

12



INTERNATIONAL TWELVE METRE CLASS

Yacht's Name VANITY V

National letters and Sail Number K 5 Club Royal Danish Yachtclub

Designer William Fife

Builder Fairlie Building Year 1936

Owner c/o JPH


Owner's Address Dronninggaard Allé 41, DK 2840 Holte, Denmark

Lloyds R class certificate (Number or Date) Lloyds

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: 18-Apr-21

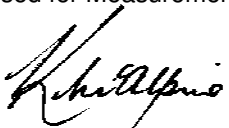
Measurer Kay-Enno Brink Signature 


Valid until 18-Apr-23

Supersedes 12-Jul-14

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

Yacht's name : VANITY V

Date 18-Apr-21

RATING CALCULATION

OVERALL LENGTH		21.585															
Overhang Forward to FGS	3.002																
Overhang Aft to AGS	3.235																
Total Overhang (Subtract)	6.237																
MEASURED LENGTH (LBG)		15.348															
Girth at Bow	1.658																
Twice vertical Height at Bow (Subtract)	1.200																
Girth Difference at FGS	0.458																
Add 1.5 Girth Difference at FGS (min 0.540 m)	0.687																
Girth at Stern	3.279																
Twice vertical Height at Stern (Subtract)	1.700																
Girth Difference at AGS	1.579																
Add 1/3 Girth Difference at AGS (min 0.400 m)	0.526																
Add any penalty (Beam or Displacement)	0.000																
Sum of Length and Girth Corrections		16.562															
Age/Date Correction Factor (ADCF)(see page 3)	0.9584																
LENGTH (L)		15.873															
Skin IM to d1 Port	2.159																
Chain IM to d1 Port	2.143																
d Port	0.016																
Skin IM to d1 Starboard	2.145																
Chain IM to d1 Starboard	2.131																
d Starboard	0.014																
Add d	0.030																
Add GIRTH 2 d		0.060															
	<table border="1" style="border-collapse: collapse; width: 100%;"> <thead> <tr> <th style="width: 33%;">Datum Sta.</th> <th style="width: 33%;">Actual Sta.</th> <th style="width: 33%;">Rating FB</th> </tr> </thead> <tbody> <tr> <td></td> <td style="text-align: center;">1.311</td> <td style="text-align: center;">1.311</td> </tr> <tr> <td></td> <td style="text-align: center;">1.006</td> <td style="text-align: center;">1.006</td> </tr> <tr> <td></td> <td style="text-align: center;">1.030</td> <td style="text-align: center;">1.030</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">3.347</td> </tr> </tbody> </table>	Datum Sta.	Actual Sta.	Rating FB		1.311	1.311		1.006	1.006		1.030	1.030			3.347	
Datum Sta.	Actual Sta.	Rating FB															
	1.311	1.311															
	1.006	1.006															
	1.030	1.030															
		3.347															
Mean Freeboard Bow																	
Mean Freeboard Midship																	
Mean Freeboard Stern																	
Sum of Freeboards		3.347															
Subtract FREEBOARD, F		1.116															
Add SAIL AREAS (Square root)		13.575															
TOTAL OF MEASUREMENTS		28.392															
PENALTY (Draft or Tumblehome)		0.000															
RATING		11.980															

Date and Place of Measurement	17-Apr-21 Flensburg	
Measurer's Name(s)	Kay-Enno Brink	Signature

Yacht's name : VANITY V		Date	18-Apr-21
Range Measurement (Yes or No)	N	Date:	17-Apr-21

PENALTIES

Overhang Forward to MWL		3.586	
Overhang Aft to MWL		3.887	
Subtract from overall length		7.473	
Difference of immersion from salt to fresh water	Meas. Density		
WATERLINE LENGTH (LWL)			14.112
Minimum Displacement for Zero Penalty [m3]		26.264	
Minimum Weight for Zero Penalty [ton] (Water of sg 1.025)		26.920	
WEIGHT [tonne] Actual weight			26.760
Equivalent LWL (for Displ. < min.)		14.083	
Difference		-0.030	
DISPLACEMENT PENALTY (add to L)			0.000
Displacement Determination Method		3D-Scan	
DRAFT (actual)		2.713	
Max. Draft for Zero Penalty		2.758	
Difference (if positive)			
DRAFT PENALTY (add to Rating)			0.000
BEAM (Min)		3.600	
Max Beam at 1/3 of Midship Freeboard		3.607	
Difference (if positive)			
BEAM PENALTY (add to L)			0.000
Tumblehome Max. (2 x 2% of Extr. Beam)		0.149	
Extreme Beam		3.722	
Beam at deck		3.630	
Difference (if positive)		0.092	
TUMBLEHOME PENALTY (add to Rating)			0.000

Date and Place of Measurement	17-Apr-21 Flensburg	
Measurer's Name(s)	Kay-Enno Brink	Signature

Design/Age Correction Factor Calculation		
Age Date	1936	
ADCF (Table E-2)	0.9584	
Hull Alteration Scope and Date		
Appendage Change Scope and Date		
Change/Alteration Correction ADCF		
Accommodation Deficiency Ballast	none	

Yacht's name : VANITY V

Date

18-Apr-21

SAIL PLAN

Max Height of Sail Plan =	<input type="text" value="25.000"/>	J=	<input type="text" value="6.210"/>	I =	<input type="text" value="18.300"/>
Boom above Mast Datum =	<input type="text" value="1.221"/>	P=	<input type="text" value="23.779"/>	E=	<input type="text" value="11.000"/>
Rated Mainsail Area	<input type="text" value="130.785"/>	Spi boom=	<input type="text" value="7.240"/>	√S=	<input type="text" value="13.575"/>
J used for Rating	<input type="text" value="7.240"/>				
Rated Foretriangle Area	<input type="text" value="56.309"/>	Propeller allowance		<input type="text" value="0.985"/>	
TOTAL RATED SAIL AREA (S)	<input type="text" value="187.094"/>	Corrected sail area		<input type="text" value="184.287"/>	

SAIL LIMITS

Mainsail max girth:	1/2 height (68% of E)	<input type="text" value="7.480"/>	3/4 height (41% of E)	<input type="text" value="4.510"/>
Genoa:	max. foot length (J + 4.8m)	<input type="text" value="11.010"/>		
Spinnaker:	1/2 foot max breadth (125% J)	<input type="text" value="9.050"/>	max. luff length=	<input type="text" value="18.244"/>

Spar Measurement

MAST (material)	<input type="text" value="wood"/>	Mast Weight	<input type="text" value="544"/>	CG pos.	<input type="text" value="10.158"/>
Mast dimensions [mm]	Deck <input type="text" value="300*265"/>	Half-Height <input type="text" value="300*265"/>	Jib-Halyard <input type="text" value="250*224"/>	Head <input type="text" value="139*131"/>	
Sections area [cm ²]	<input type="text" value="624"/>	<input type="text" value="624"/>	<input type="text" value="440"/>	<input type="text" value="143"/>	
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="n/a"/>	Propeller diameter =	<input type="text" value="0.457"/>
Minimum boat speed with engine	<input type="text" value="> 7 kn"/>	Propeller position =	<input type="text" value="on CL"/>
Propeller Type (folding feathering fixed pitch etc.), no of blades		<input type="text" value="folding"/>	<input type="text" value="3"/>
Propeller Skew			<input type="text" value="-"/>

Flotation

1	The water tank was filled with 115 l water when the yacht was presented for measurement.
2	Lead pigs in the bilge
	312.0 kg located 0.5 m in front of mast
	33.1 kg located 0.7 m in front of mast
	94.6 kg located 1.3 m in front of mast
	28.9 kg located 1.7 m in front of mast
	75.8 kg located 2.5 m in front of mast

Measurer's Notes

1	Draft and displacement penalties do not apply under Appendix E.
2	Rated freeboard is one third of the sum of the mean freeboards as per 1933 rule.

Date and Place of Measurement

17-Apr-21 Flensburg

Measurer's Name(s)

Kay-Enno Brink

