

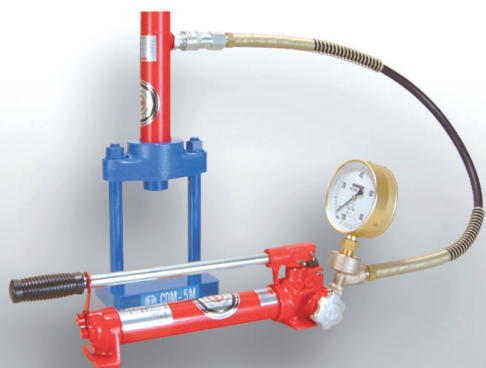
Pressure Cell (Transport)

DynaCool (D420) / PPMS (P420) / VersaLab (V420)

Often a sample's electrical transport properties evolve under the application of substantial hydrostatic pressure. The Transport Pressure Cell Option for the PPMS[®] is manufactured by ElectroLab, a leading Japanese supplier of pressure cells. It enables up to two 4-probe measurements (typically for the sample and a manometer) of electrical transport at pressures as high as 2.7 GPa. Samples are mounted to pre-made sets of electrical leads with integrated feedthroughs for pressurization in an oil media using a bench-top press to apply load.

Key Features:

- Complete kit includes required tools and materials for mounting samples, applying pressure to the cell, and measuring pressure
- Includes manometer materials of tin and lead, whose superconducting transition temperatures can be accurately measured via integrated thermometry which can be used to infer actual cell pressure
- Cell can be installed in the PPMS using standard puck insertion/extraction tool
- Data can be collected with any PPMS-compatible QD transport option
- 10 total sample leads (5 twisted pairs) included with each feedthrough set



Press specifications

Model	CDM-5PAS (5 ton)	CDM-10PAS (10 ton)
Maximum pressure	70 MPa	70 MPa
Bore area	7.16 cm ²	14.52 cm ²
Mass	10 kg	25 kg

Optional – digital pressure gauge

Pressure Cell (Transport) Specifications

Pressure [P]

Maximum Sample Pressure: 2.7 GPa
Maximum Applied Load: 3.0 GPa

Sample Space Parameters

Diameter: 4 mm
Length: 6 mm

Operational Range

1.8 to 400 K; 0 to 16 T

Specifications are subject to change without notice.



*High Pressure Cell for
Electric Transport Measurements*