

Miniature Connectors: Nanoptic™ & Microptic™



Description :

Nanoptic™: Most of the fiber optic connectors were developed for telecom application and do not offer practical solution for harsh environment, but joint connexion of singlemode fibers. Such connexions require a bulky coupling part which is a serious handicap when small form factor is needed. The Nanoptic connector allows connexion of two singlemode fibers inside a small volume, 23mm long and 5.9mm diameter. Besides the product is designed for harsh environment applications, temperature and vibrations.

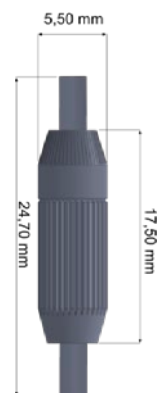
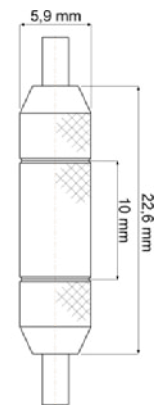


Microptic™: In many fiber optic applications it is necessary to have a connector but the space available is not compatible with the standard connectors. The Microptic concept allows fiber to fiber connexion in a very small space hardly bigger than the fiber protection. Unlike most connectors the Microptic is non symmetrical. One fiber end is equipped with a ferrule and a male screw cap. The other fiber is equipped with a ferrule and a female screw cap. The ferrules alignment is made by a ceramic or metal sleeve.

Technical Specifications:

Nanoptic™		Comments
Ferrule	Ceramic 1,25mm	
Body material	Stainless steel 316L	
Dimensions	L = 22.6mm, Ø = 5.9mm	complete connexion
Attenuation	0.3 dB Typ.	Singlemode fiber
Option 1	High T°	Up to 200°C
Option 2	APC connexion	for 50dB back reflexion
Option 3	Waterproof	for submarines applications
Protective Jackets	250µm Acrylate, 900µm PTFE or Hytrel or PEEK, 1.5mm & 1.8mm minicable, Titanium tube 1.58mm, PEEK tube 1.7mm	

Microptic™		Comments
Ferrule	metal 1,58mm	
Body material	Stainless steel 316L	
Dimensions	L = 24,7 mm, Ø = 5.5mm	complete connexion
Attenuation	< 1 dB	320µm core fiber
Option 1	High T°	Up to 200°C
Option 2	Waterproof	for submarines applications
Fibers	Large core fibers from 200 to 600µm	
Pressure test	1000 bars	
Protective Jackets	900µm PTFE or Hytrel or PEEK, 1.5mm & 1.8mm minicable, Titanium tube 1.58mm, PTFE tube 1.5mm, PEEK Tube 1.7mm	



Applications:

- Harsh environments
- Aircraft and vehicles fiber links
- Submarine connexions
- High Temperature