

12



INTERNATIONAL TWELVE METRE CLASS

Yacht's Name VEMA III

National letters and Sail Number N-11 Club Kongelig Norsk Seilforening

Designer Johan Anker

Builder Anker & Jensen Building Year 1933

Owner Tor Jorgen Dahl / Einar C. Nagell-Erichsen


Owner's Address PO Box 6 - Bekkelaget, N-137 Oslo Norway

Lloyds R class certificate (Number or Date) _____

RATING CERTIFICATE

This yacht has been measured by measurer(s) appointed by the International Twelve Metre Association and has been found to rate not more than 12.000 metres.

This certificate is dated: 16-Aug-21

Measurer Kay-Enno Brink Signature 

Valid until 16-Aug-23

Supersedes 8-Apr-19

Is this an **Appendix E** Certificate? Y / N Y


Was **Appendix F** used for Measurement? Y / N N

Signature 
ITMA Technical Director



Stamp of Authority of the International Twelve Metre Association

RATING CALCULATION

OVERALL LENGTH				21.272
Overhang Forward to FGS		2.602		
Overhang Aft to AGS		3.236		
Total Overhang (Subtract)		5.838		
MEASURED LENGTH (L_{BG})				15.434
Girth at Bow		1.618		
Twice vertical Height at Bow (Subtract)		1.200		
Girth Difference at FGS		0.418		
Add 1.5 Grith Difference at FGS (min 0.540 m)		0.627		
Girth at Stern		3.136		
Twice vertical Height at Stern (Subtract)		1.591		
Girth Difference at AGS		1.545		
Add 1/3 Girth Difference at AGS (min 0.400 m)		0.515		
Add any penalty (Beam or Displacement)		0.000		
Sum of Length and Girth Corrections				16.576
Age/Date Correction Factor (ADCF)(see page 3)	0.9568			
LENGTH (L)				15.860
Skin IM to d1 Port		2.061		
Chain IM to d1 Port		2.054		
d Port		0.007		
Skin IM to d1 Starboard		2.060		
Chain IM to d1 Starboard		2.055		
d Starboard		0.005		
Add d		0.012		
Add GIRTH 2 d				0.024
	Datum Sta.	Actual Sta.	Rating FB	
Mean Freeboard Bow		1.453	1.453	
Mean Freeboard Midship		1.001	1.001	
Mean Freeboard Stern		0.976	0.976	
Sum of Freeboards			3.430	
Subtract FREEBOARD, F			See Notes	1.143
Add SAIL AREAS (Square root)				13.443
TOTAL OF MEASUREMENTS				28.183
PENALTY (Draft or Tumblehome)			0.000	
RATING				11.892
Date and Place of Measurement	22-March-2019, Orust	16-Aug-2021	Helsinki	
Measurer's Name(s)	Kay-Enno Brink	Signature		

Yacht's name : VEMA III		Date	16-Aug-21
Range Measurement (Yes or No)	N	Date:	8-Apr-19

PENALTIES

Overhang Forward to MWL	3.106	
Overhang Aft to MWL	3.851	
Subtract from overall length	6.957	
Difference of immersion from salt to fresh water	Meas. Density	
WATERLINE LENGTH (LWL)		14.315
Minimum Displacement for Zero Penalty [m3]	27.353	
Minimum Weight for Zero Penalty [ton] (Water of sg 1.025)	28.036	
WEIGHT [tonne] Actual weight		30.886
Equivalent LWL (for Displ. < min.)	14.809	
Difference	0.494	
DISPLACEMENT PENALTY (add to L)		0.000
Displacement Determination Method	3D-Scan	
DRAFT (actual)	2.817	
Max. Draft for Zero Penalty	2.790	
Difference (if positive)	0.027	
DRAFT PENALTY (add to Rating)		0.000
BEAM (Min)	3.600	
Max Beam at 1/3 of Midship Freeboard	3.561	
Difference (if positive)	0.039	
BEAM PENALTY (add to L)		0.000
Tumblehome Max. (2 x 2% of Extr. Beam)	0.143	
Extreme Beam	3.565	
Beam at deck	3.555	
Difference (if positive)	0.010	
TUMBLEHOME PENALTY (add to Rating)		0.000

Date and Place of Measurement	22-March-2019, Orust	16-Aug-2021 Helsinki
Measurer's Name(s)	Kay-Enno Brink	Signature

Design/Age Correction Factor Calculation		
Age Date	1933	
ADCF (Table E-2)	0.9568	
Hull Alteration Scope and Date		
Appendage Change Scope and Date		
Change/Alteration Correction ADCF		
Accommodation Deficiency Ballast	none	

Yacht's name : VEMA III

Date

16-Aug-21

SAIL PLAN

Max Height of Sail Plan =	<input type="text" value="24.930"/>	J=	<input type="text" value="6.090"/>	I =	<input type="text" value="18.750"/>
Boom above Mast Datum =	<input type="text" value="1.110"/>	P=	<input type="text" value="23.820"/>	E=	<input type="text" value="10.740"/>
Rated Mainsail Area	<input type="text" value="127.913"/>	Spi boom=	<input type="text" value="6.970"/>	√S=	<input type="text" value="13.443"/>
J used for Rating	<input type="text" value="6.970"/>				
Rated Foretriangle Area	<input type="text" value="55.542"/>	Propeller allowance		<input type="text" value="0.985"/>	
TOTAL RATED SAIL AREA (S)	<input type="text" value="183.456"/>	Corrected sail area		<input type="text" value="180.704"/>	

SAIL LIMITS

Mainsail max girth:	1/2 height (68% of E)	<input type="text" value="7.303"/>	3/4 height (41% of E)	<input type="text" value="4.403"/>
Genoa:	max. foot length (J + 4.8m)	<input type="text" value="10.890"/>		
Spinnaker:	1/2 foot max breadth (125% J)	<input type="text" value="8.713"/>	max. luff length=	<input type="text" value="18.503"/>

Spar Measurement

MAST (material)	<input type="text" value="wood"/>	Mast Weight	<input type="text"/>	CG pos.	<input type="text"/>
Mast dimensions [mm]	Deck <input type="text" value="299*223"/>	Half-Height <input type="text" value="337*323"/>	Jib-Halyard <input type="text" value="290*205"/>	Head <input type="text" value="185*125"/>	
Sections area [cm ²]	<input type="text" value="523"/>	<input type="text" value="854"/>	<input type="text" value="467"/>	<input type="text" value="182"/>	
Mast CG Correction (if applicable) Wt & CG	<input type="text"/>		Mk ²	<input type="text"/>	

Engine/Propeller Installation

Engine and propeller weight	<input type="text" value="285 kg"/>	Propeller diameter =	<input type="text" value="0.533"/>
Minimum boat speed with engine	<input type="text" value="> 8 kn"/>	Propeller position =	<input type="text" value="on centreline"/>
Propeller Type (folding feathering fixed pitch etc.), no of blades		<input type="text" value="feathering"/>	<input type="text" value="2"/>
Propeller Skew			<input type="text" value="0.000"/>

Flotation**Measurer's Notes**

- 1 No beam penalty as minimum beam restriction was not introduced until 1937
- 2 Rated freeboard is one third of the sum of the mean freeboards as per 1933 rule
- 3 No minimum boom height restriction in 1933 rule
- 4 No draft penalty for Appendix E certificate

Date and Place of Measurement

22-March-2019, Orust

16-Aug-2021 Helsinki

Measurer's Name(s)

Kay-Enno Brink

