

The subminiature Type-A connector, usually referred to as an SMA coaxial connection, has a compact design ideally suited for high frequency signal transmission. Accu-Glass SMA coaxial instrumentation feedthroughs are constructed with either floating shields or grounded shields.

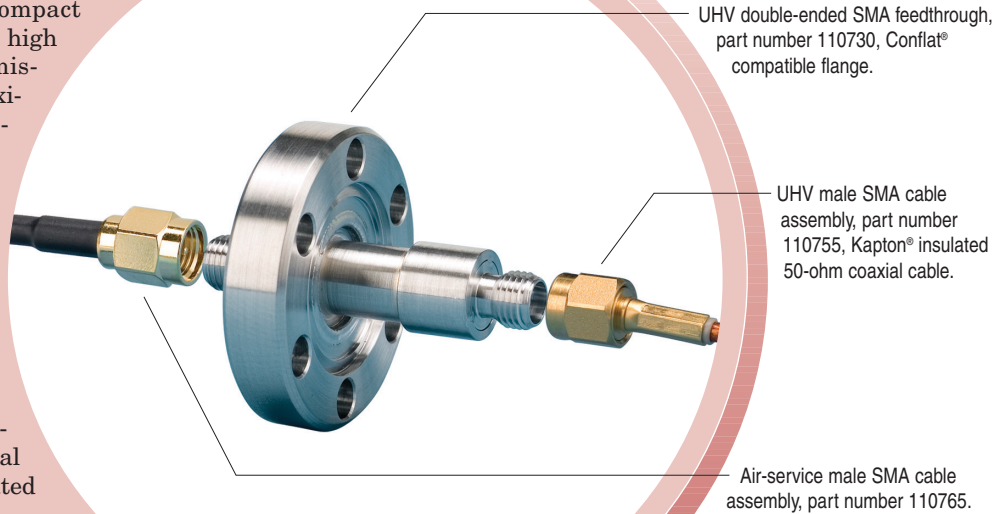
Floating shields provide two concentric conductors: one outer metal tube or shield conductor concentric with, and enclosing, a cylindrical center conductor. Both electrical paths are electrically isolated from the vacuum flange.

Grounded shields provide only one electrical path that is electrically isolated from the vacuum flange. With grounded shields, the shield and vacuum flange are electrically common.

Ultrahigh vacuum compatible coaxial cable assemblies are available to meet the needs of most in-vacuum, low noise instrumentation cable applications.

The vacuum side of the feedthrough terminates with either a standard female SMA connector or a 0.094-inch (2.4-mm) diameter conductor pin that mates perfectly with Accu-Glass' grounded or floating Accufast™ connector interface. The in-vacuum cable assemblies are made of Kapton® insulated 26AWG, 50-ohm coaxial cable fitted with Accufast™ connectors or gold plated SMA connectors.

Typical Installation



Note: Connectors and cables are not included with feedthrough and must be purchased separately.

Features

- Grounded and floating shield designs
- Single and double ended SMA designs
- Kapton® insulated, UHV compatible 50-Ohm coaxial cables
- High temperature rated to 250°C
- UHV compatible construction
- Conflat® compatible flange mounts
- ISO compatible flange mounts
- Air side connectors available

Specifications Notes

- 1 Electrical ratings are maximum test values. Feedthroughs are intended for instrumentation applications carrying low level signal voltages and currents.
- 2 PEEK is a polyetheretherketone thermoplastic.
- 3 Overall assembly ratings must be adjusted to that of the lowest rated component.
All dimensions are in inches unless specified otherwise.

Specifications

Voltage ¹	
Grounded shield	700VDC maximum
Floating shield	700VDC maximum
Current	
Grounded shield	1A maximum at 20°C
Floating shield	1A maximum at 20°C
Material	
Shell	SST
Pins	SST
Insulation	Alumina Ceramic
Connector, Air	Teflon®

Connector, Vacuum ² Accufast™ SMA	SST & PEEK Au-plt Cu & PEEK
Vacuum Range	
UHV, Ultrahigh vacuum	1x10 ⁻¹⁰ Torr
HV, High vacuum	1x10 ⁻⁸ Torr
Temperature Range ³	
Feedthrough	450°C
Flange, CF Style	450°C
Flange, ISO Style	150°C
Connector, Air	165°C
Connector, Vacuum	250°C
Thermal gradient	25°C / minute maximum