

Accessories

Beside this standard cryostat system and a broad range of customized variations CryoVac manufactures and offers all necessary accessories to operate these systems, such as:

- temperature monitor / controllers
- transfer lines (standard and customized)
- dewars (storage, transport, lab)
- exhaust gas control block valve
- exhaust gas control magnetic proportional valve
- exhaust gas line heating hoses
- exhaust gas He / N₂ pumps
- pumping and control system for isolation vacuum
- Helium recovery and liquefaction systems
- ...

40 years of experience in building cryogenic systems for research and industry. We offer a broad range of cryostats and equipment fully customized to meet your individual research needs, e.g.:

- refrigerator systems
- bath cryostats
- continuous flow cryostats
- low temperature systems
- magnet cryostats
- accessories, e.g. transfer lines, controller, GHS, recovery and liquefaction systems, ...
- consulting, training, and design studies
- ...

All systems are **custom and hand-made**, all design, engineering, machining, and assembly is done **in-house**, which allows us to fully vary options for customers and respond fast to your desired changes, even once the manufacturing process is underway.

Design and engineering of our systems is done in close cooperation with our customers. Starting from the first idea and initial design, you will be part of the process along side our **R&D department**, so as to ensure the best solution for your experiment or application. You can either choose from a broad range of starting-designs, customizable to the very last detail or challenge us with your unique problem and we will start from scratch.

We are glad to **support** you with the installation of your system and answer any questions you may have during operation.

We are looking forward to hearing from you.

CryoVac
low temperature technologies

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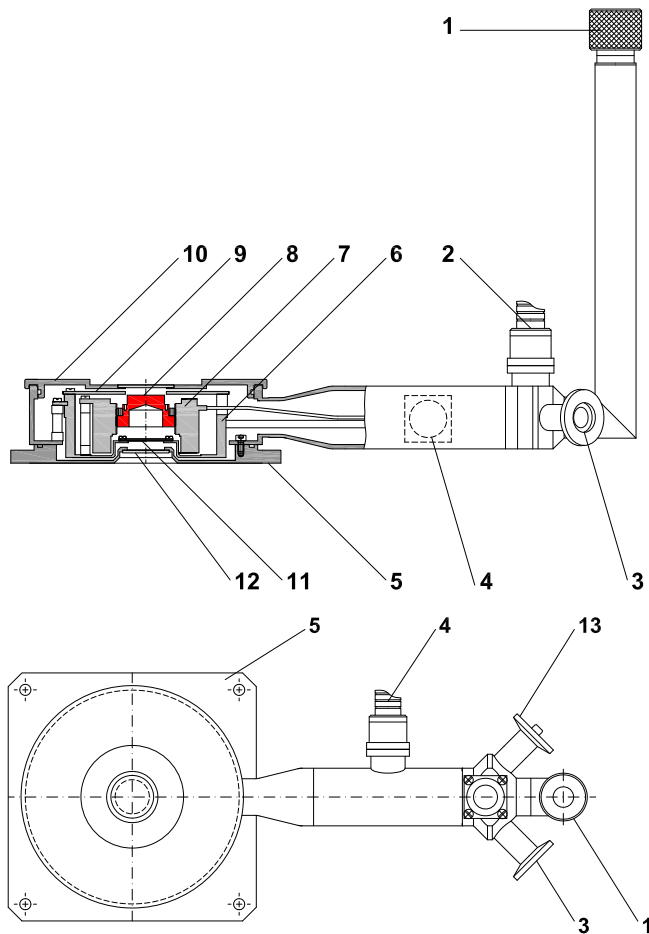
KONTI cryostat type micro

- < 3 K to 800 K
- sample in vacuum
- working distance < 1 mm
- very low vibration and drift



**40 years of customized
cryogenic solutions**

CryoVac
low temperature technologies



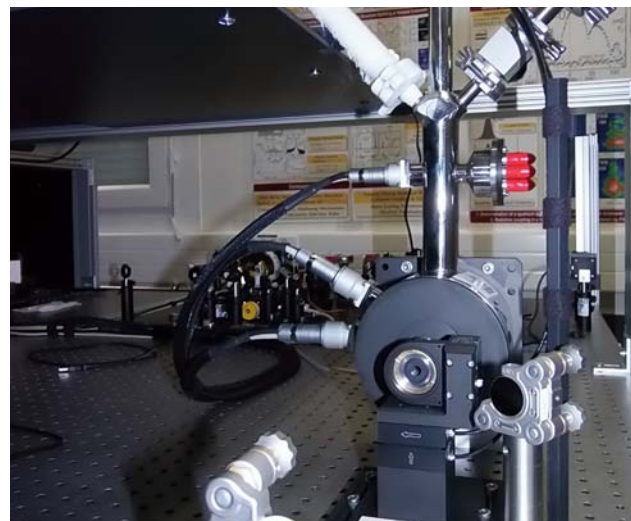
- 1 LHe / LN₂ in
- 2 electrical feedthrough: heater / temperature sensor
- 3 DN16KF vacuum
- 4 optional feethrough
- 5 base flange, standard 145 x 145 (bore 125 x 125)
- 6 exhaust gas cooled heat exchanger
- 7 main heat exchanger
- 8 adjustable sample holder
- 9 removable radiation shield (bayonet connection)
- 10 top flange with window / quick mounting
- 11 cover of bottom bore in radiation shield
- 12 bottom flange window
- 13 DN16KF He / N₂ out

General specifications:

- < 3 K to 500 K
- temperature stability < 10⁻⁴
- cooling power 3.5 W at 4.2 K
- ~10 mins cooldown to 4.2 K
- low vibration
- very low drift due to concentric heat exchanger design
- very small working distance < 1 mm
- quartz glass windows
- bottom transmission window
- sample in vacuum
- height adjustable sample holder
- ø22 mm standard sample holder
- sample holder easy to exchange
- compact table top design
- small footprint
- weighting only ~2.5 kg
- height less than 45 mm
- fast sample change
- quick heatup with the aid of a heater
- can be used with both LHe or LN₂
- alternative vertical or horizontal transfer line connection

Variations:

- KONTI type micro ELEC: for electrical measurements
- KONTI type micro MAGNO: for magnetics measurements
- KONTI type micro KERR: for KERR microscopy
- KONTI type micro PROBER: with larger vacuum system for the use with internal and / or external prober arms



General options:

- various sample holders, e.g.: transmission, tower, ...
- various top flange designs with different windows diameters and thicknesses
- various base flanges
- various window materials, optional windows flanged
- high temperature option up to 800 K
- sample in exchange gas
- sample size up to ø 300 mm

Tower version:

- easy and low budget upgrade of standard version
- various vertical and / or horizontal optical windows
- various shapes and lengths
- combination with positioning units possible

Feedthrough options:

- all extra wires thermally strapped to radiation shield as well as to heat exchanger temperature level
- standard option: 8 additional wires
- standard option: 4 coaxial wires
- semi-rigid / SMA wires
- large number of wires and cables

Positioning unit options:

- x-y (z) step motor driven sample adjustment (close loop option) with PC and joy stick control
- x-y piezo driven sample adjustment (close loop option) with PC control with resolutions down to 1 nm
- theta and phi positioning

Fully customizing to meet your experimental needs

