

# BTC Series

Up to 6 LPM Free Flow



BTC brushless motor shown

## Typical Applications

- Gas Analysis
- Anesthesia Monitor
- CO2 Monitors
- Patient Monitoring
- Wound Therapy
- Urinalysis

## Performance Data

### Physical Properties

<b>Operating Environment:</b>
41 to 158°F* (5 to 70°C*)
*Duty dependent. Consult factory for high temperature applications over 50° C
<b>Media:</b>
Most Gases and Liquids
<b>Humidity:</b>
0 – 95% RH
<b>Noise Level:</b>
As low as 45 dB
<b>Wetted Material:</b>
EPDM, AEPDM, Fluorocarbon, Teflon/EPDM Laminate
<b>Valves:</b>
EPDM, AEPDM, Perfluoro, Fluorocarbon
<b>Pump Head:</b>
Vectra (Liquid Crystal Polymer)

## Mini Pumps (air/gas)

BTC Miniature Diaphragm Pumps and Compressors are a series of brush and brushless DC motor driven pumps designed to handle air and gases. The innovative, compact design incorporates leading edge technologies that allow it to operate harder, hotter, quieter and longer than existing pump designs. The BTC Series offers multiple component configurations allowing them to be used for either vacuum operation, pressure operation, or alternating vacuum and pressure operations.

### Features

- **Highest Performance/Size Ratio:**  
Innovative and efficient engineering designs enable the BTC Series to push the performance envelope in a lightweight, compact size.
- **Runs in Hotter Environments:**  
Selection of advanced materials and our proprietary elastomer diaphragms and valves allow our pumps to operate in increased temperature environments up to 158°F (70°C).
- **Performs Quieter:**  
Optimized head, chamber, and flow path reduce noise without compromising performance.
- **Lasts Reliably Longer:**  
Using our proprietary advanced diaphragm elastomer and superior brushless motor design sets the highest benchmark for service-free operation that exceeds 10,000 hours.
- **Installs Easily:**  
Incorporating the lightweight EZ Mount facilitates simple system assembly while dampening vibration and reducing noise levels.

### Electrical

<b>Motor Type (DC):</b>
Brush, Brushless
<b>Nominal Motor Voltages (DC):</b>
6, 12, 24 VDC
Other voltages available upon request
<b>Current Range:</b>
50 mA - 900 mA*
*Dependent on motor type, voltage, pressure/vacuum and flow requirement.
<b>Motor Control:</b>
2-wire (Analog or PWM) Brush
2-wire, 3-wire (Analog or PWM)

### Pneumatic

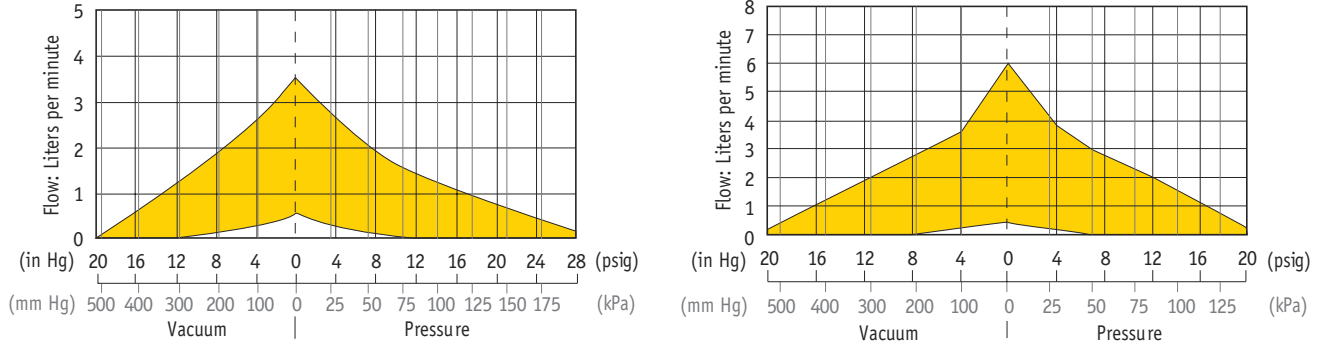
<b>Head Configuration:</b>
Single
<b>Max Flow:</b>
3.5 LPM (Flat diaphragm)
6 LPM (Convolute diaphragm)
<b>Pressure Range*:</b>
0 - 30 psig (0-193 kPa) Flat
0 - 20 psig (0-138) Convolute
<b>Vacuum Range*:</b>
0 - 23 in Hg (0-584 mmHg) Flat
0 - 20 in Hg (0-580 mmHg) Convolute
* Extended pressure and vacuum capabilities available upon request.

# BTC Series

## Mini Pumps (air/gas)

### Single Head Micro Diaphragm Pump and Compressor

#### Flow

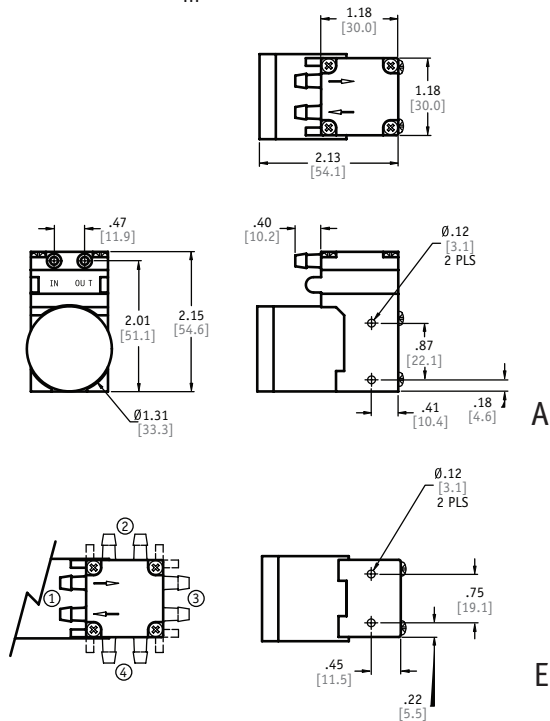


The above performance graph illustrates the overall performance of the BTC handling air at 800 feet (244 m) above sea level at 75° F [24°]. Performance will vary depending on barometric pressure and media temperature. Consult factory with your specific requirements.

#### Dimensions

##### Brushless Motor

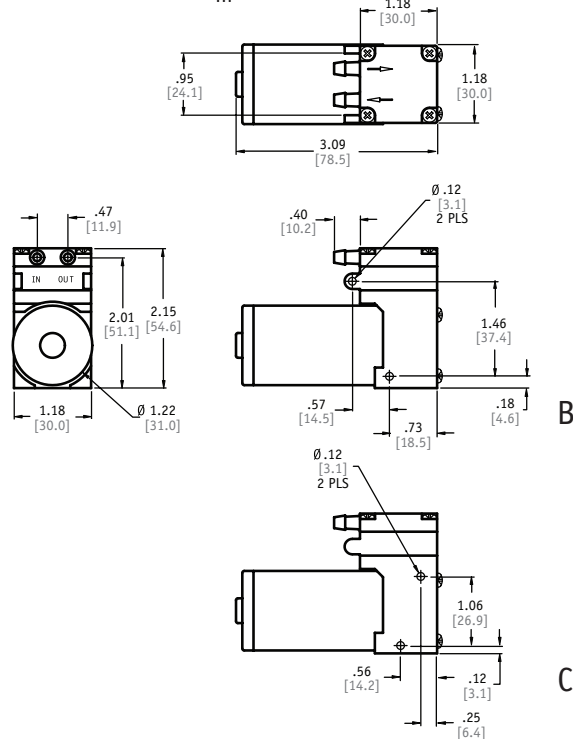
(Pump Mass - 4.5 oz<sub>m</sub> [128 gms])



Head Configuration (#1 Head Configuration is Standard)

##### Brush Motor

(Pump Mass - 6.5 oz<sub>m</sub> [184 gms])



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For more information call 1.800.525.2857 or email [ppfinfo@parker.com](mailto:ppfinfo@parker.com)  
Visit [www.parker.com/precisionfluidics](http://www.parker.com/precisionfluidics)

