



ORC

Offshore Racing Congress
World leader in rating technology

**2020
ORC Club
Certificate**

Rating Office

EYU
Purje 8
11911, Tallinn
Estonia

Certificate

Number **Est688**
Issued On **5/21/2020**
ORC Ref **03580000IL2**
VPP Ver. **2020 1.02**
Valid until **31/12/2020**

Crew Weight

Default 375kg
Maximum **320kg**
Minimum* **235kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

| | ToD | ToT |
|--------------|--------------|---------------|
| Non Spin GPH | 789.4 | 0.7601 |
| Non Spin OSN | 768.0 | 0.7812 |

Sails Limitations

Headsails **5** Spinnakers **4**

Spinnaker configuration

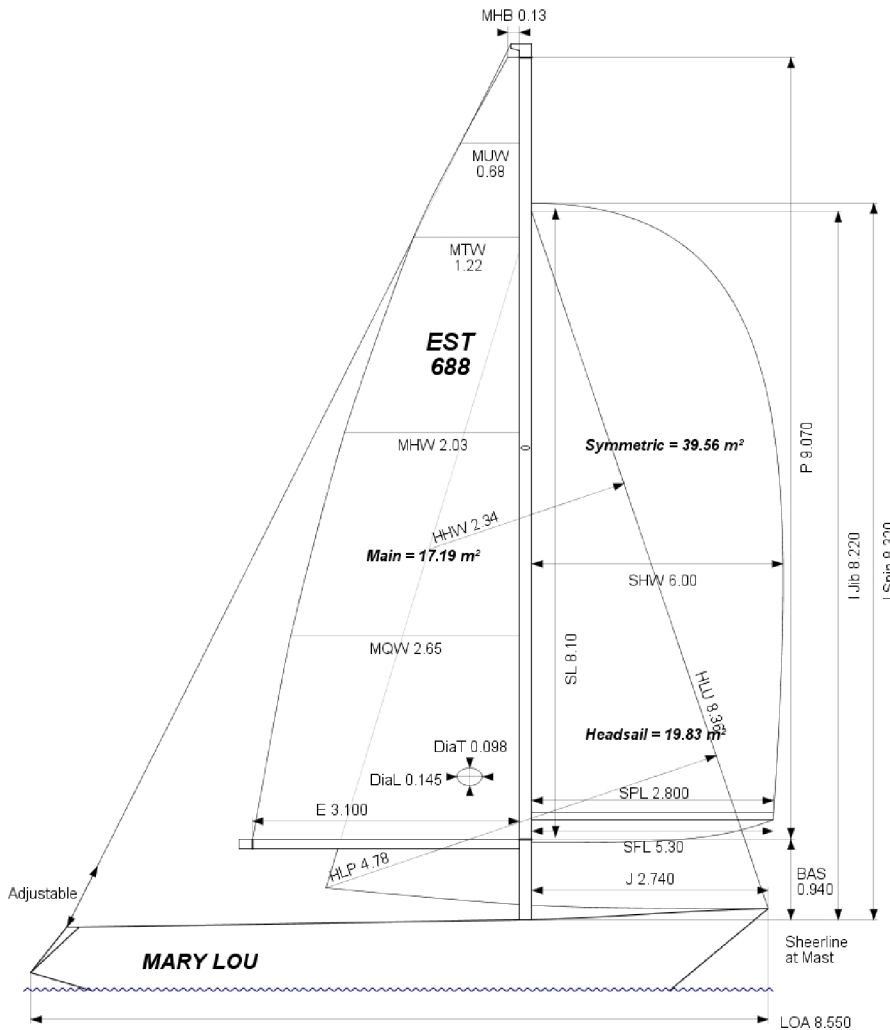
Symmetric: **Yes** **39.55**
Asymmetric: **No**
Flying H/S: **No**
Spin. Pole: **Yes**

Class Division Length

CDL = 5.912

Stability (Estimated)

Limit Positive Stab.: **136.8°**
Stability Index: **140.0**



| BOAT | GPH | HULL |
|---|--------------------------------|---|
| Name MARY LOU Sail Nr EST 688 | 766.4 | Data File Est0688 LOA 8.550m Offset File RJ85_CL.off MB 2.012m Displacement 2,444kg Draft 1.228m |
| CLASS Class RJ 85 Designer Builder Jakobssen Series 01/1969 Age Date 01/1974 Age Allowance 0.487% | | IMS Division Cruiser/Racer Dynamic All. 0.451% Plan Review Construction Solid Fiber Rigging No Aramid Core No Crew Arm Ex Carbon Rudder No Light Stanchions No |
| COMMENTS Kaal koos p aramootoriga Yamaha F4 | | IMSL 6.681m VCGD -0.211m Sink 8.34kg/mm RL 5.142m VCGM -0.178m WS 14.25m² LSM0 6.533m Displacement/Length ratio |
| PROPELLER Type No Propeller | | Water Ballast Trim Tab No BLR Index 0.0000 |
| | | CENTERBOARD N/A |
| SCORING OPTIONS | | |
| | COASTAL / LONG DISTANCE | WINDWARD / LEEWARD |
| Time on Distance | 747.6 | 837.2 |
| Time on Time | 0.8025 | 0.8062 |
| Triple Number | Low Medium High | Low Medium High |
| Time on Distance | 868.8 679.6 620.5 | 1124.6 839.2 744.6 |
| Time on Time | 0.7769 0.9932 1.0878 | 0.6002 0.8043 0.9065 |

| | |
|----------------------|---------------------------------|
| BOAT | |
| Name MARY LOU | Sail Nr EST 688 |
| File Est0688 | Data in meters/kilograms |

| | | | |
|--|----|-----------------------|-------------------|
| INCLINING TEST AND FREEBOARDS | | | |
| Inclining Test Club Estimated VCG | | | |
| Flotation date 18/05/2020 | | SG | |
| FFM | FF | 0.933 | SFFP 0.573 |
| FAM | FA | 0.625 | SAFP 7.992 |
| LCF from stem on CL / on sheer | | 4.641 / 4.753 | |
| Maximum beam station from stem | | 4.560 | |
| RM Measured | | 23.0kg·m | |
| RM Default | | 22.3kg·m | |
| Limit of positive stability / Stab.Index | | 136.8° / 140.0 | |
| Freeboard at mast at 2.740 | | 0.811 | |



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2020
Measurements
Datasheet

| | | | | | |
|----------------------|--------------------|--------------------|--------------|-----------|--------------|
| RIG | | | | | |
| Forestay Tension | Aft | Spreaders | | 1 | |
| Inner Stay | None Fitted | Runners/Checkstays | | 0 | |
| Carbon Mast | No | Jib Furler | | No | |
| Fiber Rigging | No | Main Furler | | No | |
| Non-Circular Rigging | No | | | | |
| Articulated Bowsprit | | | | | |
| P | 9.070 | E | 3.100 | MDT1 | 0.098 |
| IG | 8.220 | J | 2.740 | MDL1 | 0.145 |
| ISP | 8.320 | SFJ | | MDT2 | 0.000 |
| BAS | 0.940 | SPL | 2.800 | MDL2 | 0.000 |
| FSD | -2.000 | TPS | | TL | 1.590 |
| | | | | MW | 0.145 |
| | | | | GO | 0.160 |
| | | | | BD | |
| | | | | MWT | |
| | | | | MCG | |

| | |
|-----------------------------|--|
| MIZZEN RIG AND SAILS | |
| N/A | |

| | |
|--------------------------|--|
| PROPELLER | |
| Type No Propeller | |

| | |
|-------------------------------|--|
| Certificate | |
| Number Est688 | |
| ORC Ref 03580000IL2 | |
| Issued On 5/21/2020 | |
| VPP Ver. 2020 1.02 | |
| Valid until 31/12/2020 | |

| | |
|------------------------------------|--|
| COMMENTS | |
| Kaal koos p aramootoriga Yamaha F4 | |

| | |
|------------------------|--|
| MOVABLE BALLAST | |
| N/A | |

| | |
|--------------------|--|
| CENTERBOARD | |
| N/A | |

| SAILS INVENTORY | | | | | | | | | | | | | | | | |
|----------------------------------|------|------|------|------|------|-------|----------|-----------|-------------|-------------|----------|----------|-----------|-------------|----------|---------|
| MAINSAIL (1) | | | | | | | | | | | | | | | | |
| Id | MHB | MUW | MTW | MHW | MQW | Area | Measurer | Meas.Date | Manufacture | Material | Comment | | | | | |
| 1 | 0.13 | 0.68 | 1.22 | 2.03 | 2.65 | 17.05 | | | | | | | | | | |
| HEADSAILS (1) | | | | | | | | | | | | | | | | |
| Id | HHB | HUW | HTW | HHW | HQW | HLP | HLU | Ovrlp | Area | Btn | Flying | Measurer | Meas.Date | Manufacture | Material | Comment |
| 1 | 0.05 | 0.59 | 1.17 | 2.34 | 3.56 | 4.78 | 8.36 | 174% | 19.83 | | No | | | | | |
| SYMMETRIC SPINNAKERS (1) | | | | | | | | | | | | | | | | |
| Id | SLU | SLE | SL | SHW | SFL | Area | Measurer | Meas.Date | Manufacture | Material | Comment | | | | | |
| 1 | 8.10 | 8.10 | 8.10 | 6.00 | 5.30 | 39.56 | | | | | | | | | | |
| ASYMMETRIC SPINNAKERS (0) | | | | | | | | | | | | | | | | |
| Id | SLU | SLE | SL | SHW | SFL | Area | Kind | Measurer | Meas.Date | Manufacture | Material | Comment | | | | |



2020

ORC Club Certificate Appendix

| BOAT | | | |
|-------------|-----------------|--------------------|------------------|
| Name | MARY LOU | Certificate Number | Est688 |
| Sail Nr | EST 688 | Issued On | 5/21/2020 |

| TIME ALLOWANCES | | | | | | | |
|-------------------------|---------------|---------------|--------------|--------------|--------------|--------------|--------------|
| Wind Velocity | 6 kt | 8 kt | 10 kt | 12 kt | 14 kt | 16 kt | 20 kt |
| Beat VMG | 1281.3 | 1070.8 | 970.5 | 931.2 | 915.1 | 908.1 | 912.8 |
| 52° | 832.8 | 705.9 | 645.4 | 626.6 | 618.8 | 615.2 | 614.7 |
| 60° | 783.8 | 669.2 | 621.9 | 605.3 | 598.4 | 594.9 | 593.5 |
| 75° | 747.2 | 643.3 | 604.7 | 586.5 | 575.9 | 570.0 | 565.5 |
| 90° | 756.2 | 641.8 | 599.0 | 578.9 | 563.3 | 551.0 | 536.0 |
| 110° | 764.0 | 634.0 | 588.4 | 563.3 | 543.7 | 532.2 | 514.1 |
| 120° | 792.3 | 647.8 | 593.6 | 565.9 | 541.3 | 518.7 | 493.9 |
| 135° | 894.8 | 718.5 | 617.8 | 582.2 | 556.6 | 531.0 | 484.9 |
| 150° | 1038.0 | 822.0 | 687.0 | 611.8 | 580.6 | 556.7 | 509.2 |
| Run VMG | 1198.5 | 947.6 | 792.2 | 685.6 | 620.3 | 586.7 | 540.0 |
| Selected Courses | | | | | | | |
| Windward / Leeward | 1239.9 | 1009.2 | 881.4 | 808.4 | 767.7 | 747.4 | 726.4 |
| Circular Random | 1046.6 | 847.9 | 743.4 | 684.9 | 651.0 | 630.4 | 607.0 |
| Coastal / Long Distance | 1235.8 | 946.4 | 792.7 | 707.5 | 663.3 | 629.2 | 575.3 |
| Non Spinnaker | 1087.1 | 876.9 | 765.3 | 701.9 | 664.5 | 641.6 | 616.2 |

| 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 | 43.5° | 42.0° | 42.8° | 42.4° | 42.0° | 42.2° | 42.8° |
| Beat VMG | 2.81 | 3.36 | 3.71 | 3.87 | 3.93 | 3.96 | 3.94 |
| 52° | 4.32 | 5.10 | 5.58 | 5.75 | 5.82 | 5.85 | 5.86 |
| 60° | 4.59 | 5.38 | 5.79 | 5.95 | 6.02 | 6.05 | 6.07 |
| 75° | 4.82 | 5.60 | 5.95 | 6.14 | 6.25 | 6.32 | 6.37 |
| 90° | 4.76 | 5.61 | 6.01 | 6.22 | 6.39 | 6.53 | 6.72 |
| 110° | 4.71 | 5.68 | 6.12 | 6.39 | 6.62 | 6.76 | 7.00 |
| 120° | 4.54 | 5.56 | 6.06 | 6.36 | 6.65 | 6.94 | 7.29 |
| 135° | 4.02 | 5.01 | 5.83 | 6.18 | 6.47 | 6.78 | 7.42 |
| 150° | 3.47 | 4.38 | 5.24 | 5.88 | 6.20 | 6.47 | 7.07 |
| Run VMG | 3.00 | 3.80 | 4.54 | 5.25 | 5.80 | 6.14 | 6.67 |
| Gybe Angles | 149.0° | 153.0° | 151.0° | 166.0° | 180.0° | 180.0° | 180.0° |