

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.Nevin Inc (USA)	Building Year	1939
Owner	Patrick Howaldt		
Owner's Address	Dronninggaards Alle41 DK 2840 Holte, Denmark		
Lloyds R class certificate (Number or Date)			

APPENDIX E 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	Signature	
Measurer	K-E Brink		
Valid until	16-Aug-23		
Supersedes	8-Feb-19		

Signature 
ITMA Technical Director



Stamp of Authority of the
International Twelve Metre Association

RATING CALCULATION

OVERALL LENGTH

Overhang Forward to FGS
 Overhang Aft to AGS
 Total Overhang (Subtract)

2.760
3.168
5.928

21.343

MEASURED LENGTH (LBG)

Girth at Bow
 Twice vertical Height at Bow (Subtract)
 Girth Difference at FGS
 Add 1.5 x Girth Difference at FGS (min 0.540 m)
 Girth at Stern
 Twice vertical Height at Stern (Subtract)
 Girth Difference at AGS
 Add 1/3 Girth Difference at AGS (min 0.400 m)
 Add any penalty (Beam or Displacement)
 Sum of Length and Girth Corrections
 Age/Design Correction Factor (ADCF)(see page 3)

1.598
1.200
0.398
0.597
3.221
1.672
1.549
0.516
0.000

15.415

16.528

0.9800

LENGTH (L)

Skin IM to d1 Port
 Chain IM to d1 Port
 d Port
 Skin IM to d1 Starboard
 Chain IM to d1 Starboard
 d Starboard
 Add d

3.257
3.222
0.035
3.249
3.214
0.035
0.070

16.198

Add GIRTH 2 d

0.140

Mean Freeboard Bow
 Mean Freeboard Midship
 Mean Freeboard Stern
 Sum of Freeboards

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

Subtract FREEBOARD, F

1.196

Add SAIL AREAS (Square root)

13.299

TOTAL OF MEASUREMENTS

28.440

PENALTY (Draft or Tumblehome)

Append E

0

RATING

12.000

Date and Place of Measurement	16-Aug-21	Signature	
Measurer's Name(s)	K-E Brink		

Yacht's name : *VIM*

Date *16-Aug-21*

Range Measurement (Yes or No) Yes Date: *April 2017*

PENALTIES

Overhang Forward to MWL		3.377	
Overhang Aft to MWL		4.051	
Subtract from overall length		7.428	
Difference of immersion from salt to fresh water	Meas. Density		0.000

WATERLINE LENGTH (LWL)	13.915
Minimum Displacement for Zero Penalty [m3]	25.231
Minimum Weight for Zero Penalty [ton] (Water of sg 1.025)	25.862

WEIGHT [tonne] Actual weight			Append E
Equivalent LWL (for Displ. < min.)		13.990	
Difference		-0.075	
DISPLACEMENT PENALTY (add to L)			Append E
Displacement Determination Method		Hull Scan	

DRAFT (actual)		2.745	
Max. Draft for Zero Penalty		2.726	
Difference (if positive)		0.019	
DRAFT PENALTY (add to Rating)			Append E

BEAM (Min)		3.600	
Max Beam at 1/3 of Midship Freeboard		3.600	
Difference (if positive)		0.000	
BEAM PENALTY (add to L)			0.000
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)			0.000

Date and Place of Measurement	16-Aug-21	
Measurer's Name(s)	K-E Brink	Signature

Design/Age Correction Factor Calculation

Age Date	1939	
ADCF (Table E-2)	0.9800	ADCF of 0.98 used at Owner's request
Hull Alteration Scope and Date		Nil
Appendage Change Scope and Date		Nil
Change/Alteration Correction ADCF		
Accommodation Deficiency Ballast	55 kgs	

Sail Plan

Max Height of Sail Plan =	24.951	J=	6.905	I =	18.707
Boom above Mast Datum =	1.451	P=	23.500	E=	9.997
Rated Mainsail Area J used for Rating	117.465	Spi boom=	7.470	\sqrt{S} =	13.299
			7.470		
Rated Foretriangle Area	59.390	Propeller allowance			1.000
TOTAL RATED SAIL AREA (S)	176.855	Corrected sail area			176.855

SAIL LIMITS

Mainsail max girth:	1/2 height (68% of E)	6.798	3/4 height (41% of E)	4.099
Genoa:	max. foot length (J + 4.8m)	11.705		
Spinnaker:	1/2 foot max breadth (125% J)	9.338	max. luff length=	18.615

Spar Measurement

MAST (material)	Aluminium	Mast Weight	513	CG pos.	9.549
Mast dimensions [mm]	Deck 301*245	Half-Height 339*244	Jib-Halyard 338*244	Head 201*137	
Sections area [cm ²]	579	649	647	216	
Mast CG Correction (if applicable) Wt & CG	@		Mk ²		

Engine/Propeller Installation

Engine and propeller weight	>300 kgs	Propeller diameter =	0.460
Minimum boat speed with engine	>7 kn	Propeller position =	Exposed
Propeller Type (folding feathering fixed pitch etc.), no of blades			
Propeller Skew			< 20 ⁰

Flotation

Internal Ballast	Amount	Location from Bow	
Nil			
Flotation measured on April 9, 2018 in Flensburg. Specific seawater gravity of water 1.013t/m3			
Accommodation Deficiency			
Fwd	27.5 kg	@ Fwd L1	
	27.5 kg	@ Aft L1	

Measurer's Notes

1 Freeboard in Rating as per 1933-1970 Rule (Sum/3, Max 1.21m)