

# Kinematic Viscosity

## LKV3000 and LKV4000 refrigerated constant temperature baths

- Improved design with enhanced performance and safety features
- Standard -30°C (-22°F) LKV3000 model, and extended range -70°C (-94°F) LKV4000 model
- Microprocessor PID temperature control with two decimal calibration offset
- Dual digital displays show setpoint and actual bath temperature
- Selectable temperature scale - Fahrenheit or Celsius
- Conformity to ASTM D445 and related specifications

Refrigerated constant temperature bath series with improvements in operating features, safety and cabinetry. Advanced temperature control circuitry includes microprocessor PID design and two decimal calibration offset. Simple pushbutton controls and dual digital displays permit easy setting and monitoring of bath temperature. Baths accommodate four glass capillary viscometers using 2" (51mm) round holders (rectangular ports are available on special order) - see separate listing on pages 10-13 for complete selection of viscometers and holders. Bath medium is contained in a clear, evacuated Dewar flask, and glare-free fluorescent backlighting provides excellent visibility when working with the viscometers.

**Standard and extended range models** - Standard LKV3000 model operates at temperatures from ambient to -30°C (-22°F). Extended range LKV4000 model operates at temperatures as low as -70°C (-94°F). Both models exceed ASTM temperature control accuracy and uniformity requirements throughout the operating range. Air-cooled hermetic compressors provide efficient operation with the use of CFC-free refrigerants.

**Bath construction and safety features** - Insulated steel cabinet has an attractive polyester-epoxy finish and is mounted on adjustable leveling feet. Chemical resistant working (top) surface has four round ports for 2" (51mm) viscometer holders and one port for a thermometer holder. Front viewing window provides clear, distortion-free visibility.

Microprocessor controller incorporates circuitry that interrupts power to the heater in the event of an overtemperature condition or disconnection of the primary probe. A redundant adjustable controller and sensor probe provide added overtemperature protection, and an integrated low liquid level sensor cuts power to the heaters if the bath liquid is not filled to the proper level or falls below during operation. Both overtemperature and low liquid level circuits will latch and prevent further operation of the bath until the fault is removed.

## LKV5000 refrigerated constant temperature baths with optical detection

Koehler LKV5000 series kinematic viscosity baths with the optical flow detection system provides automatic viscosity measurements of petroleum and petrochemical products. Includes communication and power ports for each optical detection assembly, and can utilize up to four optical assemblies. Optical sensors and viscometer tubes to be ordered separately.

## ordering information

catalog no.	model	temperature range	electrical requirements	net weight	shipping weight
<b>K22753</b>	LKV3000	15 to -30°C (59 to -22°F)	115V 60Hz, Single Phase, 20.1A	176 lbs (80 kg)	300 lbs (136 kg)
<b>K22753-OS</b>	LKV5000	15 to -30°C (59 to -22°F)	115V 60Hz, Single Phase, 20.1A	176 lbs (80 kg)	300 lbs (136 kg)
<b>K22754</b>	LKV3000	15 to -30°C (59 to -22°F)	220-240V 50Hz, Single Phase, 10.6A	176 lbs (80 kg)	300 lbs (136 kg)
<b>K22754-OS</b>	LKV5000	15 to -30°C (59 to -22°F)	220-240V 50Hz, Single Phase, 10.6A	176 lbs (80 kg)	300 lbs (136 kg)
<b>K22751</b>	LKV4000	15 to -70°C (59 to -94°F)	115V 60Hz, Single Phase, 26.9A	176 lbs (80 kg)	300 lbs (136 kg)
<b>K22751-OS</b>	LKV5000	15 to -70°C (59 to -94°F)	115V 60Hz, Single Phase, 26.9A	176 lbs (80 kg)	300 lbs (136 kg)
<b>K22752</b>	LKV4000	15 to -70°C (59 to -94°F)	220-240V 50Hz, Single Phase, 14.5A	176 lbs (80 kg)	300 lbs (136 kg)
<b>K22752-OS</b>	LKV5000	15 to -70°C (59 to -94°F)	220-240V 50Hz, Single Phase, 14.5A	176 lbs (80 kg)	300 lbs (136 kg)



**K22754-OS Digital Refrigerated Kinematic Viscosity Bath**

## specifications

Conforms to the specifications of:  
ASTM D445, D2532, D6074, D6158; IP 71; ISO 3104; DIN 51550;  
FTM 791-305; NF T 60-100

Testing Capacity: Four (4) glass capillary viscometers

Viscometer Ports: Four (4) round 2" (51mm) ports

Bath Dimensions: 91/2" dia x 12" deep (24x30cm)

Bath Capacity: 3.7 gal (14L)

Temperature Control:

Display: 0.1°C/0.1°F resolution, calibrate to 0.01°C/0.01°F

Control accuracy and uniformity: Exceeds ASTM requirements throughout the operating range

### Included Accessories

Four (4) Delrin® viscometer port covers with handles

Thermometer holder

### Dimensions l x w x h, in.(cm)

42x35x36 (107x89x91)

Net Weight: 176 lbs (80kg)