



Sediment Trap with Lids

Model 28.310

Manual

KC Denmark A/S

Research Equipment

Limnology • Oceanography • Hydrobiology

Sediment Trap with Closing Functionality



KC Denmark A/S is not, and cannot be held, responsible for any damage(s) made to equipment or to operators who ignore safety precautions or because of misuse or wrong operation. Do not use any kind of alcohol for cleaning the tubes: it's recommended using a mild soap.

Available models:

The sediment trap can be configured with 1, 2, 3 or 4 sample tubes: diameter of 110/105 mm.

Adding item in series (cascade)

The sampler supports more items to be mounted in series.




Minimizing corrosion:

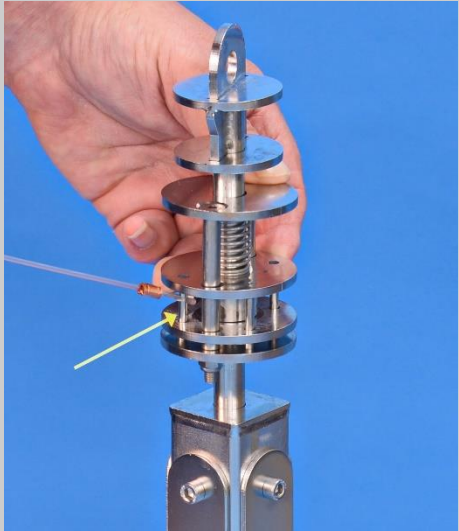
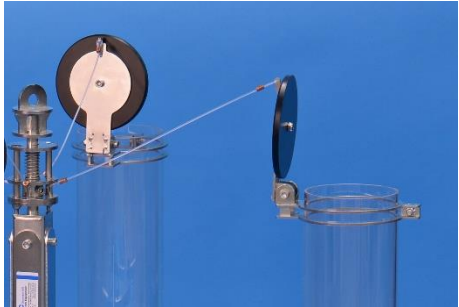


All traps come with a zinc anode to minimize corrosion in salt water.

Easy to configure:

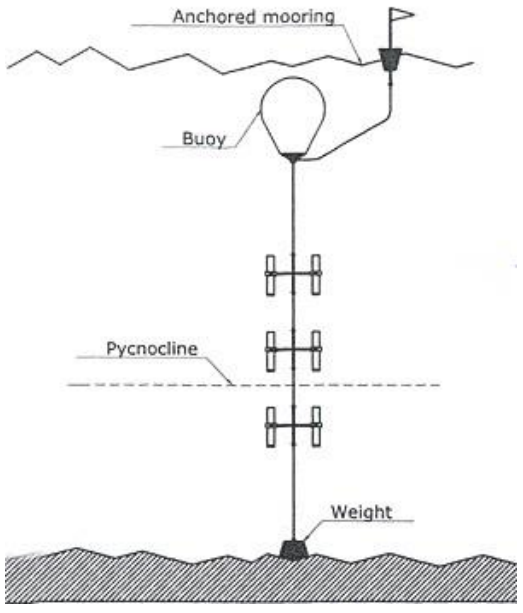
All parts are detachable, i.e. the main rack can be equipped with the amount of tubes you need for a specific project.

| Item | Description | |
|------|---|--|
| 1 | The sediment trap is configurable in various ways, having 1, 2, 3 or 4 tubes. For 3 tubes or less, the main rack supports a steering fin and/or a balance arm (counterweight). See pg. 7/8 for possible setups. | |
| 2 | <p>Mount the arms and fasten with 2 bolts "A".</p> <p>It is highly recommended that you add some anti-seize compound like Never-Seez, copper paste or a similar product to the bolts thread. It will prevent the bolts from being stuck and you can easily remove these when changing the configuration.</p> <p>A zinc anode is located at the bottom of the main rack. The zinc anode will corrode during deployment, and you must check that the zinc anode is intact and has a reasonable size. Furthermore, you may consider if the material left will be adequate for the time of deployment.</p> | |

| | | |
|----------|--|---|
| <p>3</p> | <p>Mount the lid and ensure that the spring-loaded mechanism "B" is perpendicular to the main rack.</p> <p>Check that the lid will close properly to the sample tube and fasten bolts "C" and "D".</p> |  |
| <p>4</p> | <p>Slide the tube into the holder until it rest on its collar, then fasten by means of bolt "E"</p> |  |
| <p>5</p> | <p>To load the sampler pull up the entire release mechanism, approx. 15 mm.</p> |  |

| | | |
|---|--|---|
| 6 | <p>While holding the mechanism in position insert the release line(s) from the lid(s) onto the small pins as shown.</p> |  |
| 7 | <p>The lid is loaded correctly.</p> |  |
| 8 | <p>Releasing the sediment trap requires a steel tube and a drop messenger (to be ordered separately).</p> <p>More traps can be mounted in series (cascade), the drop messenger supports adding a short release line on top.</p> |  |
| 9 | <p>Pull the deployment line through the steel tube, see item 8 and fasten it on top of the sediment sampler. The steel tube allows a carabiner or similar to pass through.</p> <p>The drop messenger is shown for illustration purpose. Once the messenger hits the steel tube, the lids will close.</p> |  |

| | | |
|----|---|--|
| 9 | <p>Depending of your project you may apply some preservatives to each tube. Use a syringe with a silicone tube or similar.</p> <p>Before deployment, you may slowly fill each tube with water, so the preservatives remain undisturbed at the bottom of the tube.</p> | |
| 10 | <p>Deploy the trap and once you decide to raise it, simply slide the drop messenger along the line and the sampler will close.</p> | |

| Sediment Traps in series (cascade) | | |
|---|--|--|
| 11 | <p>For a well-defined depth, you can attach an appropriate weight at the end of the line, and the buoy will keep the deployment line in vertical position.</p> |  |

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Adding more traps in series requires a short line between the release mechanism and the drop messenger. The messenger is located beneath the upper sediment trap and you can add more traps using this principle. Releasing the upper trap, causes the other traps to close immediately.



Emptying the traps

13

You can wash out the sediment sample using fresh water or distilled liquids.



Caution

Do not use any kind of alcohol for cleaning the tubes; a mild soap is recommended

Maintenance and storing

14

Before storing the sediment trap, it is important to clean all parts with fresh water, especially when using the trap in salt water. Remove the sample tube from its holder before cleaning. Do not expose the sample tube to direct sunlight for a long period.

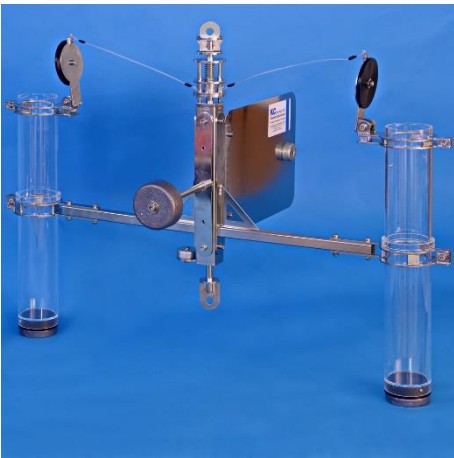
Available configurations



- 1 sample tube and a steering fin.



- 2 samples tubes, no steering fin.



- 2 sample tubes, steering fin and a balance arm



- 3 tubes and a steering fin.



- 4 sample tubes, no steering fin.

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