

GPH = **597.7** CDL = **9.573**

**BOAT**

Class **J-112E**  
Designer **JOHNSTONE**  
Builder **J-BOATS**  
Age Date **07/2019**  
Series Date **10/2015**  
Offset File **J112-EST112.off**

**HULL**

Length Overall **11.000 m**  
Maximum Beam **3.598 m**  
Draft **2.046 m**  
Displacement **5,183 kg**  
DLR **5.4161**  
IMS Division **Cruiser/Racer**  
Dynamic Allowance **0.113%**  
Age Allowance **0.195%**

**PROPELLER**

Installation **Strut**  
Type **Folding 2 blades**  
Diameter **0.380m**

**CREW**

Maximum weight **640 kg**  
Minimum weight **480 kg \* when applied**  
Non Manual Power **No**  
Crew Arm Extension

**SAIL AREAS (m<sup>2</sup>)**

|                 | Measured     | Rated        |
|-----------------|--------------|--------------|
| Mainsail        | <b>39.93</b> | <b>40.82</b> |
| Headsail Luffed | <b>34.45</b> | <b>34.45</b> |
| Headsail Flying |              |              |

Symmetric  
Asymmetric **120.43 120.43**  
*\* All asymmetric spinnakers with SHW/SFL > 85%*

**SAIL LIMITATIONS**

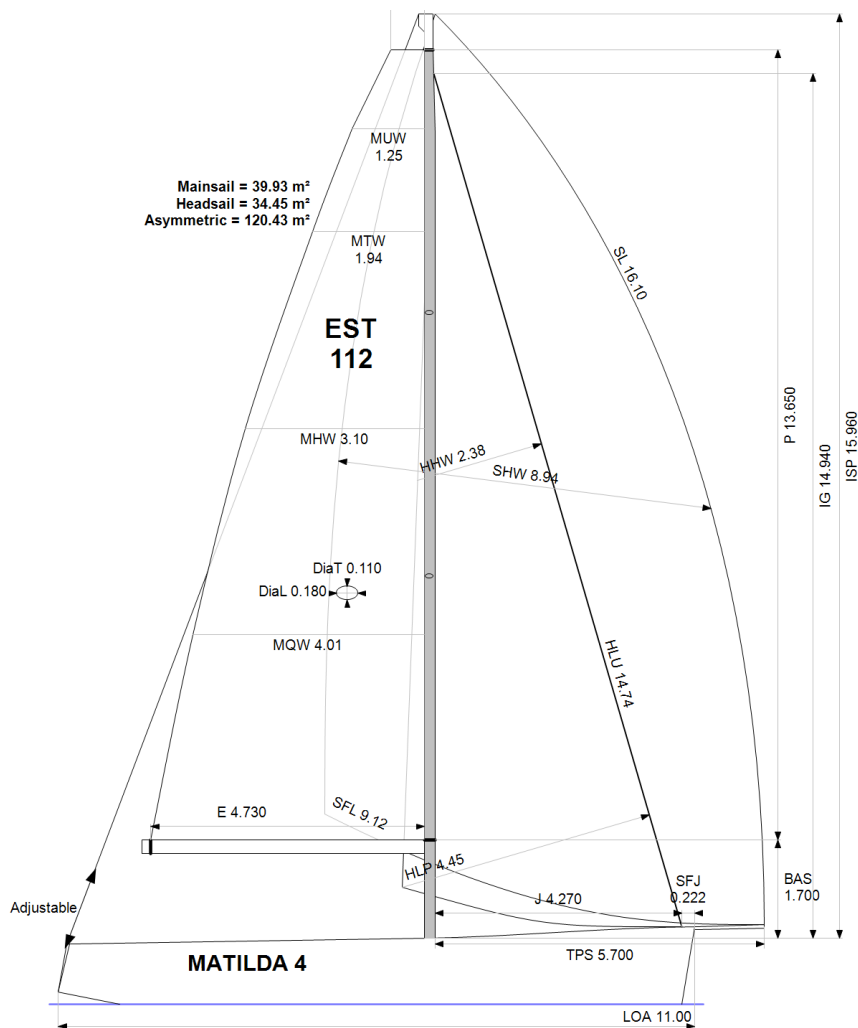
Headsails **5**  
Spinnakers **4 \* Asymmetric SHALL NOT be tacked on the pole**

**STABILITY**

Righting Moment **128.4 kg·m**  
Stability Index **120.9**

**OWNER**

*The owner certifies that he/she understands his/her responsibilities under ORC Rule and Regulations.*



Rated boat velocities in knots

| Wind Velocity | 6 kt   | 8 kt   | 10 kt  | 12 kt  | 14 kt  | 16 kt  | 20 kt  |
|---------------|--------|--------|--------|--------|--------|--------|--------|
| Beat Angles   | 43.1°  | 41.6°  | 40.5°  | 39.4°  | 39.2°  | 39.0°  | 39.0°  |
| Beat VMG      | 3.54   | 4.31   | 4.88   | 5.14   | 5.25   | 5.29   | 5.39   |
| 52°           | 5.44   | 6.48   | 7.11   | 7.36   | 7.46   | 7.50   | 7.61   |
| 60°           | 5.77   | 6.78   | 7.31   | 7.56   | 7.68   | 7.74   | 7.84   |
| 75°           | 6.05   | 7.00   | 7.47   | 7.77   | 8.01   | 8.17   | 8.30   |
| 90°           | 6.02   | 7.14   | 7.56   | 7.82   | 8.15   | 8.47   | 8.92   |
| 110°          | 6.13   | 7.26   | 7.80   | 8.24   | 8.54   | 8.81   | 9.33   |
| 120°          | 5.98   | 7.16   | 7.73   | 8.25   | 8.78   | 9.21   | 9.89   |
| 135°          | 5.32   | 6.62   | 7.42   | 7.91   | 8.44   | 9.01   | 10.51  |
| 150°          | 4.49   | 5.63   | 6.66   | 7.34   | 7.69   | 8.07   | 9.06   |
| Run VMG       | 3.89   | 4.88   | 5.77   | 6.36   | 6.69   | 7.25   | 8.01   |
| Gybe Angles   | 144.0° | 147.0° | 148.5° | 150.5° | 152.0° | 176.0° | 177.0° |

| Time Allowances in secs/NM |        |       |       |       |       |       |       |
|----------------------------|--------|-------|-------|-------|-------|-------|-------|
| Wind Velocity              | 6 kt   | 8 kt  | 10 kt | 12 kt | 14 kt | 16 kt | 20 kt |
| Beat VMG                   | 1016.9 | 835.8 | 737.8 | 700.3 | 686.0 | 680.4 | 667.4 |
| 52°                        | 662.2  | 555.4 | 506.3 | 489.0 | 482.7 | 479.8 | 473.0 |
| 60°                        | 623.9  | 530.9 | 492.4 | 476.0 | 468.8 | 465.0 | 459.3 |
| 75°                        | 595.0  | 514.0 | 482.0 | 463.4 | 449.3 | 440.6 | 433.5 |
| 90°                        | 598.3  | 504.5 | 476.5 | 460.4 | 441.8 | 425.0 | 403.6 |
| 110°                       | 587.6  | 495.8 | 461.5 | 436.7 | 421.4 | 408.5 | 385.8 |
| 120°                       | 602.2  | 503.1 | 465.6 | 436.5 | 409.8 | 390.9 | 364.2 |
| 135°                       | 676.1  | 544.2 | 485.1 | 455.4 | 426.6 | 399.3 | 342.5 |
| 150°                       | 801.2  | 639.1 | 540.4 | 490.2 | 467.9 | 446.2 | 397.3 |
| Run VMG                    | 925.1  | 738.0 | 624.0 | 565.7 | 537.9 | 496.8 | 449.3 |
| Selected Courses           |        |       |       |       |       |       |       |
| Windward / Leeward         | 971.0  | 786.9 | 680.9 | 633.0 | 612.0 | 588.6 | 558.3 |
| All purpose                | 744.5  | 613.3 | 547.8 | 516.5 | 498.7 | 483.6 | 458.8 |

| Single Number Scoring Options |                  |              |
|-------------------------------|------------------|--------------|
| Course                        | Time On Distance | Time On Time |
| Windward / Leeward            | 662.5            | 0.9057       |
| All purpose                   | 534.1            | 1.1234       |

### Custom scoring options for Estonia

| Single Number                              | Time On Distance | Time On Time |
|--|------------------|--------------|
| Coastal/Long Distance                      | 582.2            | 1.0306       |
| Triple Number Coastal/Long Distance Low    | 678.9            | 0.8838       |
| Triple Number Coastal/Long Distance Medium | 530.5            | 1.1310       |
| Triple Number Coastal/Long Distance High   | 478.0            | 1.2551       |
| Triple Number Windward/Leeward Low         | 879.0            | 0.6826       |
| Triple Number Windward/Leeward Medium      | 656.5            | 0.9139       |
| Triple Number Windward/Leeward High        | 583.1            | 1.0290       |

| Performance Curve     | 6 kt  | 8 kt  | 10 kt | 12 kt | 14 kt | 16 kt | 20 kt |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|
| Coastal/Long Distance | 966.4 | 738.4 | 615.4 | 551.4 | 517.9 | 487.6 | 438.0 |

Data in meters/kilograms (Metric)

**HULL AND APPENDAGES**

|                   |               |              |               |                                |               |
|-------------------|---------------|--------------|---------------|--------------------------------|---------------|
| Class             | <b>J-112E</b> | LOA          | <b>11.000</b> | VCGD                           | <b>-0.026</b> |
| Measurement       |               | Max. Beam    | <b>3.598</b>  | VCGM                           | <b>-0.067</b> |
| Measurer          |               | Draft        | <b>2.046</b>  | RM Measured (kg·m)             | <b>128.4</b>  |
| HIN               |               | Displacement | <b>5,183</b>  | RM Default (kg·m)              | <b>126.6</b>  |
| Plan review       |               | Wetted area  | <b>25.44</b>  | Limit of positive stability(°) | <b>121.7</b>  |
| Hull construction | <b>Cored</b>  | IMS L        | <b>10.069</b> | Stability Index                | <b>120.9</b>  |
| Carbon Rudder     | <b>No</b>     | LSM0         | <b>9.855</b>  |                                |               |
| Light stanchions  | <b>No</b>     | Acc. length  | <b>11.000</b> |                                |               |
| Trim tab          | <b>No</b>     | Sink (kg/mm) | <b>18.80</b>  |                                |               |

**PROPELLER**

|                |                         |     |              |     |              |     |              |
|----------------|-------------------------|-----|--------------|-----|--------------|-----|--------------|
| Propeller Type | <b>Folding 2 blades</b> | PRD | <b>0.380</b> | EDL | <b>2.130</b> | ST3 | <b>0.180</b> |
| Installation   | <b>Strut</b>            | PBW | <b>0.100</b> | ST1 | <b>0.065</b> | ST4 | <b>0.090</b> |
| Twin screw     | <b>No</b>               |     |              | ST2 | <b>0.180</b> | ST5 | <b>0.300</b> |
| PIPA           | <b>0.0031</b>           |     |              |     |              |     |              |

**RIG**

|                      |                    |      |               |     |               |
|----------------------|--------------------|------|---------------|-----|---------------|
| Forestay tension     | <b>Aft</b>         | P    | <b>13.650</b> | E   | <b>4.730</b>  |
| Inner stay           | <b>None Fitted</b> | IG   | <b>14.940</b> | J   | <b>4.270</b>  |
| Carbon mast          | <b>Yes</b>         | ISP  | <b>15.960</b> | BAS | <b>1.700</b>  |
| Headsail furler      | <b>No</b>          | MDT1 | <b>0.110</b>  | FSD | <b>0.038</b>  |
| Mainsail furler      | <b>No</b>          | MDL1 | <b>0.180</b>  | SFJ | <b>0.222</b>  |
| Articulated bowsprit | <b>No</b>          | MDT2 | <b>0.102</b>  | SPL | <b>4.916</b>  |
| Non-circular rigging | <b>No</b>          | MDL2 | <b>0.146</b>  | TPS | <b>5.700</b>  |
| Fiber rigging        | <b>Yes</b>         | TL   | <b>1.460</b>  | BD  | <b>0.237</b>  |
| Runners/Checkstays   | <b>0</b>           | MW   | <b>0.173</b>  | MWT | <b>105.00</b> |
| Spreaders            | <b>2</b>           | GO   | <b>0.198</b>  | MCG | <b>4.450</b>  |

**FLOTATION AND STABILITY**

|                |                        |       |               |       |               |    |             |     |              |     |                |
|----------------|------------------------|-------|---------------|-------|---------------|----|-------------|-----|--------------|-----|----------------|
| Inclining Test | <b>Poles Inclining</b> | SFFP  | <b>0.488</b>  | SAFP  | <b>10.805</b> | W1 | <b>76.0</b> | PD1 | <b>589.5</b> | WD  | <b>12.700</b>  |
| Flotation Date | <b>12/08/2021</b>      | FFM   | <b>1.323</b>  | FAM   | <b>1.031</b>  | W2 | <b>76.0</b> | PD2 | <b>592.8</b> | PLM | <b>9000.00</b> |
| Measurer       |                        | FF    | <b>1.330</b>  | FA    | <b>1.039</b>  | W3 | <b>76.0</b> | PD3 | <b>591.4</b> | GSA | <b>1.0</b>     |
| Comment        | <b>WC 2021/TALLIN</b>  | LCFcl | <b>5.891</b>  | LCFsh | <b>6.135</b>  | W4 | <b>76.0</b> | PD4 | <b>593.4</b> | RSA | <b>1.0</b>     |
|                |                        | SG    | <b>1.0000</b> | HBI   | <b>1.139</b>  |    |             |     |              |     |                |

**MEASUREMENT INVENTORY**

| Id                   | Tank Type  | Capacity     | LCG          | VCG | Condition | Description                               |
|----------------------|--|--------------|--------------|-----|-----------|---|
| 2                    | <b>Fuel plastic</b>                                | <b>80.0</b>  | <b>8.27</b>  |     |           | <del>12.0</del> <b>Starport aft cabin</b> |
| 1                    | <b>Water Neopren bag</b>                           | <b>100.0</b> | <b>2.00</b>  |     |           | <del>0.0</del> <b>At the bow</b>          |
| Id                   | Item Description                                   | Weight       | LCG          | VCG |           |   |
| 8                    | <b>Ballast Lot of pieces</b>                       | <b>100.0</b> | <b>4.27</b>  |     |           |   |
| 7                    | <b>Ballast Lot of pieces</b>                       | <b>150.0</b> | <b>5.77</b>  |     |           |   |
| 6                    | <b>Ballast 6pcs</b><br>(18+17+8+17+12,5+12,5)      | <b>85.0</b>  | <b>5.22</b>  |     |           |   |
| 5                    | <b>Ballast 2pcs (17+17kg)</b><br>centerline        | <b>34.0</b>  | <b>4.72</b>  |     |           |   |
| 4                    | <b>Ballast 3pcs (25+18+17kg)</b><br>portside       | <b>60.0</b>  | <b>5.22</b>  |     |           |   |
| 3                    | <b>Ballast 15kg portside</b>                       | <b>15.0</b>  | <b>4.67</b>  |     |           |   |
| 2                    | <b>Ballast 2pcs (16+18kg)</b><br>portside          | <b>34.0</b>  | <b>4.27</b>  |     |           |   |
| 1                    | <b>Ballast 2pcs (16+17kg)</b><br>centerline        | <b>33.0</b>  | <b>3.62</b>  |     |           |   |
| <b>Total ballast</b> |  | <b>511.0</b> |              |     |           |   |
| Id                   | Item Description                                   | Weight       | LCG          | VCG |           |   |
| 1                    | <b>Battery 2x165ah starport</b><br>side            |              | <b>4.73</b>  |     |           |   |
| 2                    | <b>Miscellaneous Autopilot</b>                     |              | <b>10.00</b> |     |           |   |
| 1                    | <b>Miscellaneous Air heater, port aft</b><br>cabin |              | <b>8.27</b>  |     |           |   |



**MAINSAIL**

| Id | MHB  | MUW  | MTW  | MHW  | MQW  | Area  | Measurer | Meas.Date  | Maker     | Material | Comment |
|----|------|------|------|------|------|-------|----------|------------|-----------|----------|---------|
| 1  | 0.58 | 1.25 | 1.94 | 3.10 | 4.01 | 39.93 |          | 13/06/2021 | One sails | Unknown  | big     |
| 2  | 0.21 | 1.08 | 1.84 | 3.12 | 4.05 | 39.27 |          | 20/02/2020 | One sails | Unknown  | small   |

**HEADSAIL**

| Id | HHB  | HUW  | HTW  | HHW  | HQW  | HLP  | HLU   | Btn | Flying | FT | Area  | Measurer | Meas.Date  | Maker     | Material | Comment        |
|----|------|------|------|------|------|------|-------|-----|--------|----|-------|----------|------------|-----------|----------|----------------|
| 6  | 0.14 | 0.73 | 1.34 | 2.38 | 3.39 | 4.45 | 14.74 | Yes | No     |    | 34.45 |          | 20/02/2020 | One Sail  | Unknown  | J-1 2020       |
| 2  | 0.13 | 0.68 | 1.28 | 2.40 | 3.48 | 4.45 | 14.66 | Yes | No     |    | 34.39 |          | 13/06/2021 | One sail  | Unknown  | J-0            |
| 7  | 0.13 | 0.73 | 1.33 | 2.35 | 3.37 | 4.46 | 14.76 | No  | No     |    | 34.33 |          | 20/02/2020 | One Sail  | Unknown  | J-2 2020       |
| 10 | 0.05 | 0.92 | 1.75 | 3.20 | 4.15 | 4.49 | 11.73 | No  | No     |    | 32.67 |          | 26/07/2021 | One Sails | Unknown  | Stay sail 2021 |
| 3  | 0.14 | 0.52 | 0.97 | 1.99 | 3.12 | 4.33 | 13.78 | Yes | No     |    | 28.71 |          | 20/02/2020 | One Sail  | Unknown  | J-3            |

**ASYMMETRIC SPINNAKER**

| Id | SLU   | SLE   | SL    | SHW  | SFL  | Ratio | Area   | Measurer | Meas.Date  | Maker     | Material | Comment |
|----|-------|-------|-------|------|------|-------|--------|----------|------------|-----------|----------|---------|
| 3  | 17.50 | 14.70 | 16.10 | 8.94 | 9.12 | 98%   | 120.43 |          | 13/06/2021 | One sails | Unknown  | A2      |
| 2a | 17.23 | 15.00 | 16.12 | 8.80 | 9.33 | 94%   | 119.60 |          | 20/07/2019 | One sails | Unknown  | A1      |
| 5  | 18.21 | 14.01 | 16.11 | 8.73 | 9.23 | 95%   | 118.54 |          | 29/06/2020 | One Sails | Unknown  | A4      |
| 8  | 17.41 | 14.37 | 15.89 | 8.02 | 9.35 | 86%   | 109.72 |          | 26/07/2021 | One Sails | Unknown  | A3      |