

Imaging Cell

PRODUCT HIGHLIGHTS

- **Ultra-high vacuum** glass cell
- Optically matched to readily available objectives at 0.3, 0.5, 0.7 NA
- Bakeable to **high temperatures**
- **Epoxy-free** and **frit-free** assembly

Infleqtion's high-quality glass cells offer a superior level of optical access to in-vacuum experiments. The AR-coated glass maintains high optical flatness, resulting in minimal optical distortion through the cell, and is designed to be used with readily available microscope objectives. The cell is fabricated to ensure excellent parallelism between the two large faces, making it possible to image or project light through two faces of the cell with near zero astigmatism. The cells are bonded without the use of epoxy or other bonding agents, giving them excellent outgassing properties ideal for ultra-high vacuum applications.



PRODUCT SPECIFICATIONS

Outer Cell Dimensions (W x D x L)	17 mm x 20 mm x 63.5 mm
Internal Cell Dimensions (W x D x L)	10 mm x 13 mm x 60 mm
Wall Thickness	3.5 ± 0.05 mm
Optical Flatness	< $\lambda/4$ per 10 mm dia. aperture, peak-to-valley (PV) flatness
Coating Options	• IBS targeted (H) AR coating for rubidium, cesium, potassium, sodium, at 767 nm, 780 nm, 790 nm, 852 nm and 1064 nm • IBS broadband (K) AR coating, minimal reflectance from 450 nm – 1070 nm • Uncoated • Custom coatings can be considered
Bake Out Temperature	Up to 300 °C
Ramp Up/Down Temperature	1 °C/min
Flange Width (Conflat)	DN16 (1.33", 33.78 mm) DN40 (2.75", 69.85 mm)
Flange Height	DN16: H = 48 ± 2 mm DN40: H = 48 ± 2 mm
Cell Material	Borofloat-33
Scratch Dig	20-10 (inside clear aperture)

PRODUCT OPTIONS

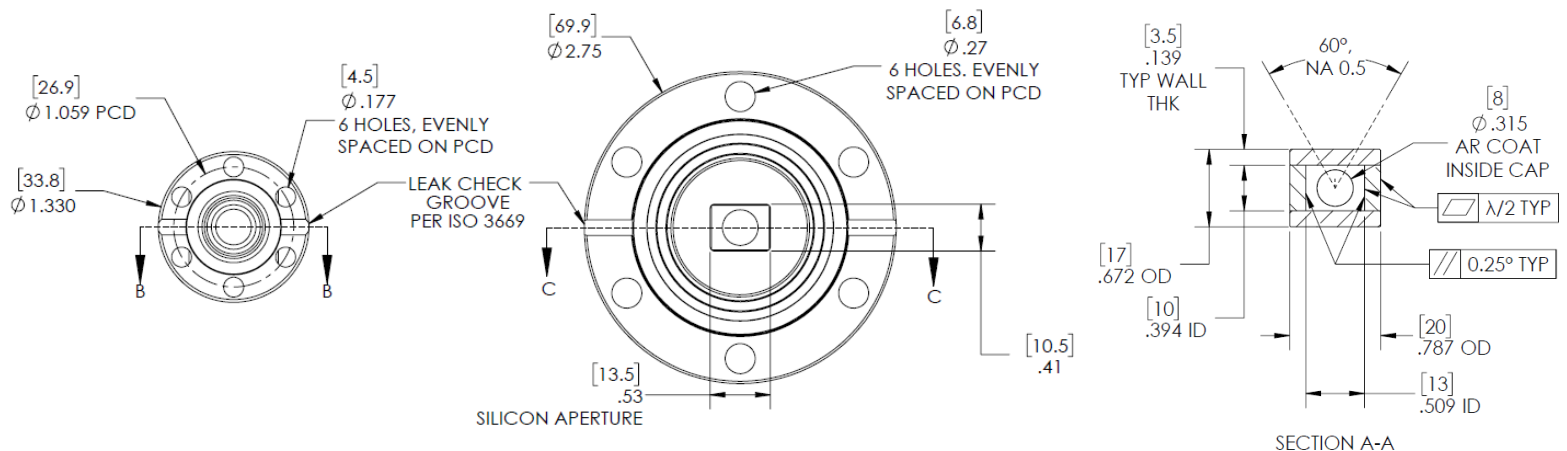
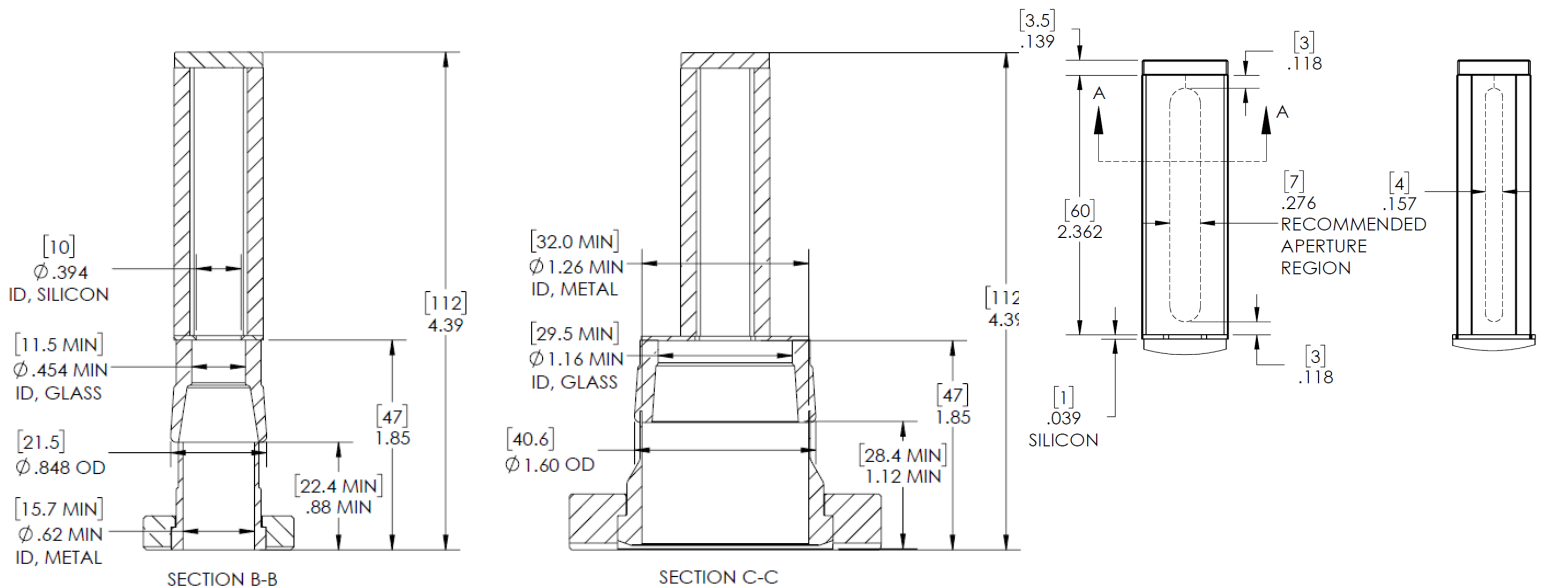
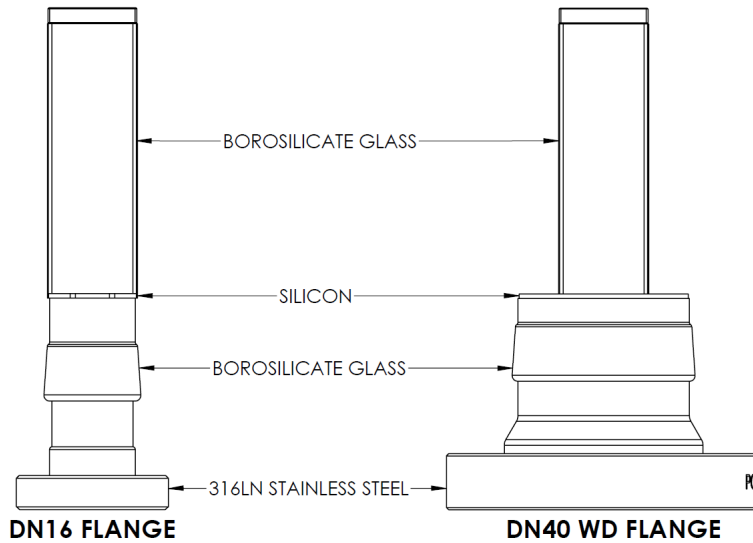
Targeted (H) Coating	CCII01360BXXHB
Broadband (K) Coating	CCII01360BXXKB
Uncoated (N) Cell	CCII01360BXXNB

"X" notes flange size

For more information,
please contact
sales@infleqtion.com

MECHANICAL DRAWINGS

Measurements in [mm] and inches



UNCONTROLLED SALES DRAWING

For more information, please contact sales@inflection.com

