

# Universal container holder

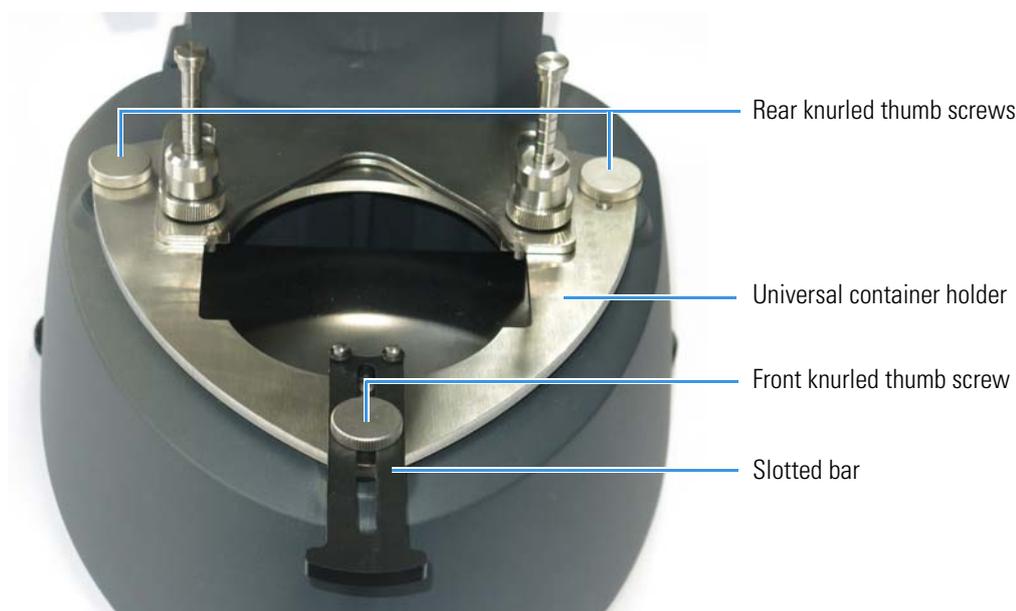
This document describes how to mount and operate the universal container holder which can be used with any Thermo Scientific™ HAAKE™ MARS™ and HAAKE™ Viscotester™ iQ rheometer.

The universal container holder is designed for firmly holding a fluid container in place so that measurements can be made directly in the container.

## Mounting

The universal container holder is mounted on the holder for the lower TM-xx-x temperature modules in the same way as a TM-xx-x temperature module, see [Figure 1](#) and [Figure 2](#). The front knurled thumb screw is also used to fix the slotted clamping bar.

**Figure 1.** Universal container holder mounted on a HAAKE Viscotester iQ



### ❖ To mount the universal container holder

1. Check that no rotor is fitted to the instrument head drive shaft.
2. Check that the instrument head is in its highest position.
3. Place the universal container holder in the instrument.
4. Make sure that the module is correctly placed on its three mounting points at the three corners of the triangular shaped plate and that the two location pins fit into the corresponding location holes of the plate.
5. Place the black slotted bar on the front mounting point and mount the front knurled thumb screw, do not tighten the thumb screw.
6. Fix the module to the holder by tightening the two rear knurled thumb screws.

The adjustment of the universal container holder to the size of a container is described in the following paragraph.

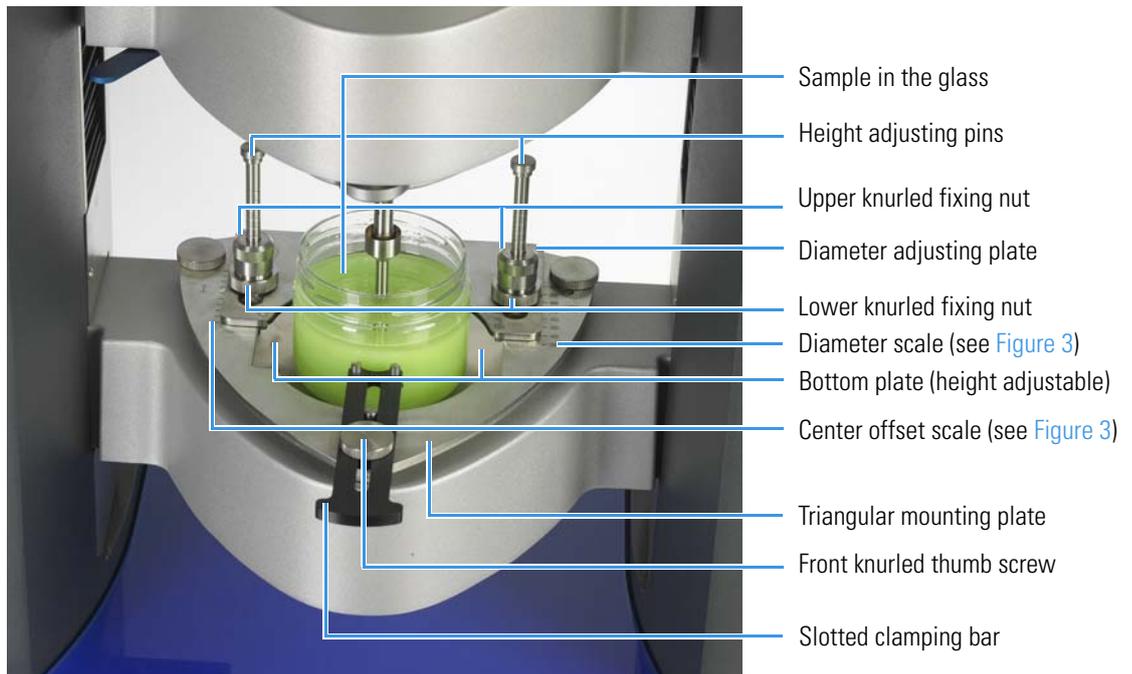
## Adjusting

### ❖ To dismount the universal container holder

1. Check that no rotor is fitted to the drive motor shaft.
2. Check that the instrument head is in its highest position.
3. Unscrew the three knurled thumb screws.
4. Remove the universal container holder from the stand.

The universal container holder consists of a triangular mounting plate, a height adjustable bottom plate, a sliding diameter adjusting plate and a slotted clamping bar, see [Figure 2](#).

**Figure 2.** Universal container holder mounted onto a MARS 60.



The universal container holder is designed for a quick and easy adaption to both the height and the diameter of a wide variety (regarding size and shape) of (original) sample containers. The height of the bottom plate can be adjusted over a range of 6 cm, the diameter can be adjusted from 3 cm to 11 cm.

### ❖ To clamp a sample container in the holder

1. Loosen the front knurled thumb screw that holds the slotted clamping bar.
2. Slide the slotted bar forward (to the front of the triangular mounting plate).
3. Loosen the two lower knurled fixing nuts which hold diameter adjusting plate.
4. Slide the diameter adjusting plate backward.
5. Place the sample container on the bottom plate.
6. Adjust the height of the bottom plate if needed, see [“To adjust the height of the bottom plate.”](#)
7. Adjust the position of the diameter adjusting plate according to the size of the container and the desired position of the container relative to the drive motor shaft.

To accurately center the sample container relative to the drive motor shaft, see [“To use the diameter scale to center the sample container.”](#)

8. Fasten the two lower knurled fixing nuts to fix the diameter adjusting plate.
9. Slide the slotted bar backward and push it against the sample container.
10. Fasten the front knurled thumb screw to fix the slotted bar and clamp the sample container.

Depending on the vertical size of the sample container the height of the bottom plate may need to be adjusted.

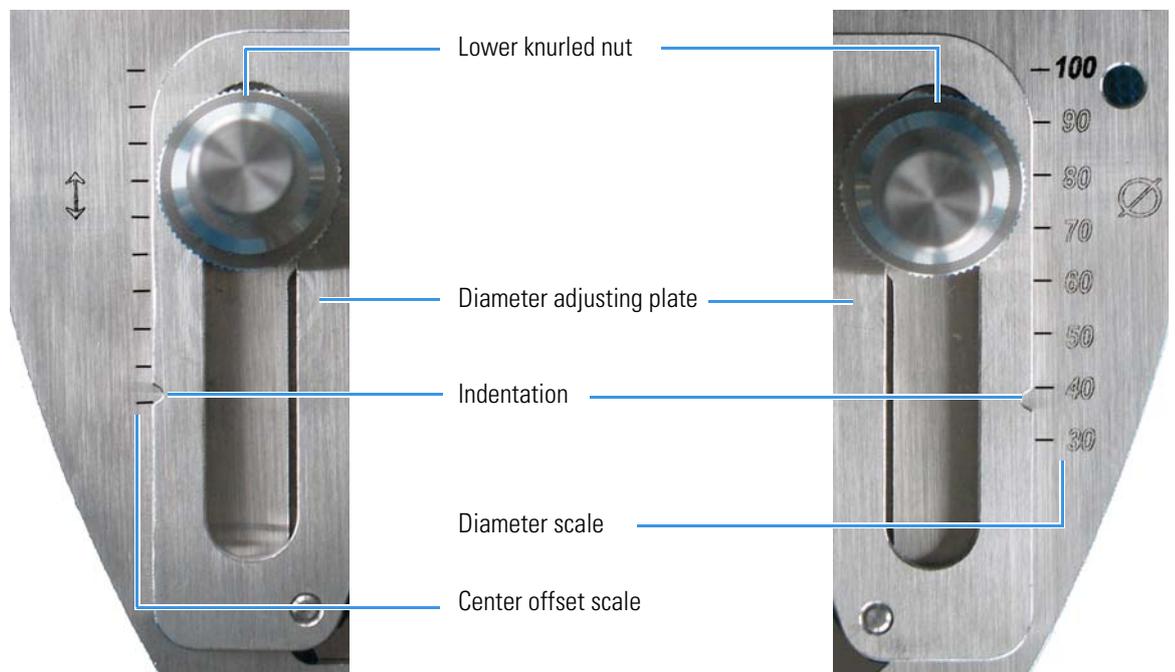
❖ **To adjust the height of the bottom plate**

1. Loosen the two upper knurled fixing nuts.
2. Move the bottom plate upward or downward by pulling or pushing on the two height adjustment pins simultaneously.

The two pins have a latching mechanism for adjusting the height in steps of 5 mm.

3. Adjust the height of the bottom plate according to the height of the sample container.
4. Fasten the two upper knurled fixing nuts (do not tighten the nuts too firm).

**Figure 3.** Center offset (left) and diameter (right) scales on the triangular mounting plate



To make it easy to place the sample container centered relative to the drive motor shaft, the triangular mounting plate is equipped with a diameter scale, see [Figure 3](#).

❖ **To use the diameter scale to center the sample container**

1. Measure the diameter of the sample container and take note of the diameter value (in mm).
2. Loosen the two lower knurled fixing nuts.
3. Slide the diameter adjusting plate in the position in which the indentation mark in the plate aligns with the desired diameter value on the diameter scale, see the right hand side image in [Figure 3](#).
4. Fasten the two lower knurled fixing nuts.

When the center of the sample container is to be placed at certain offset distance to the drive motor shaft, the center offset scale on the left side of the triangular plate (see [Figure 3](#)) can be used.

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❖ **To use the center offset scale**

1. Adjust the diameter adjusting plate so that the container is centered, see [“To use the diameter scale to center the sample container.”](#)
2. Take a note of the position of the left indentation on the diameter adjusting plate relative to the center offset scale on the triangular mounting plate.
3. Loosen the two lower knurled fixing nuts.
4. Slide the diameter adjusting plate forward or backward according to the desired offset distance using the lines of the center offset scale, which are 5 mm apart, to take measure, see the left hand side image in [Figure 3](#).
5. Fasten the two lower knurled fixing nuts.