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Product Highlights

Fiber Optic Feedthroughs — UHV rated feedthroughs available in six core sizes from 62.5µm to 1000µm.

UHV Fiber Patch Cable Assemblies — Polyimide buffered fiber patch cables available in six core sizes from 62.5µm to 1000µm.

Air-service Patch Cable Assemblies — Polyimide buffered fiber with PVC jacketing available in six core sizes from 62.5µm to 1000µm.

Accessories — Couplers, adapters, connectors, jacketing and wrap, polishing supplies and consumables.

Multimode Fiber has a large core diameter, and is commonly used in short-run cable distances such as vacuum applications. Custom fiber cable assemblies available on request.

Standard flange sizes are 1.33 and 2.75 Inch CF, ISO NW16 and 40 KF. Custom flange sizes available on request.



Fiber Optic Feedthroughs

UV / VIS / IR Multimode Step and Graded-Index

600 micron Air-service Cable*, 105240

600 Micron UV Feedthrough, 105201, on UHV Conflat® compatible flange

In-vacuum Coupler* vented, 105450

Air Side Coupler* non-vented, 105451

UHV Compatible 600 micron UV Cable*, 105260

*Vacuum and air side connectors, cables and couplers are not included with feedthrough and must be purchased separately.

Fiber Optic Feedthroughs

Accu-Glass offers fiber optic feedthroughs with 62.5, 100, 200, 400, 600, and 1000 micron core diameters. These feedthroughs are ideally suited for industrial and/or scientific research applications requiring air-to-vacuum fiber optic transitions/connections. Multimode fibers (both Step and Graded Index types) are hermetically sealed into a stainless steel shell, using the latest in glass-ceramic-metal bonding technology. Standard fiber optic feedthroughs are terminated with premium SMA 905 connectors on both vacuum and air sides. FC and ST connections are also available.

Polyimide buffered optical fiber cable assemblies are offered to meet the rigorous demands of ultrahigh vacuum environments. These optical fibers are of a core-and-cladding composite construction. The core, or the filament that guides the light, consists of a thin strand of high-transmission fused silica. The cladding is an outer layer of doped, lower refractive-index fused silica. This dual-layer design tightly confines light to the fiber's central core, thus delivering the maximum amount of light possible at the fiber's destination. Fiber diameters are closely controlled during the drawing process, allowing fibers to center well in connectors and boast low loss rates.

Graded-index multimode fiber bridges the gap between singlemode and step-index multimode fibers, giving up some bandwidth for ease of termination and light launch. It's more economical than singlemode fiber, and primarily used for data communication (not as useful for power transmission) applications requiring medium run distances (2 to 15 km lengths).

Features

- UHV compatible construction
- 100, 200, 400, 600, and 1000µm UV, VIS and NIR Step Index fibers
- 62.5µm Graded Index fiber
- SMA 905 premium connector interface
- High temperature rated to 250°C
- Conflat® and ISO KF compatible mounts
- Polyimide buffered vacuum rated optical cables

Specifications

Material

304 Stainless Steel, Glass and Quartz

Vacuum Range

UHV, Ultrahigh vacuum	1x10 ⁻¹⁰ Torr
HV, High vacuum	1x10 ⁻⁸ Torr

Temperature Range ¹

Feedthrough	-200° to 250°C
Flange Mount, Conflat®	-200° to 450°C
Flange Mount, ISO	150°C
Thermal Gradient	25°C / Minute Maximum

Multimode Optical Fiber ²

Step Index Fiber, 100-1000µm UV/VIS or High-OH	
Operating Wavelength	200-800nm

Step Index Fiber, 100-1000µm VIS/IR or Ultra Low-OH	
Operating Wavelength	400-2200nm

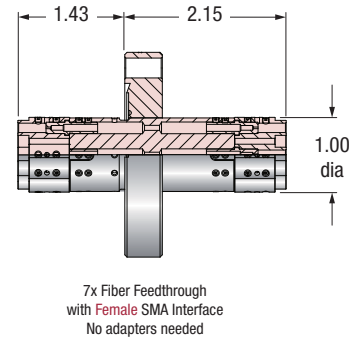
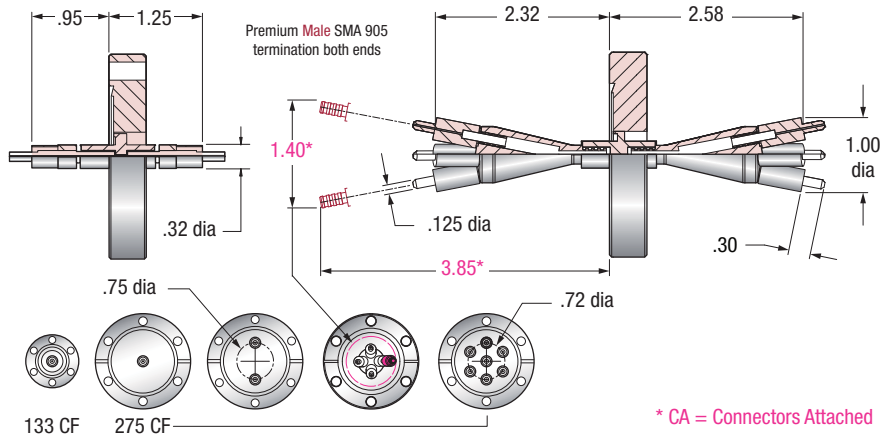
Numerical Aperture	0.22 ± 0.02 or 24.8°
Core / Cladding Ratio ³	1:1.1
Power	<1 W
Bend Radius ⁴ , Momentary / Long Term	200x / 400x
Insertion loss ⁵ , Interconnect	-0.8dB to -2.0dB

Graded-Index Fiber, 62.5µm Core / 125µm Clad

Operating Wavelength ⁶	850 and 1300nm
Numerical aperture	0.27 ± 0.02
Bend Radius ⁴ , Momentary / Long Term	400x / 800x
Attenuation at 850 / 1300nm	≤ 3.0dB / 0.8dB

Notes

1. Overall assembly ratings must be adjusted to that of its lowest rated component. For cryogenic service, the lowest recommended temperature is -80°C
 2. Bare fiber has a pure fused-silica core, fluorine-doped silica cladding, and polyimide buffer.
 3. Where core diameter is ≥ 200 µm
 4. xCore diameter
 5. Dependant on wavelength and fiber size.
 6. Optimized for these two specific wavelengths.
- § Unless specified otherwise, dimensional units in all sections of this catalog are expressed in inches.



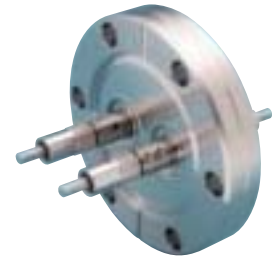
CF Flange¹ — Step-Index Multimode Fiber / 450°C / UHV to 1x10⁻¹⁰ Torr

Fiber Size μm	Number Fibers	Flange OD	Model Number	Part Number	Unit Price \$	Model Number	Part Number
UHV Feedthroughs²							
UV / Ultraviolet 200-800nm				IR / Infrared 400-2200nm			
100	1	1.33	F01UV-133	112424	665	F01IR-133	112553
	1	2.75	F01UV-275	112425	680	F01IR-275	112554
	2	2.75	F01UV-2-275	112426	1205	F01IR-2-275	112555
	4	2.75	F01UV-4-275	112598	2200	F01IR-4-275	112606
	7	2.75	F01UV-7-275	112814	3200	F01IR-7-275	112819
200	1	1.33	F02UV-133	105000	455	F02IR-133	105020
	1	2.75	F02UV-275	105001	472	F02IR-275	105021
	2	2.75	F02UV-2-275	112300	830	F02IR-2-275	112308
	4	2.75	F02UV-4-275	112599	1950	F02IR-4-275	112607
	7	2.75	F02UV-7-275	112815	2950	F02IR-7-275	112820
400	1	1.33	F04UV-133	105100	460	F04IR-133	105120
	1	2.75	F04UV-275	105101	475	F04IR-275	105121
	2	2.75	F04UV-2-275	112301	835	F04IR-2-275	112309
	4	2.75	F04UV-4-275	112600	1850	F04IR-4-275	112608
	7	2.75	F04UV-7-275	112816	2850	F04IR-7-275	112821
600	1	1.33	F06UV-133	105200	465	F06IR-133	105220
	1	2.75	F06UV-275	105201	480	F06IR-275	105221
	2	2.75	F06UV-2-275	112302	840	F06IR-2-275	112310
	4	2.75	F06UV-4-275	112601	1750	F06IR-4-275	112609
	7	2.75	F06UV-7-275	112817	2750	F06IR-7-275	112822
1000	1	1.33	F010UV-133	105300	510	F010IR-133	105320
	1	2.75	F010UV-275	105301	525	F010IR-275	105321
	2	2.75	F010UV-2-275	112303	920	F010IR-2-275	112311
	7	2.75	F010UV-7-275	112818	2650	F010IR-7-275	112823
Graded Index — Optimized for 850, and 1300nm Wavelengths							
62.5	1	1.33				F0625-133	112340
	1	2.75				F0625-275	112341
	2	2.75				F0625-2-275	112342

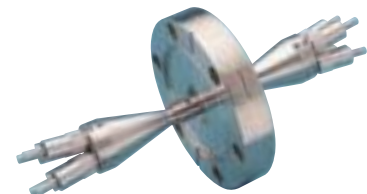
1. Compatible with Conflat® flanges and hardware. 2. See page 131 for attenuation curves



105000 / 1.33 CF Flange
1 x Feedthrough (Vacuum Side)



112301 / 2.75 CF Flange
2 x Feedthrough (Vacuum Side)



112598 / 2.75 CF Flange
4 x 1 Feedthrough (Vacuum Side)

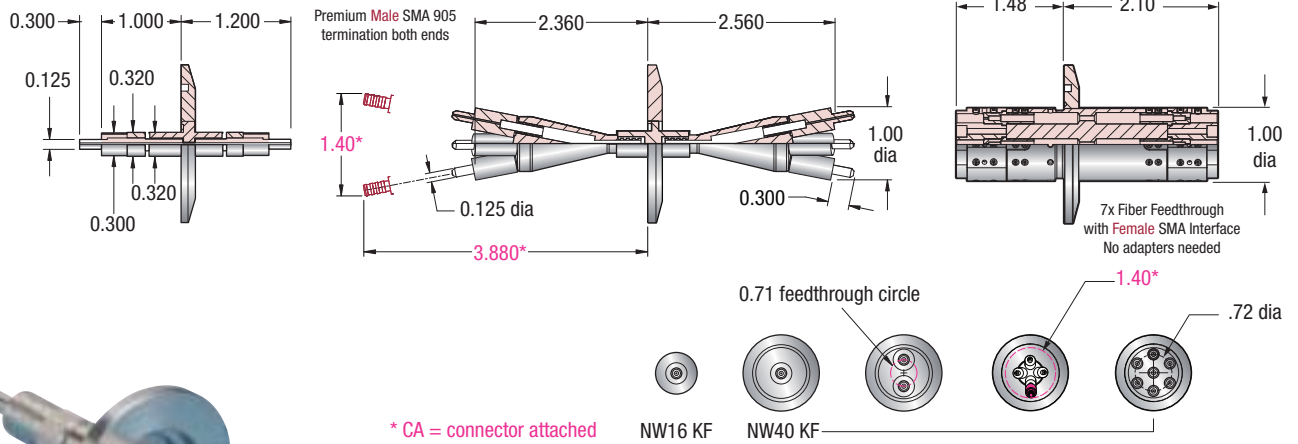


112814 / 2.75 CF Flange
7 x 1 Feedthrough (Vacuum Side)

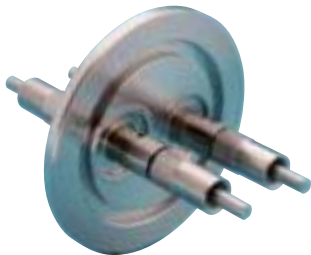


Fiber Optics

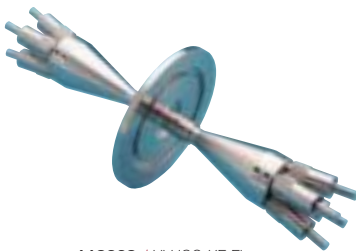
UV / VIS / IR Multimode, HV Feedthroughs



105210 / HV ISO KF Flange
1 x Feedthrough (Vacuum Side)



112304 / HV ISO KF Flange
2 x Feedthrough (Vacuum Side)



112602 / HV ISO KF Flange
4 x 1 Feedthrough
(Vacuum Side)



112804 / HV ISO KF Flange
7 x 1 Feedthrough
(Vacuum Side)

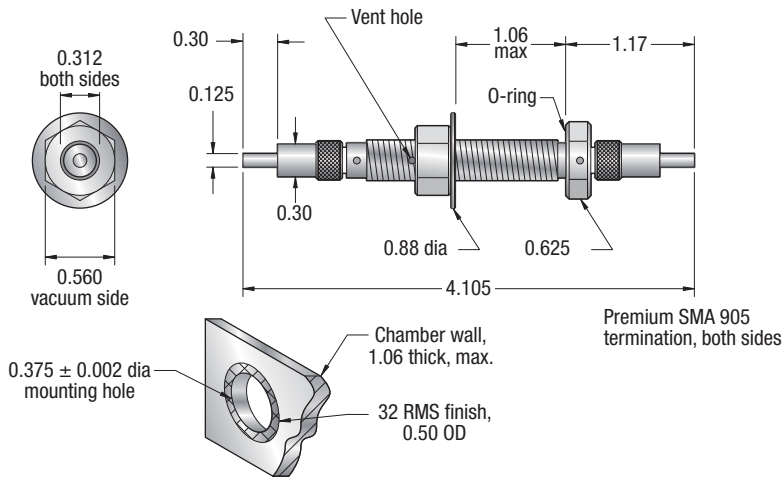
ISO KF Flange¹ — Step-Index Multimode Fiber / 150°C / HV to 1x10⁻⁸ Torr

Fiber Size µm	Number Fibers	Flange OD	Model Number	Part Number	Unit Price \$	Model Number	Part Number
HV Feedthrough² UV / Ultraviolet 200-800nm IR / Infrared 400-2200nm							
100	1	1.18	F01UV-K16	112427	670	F01IR-K16	112556
	1	2.16	F01UV-K40	112428	680	F01IR-K40	112557
	2	2.16	F01UV-2-K40	112429	1215	F01IR-2-K40	112558
	4	2.16	F01UV-4-K40	112602	2200	F01IR-4-K40	112610
	7	2.16	F01UV-7-K40	112804	3200	F01IR-7-K40	112808
200	1	1.18	F02UV-K16	105010	450	F02IR-K16	105030
	1	2.16	F02UV-K40	105011	470	F02IR-K40	105031
	2	2.16	F02UV-2-K40	112304	825	F02IR-2-K40	112312
	4	2.16	F02UV-4-K40	112603	1950	F02IR-4-K40	112611
	7	2.16	F02UV-7-K40	112805	2950	F02IR-7-K40	112809
400	1	1.18	F04UV-K16	105110	455	F04IR-K16	105130
	1	2.16	F04UV-K40	105111	475	F04IR-K40	105131
	2	2.16	F04UV-2-K40	112305	830	F04IR-2-K40	112313
	4	2.16	F04UV-4-K40	112604	1850	F04IR-4-K40	112612
	7	2.16	F04UV-7-K40	112806	2580	F04IR-7-K40	112810
600	1	1.18	F06UV-K16	105210	465	F06IR-K16	105230
	1	2.16	F06UV-K40	105211	485	F06IR-K40	105231
	2	2.16	F06UV-2-K40	112306	840	F06IR-2-K40	112314
	4	2.16	F06UV-4-K40	112605	1750	F06IR-4-K40	112613
	7	2.16	F06UV-7-K40	112807	2750	F06IR-7-K40	112811
1000	1	1.18	F010UV-K16	105310	505	F010IR-K16	105330
	1	2.16	F010UV-K40	105311	520	F010IR-K40	105331
	2	2.16	F010UV-2-K40	112307	915	F010IR-2-K40	112315
	7	2.16	F010UV-7-K40	112813	2650	F010IR-7-K40	112812

Graded Index — Fiber is Optimized for 850 and 1300nm Wavelengths

62.5	1	1.18	F0625-K16	112343
	1	2.16	F0625-K40	112344
	2	2.16	F0625-2-K40	112345

1. Compatible with ISO 2861/1 specification flanges and hardware 2. See page 131 for attenuation curves



105410 / HV Bolt Feedthrough

Bolt Style Mount — Step-Index Multimode Fiber / 150°C / HV to 1x10⁻⁶ Torr

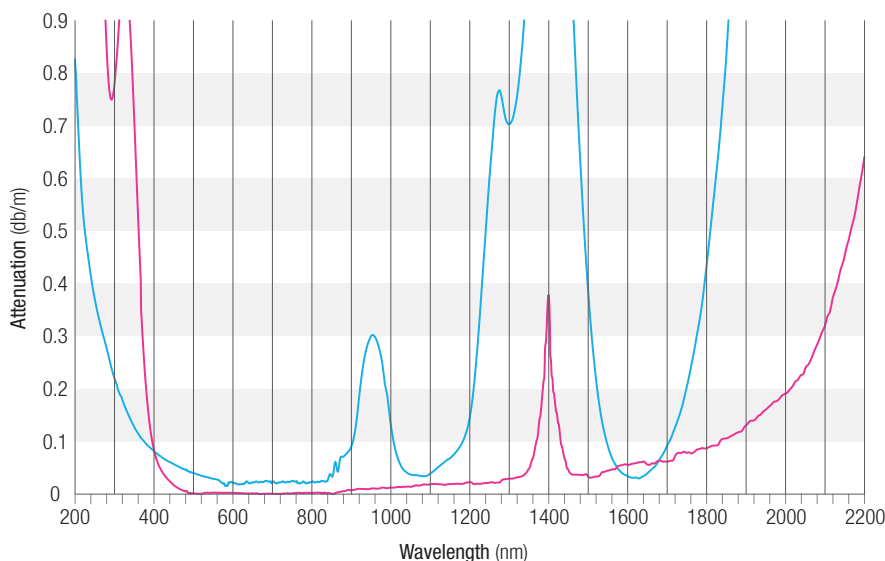
Fiber Size μm	Number Fibers	Thread Size	Model Number	Part Number	Unit Price \$	Model Number	Part Number
HV Feedthrough						UV / Ultraviolet 200-800nm	
100	1	3/8-24	BOLT-1UV-3/8	112431	425	BOLT-1IR-3/8	112559
200	1	3/8-24	BOLT-2UV-3/8	105400	345	BOLT-2IR-3/8	105401
400	1	3/8-24	BOLT-4UV-3/8	105410	345	BOLT-4IR-3/8	105411
600	1	3/8-24	BOLT-6UV-3/8	105420	345	BOLT-6IR-3/8	105421
1000	1	3/8-24	BOLT-10UV-3/8	105430	345	BOLT-10IR-3/8	105431
Graded Index — Fiber is Optimized for 850 and 1300nm Wavelengths							
62.5	1	3/8-24				BOLT-F0625-3/8	112346

200-800nm UV / VIS or High-OH Fiber

For UV/VIS applications only. Use ≤ 15 meter lengths to avoid high attenuation.

400–2200nm VIS/NIR or Ultra Low-OH Fiber

For extremely long length VIS/NIR applications. Lowest possible light attenuation.

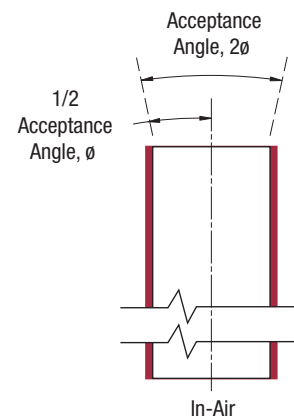


Optical Fiber Numerical Aperture

Numerical aperture is a relative measurement of how much light a fiber can gather. Numerical aperture is expressed as a result of Snell's law:

$$NA = (N_1^2 - N_2^2)^{1/2} = N \sin \theta_{\max}$$

All Accu-Glass multimode fibers have a numerical aperture of 0.22, which equals a whole acceptance angle of 24.8°.





UV/VIS Multimode Fiber Optic UHV Cable Assemblies

Connector to Connector UHV fiber optic cable assemblies are fitted with premium SMA 905 connectors on both ends of a “non-jacketed” fiber optic fiber. NA = 0.22, Step-Index.

Connector to Cable UHV fiber optic cable assemblies are fitted with a premium SMA 905 connector on one end and a bare polished fiber on the other. NA = 0.22, Step-Index.

Note: In-Vacuum cables require a coupler to mate with corresponding feedthroughs.

Cable Assemblies — Step Index Multimode Fiber / – 65 to 200°C / UHV to 1x10⁻¹⁰ Torr

Fiber Size μm	Length	Buffer	Model Number	Part Number	Unit Price \$	Model Number	Part Number
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Connector to Connector

UV / Ultraviolet 200-800nm

IR / Infrared 400-2200nm

100 ¹	19	P	UVV1-19SMA2	112548	173	IRV1-19SMA2	112560
	39	P	UVV1-39SMA2	112549	199	IRV1-39SMA2	112561
200 ²	19	P	UVV2-19SMA2	105060	160	IRV2-19SMA2	105070
	39	P	UVV2-39SMA2	105061	175	IRV2-39SMA2	105071
400	19	P	UVV4-19SMA2	105160	165	IRV4-19SMA2	105170
	39	P	UVV4-39SMA2	105161	180	IRV4-39SMA2	105171
600	19	P	UVV6-19SMA2	105260	180	IRV6-19SMA2	105270
	39	P	UVV6-39SMA2	105261	210	IRV6-39SMA2	105271
1000	19	A	UVV10-19SMA2	105360	305	IRV10-19SMA2	105370
	39	A	UVV10-39SMA2	105361	410	IRV10-39SMA2	105371

Graded Index — Optimized for 850 and 1300nm Wavelengths

62.5	19	P				FOV625-19SMA2	112347
	39	P				FOV625-39SMA2	112348

Connector to Cable

UV / Ultraviolet 200-800nm

IR / Infrared 400-2200nm

100 ¹	19	P	UVV1-19SMA	112550	110	IRV1-19SMA	112562
	39	P	UVV1-39SMA	112551	115	IRV1-39SMA	112563
200 ²	19	P	UVV2-19SMA	111860	115	IRV2-19SMA	111870
	39	P	UVV2-39SMA	111861	125	IRV2-39SMA	111871
400	19	P	UVV4-19SMA	111862	125	IRV4-19SMA	111872
	39	P	UVV4-39SMA	111863	135	IRV4-39SMA	111873
600	19	P	UVV6-19SMA	111864	135	IRV6-19SMA	111874
	39	P	UVV6-39SMA	111865	160	IRV6-39SMA	111875
1000	19	A	UVV10-19SMA	111866	258	IRV10-19SMA	111876
	39	A	UVV10-39SMA	111867	362	IRV10-39SMA	111877

Graded-Index — Optimized for 850 and 1300nm Wavelengths

62.5	19	P				FOV625-19SMA	112349
	39	P				FOV625-39SMA	112350

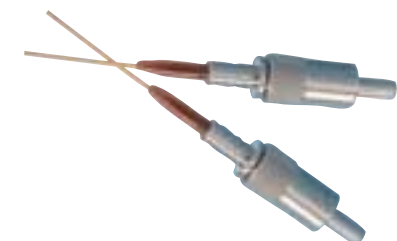
Jacket Options³ — Price for 19 and 39 Inch respectively → Part Extension

PEEK	Append extension to cable number	.60
Stainless Steel	Append extension to cable number	.61
Copper, Silver Plated	Append extension to cable number	.62

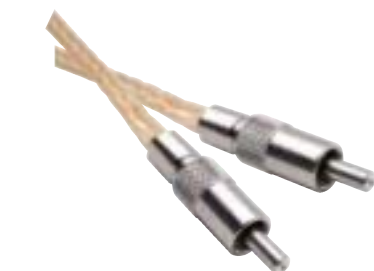
Coupler — Vented In-line SMA

In-Vacuum coupler, vented	FOVENT-C
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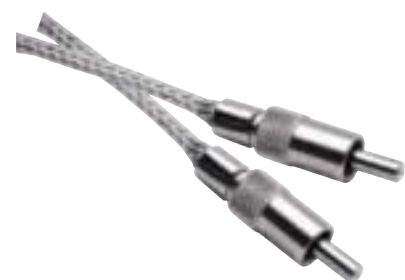
1. This size comes with PEEK jacket. 2. Due to small fiber core size, we strongly recommend adding a 'Jacket Option'. Non-jacketed cables of this core size are not warranted. 3. Jacket is an optional addition to above cable assemblies and is only installed at the factory. Jacket price must be added to cable price. For example, Part Number 105061.60 would have a price of \$225.



105261 / 600μm UV
In-Vacuum Cable



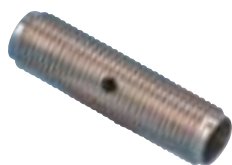
105260.60 / 600μm UV
With PEEK Braid Jacketing



105260.61 / 600μm UV
With Stainless Steel Braid Jacketing



111866 / 1000μm UV
In-Vacuum Cable



105450 / In-Vacuum Coupler
With Vent Hole

Air-Service Multimode Fiber Optic Cable Assemblies

Connector to Connector assemblies are fitted with premium SMA connectors on both ends of a blue PVC jacketed fiber optic fiber. NA = 0.22, Step-Index.

Note: Air-Service cables require a coupler to mate with corresponding feedthroughs.

Air-Service Cable Assemblies — Step Index Multimode Fiber / 80°C / Air Atmosphere

Fiber Size μm	Length	Jacket Material	Model Number	Part Number	Unit Price \$	Model Number	Part Number
Connector to Connector			UV / Ultraviolet 200-800nm		IR / Infrared 400-2200nm		
100	79	PVC	UVA1-79SMA2	112552	110	IRA1-79SMA2	112564
200	79	PVC	UVA2-79SMA2	105040	135	IRA2-79SMA2	105050
400	79	PVC	UVA4-79SMA2	105140	145	IRA4-79SMA2	105150
600	79	PVC	UVA6-79SMA2	105240	185	IRA6-79SMA2	105250
1000	79	PVC	UVA10-79SMA2	105340	325	IRA10-79SMA2	105350
Graded-Index — Optimized for 850 and 1300nm Wavelengths (Yellow Jacket)							
62.5	79	PVC				FOA625-79SMA2	112351

Coupler — In-line SMA

Air side coupler does not require venting	FO-C	105451
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Cable Rack

Electronic and fiber optic cable rack is great for hanging wires and cables. This keeps cables organized and off of already crowded workstations.

Cable Rack

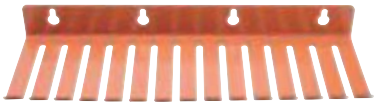
Narrow Slot Cable Rack	CR-NS	111748
Wide Slot Cable Rack	CR-WS	111890



105240 / 600μm UV
Air-Service Cable



105451 / Air Side Coupler
Without Vent Hole



111748 / Cable Rack



112580 / Air-Service
Bifurcated Cable

Bifurcated Cables

Bifurcated Cables are Y-shaped assemblies with two fibers of the same diameter. The two fibers are side-by-side inside of the common Premium SMA 905 connector on one end. From the breakout point of the assembly, the two fibers diverge into two legs. UHV and Air-service versions are available where the UHV version is made from 100% UHV compatible materials including a PEEK weave jacket, the Air-Service assemblies are made with a PVC jacket.

Air-Service versions are split at 25-inches from the common end and the UHV versions are split at 12-inches from the common end.

Air-Service Bifurcated Cables — Step Index 79 Inch / PVC Jacket / 80°C / Air Atmosphere

Fiber Size μm	Model Number	Part Number	Unit Price \$	Model Number	Part Number
Wavelength ▶			UV / Ultraviolet 200-800nm	IR / Infrared 400-2200nm	
200	F02UVA-79BC	112580	300	F02IRA-79BC	112583
400	F04UVA-79BC	112581	330	F04IRA-79BC	112584
600	F06UVA-79BC	112582	370	F06IRA-79BC	112585



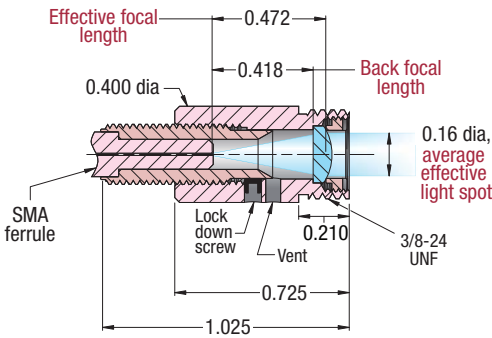
112640 / UHV Bifurcated Cable

UHV Bifurcated Cables — Step Index 39 Inch / PEEK Braid / 250°C / UHV to 1×10^{-10} Torr

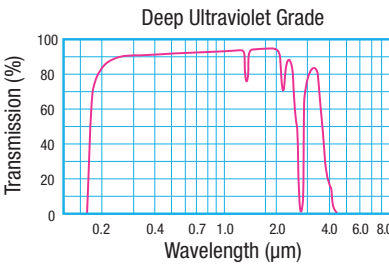
Fiber Size μm	Model Number	Part Number	Unit Price \$	Model Number	Part Number
Wavelength ▶			UV / Ultraviolet 200-800nm	IR / Infrared 400-2200nm	
200	F02UWV-39BC	112640	250	F02IRV-39BC	112643
400	F04UWV-39BC	112641	275	F04IRV-39BC	112644
600	F06UWV-39BC	112642	300	F06IRV-39BC	112645

UHV Collimator, 1/4 Inch Lens

1/4 Inch Collimating Lenses use a high performance optical element (lens) manufactured using research-grade synthetic fused silica that has excellent transmission characteristics and higher operating temperatures than other elements. Collimating lenses come set to standard effective focal length distances. However, a means of adjustment is built into the body to allow precision adjustments.



112689 / Fused Silica Lens



112689 / 1/4" Collimator Lens
Fused Silica

UHV Collimator — 1/4 Inch Lens / 250°C / Air Atmosphere or UHV to 1×10^{-10} Torr

Connector Style	Lens Material	Lens Diameter	Operating Wavelength	Model Number	Part Number
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Collimator — SMA .250-36 to .375-24 Threads

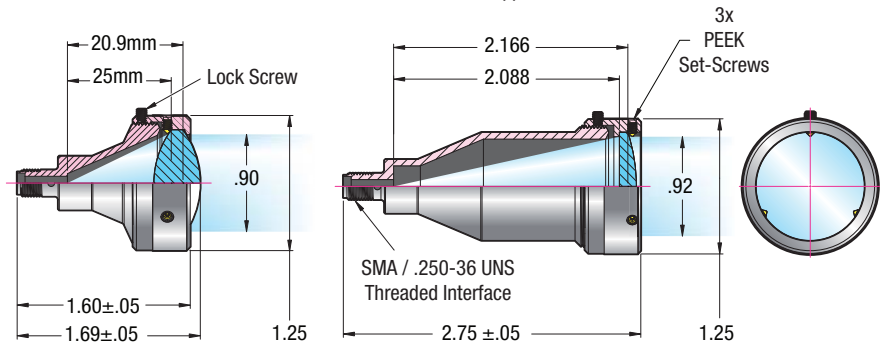
SMA	Sapphire	0.24	150nm – 5500nm	SAP-COLL4-SS	112720
SMA	Fused Silica	0.24	190nm – 2500nm	FS-COLL2-SS	112689

UHV Collimator, 1 Inch Lens

1 Inch Collimating Lenses use a high performance optical element (lens) manufactured using research-grade synthetic fused silica that has excellent transmission characteristics and higher operating temperatures than other elements. Collimating lenses come set to standard effective focal length distances. However, a means of adjustment is built into the body to allow precision adjustments.

113161 / Fused Silica Lens

112699 / Sapphire Lens



112699 / 1" Collimator Lens
Sapphire

UHV Collimator — 1 Inch Lens / 250°C / Air Atmosphere or UHV to 1×10^{-10} Torr

Connector Style	Lens Material	Lens Diameter	Operating Wavelength	Model Number	Part Number
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Collimator — SMA .250-36 Threads

SMA	Sapphire	1.00	150nm – 5500nm	SAP-COLL1-SS	112699
SMA	Fused Silica	1.00	190nm – 2500nm	FS-COLL4-SS-LP	113161



113161 / 1" Collimator Lens
Fused Silica



112694 / Filter Holder Kit
Includes Fused Silica Collimators



113006 / Filter Holder
Table / Breadboard Mount



112737 / In-Line Bayonet
Filter Holder
Collimator Lenses Sold Separately



112321 / 400µm Bare Fiber Adapter



111116 / .250-36 SMA Mount
Fits 1" or 25mm Centers



112686 / .375-24 Collimator Mount
Fits 1" or 25mm Centers

Filter Holders

Filter Holders... Table mount in-line 1/2 inch optical filter holder. Fits standard inch or metric optical tables and breadboards. Mounting bracket is fitted with two elongated holes to accommodate 1 inch or 25mm center grid mounting hole patterns. Fasten with vented 1/4-20 or M6 socket-head cap screws. Accepts 0.50 inch diameter by 0.12 inch thick optical filters. Bayonet / Barrel Mount in-line, 1 inch optical filter holder employs a 1/4 twist bayonet style interface. Accepts 1.00 inch diameter by 0.20 inch thick optical filters. Note that 1/2 and 1 inch filters are sold separately.

Filter Holders — Fiber Optic / 250°C / Air Atmosphere or UHV to 1×10^{-10} Torr

Type	Qty.	Model Number	Part Number
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UHV Filter Holder — Table / Breadboard Mount Type

Kit, Fused Silica Collimator and In-line Filter Holder	1	FO-FHC	112694
In-line Filter Holder	1	FO-FH	113006

Air Service Filter Holder — Bayonet / Barrel Mount Type

In-line Filter Holder	1	FO-FH2	112737
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Bare Fiber Adapters — Multi-Use

Bare Fiber Adapters can be used as the following devices: SMA adapter, Ferrule, or as a Bulkhead Mount. Simply insert the bare fiber end into the collet and tighten until snug. Bare fiber adapters are designed to fit on our polyimide buffered fiber only.

UHV Adapters — 250°C / Air Atmosphere or UHV to 1×10^{-10} Torr

Fiber Size	Qty.	Material	Model Number	Part Number
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Adapter — Only for use with AG Polyimide buffered fiber

200µm	1	SS/PEEK	FO200-BFFA	112320
400µm	1	SS/PEEK	FO400-BFFA	112321
600µm	1	SS/PEEK	FO600-BFFA	112322



UHV Mounts

Mounts are made from 304 stainless steel and compatible with UHV and/or Air-Service applications. They have slightly elongated clearance holes for 1/4-20 inch or M6 vented socket-head cap screws, compatible with standard 1 inch or 25mm center spaced optical table / breadboard mounting grids.

Mounts — 250°C / Air Atmosphere or UHV to 1×10^{-10} Torr

Type	Qty.	Material	Model Number	Part Number
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Mounts — Bare Fiber and Collimator Adapters

SMA Mount, .250-36 Thread	1	SS	FO-SMA/BFA-MNT	111116
Collimator Mount, .375-24 Thread	1	SS	FO-COLL-MNT	112686

Couplers

Couplers are used to connect two similar connector types. Accu-Glass couplers are manufactured from 304 stainless steel and are available for vacuum or air service applications. Vacuum rated couplers include a vent hole, which provides a path for trapped gases to escape. The SMA coupler mates with our standard SMA 905 precision connectors.

Couplers — 250°C or 80°C / UHV or Air Atmosphere

Type	Service	Material	Model Number	Part Number
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Couplers — 250°C / UHV to 1x10⁻¹⁰ Torr

SMA to SMA	UHV	SS	FOVENT-C	105450
SMA to SMA - Bulkhead mount	UHV	SS	FOVENT-C-BM	111115

Couplers — 80°C / Air Atmosphere

SMA to SMA	Air	SS	FO-C	105451
SMA to SMA - Bulkhead mount	Air	SS/Teflon	FO-C-BM	112646

Between Series Adapters

Between Series Adapters are devices used to connect two dissimilar fiber optic connector types. Accu-Glass offers two adapter types, SMA-to-FC and SMA-to-ST. FC, ferrule connector or fixed connection type, was one of the most popular singlemode connectors for many years. It also uses a 2.5 mm ferrule. It uses a secure threaded and keyed interface, but you must make sure you have the key aligned in the slot properly before tightening. ST connectors were one of the first connector types implemented in fiber optic networking applications. ST stands for Straight Tip connector. ST connections use a 2.5mm ferrule with a round plastic or metal body. ST connectors stay in place with a twist-on / twist-off bayonet-style mechanism.

Between Series Adapters — 250°C or 80°C / UHV or Air Atmosphere

Type	Service	Material	Model Number	Part Number
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Adapters — 250°C / UHV to 1x10⁻¹⁰ Torr

SMA to FC	UHV	SS	FOV-SMA-FC-ADP	112241
SMA to ST	UHV	Zirconia	FOV-SMA-ST-ADP	112242

Adapters — 80°C / Air Atmosphere

SMA to FC	Air	SS/Teflon	FO-SMA-FC-ADP	112648
SMA to ST	Air	SS/Teflon	FO-SMA-ST-ADP	112649



105450 / In-Vacuum Coupler
With Vent Hole



112241 / SMA to FC Adapter



112242 / SMA to ST Adapter