



ASTM Equipment

1.7 ASTM D445 Low Temperature Viscosity Baths 40 & 70 litres



ASTM D445 - ASTM D2162 - ISO/EN 3104 - IP 71 - DIN 51366

Main Characteristics

The TV4000LT and TV7000LT are unique visibility baths with wide dimensions. Working temperature ranges from -40°C up to +100°C. The integrated cooling system is able to lower the temperature of the bath content down to -40°C within approximately two hours. The cooling power can be controlled over several stages, so that the heat removal capacity is trimmed to the desired set point temperature, saving up to 50% of energy. Due to its wide temperature range, the bath can be used for multiple purposes varying from low temperature viscosity measurement to calibration of sensors and thermometers. The large windows show the bath contents clearly. The windows are heated preventing built up of condensate. The maximum temperature lies around +100°C. Overall accuracy is better than $\pm 0.02^\circ\text{C}$ over the whole temperature range. Ambient temperature drifts $< 0.003^\circ\text{C}/^\circ\text{C}$. The homogeneity is better than 0.02°C . Drift, accuracy and homogeneity were measured with methanol as bath medium and are true min-max values found over eight hours. The TV7000LT can be used to calibrate long thermometers or to calibrate master viscometers conform to ASTM D2162.



TV4000LT

	TV4000LT	TV7000LT
		
Range	-40..100°C/-40..212°F	
Reading	Standard °C, °F on request	
Used materials inside bath	Stainless steel 304	
Setting \pm	0.01°C	
Offset	0.01°C	
Stability \pm	0.02°C	
Heating	2000 W	
Heaters	2	
Bath volume	40 L	70 L
Number of lids	4 + 3 (4 + 4 optional)	
Window	270 * 285 mm	270 * 585 mm
Opening lid	Ø 51 mm	
Opening bath	260 x 240 mm	
Depth bath	300 mm	600 mm

- ▶ TV4000LT **REF** 00T0460 (230V/50Hz) • **REF** 00T0462 (230V/60Hz) • **REF** 00T0465 (115V/60Hz)
- ▶ TV7000LT **REF** 00T0450 (230V/50Hz) • **REF** 00T0452 (230V/60Hz) • **REF** 00T0455 (115V/60Hz)



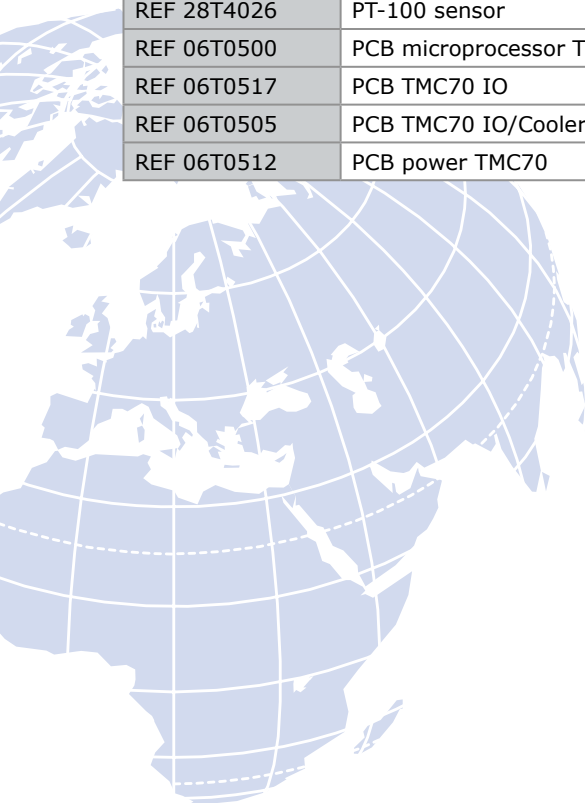
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Options		TV4000LT	TV7000LT
REF 03T2137 + REF 03T2120	Cover with eight holes (Ø 51 mm) + lids and two holes for ASTM thermometers (Ø 12.5 mm)	•	•
REF 03T2132 + REF 03T2112	Cover with eight holes (Ø 60 mm) + lids and two holes for ASTM thermometers (Ø 12.5 mm)	•	•
REF 00T0909	Illuminator Z41 230V/50-60Hz	•	

Accessories		TV4000LT	TV7000LT
REF 13T3725	Undercarriage	•	
REF 10T6065	Viscohanger	•	•
REF 10T6090	8 Channel stop-watch	•	•
REF 00T0239	ASTM thermometer holder	•	•

► For Viscosity Accessories, see section 'Viscosity Accessories'

Main spare parts 230V/50-60Hz (115V-60Hz on request)		TV4000LT	TV7000LT
REF 04T0081	Stirrer complete	•	
REF 04T0063	Stirrer complete		•
REF 25T0215	Heater 500/1500 W	•	•
REF 28T4009	Front foil with membrane switches	•	•
REF 24T8545	Mains switch	•	•
REF 24T8581	Safety cut-out thermostat	•	•
REF 28T4026	PT-100 sensor	•	•
REF 06T0500	PCB microprocessor TMC70	•	•
REF 06T0517	PCB TMC70 IO	•	•
REF 06T0505	PCB TMC70 IO/Cooler LT-version	•	•
REF 06T0512	PCB power TMC70	•	•



Specification
sheets at
www.tamson.com