

Fixed focal length C-mount liquid lenses

| Optimized design, large working distance range, low f-number without vignetting

C-mount entocentric lenses enable millisecond range focus in machine vision in manufacturing environments, life science and medical imaging.

[ELM-12-4.0-18-C](#)



[ELM-16-3.1-18-C](#)



[ELM-25-3.2-18-C](#)



[ELM-35-3.2-18-C](#)



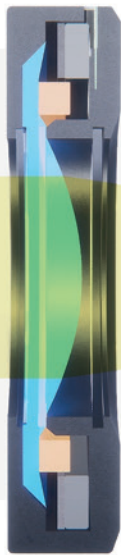
[ELM-50-3.5-18-C](#)



Optotune's electrical lens modules feature an optical design optimized for high imaging performance over a large working distance range. They embed Optotune's liquid lenses and support up to 1.1" sensors with pixel sizes down to 2.7 μm .

When paired with Optotune's optional embedded lens controller, precise and fast focal power adjustment becomes easy - even in environments with fluctuating temperatures.





Liquid lenses

C-mount liquid lenses are compact, electronically tunable lenses that replace traditional mechanical focusing systems. Instead of moving glass elements, they change the working distance of a system by adjusting the curvature of a liquid-filled lens core.

Applications

- Barcode scanners
- Quality control
- Industrial inspection
- Robot vision
- Packet sorting
- Box filling
- Palletizing
- Bin picking

Support Material

- Test reports
- Liquid lens control software
- Zemax files

Specifications:

Focal length	12, 16, 25, 35, 50 mm
F-number	3.1 to 5.6
Working distance	200 mm to ∞
Maximum image circle	18 mm
Wavelength range	>90% transmission 420 to 900 nm, best performance 425 to 675 nm
Relative illumination	higher than 95%
Mount	C-mount
Lens control	embedded or external controller

Alternative liquid lens modules are available through third-party manufacturers, featuring larger focal lengths up to 300 mm and supporting up to 32 mm image circle. For detailed information please consult www.optotune.com/elm-f-series

