
Non Spin GPH **679.5 0.8830**
Non Spin OSN **658.9 0.9106**

Sails Limitations

Headsails **5** Spinnakers **3**

Spinnaker configuration

Symmetric: **Yes 72.22**
Asymmetric: **Yes 49.43**
Flying H/S: **Yes 33.62**
Spin. Pole: **Yes**

Class Division Length

CDL = 8.342

Stability (Estimated)

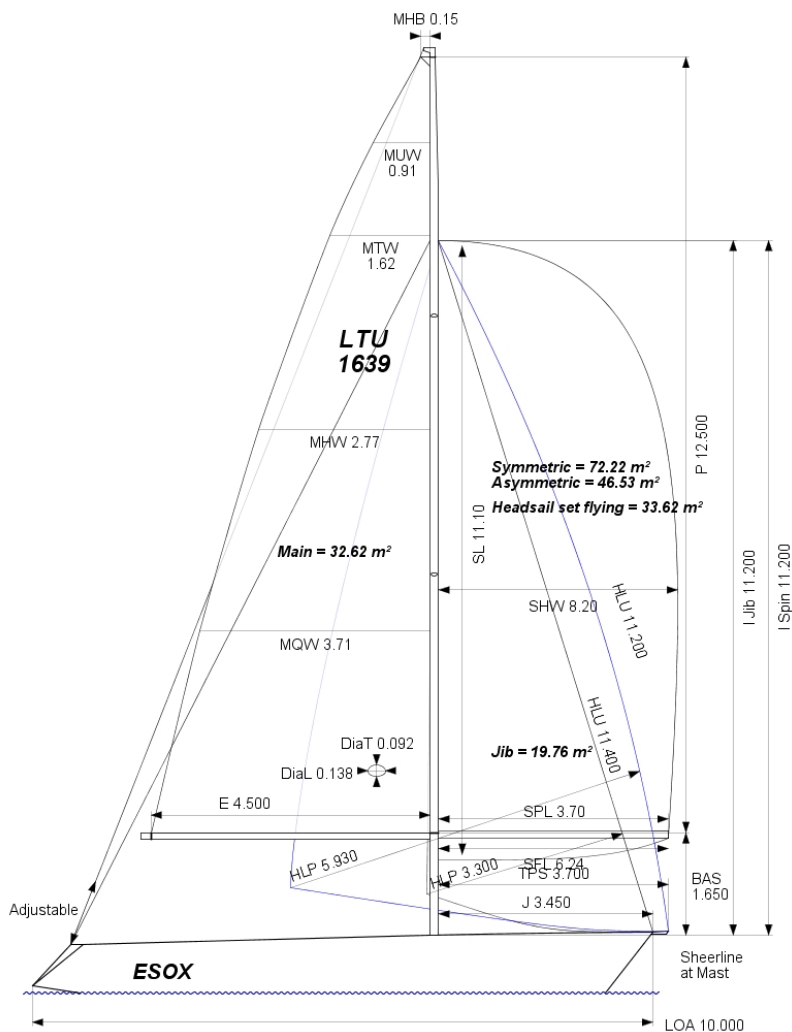
Limit Positive Stab.: **117.3°**
Stability Index: **116.3**

Owner

Rimantas Stropus
Vytorio 3-21
Klaipeda
Lithuania

I certify that I understand my responsibilities under ORC Rules and Regulations

Signature



BOAT		GPH		HULL		
Name ESOX Sail Nr LTU 1639		636.8		Data File EsoX LTU1639	LOA 10.000m	
				Offset File H012 -	MB 2.964m	
				Displacement 3,255kg	Draft 1.845m	
CLASS				IMS Division Performance	Dynamic All. 0.042%	
Class X-99				Fwd Accom. Yes	Construction Cored	
Designer N. Jeppesen				Fiber Rigging No	Aramid Core No	
Builder X Jachts				Crew Arm Ex	Carbon Rudder No	
Series 12-1985, CIN 33					Light Stanchions No	
Age Date 06-1986				IMSL 8.789m	VCGD -0.118m	Sink 14.13kg/mm
Age Allowance 0.487%				RL 7.893m	VCGM -0.083m	WS 19.51m²
COMMENTS				LSM0 8.596m	Displacement/Length ratio 5.1246	
				Water Ballast 0	Trim Tab No	
PROPELLER				CENTERBOARD		
Installation Strut	PRD 0.305			N/A		
Type Folding 2 blades	PBW 0.080					
	PIPA 0.0024					
SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time On Distance	622.5			698.6		
Time On Time	0.9639			0.9662		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	725.4	566.2	500.9	952.4	701.7	608.4
Time on Time	0.9305	1.1922	1.3477	0.7087	0.9620	1.1095

BOAT	
Name ESOX	Sail Nr LTU 1639
File EsoX LTU1639	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS			
Inclining Test Club Estimated VCG			
Flotation date 06-05-2015		SG 1.0050	
FFM 0.977	FF 0.983	SFFP 0.303	
FAM 0.781	FA 0.785	SAFP 9.175	
LCF from stem on CL / on sheer		5.480 / 5.672	
Maximum beam station from stem		6.027	
RM Measured		68.8kg-m	
RM Default		66.8kg-m	
Limit of positive stability / Stab.Index		117.3° / 116.3	
Freeboard at mast at 3.450		0.929	

RIG			
Forestay Tension Aft	Spreaders 2		
Inner Stay None Fitted	Runners 1		
Carbon Mast No	Jumper Struts None		
Taper Hollows No	Jib Furler No		
Fiber Rigging No	Main Furler No		
Lenticular Rigging No	Without Backstay No		
Articulated Bowsprit No			
P 12.500	E 4.500	MDT1 0.092	MW 0.138
IG 11.200	J 3.450	MDL1 0.138	GO 0.138
ISP 11.200	SFJ 0.000	MDT2 0.060	BD 0.110
BAS 1.650	SPL 3.700	MDL2 0.080	MWT 90.50
FSP 0.000	TPS 3.700	TL 2.100	MCG 4.600



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2017 Measurements Datasheet

MIZZEN RIG AND SAILS	
N/A	

PROPELLER			
Installation Strut	PRD 0.305		
Type Folding 2 blades	PBW 0.080		
Twin Screw No	PIPA 0.0024		
ST1 0.035	ST3 0.140	ST5 0.300	
ST2 0.140	ST4 0.085	EDL 0.900	

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COMMENTS	

MOVEABLE BALLAST	
N/A	

CENTERBOARD	
N/A	

SAILS INVENTORY																
MANSAL (1)																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
1	0.150	0.91	1.62	2.77	3.71	32.62			WB-Sails	Dacron						
HEADSAILS (4)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
Code 0	0.07	0.76	1.51	3.01	4.52	5.93	11.20	172%	33.63	N	Y					Unknow
Light jib	0.07	0.51	0.97	1.77	2.55	3.30	11.40	96%	19.76	Y				WB-Sails		Kevlar
HM jib	0.06	0.41	0.78	1.55	2.38	3.20	11.32	93%	17.95	Y	N			WB-Sails		Dacron
HW jib	0.07	0.35	0.68	1.38	2.18	2.99	11.05	87%	15.97	Y	N			WB-Sails		Polyest
SYMMETRIC SPINNAKERS (3)																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
Big OD	11.10	11.10	11.10	8.20	6.24	72.22			Bohn Segel	Nylon						
Light AP	12.00	12.00	12.00	7.40	6.30	71.80			WB-Sails	Nylon						
Small OD	11.20	11.20	11.20	6.20	6.20	57.87			Gran Segel	Nylon						
ASYMMETRIC SPINNAKERS (1)																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				
Genacker	11.50	10.80	11.15	4.70	6.24	46.53	asym			WB-Sails	Nylon					

MEASUREMENT INVENTORY					
Measurer R.S					
Date 02-05-2016					
Comment					
Id	Item	Weight	Distance	VCG	Description
Id	Item	Maker	Model		
8DV	Engine	BUKH	8DV		
Id	Item	Weight	Description		

MEASUREMENT INVENTORY								
Id	Item	Tank Use	Tank Type	Capcty	Dist.	VCG	Condtn	Description
20	Tank	fuel	stainless steel	20.0	6.00	0.00	5-0	
Id	Item	Weight	Distance	VCG	Description			
140	Battery	45.0	6.00	-0.10				
55	Battery	14.0	5.50	-0.10				
10	Misc	12.0	8.90	0.50	Gas heater			



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2017

ORC Club Certificate Appendix

BOAT	
Name	ESOX
Certificate Number	LT1639
Sail Nr	LTU 1639
Issued On	2017-06-23

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1062.5	883.8	791.5	751.6	731.5	721.5	707.5
52°	684.9	576.0	535.3	521.3	513.8	509.9	504.3
60°	636.7	547.5	517.4	504.2	495.7	490.3	483.1
75°	592.4	527.5	500.6	480.5	467.4	459.1	448.3
90°	587.2	526.1	499.8	475.8	452.6	434.8	417.4
110°	641.1	539.1	501.0	468.6	445.7	422.1	386.2
120°	665.0	550.9	508.5	477.1	444.0	414.2	371.3
135°	745.1	605.6	531.2	499.1	469.0	438.4	374.5
150°	902.4	711.4	594.1	529.7	499.7	471.8	415.5
Run VMG	1042.0	821.5	686.1	598.4	543.0	509.6	456.3

Selected Courses							
Windward / Leeward	1052.2	852.6	738.8	675.0	637.3	615.5	581.9
Circular Random	872.8	707.1	618.4	566.5	533.7	510.9	478.6
Ocean for PCS	1084.5	836.9	697.4	611.8	555.3	514.6	455.1
Non Spinnaker	953.3	762.3	658.2	596.8	558.4	532.7	498.6

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	44.3°	43.5°	42.0°	39.6°	39.0°	38.7°	38.4°
Beat VMG	3.39	4.07	4.55	4.79	4.92	4.99	5.09
52°	5.26	6.25	6.72	6.91	7.01	7.06	7.14
60°	5.65	6.58	6.96	7.14	7.26	7.34	7.45
75°	6.08	6.82	7.19	7.49	7.70	7.84	8.03
90°	6.13	6.84	7.20	7.57	7.95	8.28	8.63
110°	5.62	6.68	7.19	7.68	8.08	8.53	9.32
120°	5.41	6.54	7.08	7.55	8.11	8.69	9.70
135°	4.83	5.94	6.78	7.21	7.68	8.21	9.61
150°	3.99	5.06	6.06	6.80	7.20	7.63	8.67
Run VMG	3.45	4.38	5.25	6.02	6.63	7.06	7.89
Gybe Angles	145.1°	149.8°	149.5°	159.1°	180.0°	180.0°	180.0°