



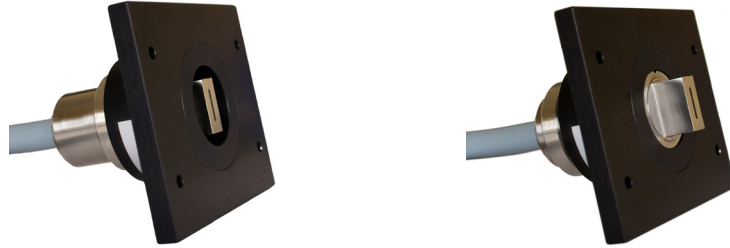
FOP Series
Fibre Optic Bundles

FOP Series Fibre Optic Bundles

Fibre optic bundles are used in measurement systems to couple light to or from the measurement plane. This provides configurational flexibility and enables measurement in inaccessible or hostile environments.

Bentham supply a range of UV, VIS and IR transmitting fibre bundles in a range of diameters and lengths, up to 15 metres.

FOP series fibre bundles are formed in a circular profile at one end, and a rectangular profile at the other to optimise coupling into monochromators.



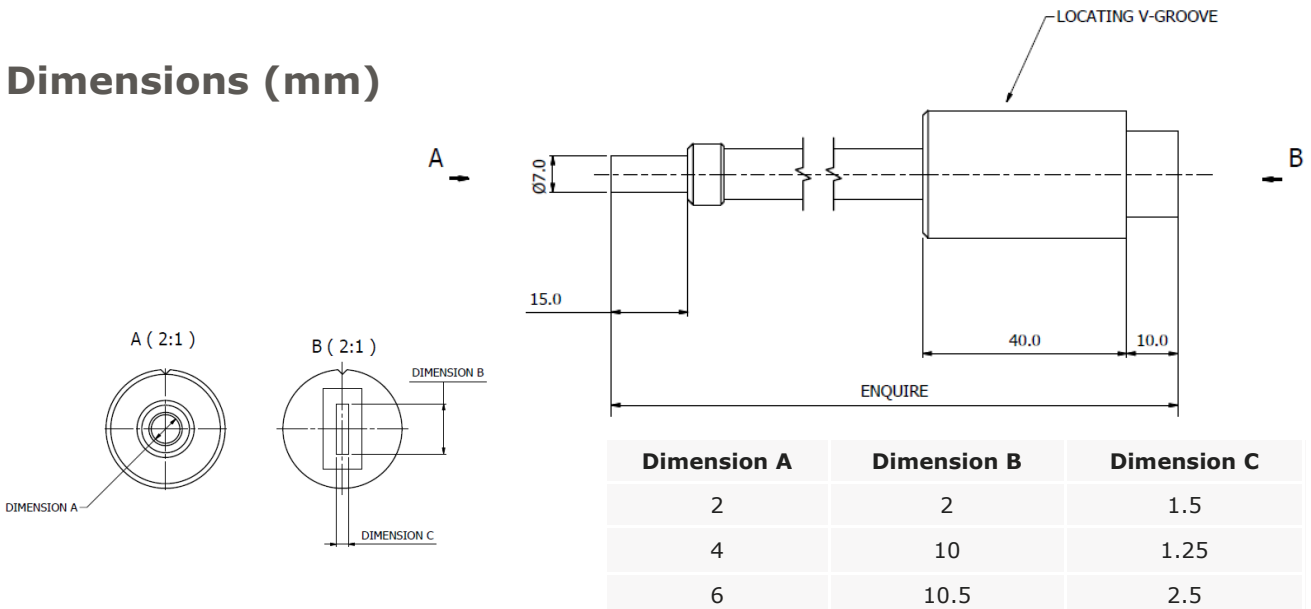
▲ An adaptor plate, with adjustable fibre positioning mechanism, is provided to mount to the entrance/ exit slit of all Bentham monochromators.

Fibre Types

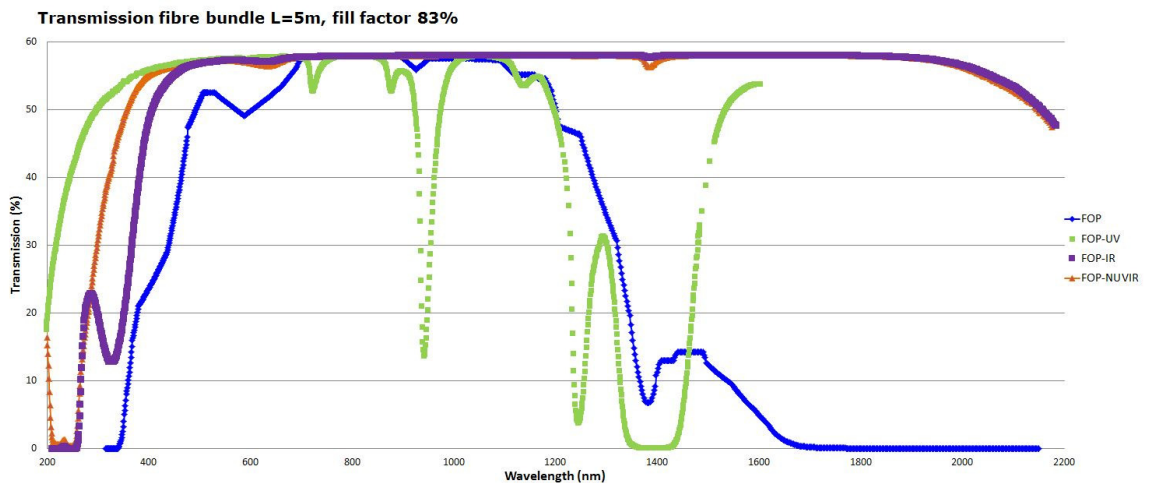
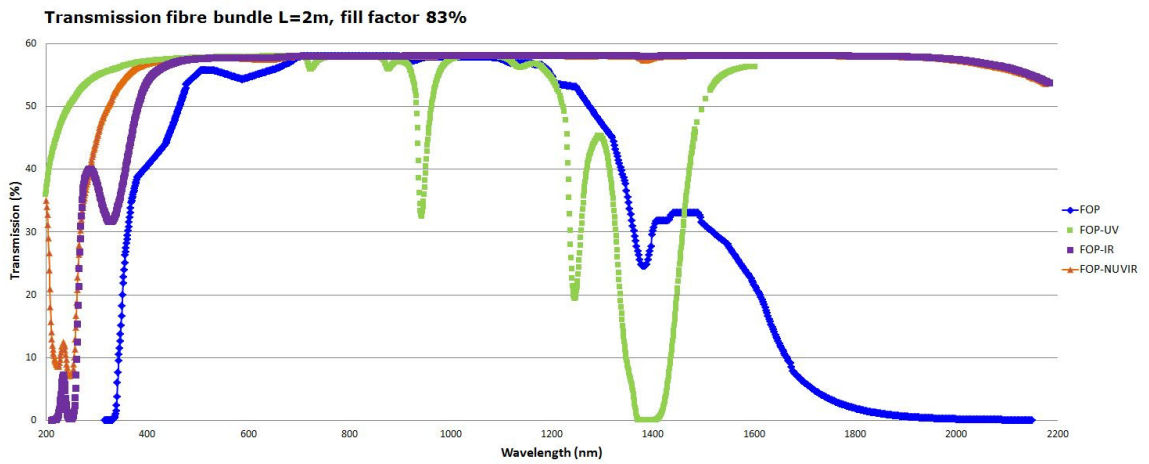
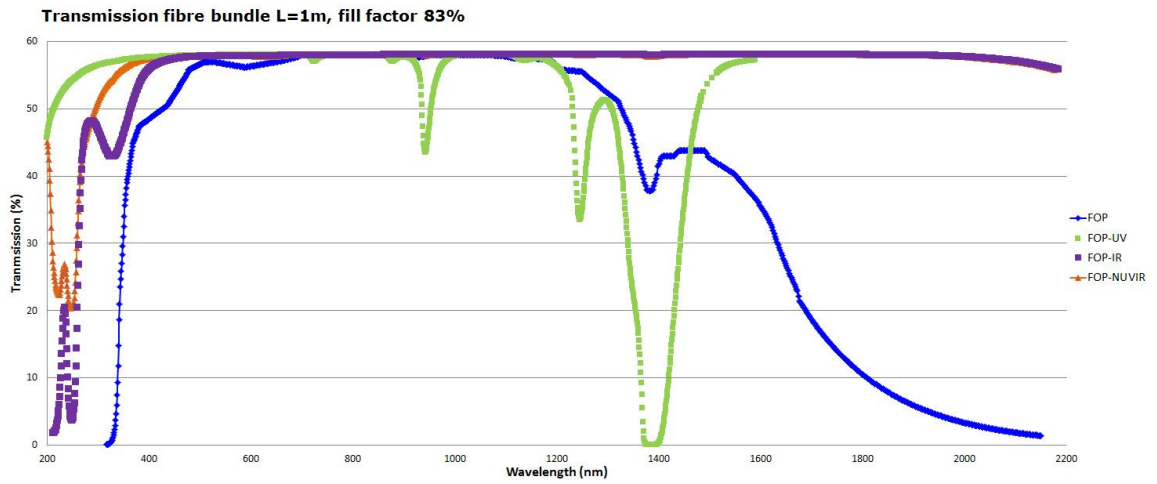
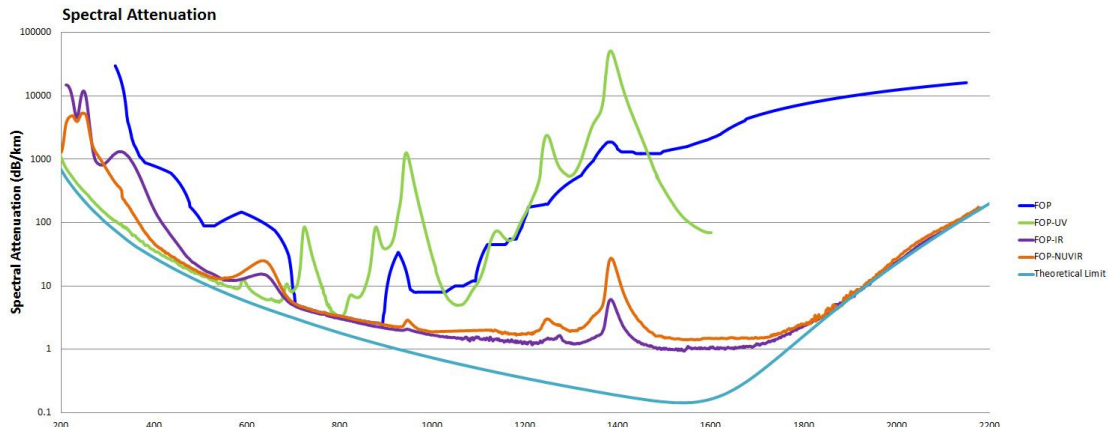
Model	Material	Spectral range	Profile dimensions
FOP-6-X	Optical glass	350-1700nm	6mm \varnothing to 10.5 x 2.5mm
FOP-UV-2-X	UV grade doped quartz	200-1350nm	2mm \varnothing to 10 x 1.25mm
FOP-UV-4-X	UV grade doped quartz	200-1350nm	4mm \varnothing to 10 x 1.25mm
FOP-NUVIR-4-X	Low hydroxyl UV grade doped quartz	300-2500nm	4mm \varnothing to 10 x 1.25mm
FOP-IR-4-X	IR grade doped quartz	400-2500nm	4mm \varnothing to 10 x 1.25mm
FOP-UV/IR-4-X	Hybrid UV and IR bundle	200-2500nm	4mm \varnothing to 10 x 1.25mm

X = length (up to 15m)

Dimensions (mm)



Transmission Data



Specifications

FOP	
Core material	Borosilicate glass
Core diameter	62µm ± 4µm
Cladding diameter	70µm ± 4µm
Numerical aperture	0.54

FOP-UV	
Core material	Pure fused silica
Core diameter	90µm ± 2%
Cladding material	Fluorine doped fused silica
Cladding diameter	100µm ± 2%
Coating material	Polyimide coating
Coating diameter	107µm ± 3%
Numerical aperture	0.22 ± 0.02

FOP-IR	
Core material	Pure fused silica
Core diameter	83µm ± 2%
Cladding material	Fluorine doped fused silica
Cladding diameter	100µm ± 2%
Coating material	Polyimide coating
Coating diameter	107µm ± 3%
Numerical aperture	0.22 ± 0.02

FOP-NUVIR	
Core material	Pure fused silica
Core diameter	90µm ± 2%
Cladding material	Fluorine doped fused silica
Cladding diameter	100µm ± 2%
Coating material	Polyimide coating
Coating diameter	107µm ± 3%
Numerical aperture	0.22 ± 0.02

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