



World Leader in Rating Technology

2009 ORC Club Certificate

Rating Office

Jadralna zveza Slovenije
Kopališko nabrežje 5
SI-6000 Koper
Slovenija

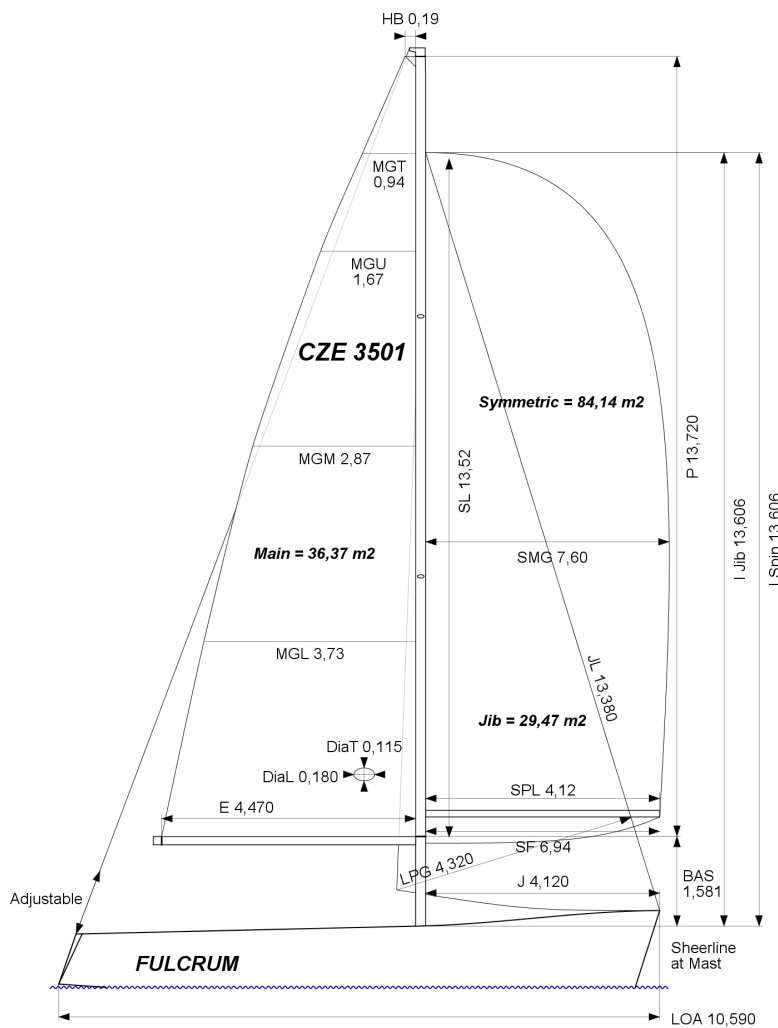


JADRALNA ZVEZA SLOVENIJE
SLOVENIAN SAILING FEDERATION

Certificate

Number **C15/09**
Issued On **30.4.2009**
ORC Ref **SLO00000237**
VPP Ver. **1.11**
Valid until **31.12.2009**

Comments



BOAT		GPH		HULL		
Name Fulcrum Sail Nr CZE 3501		610,3		Data File CZE3501.dxt	LOA 10,590 m	
				Offset File A35.OFF	MB 3,597 m	
				Displacement 4.816 kg	Draft 2,086 m	
CLASS		IMS Regulations Division Cruiser/Racer				
Class A-35		Dynamic Allowance 0,519%				
Designer NIVELT BERNARD		Forward Accommodation Yes				
Builder ARCHAMBAULT		Hull Construction Cored				
Series 11.2005		Carbon Mast No				
Age Date 06.2008		Carbon Rudder No				
Age Allowance 0,260%		IMS L 9,853		Wetted Area 23,44 m2 VCGM 0,070		
HEAVY ITEMS		PROPELLER				
Bow Thruster	No	Generator	No	Installation	Strut Drive	
Windlass	Yes	Jib Furler	No	Type	Folding	
Heavy Deck	No	Main Furler	No		PRD	
Headliners	Yes	Water Heater	Yes			
Anchor Weight	10,0	Heavy Items Adjustment	0,0023			
Anchor LCG	3,25	Total Gyradius Adjustment	0,0283			
SCORING OPTIONS						
	OFFSHORE			INSHORE		
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time On Distance	610,3			680,3		
Time On Time	0,9831			0,9922		
Performance Line	PLT	PLD		PLT	PLD	
	0,807	67,4		0,932	233,0	
Triple Number	Low	Medium	High	Low	Medium	High
	0,9435	1,2559	1,4482	0,7163	1,0003	1,1838

Crew Weight

Declared **611 kg**
Default* **611 kg**

Special Scoring

ToD ToT
Double Handed **611,9 0,9805**
Non Spinnaker **660,9 0,9079**

Sails Limitations

Genoas **0** Spinnakers **4**
Jibs **5**

Spinnaker configuration

Symmetric: **Yes 84,14**
Asymmetric: **No**
Code Zero: **No**
Spin. Pole: **Yes**

Stability

LPS (Estimated): **115,5°**
Stability Index: **113,4**
OSR Category: **2**

Owner



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2009

ORC Club Certificate Appendix

BOAT

Name **Fulcrum** Certificate Number **C15/09**
 Sail Nr **CZE 3501** Issued On **30.4.2009**

TIME ALLOWANCES

Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1072,5	869,4	753,5	700,5	671,8	654,1	638,2
52°	693,0	574,6	511,3	480,4	468,2	460,1	452,1
60°	648,9	548,3	494,0	462,4	449,2	441,4	433,1
75°	615,0	519,5	465,3	449,6	427,4	414,1	403,3
90°	581,3	496,8	451,2	428,0	417,5	408,7	376,9
110°	596,1	512,2	469,8	436,3	403,1	380,2	357,4
120°	635,4	534,7	484,5	453,2	423,8	390,6	335,7
135°	738,2	592,7	520,5	479,5	451,9	427,7	376,3
150°	886,2	696,5	586,1	522,5	483,1	456,3	412,0
Run VMG	1023,3	804,3	676,2	593,9	536,6	496,8	446,4

Selected Courses

Windward / Leeward	1066,5	848,7	726,6	655,6	611,4	582,0	547,7
Circular Random	854,1	684,4	591,6	536,2	500,9	476,8	444,5
Ocean for PCS	912,9	715,7	604,5	535,5	489,2	455,4	404,8
Non Spinnaker	944,1	748,1	639,4	573,7	531,7	503,4	467,7

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	43,6°	42,3°	40,3°	39,4°	38,3°	37,4°	36,9°
Beat VMG	3,36	4,14	4,78	5,14	5,36	5,50	5,64
52°	5,19	6,26	7,04	7,49	7,69	7,82	7,96
60°	5,55	6,57	7,29	7,78	8,01	8,16	8,31
75°	5,85	6,93	7,74	8,01	8,42	8,69	8,93
90°	6,19	7,25	7,98	8,41	8,62	8,81	9,55
110°	6,04	7,03	7,66	8,25	8,93	9,47	10,07
120°	5,67	6,73	7,43	7,94	8,50	9,22	10,72
135°	4,88	6,07	6,92	7,51	7,97	8,42	9,57
150°	4,06	5,17	6,14	6,89	7,45	7,89	8,74
Run VMG	3,52	4,48	5,32	6,06	6,71	7,25	8,06
Gybe Angles	142,5°	146,5°	151,8°	161,5°	166,7°	171,6°	173,7°