

## WiMo float 20 liters

Support float for a **WiMo** Multiparameter probe



Rev 2 (MJ-22.11.22)

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## 1 Product description

The **WIMO** float 20 liters makes it easy to deploy a **WIMO** multiparameter probe at sea or on inland bodies of water. It provides protection against mechanical shocks, and reduces the development of biofouling on the probe's body. When mounted on the float, the sensors of the **WIMO** are located 1 meter bellow the water surface.

The operation of removing and putting back the mechanical set "**WIMO** support pole" does not require any tool which makes it easy for equipment maintenance

The system provided by **nke** includes the following parts:

- A central body equipped with a 20L float.
- A **WIMO** support pole.
- A locking pin with an artillery padlock.
- A kit of screws
- A tool kit
- A mooring ballast 3kg (DN2 chain 2m)



## 2 Characteristics

Total height = 1.7m – Total weight = 24kg (chain included).

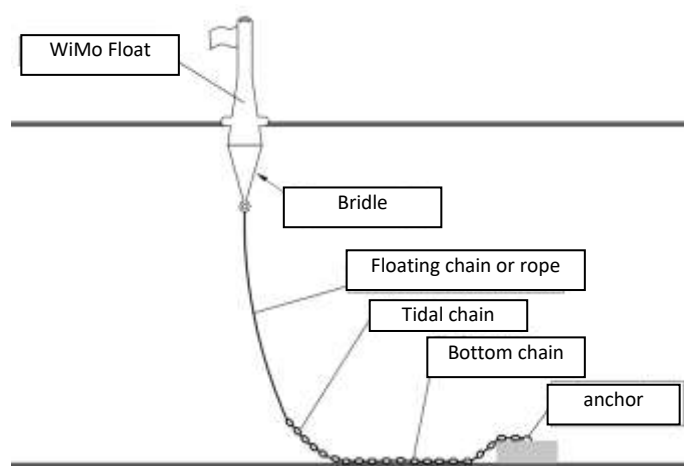
Support pole + antenna + **WIMO** total weight= 7kg.

Float with a buoyancy of 20 liters. EVA material (Ethylene-vinyl acetate).

Central body in High-density polyethylene (HDPE).

Crowfeet chain : two chains DN8 ((1.4kg/m) + Bridle and shackles.

## 3 Choice of the mooring line



In order to maintain a good hydrodynamic behavior of the **WIMO** float, we suggest keeping a 50-60% buoyancy reserve, meaning that the waterline must be between the half and the third of the total height of the yellow 20L float. The **total** ballast of the **WIMO** float is composed of the weight of the crowfeet chain Ø8 (1.2kg/m) + the weight of the mooring chain. Depending on the depth of the mooring, the floating line of the mooring will be composed of a chain only or a chain and a rope.

Recommended mooring line	
Depth > 5m	Britany Anchor 8kg + 13m chain Ø6 + 20m rope PA Ø8 + shackle Ø8 For a depth > 5m, add a rope PA Ø8.
2 < Depth < 5m	Britany Anchor 8kg + 13m chain Ø6 + shackle Ø8 - (No rope)
Depth < 2m	Britany Anchor 8kg + 13m chain Ø6 + shackle Ø8 - (No rope) For a better stability of the float, we recommend replacing the DN8 chain (1.4kg/m) by a DN10 chain (2.3kg/m)



Mooring line length must be at least three time depth.

## 4 Limit conditions for the deployment

The **WIMO** float is designed to be deployed in relatively calm environment conditions. Its small size (20 liters) and weight make it unsuitable for a deployment in the open sea or in any site exposed to a strong current (rivers, estuaries).

- Current  $\leq 0.5\text{m/s}$  –  $1/2$  knot –  $1.8\text{km/h}$ .
- Swell  $\leq 1$  m.
- Max depth: for a depth  $\geq 20\text{m}$ , a specific mooring line will need to be designed.







If the current is more than 1 knot, the 20 liters float sinks under the effect of the hydrodynamic drag.

## 5 Spare parts

Référence	Désignation
28-91-032	Artillery padlock
28-91-033	Padlock key
30-70-637	Locking pin
30-70-746	Perche WIMO
72-30-519	WIMO float
60-07-xxx	Screws kit
25-26-062	Mooring kit Brittany; Anchor 8kg + 13m chain $\varnothing 6$ + 20m rope PA $\varnothing 8$ + Shackle $\varnothing 8$

## 6 Mounting instruction of the WiMo and its modem

Parts	Fonction
<p><u>Screw</u></p> <p>2 x screw M6x40</p> <p>2 x nut M6</p> <p>4 x Screw M6x20</p> <p>2 x PVC washer</p> <p>2 x nut M6</p>	<p>Mounting the flange 30-70748, on the WiMo probe, using the 2 screws M6x40 and nut</p>  <p>Mounting <b>WIMO</b> probe on the arm on the flange, using the 4 screws M6x20 and washer.</p> 
<p><u>Screw</u></p> <p>4 x screw M5X16</p> <p>4 x washer M5</p> <p>4 x PVC washer</p>	<p>Using the 4 screws M5x16, mount the modem on the probe arm.</p>  
<p>Graisse silicone</p>	<p>Connect the WiMo probe to the modem, using the Sub-Con cable. Grease the connector with silicone grease.</p> 