



INTERNATIONAL 2.4 METRE CLASS

Rating Certificate

Plaque Number	967
National Letters and Sail Number	SWE 458
Designer	Hasse Malmsten
Builder	Hasse Malmsten
Building Year	2017
Owner	Hasse Malmsten
Owners address	Kaponjergatan 3a 41302 Göteborg Sweden

Valid until	2018-06-13	Swedish Sailing Federation
Supersedes former certificate, dated	2019-03-20	
This certificate is dated		
Validity confirmed by	Patrik Erlandsson Swedish Sailing Federation	
Measurer:	Per Lindell	
Date:	2018-06-06+2019-01-10	

Overall Length		4.239	
Add (Overhang Forward to L ₁)	0.431		
Add (Overhang Aft to L ₁)	0.760		
Subtract Total Overhang	1.191	1.191	
Measured Length		3.048	
Girth at Bow	0.312		
Subtract (Twice Vertical Height at Bow	0.240		
0 at Bow	0.072		
Add 1,5*0 at Bow, (min 0.108)		0.108	
Girth at Stern	1.056		
Subtract (Twice Vertical Height at Stern	0.536		
0 at Stern	0.520		
Add 1/3 0 at Stern, minimum 0.080		0.173	
Add any penalty at 0 ₂			
Correct length, L		3.329	3.329
Subtract (Skin d to d ₁ Port	0.000		
Subtract (Chain d to d ₁ Port	0.000		
d Port	0.000		
Subtract (Skin d to d ₁ Starboard	0.000		
Subtract (Chain d to d ₁ Starboard	0.000		
d Starboard	0.000		
Add d		0.000	
2d			0.000
Add to find sum of measurements			3.329
Add (Mean Freeboard Bow 0	0.315		
Add (Mean Freeboard Midship D	0.301		
Add (Mean Freeboard Stern 0 and 0 ₂	0.304		
Sum of Freeboards	0.920		
Subtract (1/3 sum) FREEBOARD, F, max	0.292		0.292
			3.037
Beam penalty			0.000
Tumblehome penalty			0.000
√ S			2.651
Total of Measurements			5.688
Divide by 2.37 = RATING =			2.400
Displacement penalty			0.000
Draft penalty			0.000
Final Rating			2.400

Overall Length			
Add (Overhang Forward to L	0.524	4.239	
(Overhang Aft to L	0.760		
Subtract Total Overhang		1.284	
Water Line Length		2.955	
Beam at 1/3 Height of Midship Freebord		0.780	
Maximum draft		1.000	
Tumble Home		0.000	
Weight by weighing		255 kg	
with 35 kg ballast		290 kg	
Minimum weight required by Rule		283 kg	
Areas of Sails	I =	3.750	
	J =	1.560	
	P =	4.635	
	E =	1.960	
Mainsail =		4.542	
Foretriangle Total =		2.925	
Foretriangle Total x 0.85 =		2.486	
Sail Area for Rating = S =		7.029	
√ S		2.651	

If in doubt, the Certificate can be checked against the official website;
<http://matbrev.svensksegling.se/Entyp/ApprovedList>