# Measurement Guide 2018

# <u>Weight</u>

## DSPW Measured weight of boat

This is the displacement in kg for the complete boat in racing trim. Items included are: Complete hull/deck with all fixed machinery, tanks, batteries etc installed.

All mattresses, drawers, doors etc as fitted.

Complete rig, including all spars, running and standing rigging.

Mainsail, headsail and 2 downwind sails.

One racing anchor and ground tackle.

Items NOT included are:

Safety equipment, including flares, liferaft, life jackets, MOB, immersion suits etc. Water in tanks or bilges.

Fuel (a measured amount may be deducted from overall displacement).

Personal belongings, books, etc.

Food and galley supplies, cutlery, crockery.

Tools and spare parts (except winch handles).

#### Note

The yacht is to be weighed by a direct reading load cell.

Built in load devices on cranes or travel lifts are not acceptable.

Certificates from reputable weighing services will be accepted.

# DSPWD Declared weight of boat

A published displacement may be used if a measured displacement is not available and where the boat in question is of a high volume series production type. The lowest lightship Figures should be taken from the manufacturer's web site or printed brochure. If these are not available, then online info, for example from <u>www.sailboatdata.com</u> may be used.

# <u>Hull</u>

## LOA Length overall

This is the maximum length overall of the longest hull. Only one hull needs to be measured on a catamaran but both can be measured and the average taken. The length includes the hull / deck structure but no railings, fittings or other structures that extend beyond the hull / deck.

Measure from a central point to a plum at the bow and a plumb at the stern, adding the two values together.

## FO Forward overhang

Measure the horizontal distance from where the stem or a straight projection thereof cuts the waterline to a plumb line hanging over the forward most point of the hull.

## FF Forward freeboard

This is the vertical distance from the waterline to the forward-most point of the hull. In the case of a plumb or reverse bow.

## AO Aft overhang

Measure the horizontal distance from where the aft part of the hull cuts the waterline to a plumb line hanging over the aft most point of the hull.

## Y Aft freeboard

This is the vertical distance from the waterline to the aft-most point of the hull.

## OSB Distance between stems

This is the distance between the forwardmost points of the bows of the hulls of a catamaran or the outer bows of a trimaran.

# TP Propeller Type

Enter the propeller type. Your choices are: None - no propeller or retractable drive One folding - single folding or feathering type of propeller One fixed - single fixed blade propeller Two folding - double folding or feathering type of propellers Two fixed - double fixed blade propellers

# V Draft to underside of hull or fixed keel if present

The value quoted by the manufacturers can be used in the case of boats with a fixed keel. For centreboard boats, use a square tool with spirit level to measure the depth of the hull at its deepest point, usually just behind the boards.

# TH Hull type

Enter the hull type. Your choices are: Catamaran Trimaran

# Daggerboards and Foils

Boards and foils can sometimes be measured in place or on board if they can be extracted. Otherwise they must be measured while the boat is out of the water or underwater with the use of mask and snorkel.

## TB Board type

Enter the board type. Your choices are:

None - for no moveable boards

Symmetrical - for straight, symmetrical boards including swing boards Asymmetric - for straight asymmetric boards

C-Board - for curved boards or angled straight boards designed to give lift L or T Boards - for L or T shaped boards that are designed to give lift

#### BV1, 2, 3, 4 Board /Foil 1, 2, 3, 4 maximum exposed vertical length This is the maximum vertical component of the distance between the underside of the

This is the maximum vertical component of the distance between the underside of the hull and the tip of the board as shown below.

# BH1, 2, 3, 4 Board /Foil 1, 2, 3, 4 maximum exposed horizontal length

This is the horizontal component of the distance between the root of the board (where it exits the hull) and the tip of the board. For straight boards with no lateral tilt, this will be 0.



The illustration to the left shows a front view of a catamaran with Cboards extended to illustrate where the vertical and horizontal extended lengths are measured.

# BC1, 2, 3, 4 Board/Foil 1, 2, 3, 4 maximum cord

This is the maximum cord of the board, usually measured at the root (where the board emerges from the underside of the hull.

# <u>Mast</u>

## TPC Mast Control Type

Enter the mast control type. Your choices are: Fixed - if the mast is fixed and cannot rotate or cant to the side Rotating - if one or more mast can rotate Canting - if one or more masts can cant to the side Both - if one or more masts can both rotate and cant to the side

## PC Circumference of rotating mast

Measure the full circumference around the thickest part of the mast section if it is a rotating mast.

# PCY Circumference of rotating mizzen mast

Measure the full circumference around the thickest part of the mast section if it is a rotating mast.

# <u>Main</u>

# PU Vertical distance between the top of the mainsail hoist and the clew

Measure from the top of the mainsail hoist to a point that is horizontally aligned with the end of the boom, with the boom supported in its normal close hauled position. This point will be at the tack for boats whose boom is normally horizontal.

## PL +/- Vertical distance of mainsail clew above or below tack

Measure from the tack to a point that is horizontally aligned with the end of the boom, with the boom supported in its normal position for sailing. If the tack is below this point, enter a positive number. If the tack is above this point (unusual), enter a negative number.

## E Maximum outhaul distance perpendicular to mast

Measure the horizontal distance from the aft side of the mast to the maximum outhaul position.

**MEASURING TIP** - With the boom supported in its normal close hauled position, run a thin horizontal line from the maximum outhaul position on the boom to the mast. Mark this position to measure PU, PL and E.

## Sail Measurements

Sail measurements to be taken according to the International Measurement System 2017 http://www.orc.org/rules/IMS%202017.pdf

## <u>Mizzen / 2nd main</u>

PUY, PLY and EY - Measurements as for the main.

Sail measurements to be taken according to the International Measurement System 2017 http://www.orc.org/rules/IMS%202017.pdf

# <u>Headsail</u>

## I Forestay height

Measure the vertical distance between where the forestay intersects the mast and the tack of the headsail.

**MEASURING TIP** - Run a thin horizontal line from the base of the mast going forward. Measure from the intersection of the forestay and the mast to the mast base and then measure the vertical distance between the headsail tack point and the horizontal line. Add the two measurements together to get I.

## J Foretriangle base

Measure the distance between the front of the mast and the lower attachment point of the forestay.

## **Sail Measurements**

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# <u>Spinnaker</u>

## Sail Measurements

Sail measurements to be taken according to the International Measurement System 2017 http://www.orc.org/rules/IMS%202017.pdf

## <u>Screacher</u>

#### Sail Measurements

Sail measurements to be taken according to the International Measurement System 2017 http://www.orc.org/rules/IMS%202017.pdf