



ORC
Offshore Racing Congress
World leader in rating technology

2020
ORC Club
Certificate

Rating Office

Offshore
Racing
Congress



Certificate

Number **US6324**
Issued On **28/09/2020**
ORC Ref **03410000QW7**
VPP Ver. **2020 1.02**
Valid until **31/12/2020**

Crew Weight

Default 854kg
Maximum **935kg**
Minimum* **701kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

| | ToD | ToT |
|--------------|--------------|---------------|
| Non Spin GPH | 577.1 | 1.0397 |
| Non Spin OSN | 563.4 | 1.0650 |

Sails Limitations

Headsails **7** Spinnakers **5**

Asymmetric on centerline

Spinnaker configuration
Symmetric: **No**
Asymmetric: **Yes 186.04**
Flying H/S: **No**
Spin. Pole: **No**

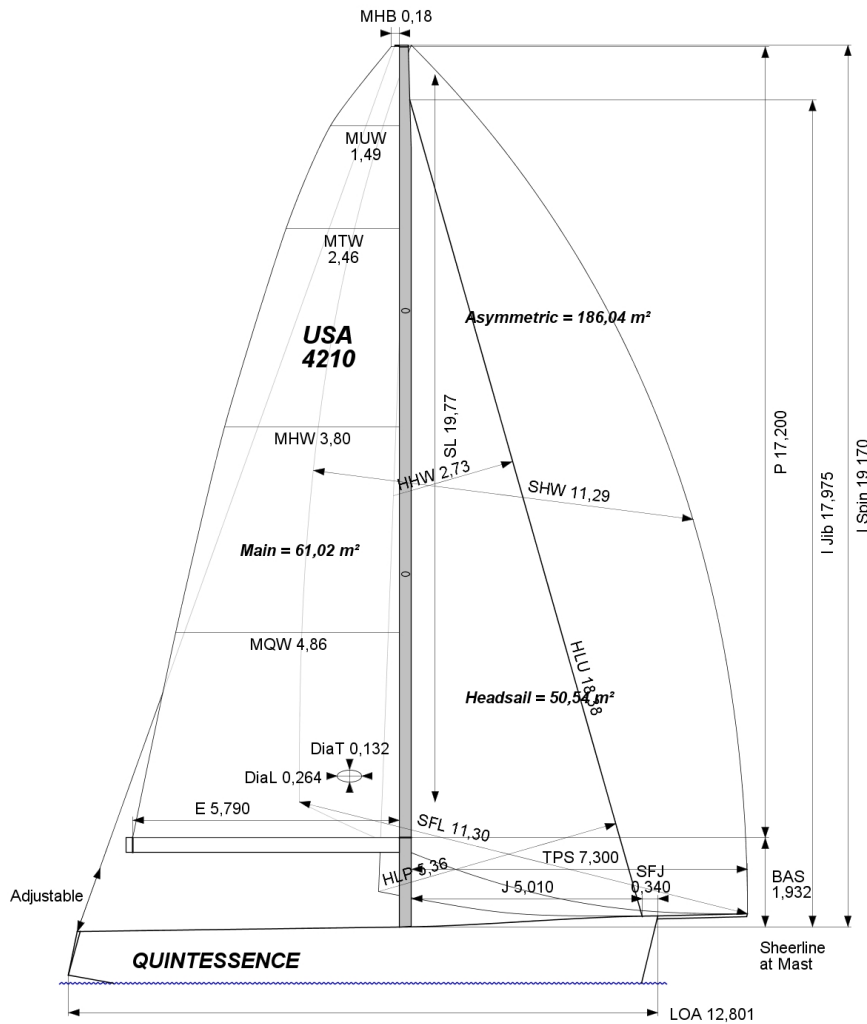
Class Division Length

CDL = 11.597

Stability (Estimated)

Limit Positive Stab.: **136.3°**
Stability Index: **139.3**

Owner



| BOAT | | GPH | HULL | | | |
|---|-------------------------|--------------------|-----------------------------------|---|------------------------|---------------|
| Name QUINTESSENCE Sail Nr USA 4210 | | 540.2 | Data File US6324 | LOA 12.801m | | |
| | | | Offset File SWAN42CLUB.O | MB 3.910m | | |
| | | | Displacement 7,846kg | Draft 2.752m | | |
| | | | IMS Division Cruiser/Racer | Dynamic All. 0.000% | | |
| | | | Plan Review | Construction Cored | | |
| | | | Fiber Rigging No | Aramid Core No | | |
| | | | Crew Arm Ex | Carbon Rudder Yes | | |
| | | | | Light Stanchions | | |
| | | | IMSL 11.893m | VCGD -0.478m | Sink 24.55kg/mm | |
| | | | RL 11.310m | VCGM -0.382m | WS 33.31m² | |
| | | | LSM0 11.628m | Displacement/Length ratio 4.9904 | | |
| | | | Water Ballast 0 | Trim Tab | | |
| | | | BLR Index 0.0000 | | | |
| CLASS | | CENTERBOARD | | | | |
| Class SWAN 42 NYYC | | N/A | | | | |
| Designer FRERS | | | | | | |
| Builder NAUTOR | | | | | | |
| Series 01/2006 | | | | | | |
| Age Date 01/2007 | | | | | | |
| Age Allowance 0.455% | | | | | | |
| COMMENTS | | | | | | |
| FLOAT ADJUSTED TO MATCH IRC SCALE OD Offsets 2020 | | | | | | |
| PROPELLER | | | | | | |
| Installation Strut | | PRD 0.430 | | | | |
| Type Folding 2 blades | | PBW 0.110 | | | | |
| | | PIPA 0.0041 | | | | |
| SCORING OPTIONS | | | | | | |
| | COASTAL / LONG DISTANCE | | | WINDWARD / LEEWARD | | |
| Time on Distance | 526.2 | | | 590.7 | | |
| Time on Time | 1.1402 | | | 1.1428 | | |
| Triple Number | Low | Medium | High | Low | Medium | High |
| Time on Distance | 607.1 | 481.9 | 433.9 | 781.6 | 591.5 | 525.9 |
| Time on Time | 1.1118 | 1.4008 | 1.5557 | 0.8636 | 1.1412 | 1.2834 |

2020

ORC Club Certificate Appendix

| BOAT | | | |
|-------------|---------------------|--------------------|-------------------|
| Name | QUINTESSENCE | Certificate Number | US6324 |
| Sail Nr | USA 4210 | Issued On | 28/09/2020 |

| TIME ALLOWANCES | | | | | | | |
|-------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Wind Velocity | 6 kt | 8 kt | 10 kt | 12 kt | 14 kt | 16 kt | 20 kt |
| Beat VMG | 886.1 | 731.1 | 656.1 | 627.9 | 615.1 | 606.6 | 592.8 |
| 52° | 583.2 | 492.3 | 459.1 | 447.5 | 442.1 | 439.1 | 431.1 |
| 60° | 552.2 | 475.1 | 448.3 | 436.1 | 430.0 | 426.2 | 418.9 |
| 75° | 528.2 | 464.3 | 439.6 | 423.7 | 411.2 | 403.8 | 396.5 |
| 90° | 532.4 | 464.8 | 438.6 | 420.1 | 402.5 | 387.2 | 368.2 |
| 110° | 537.3 | 456.2 | 426.1 | 408.6 | 394.7 | 381.0 | 355.5 |
| 120° | 550.2 | 460.9 | 428.1 | 401.3 | 380.0 | 364.6 | 336.6 |
| 135° | 611.7 | 492.5 | 444.6 | 417.3 | 389.3 | 361.3 | 307.4 |
| 150° | 726.4 | 580.6 | 493.0 | 447.0 | 426.6 | 405.6 | 353.1 |
| Run VMG | 838.7 | 670.4 | 569.2 | 515.6 | 490.9 | 460.6 | 407.7 |
| Selected Courses | | | | | | | |
| Windward / Leeward | 862.4 | 700.8 | 612.7 | 571.8 | 553.0 | 533.6 | 500.2 |
| Circular Random | 733.5 | 596.5 | 524.7 | 484.0 | 458.9 | 441.2 | 414.1 |
| Coastal / Long Distance | 860.1 | 659.7 | 556.0 | 500.4 | 471.2 | 444.5 | 397.9 |
| Non Spinnaker | 801.0 | 644.3 | 559.7 | 510.0 | 478.7 | 457.6 | 429.1 |

| 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 | 42.4° | 40.7° | 39.4° | 37.9° | 37.5° | 36.9° | 36.8° |
| Beat VMG | 4.06 | 4.92 | 5.49 | 5.73 | 5.85 | 5.93 | 6.07 |
| 52° | 6.17 | 7.31 | 7.84 | 8.04 | 8.14 | 8.20 | 8.35 |
| 60° | 6.52 | 7.58 | 8.03 | 8.26 | 8.37 | 8.45 | 8.59 |
| 75° | 6.82 | 7.75 | 8.19 | 8.50 | 8.75 | 8.92 | 9.08 |
| 90° | 6.76 | 7.75 | 8.21 | 8.57 | 8.94 | 9.30 | 9.78 |
| 110° | 6.70 | 7.89 | 8.45 | 8.81 | 9.12 | 9.45 | 10.13 |
| 120° | 6.54 | 7.81 | 8.41 | 8.97 | 9.47 | 9.87 | 10.70 |
| 135° | 5.89 | 7.31 | 8.10 | 8.63 | 9.25 | 9.96 | 11.71 |
| 150° | 4.96 | 6.20 | 7.30 | 8.05 | 8.44 | 8.88 | 10.20 |
| Run VMG | 4.29 | 5.37 | 6.32 | 6.98 | 7.33 | 7.82 | 8.83 |
| Gybe Angles | 143.0° | 145.3° | 149.0° | 152.0° | 152.0° | 176.0° | 143.3° |