

APH ToD: **551.2** CDL: **9.812**

APH ToT: **1.0885** CertNo: **PERI12**

BOAT

Class **First 42**
Designer **GERMAN FRERS**
Builder **BENETEAU**
Age date **03/1983**
Series date **03/1983**
Offset file **FIRST42-PER120.off**
Data file **PER120**

HULL

Length Overall **12.800 m**
Maximum Beam **3.982 m**
Draft **2.212 m**
Displacement **9,472 kg**
DLR **8.3259**
IMS Division **Cruiser/Racer**
Dynamic Allowance **0.390%**
Age Allowance **0.487%**

PROPELLER

Installation **Shaft exposed**
Type **Folding 2 blades**
Diameter **0.440m**

CREW

Maximum weight **930 kg** (declared)
Minimum weight **791 kg** *when applied
Non Manual Power **No**
Crew Arm Extension

SAIL AREAS (m²)

	Measured	Rated
Mainsail	37.45	38.09
Headsail Luffed	55.42	55.42
Headsail Flying		
Symmetric	134.19	134.19
Asymmetric	118.74	118.74

(All asymmetric spinnakers with SHW/SFL > 85%)

STORM SAIL AREAS (m²)

Trysail **10.81**
Storm Jib **13.00**
Heavy Weather Jib **35.10**

SAIL LIMITS

Headsails **6**
Spinnakers **5** * Asymmetric may be tacked on the pole

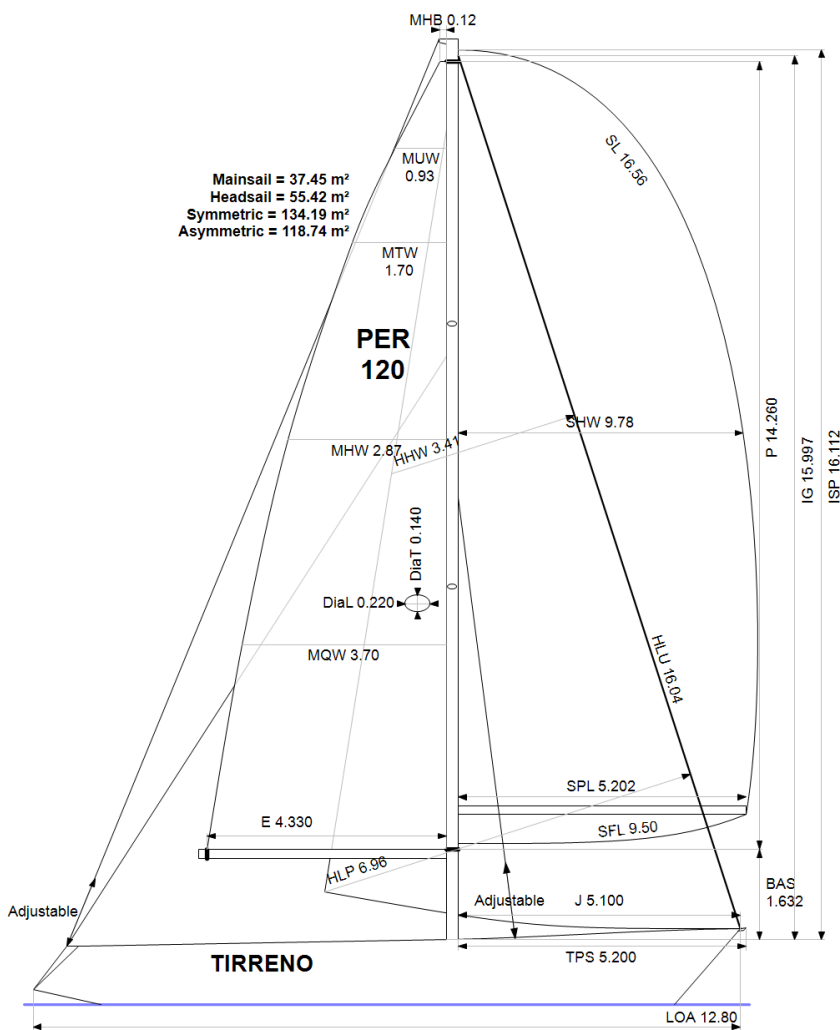
STABILITY

Righting Moment **189.6 kg·m**
Stability Index **115.9**

COMMENTS

NUEVO ARMADOR ex AKUN (antes NAISAN)
11-01-2024 cambio botavara

The owner and any other person in charge is responsible that boat is complying with her certificate in accordance with RRS 78.1 and ORC Rule 304.



Rated boat velocities in knots

Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt	24 kt
Beat Angles	42.9°	41.4°	39.7°	38.8°	38.1°	37.6°	37.4°	37.7°
Beat VMG	3.51	4.25	4.79	5.11	5.27	5.36	5.43	5.42
52°	5.35	6.31	6.91	7.23	7.40	7.49	7.57	7.60
60°	5.63	6.55	7.10	7.40	7.58	7.68	7.78	7.82
75°	5.78	6.71	7.24	7.55	7.76	7.92	8.10	8.21
90°	5.64	6.62	7.25	7.61	7.82	8.02	8.35	8.55
110°	5.58	6.75	7.43	7.81	8.11	8.37	8.73	8.99
120°	5.44	6.63	7.37	7.80	8.13	8.43	8.98	9.41
135°	4.90	6.11	7.02	7.56	7.93	8.27	8.95	9.66
150°	4.12	5.24	6.26	7.06	7.55	7.90	8.53	9.21
Run VMG	3.57	4.54	5.42	6.18	6.77	7.29	7.99	8.58
Gybe Angles	143.5°	148.7°	149.6°	155.6°	163.3°	175.4°	178.6°	178.3°



International
Certificate
2024

Boat
TIRRENO
PER-120

Asociacion de Vela Oceánica
del Peru - AVOP
Roberto Peschiera - RO
Peschiera56@gmail.com



Time Allowances in secs/NM								
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt	24 kt
Beat VMG	1026.7	846.7	752.1	704.2	683.1	671.3	662.5	664.1
52°	672.9	570.9	521.1	497.8	486.2	480.5	475.4	473.9
60°	639.8	549.3	507.2	486.5	475.0	468.7	462.9	460.2
75°	622.9	536.6	497.4	476.9	463.9	454.7	444.6	438.7
90°	638.6	543.5	496.6	473.1	460.6	448.7	431.3	420.9
110°	645.3	533.3	484.7	460.8	443.8	430.1	412.4	400.6
120°	661.9	543.0	488.7	461.8	442.7	426.8	400.8	382.6
135°	734.4	589.4	513.0	476.5	454.0	435.3	402.3	372.6
150°	874.5	686.6	575.1	509.7	476.9	455.8	422.0	391.0
Run VMG	1009.7	792.8	664.1	582.2	531.6	494.1	450.8	419.7
Selected Courses								
Windward / Leeward	1018.2	819.8	708.1	643.2	607.4	582.7	556.6	541.9
All purpose	784.9	644.0	569.9	530.1	508.0	492.9	473.8	461.3

Single Number Scoring Options		
Course	Time On Distance	Time On Time
Windward / Leeward	675.0	0.8888
All purpose	551.2	1.0885



Data in meters/kilograms (Metric)

HULL AND APPENDAGES (Lightship Trim)

Class	First 42	LOA	12.800	VCGD	0.099
Measurement	20/05/2014	Max. Beam	3.982	VCGM	0.091
HIN		Draft	2.212	RM Rated (kg·m)	189.6
Plan review		Displacement	9,472	Limit of positive stability(°)	111.0
Hull construction	Solid	Wetted area	33.18	Stability Index	115.9
Carbon Rudder	No	IMS L	10.632	Default crew weight	732
Light stanchions	No	LSM0	10.438	Declared crew weight	930
Trim tab	No	Acc. length	12.800		
		Sink (kg/mm)	23.58		

PROPELLER

Propeller Type	Folding 2 blades						
Installation	Shaft exposed	PRD	0.440	PSD	0.032	PSA	20.0°
Twin screw	No	PBW	0.109	PHD	0.078	ESL	0.900
Hydro generator	No	PIPA	0.0060	PHL	0.123	ST1	0.016
						ST4	0.058
						ST2	0.102
						ST5	0.180
						ST3	0.105

RIG

Forestay tension	Aft	P	14.260	E	4.330
Inner stay	Adjustable	IG	15.997	J	5.100
Mast material	Aluminum	ISP	16.112	BAS	1.632
Single headsail furler	No	MDT1	0.140	FSD	0.038
Mainsail furler	No	MDL1	0.220	SFJ	
Articulated bowsprit	No	MDT2	0.140	SPL	5.202
Non-circular rigging	No	MDL2	0.220	WPL	
Fiber rigging	No	TL	0.000	TPS	5.200
Adjustable mast foot	No	MW	0.220	BD	0.160
Runners/Checkstays	1	GO	0.260	MWT	
Spreaders	2			MCG	
Rotating mast	No				

FLOTATION AND STABILITY

Calculation method	Poles inclining	SFFP	0.600	SAFP	11.980	W1	100.0	PD1	510.2	WD	12.330
Flotation Date	11/05/2024	FFM	1.365	FAM	1.038	W2	100.0	PD2	510.6	PLM	9000.00
		FF	1.364	FA	1.040	W3	100.0	PD3	517.4	GSA	1.0
		LCFcl	6.918	LCFsh	7.196	W4	100.0	PD4	513.4	RSA	1.0
		SG	1.0253	HBI	1.177					RM	189.3

INVENTORY

TANKS		<i>Id</i>	<i>Description</i>	<i>Sp.Wght</i>	<i>Capacity</i>	<i>Condition</i>	<i>LCG</i>	<i>VCG</i>
	C2		Tanque inox petrol	Fuel	100	42	10.00	
	C6		Tanque inox agua	Water	100	0	6.00	
	B6		Tanque inox agua	Water	100	0	6.00	
				<i>Total deductible</i>		10	10.00	
OTHER ITEMS		<i>Id</i>	<i>Kind</i>	<i>Description</i>		<i>Weight</i>	<i>LCG</i>	<i>VCG</i>
	C4		Battery	BATERIAS DE 15 PLACAS		36	8.60	
	B2		Battery 2	BATERIAS DE 15 PLACAS		36	9.10	
	C3		Engine	MOTOR PERKINS		80	9.20	
						<i>Total deductible</i>		0

MAINSAIL

<i>Id</i>	<i>MHB</i>	<i>MUW</i>	<i>MTW</i>	<i>MHW</i>	<i>MQW</i>	<i>Area</i>	<i>Meas.Date</i>	<i>Comment</i>
M1.2	0.12	0.93	1.70	2.87	3.70	37.45	18/08/2023	

HEADSAIL

<i>Id</i>	<i>HHB</i>	<i>HUW</i>	<i>HTW</i>	<i>HHW</i>	<i>HQW</i>	<i>HLP</i>	<i>HLU</i>	<i>Btn</i>	<i>Flying FT</i>	<i>Area</i>	<i>Meas.Date</i>	<i>Comment</i>
G1.2	0.10	0.89	1.72	3.41	5.16	6.96	16.04	No	No	55.42	22/06/2023	
F1	0.13	0.69	1.26	2.43	3.63	4.88	16.03	Yes	No	39.34	02/09/2014	

SYMMETRIC SPINNAKER

<i>Id</i>	<i>SLU</i>	<i>SLE</i>	<i>SL</i>	<i>SHW</i>	<i>SFL</i>	<i>Area</i>	<i>Meas.Date</i>	<i>Comment</i>
S2-23	16.56	16.56	16.56	9.78	9.50	134.19	22/06/2023	BLANCO
S1	15.71	15.71	15.71	8.72	9.35	115.81	10/08/2022	VERDE

ASYMMETRIC SPINNAKER

<i>Id</i>	<i>SLU</i>	<i>SLE</i>	<i>SL</i>	<i>SHW</i>	<i>SFL</i>	<i>Ratio</i>	<i>Area</i>	<i>Meas.Date</i>	<i>Comment</i>
A1	16.50	14.53	15.52	9.30	8.72	107%	118.74	06/01/2022	ROJO
A3	17.05	15.50	16.28	8.10	9.18	88%	112.79	12/04/2024	BLANCO

CRUISER/RACER REQUIREMENTS*

Accommodation length	12.8 m	Table area	0.66 m²	Headroom	1.84 m
Minimum number of berths	6	Personal gear stowage	0.24 m³	Fresh water capacity	204 l
Minimum number of seats in cockpit	6	Food stowage	0.36 m³	Fuel capacity	106 l

*This list refers to the calculated requirements. See IMS Appendix 1 for the complete list of requirements.