# document no. 921-S7-08-00001- A-01

## **D.I.S Germany GmbH**

## Einzel Lens CF100, central mount, stainless steel

Electrostatic lenses are ion-optical elements used to guide and focus charged particle beams.

One of the most prominent representative is an Einzel lens which consists of three cylindrical electrodes. Focusing of the beam is achieved by applying a high voltage to the central electrode. Passing an Einzel lens does not change the energy of the charged particles.

Electrostatic lenses can be used in broad pressure ranges, down to ultra-high vacuum conditions.



Einzel lens CF100, central mount, stainless steel.

#### further reading:

 https://www.dis-eng.de/products/ charged-particle-beam-optics/ electrostatic-lenses/

#### **Special Features:**

- symmetrical design of electrode assembly based on intermediate flange solution
- · stainless steel housing
- DN100 CF beamline interface flanges
- 1st and 3rd electrode grounded
- DN16 CF 20 kV SHV feedthrough connected to electrode
- · 40 Millimeter electrode inner diameter
- Overall length 165 mm

#### **Optional Supplementing Devices:**

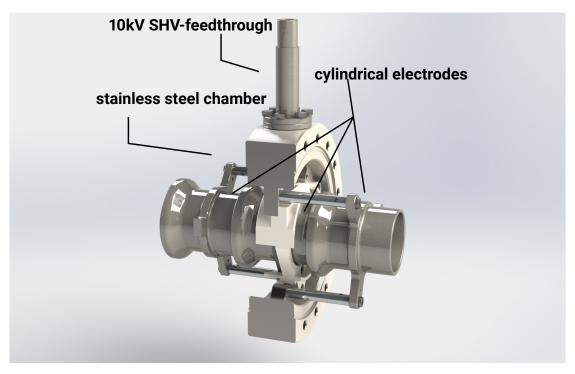
- power supply for the lens voltage
- · high voltage cable with 20 kV SHV connector

Please do not hesitate to contact us for additional support.





### Einzel Lens CF100, central mounted, stainless steel 921-S7-09-00001-B-01



Cross section of the Einzel lens CF 100, central mounted, stainless steel

TECHNICAL DATA	
maximum applicable lens voltage	±20 kV
pressure operating range	down to $1 \times 10^{-10}$ mbar
beamline interface flange	2 x DN100 CF
high voltage feedthrough	DN16 CF
connectors	20 kV SHV connector
maximum beam width	40 mm
maximum bakeout temperature	150 °C
flange to flange distance	35 mm
length of lens system	165 mm
approx. box size (length x width x height)	155 mm x 165 mm x 220 mm

