

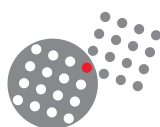
38999 Series III Hermetic Elio® Feedthrough



The First Truly Hermetic Aluminum 38999 Fiber Optic Feedthrough

Hermetic aluminum 38999 fiber optic feedthrough with a leak rate less than 10^{-9} atm.cm³/s. This feedthrough is intermateable with standard 38999 Series III plug in aluminum or composite with Elio® contact.

- Truly hermetic** ✓ Leak rate < 10^{-9} atm.cm³/s
- Weight saving** ✓ Aluminum shell
Save 30 to 40 % of weight vs. Stainless Steel
Revolution to save weight !
- Single and Multi way** ✓ Unique multiway hermetic fiber optic
feedthrough in the world
- Intermateable with SOURIAU's
Elio® connectors** ✓ Airbus A380 spec ABS1379 qualified
Intermateable with ARINC 801 and EN4531
standards



SOURIAU
Connection Technology

38999 Series III Hermetic Elio® Feedthrough



Today's technology for Aerospace and Defense equipment is more complex, requiring the management of an increasing flow of information at greater speed, a better protection to electromagnetic interferences (RFI-EMI) and the best mass saving solutions. So far, it was impossible to use fiber optic connectors for applications requiring a real level of hermeticity. Indeed, the traditional technique of glass sealing was not an option for fiber optic as the glass would melt the fiber.

Thanks to an original process of ceramic sealing developed by its U.S. subsidiary PA&E, **SOURIAU is the first connector manufacturer to provide the market with a truly hermetic 38999 serie III aluminum fiber optic feedthrough that interconnects with its existing fiber optic range Elio®.**

This innovation will allow Souriau to provide the unique connecting solution offering hermeticity, EMI immunity and mass saving all at once, for the new generation of platforms.

Description

Butt-Joint optic connector for military and aerospace on-board equipment, wherever weight saving and severe climatic resistance are requested.

Range of applications

Fiber optic connectors apply wherever robustness, high performance and easy maintenance are needed

Main applications

Aerospace, Defense, particles accelerators, power lasers...

Ordering information

Please contact: Marie Evrard
mevrard@souriau.com

Technical features

Insertion loss:
< 0.3 dB per interface

Return loss:
< 20 dB per interface

Temperature range:
-65°C +200°C

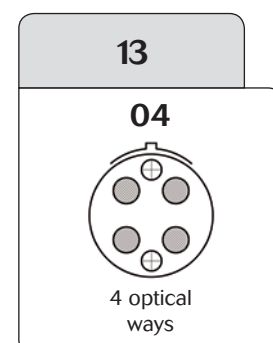
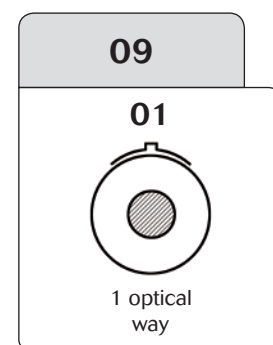
Interface:
Souriau Elio® fiber optic plugs

Fiber type:
Multimode 50 or 62.5/125 or 100/140 µm.
For any other type of fiber,
please contact us.

Shell type:
Jam nut or laser weldable flange

Shell materials:
Aluminum; Titanium; Stainless steel

MIL-DTL-38999 with ELIO® Contact Available layouts



38999 Series III Hermetic Elio[®] Feedthrough



Physical dimensions

Standard 38999 Series III dimensions

Shell size	A ±0.15	C Max	D Max	E Max	F ±0.40
9 (A)	16.53	2.80	30.50	23.00	27.00
13 (C)	23.82	2.80	38.40	31.00	34.90

Mounting information

Panel cut-out

Shell size	E ±0.25	F
09 (A)	17.78	17.02
13 (A)	25.65	24.26

Maximum wall thickness

8 mm Max

