











SETA KV-6 Viscometer Bath

A compact, high quality viscosity bath manufactured in strict conformity to ASTM D445-IP 71 requirements

Applicable Test Methods

ASTM D2170-IP 319, ASTM D2270-IP 226, ASTM D445-IP 71, ASTM D446, BS 188, BS 2000 Parts 71 & 319, DIN 51 366, DIN 51 562, EN 12595, EN 3104, FTM 791 305, ISO 3105, JIS K2283, NF T60-100, NF T60-136



Key Features

- Accommodates up to 6 viscometer tubes
- Temperature range ambient to 150°C, +/-0.01°C
- Digital temperature control with Thermostir Plus
- Oil, silicone fluid or Water filled depending on temperature of use
- Stainless Steel construction
- Double wall glass front panel ensures optimum insulation and reduce heat loss
- Integral safety features, including over temperature and low level fluid cut outs and alarms for high/low temperature
- Low voltage halogen illumination for clear and precise reading of viscometer tubes
- Two positions for reference thermometers
- · Integral cooling coil for connection to cold water supply or refrigerated chiller optimises bath stability
- Easy access drain tap fitted at the rear for bath fluid changes
- CE compliant



Principles of Operation

The Seta KV-6 gives the user a high quality and robust solution for kinematic viscosity determinations. Ultra precise temperature stability and uniformity is achieved with an integrated advanced Thermostir Plus heating and stirring system. All internal components are of stainless steel construction to ensure long term durability and suitable for use with either oil, silicone fluid or water bath media. The large 50 litre capacity ensures minimum temperature recovery time after loading of bath, improving sample throughput.

An uninterrupted view of viscometer tubes is provided by an oversize double glazed front panel with the outer panel made from toughened safety glass to BS 3463. An integrated low voltage halogen illumination unit ensures a crystal clear view of capillary timing lines for precise timing measurements.

A removeable and recessed 6 place top plate has 62mm apertures and covers with provision for two thermometer holders. The recessed design allows viscometer tubes to sit low in the bath and provides the user with a much improved vision of the upper timing marks on the viscometer tubes. An optional 7 place top plate for 51mm viscometer tube holders is available on request.

Digital temperature control and inbuilt cold water cooling coil provide accurate and stable test temperatures from ambient to $150^{\circ}\text{C} \pm 0.01^{\circ}\text{C}$.

The KV-6 Bath footprint is the best in its class with compact dimensions of 56cm wide and 33cm depth.

Specification for KV-6 Viscometer Bath (84200-2)

Product No.:	84200-2
Temperature Range:	Ambient to 160°C
Temperature Uniformity: * data is independently verified	±0.003° at 40°C ±0.006° at 100°C
Temperature Stability: * data is independently verified	±0.002° at 40°C ±0.005° at 100°C ±0.01° at 150°C
Tube Capacity:	Up to 6
Bath Fluid:	Oil, Silicone fluid or Water
Bath Capacity	50 litres
Voltage:	220/240V, 50/60Hz
Power:	2.2kW
Size (HxWxD):	Bath outside dimensions 560 x 345 x 435mm, Tank inside dimension 526 x 273 x 400mm



'Thermostir Plus' for Precise Temperature Control

- · Large colour display showing bath and set point temperatures
- Preset facility for standard kinematic viscosity temperatures
- Easy-to-use 'set temperature' facility ensures pinpoint accuracy at any temperature
- Heating & boost heating temperature control with adjustment setting to 0.01°C
- Audible High/Low temperature alarms
- Countdown timer for equilibrium times with audible alarm
- Display of stirrer speed setting (3100 RPM)
- USB and RS232 interface
- Integral calibration facility



A large colour display provides a highly visible indication of bath and set point temperature to 0.01°C. The intuitive screen icons and menus make it exceptionally easy for users to operate. Standard Kinematic Viscosity test temperatures are pre-programmed and can be accessed via the preset facility to allow quick user selection. Audible high and low temperature limit alarms can be fully programmed by the user.

High and low power heater elements provide fast heat-up and ultra precise temperature control. A specially designed baffle system and optimised impeller ensures exceptional temperature uniformity throughout the bath.

A countdown timer with audible alarm can be used for setting exact test equilibrium times.

PC connectivity is available via USB and RS232 interfaces. The software features real-time status windows, a graphic display of the controller's performance as a program is run, and allows data to be logged for future recall and analysis.

Safety

Protection against over-heating is by an independent user adjustable over-temperature cut-out facility. A low level float switch protects against loss of bath fluid. Activation of either alarm will turn off power to the heaters and trigger a visual and audible alert.

The double glazed front panel features a toughened safety glass outer panel specified to BS 3463.

Calibration

Calibration can be carried out at up to five temperatures using a calibrated reference thermometer. The bath is supplied factory calibrated at 40, 100, 150°C.

Optional Accessories

For details of our full range of Thermometers, Viscometer Tubes & Viscosity Standards contact Seta

- Viscometer Tubes & Holder for Ubbelohde & Suspended Level
- Viscometer Tubes & Holder for Cannon Fenske
- Viscometer Tubes & Holder for U-tube reverse flow
- Bath Oil for temperature range ambient to 80°C, or 80 to 120°C
- Silicone Oil for temperature range 100 to 150°C
- Viscosity Standards



