

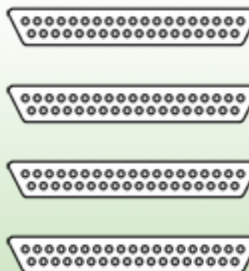
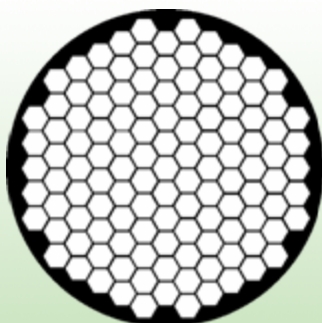
- The U-Flex-120-HEX-121 - unimorph deformable Mirror is designed to be applied in medical imaging, laser beam control and shaping, optical communications, and astronomy.
- The Mirror is capable of forming complex surface patterns, the shape of which is computer-controlled and well suited for compensation of low order aberrations (up to 10th order of Zernike).
- The SDK (C++) allows to operate all functions of the mirror and to achieve easy integration with user software.

VISIONICA

Deformable Mirror U-Flex-120-HEX-121

### TECHNICAL SPECIFICATIONS

|  |                         |
|--|-------------------------|
| Aperture diameter                              | 115 mm                  |
| Substrate                                      | Si                      |
| Stroke   | > 25 $\mu\text{m}$      |
| Effective control aperture                     | 100 mm                  |
| Number of control electrodes                   | 121                     |
| Control voltage                                | from -300 to +300 V     |
| Maximum order of operable Zernike polynomials  | 10                      |
| Reflecting coatings                            | Al + SiO <sub>2</sub>   |
| Optical Damage threshold                       | >0.2 mJ/cm <sup>2</sup> |
| Surface quality (RMS) with correction voltages | 60-40 $\text{nm}$       |
| Surface accuracy (scratch-dig)                 | 60-40                   |
| Hysteresis                                     | <15 %                   |
| Operating temperature                          | from +15 to +35 °C      |
| Storage temperature                            | from -30 to +70 °C      |
| Weight   | 1 kg                    |
| Size   | Ø166x41 mm              |

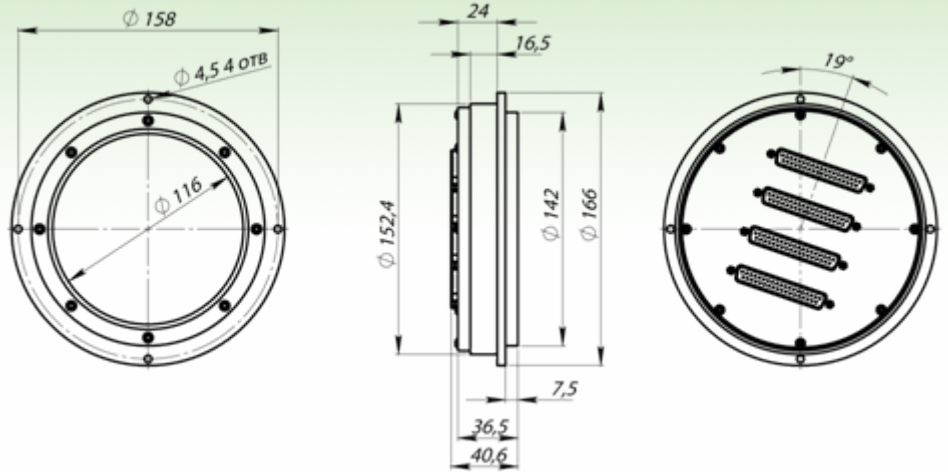


*Electrodes arrangement and electrical connectors (4 × 37-pin D-SUB)*

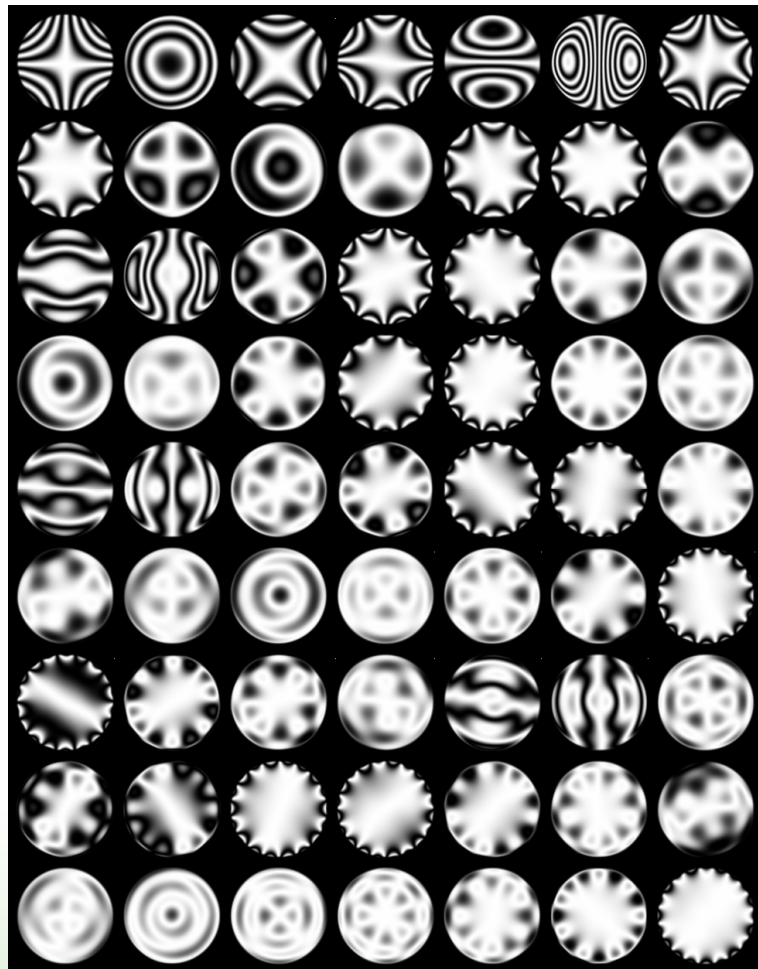


## Deformable Mirror U-Flex-120-HEX-121

### DIMENSIONS



### SIMULATION OF ZERNIKE POLYNOMIALS



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