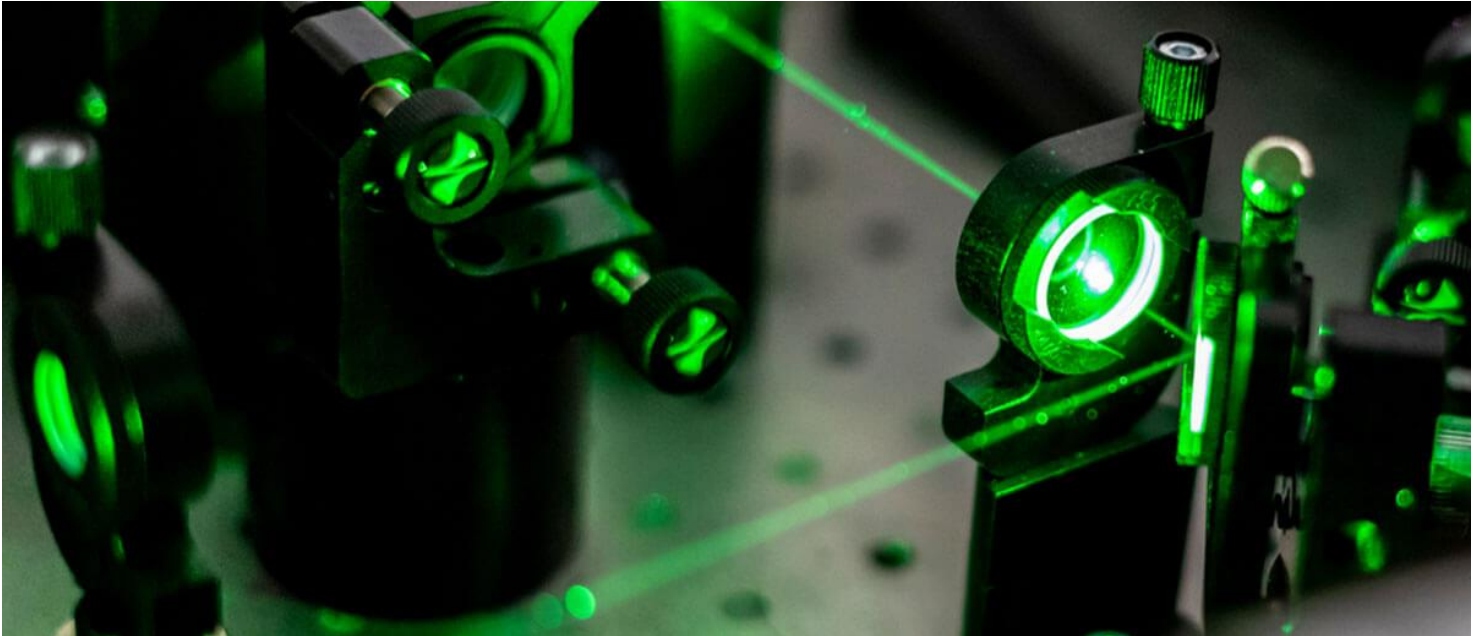




Liquid lens solution for laser beam conditioning



Corning® Varioptic® has developed an innovative multi-electrode lens that can control both focus and astigmatism. In the laser industry, beam conditioning and reshaping is a burning topic which can here be addressed with a single optical element with no moving parts. Controlled simultaneously, the sphere cylinder and tilt of the liquid surface allow the laser beam to be refocused, reshaped and redirected with high precision.

Customer's expectations

Our customer's request is to develop a laser beam conditioning device with the following capabilities:

- Focus control
- Cylinder control
- Axis control

An additional request was to have a compact solution for their portable device.

Selection of a liquid lens optical module

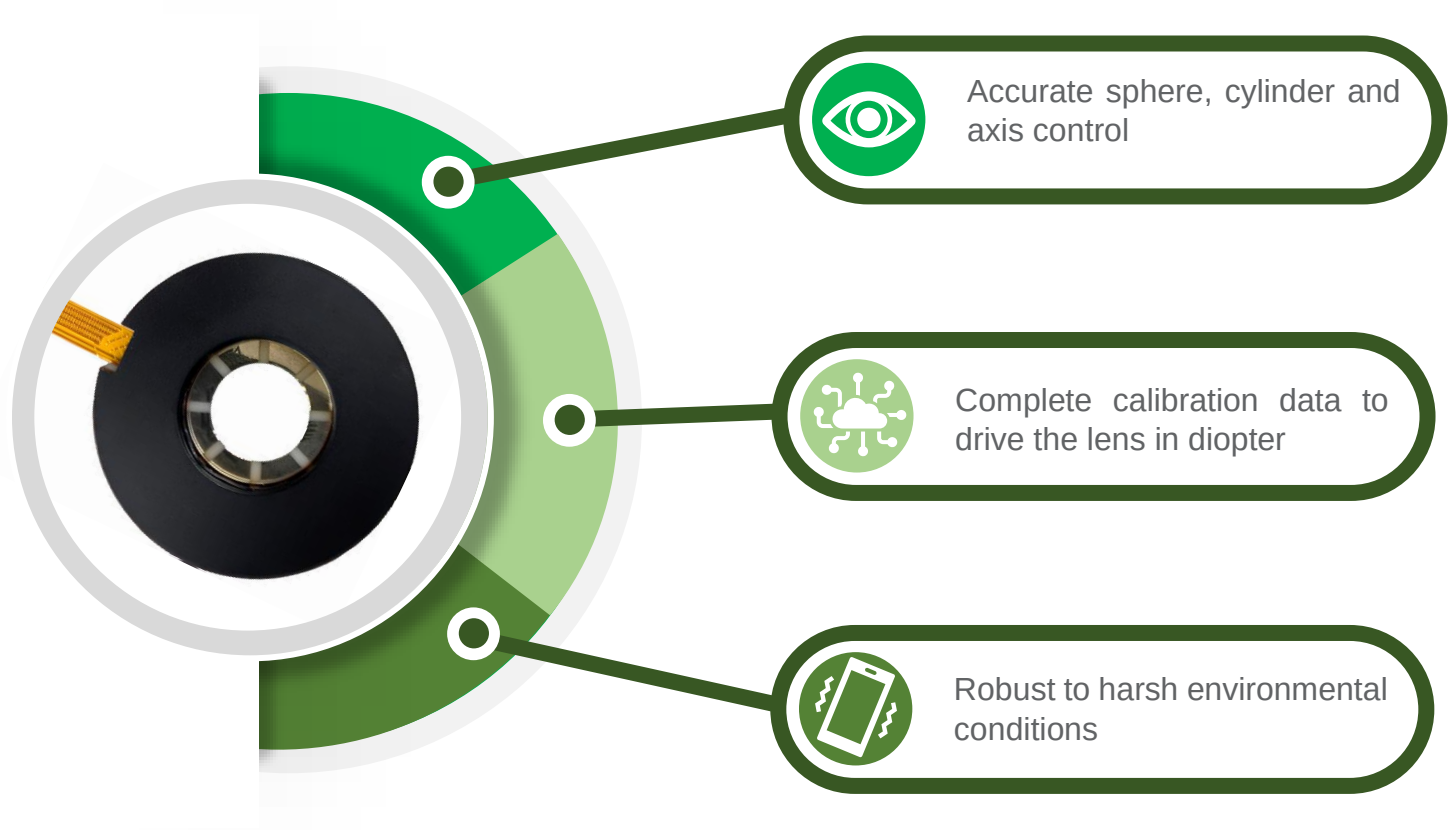
Based on the customer's optical requirements, Corning® Varioptic® was able to provide an off-the-shelf and fully calibrated liquid lens that fitted the technical specifications: the V-PE-80R0. This lens

has a clear aperture of 8 mm, a dynamic range of 24 diopters and a cylinder range of 5 diopters. Its axis can be rotated over 360°.

Thanks to the embedded electronics and calibration data, the lens can be directly driven in diopters to deliver an accurate control of the laser beam.

Liquid lenses from Corning® Varioptic® are robust to vibrations, accelerations, and shocks thanks to the iso-density of its liquid components. Additionally, their compact package can easily be integrated inside a portable device, ready to use in the field.

Key solution highlight



Contact us

You would like to know more about our products, or you have a specific use-case in mind?

Please visit our website: [Corning® Varioptic®](https://www.corning.com/variopic)

Or contact us at variopic@corning.com

Disclaimer

This content is owned by Corning® Varioptic®. Any re-use of this content can only be done after written permission by Corning® Varioptic®.