

Specifications TLV25

Tamson Low temperature Visibility bath 25 litres



Item	Unit	TLV25	
Ordering code		00T0650	
230V / 50/60Hz			
Ordering code		00T0780	
115V / 50/60Hz			
Range*	-80°	+60°C/-130°140°F	
Reading	Standar	Standard °C, °F on request	
Window	[mm]	148*213	
Setting ±	[°]	0.1	
Stability	[°K]	±0.04	
Heating	[W]	780	
Heaters		1	
Bath volume	[L]	25	
Opening	[mm]	162(dia.)	
Depht	[mm]	400	
Length	[mm]	570	
Width	[mm]	410	
Height	[mm]	540	
Opening Cold	[mm]	Dia 50 * Length240	
Finger			
230V / 50/60Hz Ordering code 115V / 50/60Hz Range* Reading Window Setting ± Stability Heating Heaters Bath volume Opening Depht Length Width Height Opening Cold Finger Weight Power	[kg]	38.5	
Power	[Watt]	920	

4				
	Stability TLV25 - KV40 and KV80 [in °C] min, max(peak) values over 1 hr			
	Temperature TLC25	Absolute inaccuracy	Delta T(peak) (Between two points)	Cryostat
	0	± 0.029	0.02	KV40/80
	-20	± 0.023	0.02	KV40/80
	-30	± 0.025	0.02	KV40/80
	-40	± 0.029	0.02	KV80
	-50	± 0.025	0.02	KV80
	-60	± 0.020	0.02	KV80

Completely stainless ste	y stainless steel	Completely
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3 positions, turn table

Autotuning, high precision

-30℃ or -80℃ with KV40 or KV80 cooler

Heated window

General

The TLV25 system contains a 25 liter Dewar flask. The fluid in the flask must permanently be cooled by a separate cryostat. The temperature set point is maintained via a microprocessor controlled heating element. When using the KV40 or KV80 minimum working tempreatures of minus 30° or minus 80°C can be reached. All presented data is measured by using a TLV25 filled with 25 liters of Methanol and a KV40 or KV80 immersion cooler. At the minimum-temperature still enough heat removal is provided to maintain stable temperature control, even when glaswork is placed in the bath for measurement. The systems accuracy is better than the requirements of ASTM D445 and ISO 3104. The bath is illuminated by a fluorescent light built in behind the Dewar-flask. The top lid has a turn table construction containing 3 holes of 51mm, each with a round cover. By turning the lid the immersed viscometer can be positioned in front of the window. This window is heated to keep clear sight at low temperatures.

Immersion cooler

The cooler is a separate device having enough capacity to cool the 25 litres of methanol. Accuracy and performance only can be achievend with KV40 or KV80 immersion cooler.

Span

Depending on the used cryostat:

Minus 30°C with KV40*

- Minus 80°C with KV80*

Accuracy

The set point can be set in steps of 0.1° C from - 90° C up to plus 60° C (- $130..140^{\circ}$ F). Overall accuracy is better than $\pm 0.03^{\circ}$ K.

Temperature readout

Standard available in °C, on request in °F.

Safety

The bath conforms CE regulation. In case of error a fixed safety thermostat will switch off the bath from the mains supply.

Optional equipment

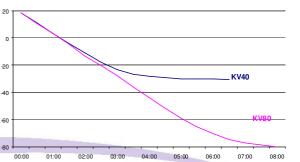
- On request:

RS232 (NOT compatible with Tamcom)

- KV40 00T0212 (230V/50Hz) 00T0259 (115V/60Hz) - KV80 00T0216 (230V/50Hz) 00T0260 (115V/60Hz)

Viscometer and viscometer holders. See our specific brochure.

^{*} Performance is defined by immersion cooler KV80 (-80 $^{\circ}$ C) or KV40 (-30 $^{\circ}$ C). Ambient higher than 24 $^{\circ}$ C and Methanol impurified by condensat results in higher temperatures.



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