



# Color Filter Wheel Specifications

All filter wheels below are software controlled. All use a stepper motor and magnetic Hall-effect homing device.

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

Model	# of Wheels	FW Thickness <sup>1</sup> inch (mm)	Weight lbs (kg)	Filter Positions	Filter Size <sup>2</sup>	Filter Thickness	Frame Connection <sup>3</sup>	Cover Connection <sup>4</sup>	OBFD with ProLine <sup>5</sup>	OBFD with MicroLine <sup>6</sup>
CFW1-5	1	0.810 (20.57)	1.7 (0.77)	5	2" / 50 mm <sup>7</sup>	3-5 mm	2.930" pocket	2" 24tpi	41.6 mm	36.3 mm
CFW1-8	1	0.810 (20.57)	1.7 (0.77)	8	28 mm <sup>8</sup>	3-5 mm	2.930" pocket	2" 24tpi	41.6 mm	36.3 mm
CFW2-7	1	0.822 (20.88)	2.9 (1.32)	7	2" / 50 mm <sup>7</sup>	1-5 mm	2.930" pocket	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	2.930" pocket	3" 24tpi	42.5 mm	37.2 mm
CFW3-12	1	0.848 (21.54)	6.9 (3.14)	12	2" / 50 mm <sup>7</sup>	1-5 mm	2.930" pocket	3" 24tpi	42.5 mm	37.2 mm
CFW3-20	1	0.848 (21.54)	6.9 (3.14)	20	28 mm <sup>8</sup>	1-5 mm	2.930" pocket	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	2.930" pocket	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	2.930" pocket	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 <sup>9</sup>	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	M92-1	39.6 mm	34.3 mm
CL-1-10	2	1.10 (27.94)	4.3 (1.95)	10 <sup>10</sup>	50 mm SQ	1-5 mm	3.43" ZTA <sup>11</sup>	3.43" ZTA	48.9 mm <sup>14</sup>	43.6 mm <sup>14</sup>
CL-1-20	2	1.10 (27.94)	4.3 (1.95)	20 <sup>10</sup>	25 mm <sup>12</sup>	1-5 mm	3.43" ZTA	3.43" ZTA	48.9 mm <sup>14</sup>	43.6 mm <sup>14</sup>

## 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. Typically the camera side of the filter wheel.
4. Typically the optical side of the filter wheel (for example, lens or telescope).
5. PL OBFD = Optical back focal distance (image plane of CCD to cover side of filter wheel) for PL or ML camera with 63.5 mm shutter. See note 13.
6. ML OBFD = OBFD for standard MicroLine with FLI dovetail + filter wheel. See note 13.
7. Carousel will accept either 2" or 50 mm filters.
8. May be made for 25 mm on special request.
9. BP = bolt pattern
10. Because the carousels overlap, one position in each is normally left open. Eight + two open positions for the CL-1-10; eighteen + two open positions for the CL-1-20.
11. ZTA = CenterLine Zero Tilt Adapter™
12. May be made for 28 mm on special request.
13. 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.
14. Assumes CL ZTA flange on front of camera. Add 9.22mm for CL adapter to FLI dovetail (AD70 or AD71).

www.flicamera.com · 1250 Rochester St. · Lima NY 14485 USA · 585-624-3760

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