

APH ToD: **600.2** CDL: **6.881**

APH ToT: **0.9996** CertNo: **J-70**

BOAT

Class **J-70 ONE DESIGN**
Designer **JOHNSTONE**
Builder **J BOATS**
Age date **02/2013**
Series date **02/2012**
Offset file **j-70.od.off**
Data file **j70**

HULL

Length Overall **6.942 m**
Maximum Beam **2.260 m**
Draft **1.450 m**
Displacement **810 kg**
DLR **3.3766**
IMS Division **Sportboat**
Dynamic Allowance **0.000%**
Age Allowance **0.390%**

PROPELLER

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

CREW

Maximum weight **340 kg** (declared)
Minimum weight **210 kg** *when applied
Non Manual Power **No**
Crew Arm Extension **Loose or no lifelines**

SAIL AREAS (m²)

	Measured	Rated
Mainsail	15.46	16.12
Headsail Luffed	10.00	10.00

Headsail Flying
Symmetric
Asymmetric **45.64** **45.64**
(All asymmetric spinnakers with SHW/SFL > 85%)

STORM SAIL AREAS (m²)

Trysail **4.02**
Storm Jib **3.39**
Heavy Weather Jib **9.13**

SAIL LIMITS

Headsails **5** * Woven polyester sails
Spinnakers **4**

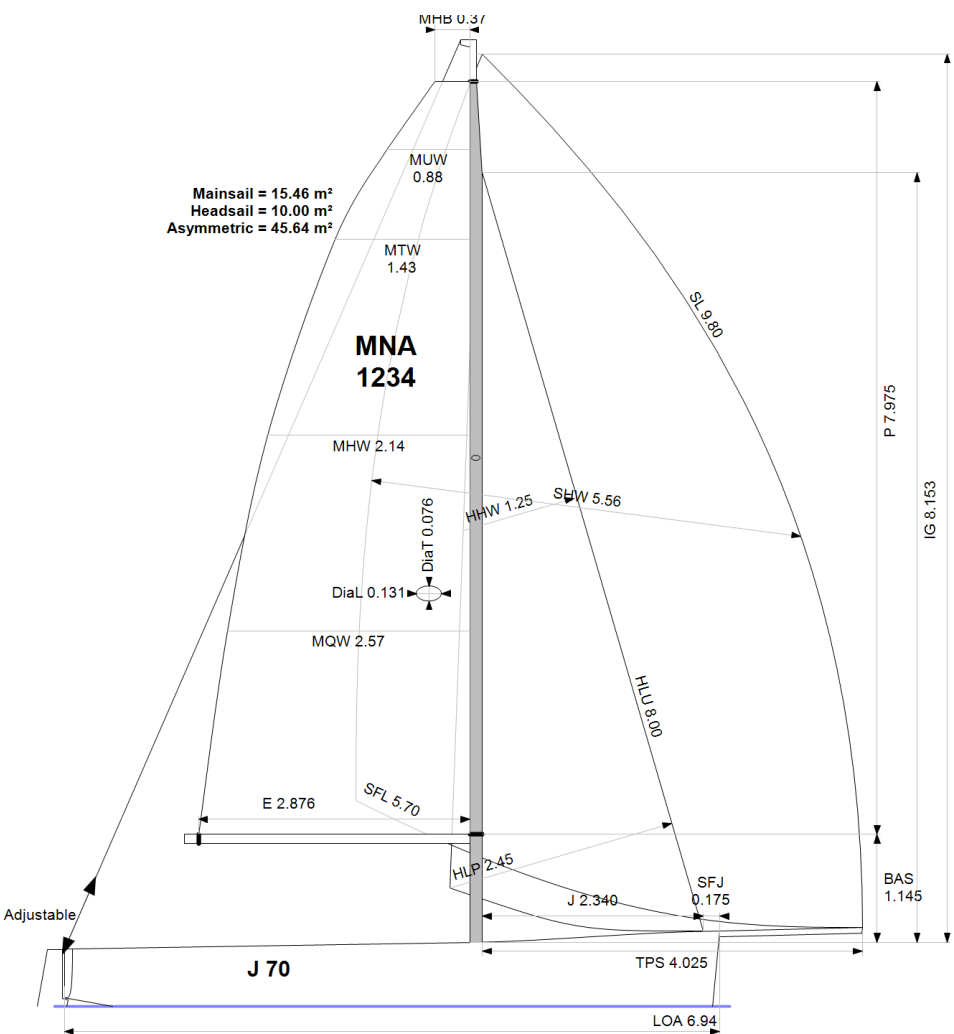
STABILITY

Righting Moment **18.5 kg·m**
Stability Index **94.5**

COMMENTS

weight acc to OD class rules incl outboard engine,

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	24 kt
Beat Angles	43.4°	41.6°	39.4°	37.6°	37.4°	37.5°	38.5°	40.4°
Beat VMG	3.08	3.77	4.25	4.52	4.59	4.62	4.59	4.48
52°	4.69	5.59	6.05	6.33	6.47	6.54	6.60	6.57
60°	4.93	5.78	6.21	6.55	6.74	6.85	6.97	6.97
75°	5.08	5.89	6.36	6.78	7.16	7.39	7.68	7.80
90°	5.38	6.20	6.61	6.88	7.30	7.83	8.54	8.93
110°	5.45	6.33	7.01	7.58	8.01	8.44	9.29	10.40
120°	5.30	6.22	6.93	7.72	8.50	9.12	10.38	11.77
135°	4.78	5.84	6.53	7.21	8.07	9.13	12.21	13.90
150°	4.06	5.14	5.92	6.47	7.02	7.78	10.66	13.80
Run VMG	3.52	4.45	5.12	5.60	6.08	6.74	9.23	11.95
Gybe Angles	144.2°	148.0°	149.5°	148.3°	145.7°	143.6°	140.6°	145.3°



Time Allowances in secs/NM								
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt	24 kt
Beat VMG	1169.0	956.0	847.5	796.1	784.0	779.3	784.9	803.2
52°	768.0	644.6	595.1	568.4	556.8	550.4	545.5	548.0
60°	730.2	623.2	579.7	550.0	533.8	525.6	516.9	516.8
75°	708.3	611.5	566.3	531.0	503.1	486.9	468.7	461.5
90°	669.7	580.7	544.6	523.2	493.5	460.1	421.7	402.9
110°	660.8	568.7	513.6	475.2	449.6	426.6	387.5	346.2
120°	679.3	578.9	519.4	466.4	423.7	394.9	346.8	306.0
135°	752.8	616.1	551.4	499.1	445.9	394.4	294.8	259.0
150°	886.1	700.5	608.5	556.7	513.0	462.7	337.7	260.9
Run VMG	1023.2	808.9	702.7	642.8	592.4	534.3	389.9	301.3
Selected Courses								
Windward / Leeward	1096.1	882.5	775.1	719.5	688.2	656.8	587.4	552.2
All purpose	845.3	698.2	626.4	583.7	554.6	528.5	480.3	455.5

Single Number Scoring Options		
Course	Time On Distance	Time On Time
Windward / Leeward	746.6	0.8037
All purpose	600.2	0.9996



Data in meters/kilograms (Metric)

HULL AND APPENDAGES (Lightship Trim)

Class	J-70 ONE DESIGN	LOA	6.942	VCGD	-0.038
Measurement	01/02/2013	Max. Beam	2.260	VCGM	-0.041
HIN		Draft	1.450	RM Rated (kg·m)	18.5
Plan review		Displacement	810	Limit of positive stability(°)	103.2
Hull construction	Cored	Wetted area	9.15	Stability Index	94.5
Carbon Rudder	No	IMS L	6.725	Default crew weight	349
Light stanchions	No	LSM0	6.214	Declared crew weight	340
Trim tab	No	Acc. length	6.942		
		Sink (kg/mm)	7.48		

PROPELLER

Propeller Type	No Propeller
Hydro generator	No

RIG

Forestay tension	Aft	P	7.975	E	2.876
Inner stay	None Fitted	IG	8.153	J	2.340
Mast material	Carbon	ISP	9.412	BAS	1.145
Single headsail furler	Yes	MDT1	0.076	FSD	0.000
Mainsail furler	No	MDL1	0.131	SFJ	0.175
Articulated bowsprit	No	MDT2	0.070	SPL	
Non-circular rigging	No	MDL2	0.070	WPL	
Fiber rigging	No	TL	1.000	TPS	4.025
Adjustable mast foot	No	MW	0.116	BD	0.095
Runners/Checkstays	0	GO	0.136	MWT	24.00
Spreaders	1			MCG	3.880
Rotating mast	No				

FLOTATION AND STABILITY

Calculation method	Poles inclining	SFFP	0.147	SAFP	6.895	W1	18.0	PD1	601.1	WD	7.870
Flotation Date	01/02/2016	FFM	0.792	FAM	0.577	W2	18.0	PD2	600.9	PLM	9000.00
Measurer	Class rules weight	FF	0.793	FA	0.578	W3	18.0	PD3	602.2	GSA	1.0
		LCFcl	3.696	LCFsh	3.858	W4	18.0	PD4	603.0	RSA	1.0
		SG	1.0190	HBI	0.678					RM	18.5

INVENTORY

OTHER ITEMS	Id	Kind	Description	Weight	LCG	VCG
	E		Engine OUTBOARD MIN.10kg			

Total deductible



MAINSAIL

<i>Id</i>	<i>MHB</i>	<i>MUW</i>	<i>MTW</i>	<i>MHW</i>	<i>MQW</i>	<i>Area</i>	<i>Meas.Date</i>	<i>Comment</i>
ORC	0.37	0.88	1.43	2.14	2.57	15.46		CLASS

HEADSAIL

<i>Id</i>	<i>HHB</i>	<i>HUW</i>	<i>HTW</i>	<i>HHW</i>	<i>HQW</i>	<i>HLP</i>	<i>HLU</i>	<i>Btn</i>	<i>Flying FT</i>	<i>Area</i>	<i>Meas.Date</i>	<i>Comment</i>
ORC	0.06	0.35	0.65	1.25	1.86	2.45	8.00	Yes	No	10.00		CLASS

ASYMMETRIC SPINNAKER

<i>Id</i>	<i>SLU</i>	<i>SLE</i>	<i>SL</i>	<i>SHW</i>	<i>SFL</i>	<i>Ratio</i>	<i>Area</i>	<i>Meas.Date</i>	<i>Comment</i>
ORC	10.80	8.80	9.80	5.56	5.70	98%	45.64		CLASS