

# ZERO LENGTH VIEWPORTS

Vacuum viewports are fabricated in viewing diameters ranging from 16mm to 140mm. These are made from optical quality "Corning 7056" glass sealed into kovar spinnings which are then welded into vacuum flanges.

Viewports can be supplied in CF and ISO flanges. Special viewports with different window materials (Sapphire, quartz, magnesium fluoride, etc.) can also be supplied as can non standard vacuum flange configurations.

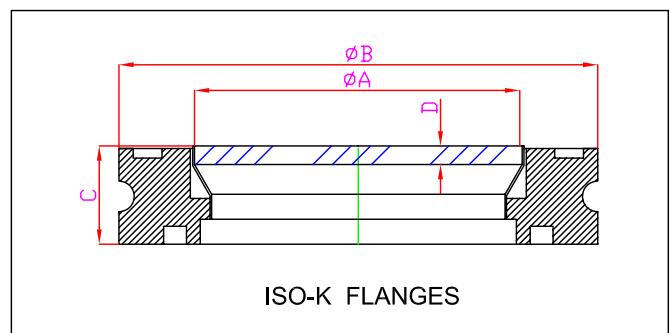
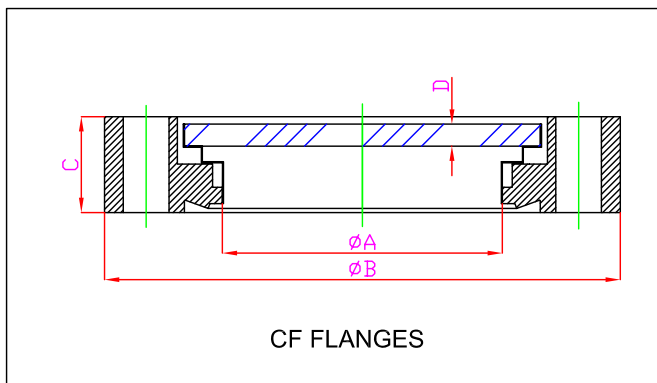
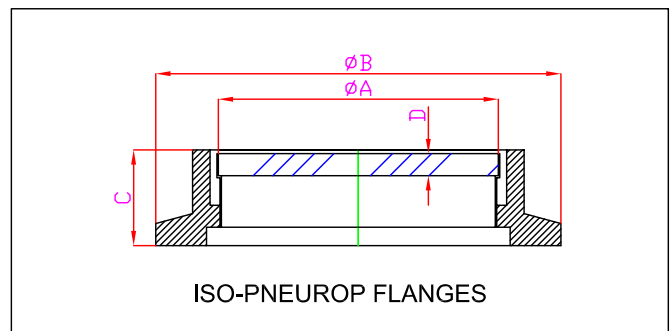
All viewports are compatible with pressures to  $1 \cdot 10^{-11}$  mbar and will withstand repeated bakeout cycles to  $400^{\circ}\text{C}$ ; however, slight deflection of the 6" window may occur at this temperature.

The transmission characteristics are 90% from 0.35 to 2.6 microns.

Standard viewports have a kovar alloy interface between glass and flange.

Viewports should be sealed using fully annealed copper gasket to reduce induced strain.

If the process can deposit material, a shutter is strongly recommended.



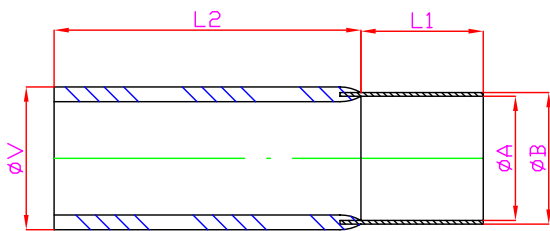
CF Flange	A	B	C	D	ORDER CODE
CF16	16	34	12	1.5	AB 145
CF40	38	70	13	3	AB 146
CF63	65	114	17.5	3.5	AB 147
CF100	90	150	20	6	AB 148
CF150	135	200	22.5	8	AB 149

ISO Flange	A	B	C	D	ORDER CODE
DN16	16	30	13	1.5	AA 244
DN40	38	55	13	3	AA 246
DN63	65	95	13	3.5	AA 248
DN100	90	130	18	6	AA 249
DN160	135	180	21	8	AA 250

## PYREX-KOVAR ADAPTERS

Kovar skirt sealed by means of transition glass grades to the Pyrex tube  
 Can be fitted to stainless steel flanges by TIG welding

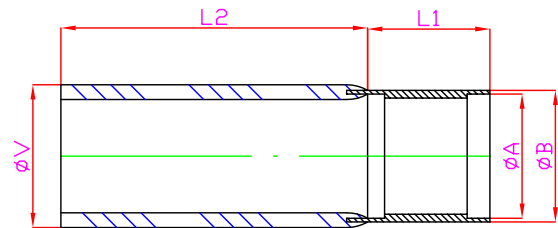
- Magnetic
- Bakeable up to 450 °C



A	B	L1	L2	V	ORDER CODE
5	6	20	70	8	AA 351
9	10	20	70	12	AA 352
14	65	20	70	17	AA 353
19	20	20	80	22	AA 354
24	25	25	80	27	AA 355
27	28	25	80	32	AA 356
37	38	30	80	40	AA 357
46	48	35	100	52	AA 358
56	58	40	100	63	AA 359
75	77	45	100	80	AA 360
85	87	45	100	90	AA 361
95	97	50	120	100	AA 362
114	116	50	120	120	AA 363

## PYREX-INOX ADAPTERS

304L Stainless steel skirt  
 Pyrex Glass  
 Non magnetic  
 Bakeable up to 400 °C  
 Withstand thermal cycles and cryogenic temperature  
 Sealing method : house keeper



A	B	L1	L2	V	ORDER CODE
5	6	20	70	8	AA 364
7	8	20	70	10	AA 365
9	10	20	70	12	AA 366
14	15	20	70	17	AA 367
19	20	20	80	22	AA 368
24	25	25	80	27	AA 369
27	28	25	80	32	AA 370
37	38	30	80	40	AA 371
46	48	35	100	52	AA 372
56	58	40	100	63	AA 373