

Bell Jar Vacuum Systems

Technical Data Sheet

System Overview

The BJ-12 system includes a borosilicate glass bell jar, a Nitrile 'L' Gasket, a complete vacuum manifold and a 304 Stainless Steel baseplate. These systems are suitable for high vacuum.

The vacuum manifold on the BJ-12-SF is comprised of a vacuum isolation valve, an air admittance valve and a 63mm diameter glycerine filled vacuum indication gauge. All of which are BSPP screw fittings. This variation is fitted with a KF16 and an KF25 service port within the baseplate.

BJ-12-VF

The BJ-12-VF is recommended for higher vacuum applications due to the utilisation of KF vacuum fittings. For additional control over the vacuum environment both the vacuum isolation line and air admittance, are controlled via adjustable speed valves. This variation is fitted with a 3/8" BSPP and an KF25 service port within the baseplate.

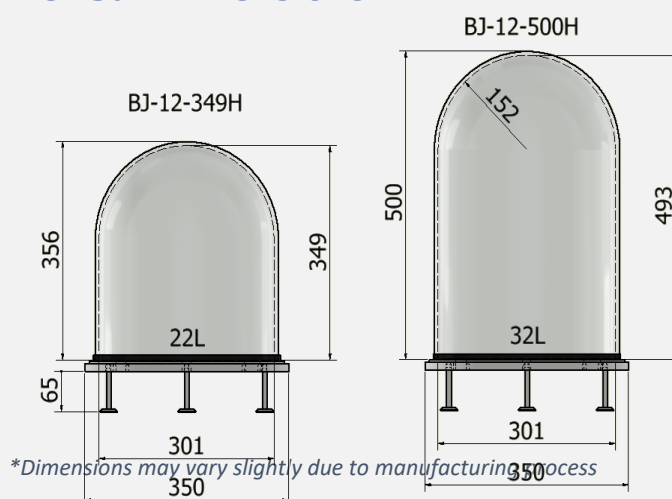
BJ-12-VF-HP

The BJ-12-VF-HP is our BJ-12-VF system fitted with an internal Kapton heater platform. The Kapton heater is ideal for applications that require fast and efficient thermal transfer within a temperature range of 0 – 200 degrees Celsius.

The heater is controlled via a digital thermostat. A vacuum switch is fitted to the system to ensure the safety of the operator and prevent the heater being activated when not under vacuum.



Bell Jar Dimensions



Options/Extras

Vacuum Pumps

We are proud to offer a 10% discount on all DVP vacuum pumps when sold with an AVE bell jar.

Implosion Guard

As a safety precaution we recommend that each bell jar system is sold with an acrylic implosion guard.

Custom Design Service.

All chambers may be customised to meet specific requirements. Additional auxiliary ports are commonly added to the baseplate.

Vacuum Feedthroughs

We offer a wide variety of electrical feedthroughs to accommodate power inputs or sensory equipment within the vacuum environment.

Gauge Calibration

Traceable and UKAS gauge calibration is available. These will be supplied with certificates of authentication.

VC System Overview

The VC-12 system includes a borosilicate glass cylinder, a Nitrile 'L' Gasket, a complete vacuum manifold and a 304 Stainless Steel baseplate. These systems are suitable for high vacuum application and are leak tested down to 1×10^{-3} mbar.

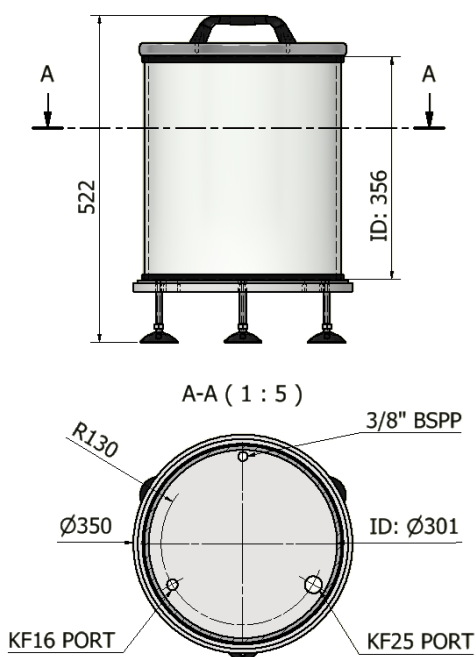
VC-12-SF

The vacuum manifold on the VC-12-SF is comprised of a vacuum isolation valve, an air admittance valve and a 63mm diameter glycerine filled vacuum indication gauge. All of which are BSPP screw fittings. This variation is fitted with a KF16 and an KF25 service port within the baseplate.

VC-12-VF

The BJ-12-VF is recommended for higher vacuum applications due to the utilisation of KF vacuum fittings. For additional control over the vacuum environment both the vacuum isolation line and air admittance, are controlled via adjustable speed valves. This variation is fitted with a 3/8" BSPP and an KF25 service port within the baseplate.

VC-12 Cylinder Dimensions



Internal Dimensions (ID): 301mm D x 356mm H
External: 350mm D x 522mm H



Cylindrical Vacuum System Kits

VC-12-SF-K12

The VC12-SF-K12 comes complete with a DVP LC12 vacuum pump and all the necessary fittings required. This system is best suited for rough vacuum applications and can achieve **2mbar**.

VC-12-VF-RV212

For high vacuum application the VC-12-VF-RV212 is the complete solution. It is supplied with a RV212 vacuum pump, and all the necessary fittings required for a plug and play vacuum environment. This system can achieve vacuum levels low as **1×10^{-3} mbar**.

Options/Extras

Implosion Guard

As a safety precaution we recommend that each bell jar system is sold with an acrylic implosion guard.

Vacuum Feedthroughs

We offer a wide variety of electrical feedthroughs to accommodate power inputs or sensory equipment within the vacuum environment.

Gauge Calibration

Traceable and UKAS gauge calibration is available. These will be supplied with certificates of authentication.

Heating Elements

For temperature-controlled environments heating elements may be incorporated within the chambers.

Custom Design Service

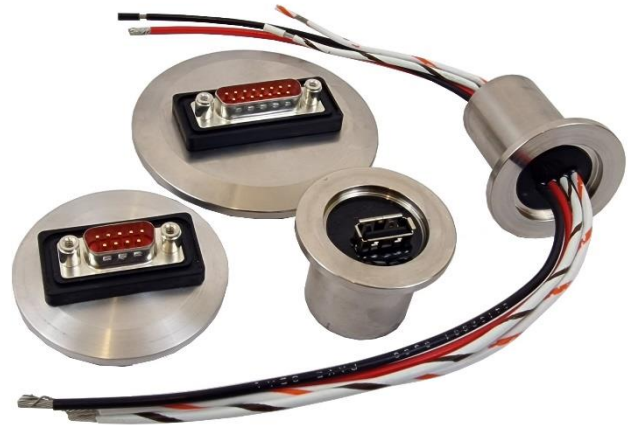
All chambers may be customised to meet specific requirements. Additional auxiliary ports are commonly added to the baseplate.

AVE Feedthroughs, Specification Sheet

We offer a diverse range of hermetically sealed electrical feedthroughs, allowing you to seamlessly integrate various devices within a vacuum environment.

To ensure dependable vacuum seals, our feedthroughs are designed with KF vacuum fittings. These fittings guarantee reliable and leak-free connections allowing you to conduct experiments with confidence.

For a specific request, please speak with a member of our design team and we will endeavour to produce a solution that meets your requirements



AVE Feedthroughs

4 Wire Electrical Feedthrough

- Each wire is rated to 18A, 600V and moulded with a KF25 fitting.

USB Feedthrough

- Precisely moulded Type A 2.0 IP67 USB connector mounted via a KF25 fitting.

D Sub Feedthroughs

- 9 Pin D-sub: Mounted via a KF25 or KF40.
- 15 Pin D-sub: Mounted via a KF40 fitting.
- 25 Pin D-sub: Mounted via a KF50 fitting.
- 26 Pin high density D-Sub: Mounted via KF50 fitting

IEC Power Leads

- KF25 feedthrough terminating in a range of IEC flying power leads.

Hybrid Quick Connect Adapters

- Quick component interchange for various tubing
- Material: 304-stainless steel
- Vacuum Fittings: KF16-KF40

Custom Feedthroughs

In addition to our AVE feedthroughs, we utilise an extensive supplier network to offer high quality solutions for specific requirements.

Electrical Coaxial Feedthroughs

-A range of double and single ended BNC connectors are available upon request.

