

# VALVED EFFUSION CELL V-LTC



The CreaTec valved effusion cell is a low temperature cell with a valve at the orifice to control the beam flux.

This modification is specially useful for elements like As, P, S, Se and Te.

The integrated valve mechanism allows a change in beam flux of two to three orders of magnitude.

## Technical Data

### Standard :

Type . . . . .	V - LTC
Heating system . . . . .	Radiation heating, tantalum wires with PBN insulators
Temperature range . . . . .	100 °C ... 800 °C bulk zone 2100 °C ... 1000 °C valve
Temperature stability . . . . .	≤ 0.1 K depending on the PID controller
Max. outgas. temp. . . . .	800 °C bulk zone 100 °C valve
Max. power . . . . .	360 W bulk zone 120 W valve
Max. current . . . . .	12 A bulk zone 6 A valve
Integral Valve . . . . .	manual
Bakeout temperature . . . . .	250 °C
Conditioning . . . . .	Heated to maximum temperature with and without crucible
Shipping . . . . .	Stainless steel container with valve

### Custom :

Flange size . . . . .	CF 40 / CF 63 as specified
Max outer diameter . . . . .	38 mm/ as specified
Length . . . . .	As specified

Thermocouple type . . . . . Two independent thermocouples type C / WRe 5% - 26%

Crucible material . . . . . Ta / quartz  
Crucible capacity . . . . . 5 ... 80 ccm, or upon request

### Options :

Motorized . . . . .	Optional
Water cooling . . . . .	Optional
Other dimensions . . . . .	As specified

