Technical data sheet

## Aspheres

## Customised, efficient and high quality

Compared to spherical lenses, aspheres have significantly better imaging properties. This is due to non-spherical shape. The resulting essential advantage is the ability to correct spherical aberrations.

Precision-molded aspheres are our speciality. We manufacture customised and standard aspheres with a diameter of up to 40 mm . Thanks to our innovative molding processes, we can also produce biconvex or meniscus lenses. In addition to the production of collimators, we also have experience in the production of special shapes of aspheres, such as segmented lenses or correction lenses. Thanks to our innovative processes, we can also produce biconvex or meniscus lenses.

Technical specifications

|  | Diameter ØD in mm | Center thickness <br> in mm | Edge thickness <br> in mm | Clear aperture <br> in mm | Numerical aperture <br> NA <br> in mm | Focal <br> length <br> EFL <br> in mm | Back focal length BFL <br> in mm | Axial wave front quality RMS <br> in waves | $\lambda$ in nm |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AC002 | 2.54 | 0.8 | 0.5 | 1.6 | 0.4 | 2.0 | 1.5 | 0.04 | $\begin{array}{r} 1,310 / \\ 1,550 \end{array}$ |
| AC024 | 3.00 | 1.84 | 0.96 | 2.70 | 0.47 | 2.86 | 1.71 | 0.05 | 1,507 |
| AC040 | 6.50 | 2.36 | 1.62 | 5.30 | 0.30 | 8.87 | 7.41 | 0.05 | 635 |
| AC048 | 1.90 | 0.8 | 0.5 | 1.6 | 0.4 | 2.0 | 1.5 | 0.04 | 1,520 |
| AC055 | 7.20 | 2.20 | 1.46 | 6.00 | 0.27 | 11.00 | 9.54 | 0.10 | 635 |
| AC055a | 6.00 | 2.20 | 1.51 | 5.50 | 0.25 | 11.00 | 9.54 | 0.10 | 635 |
| AC057 | 6.37 | 4.00 | 3.28 | 5.10 | 0.32 | 8.00 | 5.51 | 0.05 | 780 |
| AC059 | 10.50 | 3.00 | 1.76 | 9.10 | 0.30 | 15.00 | 13.14 | 0.10 | 780 |
| AC067 | 4.50 | 2.15 | 1.83 | 3.60 | 0.19 | 9.40 | 8.07 | 0.05 | 715 |
| AC090 | 5.00 | 2.56 | 2.05 | 3.80 | 0.28 | 6.50 | 5.00 | $<0.05$ | 650 |
| AC130 | 15.00 | 5.00 | - | 13.00 | 0.43 | 15.20 | 12.07 | 0.1 | 976 |
| AC144 | 8.00 | 2.663 | - | 7.200 | - | 11.32 | 9.75 | 0.08 | 635 |

Molded aspherical lenses and optical components in glass for telecommunication and laser collimating Customized solutions, stock items, coatings as required.

Other sizes and tolerances available per request.

