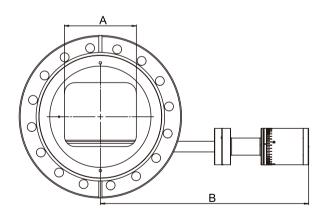
# **Viewport Shutters**

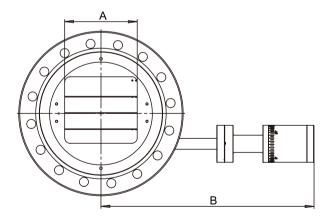
### FERMI

Some operations inside a vacuum system can cause harm or damage to a viewport. Evaporation of metals in the UHV system can, for example, cause the viewport surface to become quickly coated, resulting in a mirror reflective surface. The viewport would then need to be removed and cleaned before it could be re-used. To overcome this problem we offer a range of viewport shutters.

Both Swing Type and Venetian Blind Type Shutters are offered while Venetian Blind Type mostly on large viewports which have the advantage of being low profile when 'open'.

#### **Specification**





Flang	ge OD	Shutter Type	ŀ	4	E	3	Weight	Part Number
mm	inch		mm	inch	mm	inch	(Kg)	r art Number
70	2.75		26	1.02	134	5.24	0.8	VPS38S
114	4.5	Swing Type	45	1.77	156	6.14	1.3	VPS63S
152	6.0		68	2.68	195	7.68	2.3	VPS100S
152	6.0	Venetian Blind Type	67	2.64	195	7.68	4.0	VPS100V

## **Product Information**

Vacuum Viewport Shutters are used in both HV and UHV coating applications to protect the viewport from the deposition of materials.

All shutters incorporate a double-sided flange so that they can be mounted in between the chamber and viewport which they are protecting. The swing mechanism, which is operated via a magnetic rotary drive, can 'swing' through 0° to 90° but can easily be locked at a set angle via a thumbscrew on the back of the drive.

The viewport shutter can also easily be cleaned by bead-blasting the shutter plate.

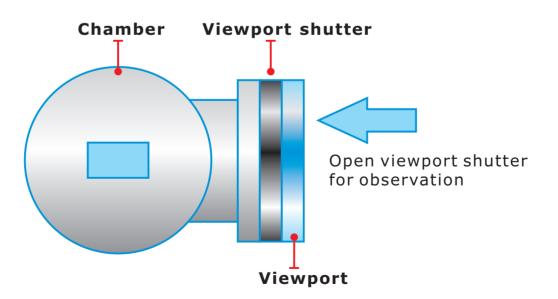
#### System Components

# Product Features\_\_\_\_\_

- Range of CF flange sizes from 2.75" to 10" OD.
- Double-sided flange mount.
- UHV grade rotary drive with thumbscrew for discrete angle positioning.
- Bakeable to 250°C.
- Wide range observation area.
- Easy installation in any orientation.

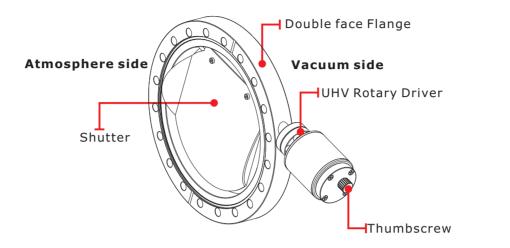


### **Product Application**\_



### Viewport shutter is mounted in between the chamber and viewport

### Key Product Parts \_\_\_\_\_



System Components

### **Technical Data for Quick Access Doors**

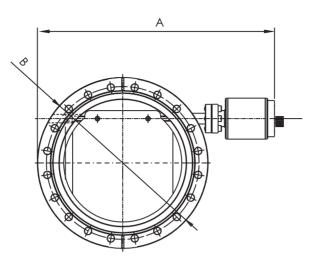
Shutter	Stainless steel		
Mounting seal	OFHC gasket (both sides)		
Operate pressure range	760 Torr ~ 1x10 <sup>-10</sup> Torr		
	1,000 mbar~1.33x10 <sup>-10</sup> mbar		
	100 kPa~ 1.13x10 <sup>-11</sup> kPa		
Leak rate	1 x 10 <sup>-10</sup> Torr l/s, He		
	1.33x10 <sup>-10</sup> mbar l/s, He		
	1.13x10 <sup>-11</sup> kPa l/s, He		
Temperature range	0°C (32°F) ~ 200°C (392°F)		
Bake temperature	250°C (482°F)		
Body material	SS304L		
Feedthrough	UHV Rotary Drive		
Mounting position	Any		

sales@nanotech-consulting.com

+44 (0) 7702 585633

— www.advantorr.com —

# Product Order Information \_\_\_\_\_



#### System Components

#### UHV Viewport Shutters, CF Flange, SS304L

Part Number	Flange Size	Α	В
VPS-CF-275	CF2.75"	152	69
VPS-CF-450	CF4.5"	197	114
VPS-CF-600	CF6"	235	152
VPS-CF-800	CF8"	285	202
VPS-CF-1000	CF10"	323	253