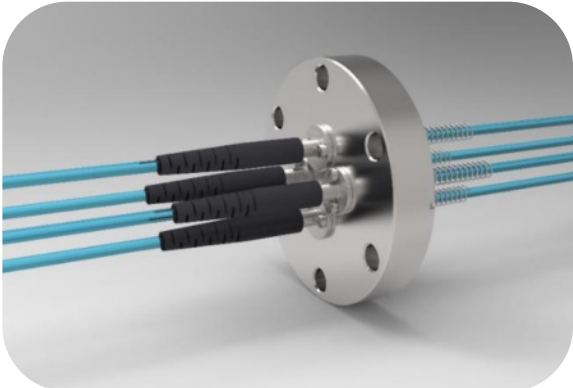


Product Overview



- Feedthroughs are available with standard (CF, KF, ISO, etc.) or custom flanges.
- Optical fibers are sealed with feedthroughs using adhesive, featuring no breakpoints in the fiber to ensure optimal optical performance.
- Available in single-pass or multi-pass configurations.
- Compatible with SM,MM,PM fibers and other fiber types.
- Suitable for UHV environments up to 10⁻⁵Pa.

Fiber Type	SM、MM	PM
Optical Performance		
Polarization-maintaining Fiber Extinction Ratio	/	≥20dB(Typical: 25 dB, Steady State: >30 dB)
Insertion Loss	≤0.6dB@1550nm、≤0.8dB@780nm、≤1.0 dB@630nm	
Environmental Performance		
Operating Temperature	-40℃~+80℃(based on optical cable temperature)	
Leak Rate	≤1×10 ⁻¹¹ Pa・m ³ /s (1 atm)	
Miscellaneous		
Flange Type	standard (CF, KF, ISO, etc.) or custom flanges	
Flange Material	Stainless Steel 304/316L	
Ferrule Material	Stainless Steel 304/316L、PEEK	
Ferrule Type	FC/PC、FC/APC、LC/PC、LC/APC	
Jacket Outer Diameter (Vacuum/Atmosphere Side)	Φ3、Φ2、Φ0.9	
Jacket Type (Atmosphere Side)	TPU armored 、TPU	
Jacket Type (Vacuum Side)	PTFE 、PTFE spiral 、Stainless Steel spiral	

*SM=Single-mode MM=Multi-mode PM=Polarization-maintaining

Product Examples

	CF16 Single-channel Feedthrough Assembly
Jacket (Atmosphere Side)	Φ3 TPU Armored
Jacket (Vacuum Side)	Φ3 PTFE
Connectors	FC/PC

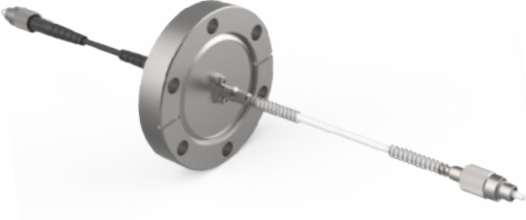
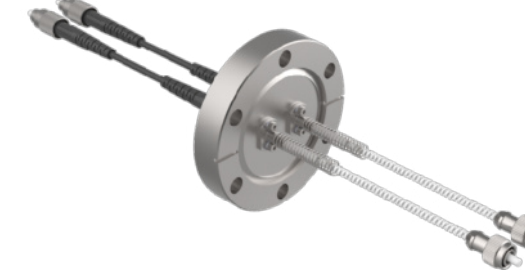
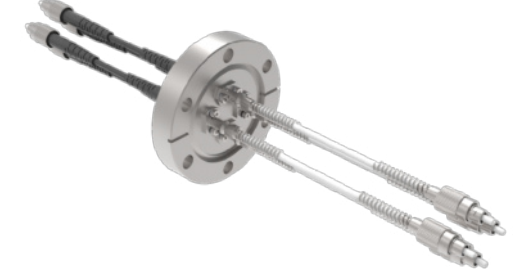
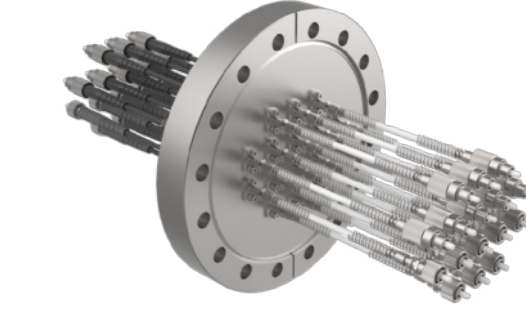


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Vacuum Optical Fiber Feedthrough
Flange Selection Guide

																	
<table><tr><th></th><th>CF16 Single-channel Feedthrough Assembly</th></tr><tr><td>Jacket (Atmosphere Side)</td><td>Φ3 TPU Armored</td></tr><tr><td>Jacket (Vacuum Side)</td><td>Φ3 Stainless Steel Spiral Material Stainless Steel 304</td></tr><tr><td>Connectors</td><td>FC/PC</td></tr></table>		CF16 Single-channel Feedthrough Assembly	Jacket (Atmosphere Side)	Φ3 TPU Armored	Jacket (Vacuum Side)	Φ3 Stainless Steel Spiral Material Stainless Steel 304	Connectors	FC/PC	<table><tr><th></th><th>CF35 Single-channel Feedthrough Assembly</th></tr><tr><td>Jacket (Atmosphere Side)</td><td>Φ3 TPU Armored</td></tr><tr><td>Jacket (Vacuum Side)</td><td>Φ3 PTFE</td></tr><tr><td>Connectors</td><td>FC/PC</td></tr></table>		CF35 Single-channel Feedthrough Assembly	Jacket (Atmosphere Side)	Φ3 TPU Armored	Jacket (Vacuum Side)	Φ3 PTFE	Connectors	FC/PC
	CF16 Single-channel Feedthrough Assembly																
Jacket (Atmosphere Side)	Φ3 TPU Armored																
Jacket (Vacuum Side)	Φ3 Stainless Steel Spiral Material Stainless Steel 304																
Connectors	FC/PC																
	CF35 Single-channel Feedthrough Assembly																
Jacket (Atmosphere Side)	Φ3 TPU Armored																
Jacket (Vacuum Side)	Φ3 PTFE																
Connectors	FC/PC																
																	
<table><tr><th></th><th>CF35 Dual-channel Feedthrough Assembly</th></tr><tr><td>Jacket (Atmosphere Side)</td><td>Φ3 TPU Armored</td></tr><tr><td>Jacket (Vacuum Side)</td><td>Φ3 PTFE Spiral</td></tr><tr><td>Connectors</td><td>FC/PC</td></tr></table>		CF35 Dual-channel Feedthrough Assembly	Jacket (Atmosphere Side)	Φ3 TPU Armored	Jacket (Vacuum Side)	Φ3 PTFE Spiral	Connectors	FC/PC	<table><tr><th></th><th>CF35 Quad-channel Feedthrough Assembly</th></tr><tr><td>Jacket (Atmosphere Side)</td><td>Φ3 TPU Armored</td></tr><tr><td>Jacket (Vacuum Side)</td><td>Φ3 PTFE</td></tr><tr><td>Connectors</td><td>FC/PC</td></tr></table>		CF35 Quad-channel Feedthrough Assembly	Jacket (Atmosphere Side)	Φ3 TPU Armored	Jacket (Vacuum Side)	Φ3 PTFE	Connectors	FC/PC
	CF35 Dual-channel Feedthrough Assembly																
Jacket (Atmosphere Side)	Φ3 TPU Armored																
Jacket (Vacuum Side)	Φ3 PTFE Spiral																
Connectors	FC/PC																
	CF35 Quad-channel Feedthrough Assembly																
Jacket (Atmosphere Side)	Φ3 TPU Armored																
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Connectors	FC/PC																
																	
<table><tr><th></th><th>CF35 5-channel Feedthrough Assembly</th></tr><tr><td>Jacket (Atmosphere Side)</td><td>Φ3 TPU Armored</td></tr><tr><td>Jacket (Vacuum Side)</td><td>Φ3 PTFE</td></tr><tr><td>Connectors</td><td>FC/PC</td></tr></table>		CF35 5-channel Feedthrough Assembly	Jacket (Atmosphere Side)	Φ3 TPU Armored	Jacket (Vacuum Side)	Φ3 PTFE	Connectors	FC/PC	<table><tr><th></th><th>CF100 16-channel Feedthrough Assembly</th></tr><tr><td>Jacket (Atmosphere Side)</td><td>Φ3 TPU Armored</td></tr><tr><td>Jacket (Vacuum Side)</td><td>Φ3 PTFE</td></tr><tr><td>Connectors</td><td>FC/PC</td></tr></table>		CF100 16-channel Feedthrough Assembly	Jacket (Atmosphere Side)	Φ3 TPU Armored	Jacket (Vacuum Side)	Φ3 PTFE	Connectors	FC/PC
	CF35 5-channel Feedthrough Assembly																
Jacket (Atmosphere Side)	Φ3 TPU Armored																
Jacket (Vacuum Side)	Φ3 PTFE																
Connectors	FC/PC																
	CF100 16-channel Feedthrough Assembly																
Jacket (Atmosphere Side)	Φ3 TPU Armored																
Jacket (Vacuum Side)	Φ3 PTFE																
Connectors	FC/PC																

Product Model

Multi-channel Hybrid Model Nomenclature									
	CF35-	4FC-	1D600-	3PM15-	3/2	L4	K/	2	P
Flange Type CF — CF Standard flanges KF — KF Standard flanges Selection options see Note 1 and Note 2.									
Channels & Connector Type 4-4 Channels FC-FC/PC Connectors AFC-FC/APC Connectors LC-LC/PC Connectors ALC-LC/APC Connectors									
Channels & Fiber Type 1D600 — 1 channel, MM 600μm 1PM15 — 1 channel, SMPM 1550nm 1D400 — 1 channel, MM 400μm 1PM78 — 1 channel, SMPM 780nm 1D105 — 1 channel, MM105μm 1PM63 — 1channel, SMPM 630nm 1B15 — 1 channel, SM 1550nm 1B78 — 1 channel, SM 780nm 1B85 — 1 channel, MM 850nm									
Hybrid Channels & Fiber Type 3PM15 — 3 channels, SMPM 1550nm 3D600 — 3 channels, MM 600μm 3PM78 — 3 channels, SMPM 780nm 3D400 — 3 channels, MM 400μm 3PM63 — 3 channels, SMPM 630nm 3D105 — 3 channels, MM 105μm 3B15 — 3 channels, SM 1550nm 3B78 — 3 channels, SM 780nm 3B85 — 3 channels, MM 850nm									
Jacket Diameter 3/2 — 3mm (Atmosphere side), 2mm (Vacuum side) 3/0.9 — 3mm (Atmosphere side), 0.9mm (Vacuum side) 2/0.9 — 2mm (Atmosphere side), 0.9mm (Vacuum side) 3 — 3mm (Vacuum/Atmosphere side) 2 — 2mm (Vacuum/Atmosphere side) 0.9 — 0.9mm (Vacuum/Atmosphere side)									
Jacket Length (Atmosphere Side) 4 — 4m length									
Jacket Type (Atmosphere Side) K — TPU armored Standard TPU not labeled									
Jacket Length (Vacuum Side) 2 — 2m length									
Jacket Type (Vacuum Side) P — PTFE spiral Standard PTFE not labeled									

*SM=Single-mode MM=Multi-mode PM=Polarization-maintaining SMPM=Single-mode polarization-maintaining

Single/Multi-channel Model Nomenclature								
	CF35-	4FC-	15-	3	L4	K/	2	K
Flange Type CF — CF Standard flanges KF — KF Standard flanges Selection options see Note 1 and Note 2.								
Channels & Connector Type 4-4 Channels FC-FC/PC Connectors AFC-FC/APC Connectors LC-LC/PC Connectors ALC-LC/APC Connectors								
Fiber Type 15 — SM 1550nm D600 — MM 600μm 85 — MM 850nm D400 — MM 400μm 78 — SM 780nm D105 — MM 105μm PM15 — SMPM 1550nm PM63 — SMPM 630nm PM78 — SMPM 780nm								
Jacket Diameter 3 — 3mm (Vacuum/Atmosphere side) 2 — 2mm (Vacuum/Atmosphere side) 0.9 — 0.9mm (Vacuum/Atmosphere side)								
Jacket Length (Atmosphere Side) 4 — 4m length								
Jacket Type (Atmosphere Side) K — TPU armored standard TPU not labeled								
Jacket Length (Vacuum Side) 2 — 2m length								
Jacket Type (Vacuum Side) K — Stainless Steel spiral P — PTFE spiral Standard PTFE not labeled								

*SM=Single-mode MM=Multi-mode PM=Polarization-maintaining SMPM=Single-mode polarization-maintaining

Note 1: Recommended optional flange specifications and channels are listed in Tab.1 .

Tab.1 Recommended Flange Specifications & Channels			
Flange Specifications	Channels	Flange Specifications	Channels
CF16	1	KF25	1
CF35	≤5	KF40	≤3
CF100	≤16	KF63	≤11

Note 2: Customizable according to user requirements.

Model Examples

Example 1: CF35-4FC-15-3L4K/2

CF35, 4 channels, SM 1550nm fiber

Atmosphere - FC/PC, 3mm TPU armored tubing , L=4m

Vacuum - FC/PC, 3mm PTFE tubing, L=2m

Example 2: CF35-4FC-1D600-3PM15-3L4K/2

CF35, 4 channels, 1x MM 600μm、3x SMPM 1550nm fibers

Atmosphere - FC/PC, 3mm TPU armored tubing, L=4m

Vacuum - FC/PC, 3mm PTFE tubing, L=2m