



ASTM Equipment

1.6 ASTM D445 Low Temperature Viscosity Bath: TV12LT

ASTM D445 - ISO/EN 3104 - IP 71 - DIN 51366

This test method specifies a procedure for the determination of the kinematic viscosity of liquid petroleum products, both transparent and opaque, by measuring the time for a volume of liquid to flow under gravity through a calibrated glass capillary viscometer.

Main Characteristics

The TV12LT with integrated cooling is a unique viscosity bath with a small footprint. It can be operated from -40°C up to +20°C (-40..68°F). Ranges from -40°C up to +80°C and -50°C up to +20°C are available. The TV12LT has a bath volume of only 15 liters and a unique stability. The TV12LT offers one row of four holes with lids. These openings will accommodate glass capillary viscometers in viscometer holders. A permanent LED light is located in the top plate to supply clear light and guarantees optimal visibility inside the bath. A bath overflow outlet protects from expanding bath fluid when the bath filling is too high. A bath drain is standard included. The bath is fitted with two windows of which the front panel is detachable for cleaning purposes. TV12LT is specially designed for kinematic viscosity testing of aviation fuels. The TV12LT also is suitable to calibrate thermometers or other sensors.



TV12LT

Range	-40..+20°C*/-40..+68°F
Reading	Standard °C, °F on request
Used materials inside bath	Stainless steel 304
Setting ±	0.01°C
Offset	0.01°C (optional 0.005°C)
Stability ±	0.01 K
Heating	1280 W
Heaters	2
Bath volume	15....18 L
Number of lids	4
Window	255 x 230 mm
Opening lid	Ø 51 mm
Opening bath	248 x 112 mm

▶ TV12LT REF 00T0410 (230V/50Hz) • REF 00T0420 (230V/60Hz) • REF 00T0415 (115V/60Hz)

* Range from -40°C up to +80°C

▶ TV12LT REF 00T0425 (230V/50Hz) • REF 00T0435 (230V/60Hz) • REF 00T0430 (115V/60Hz)

* Range from -50°C up to +20°C

▶ TV12LT REF 00T0470 (230V/50Hz) • REF 00T0480 (230V/60Hz) • REF 00T0475 (115V/60Hz)



ASTM Equipment

Options		TV12	TV12LT
REF 07T0080	Optical level indicator (Floater)	•	•
REF 13T6200	Leveling platform	•	•
REF 13T6210	Calibration / metal block	•	•
REF 13T2022	High contrast white back plate	•	
REF 13T3021	High contrast white back plate		•
REF 13T3006 + REF 03T2159	Lid for four Cannon-Fenske Routine viscometers		•
REF 03T2117 + REF 03T2144	Cover with three holes and lids (60 Ø mm)		•

Accessories		TV12	TV12LT
REF 10T6065	Viscohanger	•	•
REF 10T6090	8 Channel Stop-watch	•	•
REF 00T0239	ASTM thermometer holder	•	•
REF 00T0220	Tamson mineral oil 20 ltrs transparent (80..150°C)	•	
REF 08T0001	Silicon oil 200-10 mm ² /s (cSt) 20ltrs transparent (20..150°C)	•	
REF 00T0050	TLC10-3 external cooler to work below ambient temperature	•	

► For Viscosity Accessories, see section 'Viscosity Accessories'.

Main spare parts 230V/50-60Hz (115V-60Hz on request)		TV12	TV12LT
REF 25T1295	Motor 30 W	•	•
REF 25T1343	Capacitor 2uF	•	•
REF 25T0340	Heater 780 W	•	•
REF 25T0351	Heater 500 W	•	•
REF 24T0028	Power supply 500 W	•	
REF 24T8081	Motor fuse 0.3 Amp		•
REF 25T1123	Compressor		•
REF 25T1243	Fan 12VDC	•	
REF 24T8581	Safety cut-out thermostat	•	•
REF 24T8545	Mains switch	•	•
REF 28T4019	Front keypad	•	•
REF 25T2310	PT-100 sensor	•	•
REF 28T4125	Net entry plus filer 10A	•	
REF 06T0512	PCB power TMC70	•	•
REF 06T0500	PCB microprocessor TMC70	•	•
REF 06T0503	PCB – IO DC PWM heating	•	•
REF 06T0505	PCB TMC70 IO/cooler LT-version		•
REF 06T0507	PCB - display	•	•

Recommended set-up for kinematic viscosity of aviation fuels:

1 x TV12LT, 1 x timer (REF 10T6090), 1 x N2B reference fuel (REF N2B), 4 x Ubbelohde viscometer holder (REF 10T6001), Ubbelohde viscometers sizes 0C (REF 25T0814), 0B (REF 25T0816), 1 (REF 25T0817), and 1C (REF 25T0818), 1 x TT3 (10T6095) with probe (REF 25T2350) + certificate (REF 10T6097) + suitcase (REF 21T0200)