

# 12






## INTERNATIONAL TWELVE METRE CLASS

Yacht's Name	VIM	
National letters and Sail Number	US 15	Club Royal Danish Yacht Club
Designer	O.J. Stephens	
Builder	H B Nevins Inc	Building Year 1939
Owner	James Patrick Howaldt	
Owner's Address	Dronninggaards Allé 41 DK-2840 Holte, Denmark	
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:	February 8, 2019	
Measurer	K E Brink	Signature 
Valid until	February 8, 2021	
Supersedes	May 1 2015	
Is this an <b>Appendix E</b> Certificate?	Y / N	<input checked="" type="checkbox"/> Yes
Was <b>Appendix F</b> used for Measurement?	Y / N	<input type="checkbox"/> No
Signature 	Stamp of Authority of the International Twelve Metre Association 	
ITMA Technical Director		

**RATING CALCULATION****OVERALL LENGTH****21.343**

Overhang Forward to FGS

2.760

Overhang Aft to AGS

3.168

Total Overhang (Subtract)

5.928

**MEASURED LENGTH (L<sub>BG</sub>)****15.415**

Girth at Bow

1.598

Twice vertical Height at Bow (Subtract)

1.200

Girth Difference at FGS

0.398

Add 1.5 Girth Difference at FGS (min 0.540 m)

**0.597**

Girth at Stern

3.221

Twice vertical Height at Stern (Subtract)

1.672

Girth Difference at AGS

1.549

Add 1/3 Girth Difference at AGS (min 0.400 m)

**0.516**

Add any penalty (Beam or Displacement)

**0.000**

Sum of Length and Girth Corrections

**16.528**

Age/Date Correction Factor (ADCF)(see page 3)

0.980

**LENGTH (L)****16.198**

Skin IM to d1 Port

3.257

Chain IM to d1 Port

3.222

d Port

0.035

Skin IM to d1 Starboard

3.249

Chain IM to d1 Starboard

3.214

d Starboard

0.035

Add d

0.070

**Add GIRTH 2 d****0.140**

Mean Freeboard Bow

Datum Sta.	Actual Sta.	Rating FB
	1.432	1.432
	1.126	1.126
	1.031	1.031
		3.589

Mean Freeboard Midship

1.126

Mean Freeboard Stern

1.031

Sum of Freeboards

3.589

**Subtract FREEBOARD, F**

See Notes

**1.196****Add SAIL AREAS (Square root)****13.298****TOTAL OF MEASUREMENTS****28.440**

PENALTY (Draft or Tumblehome)

Append E

**RATING****12.000**

Date and Place of Measurement

Flensburg, April 18 2018

Measurer's Name(s)

KE Brink

Signature



<b>Yacht's name : Vim</b>		<b>Date</b>	<b>8-Feb-19</b>
Range Measurement (Yes or No)	No	Date:	NA

## PENALTIES

Overhang Forward to <b>MWL</b>	3.377	
Overhang Aft to <b>MWL</b>	4.051	
Subtract from overall length	7.428	
Difference of immersion from salt to fresh water	Meas. Density	
<b>WATERLINE LENGTH (LWL)</b>		<b>13.915</b>
Minimum Displacement for Zero Penalty [m3]	25.231	
Minimum Weight for Zero Penalty [ton] (Water of sg 1.025)	<b>25.862</b>	
<b>WEIGHT [tonne]</b> Actual weight		Append E
Equivalent LWL (for Displ. < min.)	25.231	
Difference	<b>25.862</b>	
DISPLACEMENT PENALTY (add to L)		Append E
Displacement Determination Method	Nil	
<b>DRAFT (actual)</b>	2.745	
Max. Draft for Zero Penalty	2.726	
Difference (if positive)	Nil	
DRAFT PENALTY (add to Rating)		Append E
<b>BEAM (Min)</b>	3.600	
Max Beam at 1/3 of Midship Freeboard	3.600	
Difference (if positive)	0.000	
BEAM PENALTY (add to L)		<b>0.000</b>
Tumblehome Max. (2 x 2% of Extr. Beam)	0.144	
Extreme Beam	3.617	
Beam at deck	3.521	
Difference (if positive)	0.096	
TUMBLEHOME PENALTY (add to Rating)		<b>0.000</b>

Date and Place of Measurement	Flensburg, April 18 2018	
Measurer's Name(s)	KE Brink	Signature

Design/Age Correction Factor Calculation			
Age Date	1939		
ADCF ( Table E-2)	0.98		
Hull Alteration Scope and Date		Nil	
Appendage Change Scope and Date		Nil	
Change/Alteration Correction ADCF			
Accommodation Deficiency Ballast	55 Kgs		

Yacht's name : Vim

Date

8-Feb-19

**SAIL PLAN**

Max Height of Sail Plan =	<input type="text" value="24.951"/>	J=	<input type="text" value="6.905"/>	I =	<input type="text" value="18.707"/>
Boom above Mast Datum =	<input type="text" value="1.451"/>	P=	<input type="text" value="23.500"/>	E=	<input type="text" value="10.030"/>
Rated Mainsail Area	<input type="text" value="117.853"/>	Spi boom=	<input type="text" value="7.420"/>	√S=	<input type="text" value="13.298"/>
J used for Rating			<input type="text" value="7.420"/>		
Rated Foretriangle Area	<input type="text" value="58.993"/>	Propeller allowance			<input type="text" value="1.000"/>
TOTAL RATED SAIL AREA (S)	<input type="text" value="176.845"/>	Corrected sail area			<input type="text" value="176.845"/>

**SAIL LIMITS**

Mainsail max girth:	1/2 height (68% of E)	<input type="text" value="6.820"/>	3/4 height (41% of E)	<input type="text" value="4.112"/>
Genoa:	max. foot length (J + 4.8m)	<input type="text" value="11.705"/>		
Spinnaker:	1/2 foot max breadth (125% J)	<input type="text" value="9.275"/>	max. luff length=	<input type="text" value="18.600"/>

**Spar Measurement**

MAST (material)	<input type="text" value="Aluminium"/>	Mast Weight	<input type="text" value="513"/>	CG pos.	<input type="text" value="9.549"/>
	Deck	Half-Height	Jib-Halyard	Head	
Mast dimensions [mm]	<input type="text" value="301*245"/>	<input type="text" value="339*244"/>	<input type="text" value="338*244"/>	<input type="text" value="201*137"/>	
Sections area [cm <sup>2</sup> ]	<input type="text" value="579"/>	<input type="text" value="649"/>	<input type="text" value="647"/>	<input type="text" value="216"/>	
Mast CG Correction (if applicable) Wt & CG	<input type="text" value="Nil"/>		Mk <sup>2</sup>	<input type="text"/>	

**Engine/Propeller Installation**

Engine and propeller weight	<input "&gt;="" 300="" kg"="" type="text" value=""/>	Propeller diameter =	<input type="text" value="0.460"/>
Minimum boat speed with engine	<input "&gt;="" 7kn"="" type="text" value=""/>	Propeller position =	<input type="text" value="exposed"/>
Propeller Type (folding feathering fixed pitch etc.), no of blades	<input type="text"/>		
Propeller Skew	<input "&lt;="" 20°"="" type="text" value=""/>		

**Flotation**

Internal Ballast	Amount	Location from Bow
Nil		
Accommodation Deficiency		
Forward	27.5 kgs	At Fwd L1
Aft	27.5 kgs	At Aft L1

**Measurer's Notes**

- 1 Measured according to 1934 Rule
- 2 Age allowance take into account bermudian rig
- 3 ACDF has been adjusted to 0.98 at Owner's Request: Age date is 1939 and corresponding ACDF is 0.96

Date and Place of Measurement

Flensburg, April 18 2018

Measurer's Name(s)

KE Brink

