

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.

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Accessories

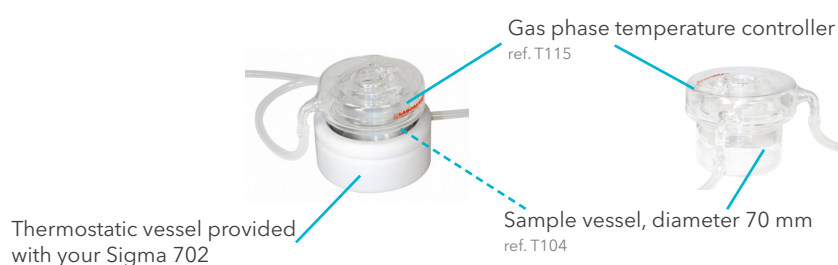
1. ENVIRONMENT AND SAMPLE CONTROL: TEMPERATURE & CABINET

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.

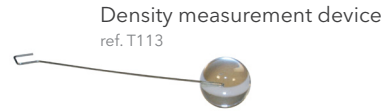


Cabinet
ref. T140CAB

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.

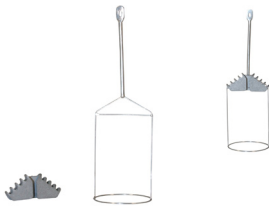
Certificate for Du Noüy ring dimensions | ref. T106A

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

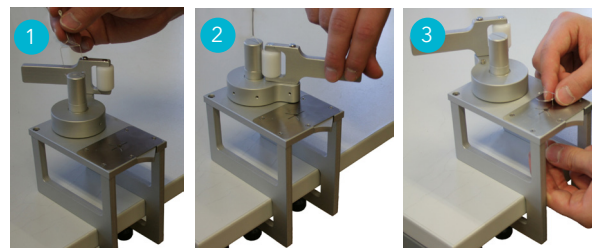
Weight with a hole in the middle for easy placement on the Sigma's balance hook.



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.

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