

# TR Multicoax Series | 50Ω Hermetic Feedthrough

## Description

Amphenol Ardent Concepts TR Multicoax Series connectors mated with our 50Ω Hermetic Feedthrough are ideal for applications where hermeticity is crucial to the transmission of high speed signals. In these applications, TR connectors are mated to the hermetic feedthrough on either end ensuring an impedance matched 50Ω channel between any two chambers. The feedthrough is fixed to a flange (such as an ISO disk) with screws in blind-holes from the inside of the vacuum. Lastly, the hermetic feedthrough is completely sealed using an epoxy potting.

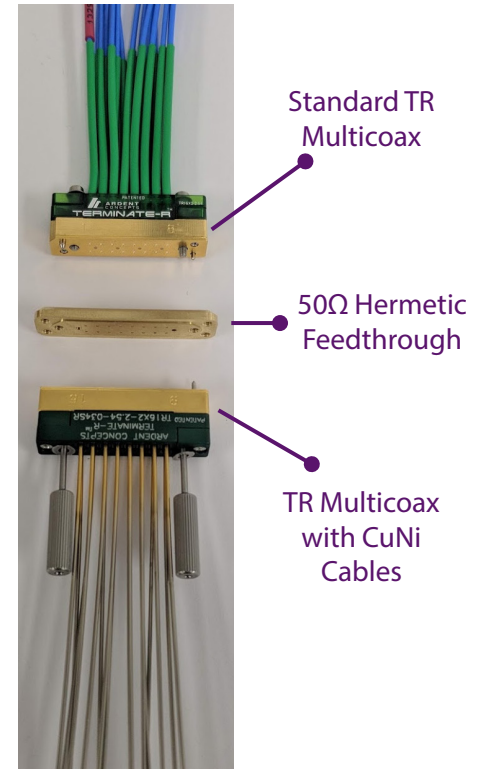
## Key Benefits

- Leak-proof design (Max leak rate 2.00E<sup>-09</sup> LTorr)
- Variety of coaxial cable materials available for milliKelvin (mK) temperatures (Flexible, CuNi, NbTi, BeCu)
- Extremely dense form factor (160+ channels in standard ISO disc)
- Easily mate/de-mate multiple high-speed lanes

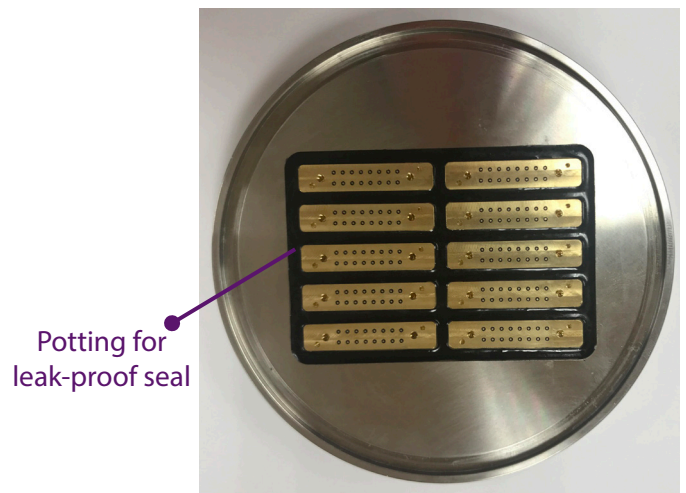
## Applications

The 50Ω Hermetic feedthrough is ideal for use in:

- › Dilution refrigerators/Cryogenic devices
- › Quantum Computing
- › Vacuum Chambers
- › Anywhere where RF signals need to be passed through a sealed wall



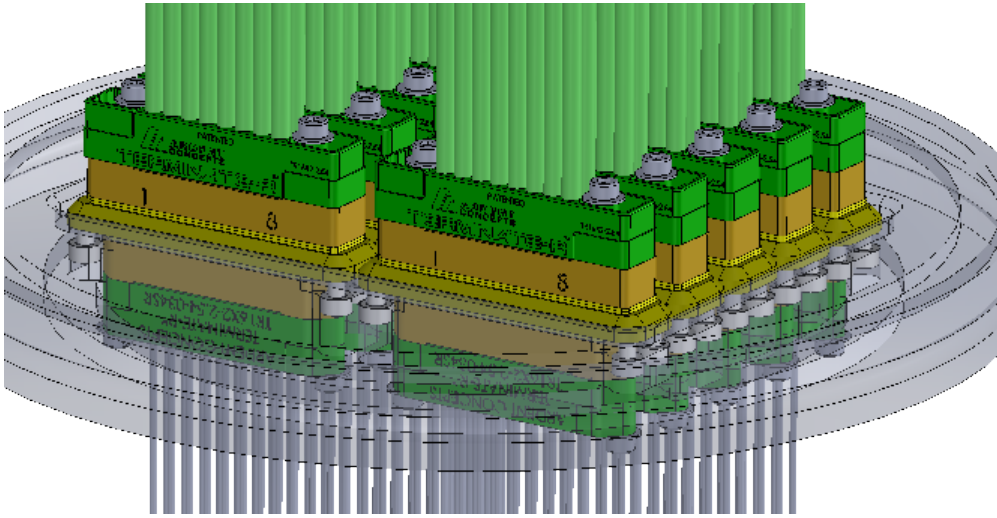
## Highly Scalable



Ten (10) 16-channel Hermetic Feedthroughs

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## Example Application



160 channel ISO disc port utilizing ten (10) standard 16 channel TR Multicoax Connectors, ten (10) 50Ω Hermetic Feedthroughs, and ten (10) TR Multicoax connectors with CuNi cables

## Leak Rate Data

