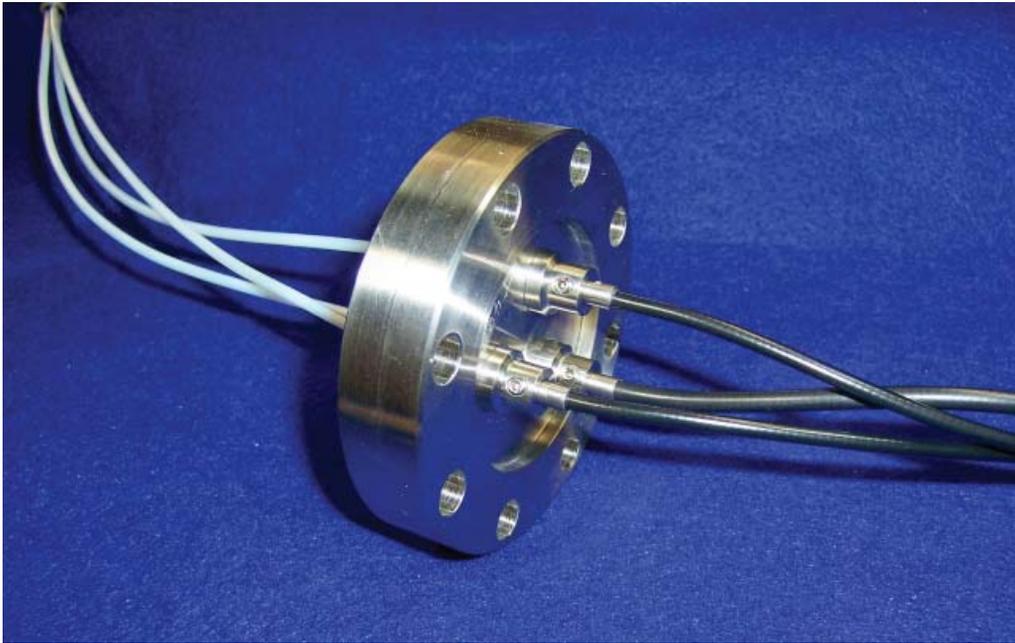


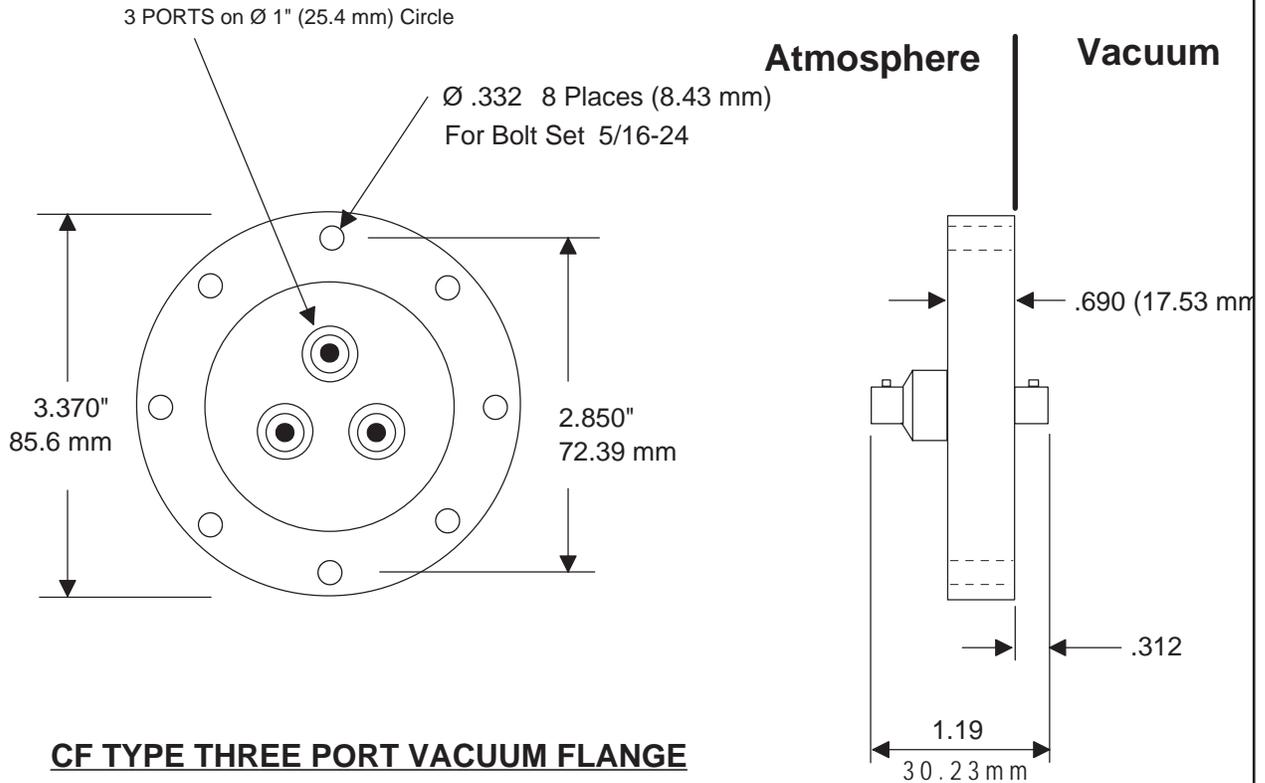
## Single Channel Vacuum Passthru



# model Bv3

### **FEATURES**

- CF Vacuum Range to below  $10^{-11}$  Torr
  - Mounting by  $\varnothing$  3.375" CF Flange
- Three Ports with Sapphire Windows for Fiberoptic Legs
  - Accepts One Philtec RC Model Sensor
  - Bakeable to 450°C without sensor cables



Material: Type 304 SS

Vacuum Range to  $10^{-9}$  torr with Viton O-Ring  
 Vacuum Range to  $10^{-11}$  torr with Copper Gasket

## Description

The Bv3 is an assembly comprising:

- $\varnothing$  3 3/8" CF Mounting Flange
- Three Ports with Sapphire Windows in Kovar Sleeves

## Operating Principle

Philtec's fiberoptic sensors are comprised of many fibers. The smallest probes have dozens of fibers, the largest have several thousand. These fiber bundles can not be sealed to hold high vacuum.

In the Bv3 vacuum passthru, the RC sensor transmitting and receiving signal channels are separated into 3 legs: one transmitter and two receivers. This eliminates all crosstalk between channels, thereby allowing the sensor light signals to be accurately transferred from air to vacuum environments.



A sensor system with Option Bv3 includes:

- Light guide with probe tip for installation in the vacuum chamber
- The Bv3 Flange
- Amplifier and fiberoptic cable for external connection to the passthru assembly.

