

BOAT Name Kujavnik Sail Nr SLO 538	GPH 587.8	HULL Length Overall 11.580m Maximum Beam 3.670m Displacement 7,219kg Draft 2.409m IMS Reg. Division Cruiser/Racer Dynamic Allowance 0.109% Fwd Accommodation Yes Hull Construction Cored Carbon Rudder No Crew Arm Extension
GENERAL Class XP-38 Designer JEPPESEN Builder X-YACHTS Series 02/2011, CIN DKXYA38546C414 Age 04/2014 Age Allowance 0.260% Offset File Xp38-24v.off - 11/06/2014 14:40:58 Measurement by - 10/04/2019		IMSL 10.817m VCGD -0.006m Sink 22.12kg/mm RL 9.669m VCGM -0.042m WS 30.05m² LSM0 10.665m Displacement/Length ratio 5.9511



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SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	572.7			642.2		
Time on Time	1.0478			1.0511		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	665.7	522.4	472.1	859.3	644.3	568.5
Time on Time	1.0139	1.2922	1.4298	0.7855	1.0476	1.1874

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	981.1	812.7	719.9	679.1	663.1	656.3	640.0
52°	645.6	544.8	495.8	477.6	471.0	467.7	461.4
60°	611.5	521.5	482.7	466.3	458.8	455.1	450.4
75°	585.2	505.6	473.5	456.2	444.1	435.9	429.2
90°	587.7	496.0	467.6	454.4	439.0	424.7	403.7
110°	581.3	489.8	456.5	435.5	422.3	411.9	391.2
120°	597.2	498.6	461.4	437.5	414.0	395.2	372.2
135°	665.9	542.1	481.3	453.8	430.7	406.8	359.7
150°	790.1	633.3	538.1	487.4	465.5	446.2	407.4
Run VMG	912.4	731.3	621.4	562.6	533.2	491.4	446.7

Selected Courses							
Windward / Leeward	946.7	772.0	670.6	620.8	598.1	573.9	543.4
Circular Random	801.9	650.3	570.5	525.3	498.1	479.9	454.8
Coastal / Long Distance	943.3	725.1	606.1	542.2	509.9	481.1	435.8
Non Spinnaker	872.0	699.0	605.1	550.2	516.2	493.9	465.2

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	42.5°	40.9°	40.3°	39.0°	38.2°	37.9°	38.0°
Beat VMG	3.67	4.43	5.00	5.30	5.43	5.49	5.62
52°	5.58	6.61	7.26	7.54	7.64	7.70	7.80
60°	5.89	6.90	7.46	7.72	7.85	7.91	7.99
75°	6.15	7.12	7.60	7.89	8.11	8.26	8.39
90°	6.13	7.26	7.70	7.92	8.20	8.48	8.92
110°	6.19	7.35	7.89	8.27	8.52	8.74	9.20
120°	6.03	7.22	7.80	8.23	8.70	9.11	9.67
135°	5.41	6.64	7.48	7.93	8.36	8.85	10.01
150°	4.56	5.68	6.69	7.39	7.73	8.07	8.84
Run VMG	3.95	4.92	5.79	6.40	6.75	7.33	8.06
Gybe Angles	143.4°	147.3°	148.5°	150.3°	152.9°	176.4°	178.0°

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Number **IP3/9**
ORC Ref **SLO00003905**
Issued On **24/05/2019**
VPP Ver. **2019 1.01**
Valid until **31/12/2019**

Crew Weight

Default **755kg**
Maximum **700kg**
Minimum* **525kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Double H.GPH	596.0	1.0066
Double H.OSN	582.0	1.0310
Non Spin GPH	624.6	0.9606
Non Spin OSN	606.9	0.9887

Sails Limitations

Headsails	Spinnakers
6	4

Class Division Length

CDL = 10.244

Storm Sails Areas

Heavy Weather Jib **36.51**
Storm Jib (JL=10.69) **13.53**
Storm Trysail **14.99**

Owner

BOAT	
Name Kujavnik	Sail Nr SLO 538
File SLO538	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS		
Inclining Test Current Inclining		
Flotation date 10/04/2019	SG 1.0260	
FFM 1.409	FF 1.411	SFFP 0.690
FAM 1.126	FA 1.126	SAFP 11.545
W1 90.0	PD1 498.3	WD 11.600
W2 90.0	PD2 494.8	GSA 1.0
W3 90.0	PD3 490.9	RSA 1.0
W4 90.0	PD4 485.3	PLM 9000.0
LCF from stem on CL / on sheer		6.509 / 6.750
Maximum beam station from stem		7.620
RM Measured		167.0kg-m
RM Default		177.3kg-m
Limit of positive stability / Stab.Index		122.7° / 126.5
Freeboard at mast at 4.630		1.192



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RIG			
Forestay Tension Aft	Spreaders 2		
Inner Stay None Fitted	Runners 0		
Carbon Mast Yes	Jumper Struts None		
Taper Hollows No	Jib Furler No		
Fiber Rigging No	Main Furler No		
Lenticular Rigging No	Without Backstay No		
Articulated Bowsprit No			
P 15.830	E 5.410	MDT1 0.115	MW 0.206
IG 16.293	J 4.330	MDL1 0.208	GO 0.246
ISP 17.853	SFJ 0.300	MDT2 0.098	BD 0.230
BAS 1.763	SPL	MDL2 0.170	MWT 183.00
FSP 0.070	TPS 5.200	TL 1.100	MCG 5.595

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MIZZEN RIG AND SAILS	
N/A	

PROPELLER		
Installation Strut	PRD 0.419	
Type Folding 2 blades	PBW 0.120	
Twin Screw No	PIPA 0.0035	
ST1 0.050	ST3 0.180	ST5 0.248
ST2 0.180	ST4 0.112	EDL 2.430

COMMENTS	

MOVABLE BALLAST	
N/A	

CENTERBOARD	
N/A	



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SAILS (Maximum Areas)									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	0.180	1.03	1.86	3.31	4.48	49.27	50.02	P/8 · (E + 2·MQW + 2·MHW + 1.5·MTW + MUW + 0.5·MHB)	
Symmetric Not Available									
Asymmetric on centerline	SLU	SLE	SL	SHW	SFL				
	18.00	16.32	17.16	9.06	9.15	129.82		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
0.11	0.70	1.31	2.46	3.54	4.55	16.20	38.81	Y		23/05/2019	Carbon	Light
0.06	0.45	0.86	1.73	2.61	3.47	11.75	20.44			23/05/2019	Spectra	Heavy

MEASUREMENT INVENTORY				
Measurer SLO03				
Date 10/04/2019				
Comment				
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>
<i>Id</i>	<i>Item</i>	<i>Maker</i>	<i>Model</i>	
1	Engine	Yanmar	28,7 kW	
<i>Id</i>	<i>Item</i>	<i>Weight Description</i>		

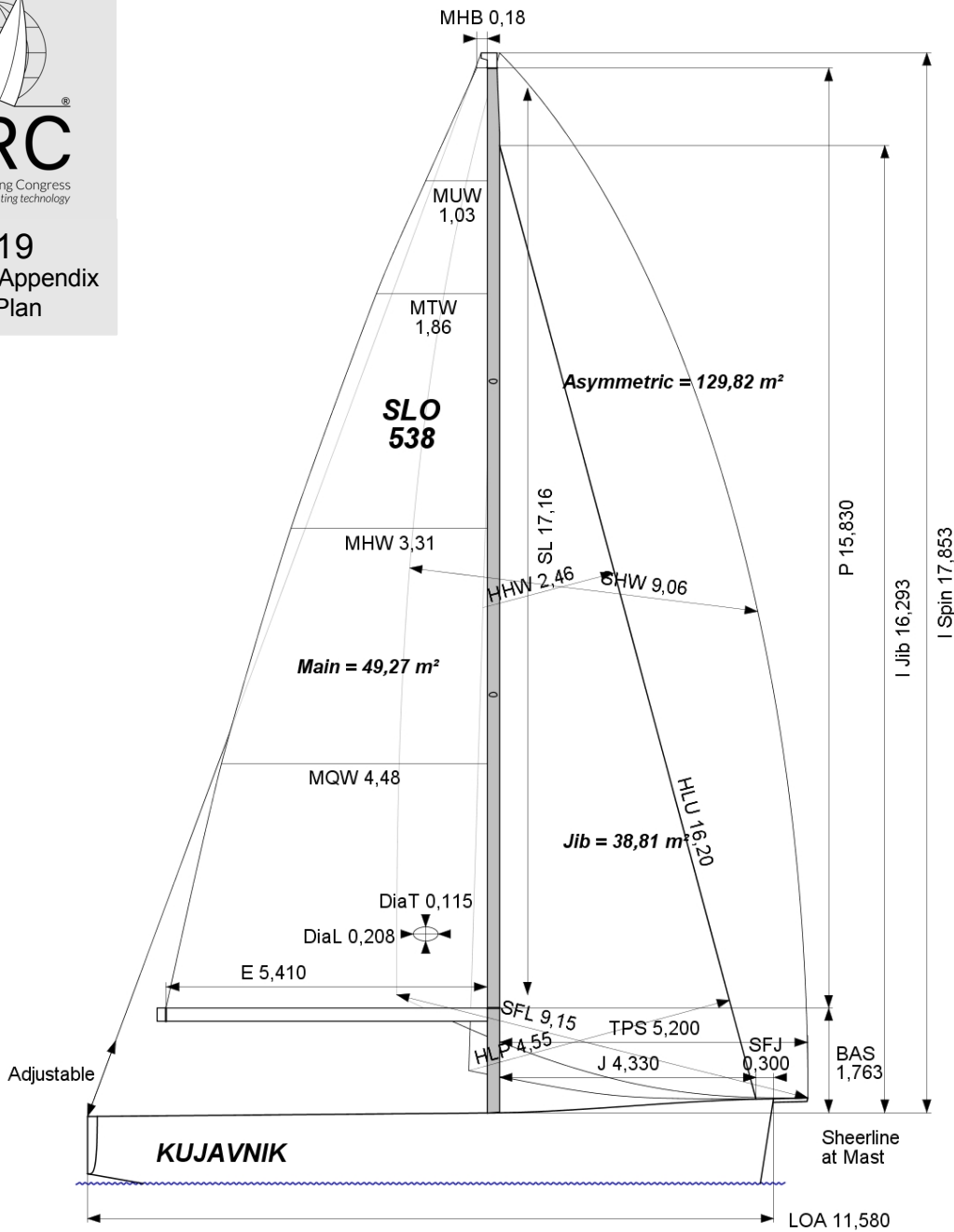
MEASUREMENT INVENTORY								
<i>Id</i>	<i>Item</i>	<i>Tank Use</i>	<i>Tank Type</i>	<i>Capcty</i>	<i>Dist.</i>	<i>VCG</i>	<i>Condtn</i>	<i>Description</i>
1	Tank	Black	Poly.	60.0	8.05	0.40	0-0	
2	Tank	Fuel	Inox	175.0	5.15	0.00	25-0	
3	Tank	Water	Inox	250.0	5.45	0.00	0-0	
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>				
1	Battery		3.85	Service: 2x 110 Ah				
2	Battery		8.65	Engine: 1x 55 Ah				



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Sail Plan



SAILS INVENTORY

MAINSAIL (1)																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
M1	0.18	1.03	1.86	3.31	4.48	49.28		23/05/2019	Štravs Sails	Carbon						
HEADSAILS (2)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
J1	0.11	0.70	1.31	2.46	3.54	4.55	16.20	105%	38.81	Y			23/05/2019	Štravs Sails	Carbon	Light
J4	0.06	0.45	0.86	1.73	2.61	3.47	11.75	80%	20.44				23/05/2019	Štravs Sails	Spectra	Heavy
SYMMETRIC SPINNAKERS (0)																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
ASYMMETRIC SPINNAKERS (2)																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				
B	18.00	16.32	17.16	9.06	9.15	129.82	asym		23/05/2019	Štravs Sails	Nylon	Light				
S	16.79	14.90	15.84	6.85	8.00	93.49	asym		23/05/2019	Štravs Sails	Nylon	Small				