


BOAT
Name X-35 ONE DESIGN Sail Nr 118

GPH
606.3

HULL	Length Overall	10.600m
	Maximum Beam	3.250m
	Displacement	4,487kg
	Draft	2.173m
	IMS Reg. Division	Cruiser/Racer
	Dynamic Allowance	0.000%
	Fwd Accommodation	Yes
	Hull Construction	Cored
	Carbon Rudder	No
	Crew Arm Extension	
	IMSL	9.449m VCGD 0.053m Sink 17.60kg/mm
	RL	8.947m VCGM 0.043m WS 22.90m²
	LSM0	9.270m Displacement/Length ratio 5.6327



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2016
ORC International
One Design Certificate

GENERAL
Class X-35 OD
Designer JEPPESEN
Builder X-YACHTS
Series 09/2005
Age 09/2005
Age Allowance 0.357%
Offset File x35.od - 01/04/2016 12:35:55
Measurement by KALL - 04/05/2006

Rating Office

Offshore
Racing
Congress



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	OFFSHORE COASTAL / LONG DISTANCE			INSHORE WINDWARD / LEEWARD		
	PLT	PLD		PLT	PLD	
Time On Distance	591.3			659.7		
Time On Time	1.0146			1.0231		
Performance Line	0.718	55.9		0.941	254.4	
	Low	Medium	High	Low	Medium	High
Triple Number	0.9802	1.2520	1.3999	0.7565	1.0197	1.1686

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1010.0	838.9	740.5	705.9	689.6	677.0	670.4
52°	658.8	553.7	509.5	496.9	491.1	488.0	479.9
60°	619.2	529.6	495.8	483.0	476.7	473.2	463.4
75°	586.7	513.9	484.7	465.1	453.5	447.3	441.1
90°	588.7	515.0	486.0	464.0	442.7	426.4	414.2
110°	609.7	514.0	478.0	450.5	435.1	421.0	400.6
120°	629.0	524.5	485.0	455.4	425.8	406.1	380.9
135°	698.2	568.0	506.9	476.8	449.0	421.1	363.2
150°	828.8	660.8	559.9	506.1	477.8	451.9	400.9
Run VMG	957.1	763.0	645.4	572.0	520.3	488.2	438.6

Certificate	
Number	6258
ORC Ref	SSF00001606
Issued On	01/07/2016
VPP Ver.	2016 1.01
Valid until	31/12/2016

Selected Courses							
Windward / Leeward	983.5	801.0	693.0	639.0	604.9	582.6	554.5
Circular Random	828.7	672.0	588.7	540.7	511.1	491.2	464.5
Ocean for PCS	1017.1	788.6	660.4	582.4	531.7	495.9	445.5
Non Spinnaker	877.8	706.7	614.7	561.0	527.7	505.6	476.9

Crew Weight	
Declared	640kg
Default*	618kg
Non Manual Pwr	No

Special Scoring		
	ToD	ToT
Double H.GPH	612.7	0.9792
Double H.OSN	598.9	1.0018
Non Spin GPH	633.8	0.9467
Non Spin OSN	617.6	0.9715
N/S Perf. Line	27.1	0.641

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	43.2°	42.3°	40.7°	39.2°	38.4°	37.7°	38.0°
Beat VMG	3.56	4.29	4.86	5.10	5.22	5.32	5.37
52°	5.46	6.50	7.07	7.25	7.33	7.38	7.50
60°	5.81	6.80	7.26	7.45	7.55	7.61	7.77
75°	6.14	7.01	7.43	7.74	7.94	8.05	8.16
90°	6.11	6.99	7.41	7.76	8.13	8.44	8.69
110°	5.90	7.00	7.53	7.99	8.27	8.55	8.99
120°	5.72	6.86	7.42	7.90	8.46	8.87	9.45
135°	5.16	6.34	7.10	7.55	8.02	8.55	9.91
150°	4.34	5.45	6.43	7.11	7.53	7.97	8.98
Run VMG	3.76	4.72	5.58	6.29	6.92	7.37	8.21
Gybe Angles	144.4°	148.7°	151.4°	159.1°	180.0°	180.0°	180.0°

Sails Limitations	
Headsails	6
Spinnakers	3

Class Division Length
CDL = 9.199

Storm Sails Areas	
Heavy Weather Jib	28.66
Storm Jib (JL=9.47)	10.61
Storm Triesail	12.22

Owner

BOAT	
Name X-35 ONE DESIGN	Sail Nr 118
File 6258.dxt	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS			
Inclining Test Current Inclining			
Flotation date 04/05/2006		SG 1.0250	
FFM 1.321	FF 1.323	SFFP 0.075	
FAM 0.980	FA 0.983	SAFP 10.275	
W1 70.0	PD1 554.0	WD 11.240	
W2 70.0	PD2 558.9	GSA 1.0	
W3 70.0	PD3 554.0	RSA 1.0	
W4 70.0	PD4 552.5	PLM 9000.0	
LCF from stem on CL / on sheer		5.956 / 6.160	
Maximum beam station from stem		7.300	
RM Measured		111.7kg·m	
RM Default		121.5kg·m	
Limit of positive stability / Stab.Index		116.3° / 117.0	
Freeboard at mast at 4.185		1.108	

RIG			
Forestay Tension Aft	Spreaders 2		
Inner Stay None Fitted	Runners 0		
Carbon Mast No	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 14.250	E 4.900	MDT1 0.125	MW 0.184
IG 14.500	J 4.185	MDL1 0.185	GO 0.204
ISP 14.530	SFJ	MDT2 0.122	BD 0.220
BAS 1.745	SPL 4.180	MDL2 0.140	MWT 156.00
FSP 0.068	TPS	TL 1.230	MCG 4.600



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IMS Measurement Certificate

Certificate	
Number 6258	
ORC Ref SSF00001606	
Issued On 01/07/2016	
VPP Ver. 2016 1.01	
Valid until 31/12/2016	

MIZZEN RIG AND SAILS	
N/A	

PROPELLER			
Installation Strut	PRD 0.420		
Type Folding 2 blades	PBW 0.128		
Twin Screw No	PIPA 0.0033		
ST1 0.042	ST3 0.182	ST5 0.255	
ST2 0.178	ST4 0.112	EDL 2.390	

COMMENTS	
O.D. TRIM PLUS TABLE AND CUSHIONS VALID ONLY IN CONJUNCTION WITH X-35 CLASS CERTIFICATE	

MOVEABLE BALLAST	
N/A	

CENTERBOARD	
N/A	



Invalid for Racing

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SAILS (Maximum Areas)									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	0.210	1.08	1.88	3.19	4.14	41.98	42.84	P/8 · (E + 2·MQW+ 2·MHW + 1.5·MTW + MUW + 0.5·MHB)	
Symmetric	SLU	SLE	SL	SHW	SFL	92.19		SL · (SFL + 4·SHW) / 6	
	14.36	14.36	14.36	7.75	7.52				
Asymmetric Not Available									

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
0.10	0.63	1.21	2.29	3.34	4.45	14.60	33.15	N	N	01/03/2007	Kevlar	One Design Rule

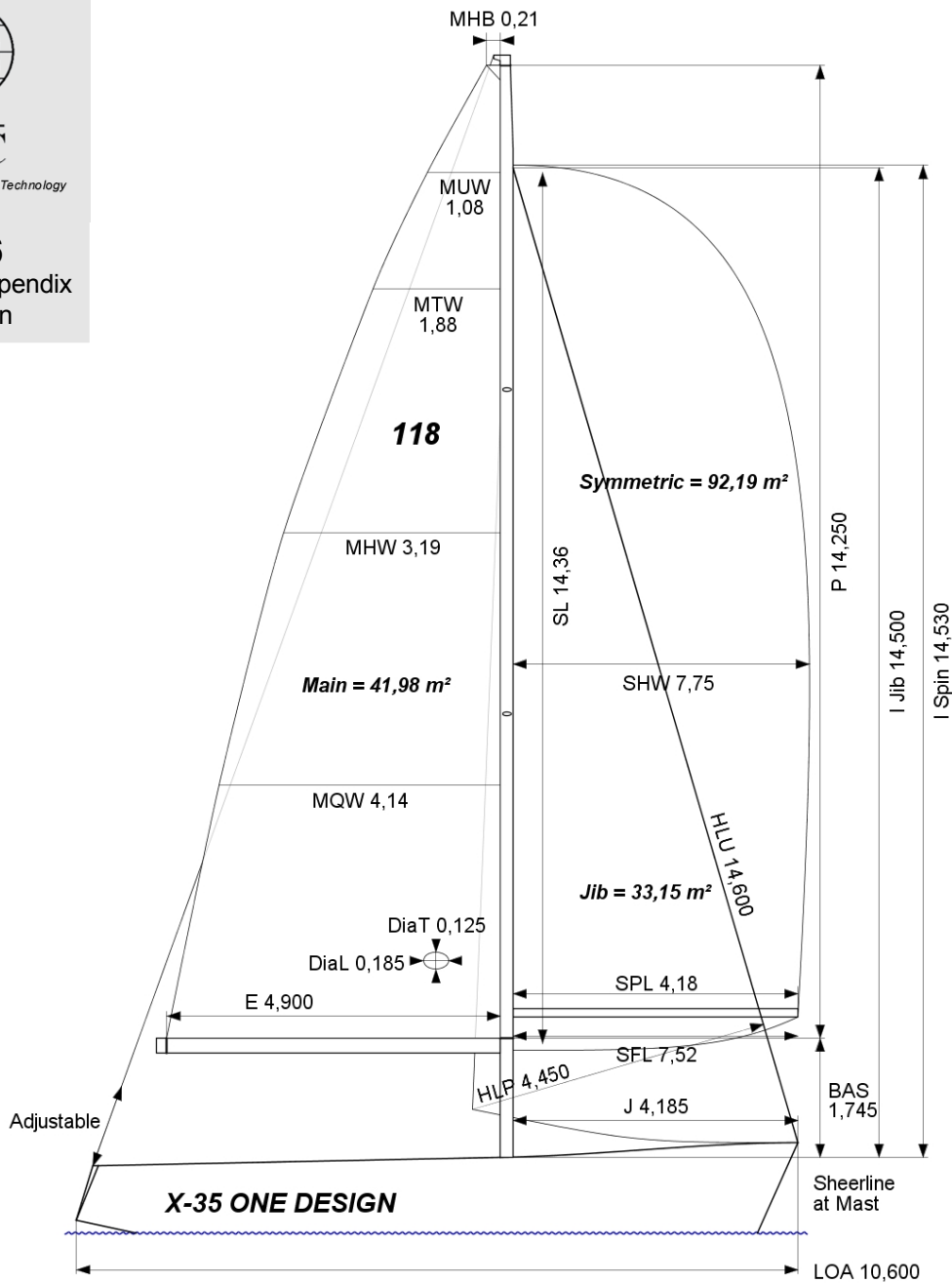
MEASUREMENT INVENTORY				
Measurer Gerd Kall KALL				
Date 04/05/2006				
Comment				
Id	Item	Weight	Distance	VCG Description
4	Anchor	40.0	6.25	Anchor 4
4	Chain	8.5	5.50	Warp
4	Tools	43.0	7.50	Tools
2	Tools	8.0	5.00	Safety
Id	Item	Maker	Model	
1	Engine	Yanmar	3YM20C	
Id	Item	Weight	Description	
4	Deck Gear	9.2	0	

MEASUREMENT INVENTORY						
Id	Item	Tank Use	Tank Type	Capcty	Dist.	VCG Condtn Description
1	Tank fuel		st.stl	60.0	6.15	0-0 fuel
2	Tank H2O		pvc	120.0	5.52	0-0 Water
3	Tank gas		steel	2.0	9.45	0-0 LPG gas
Id	Item	Weight	Distance	VCG Description		
1	Battery	46.8	4.85	120 Ah gel - services		
2	Battery	18.4	5.18	55 Ah - engine		
1	Misc	20.0	5.52	Table		



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Certificate Appendix
Sail Plan



SAILS INVENTORY

MAINSAIL

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment
ORC	0.210	1.08	1.88	3.19	4.14	41.98				Unknown	* Copied from legacy

HEADSAILS

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
1	0.10	0.63	1.21	2.29	3.34	4.45	14.60	106%	33.15	N	N	X-35	01/03/2007	Any	Kevlar	One Design Rule

SYMMETRIC SPINNAKERS

Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment
ORC	14.36	14.36	14.36	7.75	7.52	92.19				Unknown	* Copied from legacy *

ASYMMETRIC SPINNAKERS

Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment
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