

# LOW TEMPERATURE CELL LTC



The low temperature effusion cell is specially designed to evaporate materials such as As, Sb, Se, Zn, etc. The evaporation temperature of these elements is below 800°C. The crucible has a large capacity to allow maximum uptime. A good stability of the molecular beam flux is achieved through a special design of the heating system and the thermocouple.

### OPTIONS:

- Hot-lip filament (see CRC) to avoid condensation at the crucible orifice (for elements like Sb, Pb, etc.)
- Molybdenum version
- Downward looking version

### Technical Data

#### Standard :

|                                 |   |
|---------------------------------|---|
| Type . . . . .                  | LTC   |
| Heating system . . . . .        | radiation heating, tantalum wires with PBN insulators                           |
| Temperature range . . . . .     | 0 °C ... 800°C  |
| Temperature stability . . . . . | > 0.1 K depending on the PID controller   |
| Max. outgas. temp. . . . .      | 1400° C without crucible<br>800 °C ...1200°C depending on the crucible material |
| Max. power . . . . .            | 220 W (NW 40 CF)  |
| Max. current . . . . .          | 8 A   |
| Bakeout temperature . . . . .   | 250°C   |
| Conditioning . . . . .          | Heated to maximum temperature with and without crucible                         |
| Shipping . . . . .              | Stainless steel container with valve  |

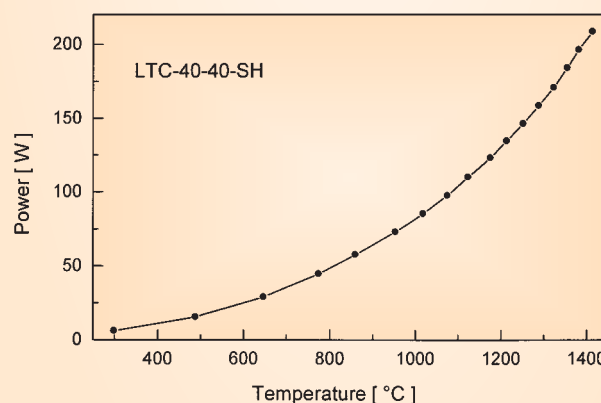
#### Custom :

|                               |                                     |
|-------------------------------|-------------------------------------|
| Flange size . . . . .         | CF 40 / CF 63 / CF 100 or specified |
| Max. outer diameter . . . . . | 38 mm / 63mm / 100mm etc.           |
| Length . . . . .              | As specified                        |

|                             |                                    |
|-----------------------------|------------------------------------|
| Thermocouple type . . . . . | Type C / WRe 5%-26% (or specified) |
| Crucible material . . . . . | PBN / PGR / W / Ta / Mo / quartz   |
| Crucible capacity . . . . . | All standard sizes or specified    |

#### Options :

|                                |              |
|--------------------------------|--------------|
| Integrated Shutter . . . . .   | Optional     |
| Water cooling . . . . .        | Optional     |
| Other dimensions . . . . .     | As specified |
| Crucible with insert . . . . . | Optional     |
| Downward looking . . . . .     | Optional     |
| Molybdenum version . . . . .   | Optional     |



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