

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: 16-Aug-21

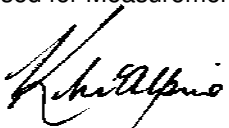
Measurer Kay-Enno Brink Signature 


Valid until 16-Apr-23

Supersedes 18-Apr-21

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 16-Aug-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 (L_{BG}) 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

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

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	16-Aug-21 Helsinki	
Measurer's Name(s)	Kay-Enno Brink	Signature	

Yacht's name : VANITY V		Date	16-Aug-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	16-Aug-21 Helsinki	
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

16-Aug-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 ">="" 7="" kn"="" type="text" value=""/>	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
	190 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
	25 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

16-Aug-21 Helsinki

Measurer's Name(s)

Kay-Enno Brink

