Closed Cycle Cryostat

Closed Cycle Cryostat for Neutron Scattering Experiments. The CS-210 is a high power cooler with fast cooldown and high cooling power.

Models:

CS210S-X5	**4K**
CS210A-X5	**10K**

Cryostat Components:

CS210A-x5 cryostat includes the following:

- Pneumatic Drive Cryocooler - DE-210AF.
- Bolt-on instrumentation skirt with 3 instrumentation ports and vacuum pump out port.
- Helium Compressor.
- Helium hoses, 20 ft.
- Vacuum Shroud – GMX-5
- Radiation Shield – RSG-5
- Temperature control Instrumentation – 1 Silicon Diode Sensor (DT.670B.SD) and robust, thermofoil heater for control

Applications:

Neutron Scattering.

Standard Features:

- Cryocooler with high cooling power available as 4K or 10K.
- Aluminium Shroud thinned in beam area to 1mm.
- Aluminium Radiation Shield thinned in beam area to 1mm.
- Sample space; 2.00 in (Diameter) * 4.00 in. (long). User defined.
- Pneumatic Drive Displex Cryocooler for low vibrations at the sample (see Specifications).
- Sample in vacuum. See Options.
- Rugged Metallized thermofoil heater for long heater life.
- Three Instrumentation Ports. One used for temperature control instrumentation. Two are blanked off for user experimental needs.
- Field replaceable components for on-site service and routine maintenance.

Options:

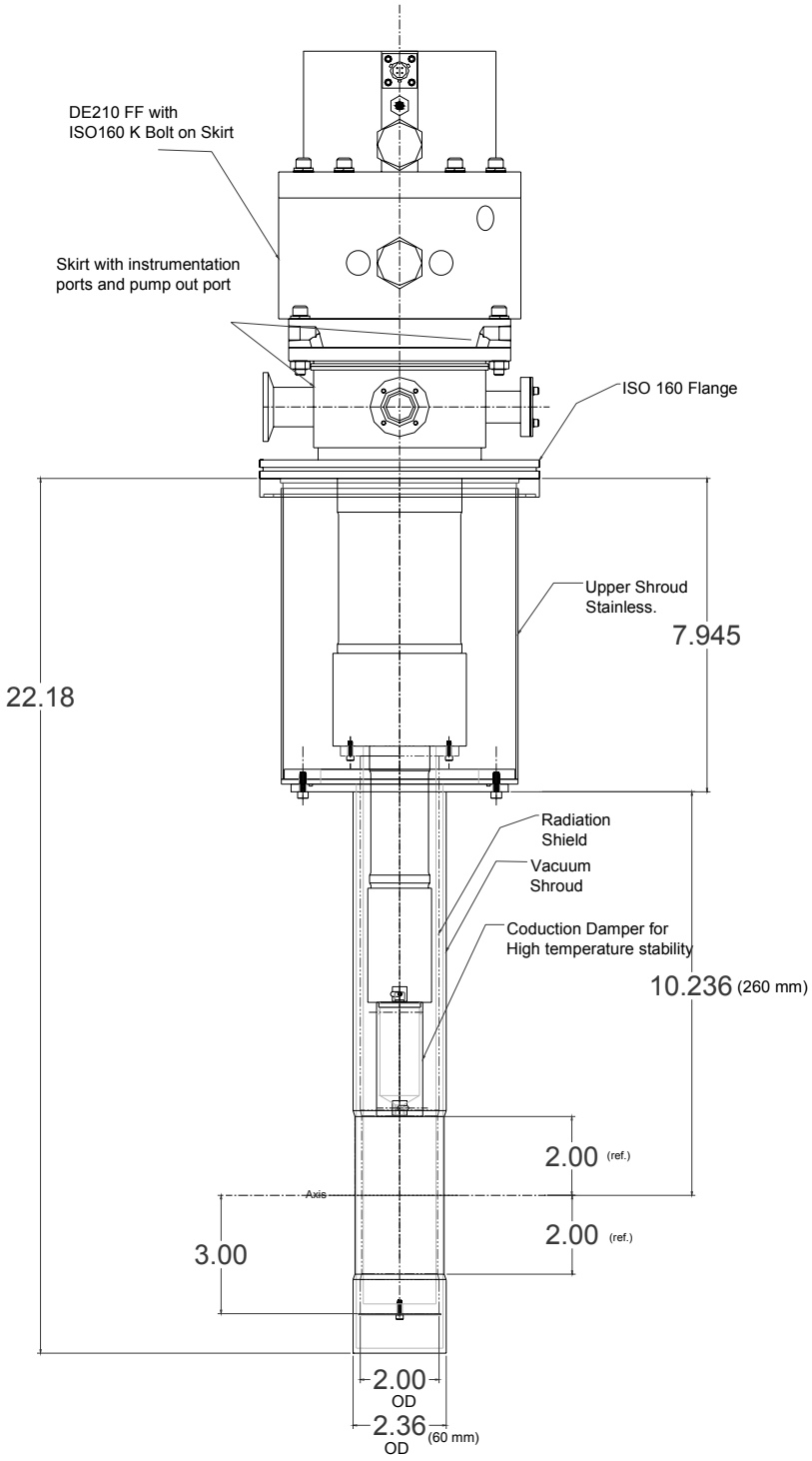
- Vacuum Shroud with larger sample space.
- Vanadium shrouds.
- High temperature; 500K with high accuracy Silicon Diodes.
- High Temperature; 800K using thermocouples for 4K to 800K range.
- Wiring for Electrical Experiments. 8 Pin Feedthrough with clear teflon coated copper wires. Kapton coated wires also available.
- Wiring for Low Noise Electrical Experiments. BNC/SMA with Coaxial leads
- Wiring for high current (15 amps) and high voltage (12,000 V) experiments.
- Low Vibration optical systems available Vibration levels ~10 nanometers.
- Top Loader Cryostat for Neutron Scattering available.
- Transformer, 10% for 230V/50 Hz. Or 240V/60 Hz. Power supply.
- Transformer, 15% for 240V/50 Hz. Power supply.

Model CS210S.x5
4K cooler, Sample in vacuum, with aluminium shroud thinned in the beam area.

Optional, Top Loader.

Model: CS210S.x19n
Top Loader with sample in vapor. Tail is thinned Aluminium in beam area. Fast sample change

Standard System.



Sample volume is 2 in. diameter by 4 in. long. This can be easily modified per user request. Lower shroud and shield is made of Aluminium in the beam area. See next page.

Optional System.

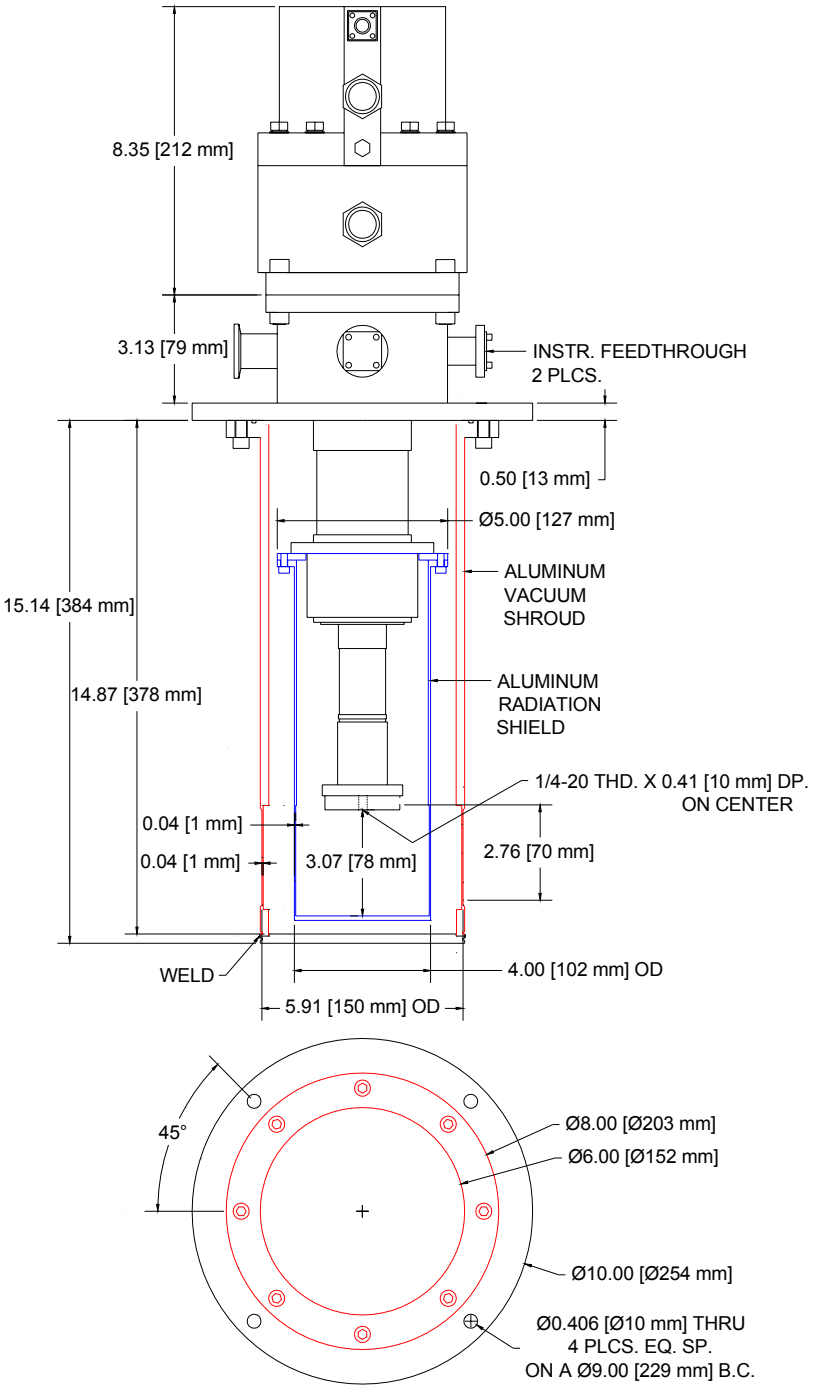


Figure shows flanged heat stations and large sample space.