

Single and Dual Backlights

Patented SCHOTT Backlights are calibrated to provide bright, even illumination for Microscopy and Machine Vision applications.



8" x 8" Backlight, A08927



Dual 2" x 2" Backlight, A08922



IR Filter A08921

Product and Performance Characteristics

- Calibrated with DDL-bulb from ± 13 to ± 15 gray scale levels at a mean of 200, gamma setting of 1.0, using a patented process to create diffuse, uniform illumination within the active area (Uniformity scans are available upon request)
- The white acrylic diffuser plate provides the optimum combination of uniformity and intensity, a protective IR filter is included with every unit
- Backlight housing is made of rugged, black anodized aluminum, the plastic fiber bundle is protected with flexible PVC covered metal tubing
- Compact, low profile housing fits in small spaces
- Can be used to create a crisp edge definition, or soft, diffuse incident light
- Dual and quad backlights increase lighting versatility, additional combinations and sizes can be custom ordered
- Intended for use with strobes and ColdVision Series light sources; other sources, particularly those without an IR filter, may damage the plastic fibers
- ColdVision dichroic color filters can be used on the products in conjunction with the A08931 backlight color filter adapter (see photo)

Backlights Single Configuration

Part No.	Active Area	Housing Dimensions	Gray Scales	Common Bundle Length
A08920	2" x 2" (51 x 51)	4" x 2.6" x .59" (102 x 66 x 14.9)	± 13	40" (1016)
A08923	3" x 3" (76 x 76)	6" x 3.5" x .75" (152 x 89 x 16)	± 13	40" (1016)
A08925	4" x 4.88" (102 x 124)	9" x 5" x .78" (229 x 127 x 19.7)	± 13	40" (1016)
A08927	8" x 8" (203 x 203)	12" x 9" x 1" (305 x 229 x 25.4)	± 15	40" (1016)

Backlights Dual Configuration

Part No.	Active Area	Housing Dimensions	Gray Scales	Common Bundle Length
A08922	2" x 2" (51 x 51)	4" x 2.6" x .59" (102 x 66 x 14.9)	± 13	42" (1067)
A08926	4" X 4.88" (102 X 124)	9" X 5" X .78" (229 X 127 X 19.7)	± 13	37" (940)

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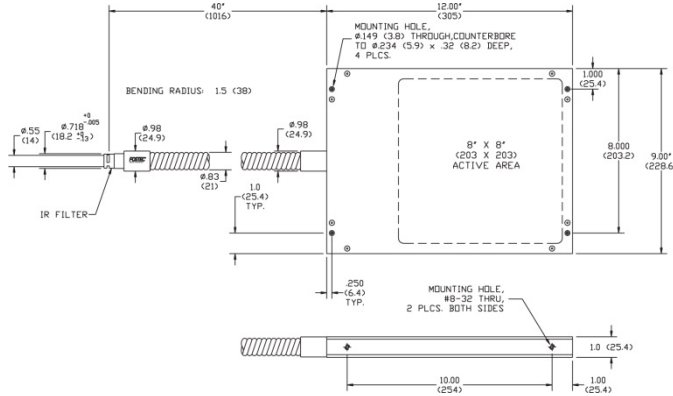


Specifications

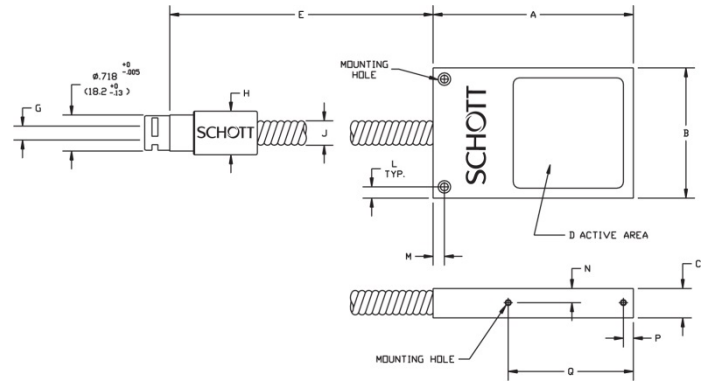
Dimensions in () are in mm

Input: Black Anodized Aluminium
 Body: Black Anodized Aluminium
 Sheathing: PVC Covered Metal Tubing

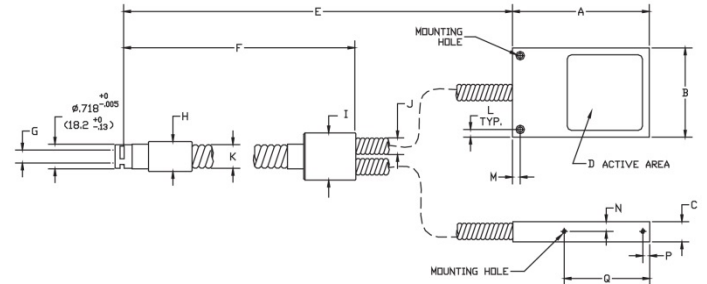
8" x 8" Backlight, A08927



Single Backlights A08920, A08923, A08925



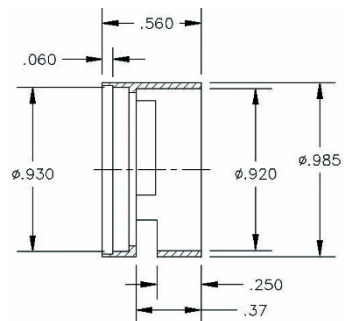
Dual Backlights, A08922, A08924 & A08926



Matrix for Single and Dual Backlights

Part No.	Housing Dimensions LX W X H	Active Area	Overall Bundle Length
Ref. Letter	A, B, C	D	E
A08920	4"x2.6"x.59" (102x66x14.9)	2"x2" (51x51)	40" (1016)
A08922	4"x2.6"x.59" (102x66x14.9)	2"x2" (51x51)	42" (1067)
A08923	6"x3.5"x.75" (152x89x19.1)	3"x3" (76x76)	40" (1016)
A08924	6"x3.5"x.75" (152x89x15.9)	3"x3" (76x76)	40" (1016)
A08925	9"x5"x.78" (229x127x19.7)	4"x4.88" (102x124)	37" (940)
A08926	9"x5"x.78" (229x127x19.8)	4"x4.88" (102x124)	37" (940)

IR Filter A08921



Warning: The IR filter on the input protects the fibers from damage caused by IR absorption.

Matrix for Single and Dual Backlights (Continuation)

Part No.	Common Bundle Length	Active Input Dia.	Ferrule Dia.	Coupler Dia.	Tubing Dia.	Top Mounting Hole Location	Top Mounting Hole Dimensions	Side Mounting Hole Location	Side Mounting Hole Dimensions	Bend Radius
Ref. Letter	F	G	H	I	JK	L/M	THRU/DIA/ C'BORE DIA/DEPTH	N/P/Q	THREAD/DEPTH	
A08920	N/A	.28" (7.0)	.87" (22.1)	N/A	.47" (12)	.225"/.225" (5.72/5.72)	.156"/.25"/.150" (4.0/6.4/3.8)	28"/.20"/2.50" (7.2/5.1/63.5)	#4-40 UNC 2A/.38 (9.6)	.6" (15)
A08922	10" (254)	.39" (9.9)	.87" (22.1)	1.38" (34.9)	.47"/.67" (12/17)	.225"/.225" (5.72/5.72)	.156"/.25"/.150" (4.0/6.4/3.8)	.28"/.20"/2.50" (7.16/5.1/63.5)	#4-40 UNC 2A/.38 (9.6)	.6"/1.2" (15)/(30)
A08923	N/A	.32" (8.1)	.87" (22.1)	N/A	.60" (15)	.187"/.187" (4.75/4.75)	.177"/.28"/.165" 4.5/7.1/4.2	.32"/100"/5.00" (8.1/25.4/127)	#6-32/.25" (6.4)	1" (25)
A08925	N/A	.39" (9.9)	.87" (22.1)	N/A	.68" (17.3)	.425"/.425" (10.80/10.80)	.250"/.50"/.300" (6.4/12.7/7.6)	.36"/.20"/5.75" (9.1/5.08/151)	#6-32 UNC 2A/.38 (9.6)	1" (25)
A08926	10" (254)	.55" (13.8)	.98" (24.9)	1.50" (38.1)	.68"/.83" (17/21)	.425"/.425" (10.80/10.80)	.250"/.50"/5.00" (6.4/12.7/7.6)	.36"/.20"/5.75" (9.1/5.08/146)	#6-32 UNC 2A/.38" (9.6)	1/1.5" (25)/(38)

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PANELite® Backlights

A versatile addition to the extensive line of our patented backlights.



PANELite® Backlight with acrylic diffuser plate, A23020



PANELite® Backlight with adhesive back, A23000

Typical Applications

- Glass Inspection
- Edge detection
- Photography
- Instrumentation display

Special Configurations

- Due to the special nature of these products, all models are made-to-order
- PANELite® backlights can be manufactured with different active areas, placement of outputs and mounting hole locations; contact us for a custom quote

NOTE: All standard PANELite® backlight configurations have the same input dimensions.

Product and Performance Characteristics

- Patented process creates diffuse, uniform illumination within the active area
- Slim profile to fit the most restrictive space requirements and economical since no housing is required
- Dependable performance built into three standard configurations, all with an IR filter included
- Flexible panel A23000 can create a seamless, curved background and can be trimmed to final size
- When used with a curved diffuser (not included) PANELite® backlights are ideal for multi-camera inspection of cylindrical surfaces
- Intended for use with strobes and ColdVision Series light sources; other sources, particularly those without an IR filter, may damage the plastic fibers
- Can be used with all of our dichroic color filters in conjunction with the A08931 backlight color filter adapter

PANELite® Backlights

Part No.	Description	Calibrated Area	Panel Size	Overall Thickness
A23000	Flexible, adhesive back	3" x 5" (76 x 127)	4" x 6" (102 x 152)	.05" (1.3)
*A23010	Non-flexible, black anodized aluminum back	3" x 5" (76 x 127)	4.8" x 9" (122 x 229)	.09" (2.3)
*A23020	Non-flexible, black anodized aluminum plate with acrylic diffuser plate	3" x 5" (76 x 127)	4.8" x 9" (122 x 229)	.5" (12.7)
* Made-to-order products				

PANELite® Backlight Options

Part No.	Description	
*A08931	Color filter adapter	Fits backlight light source adapters with .718" (18.2) diameter input size
* Made-to-order product		

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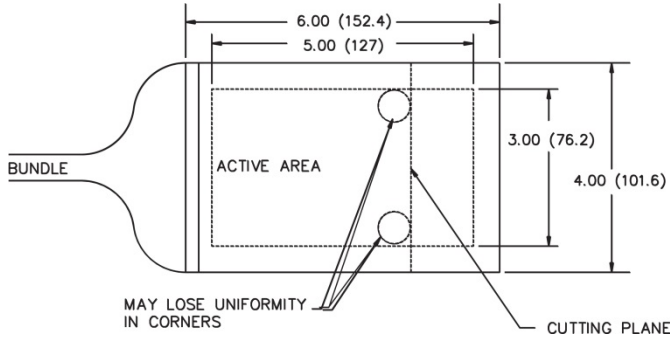


Specifications PANELite® Backlights

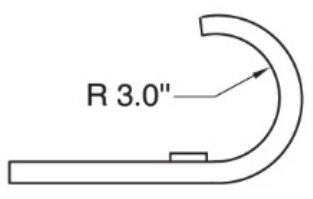
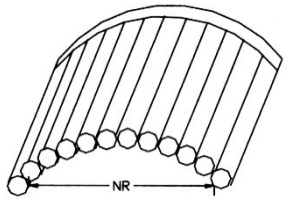
All standard PANELite® backlight configurations have the same input dimensions.

Dimensions in () are in mm

A23000 PANELite® Backlight



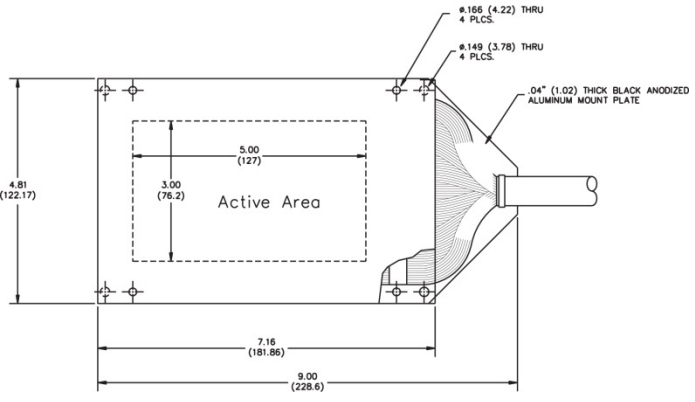
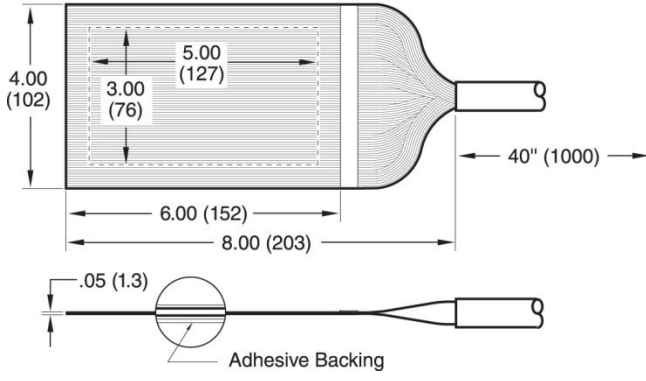
Warning : This product contains plastic fibers. To avoid fiber damage use only with SCHOTT or other approved light sources. Do not use input filters or diffusers without a SCHOTT adapter. Thermal transfer may cause damage to the fibers. All PANELite® Backlights have permanent input IR filters which must be kept clean. Clean panels with isopropanol only. OTHER SOLVENTS will damage the fiber and affect uniformity.



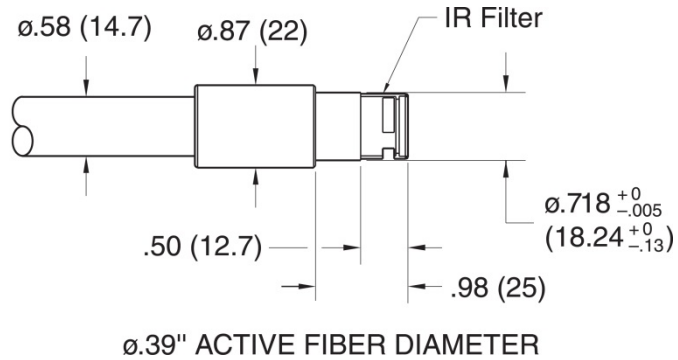
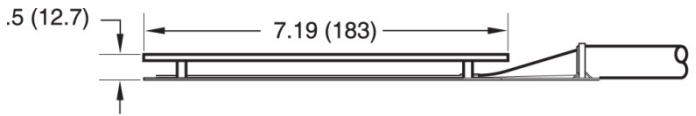
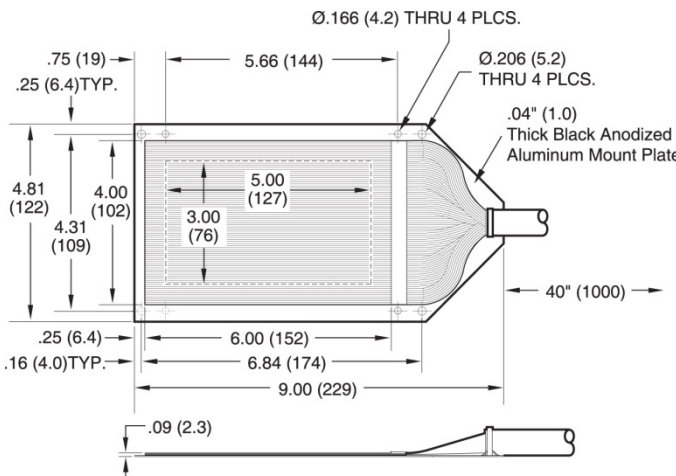
Do not bend parallel to fiber direction

Bending Radius

A23020 PANELite® Backlight



A23010 PANELite® Backlight



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