

Band-Pass Filters

for Machine Vision Camera Lenses

Hard-Coated Filters:

Superior durability



Band-Pass Filters Designed for Use with LED Light Units



Ideal for LED wavelength
Highly transmissive
Hard-coated filters with superior durability
12 different models
Each filter available in 25 sizes
Total of 300 Models



Band-pass Filters Designed

Band-Pass Filters

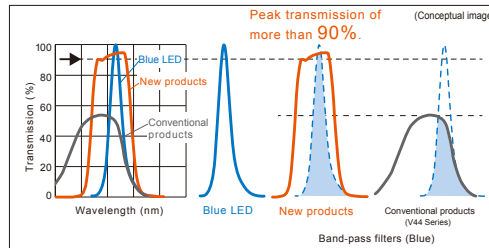
for Machine Vision Camera Lenses

Hard-coated Filters:

Superior durability

Features

- Ideal for LED wavelength
- Highly transmissive
- Hard-coated filters with superior durability
- 12 different models
- Each filter available in 25 sizes
- Total of 300 Models



Model Name

Example:

F-BP470-□

Wavelength
Filter size

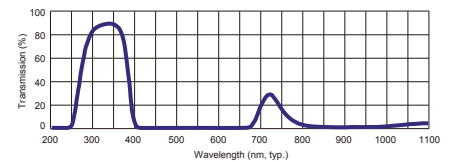
BP: Band-pass filter
LP: Sharp-cut filter or protective filter
SP: Short-pass filter

F-BP324-□

For Ultraviolet Light Units



Filter color	Ultraviolet
Lens material	Glass
Useful range	290 to 365 nm
Full width at half max	105 nm
Wavelength tolerance	+/-10 nm
Peak transmission	>90 %
Filter size	Refer to Table of Filer Dimensions.

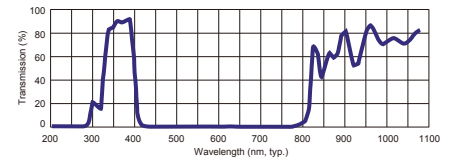


F-BP365-□

For Ultraviolet Light Units



Filter color	Ultraviolet
Lens material	Glass
Useful range	335 to 400 nm
Full width at half max	80 nm
Wavelength tolerance	+/-10 nm
Peak transmission	>85%
Filter size	Refer to Table of Filer Dimensions.

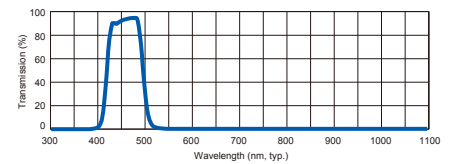


F-BP470-□

For Blue Light Units



Filter color	Blue
Lens material	Glass
Useful range	425 to 495 nm
Full width at half max	85 nm
Wavelength tolerance	+/-10 nm
Peak transmission	>90 %
Filter size	Refer to Table of Filer Dimensions.

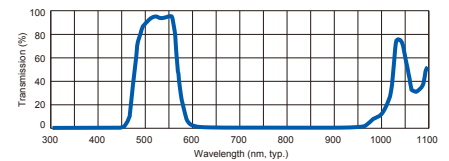


F-BP505-□

For Blue Light Units



Filter color	Cyan
Lens material	Glass
Useful range	485 to 550 nm
Full width at half max	90 nm
Wavelength tolerance	+/-10 nm
Peak transmission	>90 %
Filter size	Refer to Table of Filer Dimensions.

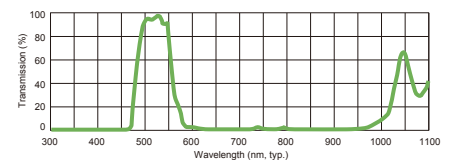


F-BP525-□

For Green Light Units



Filter color	Light green
Lens material	Glass
Useful range	500 to 555 nm
Full width at half max	80 nm
Wavelength tolerance	+/-10 nm
Peak transmission	>90 %
Filter size	Refer to Table of Filer Dimensions.



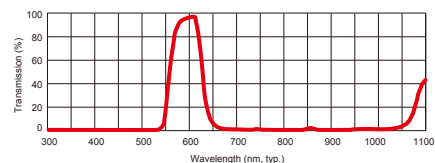
for Use with LED Light Units

F-BP590-□

For Red Light Units



Filter color	Orange
Lens material	Glass
Useful range	560 to 600 nm
Full width at half max	70 nm
Wavelength tolerance	+/- 10 nm
Peak transmission	>90 %
Filter size	Refer to Table of Filer Dimensions.

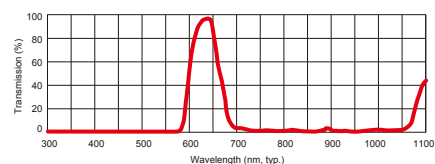


F-BP635-□

For Red Light Units



Filter color	Light red
Lens material	Glass
Useful range	615 to 645 nm
Full width at half max	60 nm
Wavelength tolerance	+/- 10 nm
Peak transmission	>90 %
Filter size	Refer to Table of Filer Dimensions.

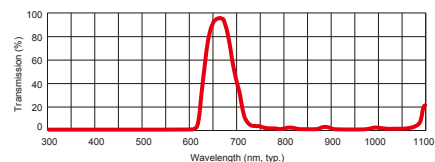


F-BP660-□

For Red Light Units



Filter color	Dark red
Lens material	Glass
Useful range	640 to 680 nm
Full width at half max	65 nm
Wavelength tolerance	+/- 10 nm
Peak transmission	>90 %
Filter size	Refer to Table of Filer Dimensions.

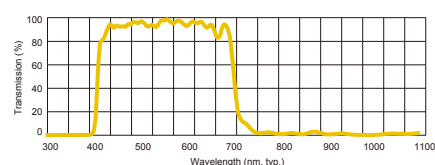


F-SP700-□

Short-Pass Filters



Filter color	Yellow
Lens material	Glass
Useful range	410 to 690 nm
Cut-on wavelength (50% transmission)	400/700 nm (cut-on / cut-off)
Wavelength tolerance	+/- 10 nm
Peak transmission	>90 %
Filter size	Refer to Table of Filer Dimensions.

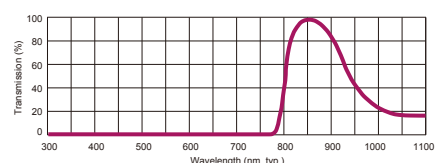


F-BP850-□

Band-Pass Filters for Infrared Light Units



Filter color	Infrared
Lens material	Glass
Useful range	820 to 910 nm
Full width at half max	160 nm
Wavelength tolerance	+/- 10 nm
Peak transmission	>90 %
Filter size	Refer to Table of Filer Dimensions.

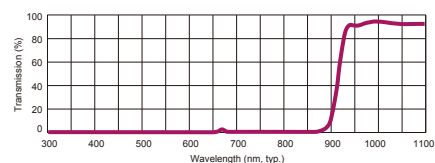


F-LP920-□

Sharp-Cut Filters

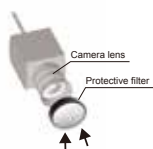


Filter color	Infrared (sharp-cut)
Lens material	Glass
Useful range	930 to 1,100 nm
Cut-on wavelength (50% transmission)	920 nm
Wavelength tolerance	+/- 10 nm
Peak transmission	90 %
Filter size	Refer to Table of Filer Dimensions.



F-LP340-□

Protective Filters



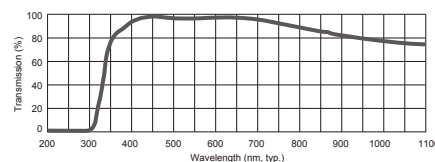
Protects the camera lens from scratches and dust.



Anti-reflection coating glass is used.

Lens material	Glass
Useful range	350 to 800 nm
Cut-on wavelength (50% transmission)	340 nm
Wavelength tolerance	+/- 10 nm
Peak transmission	98 %
Filter size	Refer to Table of Filer Dimensions.

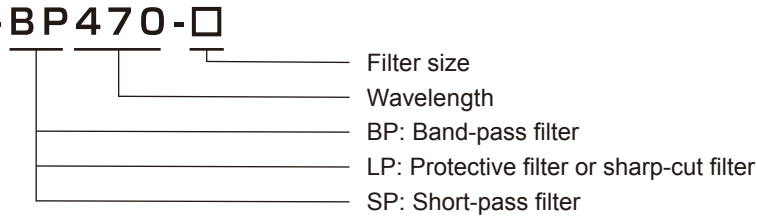
Please contact your CCS sales representative for information on acrylic protective filters.



Each filter type is available in 25 sizes.

Interpreting Model Names

Example: **F-BP470-□**



Dimension (mm)

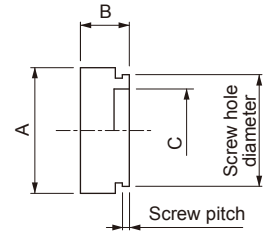


Table of Filter Dimensions (mm)

End of the model name (-□)	Screw hole diam. x Screw pitch	A: Outer diameter	B: Thickness	C: Aperture diameter
13.25	M13.25 x P0.5	Ø14.75	7.5	Ø10.5
22.5	M22.5 x P0.5	Ø24	7	Ø18.5
25.5	M25.5 x P0.5	Ø27.5	7	Ø21
27	M27 x P0.5	Ø29	7	Ø22.5
30.5	M30.5 x P0.5	Ø32.5	7	Ø25.5
34	M34 x P0.5	Ø36	7	Ø29
35.5	M35.5 x P0.5	Ø37.5	7	Ø30.5
37	M37 x P0.75	Ø39	7	Ø32.5
37.5	M37.5 x P0.5	Ø39.5	7	Ø32.5
39	M39 x P0.5	Ø41	7	Ø34
40.5	M40.5 x P0.5	Ø42.5	7	Ø35.5
43	M43 x P0.75	Ø45	7	Ø38
46	M46 x P0.75	Ø48	7	Ø41

End of the model name (-□)	Screw hole diam. x Screw pitch	A: Outer diameter	B: Thickness	C: Aperture diameter
49	M49 x P0.75	Ø51	7	Ø44
52	M52 x P0.75	Ø54	7	Ø47
55	M55 x P0.75	Ø57	7	Ø50
58	M58 x P0.75	Ø60	7	Ø53
62	M62 x P0.75	Ø64	7	Ø57
67	M67 x P0.75	Ø70	8.3	Ø62.5
72	M72 x P0.75	Ø75	8.3	Ø67.5
77	M77 x P0.75	Ø80	8.3	Ø73
82	M82 x P0.75	Ø84	8	Ø77.5
86	M86 x P1.0	Ø89	8.3	Ø81.7
95	M95 x P1.0	Ø98.2	10	Ø89.9
105	M105 x P1.0	Ø107.8	8.5	Ø100

Test Kit



Model name:
F-FK-10



This Kit includes various filters.

In addition to the four filters that are described in this brochure, it also includes filters that are available only in this Kit. When you select Light Units, you can use the filters with the suitable wavelengths to evaluate the Light Units.

Contents (Total of 12 models)

UV (290 to 365 nm) ● F-BP324-27

Blue (425 to 495 nm) ● F-BP470-27

Cyan (485 to 550 nm) ● F-BP505-27

Light green (500 to 555 nm) ● F-BP525-27

Orange (560 to 600 nm) ● F-BP590-27

Light red (615 to 645 nm) ● F-BP635-27

Dark red (640 to 680 nm) ● F-BP660-27

Infrared (band-pass) (820 to 910 nm) ● F-BP850-27

Infrared (sharp-cut) (930 to 1,100 nm) ● F-LP920-27

Protective filter (350 to 800 nm) ● F-LP340-27

Step adapter (M25.5-M27) ● F-SU25.5-27

Step adapter (M30.5-M27) ● F-SD30.5-27

We accept custom orders for filter wavelengths. Please do not hesitate to inquire.

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CAUTION

- To ensure proper and safe use of the product, please read the Instruction Guide completely before using the product.
- The design and specifications of this product are subject to change without notification for product improvement.

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For information on your nearest CCS office, refer to our website.
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