# **TTC-IIS Series**

# Mini Pumps (air/gas)

Up to 11 LPM Free Flow



TTC-IIS slotless motor shown

## **Typical Applications**

- Patient Monitoring
- Compression Therapy
- Hemodialysis
- Peritoneal dialysis
- Respiratory care
- Wound Therapy

TTC-IIS Single Body Dual Head Miniature Diaphragm Pumps and Compressors are a series of brush and brushless DC motor driven pumps which are tailored to meet the specific performance requirements of your applications. These pumps are designed to handle air and gasses only.

#### **Features**

## • Proportional Flow Control

Three-wire motor available for external pulse width modulation.

#### Longevity

The BTC-IIS Series pump sets the highest benchmark for service-free performance with our unique brushless DC motor design and advanced proprietary diaphragm elastomer.

#### • Light Weight, Compact Size

The BTC-IIS Series pump design has a unique compact configuration allowing designers to minimize system weight and allotted space requirement for pumps and compressors.

#### • Versatile Head Configuration

Each pump head can be configured to operate independently for a combination of pressure and vacuum.

#### • Flexible Mounting Options

The BTC-IIS maximizes mounting flexibility by offering several ways to mount the pump, as well as four possible port orientations.

#### • Contamination-Free

Parker takes the necessary steps in manufacturing to assure that our 100% oil-free pump and compressor designs maintain the purity of your system. Parker pumps and compressors are commonly used in FDA-approved systems.

## **Performance Data**

## **Physical Properties**

## **Operating Environment:**

41 to 158°F\* (5 to 70°C\*)

#### Media:

Air and Most Gases

#### **Humidity:**

0 - 95% RH

## **Wetted Material:**

EPDM, AEPDM, Fluorocarbon, Teflon/EPDM Laminate

#### Valves:

EPDM, Silicone, Fluorocarbon

## **Pump Head:**

Vectra (Liquid Crystal Polymer) Lubricomp

## **Electrical**

#### Motor Type (DC):

Brush Dual Ball Bearings Brushless Dual Ball Bearings

## **Nominal Motor Voltages:**

6, 12, 24 VDC

Other voltages available upon request

#### **Current Range:**

200 mA - 1400 mA\*

\*Dependent on motor type, voltage, pressure/vacuum and flow requirement.

## **Pneumatic**

#### **Head Configuration:**

Dual

#### Max Unrestricted Flow:

6 LPM (Per head)

11 LPM (Parallel)

## Pressure Range:\*

0 - 10 psig (69 kPa) Parallel

#### Vacuum Range:\*

0 - 20 in Hg (580mmHg) (Parallel)

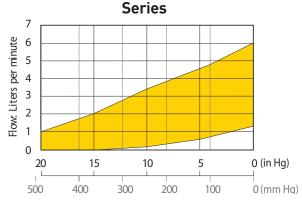


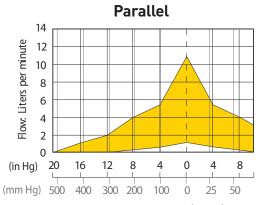
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# Mini Pumps (air/gas)

# Miniature Diaphragm Pump and Compressor

## Flow



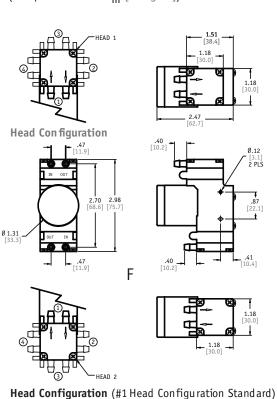


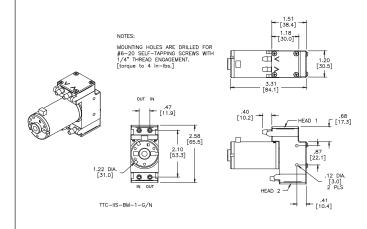
The above performance graph illustrates the overall performance of the TTC-IIS handling air at 800 feet (244 m) above sea level at  $75^{\circ}$  F (24°). Performance will vary depending on barometric pressure and media temperature. Consult factory with your specific requirements.

## **Dimensions**

## **Brushless Motor**

(Pump Mass -  $6.0 \text{ oz}_{m} [170 \text{ gms}]$ )







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