

BOAT Name ALLEGRA Sail Nr GBR-3116	GPH 602,0	HULL Length Overall 11,924m Maximum Beam 3,770m Displacement 7.550kg Draft 2,436m IMS Reg. Division Cruiser/Racer Dynamic Allowance 0,148% Fwd Accommodation Yes Hull Construction Solid Carbon Rudder No Crew Arm Extension
GENERAL Class FIRST 40.7 Designer FARR Builder Bennetau Series 12/1997 Age 08/2007 Age Allowance 0,487% Offset File EFRST407.OFF - 22/11/2000 17:10:00 Measurement by Grubiša, Marinov - 31/07/2012		IMSL 10,713m VCGD -0,119m Sink 22,58kg/mm RL 9,323m VCGM 0,102m WS 30,26m² LSM0 10,653m Displacement/Length ratio 6,2450



World Leader in Rating Technology

2018
ORC International
Certificate

Rating Office
R.F.E.V.
Luis de Salazar,9
28002 Madrid
crucero@rfev.es



SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	584,3			651,2		
Time on Time	1,0268			1,0366		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	690,7	532,5	477,1	888,7	654,5	567,3
Time on Time	0,9773	1,2677	1,4149	0,7595	1,0313	1,1898

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1002,7	829,8	733,9	691,6	674,9	667,8	651,3
52°	664,2	557,5	504,4	484,9	478,1	474,8	468,4
60°	632,0	533,4	490,3	473,0	465,9	462,2	457,5
75°	608,3	517,6	480,4	462,7	451,2	444,1	438,1
90°	615,0	517,9	476,3	459,8	444,9	431,9	413,8
110°	618,4	509,8	467,8	445,9	430,9	420,4	402,6
120°	635,1	521,7	473,0	448,3	426,7	407,3	386,1
135°	700,4	569,2	496,2	464,1	441,9	419,6	377,7
150°	830,8	660,9	558,2	495,4	465,4	444,5	403,6
Run VMG	959,3	763,1	644,6	566,3	515,2	477,8	435,5

Certificate
Number **311601**
ORC Ref **ESP00027881**
Issued On **19/02/2018**
VPP Ver. **2018 1.00**
Valid until **31/12/2018**

Crew Weight
Default **753kg**
Maximum **625kg**
Minimum* **469kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Double H.GPH	604,8	0,9921
Double H.OSN	588,8	1,0191
Non Spin GPH	634,2	0,9461
Non Spin OSN	614,9	0,9758

Selected Courses							
Windward / Leeward	981,0	796,5	689,2	628,9	595,1	572,8	543,4
Circular Random	829,2	669,1	583,8	534,8	505,1	485,8	460,6
Coastal / Long Distance	978,8	748,9	622,0	550,9	514,7	486,7	442,7
Non Spinnaker	887,3	710,3	614,2	558,0	523,5	501,1	472,6

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	42,1°	40,5°	40,0°	38,9°	38,2°	38,0°	37,9°
Beat VMG	3,59	4,34	4,91	5,21	5,33	5,39	5,53
52°	5,42	6,46	7,14	7,42	7,53	7,58	7,69
60°	5,70	6,75	7,34	7,61	7,73	7,79	7,87
75°	5,92	6,96	7,49	7,78	7,98	8,11	8,22
90°	5,85	6,95	7,56	7,83	8,09	8,34	8,70
110°	5,82	7,06	7,70	8,07	8,35	8,56	8,94
120°	5,67	6,90	7,61	8,03	8,44	8,84	9,32
135°	5,14	6,33	7,25	7,76	8,15	8,58	9,53
150°	4,33	5,45	6,45	7,27	7,74	8,10	8,92
Run VMG	3,75	4,72	5,59	6,36	6,99	7,53	8,27
Gybe Angles	144,7°	149,1°	150,1°	155,6°	170,1°	180,0°	180,0°

Class Division Length
CDL = **10,019**

Storm Sails Areas

Heavy Weather Jib	33,06
Storm Jib (JL=10,17)	12,25
Storm Triesail	14,03

Owner

BOAT	
Name ALLEGRA File GBR3116	Sail Nr GBR-3116 Data in meters/kilograms

INCLINING TEST AND FREEBOARDS		
Inclining Test Current Inclining		
Flotation date 31/07/2012	SG 1,0250	
FFM 1,323	FF 1,318	SFFP 0,292
FAM 1,095	FA 1,115	SAFP 11,313
W1 100,0	PD1 543,9	WD 11,790
W2 100,0	PD2 537,7	GSA 1,0
W3 100,0	PD3 538,0	RSA 1,0
W4 100,0	PD4 537,8	PLM 9000,0
LCF from stem on CL / on sheer		6,482 / 6,720
Maximum beam station from stem		7,502
RM Measured		172,1kg-m
RM Default		182,3kg-m
Limit of positive stability / Stab.Index		113,9° / 117,4
Freeboard at mast at 4,405		1,192



World Leader in Rating Technology

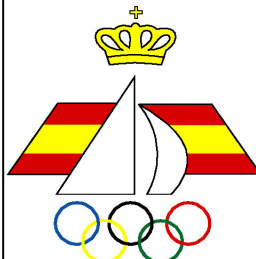
2018

IMS Measurement Certificate

RIG			
Forestay Tension Aft	Spreaders 2		Runners 0
Inner Stay None Fitted	Jumper Struts None		Jib Furler No
Carbon Mast No	Main Furler No		Without Backstay No
Taper Hollows No	MWT 0,186		MWT 0,186
Fiber Rigging No	MDL1 0,240		MDL2 0,130
Lenticular Rigging No	MDL2 0,130		MDL2 0,130
Articulated Bowsprit No	MDL1 0,240		MDL1 0,240
P 14,850	E 5,400	MDT1 0,135	MW 0,240
IG 15,536	J 4,405	MDL1 0,240	GO 0,272
ISP 15,836	SFJ 0,000	MDT2 0,130	BD 0,190
BAS 1,724	SPL 4,480	MDL2 0,186	MWT 0,186
FSP 0,072	TPS	TL 1,040	MCG

Certificate

Number **311601**
 ORC Ref **ESP00027881**
 Issued On **19/02/2018**
 VPP Ver. **2018 1.00**
 Valid until **31/12/2018**



MIZZEN RIG AND SAILS	
N/A	

PROPELLER		
Installation Strut	PRD 0,437	
Type Folding 2 blades	PBW 0,112	
Twin Screw No	PIPA 0,0035	
ST1 0,042	ST3 0,180	ST5 0,295
ST2 0,180	ST4 0,112	EDL 2,265

COMMENTS	

MOVABLE BALLAST	
N/A	

CENTERBOARD	
N/A	

SAILS (Maximum Areas)									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	0,180	1,16	2,01	3,48	4,50	47,57	48,60	P/8 · (E + 2·MQW + 2·MHW + 1.5·MTW + MUW + 0.5·MHB)	
Symmetric	SLU	SLE	SL	SHW	SFL	112,58		SL · (SFL + 4·SHW) / 6	
	16,03	16,03	16,03	8,47	8,26				
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
0,09	0,82	1,54	2,69	3,74	4,68	15,47	39,68	Y			Unknown	
0,00	0,00	0,00	0,00	0,00	4,18	15,30	32,56	Y		03/10/2007	Dacron	G-3

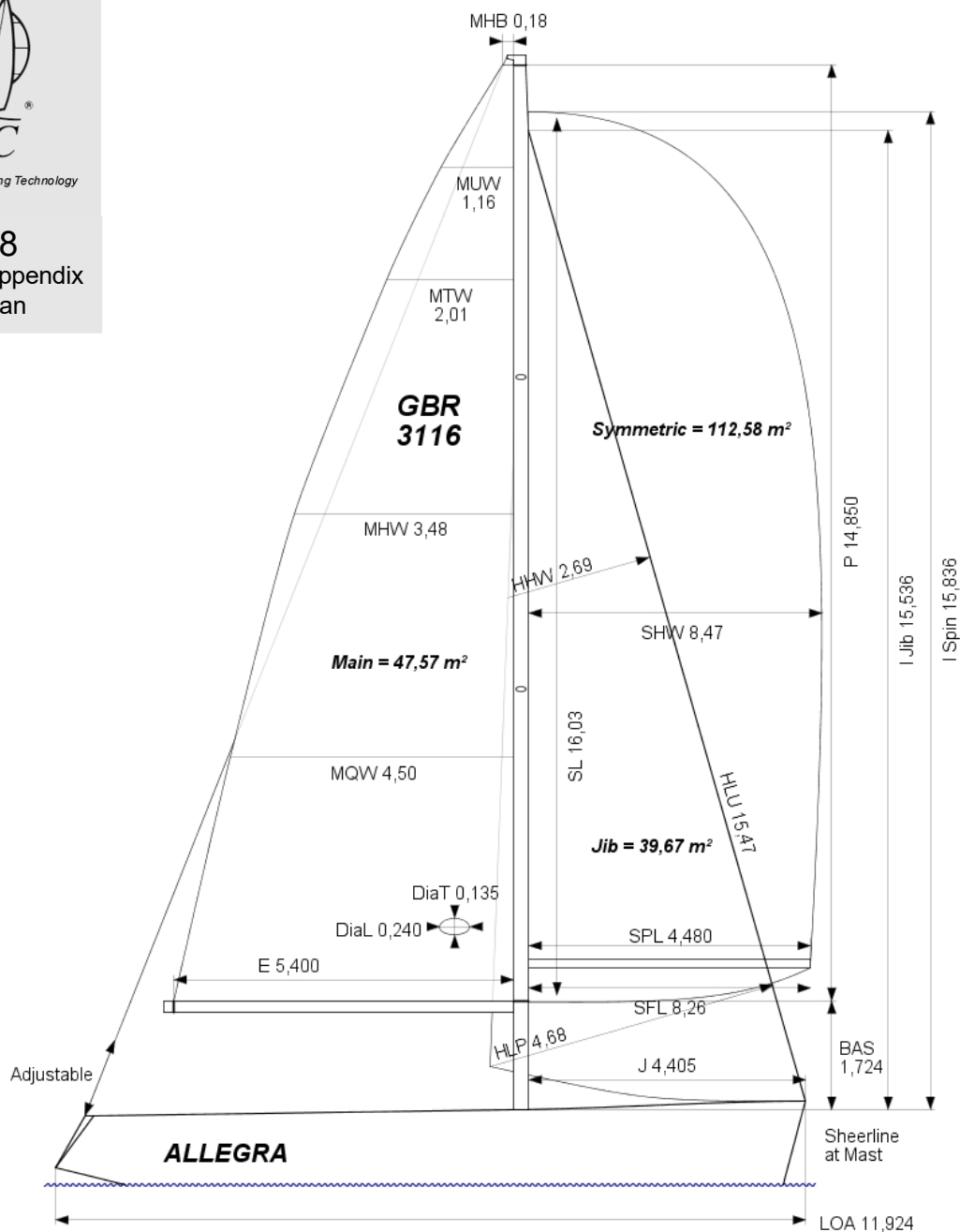
MEASUREMENT INVENTORY				
Measurer Marinov CRO 5 Date 31/07/2012 Comment				
Id	Item	Weight	Distance	VCG Description
4	Anchor	42,0	4,70	
4	Chain	40,0	4,70	rope 50 m x 10-
4	Tools	20,0	6,40	tool box, spare-
Id	Item	Maker	Model	
1	Engine	YANMAR	3JH4E	
Id	Item	Weight	Description	
4	Deck Gear	14,0	sheets, blocks	
4	Fwd Items	5,0	life jacket, harness	

MEASUREMENT INVENTORY									
Id	Item	Tank Use	Tank Type	Capcty	Dist.	VCG	Condtn	Description	
4	Tank	Boiler	INOX - FIX	25,0	8,90		25,0	starboard side	
4	Tank	Holding	PVC - FIX	80,0	2,80		0,0	centar line	
3	Tank	Disel	PVC - FIX	138,0	9,30		130,0	centar	
2	Tank	Water	PVC - FIX	140,0	5,70		0,0	starbord side	
1	Tank	Water	PVC - FIX	140,0	5,70		0,0	port side	
Id	Item	Weight	Distance	VCG Description					
1	Battery		7,40	2x 108 Ah, 1 x 75 Ah					
1	Misc	4,0	11,00	gas bottle					



World Leader in Rating Technology

2018
Certificate Appendix
Sail Plan



SAILS INVENTORY

MAINSAIL (1)

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment
2	0,180	1,16	2,01	3,48	4,50	47,57	Marinov	09/06/2009	North sails	Kevlar	

HEADSAILS (2)

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
4	0,09	0,82	1,54	2,69	3,74	4,68	15,47	106%	39,68	Y						Unknow
2	0,00	0,00	0,00	0,00	0,00	4,18	15,30	95%	32,56	Y		Grubisa	03/10/2007	Grego	Dacron	G-3

SYMMETRIC SPINNAKERS (1)

Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment
2	16,03	16,03	16,03	8,47	8,26	112,58	D - 206	30/10/2003	North sails	Nylon	S 1,5

ASYMMETRIC SPINNAKERS (0)

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