

BOAT Name Rival Sail Nr USA 93664	GPH 555.1	HULL Length Overall 13.305m Maximum Beam 4.054m Displacement 9,565kg Draft 2.345m IMS Reg. Division Cruiser/Racer Dynamic Allowance 0.080% Fwd Accommodation Yes Hull Construction Cored Carbon Rudder Crew Arm Extension
GENERAL Class XP 44 Designer Jeppesen Builder X-Yachts Series 12/2010 Age 03/2016 Age Allowance 0.228% Offset File XP44SD.off - 28/07/2011 11:45:18 Measurement by Dobbs Davis - 17/03/2016		IMSL 12.358m VCGD -0.099m Sink 27.54kg/mm RL 10.311m VCGM -0.083m WS 37.08m² LSMO 12.152m Displacement/Length ratio 5.3302



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SCORING OPTIONS	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
	Time On Distance	540.8			607.4	
Time On Time	1.1095			1.1112		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	637.5	491.5	435.8	830.8	610.6	527.2
Time on Time	1.0589	1.3733	1.5487	0.8125	1.1055	1.2804

TIME ALLOWANCES	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	970.8	801.4	703.5	657.6	636.3	625.3	609.6
52°	627.5	523.9	468.5	448.4	440.4	436.2	429.6
60°	586.8	493.4	451.2	434.2	426.8	422.5	416.9
75°	552.9	471.6	439.3	421.5	408.2	399.9	392.2
90°	552.9	462.8	438.0	419.6	402.9	386.4	364.4
110°	549.8	457.3	423.9	407.0	394.5	382.3	359.4
120°	564.7	465.7	428.8	404.1	382.3	368.4	344.9
135°	627.6	507.6	448.6	421.6	398.0	372.7	323.2
150°	744.9	598.3	504.3	450.4	424.4	402.7	357.0
Run VMG	860.1	690.9	582.3	514.7	473.3	440.1	397.0

Selected Courses	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Windward / Leeward	915.4	746.2	642.9	586.2	554.8	532.7	503.3
Circular Random	765.3	617.6	538.5	492.5	463.8	444.3	417.6
Ocean for PCS	939.6	726.0	605.3	531.2	482.8	448.6	400.0
Non Spinnaker	833.3	665.7	574.0	519.6	485.4	462.6	433.0

Velocity Prediction in Knots for True Wind Speeds	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat Angles	44.0°	42.8°	42.5°	41.0°	40.0°	39.9°	39.5°
Beat VMG	3.71	4.49	5.12	5.47	5.66	5.76	5.91
52°	5.74	6.87	7.68	8.03	8.17	8.25	8.38
60°	6.14	7.30	7.98	8.29	8.44	8.52	8.63
75°	6.51	7.63	8.19	8.54	8.82	9.00	9.18
90°	6.51	7.78	8.22	8.58	8.93	9.32	9.88
110°	6.55	7.87	8.49	8.85	9.13	9.42	10.02
120°	6.37	7.73	8.40	8.91	9.42	9.77	10.44
135°	5.74	7.09	8.02	8.54	9.04	9.66	11.14
150°	4.83	6.02	7.14	7.99	8.48	8.94	10.08
Run VMG	4.19	5.21	6.18	6.99	7.61	8.18	9.07
Gybe Angles	143.2°	146.7°	148.3°	155.1°	164.2°	180.0°	180.0°

Certificate

Number **US6008**
ORC Ref **USA00000984**
Issued On **24/05/2017**
VPP Ver. **2017 1.00**
Valid until **28/02/2018**

Crew Weight

Declared **909kg**
Default* **909kg**
Non Manual Pwr **No**

Special Scoring

ToD ToT
Non Spin GPH **592.6 1.0125**
Non Spin OSN **577.4 1.0391**

Sails Limitations

Headsails	Spinnakers
6	4

Class Division Length

CDL = 11.335

Storm Sails Areas

Heavy Weather Jib **45.29**
Storm Jib (JL=11.91) **16.77**
Storm Triesail **18.68**

Owner

BOAT		
Name Rival	Sail Nr USA93664	
File US6008	Data in meters/kilograms	

INCLINING TEST AND FREEBOARDS					
Inclining Test Current Inclining					
Flotation date 17/03/2016				SG 1.0010	
FFM 1.484	FF 1.495	SFFP 0.744			
FAM 1.206	FA 1.213	SAFP 13.259			
W1 115.6	PD1 438.1	WD 12.235			
W2 115.6	PD2 438.1	GSA 1.0			
W3 115.6	PD3 438.1	RSA 1.0			
W4 115.6	PD4 438.1	PLM 9000.0			
LCF from stem on CL / on sheer				7.421 / 7.679	
Maximum beam station from stem				9.119	
RM Measured				254.2kg·m	
RM Default				264.7kg·m	
Limit of positive stability / Stab.Index				125.7° / 130.8	
Freeboard at mast at 5.256				1.336	

RIG					
Forestay Tension Aft	Spreaders 2				
Inner Stay None Fitted	Runners 0				
Carbon Mast Yes	Jumper Struts None				
Taper Hollows	Jib Furler Yes				
Fiber Rigging	Main Furler				
Lenticular Rigging	Without Backstay				
Articulated Bowsprit No					
P 17.923	E 5.955	MDT1 0.134	MW 0.262		
IG 18.250	J 4.971	MDL1 0.262	GO 0.280		
ISP 19.720	SFJ 0.285	MDT2 0.119	BD 0.305		
BAS 1.795	SPL 5.835	MDL2 0.193	MWT 259.40		
FSP 0.080	TPS 5.846	TL 1.180	MCG 6.201		

MIZZEN RIG AND SAILS					
N/A					

PROPELLER					
Installation Strut	PRD 0.430				
Type Feathering 3 blades	PBW 0.120				
Twin Screw	PIPA 0.0042				
ST1 0.050	ST3 0.180	ST5 0.320			
ST2 0.180	ST4 0.112	EDL 2.650			

COMMENTS					
XP 44SD					

MOVEABLE BALLAST					
N/A					

CENTERBOARD					
N/A					

SAILS (Maximum Areas)									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	0.160	1.29	2.26	3.87	5.01	63.79	65.00	P/8 · (E + 2·MQW + 2·MHW + 1.5·MTW + MUW + 0.5·MHB)	
Symmetric	SLU	SLE	SL	SHW	SFL				
	20.38	20.38	20.38	11.00	10.46	184.98		SL · (SFL + 4·SHW) / 6	
Asymmetric	SLU	SLE	SL	SHW	SFL				
	21.61	18.62	20.11	10.92	11.57	185.23		AS · (SFL + 4·SHW) / 6	

HEADSAILS												
Area = 0.1125·HLU · (1.445·HLP + 2·HQW + 2·HHW + 1.5·HTW + HUW + 0.5·HHB)												
HHB	HUW	HTW	HHW	HQW	HLP	HLU	Area	Btn	Fly	Meas.Date	Material	Comment
0.09	0.74	1.39	2.67	4.00	5.33	18.16	48.85	Y		06/03/2016	Carbon	



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IMS Measurement Certificate

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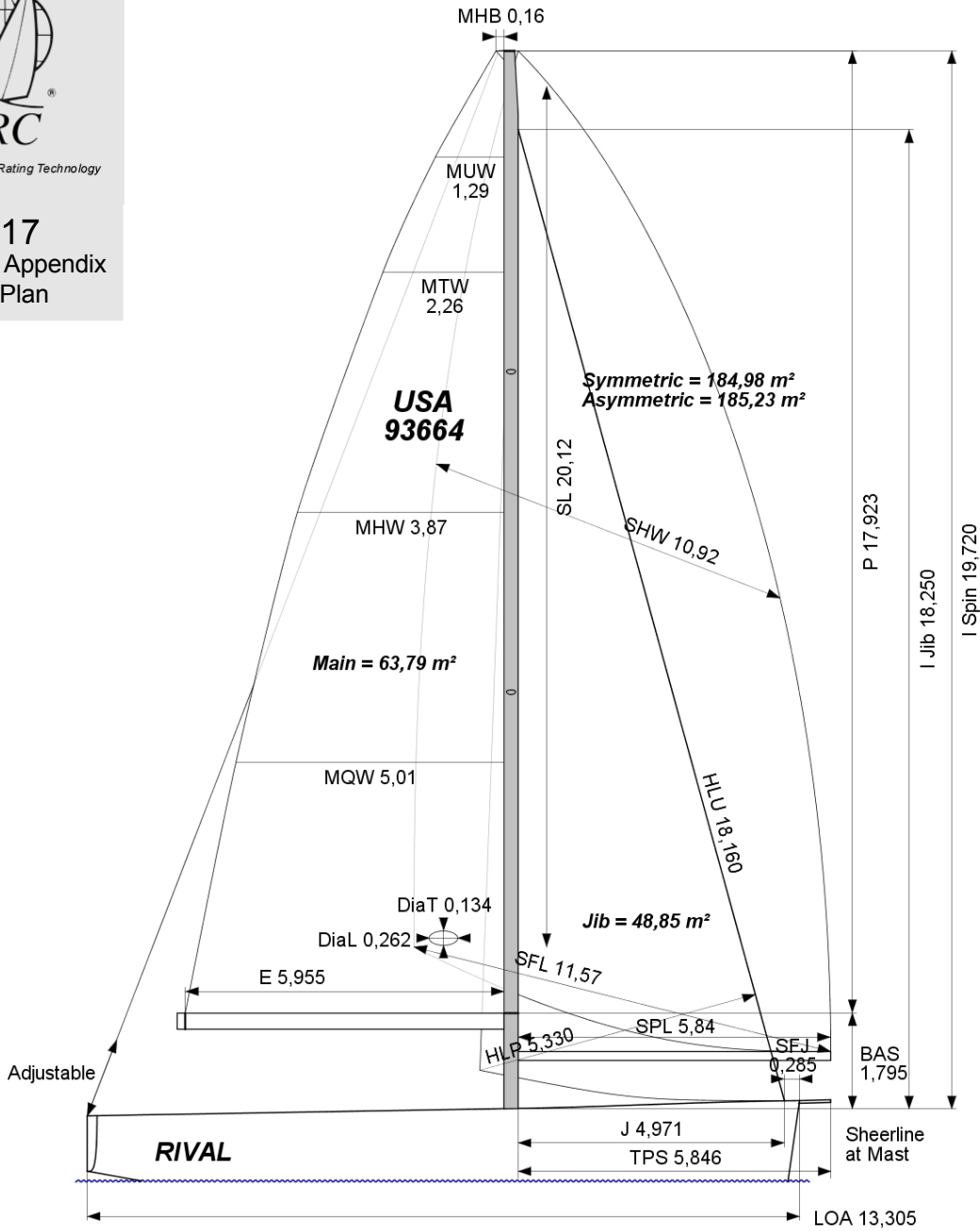


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Sail Plan



SAILS INVENTORY																
MAINSAIL (1)																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
101029	0.160	1.29	2.26	3.87	5.01	63.79	Quantum		Quantum	Carbon						
HEADSAILS (1)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
101030	0.09	0.74	1.39	2.67	4.00	5.33	18.16	107%	48.85	Y			06/03/2016	Quantum	Carbon	
SYMMETRIC SPINNAKERS (1)																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
114033	20.38	20.38	20.38	11.00	10.46	184.98				Unknown						
ASYMMETRIC SPINNAKERS (2)																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				
104212	21.61	18.62	20.12	10.92	11.57	185.23	asym		02/02/2016	Quantum	Nylon	A1				
101116	21.05	19.12	20.09	9.77	10.90	167.31	asym		02/12/2015	Quantum	Nylon	A3				