



**2019  
ORC Club  
Certificate**

**Rating Office**  
A.Goštauto g. 40 A  
LT-03163, Vilnius  
Lithuania  
+370 650 28392



**Certificate**

Number **LT1232**  
Issued On **2019-07-15**  
ORC Ref **lt00000950**  
VPP Ver. **2019 1.01**  
Valid until **2019-12-31**

**Crew Weight**

Default 481kg  
Maximum 426kg  
Minimum\* 320kg  
*\*when applied by the NoR and SI*  
Non Manual Pwr No

**Special Scoring**

	ToD	ToT
Non Spin GPH	690,3	0,8692
Non Spin OSN	670,1	0,8954

**Sails Limitations**

Headsails 1 Spinnakers 3  
**Asymmetric on centerline**  
**Spinnaker configuration**  
Symmetric: No  
Asymmetric: Yes 79,13  
Flying H/S: No  
Spin. Pole: No

**Class Division Length**

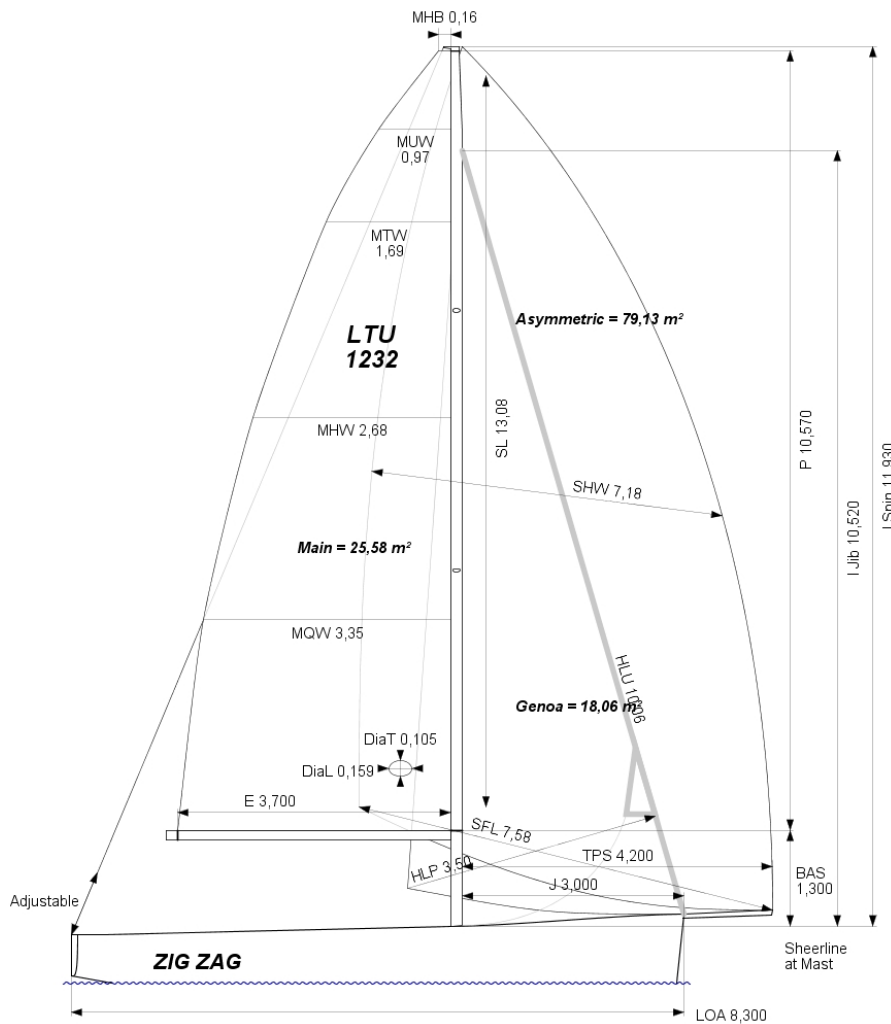
CDL = 7,711

**Stability (Measured)**

Limit Positive Stab.: 106,5°  
Stability Index: 101,4

**Owner**

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



BOAT		GPH	HULL			
Name <b>ZIG ZAG</b> Sail Nr <b>LTU 1232</b>		<b>646,5</b>	Data File <b>ZigZag LTU1232</b>	LOA <b>8,300m</b>		
CLASS			Offset File <b>RS280.OFF</b>	MB <b>2,656m</b>		
Class <b>RS280</b>			Displacement <b>1.856kg</b>	Draft <b>1,724m</b>		
Designer <b>UAB Plastolitas</b>			IMS Division <b>Sportboat</b>	Dynamic All. <b>0,177%</b>		
Builder <b>UAB Plastolitas</b>			Fwd Accom. <b>Yes</b>	Construction <b>Cored</b>		
Series <b>06-1998</b>			Fiber Rigging <b>No</b>	Aramid Core <b>No</b>		
Age Date <b>04-2008</b>			Crew Arm Ex	Carbon Rudder <b>No</b>		
Age Allowance <b>0,487%</b>				Light Stanchions		
COMMENTS			IMSL <b>7,951m</b>	VCGD <b>-0,005m</b>		
			RL <b>7,471m</b>	VCGM <b>0,001m</b>		
			LSM0 <b>7,774m</b>	WS <b>15,35m²</b>		
			Water Ballast <b>0</b>	Displacement/Length ratio <b>3,9504</b>		
			Trim Tab <b>No</b>			
			BLR Index <b>0,0000</b>			
PROPELLER			CENTERBOARD			
Type <b>No Propeller</b>			NA			
SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	<b>631,2</b>			<b>713,8</b>		
Time on Time	<b>0,9506</b>			<b>0,9457</b>		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	<b>725,6</b>	<b>577,6</b>	<b>517,0</b>	<b>935,2</b>	<b>712,2</b>	<b>632,7</b>
Time on Time	<b>0,9303</b>	<b>1,1687</b>	<b>1,3057</b>	<b>0,7218</b>	<b>0,9478</b>	<b>1,0669</b>

<b>BOAT</b>	
Name <b>ZIG ZAG</b>	Sail Nr <b>LTU 1232</b>
File <b>ZigZag LTU1232</b>	Data in <b>meters/kilograms</b>

<b>INCLINING TEST AND FREEBOARDS</b>			
Inclining Test <b>Current Inclining</b>			
Flotation date		SG <b>1,000</b>	
FFM <b>0,920</b>	FF <b>0,929</b>	SFFP <b>0,499</b>	
FAM <b>0,650</b>	FA <b>0,653</b>	SAFP <b>7,839</b>	
W1 <b>33,5</b>	PD1 <b>249,0</b>	WD <b>7,450</b>	
W2 <b>33,5</b>	PD2 <b>247,0</b>	GSA <b>50,2</b>	
W3 <b>33,5</b>	PD3 <b>248,0</b>	RSA <b>5407,9</b>	
W4 <b>33,5</b>	PD4 <b>247,0</b>	PLM <b>2500,0</b>	
LCF from stem on CL / on sheer		<b>4,461 / 4,601</b>	
Maximum beam station from stem		<b>6,000</b>	
RM Measured		<b>43,7kg-m</b>	
RM Default		<b>47,8kg-m</b>	
Limit of positive stability / Stab.Index		<b>106,5° / 101,4</b>	
Freeboard at mast at 3,000		<b>0,768</b>	



**ORC**  
Offshore Racing Congress  
World leader in rating technology

**2019**  
Measurements  
Datasheet


<b>RIG</b>			
Forestay Tension <b>Aft</b>	Spreaders <b>2</b>		
Inner Stay <b>None Fitted</b>	Runners <b>0</b>		
Carbon Mast <b>No</b>	Jumper Struts <b>None</b>		
Taper Hollows <b>Yes</b>	Jib Furler <b>Yes</b>		
Fiber Rigging <b>No</b>	Main Furler <b>No</b>		
Lenticular Rigging <b>No</b>	Without Backstay <b>No</b>		
Articulated Bowsprit <b>No</b>			
P <b>10,570</b>	E <b>3,700</b>	MDT1 <b>0,105</b>	MW <b>0,159</b>
IG <b>10,520</b>	J <b>3,000</b>	MDL1 <b>0,159</b>	GO <b>0,169</b>
ISP <b>11,930</b>	SFJ <b>0,000</b>	MDT2 <b>0,105</b>	BD <b>0,130</b>
BAS <b>1,300</b>	SPL <b>0,000</b>	MDL2 <b>0,120</b>	MWT <b>80,50</b>
FSP <b>0,048</b>	TPS <b>4,200</b>	TL <b>1,122</b>	MCG <b>4,480</b>

<b>MIZZEN RIG AND SAILS</b>	
N/A	

<b>PROPELLER</b>	
Type <b>No Propeller</b>	

**Certificate**

Number **LT1232**  
ORC Ref **lt00000950**  
Issued On **2019-07-15**  
VPP Ver. **2019 1.01**  
Valid until **2019-12-31**



<b>COMMENTS</b>	

<b>MOVABLE BALLAST</b>	
N/A	

<b>CENTERBOARD</b>	
N/A	

<b>SAILS INVENTORY</b>																
<b>MAINSAIL (2)</b>																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
M0048	0,16	0,97	1,69	2,68	3,35	25,56				Unknown						
M0040	0,16	0,97	1,69	2,69	3,26	25,35			NS	Unknown						
<b>HEADSAILS (3)</b>																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	OvrI/p	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
B/N	0,10					3,50	10,06	117%	18,06				18-07-2018	Klaudias	Unknown	Unknow
J0055	0,10					3,49	10,05	116%	17,99					AGB	Unknown	Unknow
J0046	0,10					3,45	10,12	115%	17,92					NS	Unknown	Unknow
<b>SYMMETRIC SPINNAKERS (0)</b>																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
<b>ASYMMETRIC SPINNAKERS (4)</b>																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				
A2*	14,18	11,98	13,08	7,18	7,58	79,14	asym				Unknown					
A2	14,18	11,98	13,08	7,18	7,58	79,14	asym				Unknown					
B/N	12,00	9,96	10,98	5,84	7,21	55,95	asym		18-07-2018	Klaudias	Unknown					
G0040	11,80	10,11	10,96	5,72	7,14	54,82	asym			EG	Unknown					

<b>MEASUREMENT INVENTORY</b>					
Measurer <b>Vytautas Gričius</b>					
Date					
Comment					
Id	Item	Weight	Distance	VCG Description	
B/N	Anchor	8,0	3,40		
B/N	Chain	3,5	3,40		
B/N	Tools	5,0	3,90		
Id	Item	Weight	Description		

<b>MEASUREMENT INVENTORY</b>				
Id	Item	Weight	Distance	VCG Description
B/N	Battery	6,0	3,00	
B/n	Misc	2,0	5,40	Paddle
B/N	Misc	4,0	3,40	Fire-extinguisher

# 2019

## ORC Club Certificate Appendix

<b>BOAT</b>			
Name	<b>ZIG ZAG</b>	Certificate Number	<b>LT1232</b>
Sail Nr	<b>LTU 1232</b>	Issued On	<b>2019-07-15</b>

<b>TIME ALLOWANCES</b>							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	<b>1091,1</b>	<b>900,2</b>	<b>799,4</b>	<b>772,6</b>	<b>765,3</b>	<b>763,8</b>	<b>762,3</b>
52°	<b>712,1</b>	<b>604,1</b>	<b>560,1</b>	<b>547,6</b>	<b>542,7</b>	<b>540,6</b>	<b>533,9</b>
60°	<b>681,5</b>	<b>581,4</b>	<b>546,1</b>	<b>531,0</b>	<b>524,8</b>	<b>521,7</b>	<b>511,8</b>
75°	<b>651,4</b>	<b>565,6</b>	<b>534,1</b>	<b>508,9</b>	<b>493,3</b>	<b>485,6</b>	<b>478,8</b>
90°	<b>627,4</b>	<b>551,0</b>	<b>531,6</b>	<b>503,8</b>	<b>475,1</b>	<b>453,8</b>	<b>437,3</b>
110°	<b>614,8</b>	<b>538,7</b>	<b>499,8</b>	<b>476,4</b>	<b>457,2</b>	<b>439,7</b>	<b>408,5</b>
120°	<b>630,3</b>	<b>544,5</b>	<b>500,3</b>	<b>459,6</b>	<b>434,1</b>	<b>416,2</b>	<b>383,6</b>
135°	<b>712,1</b>	<b>578,1</b>	<b>525,5</b>	<b>482,7</b>	<b>439,8</b>	<b>396,8</b>	<b>331,3</b>
150°	<b>842,2</b>	<b>672,8</b>	<b>576,8</b>	<b>532,7</b>	<b>502,1</b>	<b>460,8</b>	<b>369,0</b>
Run VMG	<b>972,5</b>	<b>776,9</b>	<b>666,0</b>	<b>614,2</b>	<b>569,8</b>	<b>532,0</b>	<b>426,1</b>
<b>Selected Courses</b>							
Windward / Leeward	<b>1031,8</b>	<b>838,6</b>	<b>732,7</b>	<b>693,4</b>	<b>667,6</b>	<b>647,9</b>	<b>594,2</b>
Circular Random	<b>876,4</b>	<b>713,6</b>	<b>628,2</b>	<b>579,3</b>	<b>548,4</b>	<b>526,1</b>	<b>490,5</b>
Coastal / Long Distance	<b>1025,9</b>	<b>788,4</b>	<b>665,1</b>	<b>602,8</b>	<b>565,1</b>	<b>530,7</b>	<b>467,1</b>
Non Spinnaker	<b>958,4</b>	<b>770,0</b>	<b>669,1</b>	<b>610,6</b>	<b>574,6</b>	<b>550,3</b>	<b>516,4</b>

<b>Velocity Prediction in Knots for True Wind Speeds</b>							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat Angles	<b>42,8°</b>	<b>41,2°</b>	<b>39,4°</b>	<b>38,2°</b>	<b>38,1°</b>	<b>38,5°</b>	<b>39,9°</b>
Beat VMG	<b>3,30</b>	<b>4,00</b>	<b>4,50</b>	<b>4,66</b>	<b>4,70</b>	<b>4,71</b>	<b>4,72</b>
52°	<b>5,06</b>	<b>5,96</b>	<b>6,43</b>	<b>6,57</b>	<b>6,63</b>	<b>6,66</b>	<b>6,74</b>
60°	<b>5,28</b>	<b>6,19</b>	<b>6,59</b>	<b>6,78</b>	<b>6,86</b>	<b>6,90</b>	<b>7,03</b>
75°	<b>5,53</b>	<b>6,36</b>	<b>6,74</b>	<b>7,07</b>	<b>7,30</b>	<b>7,41</b>	<b>7,52</b>
90°	<b>5,74</b>	<b>6,53</b>	<b>6,77</b>	<b>7,15</b>	<b>7,58</b>	<b>7,93</b>	<b>8,23</b>
110°	<b>5,86</b>	<b>6,68</b>	<b>7,20</b>	<b>7,56</b>	<b>7,87</b>	<b>8,19</b>	<b>8,81</b>
120°	<b>5,71</b>	<b>6,61</b>	<b>7,20</b>	<b>7,83</b>	<b>8,29</b>	<b>8,65</b>	<b>9,38</b>
135°	<b>5,06</b>	<b>6,23</b>	<b>6,85</b>	<b>7,46</b>	<b>8,18</b>	<b>9,07</b>	<b>10,87</b>
150°	<b>4,27</b>	<b>5,35</b>	<b>6,24</b>	<b>6,76</b>	<b>7,17</b>	<b>7,81</b>	<b>9,76</b>
Run VMG	<b>3,70</b>	<b>4,63</b>	<b>5,41</b>	<b>5,86</b>	<b>6,32</b>	<b>6,77</b>	<b>8,45</b>
Gybe Angles	<b>144,0°</b>	<b>147,6°</b>	<b>149,3°</b>	<b>150,9°</b>	<b>175,7°</b>	<b>144,2°</b>	<b>140,1°</b>