

# ch3 09 Borosilicate Fiber Optics Annular Rings



Fiber Optic Annular Rings provide 360 degree illumination at a range of focal lengths. Available in sizes from 25mm I.D to 99mm I.D. A rugged black anodized aluminum housing contains and protects the Borosilicate fiber. Custom lengths available upon request.

## Diameters 21mm - 39mm - 36" Standard Length (Fits 30123177 Adapt-

Part Numbers	Ring Top I.D.	Ring Bottom I.D.	Input End	Fiber Type	Bundle Diameter	Cone Angle	Working distance	Style	Polarizer Part Numbers	Standard Sheathing
A2521MD036	1.12" (28.46 mm)	0.83" (21 mm)	0.3125" (7.93 mm)	Borosilicate Fiber	0.25" (6.35mm)	38	0.25" (0.50")	Step	N/A	Black Polymer Over Multi-Coil
	1.299" (33mm)	1.102" (28 mm)	0.3125" (7.93 mm)	Borosilicate Fiber	0.25" (6.35 mm)	20	0.63" (1.26")	Step	N/A	Black Polymer Over Multi-Coil
	1.693" (43 mm)	1.547" (39.3 mm)	0.625" (15.88 mm)	Borosilicate Fiber	0.25" (6.35 mm)	5	1.29" (2.60")	Step	N/A	Black Polymer Over Multi-Coil

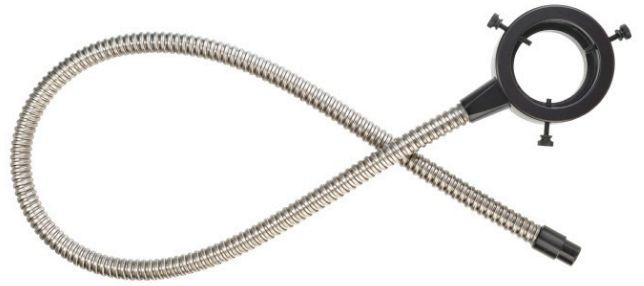
## Diameters 50 mm to 64 mm - 36" Standard Length (Fits 30123177 Adapter)

Part Numbers	Ring Top I.D.	Ring Bottom I.D.	Input End	Fiber Type	Bundle Diameter	Cone Angle	Focal Length		Polarizer Part Numbers	Standard Sheathing
A5852SA36-ESD	2.283" (58 mm)	2.047" (52 mm)	0.625" (15.86 mm)	Borosilicate Fiber	0.372" (9.45 mm)	20	1.27" (2.54")		N/A	Stainless Steel Interlock
A5850SA036	2.283" (58 mm)	2.063" (50.00 mm)	0.625" (15.86 mm)	Borosilicate Fiber	0.372" (9.45 mm)	10	1.78" (3.56")		A58-60-PLZR-KIT	Stainless Steel Interlock
A6050SA036	2.362" (60 mm)	2.00" (50 mm)	0.625" (15.86 mm)	Borosilicate Fiber	0.372" (9.45 mm)	10	1.78" (3.56")		A58-60-PLZR-KIT	Stainless Steel Interlock
A6664SA036	2.600" (66 mm)	2.52" (64 mm)	0.625" (15.86 mm)	Borosilicate Fiber	0.372" (9.45 mm)	20	1.27" (2.54")		A66-PLZR-KIT	Stainless Steel Interlock

# ch3 Borosilicate Fiber Optics

## 10 Annular Rings

Custom lengths available upon request. Select ring diameter and calculate your price based on length from chart below. The last three digits of the part number indicate cable length. (036=36", 048=48"



### Diameter 50.8 mm 36" Standard Length (Fits 30123174 Adapter)

Part Numbers	Ring Top I.D.	Ring Bottom I.D.	Input End	Fiber Type	Bundle Diameter	Cone Angle	Focal Length	Style	Polarizer Part Numbers	Standard Sheathing
A5351FA036	2.09" (53.1 mm)	2.00" (50.8 mm)	0.625" (15.88 mm)	Borosilicate Fiber	0.66" (16.78 mm)	10	1.27" (2.54")	Step	N/A	Flexa

### Diameters 82 mm to 99mm - 36" Standard Length (Fits 30123177 Adapter)

Part Numbers	Ring Top I.D.	Ring Bottom I.D.	Input End	Fiber Type	Bundle Diameter	Cone Angle	Focal Length		Polarizer Part Numbers	Standard Sheathing
A8278SA036	3.230" (82 mm)	3.07" (78 mm)	0.625" (15.88 mm)	Borosilicate Fiber	0.456" (11.5 mm)	32	1.20" (2.40")	Step	A82-PLZR-KIT	Stainless Steel Interlock
A9989PA036	3.906" (99.2 mm)	3.50" (89 mm)	0.625" (15.88 mm)	Borosilicate Fiber	0.5" (6.35 mm)	20	2.28" (4.56")	Step	N/A	Black Polymer Over Multi-Coil

### Pricing for Custom Lengths

Ring Inside Diameter Bottom I.D.	
21 mm	Add Length (Per Foot)
28 mm	Add Length (Per Foot)
39 mm	Add Length (Per Foot)
50 mm	Add Length (Per Foot)
52 mm	Add Length (Per Foot)
64 mm	Add Length (Per Foot)
78 mm	Add Length (Per Foot)
89 mm	Add Length (Per Foot)



## ch3 Borosilicate Fiber Optics

# 11 Annular Rings (Continued)

## Polarizers For Fiber Rings

Polarizers improve contrast by reducing glare. A common solution to reduce glare is to add a Polarizer / Analyzer kit which can be used to block unwanted reflections and also provide color and contrast enhancement. TechniQuip Polarizer / Analyzer kits for fiber rings consist of two polarizers, a fixed analyzer mounted in the central portion of the ring light and a rotatable polarizer mounted on the bottom portion of the ring light. Rotation and positioning of the of the bottom polarizer in relation to the fixed analyzer is useful in reducing glare and hot spots, enhancing contrast and performing stress evaluations.

### Polarizer / Analyzer Kits for Fiber Rings

Item	Description
A58-60-PLZR-KIT	Polarizer /Analyzer Kit with A5850SA036 and A6050SA036 Fiber Ring For use
A66-PLZR-KIT	Polarizer /Analyzer Kit with A6664SA036 Fiber Ring For use
A82-PLZR-KIT	Polarizer /Analyzer Kit with A8278SA036 Fiber Ring For use

### Adapters To Mount Fiber Ring Lights to Various Microscopes & Optical Sys-

Adapter	Type	Attach- ment	Outside Diameter	Leica (B & L)	Nikon	Olympus	Meiji
AN-1-5	Male Threads	1.500" (38.1 mm)	2.28" (58 mm)	SZ 1-5			
AN-1-10	Male Threads	1.890" (48 mm)	2.28" (58 mm)		SMZ1 SMZ1b	SZ11 30 40 60	
AN-1-EMZ	Male Threads	1.970" (50 mm)	2.28" (58 mm)				EMZ
AN-1-645	Set Screws	Set Screws	2.28" (58 mm)		645 745		
AN-1-S4S6	Male Threads		2.28" (58 mm)	S4 S6			

ch3

Selection Guide

12

# Annular Fiber Ring

- A** | A = Annular Fiber Optic Ring
- 5** | Top of Ring I.D. in mm
- 8** |
- 5** | Bottom Ring I.D. in mm
- 0** |
- S** | Exterior Sheathing  
M = Black Polymer Over Monocoil (Black Smooth)  
S = Stainless Steel Interlock (Shiny, Ridges)  
P = Black PVC
- A** | End Tips  
D = 0.312" (7.92 mm)  
A = 0.625" (15.87 mm)
- 0** |
- 3** | Cable length in Inches
- 6** |

