



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 **2017-05-12**
ORC Ref **lt00000087**
VPP Ver. **2017 1.00**
Valid until **2017-12-31**

Crew Weight

Declared **420kg**
Default* **555kg**
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Non Spin	GPH 664.4	0.9031
Non Spin	OSN 646.9	0.9276

Sails Limitations

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

Spinnaker configuration

Symmetric: **Yes** **72.22**
Asymmetric: **Yes** **48.76**
Flying H/S: **No**
Spin. Pole: **Yes**

Class Division Length

CDL = 8.422

Stability (Estimated)

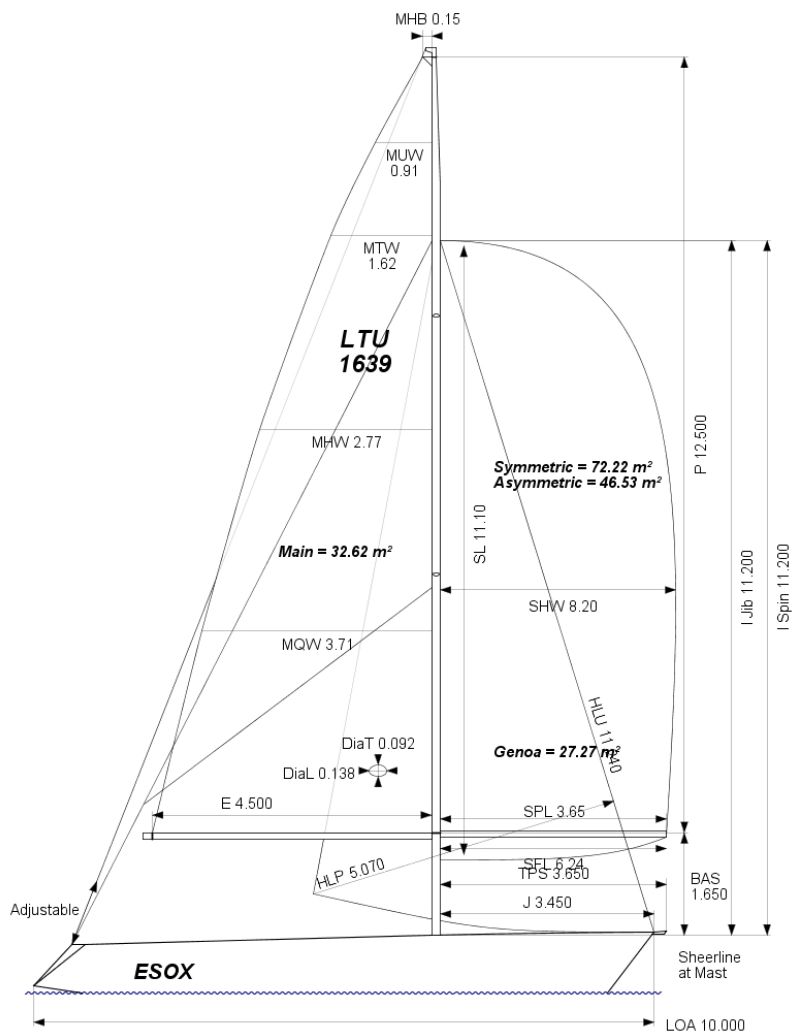
Limit Positive Stab.: **118.7°**
Stability Index: **117.6**

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			Data File	EsoX LTU1639	LOA	10.000m
Sail Nr	LTU 1639			Offset File	H012 -	MB	2.964m
			637.8	Displacement	3,255kg	Draft	1.845m
CLASS		IMS Division Performance					
Class	X-99	Dynamic All.	0.037%				
Designer	N. Jeppesen	Fwd Accom.	Yes				
Builder	X Jachts	Fiber Rigging	No				
Series	12-1985, CIN 33	Crew Arm Ex	No				
Age Date	06-1986	Light Stanchions	No				
Age Allowance	0.487%	IMSL	8.789m	VCGD	-0.144m	Sink	14.13kg/mm
		RL	8.053m	VCGM	-0.109m	WS	19.51m²
		LSM0	8.596m Displacement/Length ratio 5.1246				
COMMENTS		Water Ballast	0 Trim Tab No				
PROPELLER		CENTERBOARD					
Installation	Strut	PRD	0.305				
Type	Folding 2 blades	PBW	0.080				
		PIPA	0.0024				
SCORING OPTIONS							
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD			
Time On Distance	621.7			695.1			
Time On Time	0.9651			0.9711			
Triple Number	Low	Medium	High	Low	Medium	High	
Time on Distance	727.9	566.3	502.8	947.9	697.5	607.5	
Time on Time	0.9273	1.1920	1.3425	0.7121	0.9677	1.1111	

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		70.3kg·m	
RM Default		68.3kg·m	
Limit of positive stability / Stab.Index		118.7° / 117.6	
Freeboard at mast at 3.450		0.929	

RIG			
Forestay Tension Aft	Spreaders 2		
Inner Stay None Fitted	Runners 2		
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 3.650	MDL2 0.080	MWT 90.50
FSP 0.000	TPS 3.650	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 (3)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
AP	0.06	0.61	1.07	2.35	3.65	5.07	11.24	147%	27.28		N			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 (2)																
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					
101	11.65	9.90	10.78	4.73	6.20	45.11	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	2017-05-12

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1053.1	876.1	781.0	744.1	726.9	716.5	712.3
52°	688.8	580.2	536.8	522.1	514.9	510.8	506.7
60°	648.4	555.6	522.2	506.7	498.8	493.7	489.3
75°	616.3	539.4	509.8	489.0	472.5	463.2	454.9
90°	619.3	539.0	506.4	483.8	462.6	443.1	423.1
110°	640.6	538.8	500.9	469.5	447.6	425.3	398.6
120°	664.6	550.6	508.4	477.0	444.1	417.0	375.5
135°	745.0	605.4	531.1	499.0	468.9	438.3	374.5
150°	902.0	711.1	593.8	529.5	499.6	471.6	415.3
Run VMG	1041.5	821.1	685.7	598.1	542.5	509.2	455.8

Selected Courses							
Windward / Leeward	1047.3	848.6	733.3	671.1	634.7	612.9	584.0
Circular Random	875.4	708.4	619.1	567.2	534.7	512.7	483.0
Ocean for PCS	1080.3	834.3	696.0	611.5	556.1	516.6	459.5
Non Spinnaker	921.7	741.5	644.3	587.4	551.9	528.1	497.3

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	43.0°	42.2°	40.8°	39.3°	38.8°	38.3°	38.6°
Beat VMG	3.42	4.11	4.61	4.84	4.95	5.02	5.05
52°	5.23	6.20	6.71	6.89	6.99	7.05	7.10
60°	5.55	6.48	6.89	7.10	7.22	7.29	7.36
75°	5.84	6.67	7.06	7.36	7.62	7.77	7.91
90°	5.81	6.68	7.11	7.44	7.78	8.12	8.51
110°	5.62	6.68	7.19	7.67	8.04	8.46	9.03
120°	5.42	6.54	7.08	7.55	8.11	8.63	9.59
135°	4.83	5.95	6.78	7.21	7.68	8.21	9.61
150°	3.99	5.06	6.06	6.80	7.21	7.63	8.67
Run VMG	3.46	4.38	5.25	6.02	6.64	7.07	7.90
Gybe Angles	145.1°	149.8°	149.6°	159.3°	180.0°	180.0°	180.0°