



World Leader in Rating Technology

## 2016 ORC Club Certificate

### Rating Office

EYU  
Regati 1  
11911  
Estonia

### Certificate

Number **EST606**  
Issued On **28.04.2016**  
ORC Ref **EST00001016**  
VPP Ver. **2016 1.01**  
Valid until **31.12.2016**

### Crew Weight

Declared **670kg**  
Default\* **634kg**  
Non Manual Pwr **No**

### Special Scoring

|                | ToD              | ToT           |
|----------------|------------------|---------------|
| Double         | <b>651,3</b>     | <b>0,9213</b> |
| Double         | <b>633,6</b>     | <b>0,9469</b> |
| Non Spin       | <b>GPH 681,0</b> | <b>0,8811</b> |
| Non Spin       | <b>OSN 658,7</b> | <b>0,9109</b> |
| N/S Perf. Line | <b>7,5</b>       | <b>0,572</b>  |

### Sails Limitations

Headsail **6** Spinnakers **3**

### Spinnaker configuration

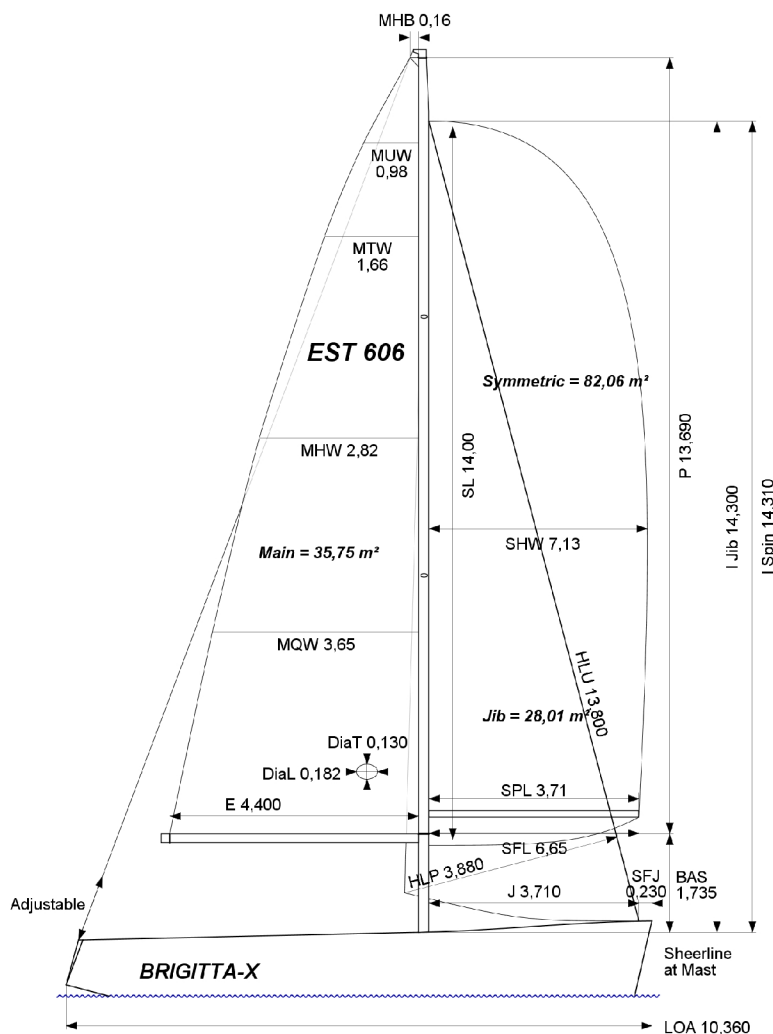
Symmetric: **Yes** **82,06**  
Asymmetric: **No**  
Flying H/S: **No**  
Spin. Pole: **Yes**

### Class Division Length

CDL = **8,668**

### Stability

LPS (Measured): **117,5°**  
Stability Index: **120,2**  
OSR Category: **0**



| BOAT          |                         | GPH                | HULL          |                                                         |
|---------------|-------------------------|--------------------|---------------|---------------------------------------------------------|
| Name          | <b>BRIGITTA-X</b>       | <b>648,8</b>       | Data File     | <b>Est0606.dxt</b> LOA <b>10,360m</b>                   |
| Sail Nr       | <b>EST 606</b>          |                    | Offset File   | <b>X34.OFF</b> MB <b>3,384m</b>                         |
| CLASS         |                         |                    | Displacement  | <b>5 638kg</b> Draft <b>1,920m</b>                      |
| Class         | <b>X-34</b>             |                    | IMS Division  | <b>Cruiser/Racer</b> Dynamic All. <b>0,248%</b>         |
| Designer      | <b>JEPPESEN</b>         |                    | Fwd Accom.    | <b>Yes</b> Construction <b>Cored</b>                    |
| Builder       | <b>X YACHTS</b>         |                    | Fiber         | <b>No</b> Aramid Core <b>No</b>                         |
| Series        | <b>11.2007</b>          |                    | Crew Arm Ex   | <b>No</b> Carbon Rudder <b>No</b>                       |
| Age Date      | <b>04.2009</b>          |                    |               | Light                                                   |
| Age Allowance | <b>0,292%</b>           |                    | IMSL          | <b>9,469m</b> VCGD <b>0,067m</b> Sink <b>18,23kg/mm</b> |
| COMMENTS      |                         |                    | RL            | <b>7,866m</b> VCGM <b>0,038m</b> WS <b>24,64m²</b>      |
|               |                         |                    | LSM0          | <b>9,444m</b> Displacement/Length <b>6,6936</b>         |
|               |                         |                    | Water Ballast | <b>0</b> Trim Tab <b>No</b>                             |
| PROPELLER     |                         |                    | CENTERBOARD   |                                                         |
| Installation  | <b>Strut</b>            | PRD <b>0,430</b>   | <b>N/A</b>    |                                                         |
| Type          | <b>Folding 2 blades</b> | PBW <b>0,125</b>   |               |                                                         |
|               |                         | PIPA <b>0,0032</b> |               |                                                         |

| SCORING OPTIONS  |                                     |                         |                       |                               |                         |                       |
|------------------|-------------------------------------|-------------------------|-----------------------|-------------------------------|-------------------------|-----------------------|
|                  | OFFSHORE<br>COASTAL / LONG DISTANCE |                         |                       | INSHORE<br>WINDWARD / LEEWARD |                         |                       |
| Time On Distance | <b>629,3</b>                        |                         |                       | <b>702,3</b>                  |                         |                       |
| Time On Time     | <b>0,9534</b>                       |                         |                       | <b>0,9611</b>                 |                         |                       |
| Performance Line | PLT<br><b>0,637</b>                 | PLD<br><b>32,1</b>      |                       | PLT<br><b>0,770</b>           | PLD<br><b>173,1</b>     |                       |
| Triple Number    | Low<br><b>0,8980</b>                | Medium<br><b>1,1784</b> | High<br><b>1,3352</b> | Low<br><b>0,6920</b>          | Medium<br><b>0,9513</b> | High<br><b>1,1175</b> |



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# 2016

## ORC Club Certificate Appendix

### BOAT

Name **BRIGITTA-X**  
Sail Nr **EST 606**

Certificate Number **EST606**  
Issued On **28.04.2016**

### TIME ALLOWANCES

| Wind Velocity | 6 kt   | 8 kt  | 10 kt | 12 kt | 14 kt | 16 kt | 20 kt |
|---------------|--------|-------|-------|-------|-------|-------|-------|
| Beat VMG      | 1129,9 | 936,9 | 828,2 | 752,9 | 722,0 | 708,5 | 698,3 |
| 52°           | 731,9  | 614,8 | 546,8 | 514,9 | 501,6 | 496,6 | 493,3 |
| 60°           | 687,1  | 578,8 | 525,0 | 500,6 | 487,7 | 481,8 | 477,9 |
| 75°           | 650,6  | 551,1 | 509,9 | 489,3 | 473,7 | 461,2 | 449,8 |
| 90°           | 654,0  | 548,6 | 501,9 | 484,1 | 473,7 | 458,5 | 430,5 |
| 110°          | 659,0  | 544,2 | 499,5 | 475,1 | 452,3 | 437,4 | 418,7 |
| 120°          | 680,1  | 559,2 | 506,3 | 480,8 | 458,2 | 434,8 | 401,9 |
| 135°          | 752,7  | 613,2 | 532,5 | 497,5 | 475,1 | 453,1 | 409,8 |
| 150°          | 886,2  | 702,7 | 596,1 | 529,3 | 497,6 | 476,4 | 435,2 |
| Run VMG       | 1023,3 | 811,5 | 687,1 | 602,8 | 543,5 | 506,4 | 464,4 |

### Selected Courses

|                    |        |       |       |       |       |       |       |
|--------------------|--------|-------|-------|-------|-------|-------|-------|
| Windward / Leeward | 1076,6 | 874,2 | 757,7 | 677,8 | 632,8 | 607,5 | 581,4 |
| Circular Random    | 900,3  | 724,4 | 629,1 | 573,2 | 538,5 | 516,0 | 488,5 |
| Ocean for PCS      | 1103,9 | 850,5 | 706,6 | 618,2 | 560,8 | 521,0 | 466,4 |
| Non Spinnaker      | 958,8  | 765,6 | 659,6 | 596,5 | 557,1 | 531,5 | 500,5 |

### 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   | 43,9°  | 42,3°  | 42,5°  | 41,4°  | 40,0°  | 39,9°  | 39,5°  |
| Beat VMG      | 3,19   | 3,84   | 4,35   | 4,78   | 4,99   | 5,08   | 5,16   |
| 52°           | 4,92   | 5,86   | 6,58   | 6,99   | 7,18   | 7,25   | 7,30   |
| 60°           | 5,24   | 6,22   | 6,86   | 7,19   | 7,38   | 7,47   | 7,53   |
| 75°           | 5,53   | 6,53   | 7,06   | 7,36   | 7,60   | 7,81   | 8,00   |
| 90°           | 5,50   | 6,56   | 7,17   | 7,44   | 7,60   | 7,85   | 8,36   |
| 110°          | 5,46   | 6,62   | 7,21   | 7,58   | 7,96   | 8,23   | 8,60   |
| 120°          | 5,29   | 6,44   | 7,11   | 7,49   | 7,86   | 8,28   | 8,96   |
| 135°          | 4,78   | 5,87   | 6,76   | 7,24   | 7,58   | 7,95   | 8,79   |
| 150°          | 4,06   | 5,12   | 6,04   | 6,80   | 7,23   | 7,56   | 8,27   |
| Run VMG       | 3,52   | 4,44   | 5,24   | 5,97   | 6,62   | 7,11   | 7,75   |
| Gybe Angles   | 145,7° | 150,5° | 152,1° | 157,3° | 176,9° | 180,0° | 180,0° |