HYVAC PRODUCTS, INC.

Mail: P.O. Box 389 - Phoenixville, Pa - 19460-0389 - U.S.A. Plant: 201 North 5^{TH} Avenue - Royersford, PA - 19468 - U.S.A.

610-792-0500 PHN • 610-792-0600 FAX

EMAIL jeff@hyvac.com
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Glass Vacuum Bell Jars

Bell jars are available from HyVac in a number of sizes and configurations. All bell jars are rated for full vacuum. They are made of the highest quality Borosilicate glass to assure full performance. Bell jar options are not that extensive and come in two basic flavors. Having a knob on top of the jar or a having a plain top. Having a flange on the bottom where the jar mates to the plate / base or a plain bottom. Height is measured to the top of the inside dome. Diameters are the outside of the jar add roughly ½" for flanges.



Sizes Avail OD Diameters	Sizes Avail inside Height
18.00" (457 mm)	30" (762 mm)
15.37" (390 mm)	24" (609 mm)
12.50" (317 mm)	18" (457 mm)
10.25" (260 mm)	12" (304 mm)
09.50" (241 mm)	08" (203 mm)
08.25" (209 mm)	06" (152 mm)
07.00" (177 mm)	
06.50" (165 mm)	
06.00" (152 mm)	
05.50" (139 mm)	
04.25" (107 mm)	
03.25" (83 mm)	

We have little jars also that come in a wide variety of sizes too numerous to list individually. Not all diameters are available with all height options. These are given as a reference for the customer's applications. Call for availability general if not stock 2-3 weeks ARO.

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Glass Bell Jar Guards

These safety guards are made of 17 gauge-perforated steel. We have guards with handles and guards with holes in the top for the knob to protrude. Available to fit most HyVac bell jars. Get safe and use a guard. Minimizes potential problems associated with implosion.

Bell Jar Gaskets

Made from Neoprene or Viton elastomers provide vacuum tight seal against bottom and side of bell jar or flange. Helps guard bell jar from chipping.

Vacuum Grease

Don't forget the grease used to seal jars to plates.

Glass Bell Jar Technical Information

Type 1, Class A, low expansion borosilcate glass conforming Composition to Federal specification DD-G-54 lb and ASTM E-438. These jars also meet US Pharmacopia (USP) spcifications for Type 1 borosilicate glass.

Composition of borosilicate glass in HyVac bell jars:

<u>Material</u>	% approximate
SiO ₂	80.6
B_2O_3	13.0
Na₂O	4.0
Al_2O_3	2.3

Physical Properties	<u>Value</u>
Coefficient of Expansion	32.5 x 10 ⁻⁷ cm/cm/°C
Strain Point	510.0 °C
Anneal Point	560.0 °C
Soften Point	821.0 °C
Density	2.53 grams / cm ³ 76.0 x 10 ¹ Kg / mm ²
Youngs Mod.	76.0 x 10 ¹ Kg / mm ²

1.474 @ Sodium D Line Refractive Index 490.0 °C Extreme Service Temperture Limits 230.0 °C Normal Service

Maximum Thermal Shock 160.0 °C

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