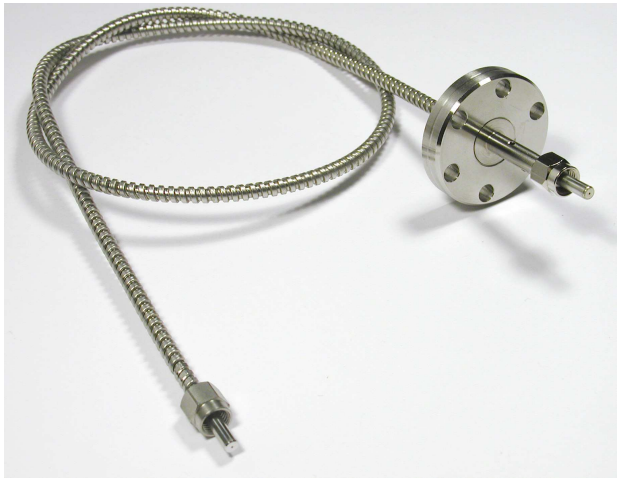
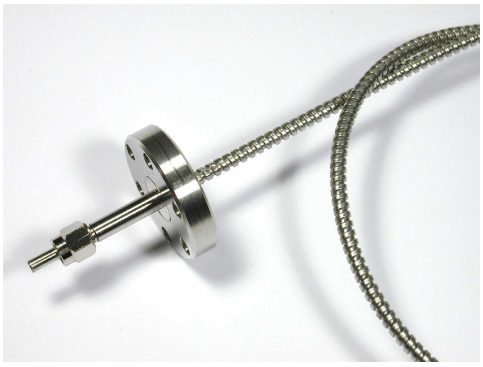
Fiberoptic Feedthroughs Multimode with SMA connectors
150-IR-S-S-1000-C16 an other types

A new style of fiberoptic f/t amend the existing program with some advanced features. The new style includes already the in-vacuum part of the fiber and so avoids the requirement of a second coupling.
The result are lower losses and a significantly reduced price compared to the hitherto existing types.



Fiberoptic f/t with SMA connectors on CF16 flange

Specifications	
Vacuum	UHV, leak rate < 5x10-10 mbar l/s
Seal	All Metal
Connectors	SS (Vacuum side)
Temperature	200°C bakeout, -25...+75°C working
Fiber Type	Multi-Mode Fiber, Step Index, 400µm Core ø
Num. Aperture	0.22
IR FIBER Type	
Transmission	(400...) 600 – 2000nm
Damping of fiber	~0.1 dB /m at 400nm ~0.05 dB/m at 600nm ~0.03 dB/m at 1000nm ~0.03 dB/m at 1600nm
UV FIBER Type	
Transmission	(200...) 400 – 1600nm
Damping of fiber	~3 dB /m at 200nm ~0.05 dB/m at 400nm <0.15 dB/m 400 ... 900nm
Connectors	
	FSMA-905 both sides, (= SMA) ferrule without nut optional on vacuum side
Stand length	up to 1000mm



Flange	Fiber	Length	Art.Nr.
16CF	1x IR	1000mm	150-IR-S-S-1000-C16
40CF	1x IR	1000mm	150-IR-S-S-1000-C40
40CF	2x IR	1000mm	150-IR-S-S-1000-C40-2
40CF	3x IR	1000mm	150-IR-S-S-1000-C40-3
16CF	1x UV	1000mm	150-UV-S-S-1000-C16
40CF	1x UV	1000mm	150-UV-S-S-1000-C40
40CF	2x UV	1000mm	150-UV-S-S-1000-C40-2
40CF	3x UV	1000mm	150-UV-S-S-1000-C40-3

Versions on KF flanges, other lengths or combinations are available on request.

Last revised 2009-02-24 File: 150-IR-S-S-1000-C16-E

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125µm Fiberoptic feedthroughs Multimode and Singlemode with FC/PC connectors 150-50-F-F-1000-C16 and other types

125µm fiber f/t with FC/PC connectors, here shown on a KF25 flange

Based on 125µm OD fibers Allectra offers Multimode and Monomode fiber feedthroughs for UHV applications. This new design includes already the in-vacuum fiber, so only one optical connection is required which results in lower losses and a significantly reduced price compared to the hitherto existing types.
The f/t comes with high quality FC/PC connectors, a connection to FC or ST connectors is possible.
On the vacuum side, a ferrule without connector is optionally available.

General Specifications	
Vacuum	UHV, Leak rate < 5x10-10 mbar l/s
Sealing	All Metal
Connectors	SS, Ceramic (Vacuum side)
Temperature	200°C bakeout, -25...+75°C working
Fiber Type	Graded-Index Fiber 125µm Cladding diameter
50µm Core Fiber	
Transmission	600 – 2000nm
Num. Aperture	0.22
Damping	~0.014 dB /m at 1300nm
9µm Core Fiber – Mono-Mode	
Transmission	1300 – 1600nm
Cut-Off	<1250 nm
Num. Aperture	0.13
Damping	~0.0055 dB /m at 1300nm
6µm Core Fiber – Mono-Mode	
Transmission	800 – 900 nm
Cut-Off	<770 nm
Num. Aperture	0.13
Damping	~0.0105 dB /m at 850nm
Connectors	
	FC/PC (physical contact) both sides Ferrule without thread coupling on vacuum side optional
Standard Lengths	up to 1000mm

Flange	Fiber	Length	Art.Nr.
16CF	1x 125/50µm	1000mm	150-50-F-F-1000-C16
40CF	1x 125/50µm	1000mm	150-50-F-F-1000-C40
40CF	2x 125/50µm	1000mm	150-50-F-F-1000-C40-2
40CF	3x 125/50µm	1000mm	150-50-F-F-1000-C40-3
16CF	1x 9/125µm	1000mm	150-09-F-F-1000-C16
40CF	1x 9/125µm	1000mm	150-09-F-F-1000-C40
40CF	2x 9/125µm	1000mm	150-09-F-F-1000-C40-2
40CF	3x 9/125µm	1000mm	150-09-F-F-1000-C40-3

16CF	1x 6/125µm	1000mm	150-06-F-F-1000-C16
40CF	1x 6/125µm	1000mm	150-06-F-F-1000-C40
40CF	2x 6/125µm	1000mm	150-06-F-F-1000-C40-2
40CF	3x 6/125µm	1000mm	150-09-F-F-1000-C40-3

Air side connector coupler FC-FC and FC-ST are available.
Versions on KF flanges, other lengths or combinations are available on request.

Last revised 2009-02-24 File: 150-IR-S-S-1000-C16-E

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