

WATERSPORTVERBOND
NATIONAL CLASS RULES
12- FOOT DINGHY CLASS
(Unofficial translation , original in Dutch)

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NOMINAL PRINCIPAL DIMENSIONS

LOA	: 3.660 mm
Beam	:1.452 mm
Draft with centreboard down	:0.920 mm
Mainsail	:9.5 m2
Crew	:1 or 2 persons
Designer	:George Cockshott
Accepted Class since	:1914
National Authority	: Watersportverbond
National Class Association	: “Twaalfvoetsjollenclub”

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GENERAL

In general these Class rules aim at preservation of the unity of design in the twelve foot dinghy class.

1 BUILDING CLASS RULES

1.1 STANDARD DRAWINGS

Standard drawing

Sheet 1A	Lines Plan, scale 1:5	(January 2005) no amends
Sheet 2A	Building frames 2, 5, 9, 13 Stem- and stern knee	(January 2005) no amends
Sheet 3	Rudder and Tiller, scale 1:1	(January 2005) new
Sheet 4	Centreboard and Ironwork, scale 1:1	(January 2005) new
Sheet 5	Sail Plan and Spars, scale 1:1	(January 2005) new

1.2 SPECIFICATION

Tolerances	The nominal dimensions of the parts described correspond with the standard drawings (see 1.1). The measurement protocol shows the permitted tolerances . In some cases the nominal and the limiting values of a measurement are explained and reported in the chapter Class Rules.
Material choice	Wooden parts have to be made of wood mentioned in kind in this specifications. Other kinds of wood are allowed, provided they have the corresponding property and a permission in writing is given by the Watersportverbond. This rule does not hold for the planking. For metal parts and fastening material the following materials are allowed: copper, brass, bronze, (galvanised) steel and stainless steel. This rule does not hold for the nails of the planking of the hull and the frames and it does not hold where is specified otherwise.
Glues	All those parts considered for fastening to the hull may be next to clinkered, nailed and screwed, also glued to the hull.
Conservation	Hull and parts may only be protected with a not reinforced coating of varnish, paint or epoxy, unless these rules prescribe otherwise.
Laminating	Those parts considered for lamination instead of massive wood, may be built from sections of wood, provided the wood grain is running in one and the same direction (laminating).
Keel	Oak, pine or teak, 180x50mm.
Inside part of keel	Oak, pine or teak, 104x19mm, to be fastened on the keel with screws at an interval of ca. 100mm.
Stem	Oak, 45mm thick, glued to the keel and fastened by clinkers or screws.
Stern and knee	The stern 30mm thick, inlayed in the inside keel and the knee, 20 mm thick. It is allowed to make the stern of one piece 30 mm and not being inlayed.
Transom	Mahogany or teak, minimal 19mm thick, to be screwed to the stern.
Centreboard case	The cheeks of the centreboard case are made of mahogany or teak, min. 16 mm thick, the fill pieces are made of mahogany, oak or teak, min.12mm thick.

The inside has to have a smooth finish. No further constriction wherever is allowed. The minimal finished width of the slot is 11 mm.

Cover planks of mahogany, eventually strengthened with metal strips. Metal centreboard bolt, 12 mm with box diameter 16 mm or bolt diameter 16 mm, closing rings placed under head and nut.

It is allowed to connect the centreboard case with the front rowing seat.

The centre of the centreboard bolt in the centreboard case is at minimal 13 mm above the upper side of the inside keel and 1396 mm behind the lead line of the finished bow without metalwork.

Planking

Mahogany, oak, teak, cedar (only hardwood) or pine, minimal 8mm thick.

The hull is clinker built, 12 strakes at every side, 16 mm overlap.

With two fastenings (copper nails, roved) to clink between each pair of timbers and a clinker through the strake and timber.

Besides the strakes may be glued as extra to each other and to the transom and stem. Slanting of the strake underneath has to be done in such a way that the upper strake is at least 8 mm outside the strake underneath.

It is not allowed to fill the right angle between the outside- and the underneath strake. The strakes are not allowed to be rounded at the outside of the hull. At the inside it is allowed.

At the front- and backside both strakes may be cut slantwise over a maximal length of 500 mm from the transom or the bow.

Timbers

Oak, 16mm wide and 12 mm thick, placed on a relative distance, measured along the keel, from 178 mm centre to centre (attention: the distance of the first timber with regard to the transom is different, see sheet 1A). All timbers are running parallel with the transom.

The timbers, are cut of one length from gun whale to gun whale running over the keel, wherever this is possible.

Besides the keel and eventually at the subsequent strakes oak or teak wedges should be placed under the timbers if necessary

Keelson

Oak, 16 mm thick, height and relative distance as on the drawing, with ridges fitted to the skin and fastened with a clinker or screw through every strake.

Mast step

Oak or teak, fitting to the hull and to the stem and screwed to the stem. The place and size of the mast hole is not allowed to deviate from the drawing.

An alternative construction as given in the drawing is permitted.

Gun whale

Oak, 32 mm high and 25 mm wide, tapered at the front- and backside to 20 mm. The timberheads fitted to the gun whales or countersink into it.

Hor. ceilings

Oak or the wood of the skin, 30x10mm preferably rounded with an ornamental groove (without is permitted) and to be screwed to every timber.

The first ceilings should be put under the benches from the stem to the girder of the steering bench.

The second ceiling should be put at the outside of the floorboards from the second support till the last support of the floorboards.

Rowing seats

Mahogany 190x19mm with two oak knees, 19 mm thick, at each end.

Mast bench

Mahogany, 200x25mm with two horizontal knees at least 25mm thick and two hanging knees 19 mm thick.

Steering seats	Mahogany, 265mm wide and 19 mm thick. Under these seats at the height of the backbench a cross ship girder of mahogany or oak 50x19 mm. It is permitted to round off the angle between the steering seats and the mid ships seat.
Horizontal stem knee	Oak, 25 mm thick.
Horizontal transom knee	Oak, 20 mm thick.
Floor	Kind of wood is free, 10 mm thick. The front floorboard is made of one piece. The side floor is made of lats which are 70 mm wide at the point of the largest width of the ship. This side floor is allowed to be made in three pieces. A non skid cover to prevent slipping may be applied. It is permitted to make a hole in the board at the position of the self bailers.
Rubbing streak	Oak, 22x22 mm, an inlayed messing flat strip of maximal 11x2 mm is permitted.
Side keels	Oak, minimal 19 mm wide, height 19 mm, length 1850 mm. The rounding of the diameter is free. The back ends of the side keels are minimal 500 mm in front of the transom. A metal strip, flat or half-round, of maximal 12 mm wide and 6 mm thick, placed upon the wood is permitted. The side keels are placed on the land over the full length between strake 4 and strake 5, without tolerance. The ends of the side keels may be cut slantwise or tapered over no more than 50 mm.
Traveller	As standard drawing, the material is metal of 12 mm thick.
Stem and keel protection strip	The material is metal half-round, minimal 12x6 mm from stem to transom.
Hoist chains and protect plate	Metal, the links must have a thickness of minimal 4 mm. The holes for the hoist chains in the mast and steering bench are to be reinforced with a metal plate. The plate on the mast bench should also surround the mast.
Eye bolts	These may have, in contrary to the drawing, a minimal thickness of 10 mm.
Stay fastenings	Two pieces, metal, placed in such a way, that the distance of the centre of the piece, measured from the centre line from the ship to the front of the bow, without the metalwork, is 590 mm.
Belaying-pins	Two pieces to be placed into the mast bench.
Thole-pin pots	Efficient, suitable, four pieces.

2 CLASS RULES Dutch NATIONAL 12- FOOT DINGHY CLASS

These rules have to be read in connection to:

- The Rules for Regatta sailing
- The Measurement-certificate, Register-evidences and the Start-licenses.
- the rules for measuring the sails of yachts of Dutch national one design-classes.
- The Standard-drawings.

2.1 CREW

During a regatta the crew may consist of one or two persons.

The use of a suspension rack is not allowed.

2.2. UNITY

2.2.1. The goal of these rules is to obtain as much as possible equality between the boats.

2.2.2. Everything is forbidden, which is not explicitly allowed in these rules.

2.3 DEAD WEIGHT

2.3.1 The dead weight of the bare hull, measured in dry condition, inclusive the fixed metalwork an pulley chains, but without rudder, centreboard, spars, rigging, mast, rigging, floors, sails and other inventory, shall not be not less than 104 kg.

2.3.2 The meaning of in “dry condition” is that the new hull never has been in contact with the water and that a hull, which is not new, is dry according to the judgment of the measurer.

2.3.3 If the dead weight of the hull is less than 104 kg , the difference, which can not be more than 10 kg, is completed with compensation ballast. The compensation ballast has to consist of two equal pieces of metal, which after inspection and certifying by the measurer, has to be fastened with their biggest surface on the inside keel, one piece behind the mast step and one piece under the back bench, in front of the transom knee.

2.4 CENTREBOARD, RUDDER AND TILLER

2.4.1 Centreboard:

Galvanised- or stainless steel, 6 mm thick, may be varnished.

2.4.2 Rudder

Mahogany, thick 22 mm +/- 1mm. It may be tapered to minimal 7 mm at the edges.

Shape as on the drawing +/- 5 mm.

Rudder cheeks: mahogany, 18 mm thick.

Straight *cheeks* are allowed, as on drawing sheet 3. The ... are not allowed to be inlayed., except the front piece at the front side of the rudder blade.

2.4.3 Tiller

Ash or oak, the largest cross section being 40x30 mm, length maximal 915 mm. The tiller has to be massive and has to be neatly smoothed everywhere. The tiller may be locked with a metal lock pin.

2.5 SPARS

2.5.1 In general

All spars should be made of wood. They should be round and massive.

2.5.2 Mast

The diameter at the position 1863 mm from the bottom side is maximal 73 mm.

The distance from the bottom back side of the foot pin to the upper side of the halyard disc is maximal 3855 mm.

The distance of the upper side of the halyard disc to the lay ups of the shrouds, including eventually a steel protection ring, is 21 mm +/- 5mm.

2.5.3 Boom

The maximum diameter at half length is 51 mm and at the position of the inside of the forward measure-ribbon it is maximal 35 mm. Claw: material wood, massive. It is obligatory to have a fixed not moveable clip at the front end of the boom for the fastening of the clew of the sail.

At the end of the boom, at maximum 400 mm in front of the measure ribbon, a cleat or belaying pin may be fixed for the fastening of the foot stretcher of the main.

The fastening bolt for the front clew has to have a diameter of minimal 6 mm and the centre of the bolt has to coincide with the inside of the measurement ribbon. The distance from the centre of the bolt to the boom is at maximum 40 mm.

The boom may not be equipped with a groove.

2.5.4 Gaff

Maximum diameter half way is 58 mm. It is maximal 41 mm at the inside of the bottom of the measurement ribbon and it is maximal 35 mm at the inside of the upper measurement ribbon. At the bottom end of the gaff one should fix a not moveable clip for the fastening of the upper part of the front leech of the sail.

The fastening bolt for that eye has to have a diameter of minimal 6 mm and the centre of the bolt has to coincide with the inside of the bottom measurement ribbon. The distance between the centre of the bolt to the gaff is at maximum 40 mm.

It is allowed to have a inlaid U-formed clip.

At the end of the gaff, at maximal 40 mm in front of the measure ribbon, a clip construction or belaying-pin may fixed for the fastening of the upper leech.

The boom may not be equipped with a groove.

Straps

The position of the straps on the gaff are: upper strap 1700 mm from the inside of the bottom of the measure ribbon with a tolerance of 40 mm in both sides. The distance of the outside of the upper strap to the gaff is maximal 85 mm. The spot of the bottom strap is free, provided the distance of the tops of the straps measured along the gaff is at minimum 200 mm.

2.5.5 Measurement ribbons

Two ribbons have to be painted in a clear contrasting colour at the boom and the gaff, such that the distance between the two ribbons is 3580 mm.

2.5.6 Protection

Covering the mast, boom and gaff with metal, (synthetic) leather, reinforced polyester or epoxy and other synthetic materials instead of normal conservation- or protecting materials is only allowed when these materials are solely used for protection.

2.6 SAIL

(See also the rules for the measurement of sails of the national one design classes)

2.6.1 Mainsail

Length leech is 5300 mm, tolerance -3 %

Length luff is 1300 mm, tolerance -20 %

The length over the diagonal is 3780 mm, tolerance -3 %

The width at half height is maximal 2830 mm and minimal 2600mm,

The width at $\frac{3}{4}$ height is maximal 3000 mm.

Apart from the rules mentioned above one has also to measure the upper- and bottom leech to be 3580 mm, tolerance - 3% .

The upper- and the lower leech have to be sailed between the measurement ribbons in a contrasting colour at the boom and the gaff.

The sail has to be fastened directly at the spar at the backside of the gaff and the boom.

A single or a double set of reefpoints is allowed.

Battens are not allowed. The sail number has to be in a contrasting colour to the sail. The sizes of the numbers are:

Height 300 mm, wide 200 mm, stem thickness 50 mm, relative distances 60 mm.

The inside diameter of the eyes in the corners of the sail may not be bigger than 20 mm.

The sail has to be cut in such a way that seams of the panels are perpendicular to the line of lower corner – top corner. A tolerance of maximal 5 degrees is permitted.

The panels may have seams which are not perpendicular to the reference line only under the perpendicular line at the seam which cuts the front leech at 450 mm above the clew.

The way of cutting the strengthening panels of the sail is free.

Seams in the sail outside those parts of the sail that are allowed to be strengthened, should have no more than two stitched seams.

In reference to article 1.6 of the rules for the measurement of sails of national one design classes one or more windows may be fixed, provided the total surface does not exceed 0,28 m².

2.6.2 Marline

The marline is one continuous line.

2.7 STANDING RIGGING, SHEETING

2.7.1 Shrouds

The shrouds at both sides of the mast are of steel wire minimal 3 mm, with a strap laid around the mast. The other side connected to the shroud plate with a Massive wire is forbidden.

2.7.2 Mainsheet rigging.

The blocks have to be fixed with straps, their position is free. No more blocks are permitted than indicated in the drawing, plus a foot block. This foot block is fastened behind the centreboard case or at the floor timbers or at the inside keel. A sheet clamp construction at this foot block is not allowed. If the foot block is fastened at the inside keel it may be raised at maximum 140 mm with a piece of wood.

It is allowed fix clamp cleats, which are only used for the mainsheet. They are positioned at the inside at the height of the middle thwart, at port and starboard,

2.7.3 Tack.-, centreboard.- and boomvang tackle.

Tack.-, centreboard.- and boomvang tackle are fixed each in only one cleat. For the tack and boomvang tackle each five blocks are permitted. Three blocks are permitted for the centreboard tackle.

2.7.4 Down haul or boomvang.

The point of attachment at the boom is free, also the way of fastening, however a fastening with a rail or adjustable construction is not allowed.

The distance of the centre of the mast to the bottom point of attachment of the boomvang is no more than 70 +/- 10 mm.

For the fastening to the mast step a metal bar is allowed with a diameter of 8 mm, of which the distance measured from the inside to the mast step is 70 +/- 10 mm (see drawing 4) The length of the bar measured from the inside to the vertical supports is maximal 150 mm.

The bar has to be fastened at or through the mast step. An adjustable mechanism is not allowed. The bar has to have a stopper at both sides. Contrary to drawing 7A the bar may be curved in the horizontal plane, provided the curve is nowhere wider than 150 mm.

2.7.5 Main halyard

The main halyard has to be rigged through the upper strap at the gaff and then over the disc in the mast. Further it has to be belayed via the nose block at the belaying pins.

2.8 OBLIGATORY INVENTORY

During a regatta the following items have to be on board:

- a wooden paddle with a minimal length of 80 cm.
- a towrope, fastened at the stem, length minimal 6 meter with a diameter of 10 mm.
- a life vest for each person on board
- a pump or other material to empty the boat
- two hoist chains, with at least one side fastened to the eyebolts at the keel.

2.9 SPECIAL DEFINITIONS

2.9.1 Hang rope

For the crew a hang rope (with or without handle) is allowed, to use in a direct line between the hand and a fixed fastening point. The fixed fastening point is situated around the central bench at the end of the centreboard case.

2.9.2 Selfbailers

Selfbailers are allowed, maximal four.

2.9.3 Drain holes

In the transom two drain holes may fixed with a maximal diameter of 25 mm each and a wrench hole. Other holes are not allowed.

2.9.4 A permanently built in draining pump is not allowed.

2.9.5 Floating bags

It is obligatory to have minimal 120 litre, inflatable, floating capacity.

At least 2x 40 litre respectively at port and starboard side in front of the central bench and minimal 10 cm behind the mastbench. Placing behind the central bench is free provided it is symmetric with regard to the centre line of the boat.

The airbags have to be fastened reliably.

2.9.5 Boats measured before 1 March 1993

When a boat is re-measured, of which the first measurement was taken before 1 March 1993, the depth measurements and the width measurements can deviate from the drawing. This deviation is conform the following depth and width sizes:

At re-measurement of boats, measured before 1/3/1993 holds:

(Depth measurements from the sheer)

At 420 mm from front side stem to upper side inside stem	497	523
At 1070 mm from front side stem to upper side inside keel	522	548
At 1930 mm from front side stem to upper side inside keel	487	513
At 865 mm from backside transom to upper side inside stem	427	453

Width sizes (to inside hull)

Transom width at 190 mm under the sheer (?)	812	838
Transom width at the point of the sheer.	822	848
At 865 mm from backside transom at the point of the sheer	1277	1303
At 1930 mm from front side stem at the point of the stem at the point of the sheer	1382	1408
At 1070 mm from the front side stem at the point of the stem at the point of the sheer	1127	1153
At 420 mm from the front side stem at the point stem at the point sheer	577	603
At 420 mm from the front side stem at 468 mm under the sheer	292	318

3. MEASUREMENT FORM

Name owner :
Address :
Sailing club : member number :
Class and sail number : 12- foot dinghy
Name boat :
Telephone(s) and e-mail :
Builder and year of building :

General statements

a.	Are the correct kind of woods used	Yes []	No []	[]
b.	Has the last edition of the drawings been used	Yes []	No []	[]
c.	Has a building statement been given	Yes []	No []	[]
d.	Are important parts of the hull changed	Yes []	No []	[]
e.	Has a renovation statement been given	Yes []	No []	[]
f.	Is there a CB-stamp in the boat	Yes []	No []	[]
g.	Is there a sticker in the boat	Yes []	No []	[]
h.	Is there compensation weight in the boat	Yes []	No []	[]
i.	Is an "Owner statement" been given	Yes []	No []	[]
j.	Is the boat certified	Yes []	No []	[]
k.	Place of the measurement sticker			
l.	Place of the CB-stamp			

Comments:

I declare having weighed and measured this yacht and the measurements noted by me on this measurement form are in accordance with my observations.

Name measurer:

Date of measurement: Signature: Stamp:

MEASUREMENT REPORT

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The horizontal reference line is laid at 730 + 20 mm above the base line. At the stem the stem mould is used to achieve this.

Horizontal measure line with help of the stem mould [O]
(see page 5) at the transom above bottom side transom (inclusive skin)(528)

No	Description	Min.		Max.
1	Length over all (exclusive metalwork)	3650	[]	3670
	Hull depths (from the horizontal reference line)			
2	At 419 mm from front side stem to inside inside-stem (mould 2)	557	[]	630
2a	At 560 mm from front side stem to inside inside-keel (mould 2a)	610	[]	630
3	At 953 mm from front side stem to inside inside-keel (mould 4a)	642	[]	662
4	At 1931 mm from front side stem to inside inside-keel (mould 9)	665	[]	685
5	At 2796 mm from front side stem to inside inside-keel (mould 13)	621	[]	641
6	At 0 mm from back side transom to bottom side ...	699	[]	719
	Sheer (from the horizontal reference line)			
7	At 560 mm from front side stem to sheer ... (mould 2a)	68	[]	88
8	At 1068 mm from front side stem to sheer ... (mould 5)	116	[]	136
9	At 1931 mm from front side stem to sheer ... (mould 9)	172	[]	192
10	At 2796 mm from front side stem to sheer ... (mould 13)	189	[]	209
11	At 0 mm from backside transom to sheer ...	151	[]	171
	Widths (to inside hull skin)			
12	Transom wideness at 190 mm under ...	808	[]	828
13	Transom wideness ad loc sheer ...	824	[]	844
14	Wideness at 2796 mm from backside transom ad loc sheer ...	1272	[]	1292
15	Wideness at 1931 mm from front side stem ad loc sheer ...	1382	[]	1402
16	Wideness at 1068 mm from front side stem ad loc sheer...	1120	[]	1140
17	Wideness at 419 mm from front side stem ad loc sheer ... (declination tolerance)	573	[]	588
	Mould			
18	Mould 2 at 419 mm from front side stem	0	[]	20
19	Mould 5 at 1068 mm from front side stem	0	[]	20
20	Mould 9 at 1931 mm from front side stem	0	[]	20
21	Mould 13 at 2796 mm from front side stem	0	[]	20
	Transom			
22	Transom, mahogany, thick	19	[]	21
23	Transom stiffener, oak, thick	30	[]	32
23a	Transom knee, oak, thick	19	[]	21
	Stem			
24	Horizontal distance from stem to front side stem at 550 mm under measure line (after placing the boat horizontal)	120	[]	140
25	Stem mould, tolerance	0	[]	20
25a	Horizontal stem knee, oak	23	[]	26
	Centreboard case and Benches (rowing seats)			
26	Distance front side centreboard opening to front side stem	1340	[]	1360
27	Length centreboard opening along keel...	995	[]	1005
28	Height centreboard above bottom side keel ad loc front side cover	350	[]	370

29	Hart centreboard bolt to front side stem	1386	[]	1406
30	Hart centreboard bolt to upper side inside keel	13	[]	25
31	Centreboard bolt dia. 12 mm + box or dia. 16 mm + closing ring		yes / no	
32	Filling piece, mahogany, thickness	12	[]	-
33	Effective opening centreboard case	11	[]	-
34	Cover plank mahogany + eventually strip strengthening		yes / no	
35	Centreboard case, cheeks, mahogany / teak, thickness	16	[]	-
36	Benches (rowing seats), wide 190 mm, thickness	19	[]	-
37	Front side second bench to front side stem	933	[]	973
38	Height second bench under the sheer ad loc mould 5	174	[]	194
39	Front side first bench to front side stem	1921	[]	1941
	Mast step and mast bench			
40	Place mast hole from stem	409	[]	429
41	Size of the mast hole		[]	75
42	Mastbench , mahogany, 200x25 mm	-1	[]	+1
	With two laying and two hanging knees, both thick (minimal thickness 19mm)	19	[]	26
43	Height upper side mast bench under the measure line	527	[]	537
	Centreboard and rudder			
44	Centreboard, galvanised steel (Stainless steel forbidden) thick	5.7	[]	6.3
45	Centreboard, conform the mould, deviation	-5	[]	+5
46	Rudder, conform the mould, deviation	-5	[]	+5
47	Rudder, wood, thick middle	21	[]	23
	edge	7	[]	21
48	Cheeks, mahogany, thick	16	[]	20
49	Tiller, ash / oak, size	40x30	[]	
50	Length tiller		[]	915
51	to 55 on reserve			
	Standing and running rigging, mainsheet			
56	Shrouds, diameter	3	[]	-
57	Shroud plates, distance centre to stem, ... ,	570	[]	610
58	Traveller, metal, diameter	12	[]	
59	Blocks mainsheet with strops, place free		yes / no	
60	Tack, boomvang , centreboard tackle each in a cleat		yes / no	
61	Boomvang and tack tackle.maximal 5 discs		yes / no	
62	Centreboard tackle maximal 3 discs		yes / no	

	Mast (wood, massive, formed like a circle)			
63	Total length of the mast from bottom side to top	-	[]	3875
64	Length from bottom side mast to upper side disc	-	[]	3855
65	Diameter at 480 mm above the breast of the pin	-	[]	70
66	Diameter at 1830 mm above the breast of the pin	-	[]	73
67	Diameter at the top of the mast	-	[]	57
68	Mast pin 38x38, length 33 mm		[]	
	Boom (wood, massive, formed like a circle)			
69	Length, maximal	-	[]	3660
70	Distance between the two black ribbons	-	[]	3580
71	Diameter at half length	-	[]	51
72	Diameter at the claw	-	[]	41
73	Diameter at the and ad loc black ribbon	-	[]	35
	Gaff			
74	Distance between two black ribbons	-	[]	3580
75	Diameter at halve length	-	[]	58

76	Diameter ad loc black ribbon under	-	[]	41
77	Diameter ad loc black ribbon above	-	[]	35
78	Place upper strap from lower black ribbon	1660	[]	1740
79	Distance outside strap to gaff	-	[]	85
80	Fixed clip at the lower end		yes / no	
81	to 85 at reserve			
	Remaining construction parts			
86	Skin, mahogany, cedar, oak, teak, pine	8	[]	-
87	Number of strakes each side	12	yes / no	
88	Number of timbers, 16x12 mm, 178 mm	19	yes / no	
89	Floors, thick	10	[]	-
	: front - closed		yes / no	
	: side - raster	70	[]	80
90	Side keels , oak, 19x19; size 2, length (On the land from mould 8 and 9 from ...)	1830	[]	1870
91	Distance backside side keels to backside transom	500	[]	
92	Distance bottom side steer thwart inside keel	190	[]	
93	Steerbench thwart beam , mahogany / oak, 50x19 mm		yes / no	
94	Width steering benches, minimal thickness 19 mm	255	[]	
95	Material inside keel	oak	pine	teak
	Dead weight			
96	Dead weight dry hull, including fastened metalwork and pulleys	104	[]	-
97	Compensation ballast , to fix in two equal pieces at the in side keel: one behind the maststep, one under the back thwart	-	-	10kg
98	to 99 at reserve		yes / no	

At re-measurement of ships , measured before 1/3/1993 be in forced: Depth measurements from the sheer.

100	At 420 mm from front side stem to upper side inside stem	497	[]	523
101	At 1070 mm from front side stem to upper side inside keel	522	[]	548
102	At 1930 mm from front side stem to upper side inside keel	487	[]	513
103	At 865 mm from backside transom to upper side inside stem	427	[]	453
	Wideness sizes (to inside skin)			
104	Transom wideness at 190 mm under the sheer	812	[]	838
105	Transom wideness at the point of the sheer	822	[]	848
106	At 865 mm from backside transom at the point of the sheer	1277	[]	1303
107	At 1930 mm from front side stem at the point of the stem at the point of the sheer ...	1382	[]	1408
108	At 1070 mm from the front side stem at the point of the stem at the point of the sheer	1127	[]	1153
109	At 420 mm from the front side stem at the point stem at the point sheer	577	[]	603
110	At 420 mm from the front side stem at 468 mm under the sheer	292	[]	318

