



Filter Wheels

<https://www.flicamera.com>
USA 585-624-3760

Filters listed in Red have been discontinued. Specifications are for reference only.

All filter wheels use unmounted filters only. All use a stepper motor and magnetic Hall-effect homing device.

FLIFilter software is included in the FLI Software Installation Kit on <https://www.flicamera.com/support>

For additional detail regarding mechanical specifications, please see drawings at <https://www.flicamera.com/accessories/accessories>



Model	# of Wheels	FW Thickness ¹ inch (mm)	Weight lbs (kg)	Filter Positions	Filter Size ²	Filter Thickness	Camera Side	Optics Side	OBFD with Long BFD ³	OBFD with Short BFD ⁴
CFW1-5	1	0.810 (20.57)	1.7 (0.77)	5	2" / 50 mm ⁵	3-5 mm ⁶	FLI Dovetail	2" 24tpi	41.6 mm	36.3 mm
CFW1-8-25	1	0.810 (20.57)	1.7 (0.77)	8	1" / 25 mm	3-5 mm ⁶	FLI Dovetail	2" 24tpi	41.6 mm	36.3 mm
CFW1-8-28	1	0.810 (20.57)	1.7 (0.77)	8	28 mm	3-5 mm ⁶	FLI Dovetail	2" 24tpi	41.6 mm	36.3 mm
CFW2-7	1	0.822 (20.88)	2.9 (1.32)	7	2" / 50 mm ⁵	1-5 mm	FLI Dovetail	2" 24tpi	41.9 mm	36.6 mm
CFW3-10	1	0.848 (21.54)	6.9 (3.14)	10	50 mm SQ	1-5 mm	FLI Dovetail	3" 24tpi	42.5 mm	37.2 mm
CFW3-12	1	0.848 (21.54)	6.9 (3.14)	12	2" / 50 mm ⁵	1-5 mm	FLI Dovetail	3" 24tpi	42.5 mm	37.2 mm
CFW3-20	1	0.848 (21.54)	6.9 (3.14)	20	25 or 28 mm	1-5 mm	FLI Dovetail	3" 24tpi	42.5 mm	37.2 mm
CFW4-5	1	0.785 (19.94)	2.9 (1.32)	5	50 mm SQ	1-5 mm	FLI Dovetail	3" 24tpi	40.9 mm	35.6 mm
CFW5-7	1	0.85 (21.59)	4.3 (1.95)	7	50 mm SQ	1-5 mm	FLI Dovetail	3" 24tpi	42.6 mm	37.3 mm
CFW8-8RND	1	0.73 (18.6)	4.03 (1.8)	7+1 ⁷	50 mm	3-5 mm	M4 x 0.7 BP ⁸	M4 x 0.7 BP	39.5 mm	34.2 mm
CFW8-8SQ	1	0.73 (18.6)	4.03 (1.8)	7+1 ⁷	50 mm SQ	3-5 mm	M4 x 0.7 BP ⁸	M4 x 0.7 BP	39.5 mm	34.2 mm
CFW9-5	1	0.595 (15.11)	3.2 (1.45)	5	65 mm SQ	1-5 mm	10-32 BP ⁸	M92-1	36.1 mm	30.8 mm
CFW10-7	1	0.731 (18.57)	3.2 (1.45)	7	65 mm SQ	1-5 mm	10-32 BP ⁸	M92-1	39.6 mm	34.3 mm
CFW14-5	1	0.73 (18.5)	5.2 (2.36)	5	74.8-76.5 mm SQ	1-5.5 mm	M4 x 0.7 BP	M4 x 0.7 BP	39.5 mm	34.2 mm
CL-1-10	2	1.10 (27.94)	4.3 (1.95)	10 ⁹	50 mm SQ	1-5 mm	CL ZTA ¹⁰	CL ZTA	48.9 mm ¹¹	43.6 mm ¹¹
CL-1-14	2	1.10 (27.94)	4.3 (1.95)	14 ⁹	2" / 50 mm ⁵	1-5 mm	CL ZTA	CL ZTA	48.9 mm ¹¹	43.6 mm ¹¹
CL-1-16	2	1.10 (27.94)	4.3 (1.95)	16 ⁹	36 mm	1-5 mm	CL ZTA	CL ZTA	48.9 mm ¹¹	43.6 mm ¹¹
CL-1-20	2	1.10 (27.94)	4.3 (1.95)	20 ⁹	25 mm	1-5 mm	CL ZTA	CL ZTA	48.9 mm ¹¹	43.6 mm ¹¹

Notes:

1. Front to back thickness of the filter wheel excluding motor, in inches (mm).
2. Filters are round unless followed by SQ, indicating square.
3. Long BFD = cameras with 21 mm back focal distance. OBFD = Optical back focal distance = image plane of CCD to optics side of filter wheel. Also see note 11.
4. Short BFD = cameras with 15.7 mm BFD. Adjust for specific camera BFD per mechanical drawing. Some drawings show mechanical distance rather than optical. Also see notes 3, 11, and 12.
5. Carousel will accept either 2" or 50 mm filters.
6. May accept thinner filters with an O-ring; however, the O-ring will reduce the aperture.
7. One position has no aperture (for use as a shutter for calibration images).
8. BP = bolt pattern. Mates directly to cameras with optional front plate.
9. Because the carousels overlap, one position in each is normally left open. For example, eight + two open positions for the CL-1-10.
10. CL ZTA = CenterLine Zero Tilt Adapter™
11. Assumes CL ZTA flange on front of camera. Add 9.22mm for CL adapter to FLI dovetail (AD70 or AD71).
12. For most materials, subtract 1/3 of the thickness of any filter (e.g. subtract 1mm for a 3mm thick filter) as well as 1/3 of the thickness of any cover glass on the CCD.