

HELIUM-3 (SV) 'Sample in Vacuum'

He3-SV insert is the standard for sample in vacuum and easily top loads into storage or research dewars and superconducting magnet systems.

Screenshot taken during actual test of cryostat no. 3913

Charcoal Temperature (Kelvin)



Sample Temperature (Kelvin)

Helium-3	Sample in Vacuum
Base Temperature	260 mK
Cooling Power at 300 mK	60 μ W See graph p. 3
Hold Time at Base Temperature	60 Hours
Temperature Range	0.26 K to 80 K (300 K optional)
Thermometers	Cernox - Charcoal & POT RuO2 - Sample Si diode or platinum RTD -to monitor sample cooldown
Helium-3 Regeneration Time	30 min typ.
Sample Mount Diameter	1.37 inch 34.9 mm
Sample Environment	Vacuum (std) with Liquid/vapor Top Load Port 0.21 in dia. clear [5.3 mm] (Port epoxy sealed with NPT fitting)
Experimental Access Vacuum Seal	Quick connect IVC with tapered grease seal
POT digital level monitor	Yes, optional
Wire Anchors	Kapton flex circuits + 4K extendable copper post
Charcoal Cooling Method	Both dynamic and static exchange gas (direct thermal contact)
Experimental Wiring	5 twisted pairs (10) wires for Customer use
Materials of Construction	Non magnetic [Insert and all main temperature sensors compatible with use in high magnetic fields]

