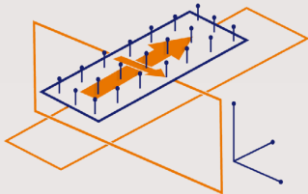


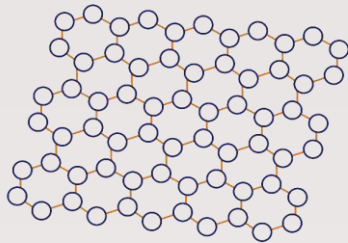
## Kelvinox<sup>®</sup> JT

A dilution refrigerator insert compatible with Cryofree<sup>®</sup> or liquid-helium system variable temperature inserts

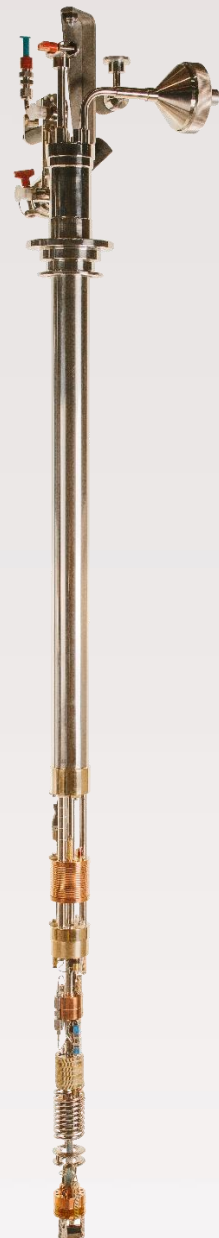
### Electrical Transport Measurements



### Low Dimensional Physics



### Spintronics



- Compatible with our Cryofree TeslatronPT or any variable temperature insert (VTI) with a 50 mm sample tube diameter
- Joule-Thompson condensation, not requiring 1 K pot pump
- Automated gas handling system with software for data visualisation and remote control
- Inner vacuum chamber (IVC) with automatic exchange gas control
- IVC sealed using vacuum grease or CAF paste (no indium required)
- One spare 6 mm line-of-sight port for installing additional experimental wiring

# Options and Accessories

## Flexible Coax Option:

- Two flexible S1 stainless steel coaxial cables, from room temperature to the mixing chamber suitable for low frequencies
- Suitable for signals up to MHz frequency
- Fischer connector at room temperature

## DC Wiring Option:

- 24-way constantan loom with 12 twisted pairs wired to the mixing chamber
- 24-way Fischer connector at room temperature

## Beamline IVC Options:

- Special AI IVCs available for neutron scattering applications, with thinned area matched to scattering angles
- Special IVCs for muon and x-ray applications available on enquiry

# Key Specifications

Base temperature	25 mK, in a VTI
Temperature control stability	T < 100 mK: $\leq \pm 1$ mK      100 mK < T < 1K: $\leq \pm 1\%$
Temperature control range	25 mK to 1 K
Cooling power at 100 mK	$\geq 20 \mu\text{W}$
Sample space	Inner diameter 43 mm x length 180 mm in TeslatronPT
System cooldown	From room temperature to < 100 mK typically 12 hours in TeslatronPT or other Cryofree systems, 6 hours in liquid cryogen systems

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