

# International 5.5 Metre Class Certificate of Rating

Yacht's name ..... <i>B.I.D.</i> Sail number ..... <i>Z 140</i> Owner ..... <i>B. Peter</i> Owner's club ..... <i>SVP</i> Designer ..... <i>Britten Chance</i> <input type="radio"/> completed ..... <i>6. July 1983</i> Condition of water when marks were sighted State fresh or salt ..... <i>fresh</i>	Classification society <i>Finn</i> Expiration date of classification certificate Measurements or partial remeasurements by N.A. Measurer, signature & date <i>USY - Verm.</i> <i>O. Weber</i> <i>CH-8802 Kilchberg ZH</i>
Difference in immersion (class rule 5) ..... <i>.007</i> (metres)	Expiration date of rating certificate <i>5. July 1985</i>
Has designer's or builder's declaration been supplied ..... <i>yes</i> I declare that the particulars given on this certificate are correct at this date Signature of measurer ..... <i>Chant'or</i> Signature of designer or builder ..... <i>[Signature]</i> Signature of owner or representative ..... <i>[Signature]</i>	Re-rated .....

Certificate authorised by ..... Date ..... for .....  
 (National Authority)

Im USY-Register  
eingetragen am  
21. JULI 1983

*CT. USY. 19.07.73 [Signature]*

	Actual <sup>1)</sup>	Rule limits	Rule No.
<b>HULL</b>			
Immersion checked in salt/fresh water	date 6-7-83		7127
Weight of inside ballast placed at <u>110722</u>		xx)	6133
Beam	<u>4902</u>	min. 1.90 m	717
Draft	<u>1359</u>	max. 1.35 m	7
Freeboard at bow girth station	<u>688</u>		
" at stern girth station	<u>622</u>		
" at midship mark	<u>606</u>		
" average	<u>639</u>	min. 0.63 m	
Keel, ballast material	<u>lead</u>	lead or iron	10
" ht. of round at bottom	<u>∅</u>	max. 75mm	10
" width at max. section 1 metre below L.W.L.	<u>152</u>	min. 150mm	10
Stern angle	<u>226</u>	min. 1 in 5.5 = 18'2	12
Round of beams	<u>∅</u>	max. 7mm in 305mm	13
Tumble home	<u>∅</u>		14
2% of max. beam			
Excess tumble home	<u>∅</u>	3 x excess added to rating	14
Area of deck openings	<u>2.22</u>	max. 2.25 m <sup>2</sup>	24
Cockpit forward of L1 mark	<u>2.265</u>	min. 1.75 m	25
Breadth of side decks	<u>378</u>	min. 35 cm	24
<b>SAILS &amp; RIGGING</b>			
Height of sailplan above covering board level	<u>11.60</u>	max. 11.10 m	16
" " boom (black band) above covering board level	<u>1.00</u>	max. 0.85 m	17
" " fore triangle above covering board level (1)	<u>8.880</u>	max. 8.88 m	16
Base of fore triangle (J) (Deck black band to be checked)	<u>2672</u>	max. 0.50 x J <sup>2</sup> 2692	16
Min. headsail for measurement purposes = 0.5 x 1 x J x 80%	<u>9.562</u>	min. 9.490	15
Spinnaker, halliard above forestay	<u>100</u>	max. 10 cm	20
" " out from mast	<u>∅</u>	max. 3 cm	20
" breadth of half the foot	<u>3365</u>	max. 1.25 x J	20
Storm spinnaker, breadth of half the foot	<u>2.692</u>	max. J	20
Spinnaker boom length	<u>2.692</u>	max. J	21
Mast diameter at 1/2 ht. of fore triangle, round mast	<u>103/144</u>	min. 11.5 cm	22
" " at deck " "	<u>103/144</u>	min. 10.7 cm	22
" " at jib halliards " "	<u>95/130</u>	min. 9.2 cm	22
" " at top " "	<u>90/85</u>	min. 5.8 cm	22
(The athwartship diameter of oval masts may be reduced by 10% of the above, but the sectional areas shall not be less)			
Weight of mast with fixed fittings	<u>42</u>	min. 40 kgs	22
Centre of gravity of mast above covering board level	<u>78%</u>	min. 38% of mast ht.	22
Boom depth	<u>105</u>	max. 15.2 cm	23
Boom width	<u>0.70</u>	min. 3.8 cm	23
<b>MISCELLANEOUS</b>			
Weight of anchor	<u>125</u>	max. 13kgs min. 11kgs	26
Length of warp	<u>15</u>	min. 30 m	26
Top of 1 marks above water with masts	<u>15</u>		

	Actual measurements		Rule limit
<b>LENGTH L FOR RATING</b>			
Overall length L.O.A.		8.975	
Bow overhang to L <sub>1</sub>	.909		
Stern overhang to L <sub>1</sub>	.792		
Total overhang		1.701	
Measured length L <sub>1</sub>		7.274	
Girth at bow	.718		
Twice vertical height at bow (x0.570 m)	.550		
Bow girth difference		.168	min. 0.163 m (rule 3)
Girth at stern	1.775		
Twice vertical height at stern	1.080		
Stern girth difference		.695	
1/2 stern girth difference		.347	min. 0.274 m (rule 3)
Length L for rating formula		7.676	
<b>SAIL AREA FOR RATING</b>			
Largest headsail = 0.5 x _____ (luff) x _____ (perp)		9.562	min. see next page
Mainsail = 0.5 x 10.600 (luff) x 3.668 (B)		19.438	min. 26.5 m <sup>2</sup> (rule 7)
Total sail area S		29.000	max. 29.0 m <sup>2</sup>
$\sqrt{S}$		5.385	
<b>DISPLACEMENT</b>			
Weight of yacht (date when weighed _____)		1.839	
Displacement D = weight div. by 1025.21 kg/m <sup>3</sup>		1.794	min. 1.7 m <sup>3</sup> (rule 7)
$\sqrt{D}$		1.215	max. 2.0 m <sup>3</sup>
<b>RATING</b>			
Rating calc'd according to formula		5.490	
x tumble home excess			
FINAL RATING		5.490	(rule 14)

