

Custom Hermetic feedthroughs

Description

Connectable hermetic feedthroughs inherently induce insertion losses which can rule them out of some applications where photon budget is tight.

In that case products without fiber discontinuity are to be considered.

According to the level of hermeticity required the sealing of the fiber will be different.

Besides the usual optical parameters leading to the choice of fiber, it will be important to consider the followings:

- Material
- Length of fiber
- Mechanical design
- Connectors to be used
- Hermeticity needed
- Environment

Applications

- Geophysics

Material	Inconel
T°	Up to 200°C
Pressure	15000 psi
Environment	Gas, Sand, ...
Versions	Single or Multi fiber
Fiber	Singlemode (polyimide coated), Multimode (polyimide coated)
Sealing techno.	Epoxy, Glass solder, brasing



- Research / Nuclear

	M16	M30
Material	Arcap AP1D	Stainless Steel 316L
Flange Diameter	30 mm	65 mm
T°	-40 °C / +85 °C	-40 °C / +85 °C
Hermeticity	10 ⁻⁸ mbar.l/s	10 ⁻⁶ mbar.l/s
Insertion Loss	< 0,3 dB max. (SM & GI)	< 0,3 dB max. (SM & GI)
Sealing techno.	Epoxy	Epoxy



- Navy / Underwater

Material	Titanium, Inconel, Stainless Steel 316L, Bronze
Pressure	Up to 15000 psi
Environment	Sea, Corrosion, ...
Versions	Single or Multi fiber
Sealing techno.	Epoxy



- Sapphire Feedthroughs

Sealing done on either sapphire fibers or sapphire windows



As part of our policy of continuous product improvement, we reserve the right to change specifications at any time.