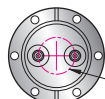
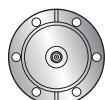


Ultrahigh Vacuum CF Flange Feedthrough

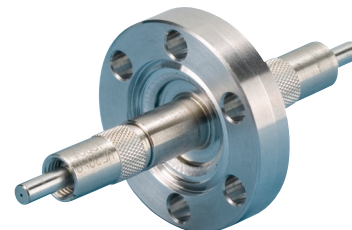
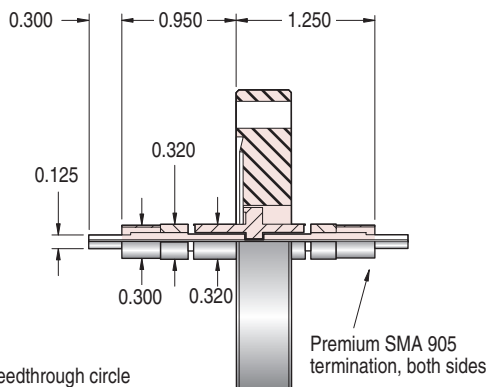
133 CF



275 CF



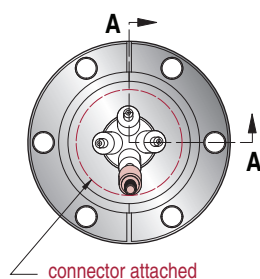
0.85 feedthrough circle

105020, UHV CF Flange
(Vacuum Side)105021, UHV CF Flange
(Vacuum Side)

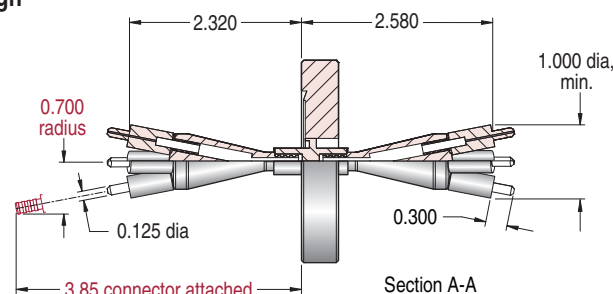
Number F'thrus	Fiber VIS/NIR	Connector Type	CF Flange		Model Number	Part Number	Unit Price \$
			Model	OD			
1	100µm IR	SMA	133 CF	1.33	FO1IR-133	112553	635
1	100µm IR	SMA	275 CF	2.73	FO1IR-275	112554	650
2	100µm IR	SMA	275 CF	2.73	FO1IR-2-275	112555	1150
1	200µm IR	SMA	133 CF	1.33	FO2IR-133	105020	435
1	200µm IR	SMA	275 CF	2.73	FO2IR-275	105021	450
2	200µm IR	SMA	275 CF	2.73	FO2IR-2-275	112308	790
1	400µm IR	SMA	133 CF	1.33	FO4IR-133	105120	440
1	400µm IR	SMA	275 CF	2.73	FO4IR-275	105121	455
2	400µm IR	SMA	275 CF	2.73	FO4IR-2-275	112309	795
1	600µm IR	SMA	133 CF	1.33	FO6IR-133	105220	450
1	600µm IR	SMA	275 CF	2.73	FO6IR-275	105221	465
2	600µm IR	SMA	275 CF	2.73	FO6IR-2-275	112310	805
1	1000µm IR	SMA	133 CF	1.33	FO10IR-133	105320	485
1	1000µm IR	SMA	275 CF	2.73	FO10IR-275	105321	499
2	1000µm IR	SMA	275 CF	2.73	FO10IR-2-275	112311	875

112308, UHV CF Flange
(Vacuum Side)

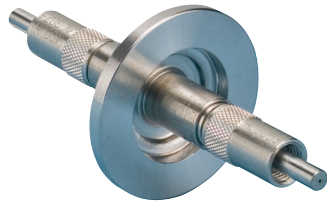
Ultrahigh Vacuum 4 x 1 CF Flange Feedthrough



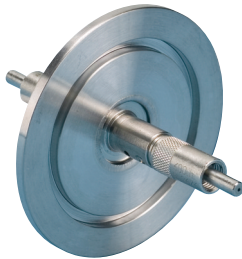
connector attached

112606, UHV CF Flange
4 x 1 Feedthrough

Number F'thrus	Fiber VIS/NIR	Connector Type	CF Flange		Model Number	Part Number	Unit Price \$
			Model	OD			
4x1	100µm IR	SMA	275 CF	2.73	FO1IR-4-275	112606	2200
4x1	200µm IR	SMA	275 CF	2.73	FO2IR-4-275	112607	1950
4x1	400µm IR	SMA	275 CF	2.73	FO4IR-4-275	112608	1850
4x1	600µm IR	SMA	275 CF	2.73	FO6IR-4-275	112609	1750



105230, HV ISO KF Flange
(Vacuum Side)



105231, HV ISO KF Flange
(Vacuum Side)

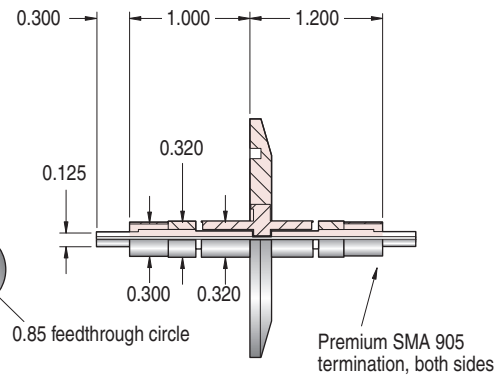
112312, HV ISO KF Flange
(Vacuum Side)

High Vacuum ISO Flange Feedthrough

NW16 KF



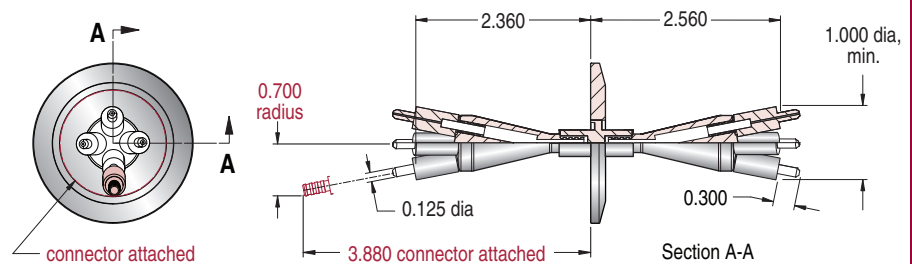
NW40 KF



Number F'thrus	Fiber VIS/NIR	Connector Type	ISO Flange		Model Number	Part Number	Unit Price \$
			Model	OD			
1	100µm IR	SMA	NW16 KF	1.18	FO1IR-K16	112556	630
1	100µm IR	SMA	NW40 KF	2.16	FO1IR-K40	112557	645
2	100µm IR	SMA	NW40 KF	2.16	FO1IR-2-K40	112558	1140
1	200µm IR	SMA	NW16 KF	1.18	FO2IR-K16	105030	430
1	200µm IR	SMA	NW40 KF	2.16	FO2IR-K40	105031	445
2	200µm IR	SMA	NW40 KF	2.16	FO2IR-2-K40	112312	785
1	400µm IR	SMA	NW16 KF	1.18	FO4IR-K16	105130	435
1	400µm IR	SMA	NW40 KF	2.16	FO4IR-K40	105131	450
2	400µm IR	SMA	NW40 KF	2.16	FO4IR-2-K40	112313	790
1	600µm IR	SMA	NW16 KF	1.18	FO6IR-K16	105230	445
1	600µm IR	SMA	NW40 KF	2.16	FO6IR-K40	105231	460
2	600µm IR	SMA	NW40 KF	2.16	FO6IR-2-K40	112314	800
1	1000µm IR	SMA	NW16 KF	1.18	FO10IR-K16	105330	480
1	1000µm IR	SMA	NW40 KF	2.16	FO10IR-K40	105331	495
2	1000µm IR	SMA	NW40 KF	2.16	FO10IR-2-K40	112315	870

High Vacuum 4 x 1 ISO Flange Feedthrough

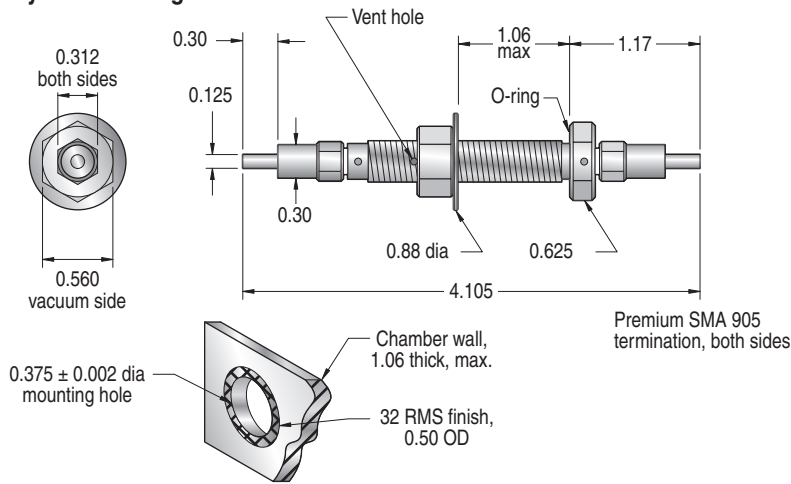
112610, HV ISO KF Flange
4 x 1 Feedthrough



Number F'thrus	Fiber VIS/NIR	Connector Type	ISO Flange		Model Number	Part Number	Unit Price \$
			Model	OD			
4x1	100µm IR	SMA	NW40 KF	2.16	FO1IR-4-K40	112610	2200
4x1	200µm IR	SMA	NW40 KF	2.16	FO2IR-4-K40	112611	1950
4x1	400µm IR	SMA	NW40 KF	2.16	FO4IR-4-K40	112612	1850
4x1	600µm IR	SMA	NW40 KF	2.16	FO6IR-4-K40	112613	1750



High Vacuum Bolt style Feedthrough

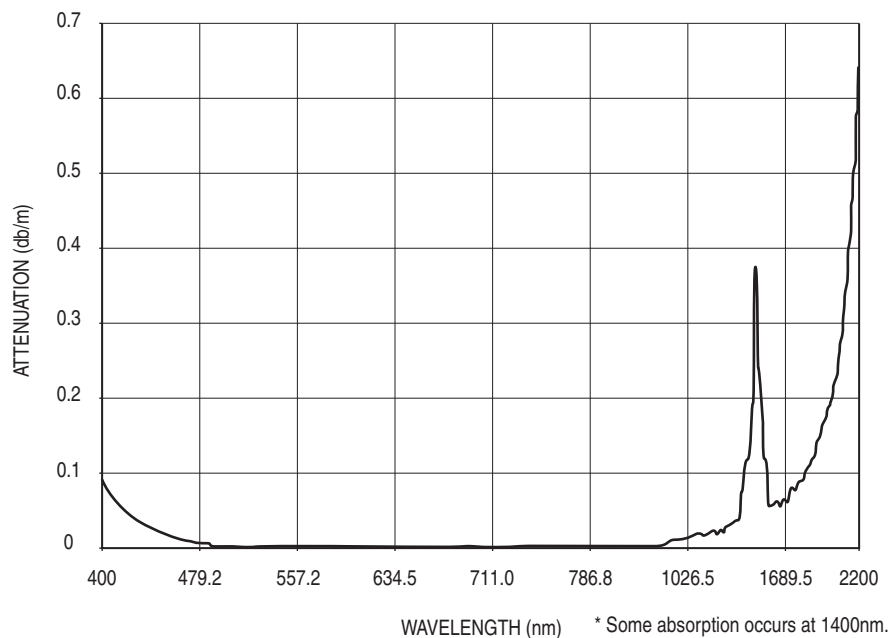


105411, HV Bolt Feedthrough

Number F'thrus	Fiber VIS/NIR	Connector Type	Bolt Thread	Overall Length	Model Number	Part Number	Unit Price \$
1	100µm IR	SMA	3/8-24	4.105	BOLT-1IR-38	112559	405
1	200µm IR	SMA	3/8-24	4.105	BOLT-2IR-38	105401	329
1	400µm IR	SMA	3/8-24	4.105	BOLT-4IR-38	105411	329
1	600µm IR	SMA	3/8-24	4.105	BOLT-6IR-38	105421	329
1	1000µm IR	SMA	3/8-24	4.105	BOLT-10IR-38	105431	329

VIS / NIR or Ultra-low-OH Fiber, 400–2200 nm*

- Provides the lowest possible internal light attenuation.
- Useful for VIS or VIS / NIR applications requiring extremely long fiber lengths.

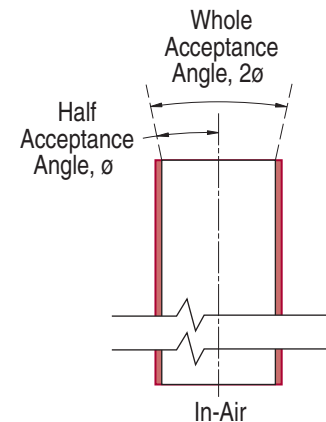


Optical Fiber Numerical Aperture

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°.





VIS / NIR Multimode Fiber Optic 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.

Operating: -65°C to 200°C, Intermittent 300°C

Service: UHV

1 x 10⁻¹⁰ Torr

105271, 600µm IR
In-Vacuum Cable

111876, 1000µm IR
In-Vacuum Cable



105450, In-Vacuum Coupler
with vent hole

Core & Type	Length (inches)	Operating Wavelength Range	Buffer	Type	Model Number	Part Number	Unit Price \$
Connector to Connector							
100µm IR	19	400–2200 nm	Polyimide	Step-Index	IRV1-19SMA2	112560	145
100µm IR	39	400–2200 nm	Polyimide	Step-Index	IRV1-39SMA2	112561	153
200µm IR	19	400–2200 nm	Polyimide	Step-Index	IRV2-19SMA2	105070	151
200µm IR	39	400–2200 nm	Polyimide	Step-Index	IRV2-39SMA2	105071	155
400µm IR	19	400–2200 nm	Polyimide	Step-Index	IRV4-19SMA2	105170	156
400µm IR	39	400–2200 nm	Polyimide	Step-Index	IRV4-39SMA2	105171	167
600µm IR	19	400–2200 nm	Polyimide	Step-Index	IRV6-19SMA2	105270	172
600µm IR	39	400–2200 nm	Polyimide	Step-Index	IRV6-39SMA2	105271	197
1000µm IR	19	400–2200 nm	Aluminum	Step-Index	IRV10-19SMA2	105370	291
1000µm IR	39	400–2200 nm	Aluminum	Step-Index	IRV10-39SMA2	105371	390

Connector to Cable

100µm IR	19	400–2200 nm	Polyimide	Step-Index	IRV1-19SMA	112562	105
100µm IR	39	400–2200 nm	Polyimide	Step-Index	IRV1-39SMA	112563	108
200µm IR	19	400–2200 nm	Polyimide	Step-Index	IRV2-19SMA	111870	106
200µm IR	39	400–2200 nm	Polyimide	Step-Index	IRV2-39SMA	111871	110
400µm IR	19	400–2200 nm	Polyimide	Step-Index	IRV4-19SMA	111872	111
400µm IR	39	400–2200 nm	Polyimide	Step-Index	IRV4-39SMA	111873	122
600µm IR	19	400–2200 nm	Polyimide	Step-Index	IRV6-19SMA	111874	127
600µm IR	39	400–2200 nm	Polyimide	Step-Index	IRV6-39SMA	111875	152
1000µm IR	19	400–2200 nm	Aluminum	Step-Index	IRV10-19SMA	111876	246
1000µm IR	39	400–2200 nm	Aluminum	Step-Index	IRV10-39SMA	111877	345

In-Vacuum coupler with vent hole

FOVENT-C

105450

28

Cable Assembly Jacketing Options

Jacketing

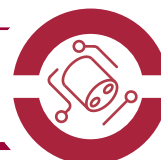
19" price 39" price

PEEK braid jacketing	append to Part Number	.60	28	46
Stainless steel braid jacketing	append to Part Number	.61	28	46
Silver plated copper braid jacketing	append to Part Number	.62	28	46

These are sold as additions to the above cable assemblies and are added at the factory only. Price is added to Unit Price. For example, Part Number 105070.60 would have a price of \$179. Part Number 105071.60 would have a price of \$201.

105271.60, 600µm IR
with PEEK Braid Jacketing

105271.61, 600µm IR
with Stainless Steel Braid Jacketing



Air-service Multimode Fiber Optic Cable Assemblies

Air-service Cable assemblies are fitted with premium SMA connectors on both ends of a red PVC jacketed fiber optic fiber. NA = 0.22, Step-Index.

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

Operating: 80°C

Service: Air

Atmos.

Core & Type	Length (inches)	Operating Wavelength Range	Jacketing	Type	Model Number	Part Number	Unit Price \$
Air-service Cable							
100µm IR	79	400–2200 nm	PVC	Step-Index	IRA1-79SMA2	112564	195
200µm IR	79	400–2200 nm	PVC	Step-Index	IRA2-79SMA2	105050	199
400µm IR	79	400–2200 nm	PVC	Step-Index	IRA4-79SMA2	105150	223
600µm IR	79	400–2200 nm	PVC	Step-Index	IRA6-79SMA2	105250	283
1000µm IR	79	400–2200 nm	PVC	Step-Index	IRA10-79SMA2	105350	509
Air side coupler without vent hole					FO-C	105451	24

105250, 600µm IR
Air-service Cable



105451, Air side Coupler
without vent hole

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	30
Wide Slot Cable Rack	CR-WS	111890	30

111748, Cable Rack