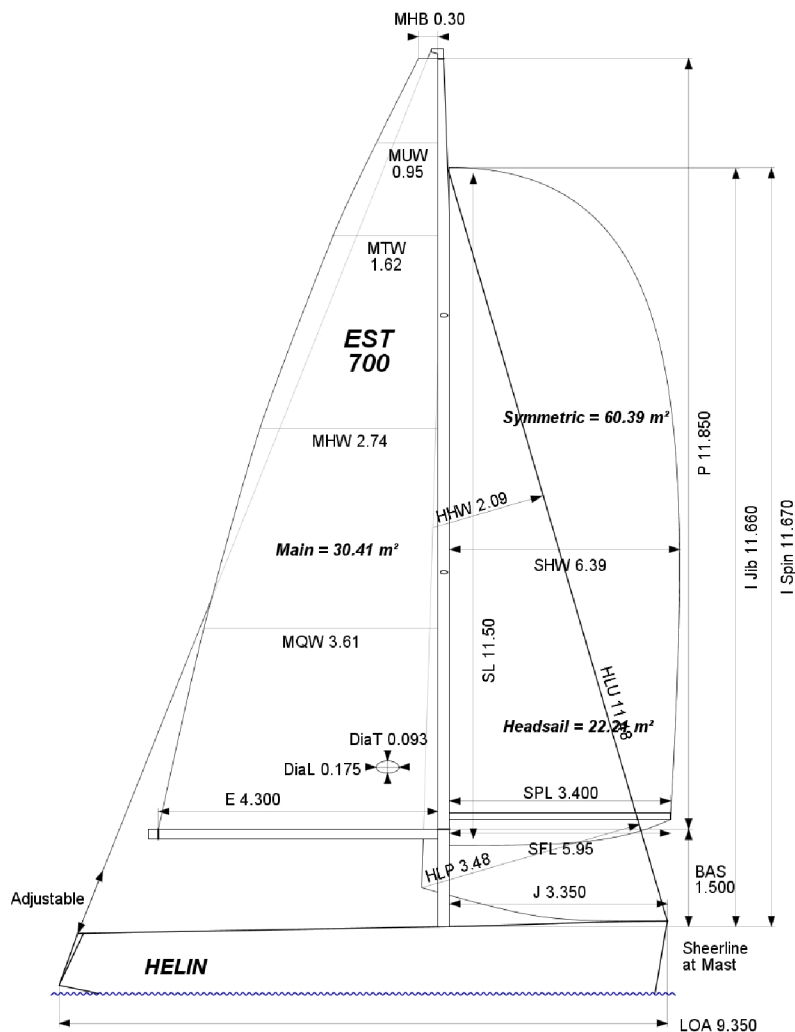




BOAT		GPH	HULL	
Name	HELIN	658.3	Data File	EST700
Sail Nr	EST 700		LOA	9.350m
CLASS			Offset File	EST700CL.off
Class	RIDAS 31		Displacement	3,449kg
Designer	DIETER BLANK		MB	3.106m
Builder	RIDAS JAHT		Draft	2.022m
Series	06/2012		IMS Division	Cruiser/Racer
Age Date	06/2012		Dynamic All.	0.207%
Age Allowance	0.260%		Plan Review	Construction
COMMENTS			Fiber Rigging	No
PROPELLER			Crew Arm Ex	No
Installation	Strut	PRD 0.407	Light Stanchions	
Type	Folding 2 blades	PBW 0.095	IMSL	8.690m
		PIPA 0.0031	VCGD	-0.030m
			Sink	13.93kg/mm
			RL	7.702m
			VCGM	-0.096m
			WS	19.68m²
			LSM0	8.614m
			Displacement/Length ratio	5.3961
			Water Ballast	0
			Trim Tab	No
			BLR Index	0.0000
			CENTERBOARD	
			N/A	

SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	640.0			713.9		
Time on Time	0.9375			0.9455		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	752.8	583.2	521.7	973.0	715.6	625.5
Time on Time	0.8966	1.1574	1.2939	0.6937	0.9433	1.0791



Rating Office
Estonian Yachting Union
Purje 8, maja 3
11911 Tallinn
Estonia



Certificate
Number 025/20
Issued On 05/06/2020
ORC Ref 03880000K00
VPP Ver. 2020 1.02
Valid until 31/12/2020

Crew Weight
Default 556kg
Maximum 510kg
Minimum* 383kg
*when applied by the NoR and SI
Non Manual Pwr No

Special Scoring
ToD ToT
Non Spin GPH 688.9 0.8710
Non Spin OSN 667.6 0.8987

Sails Limitations
Headsails 5 Spinnakers 4

Spinnaker configuration
Symmetric: Yes 60.39
Asymmetric: No
Flying H/S: No
Spin. Pole: Yes

Class Division Length
CDL = 8.192

Stability (Estimated)
Limit Positive Stab.: 124.8°
Stability Index: 123.3

BOAT			
Name	HELIN	Sail Nr	EST 700
File	EST700	Data in	meters/kilograms

RIG									
Forestay Tension	Aft			Spreaders	2				
Inner Stay	None Fitted			Runners/Checkstays	0				
Carbon Mast	No			Jib Furler	No				
Fiber Riggig	No			Main Furler	No				
Non-Circular Riggig	No								
Articulated Bowsprit	No								
P	11.850	E	4.300	MDT1	0.093	MW			
IG	11.660	J	3.350	MDL1	0.175	GO			
ISP	11.670	SFJ		MDT2	0.000	BD			
BAS	1.500	SPL	3.400	MDL2	0.000	MWT	116.00		
FSD	0.035	TPS		TL	-2.000	MCG	4.430		

INCLINING TEST AND FREEBOARDS				
Inclining Test Enter VCG directly				
Flotation date 28/04/2014		SG 1.0250		
VCGDe -0.030				
FFM	1.105	FF	1.105	SFFP 0.275
FAM	0.886	FA	0.886	SAFP 8.975
LCF from stem on CL / on sheer				5.179 / 5.379
Maximum beam station from stem				6.265
RM Measured				68.8kg·m
RM Default				70.3kg·m
Limit of positive stability / Stab.Index				124.8° / 123.3
Freeboard at mast at 3.350				1.030

MIZZEN RIG AND SAILS	
	N/A

PROPELLER					
Installation	Strut			PRD	0.407
Type	Folding 2 blades			PBW	0.095
Twin Screw	No			PIPA	0.0031
ST1	0.041	ST3	0.180	ST5	0.220
ST2	0.180	ST4	0.110	EDL	1.670

COMMENTS	

MOVABLE BALLAST
N/A

CENTERBOARD	
	N/A



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2020

**Measurements
Datasheet**

Certificate
Number **025/20**
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VPP Ver. **2020 1.02**
Valid until **31/12/2020**



ESTONIAN
YACHTING
UNION

SAILS INVENTORY																
MAINSAIL (2)																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer		Meas.Date	Manufacture	Material	Comment				
2	0.30	0.95	1.62	2.74	3.61	30.41					Unknown					
1a	0.17	0.86	1.57	2.70	3.57	29.84			03/05/2013		Unknown					
HEADSAILS (6)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Flying	Measurer	Meas.Date	Manufacture	Material	Comment
5	0.10	0.63	1.19	2.09	2.76	3.48	11.48	104%	22.21		No					Unknow
4	0.08	0.49	0.93	1.81	2.69	3.49	11.35	104%	20.39		No		12/05/2014			Unknow
2a	0.09	0.52	0.94	1.80	2.64	3.44	11.40	103%	20.30		No		03/05/2013			Unknow
1a	0.09	0.51	0.93	1.75	2.58	3.40	11.30	101%	19.74		No		07/05/2013			Unknow
3	0.09	0.47	0.87	1.71	2.57	3.47	11.10	104%	19.23		No		03/05/2013			Unknow
6	0.08	0.49	0.93	1.18	2.64	3.49	11.35	104%	18.66		No					Unknow
SYMMETRIC SPINNAKERS (2)																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer		Meas.Date	Manufacture	Material	Comment				
3	11.50	11.50	11.50	6.39	5.95	60.40			12/05/2014		Unknown					
2	11.50	11.50	11.50	6.30	6.16	60.11			03/05/2013		Unknown					
ASYMMETRIC SPINNAKERS (0)																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer		Meas.Date	Manufacture	Material	Comment			

2020

ORC Club Certificate Appendix

BOAT			
Name	HELIN	Certificate Number	025/20
Sail Nr	EST 700	Issued On	05/06/2020

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1097.9	912.7	807.5	760.9	747.3	743.4	734.2
52°	720.0	609.8	555.8	535.0	527.9	524.8	519.4
60°	680.9	582.7	540.8	522.0	513.0	509.2	505.1
75°	653.3	563.7	529.4	509.5	494.6	484.2	477.0
90°	663.0	559.9	520.5	503.1	487.5	469.3	444.3
110°	663.9	554.3	514.4	487.0	461.0	444.7	421.6
120°	687.5	567.3	520.5	492.1	463.6	436.4	398.8
135°	765.4	620.5	545.0	511.6	484.4	456.2	400.6
150°	910.3	719.2	606.1	542.4	511.7	486.3	434.5
Run VMG	1051.1	830.4	699.0	613.7	554.6	520.1	470.4
Selected Courses							
Windward / Leeward	1074.5	871.5	753.3	687.3	650.9	631.8	602.3
Circular Random	904.8	731.2	638.7	585.4	552.9	531.4	502.4
Coastal / Long Distance	1072.2	818.7	680.6	604.1	564.7	533.1	478.7
Non Spinnaker	959.9	770.0	667.5	607.9	571.5	547.8	517.3

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	42.8°	40.9°	40.5°	39.0°	38.6°	38.6°	38.8°
Beat VMG	3.28	3.94	4.46	4.73	4.82	4.84	4.90
52°	5.00	5.90	6.48	6.73	6.82	6.86	6.93
60°	5.29	6.18	6.66	6.90	7.02	7.07	7.13
75°	5.51	6.39	6.80	7.07	7.28	7.43	7.55
90°	5.43	6.43	6.92	7.16	7.39	7.67	8.10
110°	5.42	6.50	7.00	7.39	7.81	8.09	8.54
120°	5.24	6.35	6.92	7.32	7.76	8.25	9.03
135°	4.70	5.80	6.60	7.04	7.43	7.89	8.99
150°	3.95	5.01	5.94	6.64	7.04	7.40	8.29
Run VMG	3.42	4.34	5.15	5.87	6.49	6.92	7.65
Gybe Angles	145.5°	150.0°	151.0°	160.0°	180.0°	180.0°	180.0°