

Filter Wheels (ML & PL Cameras)

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/software/index.html>.

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

Model	# of Wheels	FW Thickness ¹ inch (mm)	Weight lbs (kg)	Filter Positions	Filter Size ²	Filter Thickness	Camera Side	Optics Side	OBFD with PL/ML65 ³	OBFD with MicroLine 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	1	0.810 (20.57)	1.7 (0.77)	8	28 mm ⁷	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	28 mm ⁷	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
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. PL OBFD = Optical back focal distance (image plane of CCD to optics side of filter wheel) for PL or ML camera with 65 mm shutter. See note 12.
4. ML OBFD = OBFD for standard 25mm or 45mm MicroLine with FLI dovetail + filter wheel. See note 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. May be made for 25 mm / 1" filters on special request.
8. BP = bolt pattern. Mates directly to ProLine, MicroLine, or Kepler 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.