

Sigma 702/702ET/703D Force Tensiometer

List of accessories

A wide range of accessories are available to expand the use of your Sigma 702, Sigma 702ET and Sigma 703D. Available accessories add measurement types, control temperature or allow improved measurements.

Table of Contents

Accessories	2
<i>1. ENVIRONMENT AND SAMPLE CONTROL: TEMPERATURE & CABINET</i>	<i>2</i>
<i>2. DENSITY</i>	<i>3</i>
<i>3. PROBES AND CALIBRATION</i>	<i>3</i>
<i>4. CONSUMABLES</i>	<i>4</i>
<i>5. PC & SOFTWARE</i>	<i>4</i>
<i>6. MAINTENANCE & SERVICES</i>	<i>4</i>

Accessories

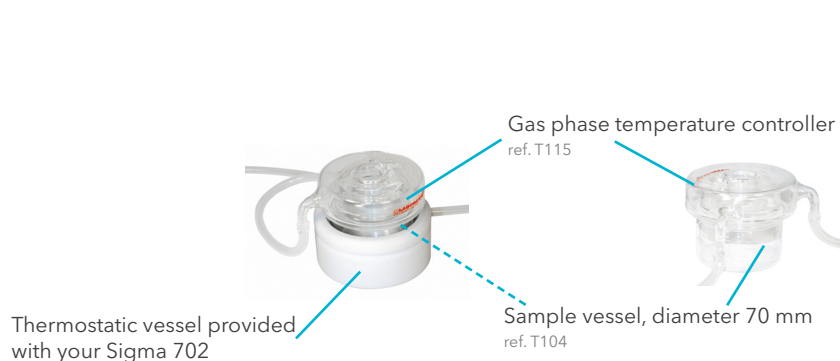
1. ENVIRONMENT AND SAMPLE CONTROL: TEMPERATURE & CABINET

Thermostatic vessel (from -10 to +100°C) | ref. T705ET

Only for 702ET: already included with Sigma 702. For temperature control of the liquid sample. A heat exchange vessel with water jacket type of construction. Heating/cooling of the water jacket requires external bath/circulator (e.g. T102ME). Fits glass sample vessel 70 mm in diameter (T104). Operable temperature range from -10 to +100°C.

Gas phase temperature controller | ref. T115

A glass lid mounted on top of thermostatted sample vessels for regulation of the air temperature during measurement. Heating/cooling fluid circulates inside the glass lid. Prevents evaporation and condensation while measuring. Requires external bath/circulator (T102ME).



Bath/circulator Julabo F12 (left) and F25 (right)
ref. T102ME, T102ED



Bath/circulator, Julabo F 12-MC | ref. T102MC

A standalone constant temperature bath/circulator, for sample liquid temperature regulation. Temperature range -20 to +200°C. Stability $\pm 0.02^\circ\text{C}$. Digital readout. Bath opening 130x150mm, bath depth 130mm, volume 4.5L. Dimensions 200 x 360 x 560 (W,L,H).

Bath/circulator, Julabo F25-ME | ref. T102ME

A constant temperature standalone bath/circulator for sample liquid temperature regulation. Temperature range -28 to +200°C. Stability $\pm 0.01^\circ\text{C}$. Digital readout. Bath opening 120x140mm, bath depth 140mm, volume 4.5L. Dimensions 230 x 420 x 610 (W,L,H).

Note: Can be equipped with external PT100 temperature probe (T102MT) to maintain the desired temperature in the sample vessel. Please note that this is not possible with Julabo F12-MC or F12-ED.

Temperature probe for the Julabo bath circulator F25ME (T102ME) | ref. T102MT

PT-100 temperature probe and probe holder to enable stand-alone temperature control by the T102ME in the sample vessel.



Temperature probe for Julabo F25ME
ref. T102MT

Bath/circulator, Julabo F12-ED | ref. T102ED

A constant temperature stand-alone bath/circulator for sample liquid temperature regulation. Temperature range -20 to +100°C. Stability $\pm 0.03^\circ\text{C}$. Digital readout. Bath opening 130x150mm, bath depth 130mm, volume 4.5L. Dimensions 200 x 360 x 560 (W,L,H).

Digital thermometer | ref. T202

Battery operated with display and probe for temperature measurement directly from sample.

Cabinet | ref. T140CAB

A transparent cabinet to protect the instrument from airborne particles.

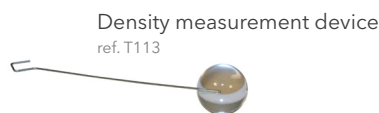


Cabinet
ref. T140CAB

2. DENSITY

Density measurement device | ref. T113

Glass probe for measurement of liquid density.
For density range up to 2.2 g/ml or 2.2 kg/l.



3. PROBES AND CALIBRATION

Platinum Du Noüy ring | ref. T106

Pt-Ir-ring made to fulfill the requirements at least of following standards: ISO 301, ISO 4311, ISO 6889, ASTM D1331 and ASTM D 971. Includes also additional weight for push-mode. Packed in a protective wooden box.

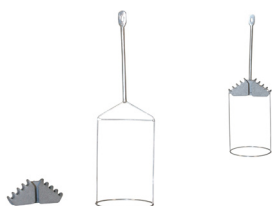
Certificate for Du Noüy ring dimensions | ref. T106A

A document confirming the ring quality, dimensions and specifications. Issued only for new unused rings.

MIKES calibration certificate for Du Noüy ring | ref. T106B

A certificate confirming the ring quality, dimensions and specification to relevant ISO, ASTM and DIN norms. Issued by the Center for Metrology and Accreditation of Finland.

Du Nouy ring & additional weight ref. T106



Wilhelmy plate ref. T107



Wilhelmy Plate, platinum plate with micro roughened surface | ref. T107

Certificate for Wilhelmy plate dimensions | ref. T107A

A document confirming the plate quality, dimensions and specifications. Issued only for new unused plates.

MIKES calibration certificate for Wilhelmy plate | ref. T107C

A certificate confirming the plate quality, dimension and specification to relevant ISO, ASTM and DIN norms. Issued Center for Metrology and Accreditation of Finland.

Certified calibration kit | ref. T117B

Set of certified weights for validation of tensiometers. Including 3 weights with DKD certificate, a brush, a holder and tweezers.
(DKD = Deutschen Kalibrierdienst, the German calibration service).



Calibration weight | ref. T120

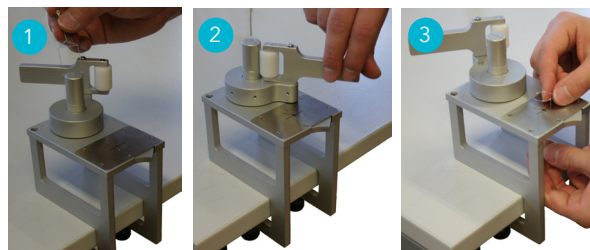
Weight with a hole in the middle for easy placement on the Sigma's balance hook.



Ring re-form tool | ref. T108

For straightening of deformed Du Nouy ring. Du Nouy rings can be accidentally bent, and to get it back in shape a ring re-form tool can be used.

The reform takes place in two steps. First, the ring is fitted onto a cylinder (illustration 1) and a roller is pressed against the cylinder, straightening the ring frame (illustration 2). Second, the ring is slotted through a plate and vertical deformities are fixed (illustration 3).



Ring re-form tool
ref. T108

4. CONSUMABLES

Sample vessel, diameter 70 mm, 5 pcs/box | ref. T104

Sample vessel, diameter 50 mm, 5 pcs/box | ref. T105



Sample vessel, diameter 50 mm
ref. T105



Sample vessel, diameter 70 mm
ref. T104

5. PC & SOFTWARE

Computer with pre-installed software | ref. T130

Sigma compatible computer with Attension Sigma data receiver software already installed.

Printer | ref. T702PR

Printer allowing direct connection to your Sigma for simple data printing.

6. MAINTENANCE & SERVICES

Start up and training | ref. STUP-EU, ref. STUP-NEU

Installation, on-site training and first customer sample measurements by an Attension specialist. Includes installation, aligning and calibration of one instrument and a training at the customer premises. All travel expenses are included in the price.

Service contract level 2 | ref. SERV2

One year instrument and customer specific service contract including free software upgrades and an option to a full day maintenance visit during the contract period. Possible spare parts cost is excluded.

Extended warranty | ref. SERV3

One year instrument and customer specific extended warranty.

Specifications and appearance are subject to change without prior notice.

Biolin Scientific shall not be liable for any errors in this document.