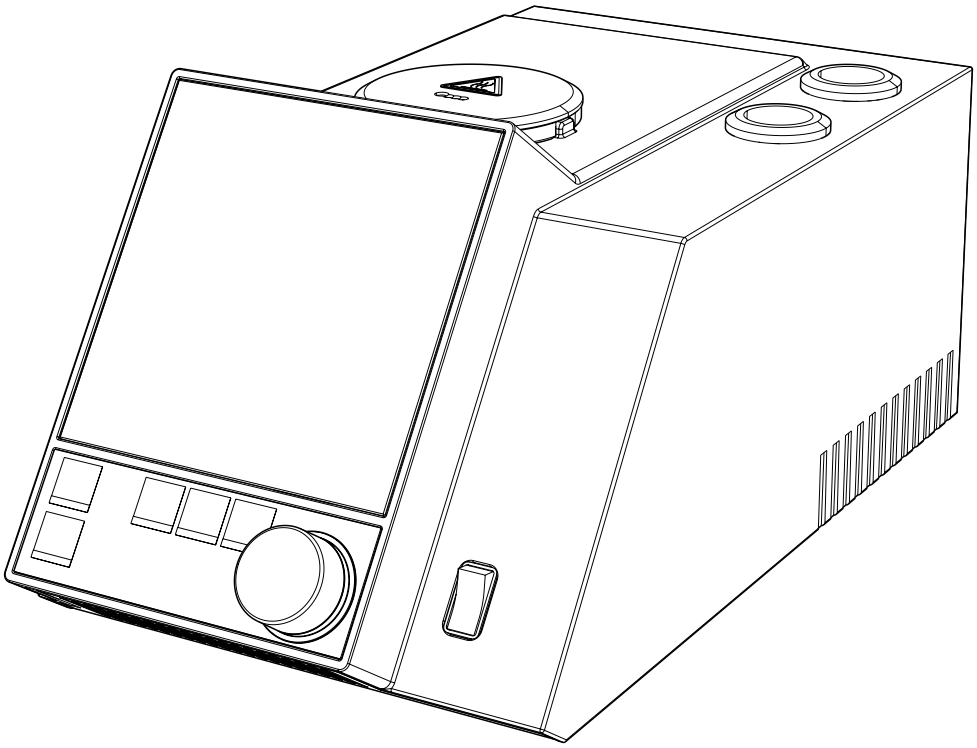
Melting Point M-560
Technical data sheet

The Melting Point M-560 is designed for manual determination of melting and boiling points. The easy observation of the phase transition through a magnifying lens together with the intuitive calibration and verification procedures ensures highly accurate measurements.



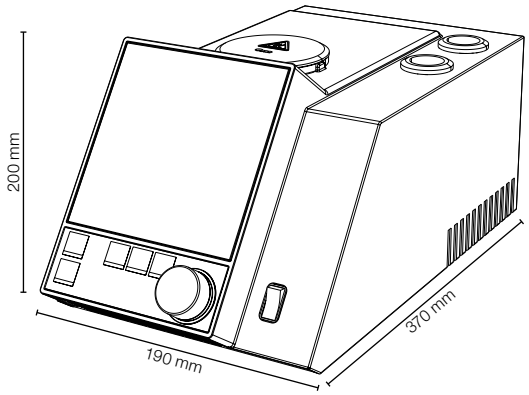
Scope of delivery

Components	Qty
Calibration set M-560/M-565	1
Melting point tubes	100
Boiling point tubes	10
Boiling capillary	10
Sample holder	1
Cleaning tool	1
Operation manual	1

Order code

0 5 1 9 9 9 Melting Point M-560

Dimensions and weight



	Dimensions (W x H x D)	Weight
Melting Point M-560	190 x 200 x 370 mm	4.5 kg

Technical data

Positions for melting capillaries	3
Positions for boiling capillaries	1
Precision magnifying lens	1
Magnification of lens	2.5 x
Display	Color, TFT, 320 x 240, 3.5″
Determination temperature range	Ambient + 10 °C to 400 °C

Temperature resolution	0.1 °C
Accuracy of the oven temperature at 0.5 °C/min	up to 250 °C ± 0.3 °C 250 °C to 400 °C ± 0.3 °C to ± 0.5 °C
Repeatability of melting point at 0.5 °C/min	± 0.1 °C
Accuracy of boiling point at 1.0 °C/min up to 400 °C	± 0.5 °C
Temperature gradients, °C/min	0.1, 0.2, 0.5, 1, 2, 3, 5, 10, 20
Heat-up time (50 °C – 350 °C) at 25 °C	~ 4 min
Cool-down time (350 °C – 50 °C) at 25 °C	~ 13 min
Electrical supply	100 – 240 V (±10 %) 50 – 60 Hz
Power consumption	150 W
Storable methods for melting point	50
Storable methods for boiling point	50
Compliant with Pharmacopeia methods	PH. EUR. 6.1.2.2.60, USP XXI 741 and JP
Interfaces	1 x PS/2 1 x RS232 1 x USB
Languages	en / de / fr / it / es / ja / cn

Environmental conditions

Temperature	5 – 40 °C
Altitude	up to 2000 m a.s.l.
Humidity	maximum relative humidity 80 % for temperatures up to 31 °C, decreasing linearly to 50 % relative humidity at 40 °C
Overvoltage category	II
Degree of protection	IP20
Pollution degree	2

Accessories

	Order number
Sample Loader M-569	051997
Verification Kit M-560/M-565	11055019
Calibration Kit M-560/M-565	11055018
Agate mortar and pestle	041867

	Order number
Compact keyboard German (CH)	029509
Compact keyboard English (USA)	029508
Serial printer	11055438
Ribbon for printer	044306
Paper roll for printer	038684
Sample holder	11055014
Melting point capillaries, 1000 units	001759
Melting point capillaries, 100 units	017808
Boiling point tubes, 10 pcs.	019697
Boiling point capillaries 10 pcs.	051850
Boiling point tubes, 100 pcs.	019007
Boiling point capillaries 100 pcs.	051890
Cleaning tool	051978

Functional principle

The Melting Point M-560 is an instrument for manual (visual) determination of melting point, melting range, and boiling point at ambient temperatures +10 °C up to 400 °C. The melting point of three samples can be determined at the same time. The boiling point can be determined for one sample. Samples are observed through the lens.

Melting point

The melting point capillary sits in a hollow of the metal block, which is electrically heated and controlled by a temperature sensor. The heating block is capable of being maintained accurately at a pre-defined temperature by the heating element, and of being heated at a defined rate. The melting point is determined manually.

Boiling point

The boiling point is determined by the “Siwoloboff” method. The Melting Point M-560 can be used to determine the boiling point of a small amount of liquid. The heating block has one insert available for boiling point tubes (outside left). The boiling point is determined visually.

M-560 Data Sheet en 1502 C / Technical data are subject to change without notice / Quality Systems ISO 9001 The English version is the original language version and serves as basis for all translations into other languages.