

APH: **561.2**

CDL: **8.724**

GPH: **625.9**

CertNo:

### BOAT

Class **X-99**  
Designer **NIELS JEPPESEN**  
Builder **X-YACHTS**  
Age date **06/1985**  
Series date **04/1985**  
Offset file **X99.OD.OFF**  
Data file

### HULL

Length Overall **10.000 m**  
Maximum Beam **2.990 m**  
Draft **1.796 m**  
Displacement **3,073 kg**  
DLR **5.5353**  
IMS Division **Cruiser/Racer**  
Dynamic Allowance **0.000%**  
Age Allowance **0.487%**

### PROPELLER

Installation **Strut**  
Type **Folding 2 blades**  
Diameter **0.350m**

### CREW

Maximum weight **520 kg**  
Minimum weight **390 kg** \* when applied  
Non Manual Power **No**  
Crew Arm Extension

### SAIL AREAS (m<sup>2</sup>)

	Measured	Rated
Mainsail	<b>32.71</b>	<b>33.32</b>
Headsail Luffed	<b>28.07</b>	<b>28.07</b>
Headsail Flying		
Symmetric	<b>57.31</b>	<b>57.31</b>
Asymmetric		

### STORM SAIL AREAS (m<sup>2</sup>)

Trysail **9.85**  
Storm Jib **6.28**  
Heavy Weather Jib **16.94**

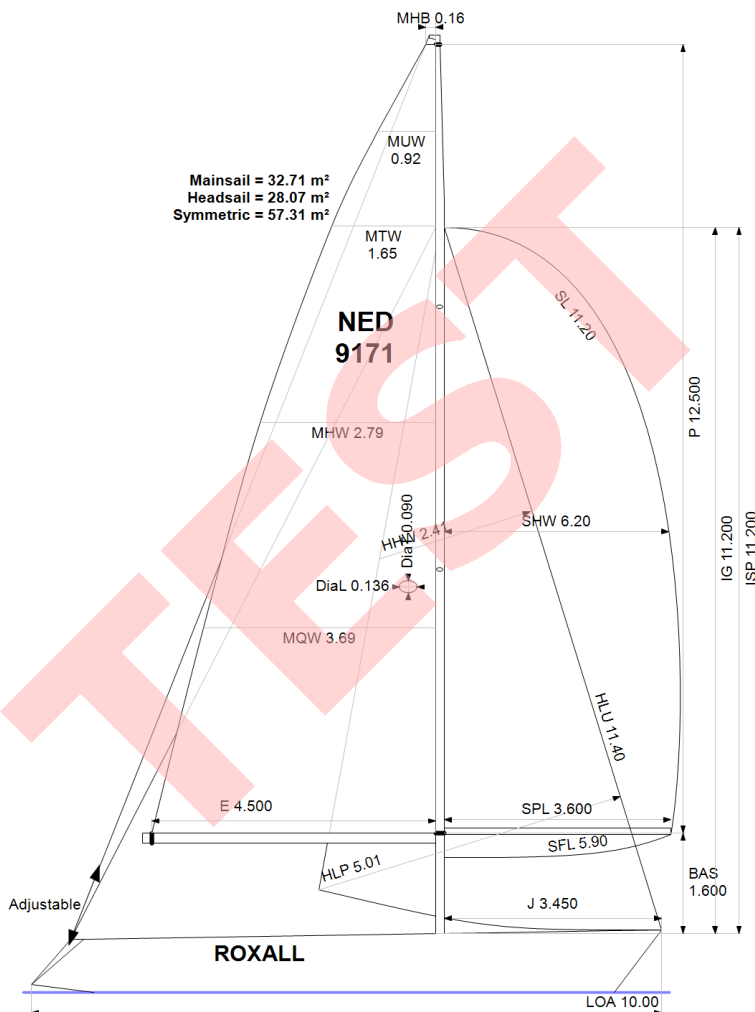
### SAIL LIMITS

Headsails **5**  
Spinnakers **4**

### STABILITY

Righting Moment **N/A**  
Stability Index **N/A**

*The owner and any other person in charge is responsible that boat is complying with her certificate in accordance with RRS 78.1 and ORC Rule 304.*



### Rated boat velocities in knots

Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat Angles	42.0°	39.4°	37.5°	36.9°	36.4°	36.0°	36.3°
Beat VMG	3.77	4.51	4.89	5.05	5.15	5.21	5.24
52°	5.68	6.48	6.82	6.97	7.06	7.13	7.20
60°	5.93	6.64	6.97	7.14	7.25	7.33	7.42
75°	6.07	6.75	7.10	7.34	7.52	7.65	7.81
90°	5.94	6.71	7.11	7.42	7.68	7.91	8.25
110°	5.62	6.64	7.17	7.58	7.95	8.29	8.83
120°	5.41	6.48	7.07	7.52	7.95	8.39	9.49
135°	4.81	5.94	6.70	7.18	7.62	8.09	9.32
150°	3.98	5.09	6.05	6.74	7.19	7.61	8.55
Run VMG	3.45	4.41	5.25	5.97	6.58	7.04	7.84
Gybe Angles	138.5°	148.7°	152.5°	159.7°	174.5°	179.0°	179.0°

Time Allowances in secs/NM							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	954.1	797.9	736.7	712.5	699.4	691.1	686.9
52°	634.3	555.5	527.8	516.4	509.6	505.1	500.3
60°	607.5	542.0	516.7	504.1	496.6	491.4	485.1
75°	592.8	533.7	507.2	490.2	478.5	470.7	460.7
90°	605.8	536.9	506.3	485.4	468.7	455.1	436.5
110°	640.7	541.8	501.9	475.0	453.1	434.0	407.9
120°	665.3	555.4	509.0	478.6	453.1	429.1	379.4
135°	749.2	605.9	537.3	501.3	472.3	444.9	386.3
150°	904.5	707.0	595.1	534.1	500.7	473.3	420.9
Run VMG	1044.4	816.4	685.6	602.6	547.0	511.2	459.4
Selected Courses							
Windward / Leeward	999.2	807.2	711.1	657.6	623.2	601.2	573.2
All purpose	766.4	638.2	578.7	545.7	524.0	507.6	482.2

Single Number Scoring Options		
Course	Time On Distance	Time On Time
Windward / Leeward	683.6	0.8777
All purpose	561.2	1.0691

### Custom scoring options for Netherlands

Scoring Option	Time On Time
Triple Number Coastal/Long Distance Low	0.8543
Triple Number Coastal/Long Distance Medium	1.0734
Triple Number Coastal/Long Distance High	1.1948
Triple Number Windward/Leeward Low	0.6643
Triple Number Windward/Leeward Medium	0.8833
Triple Number Windward/Leeward High	1.0064
Coastal/Long Distance	0.9852
Predominantly Upwind	1.0002
Predominantly Downwind	1.0424

Data in meters/kilograms (Metric)

**HULL AND APPENDAGES (Lightship Trim)**

Class	<b>X-99</b>	LOA	<b>10.000</b>	VCGD	<b>-0.167</b>
Measurement	<b>14/04/2021</b>	Max. Beam	<b>2.990</b>	VCGM	<b>-0.122</b>
HIN		Draft	<b>1.796</b>	RM Rated (kg-m)	<b>67.6</b>
Plan review		Displacement	<b>3,073</b>	Limit of positive stability(°)	<b>N/A</b>
Hull construction	<b>Cored</b>	Wetted area	<b>18.59</b>	Stability Index	<b>N/A</b>
Carbon Rudder	<b>No</b>	IMS L	<b>8.665</b>		
Light stanchions	<b>No</b>	LSM0	<b>8.218</b>		
Trim tab	<b>No</b>	Acc. length	<b>9.717</b>		
		Sink (kg/mm)	<b>13.73</b>		

**PROPELLER**

Propeller Type	<b>Folding 2 blades</b>				
Installation	<b>Strut</b>	PRD	<b>0.350</b>	EDL	ST3
Twin screw	<b>No</b>	PBW		ST1	ST4
Hydro generator	<b>No</b>	PIPA	<b>0.0005</b>	ST2	ST5

**RIG**

Forestay tension	<b>Aft</b>	P	<b>12.500</b>	E	<b>4.500</b>
Inner stay	<b>None Fitted</b>	IG	<b>11.200</b>	J	<b>3.450</b>
Carbon mast	<b>No</b>	ISP	<b>11.200</b>	BAS	<b>1.600</b>
Headsail furler	<b>No</b>	MDT1	<b>0.090</b>	FSD	<b>0.000</b>
Mainsail furler	<b>No</b>	MDL1	<b>0.136</b>	SFJ	<b>0.000</b>
Articulated bowsprit	<b>No</b>	MDT2		SPL	<b>3.600</b>
Non-circular rigging	<b>No</b>	MDL2		WPL	
Fiber rigging	<b>No</b>	TL	<b>Taper</b>	TPS	
Runners/Checkstays	<b>1</b>	MW		BD	
Spreaders	<b>2</b>	GO		MWT	
Rotating mast	<b>No</b>			MCG	

**FLOTATION AND STABILITY**

Calculation method	<b>RM estimated</b>	SFFP	<b>0.303</b>	SAFP	<b>9.175</b>
Flotation Date	<b>14/04/2021</b>	FFM		FAM	
Measurer		FF	<b>0.981</b>	FA	<b>0.802</b>
Comment		LCFcl	<b>5.437</b>	LCFsh	<b>5.629</b>
		SG	<b>1.0000</b>	HBI	<b>0.930</b>

**INVENTORY**

<b>OTHER ITEMS</b>	<b>Id</b>	<b>Kind</b>	<b>Description</b>	<b>Weight</b>	<b>LCG</b>	<b>VCG</b>
	SaS		Deductible Sailor Services	44	5.27	0.00
			<i>Total deductible</i>	<b>11</b>	<b>5.27</b>	<b>0.00</b>



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**MAINSAIL**

<i><b>Id</b></i>	<i><b>MHB</b></i>	<i><b>MUW</b></i>	<i><b>MTW</b></i>	<i><b>MHW</b></i>	<i><b>MQW</b></i>	<i><b>Area</b></i>	<i><b>Meas.Date</b></i>	<i><b>Comment</b></i>
1	0.16	0.92	1.65	2.79	3.69	32.71	17/09/2003	

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**HEADSAIL**

<i><b>Id</b></i>	<i><b>HHB</b></i>	<i><b>HUW</b></i>	<i><b>HTW</b></i>	<i><b>HHW</b></i>	<i><b>HQW</b></i>	<i><b>HLP</b></i>	<i><b>HLU</b></i>	<i><b>Btn</b></i>	<i><b>Flying FT</b></i>	<i><b>Area</b></i>	<i><b>Meas.Date</b></i>	<i><b>Comment</b></i>
1	0.06	0.62	1.20	2.41	3.69	5.01	11.40	No	No	28.07		
new	0.05	0.38	0.74	1.50	2.32	3.19	11.47	Yes	No	17.76		

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**SYMMETRIC SPINNAKER**

<i><b>Id</b></i>	<i><b>SLU</b></i>	<i><b>SLE</b></i>	<i><b>SL</b></i>	<i><b>SHW</b></i>	<i><b>SFL</b></i>	<i><b>Area</b></i>	<i><b>Meas.Date</b></i>	<i><b>Comment</b></i>
2021	11.20	11.20	11.20	6.20	5.90	57.31		