ADP-84UV-CF25



Adjustable CF Flange Adapter for Plasma Chamber UV Monitoring

The **ADP-84UV-CF25** is an adjustable flange adapter designed specifically for **plasma chamber optical monitoring applications.** The adapter mounts directly onto a chamber viewport flange and provides a mechanical interface for connecting an **84-UV collimating lens assembly.**

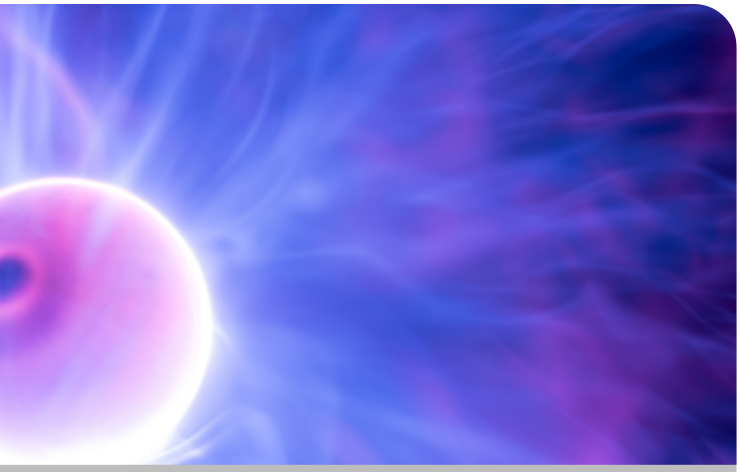
The built-in adjustment mechanism enables optical alignment through a fixed viewport, allowing emission signals to be collected from different regions inside the chamber. This flexibility is particularly useful for plasma process monitoring, endpoint detection, and UV emission measurements where the observation angle significantly affects the measured signal.

The **standard ADP-84UV-CF25** is designed for **CF25 viewports,** while custom versions can be configured to accommodate other CF flange sizes.

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At a Glance

Part Number: ADP-84UV-CF25
Material: 304 stainless steels
Viewport Compatibility: CF25 Flange
Compatible Optics: 84-UV Collimating Lens
Viewing Angle Adjustment:* 0° to 15°
Custom Options: Available for alternative CF flange sizes

*At the maximum adjustment angle, approximately 25% of the optical throughput may be blocked, depending on the viewport configuration and installation conditions.

Typical Applications

- Plasma process monitoring
- Optical emission spectroscopy (OES)
- Semiconductor process development
- Plasma etch and deposition systems
- Endpoint detection measurements
- UV emission characterization

Key Features

Adjustable Viewing Angle
Allows different plasma regions to be viewed through the same chamber viewport.

Customizable Flange Interface
The standard configuration supports **CF25 viewports,** with custom adapters available for other CF flange sizes and plasma system requirements.

Designed for Plasma Monitoring
The adapter is ideal for optical emission spectroscopy, plasma diagnostics, process monitoring, and stable optical access through existing chamber windows.

Broad UV–NIR Wavelength Coverage
The adapter directly interfaces with the **84-UV collimating lens** to maintain repeatable optical alignment in laboratory and industrial environments.

Optical Considerations
At larger viewing angles, the viewport geometry may partially obscure the optical aperture.

84-UV-25 Collimating Lens Optical Specifications

Part Number	84-UV-25
Type	Single lens
Connects To	Optical fiber
Lens Material	f/4 fused silica
Wavelength Range	200–2000 nm
Connector	SMA 905, 6.35 mm ferrule
Connector Threads	¼–36 external thread
Diameter	25.4 mm
Focal Length	100 mm
Operating Temperature	70 °C

For more information on the ADP-84-UV-CF25, please contact an Ocean Optics Application Scientist today.