A wide range of high tech vacuum applications use optical signals; from simple process controls up to laser interferometry. These signals have to be guided into a vacuum chamber.

VACOM has the technical know how and offers intelligent solutions for the combination of optical elements and vacuum components. Our product portfolio for vacuum optics consists of a large number of products with highest quality and quick availability with the requirements of many common applications.

We offer suitable products with KF, ISO, CF and QCF connections for all ranges from rough vacuum up to ultra high vacuum for a smooth operation of your processes. From our own experts and technical expertise as well as from our strong partners, we are well prepared for your requests.

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**Optical Fiber Feedthroughs**

Pioneering solutions for a flexible and highly efficient guidance of optical information and signals into vacuum.

- FC/PC, FC/APC and FSMA connectors
- Minimal optical losses
- He leak rate < 1,0 x 10^-10 mbar l/s
- Extremely low outgassing rates
- Feedthroughs completely made of 1.4404 stainless steel

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**Optical Fiber Material with in-stock Feedthroughs**

Guaranteed quick delivery times through an effective modular system.

- Integration of custom fibers in feedthroughs available on request
- Compatible with all common flange systems and in combination with electrical feedthroughs

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**Fiber Optic Cables**

We offer a wide range of patch cords optimized for our optical fiber feedthroughs.

- Atmospheric and vacuum optimized fibre optic cords
- In-stock standard as well as customized lengths
- Customized configurations available
High Precision Optics Series

Ideal connection of elastomer fittings combined with high precision optics to achieve and preserve high optical quality.

- High performance BBAR\textsuperscript{1} or VAR\textsuperscript{2} coatings with guaranteed laser damage threshold
- Flatness\textsuperscript{3}: \(\lambda / 10\)
- Scratch-dig\textsuperscript{3}: 10-5
- He leak rate < 5 \(\times\) 10\textsuperscript{-10} mbar l/s

\textsuperscript{1} Broad band antireflective coatings
\textsuperscript{2} Narrow band antireflective coatings
\textsuperscript{3} For fused silica viewports, depends on optical material

Optical Material

Viewports for Optical Applications

Maximum transmission values maintaining your light characteristics through high performance optical elements.

- Optional antireflective coatings
- Flatness\textsuperscript{3}: \(\lambda / 4\)
- Scratch-dig\textsuperscript{3}: 20-10

\textsuperscript{3} For fused silica viewports, depends on optical material

Standard Viewports

Optimized system for viewing and illumination.

- Maximal view diameter
- Standard grade borosilicate or fused silica
- Available for many KF, ISO, CF and QCF flanges

Viewports according to Customer Requirements

In-house production, high design competence and technological know how allow us to customize your product ideas fast and efficient.

- Customized flange configurations
- Adapted optical materials
- Special coatings on request
- Optics with wedge angles possible