



Helium Dewar Pressure Booster

A compact and simple Pressure Booster is commercially available for increasing the pressure in any small Liquid Helium dewar. This product is ideal for increasing the pressure in the dewar to reduce liquid transfer cycles. Simply select 5 or 8 psi operating pressure as the heater with its solid state logic and built-in pressure transducer, will add heat to the Helium liquid increasing the vessel pressure.

General Description

The provided mains transformer provides power to the DC power jack at the bottom of the aluminum enclosure. The flexible heater section is inserted into the dewar where it lays at the invert of the vessel. A stainless tube is used to connect to the pressure fitting on the dewar. This tube can be bent up to 90 degrees and terminated by a Swagelok tube fitting.

Once the Pressure Booster is installed and power is provided, the operation selector switch is placed in the required pressure position. The unit is now ready to deliver heat to the Helium inventory. This device is intrinsically safe and can operate in a dry dewar.

Options

- OEM Modifications: Private Labeling is Available
- Tube Modifications: Custom Lengths and Bends
- Pressure Settings: Custom Pressures available for OEM Orders
- Laydown Length: 1.5 meter Standard Construction With Custom Lengths Available



Specifications

- Model Designation: HPB-180710-13
- Mains Power: 100-264 VAC, 50-60 Hz
- Operation Voltage: 24 VDC
- Heat Provided: 25-35 Watts at 4.2 K
- Heat Flux: $<0.3 \text{ W / cm}^2$
- Operating Temperature: 4.2 K to Room Temperature
- MAWP: 4 bar
- Pressure Selection: 5 or 8 psi
- Certifications: CE Marked Mains Transformer
- Installation Tube: 0.375-in OD x 25 cm long
- Enclosure Size: 80 x 22 x 41 mm

The LED Lights indicate power availability and heat generation. Upon reaching the selected pressure, the heat energy is denegized. This device works automatically with no needed adjustments or calibrations.

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