BOAT

Name **PINGON**
Sail Nr **ESP-3560**

GPH

735.0

GENERAL

Class	**DUETTA 94**
Designer	**V.D. STADT**
Builder	**DEHLER**
Series	**01/1985**
Age	**07/1986**
Age Allowance	**0.975%**
Offset File	**HC19001.OFF - 31/05/1999 14:44:52**
Measurement by	**DMOR/OMOL/EMOL - 12/02/2010**

HULL

Length Overall	**9.430 m**
Maximum Beam	**3.116 m**
Displacement	**3,830 kg**
Draft	**1.416 m**
IMS Reg. Division	**Cruiser/Racer**
Dynamic Allowance	**0.382%**
Fwd Accommodation	**Yes**
Hull Construction	**Solid**
Carbon Rudder	**No**
Crew Arm Extension	

IMS L **7.927** VCGD **0.106** VCGM **0.111**
Sink **14.00 kg/mm** Wetted Area **18.76 m²**

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SCORING OPTIONS

	OFFSHORE COASTAL / LONG DISTANCE			INSHORE WINDWARD / LEEWARD		
Time On Distance	**702.5**			**800.8**		
Time On Time	**0.8541**			**0.8429**		
	PLT		PLD	PLT		PLD
Performance Line	**0.712**		**100.0**	**0.700**		**195.3**
	Low	Medium	High	Low	Medium	High
Triple Number	**0.7478**	**0.9951**	**1.1907**	**0.6024**	**0.8420**	**0.9702**

TIME ALLOWANCES

Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	**1310.0**	**1070.1**	**932.1**	**876.3**	**846.3**	**828.9**	**822.6**
52°	**830.2**	**672.4**	**617.0**	**588.4**	**574.6**	**566.3**	**559.4**
60°	**766.7**	**636.3**	**594.5**	**566.8**	**550.9**	**543.1**	**535.6**
75°	**713.2**	**614.5**	**577.4**	**551.4**	**529.5**	**513.3**	**502.6**
90°	**719.4**	**608.8**	**565.1**	**535.1**	**520.5**	**510.1**	**481.8**
110°	**727.7**	**609.9**	**565.1**	**533.4**	**507.0**	**483.8**	**457.1**
120°	**763.5**	**623.9**	**575.4**	**543.0**	**516.0**	**492.2**	**450.6**
135°	**865.7**	**679.4**	**604.9**	**566.2**	**537.2**	**512.1**	**468.9**
150°	**1023.2**	**795.6**	**659.3**	**599.5**	**563.8**	**536.3**	**490.8**
Run VMG	**1181.5**	**920.2**	**755.7**	**659.1**	**606.0**	**570.8**	**520.3**
Selected Courses							
Windward / Leeward	**1245.8**	**995.1**	**843.9**	**767.7**	**726.2**	**699.8**	**671.4**
Circular Random	**1021.7**	**820.2**	**712.1**	**649.8**	**612.0**	**587.6**	**557.5**
Ocean for PCS	**1090.7**	**857.2**	**727.6**	**649.2**	**598.3**	**562.1**	**509.8**
Non Spinnaker	**1072.6**	**855.2**	**737.3**	**668.6**	**626.5**	**599.5**	**567.0**

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	**46.3°**	**47.1°**	**44.5°**	**42.6°**	**41.4°**	**40.9°**	**41.3°**
Beat VMG	**2.75**	**3.36**	**3.86**	**4.11**	**4.25**	**4.34**	**4.38**
52°	**4.34**	**5.35**	**5.83**	**6.12**	**6.26**	**6.36**	**6.44**
60°	**4.70**	**5.66**	**6.06**	**6.35**	**6.54**	**6.63**	**6.72**
75°	**5.05**	**5.86**	**6.23**	**6.53**	**6.80**	**7.01**	**7.16**
90°	**5.00**	**5.91**	**6.37**	**6.73**	**6.92**	**7.06**	**7.47**
110°	**4.95**	**5.90**	**6.37**	**6.75**	**7.10**	**7.44**	**7.88**
120°	**4.71**	**5.77**	**6.26**	**6.63**	**6.98**	**7.31**	**7.99**
135°	**4.16**	**5.30**	**5.95**	**6.36**	**6.70**	**7.03**	**7.68**
150°	**3.52**	**4.52**	**5.46**	**6.01**	**6.39**	**6.71**	**7.34**
Run VMG	**3.05**	**3.91**	**4.76**	**5.46**	**5.94**	**6.31**	**6.92**
Gybe Angles	**146.3°**	**151.3°**	**153.5°**	**168.6°**	**174.4°**	**175.7°**	**175.9°**

Rating Office

REAL FEDERACION ESPAÑOLA DE VELA
C/ Luis de Salazar, 9
28002 MADRID

Certificate

Number **356001**
ORC Ref **ESP00002680**
Issued On **03/02/2012**
VPP Ver. **2012 1.00**
Valid until **31/12/2012**

Crew Weight

Declared	**420 kg**
Default*	**516 kg**
Non Manual Power	**No**

Special Scoring

	ToD	ToT
Double Handed	**704.9**	**0.8512**
Non Spinnaker	**728.0**	**0.8242**
N/S Perf. Line	**73.7**	**0.653**

Sails Limitations

Genoas	Jibs	Spinnakers
2	**2**	**3**

Spinnaker configuration **Symmetric**

Storm Sails Areas

Heavy Weather Jib	**15.49**
Storm Jib (JL=6.96)	**5.74**
Storm Trysail	**7.65**

Owner

Signature

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BOAT

Name	**PINGON**	Sail Nr	**ESP-3560**
File	**E3560.dxt**	Data in	**meters/kilograms**

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	**10.800**	E	**4.050**	MDT1	**0.105**	TL	**0.000**
IG	**10.680**	J	**3.270**	MDL1	**0.160**	MWT	**78.40**
ISP	**10.900**	SFJ	**0.220**	MDT2	**0.105**	MCG	**4.410**
SPS	**1.670**	SPL	**3.280**	MDL2	**0.160**	CPW	**2.100**
BAS	**1.460**	TPS		MW	**0.160**	BD	**0.165**
BAL	**0.152**	FSP	**0.000**	GO	**0.170**	BWT	**23.90**

MIZZEN RIG AND SAILS

N/A

COMMENTS

INCLINING TEST AND FREEBOARDS

Inclining Test **Current Inclining**

Flotation date **06/05/2007** SG **1.0250**

FFM	**1.186**	FF	**1.186**	SFFP	**0.552**
FAM	**0.937**	FA	**0.937**	SAFP	**8.662**

W1	**51.900**	PD1	**537.6**	WD	**9.400**
W2	**51.900**	PD2	**535.8**	GSA	**1.0**
W3	**51.900**	PD3	**534.8**	RSA	**1.0**
W4	**51.900**	PD4	**534.4**	PLM	**9000.0**

Maximum beam station from stem	**5.394**
RM Measured / Default	**71.7 / 74.2**
Limit of positive stability	**112.1°**
Stability Index	**111.7**
Freeboard at mast at 3.490	**1.049**

PROPELLER

Installation	**Shaft**					PRD	**0.430**
Type	**Folding**					PBW	
Twin Screw	**No**					PIPA	**0.0064**
PSA	**20.000**	PHL	**0.150**	ST3	**0.105**	ESL	**0.845**
PSD	**0.025**	ST1	**0.029**	ST4	**0.051**		
PHD	**0.090**	ST2	**0.100**	ST5	**0.203**		

WATER BALLAST

N/A

CENTERBOARD

N/A

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Certificate

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ORC Ref **ESP00002680**
Issued On **03/02/2012**
VPP Ver. **2012 1.00**
Valid until **31/12/2012**

SAILS (Maximum Areas)

Mainsail	HB	MGT	MGU	MGM	MGL	MSW		Area	Area (r)	Formula
	0.140	0.83	1.55	2.65	3.47	13.40		26.35	26.99	P/8 · (E + 2·MGL+ 2·MGM + 1.5·MGU + MGT + 0.5·HB)
Jib/Genoa	**JH**	**JGT**	**JGU**	**JGM**	**JGL**	**JL**	**LPG**			
	0.05	0.55	1.09	2.21	3.40	10.36	4.68	23.53		0.1125·JL·(1.445·LPG+2·JGL+2·JGM+1.5·JGU+JGT+0.5·JH)
Symmetric	**SL**	**SMG**	**SF**							
	10.69	5.88	5.97					52.54		SL · (SF + 4·SMG) / 6

Asymmetric
Not Available

Code Zero
Not Available

MEASUREMENT INVENTORY

Measurer **S.TROITEIRO / D. MORENO 490 / 488**
Date **06/05/2007**
Comment

Id	Item	Weight	Distanc	Description
1	Anchor	40.0	1.10	ANCLA Y
1	Anchor	10.0	3.27	ANCLA Y
1	Tools	3.0	0.00	

Id	Item	Weight	Description

MEASUREMENT INVENTORY

Id	Item	Tank Use	Tank Type	Capct	Dist.	Condt	Description
1	Liquid Tank	COMBUSTIB		0.0	7.17	0.0	VACIO
1	Liquid Tank	AGUA		0.0	1.25	0.0	VACIO

Id	Item	Weight	Distanc	Description
1	Battery	0.0	6.27	2 BATERIAS A J+3

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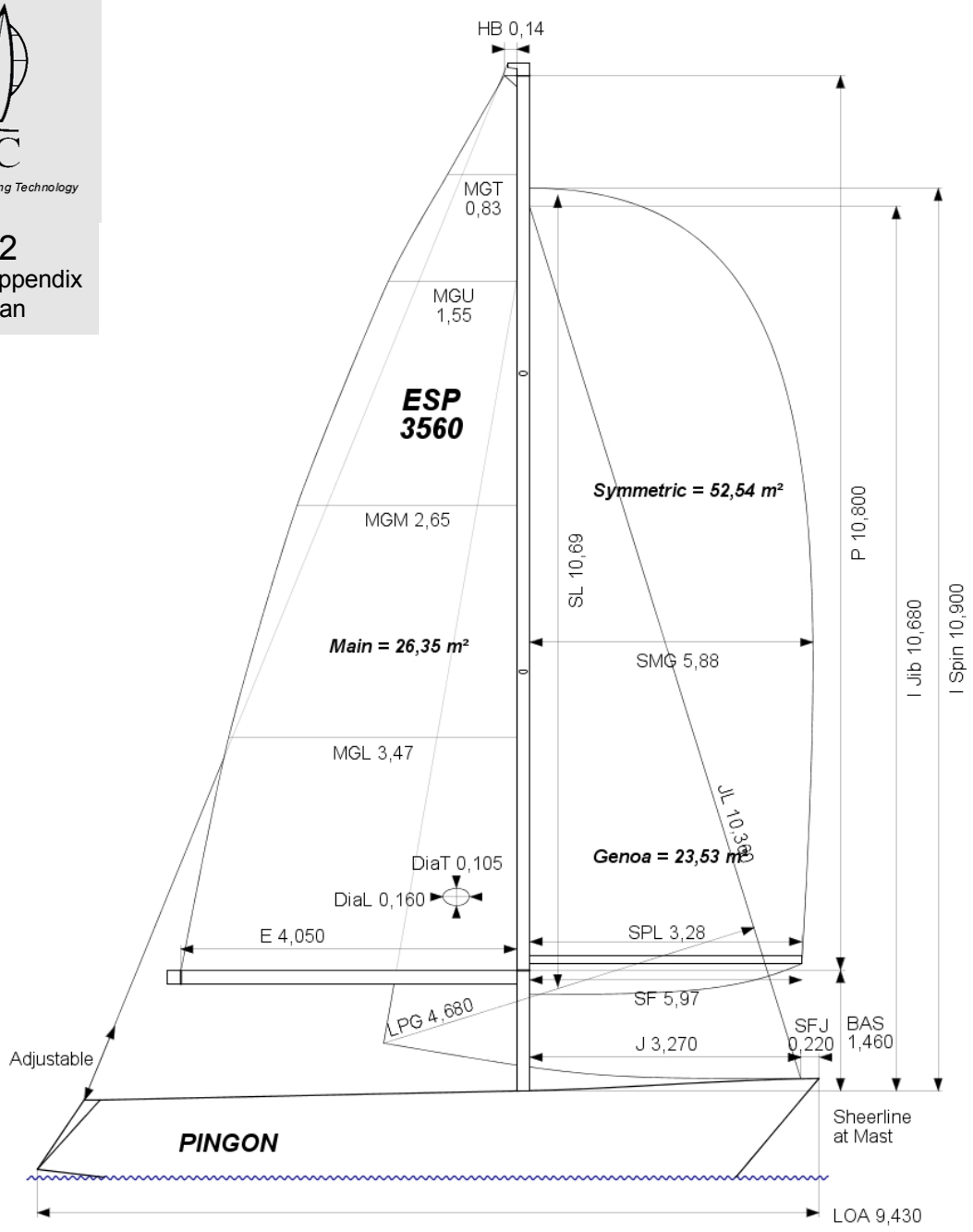
Sail Plan



SAILS INVENTORY

MAINSAIL

Id	HB	MGT	MGU	MGM	MGL	MSW	Area	Measurer	Meas.Date	Manufacture	Material	Comment
1	0.140	0.83	1.55	2.65	3.47	13.40	26.35	O.MOLINELLI	23/04/2008		Unknown	

JIBS / GENOAS

Id	JH	JGT	JGU	JGM	JGL	LPG	JL	Ovrlp	Area	Measurer	Meas.Date	Manufacture	Material	Comment
001	0.05	0.55	1.09	2.21	3.40	4.68	10.36	143%	23.53	EMOLINE	12/02/2010	NORTH	Unknown	

SYMMETRIC SPINNAKERS

Id	SL	SMG	SF	Area	Measurer	Meas.Date	Manufacture	Material	Comment
003	10.69	5.88	5.97	52.54	EMOLINELLI	12/02/2010		Unknown	
002	10.56	5.84	5.70	51.15	DMOR/EMOL	02/04/2009		Unknown	NUEVO
001	10.72	5.67	5.82	50.92	DMOR/EMOL	02/04/2009			VIEJO

ASYMMETRIC SPINNAKERS

Id	SLU	SLE	ASL	AMG	ASF	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment

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