

BOAT Name HISTOLAB Sail Nr ESP-5670	GPH 602,4	HULL Length Overall 11,924m Maximum Beam 3,770m Displacement 6.954kg Draft 2,408m IMS Reg. Division Cruiser/Racer Dynamic Allowance 0,196% Fwd Accommodation Yes Hull Construction Solid Carbon Rudder Yes Crew Arm Extension
GENERAL Class FIRST 40.7 Designer B.FARR Builder BENETEAU Series 12/1997 Age 10/2000 Age Allowance 0,487% Offset File EFRST407.OFF - 25/10/2016 16:33:16 Measurement by - 14/02/2013		IMSLS 10,611m VCGD -0,284m Sink 22,08kg/mm RL 9,585m VCGM -0,033m WS 29,45m² LSM0 10,463m Displacement/Length ratio 6,0711



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SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	584,0			650,5		
Time on Time	1,0274			1,0377		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	695,9	532,2	472,0	898,1	654,7	562,9
Time on Time	0,9700	1,2684	1,4301	0,7516	1,0310	1,1991

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1013,8	838,5	735,4	682,1	663,5	655,3	642,5
52°	666,5	561,4	505,1	482,2	473,2	469,2	465,0
60°	631,1	535,9	491,2	471,4	461,0	456,5	453,2
75°	604,6	518,1	481,3	462,0	447,9	437,3	428,2
90°	612,3	519,6	475,3	458,1	443,6	428,0	404,6
110°	621,5	512,8	469,0	444,8	423,8	410,6	391,1
120°	640,2	525,0	474,8	448,9	425,2	403,4	374,4
135°	709,2	574,8	500,1	466,1	443,0	419,8	376,4
150°	840,2	666,7	563,5	499,5	467,7	445,8	403,6
Run VMG	970,1	769,8	650,5	571,6	518,6	480,1	436,2

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VPP Ver. **2019 1.01**
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Crew Weight
Default **734kg**
Maximum **750kg**
Minimum* **563kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Double H.GPH	609,8	0,9840
Double H.OSN	592,5	1,0127
Non Spin GPH	634,8	0,9452
Non Spin OSN	614,7	0,9760

Selected Courses							
Windward / Leeward	992,0	804,2	692,9	626,8	591,1	567,7	539,3
Circular Random	833,6	671,4	584,2	533,3	502,0	481,3	454,8
Coastal / Long Distance	989,8	755,7	624,9	549,1	511,4	482,1	436,0
Non Spinnaker	892,0	712,7	614,7	556,8	520,9	497,4	468,1

Sails Limitations

Headsails	Spinnakers
6	4

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°	40,1°	38,6°	37,7°	38,0°	37,5°
Beat VMG	3,55	4,29	4,90	5,28	5,43	5,49	5,60
52°	5,40	6,41	7,13	7,47	7,61	7,67	7,74
60°	5,70	6,72	7,33	7,64	7,81	7,89	7,94
75°	5,95	6,95	7,48	7,79	8,04	8,23	8,41
90°	5,88	6,93	7,57	7,86	8,12	8,41	8,90
110°	5,79	7,02	7,68	8,09	8,49	8,77	9,20
120°	5,62	6,86	7,58	8,02	8,47	8,92	9,62
135°	5,08	6,26	7,20	7,72	8,13	8,57	9,56
150°	4,28	5,40	6,39	7,21	7,70	8,07	8,92
Run VMG	3,71	4,68	5,53	6,30	6,94	7,50	8,25
Gybe Angles	144,6°	148,9°	150,7°	155,4°	169,8°	180,0°	180,0°

Class Division Length
CDL = **10,099**

Storm Sails Areas

Heavy Weather Jib	33,65
Storm Jib (JL=10,27)	12,47
Storm Trysail	13,32

Owner

BOAT	
Name HISTOLAB	Sail Nr ESP-5670
File E5670	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS		
Inclining Test Current Inclining		
Flotation date 14/02/2013	SG 1,0250	
FFM 1,373	FF 1,373	SFFP 0,292
FAM 1,120	FA 1,121	SAFP 11,313
W1 114,6	PD1 560,5	WD 11,120
W2 114,6	PD2 558,9	GSA 1,0
W3 114,6	PD3 561,2	RSA 1,0
W4 114,6	PD4 560,3	PLM 9000,0
LCF from stem on CL / on sheer		6,503 / 6,737
Maximum beam station from stem		7,502
RM Measured		179,1kg-m
RM Default		173,3kg-m
Limit of positive stability / Stab.Index		121,7° / 123,9
Freeboard at mast at 4,410		1,228



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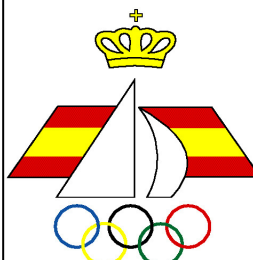
RIG			
Forestay Tension Aft	Spreaders 3		Runners 0
Inner Stay None Fitted	Jumper Struts None		Jib Furler No
Carbon Mast No	Main Furler No		Without Backstay No
Taper Hollows No	Main Furler No		Without Backstay No
Fiber Rigging No	Main Furler No		Without Backstay No
Lenticular Rigging No	Main Furler No		Without Backstay No
Articulated Bowsprit No	Main Furler No		Without Backstay No
P 14,550	E 5,230	MDT1 0,116	MW 0,212
IG 15,680	J 4,410	MDL1 0,214	GO 0,242
ISP 15,780	SFJ 0,000	MDT2 0,115	BD 0,185
BAS 1,690	SPL 4,410	MDL2 0,180	MWT 207,00
FSP 0,060	TPS	TL 0,700	MCG 5,400

MIZZEN RIG AND SAILS	
N/A	

PROPELLER		
Installation Strut	PRD 0,435	
Type Folding 2 blades	PBW 0,000	
Twin Screw No	PIPA 0,0031	
ST1 0,046	ST3 0,167	ST5 0,285
ST2 0,167	ST4 0,097	EDL 2,235

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COMMENTS

MOVABLE BALLAST
N/A

CENTERBOARD
N/A

SAILS (Maximum Areas)						
Mainsail	MHB	MUW	MTW	MHW	MQW	Area Area (r) Formula
	0,210	1,12	1,95	3,28	4,30	44,63 45,51 P/8 · (E + 2·MQW+ 2·MHW + 1.5·MTW + MUW + 0.5·MHB)
Symmetric	SLU	SLE	SL	SHW	SFL	102,41 SL · (SFL + 4·SHW) / 6
	15,47	15,47	15,47	8,03	7,60	
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	0,69	1,31	2,50	3,59	4,65	15,50	37,67	Y		30/01/2013	Unknow	
0,06	0,65	1,28	2,59	3,93	5,20	14,40	37,51	N		24/01/2018	Unknow	24011801
0,08	0,71	1,34	2,45	3,58	4,63	15,46	37,41	Y		21/02/2017	Unknow	21071602
0,09	0,76	1,41	2,45	3,50	4,53	15,47	37,19	Y		30/03/2017	Unknow	30031703

MEASUREMENT INVENTORY				
Measurer ESP-222				
Date 14/02/2013				
Comment				
Id	Item	Weight	Distance	VCG Description
Id	Item	Maker	Model	
001	Engine	VOLVO		
Id	Item	Weight	Description	

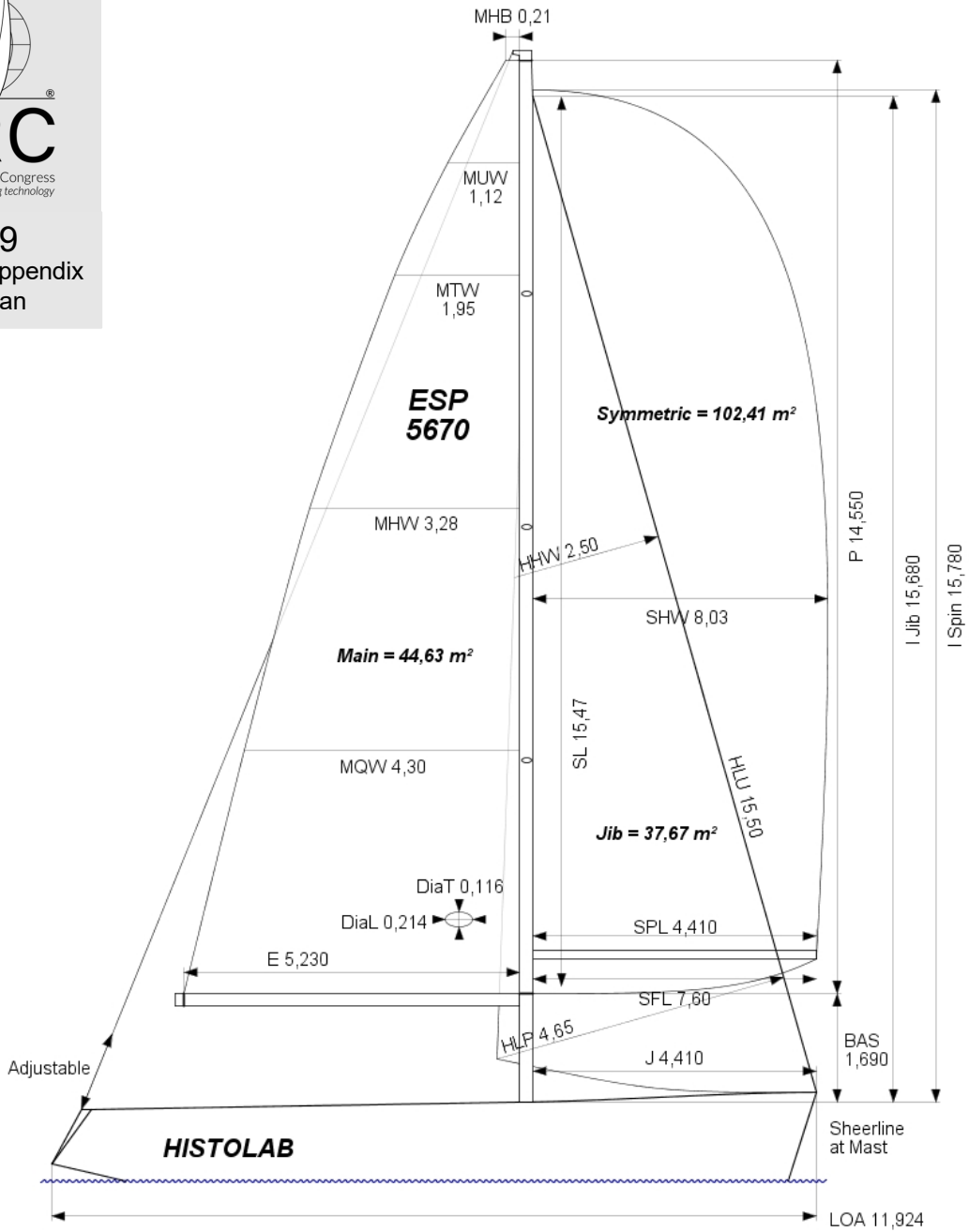
MEASUREMENT INVENTORY							
Id	Item	Tank Use	Tank Type	Capcty	Dist.	VCG	Condtn Description
001	Tank	AGUA	RIGIDO	150,0	5,31		0,0
002	Tank	AGUA	RIGIDO	150,0	5,31		0,0
003	Tank	GASOIL	RIGIDO	130,0	7,96	0,10	5,0 Liters
Id	Item	Weight	Distance	VCG Description			
001	Battery		7,36				
002	Battery		7,36	75Ah			



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Sail Plan



SAILS INVENTORY

MAINSAIL (1)																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
M17	0,21	1,12	1,95	3,28	4,30	44,64		15/11/2017			15111701					
HEADSAILS (4)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
G3	0,10	0,69	1,31	2,50	3,59	4,65	15,50	105%	37,67	Y			30/01/2013		Unknow	
JIB TOP	0,06	0,65	1,28	2,59	3,93	5,20	14,40	118%	37,51	N			24/01/2018		Unknow	24011801
J1	0,08	0,71	1,34	2,45	3,58	4,63	15,46	105%	37,41	Y			21/02/2017		Unknow	21071602
J2	0,09	0,76	1,41	2,45	3,50	4,53	15,47	103%	37,19	Y			30/03/2017		Unknow	30031703
SYMMETRIC SPINNAKERS (2)																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
S1	15,47	15,47	15,47	8,03	7,60	102,42										
S2	15,55	15,55	15,55	7,93	7,56	101,81		15/01/2014		Unknown	15011402					
ASYMMETRIC SPINNAKERS (0)																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				