

BOAT Name Team Pro4u Sail Nr SWE 88	GPH 620.4	HULL Length Overall 10.598m Maximum Beam 3.474m Displacement 5,811kg Draft 2.163m IMS Reg. Division Cruiser/Racer Dynamic Allowance 0.085% Fwd Accommodation Yes Hull Construction Solid Carbon Rudder Yes Crew Arm Extension
GENERAL Class FIRST 36.7 MOD Designer FARR YACHT DESIGN Builder BENETEAU Series 01/2001 Age 06/2002 Age Allowance 0.487% Offset File Malin190409_NewKeel_final_v1.4.off Measurement by - 14/04/2019		IMSL 9.573m VCGD 0.038m Sink 19.62kg/mm RL 8.637m VCGM 0.051m WS 26.04m² LSM0 9.490m Displacement/Length ratio 6.7991



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SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	603.8			671.7		
Time on Time	0.9938			1.0049		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	704.1	551.1	496.7	905.1	673.4	590.2
Time on Time	0.9587	1.2249	1.3591	0.7458	1.0024	1.1436

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1031.4	859.1	760.3	718.5	704.1	699.0	685.4
52°	679.3	575.5	525.0	506.6	500.4	497.6	490.8
60°	644.1	551.4	511.9	495.0	487.7	484.2	478.9
75°	617.3	535.2	502.6	484.4	471.6	463.7	457.7
90°	622.2	531.5	495.2	481.3	464.8	449.8	430.2
110°	623.8	523.8	487.0	463.5	446.2	435.0	417.2
120°	641.0	533.5	491.8	466.3	442.1	421.2	399.0
135°	706.7	576.8	512.4	482.9	458.9	434.9	391.1
150°	832.0	666.0	566.3	511.2	483.8	461.3	417.6
Run VMG	960.7	769.1	652.8	579.0	526.3	493.7	449.6

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Number **88**
ORC Ref **SWE20190362**
Issued On **08/08/2019**
VPP Ver. **2019 1.01**
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Crew Weight

Default **639kg**
Maximum **612kg**
Minimum* **459kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Double H.GPH	627.9	0.9556
Double H.OSN	612.5	0.9796
Non Spin GPH	653.6	0.9180
Non Spin OSN	634.7	0.9454

Selected Courses							
Windward / Leeward	996.0	814.1	706.6	648.7	615.2	596.3	567.5
Circular Random	847.0	686.9	602.2	553.8	524.5	505.4	479.9
Coastal / Long Distance	992.5	765.4	639.8	571.4	535.2	506.9	460.8
Non Spinnaker	907.4	729.4	633.5	577.8	543.9	521.8	493.7

Sails Limitations

Headsails	Spinnakers
5	3

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	42.3°	41.0°	40.4°	39.0°	38.3°	38.1°	38.5°
Beat VMG	3.49	4.19	4.74	5.01	5.11	5.15	5.25
52°	5.30	6.26	6.86	7.11	7.19	7.24	7.34
60°	5.59	6.53	7.03	7.27	7.38	7.43	7.52
75°	5.83	6.73	7.16	7.43	7.63	7.76	7.87
90°	5.79	6.77	7.27	7.48	7.74	8.00	8.37
110°	5.77	6.87	7.39	7.77	8.07	8.28	8.63
120°	5.62	6.75	7.32	7.72	8.14	8.55	9.02
135°	5.09	6.24	7.03	7.45	7.84	8.28	9.21
150°	4.33	5.41	6.36	7.04	7.44	7.80	8.62
Run VMG	3.75	4.68	5.51	6.22	6.84	7.29	8.01
Gybe Angles	145.2°	149.5°	151.4°	158.4°	179.6°	180.0°	180.0°

Class Division Length

CDL = **9.106**

Storm Sails Areas

Heavy Weather Jib **30.92**
Storm Jib (JL=9.84) **11.45**
Storm Trysail **12.38**

Owner

BOAT	
Name Team Pro4u	Sail Nr SWE 88
File SWE88	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS			
Inclining Test Current Inclining			
Flotation date 14/04/2019		SG 1.0040	
FFM 1.346	FF 1.354	SFFP 0.365	
FAM 1.044	FA 1.049	SAFP 10.115	
W1 94.5	PD1 616.5	WD 11.620	
W2 94.5	PD2 612.0	GSA 1.0	
W3 94.5	PD3 611.9	RSA 1.0	
W4 94.5	PD4 614.7	PLM 9000.0	
LCF from stem on CL / on sheer		5.878 / 6.105	
Maximum beam station from stem		7.000	
RM Measured		140.9kg-m	
RM Default		144.5kg-m	
Limit of positive stability / Stab.Index		116.6° / 118.9	
Freeboard at mast at 3.989		1.191	



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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 14.230	E 4.970	MDT1 0.122	MW 0.179
IG 15.132	J 3.989	MDL1 0.181	GO 0.179
ISP 15.527	SFJ 0.000	MDT2 0.122	BD 0.252
BAS 1.582	SPL 4.311	MDL2 0.165	MWT 142.000
FSP 0.068	TPS 4.332	TL 1.140	MCG 5.275

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MIZZEN RIG AND SAILS	
N/A	

PROPELLER			
Installation Strut	PRD 0.392		
Type Folding 2 blades	PBW 0.107		
Twin Screw No	PIPA 0.0037		
ST1 0.065	ST3 0.180	ST5 0.283	
ST2 0.180	ST4 0.110	EDL 2.530	

COMMENTS	
Modified keel 2019	

MOVABLE BALLAST	
N/A	

CENTERBOARD	
N/A	



SAILS (Maximum Areas)									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	0.220	1.14	1.98	3.25	4.17	42.74	43.69	P/8 · (E + 2·MQW+ 2·MHW + 1.5·MTW + MUW + 0.5·MHB)	
Symmetric	SLU	SLE	SL	SHW	SFL				
	15.25	15.25	15.25	7.85	7.56	99.02		SL · (SFL + 4·SHW) / 6	
Asymmetric									
Not Available									

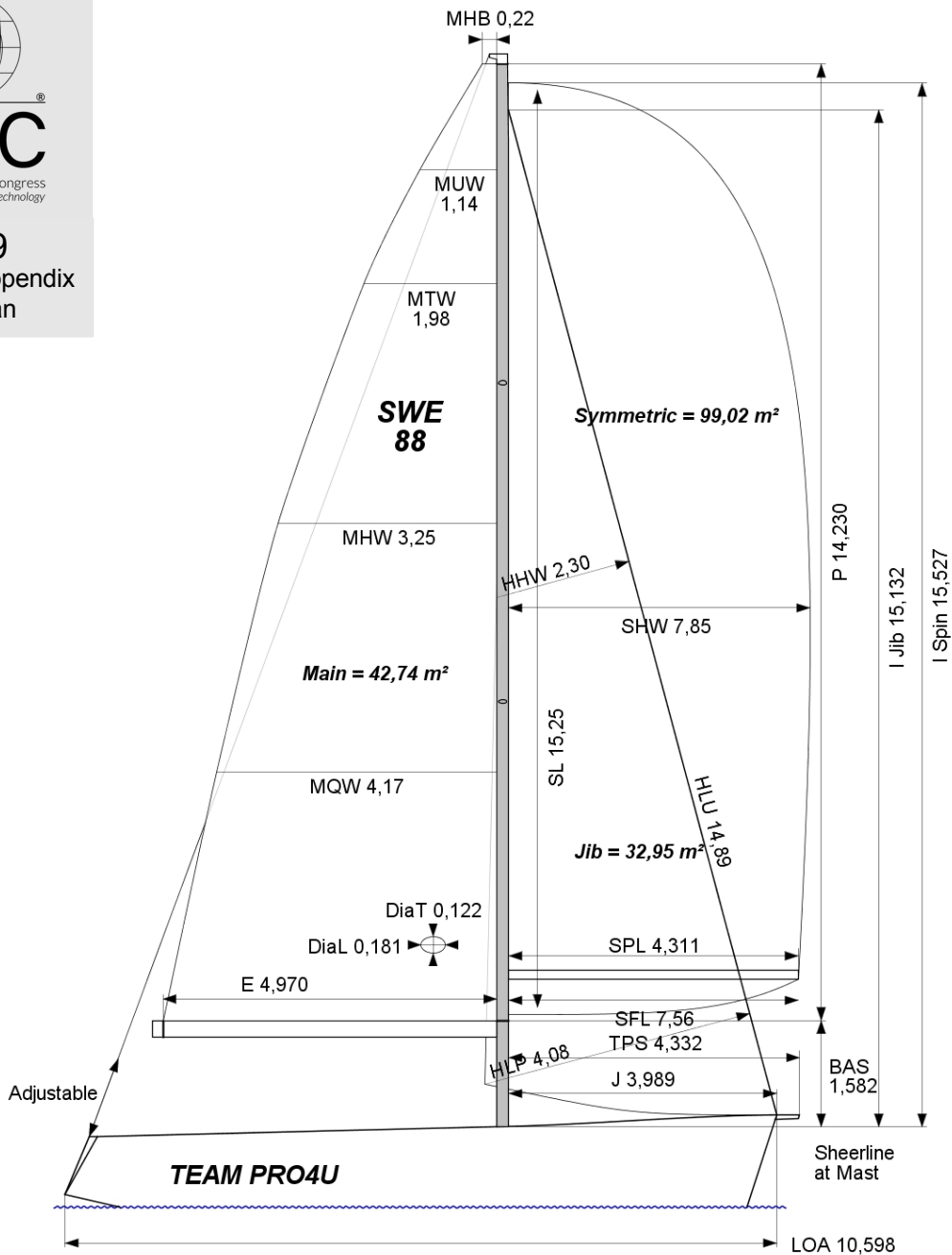
HEADSAILS												
Area = 0.1125·HLU · (1.445·HLP + 2·HQW + 2·HHW + 1.5·HTW + HUW + 0.5·HHB)												
HHB	HUW	HTW	HHW	HQW	HLP	HLU	Area	Btn	Fly	Meas.Date	Material	Comment
0.13	0.72	1.34	2.30	3.19	4.08	14.89	32.95	Y		17/01/2018	Unknow	Jib 3.2 (M/H) 2017
0.13	0.73	1.33	2.31	3.18	4.06	14.90	32.92	Y		17/01/2018	Unknow	Jib 3.1 (L/M) 2017
0.08	0.51	0.97	1.90	2.92	3.98	14.86	29.08	Y		23/04/2012	Unknow	JIB4.1 2012 (HWJ)
0.08	0.47	0.88	1.71	2.57	3.44	13.20	22.81	Y		06/05/2015	Unknow	REACHING STAY
0.08	0.44	0.80	1.50	2.22	2.95	13.50	20.33	Y		27/04/2017	Unknow	RUNNING STAY

MEASUREMENT INVENTORY				
Measurer 1129				
Date 07/04/2017				
Comment				
Id	Item	Weight	Distance	VCG Description
Id	Item	Maker	Model	
E1	Engine	VOLVO PENTA	D1-30	
Id	Item	Weight Description		

MEASUREMENT INVENTORY							
Id	Item	Tank Use	Tank Type	Capcty	Dist.	VCG	Condtn Description
BOI	Tank	WATER	S.S.	25.0	8.00	0.00	0-0
F1	Tank	FUEL	GRP	70.0	8.70	0.00	0-0
WA	Tank	WASTE	S.S.	50.0	5.25	0.00	0-0
W2	Tank	WATER	GRP	150.0	4.80	0.00	0-0
W1	Tank	WATER	GRP	42.0	4.45	0.00	0-0
Id	Item	Weight	Distance	VCG Description			
N1	Ballast			NONE			
B1	Battery	34.5	7.00	0.00 3 units x 11,5			
DE	Misc		6.00	0.00 DEHUMIDATOR			
AU	Misc		9.80	0.00 AUTOPILOT			
HE	Misc		10.10	0.00 HEATER			



2019
Certificate Appendix
Sail Plan



SAILS INVENTORY

MAINSAIL (2)

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment
3Di Race	0,22	1,14	1,98	3,25	4,17	42,75		17/01/2018	NORTH	Unknown	3Di Race
3Di2014	0,21	1,16	1,97	3,25	4,16	42,71		17/01/2018	NORTH	Unknown	3Di Endurance 2014

HEADSAILS (5)

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
JIB3.22	0,13	0,72	1,34	2,30	3,19	4,08	14,89	102%	32,95	Y			17/01/2018	NORTH	Unknown	Jib 3.2 (M/H) 2017
JIB3.12	0,13	0,73	1,33	2,31	3,18	4,06	14,90	102%	32,92	Y			17/01/2018	NORTH	Unknown	Jib 3.1 (L/M) 2017
JIB4.1	0,08	0,51	0,97	1,90	2,92	3,98	14,86	100%	29,08	Y			23/04/2012	NORTH	Unknown	JIB4.1 2012 (HWJ)
STAYSA	0,08	0,47	0,88	1,71	2,57	3,44	13,20	86%	22,81		Y		06/05/2015	NORTH	Unknown	REACHING STAY
STAYSA	0,08	0,44	0,80	1,50	2,22	2,95	13,50	74%	20,33		Y		27/04/2017	NORTH	Unknown	RUNNING STAY

SYMMETRIC SPINNAKERS (3)

Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment
S2-2019	15,25	15,25	15,25	7,85	7,56	99,03		07/07/2019	NORTH	Nylon	S2-2019
S1.5-2015	15,35	15,35	15,35	7,61	7,60	97,32		17/01/2018	NORTH	Nylon	S1.5-2015
S3-2019	16,20	16,20	16,20	6,86	7,89	95,40		15/12/2018	NORTH	Nylon	S3-2019

ASYMMETRIC SPINNAKERS (0)

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