



Product Code: SM4 085



## DAC cell

The SM4 085 DAC is a modular diamond anvil cell. It allows a basic DAC module, generally operated by screws, to be driven by a membrane, by means of an external kit.

The DAC cell, on request, can work at low temperature because it is designed to be inserted in a cryostat.

The external membrane kit transmits the force to the diamond anvils to generate the high pressure on the sample. This pressure can be finely tuned by remotely controlling the gas pressure in the membrane.

Using the basic cell with screws is possible to control the pressure by means of a torque wrench.

Diamond Anvil Cell technology is nowadays within the reach of even the smallest physics or chemistry laboratory. The simplicity of this device and its affordable price permit any interested scientist to perform measurements at pressures in the 100 GPa range and above. By combining the DAC with different investigation techniques, from the simplest ones, as microscope visual observation, through optical or Infrared spectroscopy, Raman spectroscopy, to synchrotron x-ray scattering, researchers all around the world continues to investigate the changes under pressure of virtually any material. LOTO-eng manufactures a variety of types of DAC, among which, for sure, the one suitable for your purpose. LOTO-eng specialists will help you to identify the most suitable DAC cell, accessories and loading technique to meet your needs, in accordance with your scientific goal.

## TECHNICAL DATA

PRESSURE DRIVER	Screws / Membrane
CELL MATERIAL	Stainless steel alloy
TOP AND BOTTOM ANGLE	Total angle max 60° on request 85° Bholer diamond design
TEMPERATURE	Can work from 4°K up to 200°K
MAX PRESSURE	up 50 GP depends of culet dimension
DAC DIMENSIONS	Diameter 50mm Height 25mm

## HIGHLIGHT

- Reduced size and weight
- Membrane kit to use for remote control.