

# 1.High Vacuum viewport

*Custom vacuum viewport are available upon request.*

## Windows Materials

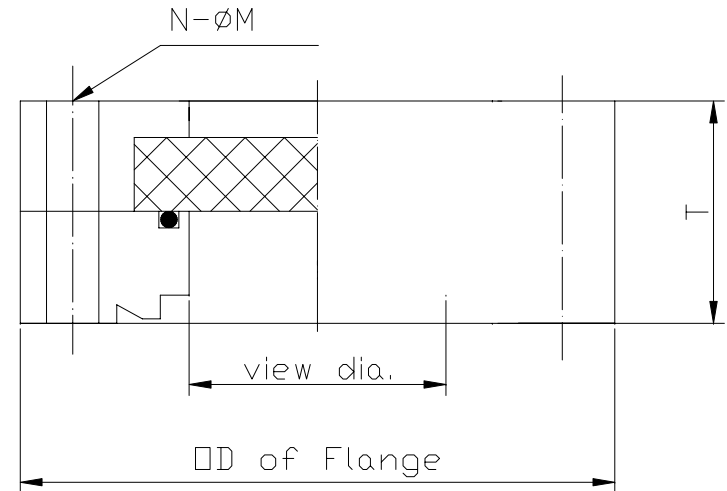
Sapphire ,  $MgF_2$  ,  $BaF_2$  ,  $CaF_2$  ,LiF, Ge, Si, Pyrex, Fused silica, Quartz, ZnSe ,ZnS.

## Specification

- Bake Temperature up to 200°C
- Leak Rate <  $1 \times 10^{-8}$  Torr
- CF Flange Copper gasket

unit : mm

View dia.	OD of Flange	Flange	T
12.7	34	DN16	12.7
25.4	70	DN34	12.7



## Standard catalog of high vacuum viewport

Part No.	View dia.	Flange	Window type	Transmittance range
CFVP-1/2-CF16	12.7	DN16CF	UV CaF <sub>2</sub>	T= 90% at 193nm
CFVP-1-CF40	25.4	DN40CF	UV CaF <sub>2</sub>	T= 90% at 193nm
MFVP-1/2-CF16	12.7	DN16CF	VUV MgF <sub>2</sub>	T= 80% at 157nm
MFVP-1-CF40	25.4	DN40CF	VUV MgF <sub>2</sub>	T= 80% at 157nm
BFVP-1/2-CF16	12.7	DN16CF	IR BaF <sub>2</sub>	0.3 - 10 μm
BFVP-1-CF40	25.4	DN40CF	IR BaF <sub>2</sub>	0.3 - 10 μm
SAVP-1/2-CF16	12.7	DN16CF	UV Sapphire	0.2 - 5 μm
SAVP-1-CF40	25.4	DN40CF	UV Sapphire	0.2 - 5 μm
SIVP-1/2-CF16	12.7	DN16CF	Silicon	1 - 7 μm
SIVP-1-CF40	25.4	DN40CF	Silicon	1 - 7 μm
FSVP-1/2-CF16	12.7	DN16CF	Fused silica	0.2 - 2 μm
FSVP-1-CF40	25.4	DN40CF	Fused silica	0.2 - 2 μm
ZSVP-1/2-CF-A	12.7	DN16CF	ZnSe	AR 3 - 12 μm
ZSVP-1-CF-A	25.4	DN40CF	ZnSe	AR 3- 12 μm
ZSVP-1/2-CF-B	12.7	DN16CF	ZnSe	AR 8 - 14 μm
ZSVP-1-CF-B	25.4	DN40CF	ZnSe	AR 8 - 14 μm

## 2.Ultra High Vacuum Viewport (UHV Viewport)

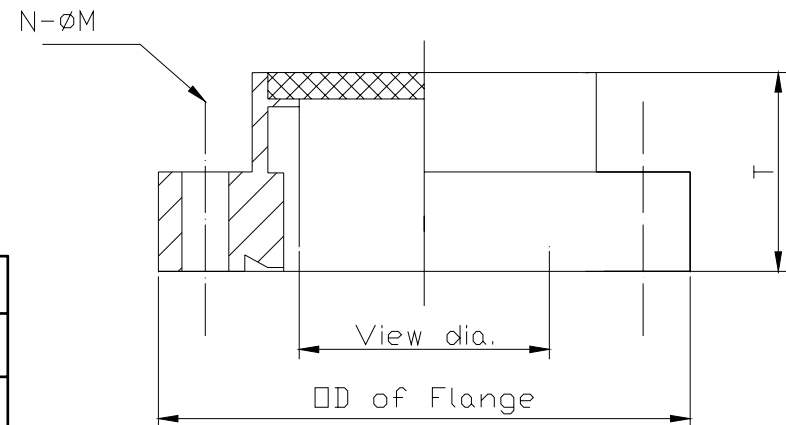
*Custom UHV viewport are available upon request.*

### Specification

- Bake Temperature up to 400°C
- Leak Rate <  $1 \times 10^{-11}$  Torr
- CF Flange Copper gasket

unit : mm

View dia	OD of Flange	Flange	T
12.7	34	DN16	15.0
25.4	70	DN34	15.0



# Standard catalog UHV Viewport

**Laser Optex**  
Full of Optical Windows

Part No.	View dia.	Flange	Window type	Transmittance range
CFUHVP-1/2-CF16	12.7	DN16CF	UV CaF <sub>2</sub>	T= 90% at 193nm
CFUHVP-1-CF40	25.4	DN40CF	UV CaF <sub>2</sub>	T= 90% at 193nm
MFUHVP-1/2-CF16	12.7	DN16CF	VUV MgF <sub>2</sub>	T= 80% at 157nm
MF-UHVP-1-CF40	25.4	DN40CF	VUV MgF <sub>2</sub>	T= 80% at 157nm
SAUHVP-1/2-CF16	12.7	DN16CF	UV Sapphire	0.2 - 5 μm
SAUHVP-1-CF40	25.4	DN40CF	UV Sapphire	0.2 - 5 μm
SIUHVP-1/2-CF16	12.7	DN16CF	Silicon	1 - 5 μm
SIUHVP-1-CF40	25.4	DN40CF	Silicon	1 - 5 μm
FSUHVP-1/2-CF16	12.7	DN16CF	Fused silica	0.2 - 2 μm
FSUHVP-1-CF40	25.4	DN40CF	Fused silica	0.2 - 2 μm
ZSUHVP-1/2-CF-A	12.7	DN16CF	ZnSe	AR 3 - 12 μm
ZSUHVP-1-CF-A	25.4	DN40CF	ZnSe	AR 3- 12 μm
ZSUHVP-1/2-CF-B	12.7	DN16CF	ZnSe	AR 8 - 14 μm
ZSUHVP-1-CF-B	25.4	DN40CF	ZnSe	AR 8 - 14 μm

## 3.Laser UHV viewport

*Custom Laser UHV viewport are available upon request.*

### Specification

- Bake Temperature up to 400°C
- Leak Rate < 1x10<sup>-11</sup> Torr
- CF Flange Copper gasket

**Coating** - a range of custom coatings can applied

- Single QWOT
- Broad Band AR
- V coatings
- ITO
- DLC (Diamond like coating)

Part No.	View dia.	Flange	Window type	Laser type
CFVP-1-CF40	35	DN40CF	AR 193 nm	ArF Excimer Laser
MF-VP-1-CF40	35	DN40CF	AR 248 nm	KrF Excimer Laser
MPDIVP-1.33-CF40	35	DN40CF	AR 786nm	Diode Laser
HPDIVP-1.33-CF40	35	DN40CF	AR 786nm	High power Diode Laser
MPCO2VP-1.37-CF40	35	DN40CF	AR 10.6 μm	CO2 laser
HPCO2VP-1.37-CF40	35	DN40CF	AR 10.6 μm	High power CO2 laser
HPCO2VP-1.37-CF40A	35	DN40CF	AR 10.6 μm& 632nm	High power CO2 laser