

GPH = 865.7 **CDL = 4.545**

BOAT

Class **ORION 20**
Designer
Builder **Conrad**
Age Date **01/1977**
Series Date **01/1977**
Offset File **ORION20.off**

HULL

Length Overall **6.000 m**
Maximum Beam **2.300 m**
Draft **0.726 m**
Displacement **500 kg**
DLR **3.6661**
IMS Division **Cruiser/Racer**
Dynamic Allowance **0.279%**
Age Allowance **0.487%**

PROPELLER

Installation **No Propeller**
Type **N/A**
Diameter **N/A**

CREW

Maximum weight **300 kg**
Minimum weight **215 kg * when applied**
Non Manual Power **No**
Crew Arm Extension

SAIL AREAS (m²)

	Measured	Rated
Mainsail	9.09	9.37
Headsail Luffed	6.33	6.54
Headsail Flying		
Symmetric		
Asymmetric		

SAIL LIMITATIONS

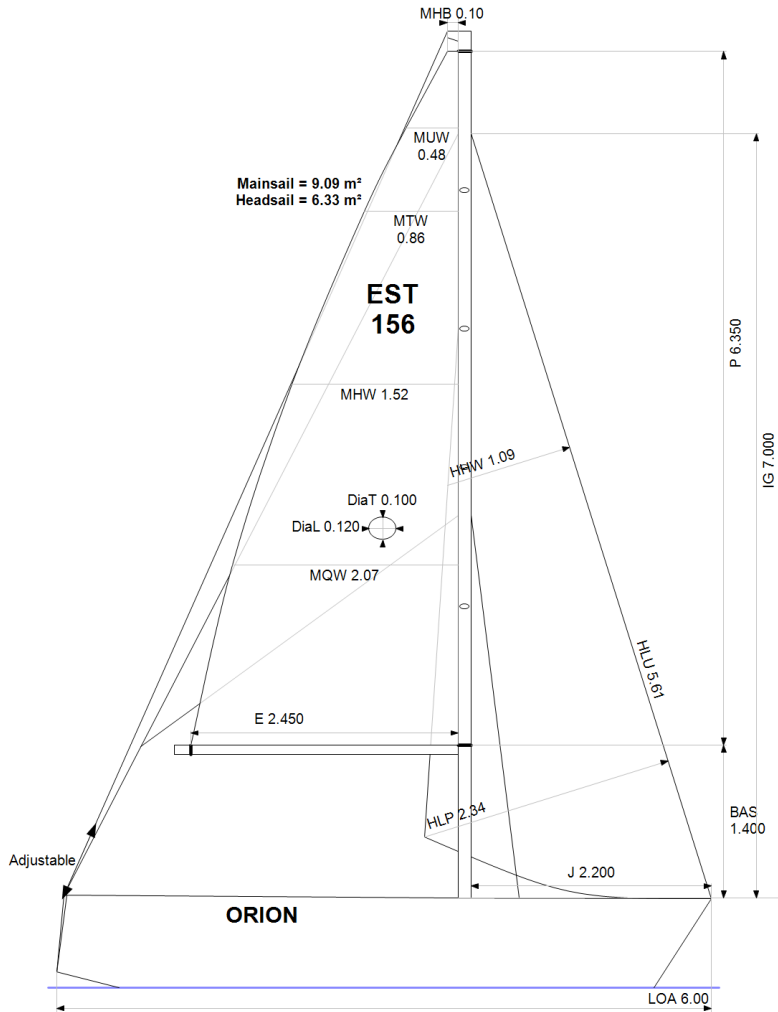
Headsails **5** * Woven polyester sails
Spinnakers **0** * No spinnaker pole aboard

STABILITY

Righting Moment **10.4 kg·m**
Stability Index **N/A**

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	44.3°	44.3°	44.3°	44.6°	44.3°	44.6°	49.7°
Beat VMG	2.47	2.92	3.23	3.42	3.55	3.56	3.25
52°	3.82	4.50	4.93	5.17	5.34	5.40	5.20
60°	4.08	4.77	5.13	5.36	5.57	5.73	5.65
75°	4.31	4.97	5.29	5.55	5.84	6.12	6.39
90°	4.30	4.99	5.34	5.69	6.05	6.44	7.10
110°	4.07	4.86	5.28	5.59	5.95	6.30	7.28
120°	3.84	4.65	5.17	5.48	5.82	6.17	7.03
135°	3.42	4.23	4.89	5.27	5.57	5.90	6.62
150°	3.00	3.81	4.51	5.04	5.36	5.66	6.31
Run VMG	2.66	3.45	4.14	4.76	5.18	5.49	6.14
Gybe Angles	175.0°	179.0°	179.0°	180.0°	180.0°	180.0°	180.0°

Time Allowances in secs/NM								Single Number Scoring Options		
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt	Course	Time On Distance	Time On Time
Beat VMG	1458.9	1233.5	1115.8	1052.5	1014.0	1012.5	1106.9	Windward / Leeward	950.7	0.6311
52°	941.9	799.5	730.2	696.2	674.6	667.0	692.1			
60°	882.5	754.4	701.4	672.1	646.3	628.8	636.9	All purpose	771.4	0.7778
75°	836.2	725.0	680.7	648.7	616.3	588.1	563.0			
90°	836.3	721.1	673.7	633.1	594.6	559.4	507.4			
110°	884.2	741.1	682.1	643.6	605.5	571.0	494.8			
120°	936.7	773.9	697.0	656.7	618.7	583.9	512.3			
135°	1051.4	850.2	736.6	682.8	646.1	609.8	543.7			
150°	1200.5	944.1	799.1	715.0	671.6	636.1	570.5			
Run VMG	1353.6	1042.8	868.8	757.0	694.8	656.2	586.7			
Selected Courses										
Windward / Leeward	1406.2	1138.1	992.3	904.7	854.4	834.3	846.8			
All purpose	1086.4	896.3	801.3	745.7	707.9	684.3	670.1			

Custom scoring options for Estonia

Single Number	Time On Distance	Time On Time
Coastal/Long Distance	839.6	0.7146
Triple Number Coastal/Long Distance Low	991.2	0.6053
Triple Number Coastal/Long Distance Medium	767.3	0.7820
Triple Number Coastal/Long Distance High	684.9	0.8761
Triple Number Windward/Leeward Low	1272.3	0.4716
Triple Number Windward/Leeward Medium	940.7	0.6378
Triple Number Windward/Leeward High	844.0	0.7109

Performance Curve	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Coastal/Long Distance	1401.0	1070.2	899.7	799.2	736.8	690.0	615.2