

BOAT Name CARRION OF WIGHT Sail Nr GBR-296L	GPH 627,6	HULL Length Overall 13,442m Maximum Beam 3,776m Displacement 13.787kg Draft 2,296m IMS Reg. Division Cruiser/Racer Dynamic Allow ance 0,571% Fwd Accommodation Yes Hull Construction Solid Carbon Rudder No Crew Arm Extension
GENERAL Class S&S 45 Designer S&S Builder NAUTOR Series 01/1970 Age 01/1971 Age Allow ance 0,487% Offset File e213.off - 29/01/1997 17:52:00 Measurement by Francisco Gil / Ju - 02/08/2013		IMSL 11,001m VCGD -0,203m Sink 25,98kg/mm RL 8,517m VCGM -0,223m WS 37,91m² LSM0 10,970m Displacement/Length ratio 10,4436



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	609,2			679,8		
Time on Time	0,9848			0,9929		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	726,4	554,9	489,6	934,8	689,3	582,7
Time on Time	0,9292	1,2165	1,3787	0,7221	0,9792	1,1584

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1051,0	881,2	784,3	723,6	692,6	675,9	661,1
52°	691,3	590,4	523,7	494,3	481,0	474,6	468,7
60°	657,2	561,6	504,3	481,3	469,1	462,3	456,1
75°	632,0	539,0	491,6	471,4	458,9	449,6	438,6
90°	636,4	542,8	489,5	465,7	455,2	444,2	426,4
110°	653,1	540,7	483,5	459,6	443,3	429,7	415,7
120°	671,6	558,0	491,5	463,8	445,9	430,7	403,7
135°	739,3	609,7	525,9	481,6	459,4	442,6	411,1
150°	871,9	692,8	592,9	523,0	482,1	460,9	430,1
Run VMG	1006,7	799,9	683,4	599,6	540,3	495,8	453,1

Certificate
Number **029601**
ORC Ref **ESP00027131**
Issued On **16/01/2018**
VPP Ver. **2018 1.00**
Valid until **31/12/2018**

Crew Weight
Default **786kg**
Maximum **600kg**
Minimum* **450kg**
**when applied by the NoR and SI*
Non Manual Pwr **Yes**

Special Scoring

	ToD	ToT
Double H.GPH	629,3	0,9534
Double H.OSN	611,5	0,9812
Non Spin GPH	651,9	0,9204
Non Spin OSN	632,5	0,9486

Selected Courses							
Windward / Leeward	1028,9	840,6	733,9	661,6	616,5	585,8	557,1
Circular Random	868,5	700,2	608,9	554,9	521,4	499,8	474,5
Coastal / Long Distance	1026,7	790,2	658,0	573,8	530,0	499,1	454,7
Non Spinnaker	912,2	731,3	632,0	572,6	535,3	510,9	481,5

Sails Limitations

Headsails	Spinnakers
1	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	43,0°	40,9°	41,1°	41,7°	40,6°	39,8°	39,2°
Beat VMG	3,43	4,09	4,59	4,98	5,20	5,33	5,45
52°	5,21	6,10	6,87	7,28	7,48	7,59	7,68
60°	5,48	6,41	7,14	7,48	7,67	7,79	7,89
75°	5,70	6,68	7,32	7,64	7,84	8,01	8,21
90°	5,66	6,63	7,35	7,73	7,91	8,10	8,44
110°	5,51	6,66	7,45	7,83	8,12	8,38	8,66
120°	5,36	6,45	7,33	7,76	8,07	8,36	8,92
135°	4,87	5,90	6,85	7,47	7,84	8,13	8,76
150°	4,13	5,20	6,07	6,88	7,47	7,81	8,37
Run VMG	3,58	4,50	5,27	6,00	6,66	7,26	7,95
Gybe Angles	146,0°	151,0°	153,2°	153,4°	163,5°	180,0°	180,0°

Class Division Length
CDL = **9,760**

Storm Sails Areas

Heavy Weather Jib	35,34
Storm Jib (JL=10,52)	13,09
Storm Trysail	14,48

Owner

BOAT	
Name CARRION OF WIGHT	Sail Nr GBR-296L
File GBR296	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS		
Inclining Test Current Inclining		
Flotation date 01/01/2010	SG 1,0260	
FFM 1,346	FF 1,354	SFFP 0,963
FAM 0,992	FA 0,998	SAFP 13,026
W1 100,0	PD1 386,6	WD 13,800
W2 100,0	PD2 387,5	GSA 1,0
W3 100,0	PD3 387,5	RSA 1,0
W4 100,0	PD4 386,6	PLM 9000,0
LCF from stem on CL / on sheer		7,471 / 7,695
Maximum beam station from stem		7,335
RM Measured		280,8kg-m
RM Default		220,5kg-m
Limit of positive stability / Stab.Index		128,6° / 138,0
Freeboard at mast at 6,100		1,101



World Leader in Rating Technology

2018

IMS Measurement Certificate

RIG			
Forestay Tension Aft	Spreaders 2		Runners 0
Inner Stay None Fitted	Carbon Mast No		Jumper Struts None
Taper Hollows No	Fiber Rigging No		Jib Furler Yes
Lenticular Rigging No	Main Furler No		Without Backstay
Articulated Bowsprit No			
P 15,320	E 5,400	MDT1 0,140	MW 0,270
IG 16,150	J 5,400	MDL1 0,270	GO 0,280
ISP 16,910	SFJ 0,700	MDT2 0,140	BD 0,170
BAS 1,700	SPL 5,520	MDL2 0,270	MWT
FSP 0,072	TPS 0,000	TL 0,000	MCG

Certificate

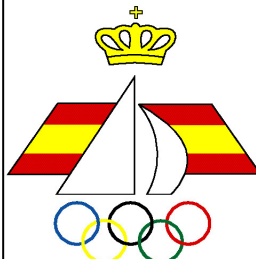
Number **029601**

ORC Ref **ESP00027131**

Issued On **16/01/2018**

VPP Ver. **2018 1.00**

Valid until **31/12/2018**



MIZZEN RIG AND SAILS	
N/A	

PROPELLER		
Installation Strut	PRD 0,460	
Type Folding 2 blades	PBW 0,012	
Twin Screw	PIPA 0,0035	
ST1 0,048	ST3 0,175	ST5 0,235
ST2 0,175	ST4 0,112	EDL 2,070

COMMENTS

MOVABLE BALLAST	
N/A	

CENTERBOARD	
N/A	

SAILS (Maximum Areas)						
Mainsail	MHB	MUW	MTW	MHW	MQW	Area Area (r) Formula
	0,050	0,99	1,78	3,20	4,31	46,16 46,78 $P/8 \cdot (E + 2 \cdot MQW + 2 \cdot MHW + 1.5 \cdot MTW + MUW + 0.5 \cdot MHB)$
Symmetric Not Available						
Asymmetric	SLU	SLE	SL	SHW	SFL	Area Formula
	16,72	14,76	15,74	8,91	9,59	118,65 $AS \cdot (SFL + 4 \cdot SHW) / 6$

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
0,11	1,08	2,15	4,31	6,50	8,68	15,39	66,70			01/08/2013	Carbon	

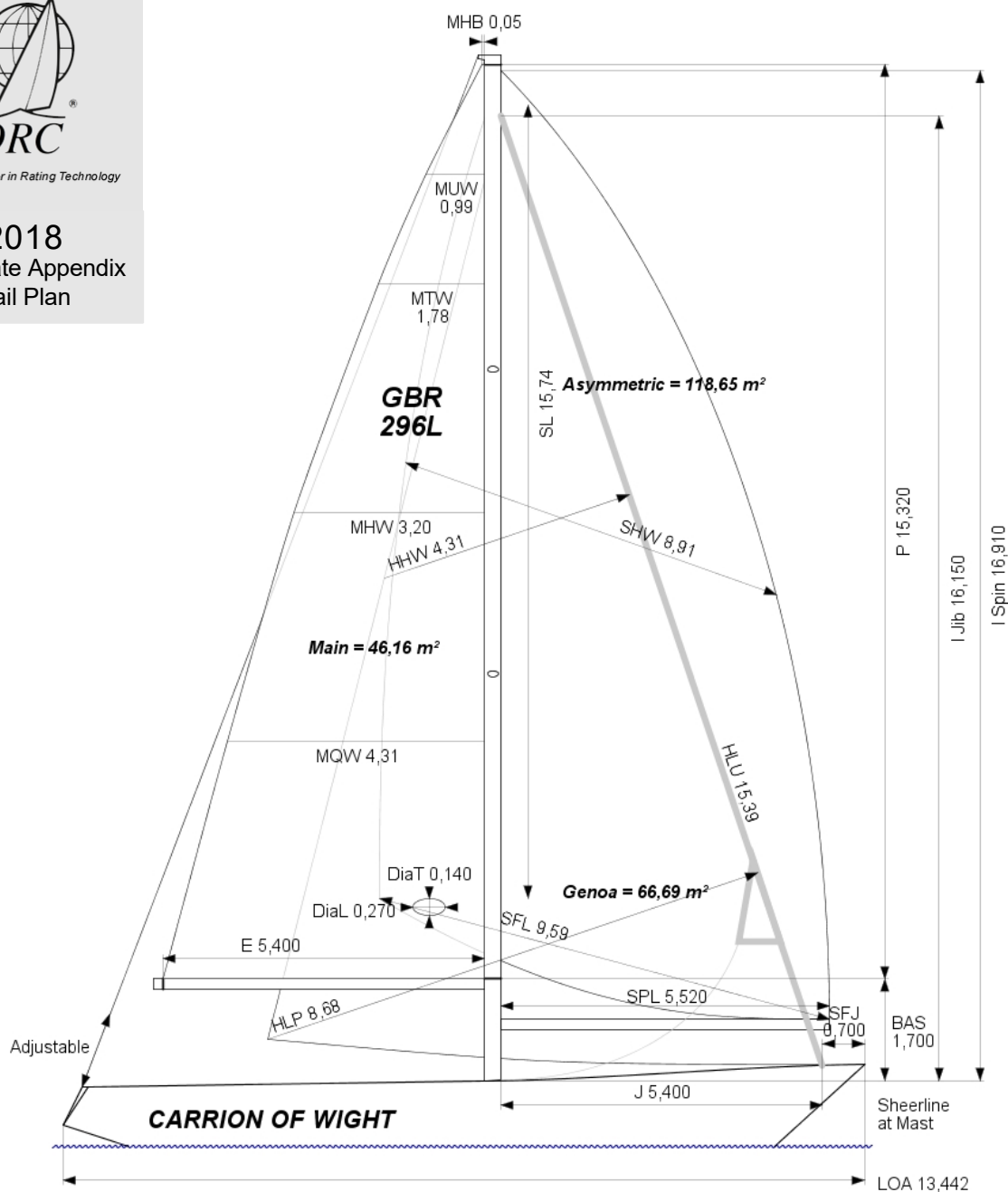
MEASUREMENT INVENTORY				
Measurer PERELLO esp 493				
Date 01/01/2010				
Comment				
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>
<i>Id</i>	<i>Item</i>	<i>Weight Description</i>		

MEASUREMENT INVENTORY				
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>



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
1	0,050	0,99	1,78	3,20	4,31	46,16	FRAGIL	01/08/2013	ONE SAILS	Kevlar	

HEADSAILS (1)

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
1	0,11	1,08	2,15	4,31	6,50	8,68	15,39	161%	66,70			FRAGIL	01/08/2013	ONE SAILS	Carbon	

SYMMETRIC SPINNAKERS (0)

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

ASYMMETRIC SPINNAKERS (1)

Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment
1	16,72	14,76	15,74	8,91	9,59	118,65	asym	FRAGIL	01/08/2013		Nylon	