KINEMATIC VISCOSITY





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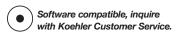
KV3000 and **KV4000** Constant Temperature Baths with Integrated Digital Timing

- Microprocessor temperature control between ambient and 150°C (302°F)
- Integrated digital timing for easy measurement of sample efflux times
- KV4000 permits entry of viscometer constants for automatic calculation and display in viscosity units or seconds
- Dual digital displays show setpoint and actual bath temperature
- Selectable temperature scale Fahrenheit or Celsius
- Integrated redundant overtemperature and low liquid level cut-off circuitry
- Conforms to ASTM D445, D2170 and related specifications

Constant temperature bath series with advanced temperature control circuitry and integrated timing features for convenient, accurate glass capillary viscometry determinations. Microprocessor PID circuitry assures precise, reliable temperature control within ASTM specified tolerances throughout the operating range of the bath. Simple push-button controls and dual digital displays permit easy setting and monitoring of bath temperature. Two place calibration offset capability is provided. Baths accommodate seven glass capillary viscometers of various types - see pages 10-13 for complete selection. Viewing the viscometers is made easy by glare-free fluorescent illumination inside the bath and a baffle that provides a background for easy viewing. Temperature control uniformity is assured by means of motorized stirrer which provides complete circulation without turbulence. Connection of the built-in cooling coil to tap water or a recirculating water chiller facilitates temperature control at ambient or below ambient temperatures. Communications software (RS232, etc.) ramp-to-set, and other enhanced features are available at additional cost. Contact your Koehler representative for additional information.

Integrated Timing Features - KV3000 incorporates seven digital timers on the front control panel for convenient timing and monitoring of the efflux interval for each viscometer. On KV4000, the user can enter the viscosity constant for each viscometer on the front LCD control/display, and then get the test result in both efflux time and viscosity units automatically after stopping each timer. All timing functions are displayed in 0.01 or 0.1 second resolution and are accurate within 0.01%.

Bath Construction and Safety Features - Bath chamber is a clear borosilicate glass vessel enclosed in a polyester-epoxy finished steel housing. Top working surface has seven 2" (51mm) viscometer ports. Front viewing window assures safe, distortion-free viewing. Microprocessor temperature controller incorporates safety circuitry that interrupts power to the heaters in the event of an overtemperature condition or disconnection of the primary probe. For added safety, an adjustable redundant controller with separate sensor probe interrupts power if an overtemperature situation occurs. An integrated low-liquid sensor prevents operation of the bath if the bath liquid is not filled to the proper level, and cuts off power should it fall below during operation. Both overtemperature and low liquid level circuits will latch and prevent further operation of the bath until the fault is removed.





Dimensions Ixwxh,in.(cm)
12" Kinematic Viscosity Bath:
201/4x151/4x241/2 (51x39x62)
Net Weight: 78 lbs (35.5kg)
18" Kinematic Viscosity Bath:
201/4x151/4x301/2 (51x39x77)
Net Weight: 90 lbs (41kg)

Bath Capacity 12": 5.8 gal (22L) 18": 8.9 gal (33.7L)

Included Accessories
Port covers, Delrin® (7)
Thermometer holder

| | | Ordering Information | | |
|---|---------------------------|---|-----------------------|--|
| Catalog No. K23700 K23702 | Model KV3000 KV4000 | Electrical requirements 115V 60Hz, single phase 12.6A | Bath Depth | |
| K23790 K23792 | KV3000 KV4000 | 220-240V 50/60Hz, single phase | 12" (30.5 cm) 7.2A | |
| K23706 K23708 | KV3000 KV4000 | 115V 60Hz, single phase 12.6A | 18" (46 cm) 7.2A | |
| K23796 K23798 | KV3000 KV4000 | 220-240V 50/60Hz, single phase | | |

