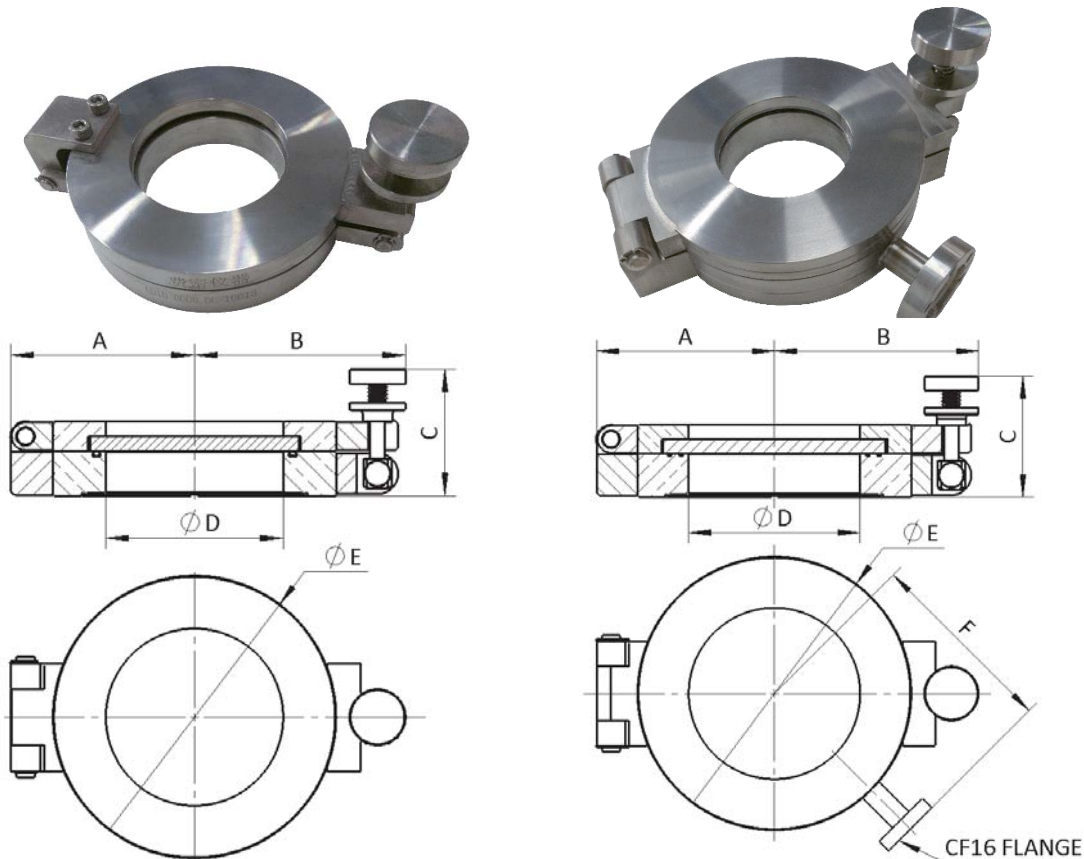


Sample Transfer Devices

Fast Entry Door & Differential Pumped Fast Entry Door



Without Differential Pump

With Differential Pump

Flange (OD)		Type	A	B	C	D	E	F	Weight (Kg)	Part Number
mm	inch		mm							
70	2.75	Without Differential Pump	48	35	32	40	70		0.5	FED2
114	4.50		79	88	59	61	114		2.0	FED4
152	6.00		99	113	68	95	152		4.0	FED6
114	4.50	With Differential Pump	79	88	59	61	114	80	2.3	FED4-DP
152	6.00		99	113	68	95	152	107	4.4	FED6-DP

Fast Entry Doors provide convenient and fast manual loading of samples in and out of vacuum chambers. Doors are fitted with a spring-loaded hand knob locking mechanism, this patented design also prevent the Load Lock Chamber from being over-pressurized as the door will be pushed open.

Two types of Fast Entry Doors are offered to the market for different application. The conventional model has single Viton® elastomer seal and suitable for vacuum sealing to 10⁻⁸ mbar, the convention model uses Quartz as window material and it is replaceable. The other model is designed for UHV application and could seal the chamber to 10⁻¹⁰ mbar by double elastomer seals and differential pumping in between.

These Fast Entry Doors are compatible with all NW-CF flanges and could be installed with either tapped or clear hole flange. However please confirm with our sales or distributor for the bolt hole orientation for proper installation.

Fermi Instruments also offers larger and customized fast entry doors.

Product Information

Vacuum Quick Access Doors are designed to gain immediate access to load locks and chambers to load and unload substrates. **AdvanTorr** offers two styles including a blank door only or a door with integrated viewport to allow for viewing access.

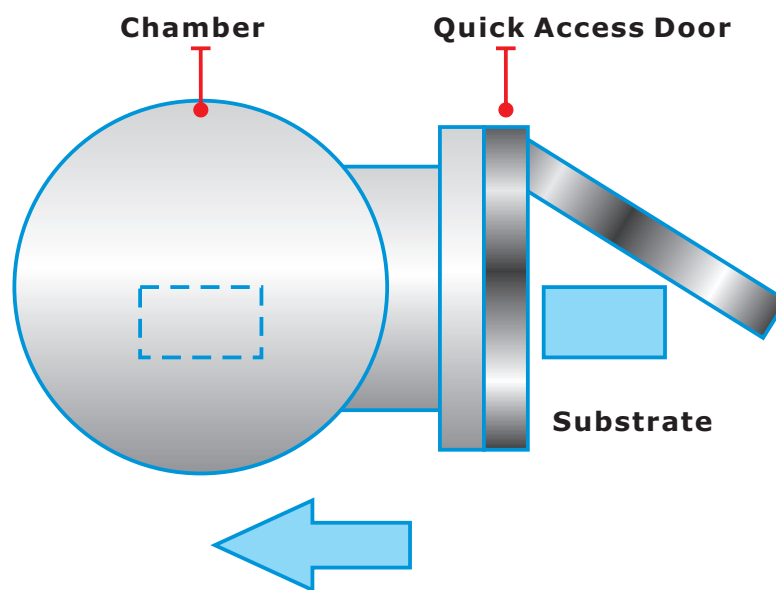
Optional high-grade SS316L material is available where higher purity with a low outgassing rate is required.

Product Features

System Components

- Available in a range of flange sizes with and without integrated viewport.
- SS304L material as standard with option for higher-grade SS316L.
- Precision hinged door with reliable FKM O-ring seal.
- CF port mounts.
- Can be installed in any position.

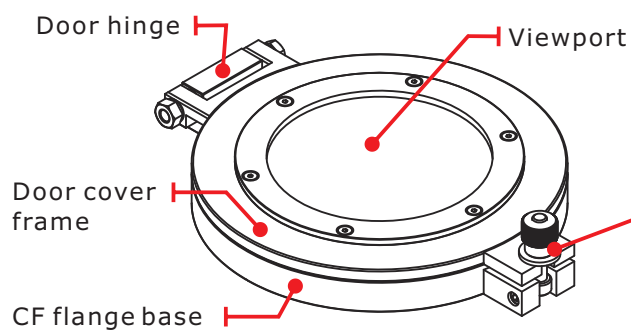
Product Application



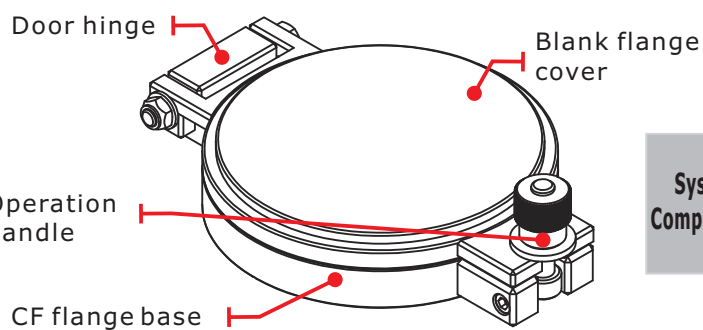
Substrate can transfer from atmosphere to vacuum chamber via quick access door

Key Product Parts

Viewport type



Blank flange type



System Components

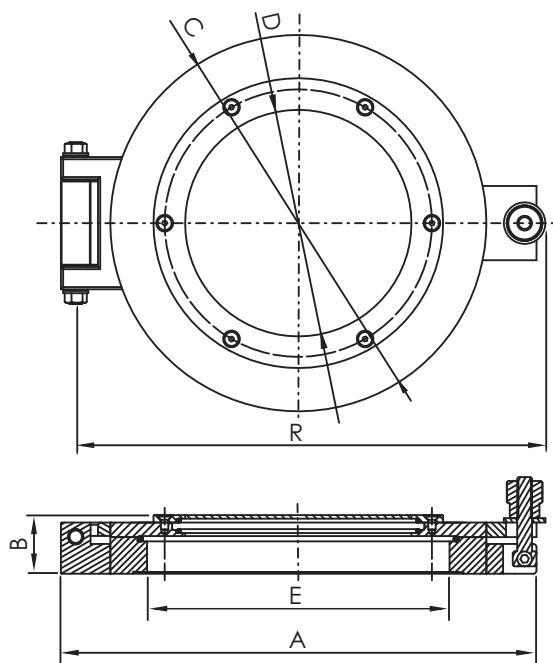
Technical Data for Quick Access Doors

Door seal	FKM
Mounting seal	OFHC gasket
Operate pressure range	760 Torr ~ 1×10^{-8} Torr 1,000 mbar ~ 1.33×10^{-8} mbar 100 kPa ~ 1.13×10^{-9} kPa
Leak rate	1×10^{-9} Torr l/s, He 1.33×10^{-9} mbar l/s, He 1.13×10^{-10} kPa l/s, He
Temperature range	-20°C (-4°F) ~ 150°C (302°F)
Bake temperature	100°C (212°F)
Body material	SS304L
Hinge material	Optional high-grade SS31 6L material
Viewport material	Glass (only with viewport version)
Mounting position	Any



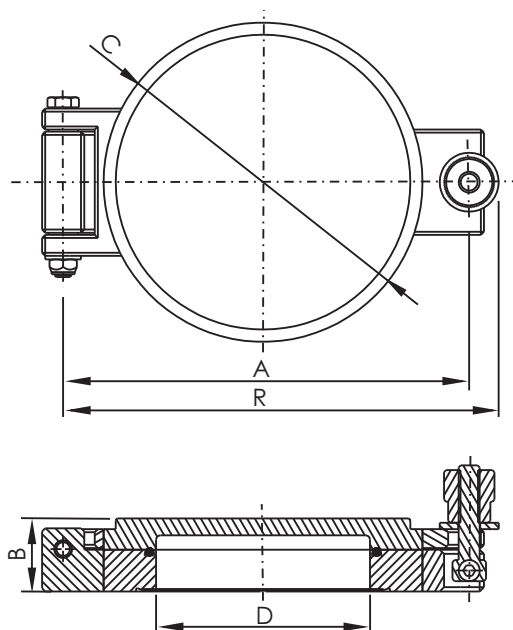
Product Order Information

System Components



Quick Access Door - Viewport Type

Part Number	Flange Size	A	B	C	D	E
QDV-CF-450	CF4.5"	177	32	114	64	64
QDV-CF-600	CF6"	215	35	152	102	102
QDV-CF-800	CF8"	276	37	202	152	153
QDV-CF-1000	CF10"	326	39	253	152	204



Quick Access Door - Blank Flange Type

Part Number	Flange Size	A	B	C	D
QDB-CF-450	CF4.5"	177	32	114	64
QDB-CF-600	CF6"	217	35	152	102
QDB-CF-800	CF8"	276	37	202	153
QDB-CF-1000	CF10"	326	39	253	204