

The ALPHA-MINI-PPS is a small, oil free, diaphragm pump which provides adequate capacity for the ALPHA-ARIA or the ALPHA-DUO. It is capable of pumping a half liter of leak free volume\* to below 1 Torr within a few minutes, and can achieve a vacuum of 10 Torr, as is typical for Recoil Contamination Avoidance, in less than a minute.

Because of its compact size, the ALPHA-MINI-PPS is an ideal companion for use with the ALPHA-DUO spectrometer when space is at a premium (e.g., in mobile labs and response vehicles). The ALPHA-MINI-PPS includes a power control cable and power supply for connection to mains. Two lengths of vacuum tubing (3-ft. and 10-inch) are provided for connection to the ALPHA-ARIA or ALPHA-DUO.

### Specifications

#### Pump

Ultimate Pressure:  $\leq 2.0$  millibar.  
 Nominal Pumping Speed: 6 liter per minute.  
 Input Voltage: 24 V DC,  $\pm 10\%$ .  
 Motor Rating Max.: 17.2 W.  
 Current Max.: 0.72 A.  
 Sound Pressure Level: 45 dB(A).  
 Ambient Temperature: 5–40°C.  
 Weight: 1.8 kg (4 lbs.).  
 Dimensions: 180 mm x 106 mm x 99.5 mm (7.1 in. x 4.2 in. x 3.9 in.)

#### Power Supply

Output Voltage: 24 V DC,  $\pm 2\%$ .  
 Output Current: 4.6 A.  
 Ambient Temperature: 5–50°C.  
 Weight: 0.7 kg (1.5 lbs.).  
 Dimensions: 169 mm x 142 mm x 56.6 mm  
 (6.7 ins. x 5.6 ins. x 2.2 ins.).  
 Mains Power Required: 115–230 V (–20 +15) V AC, 50/60 Hz.

### Maintenance

The diaphragms should be changed with every 12,000 hours of operation.

### Ordering Information

#### Model

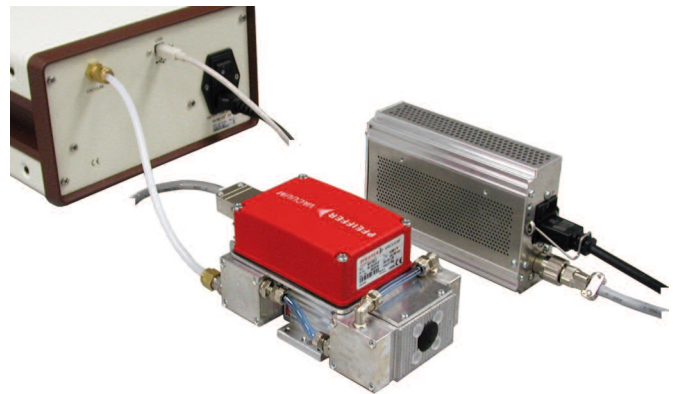
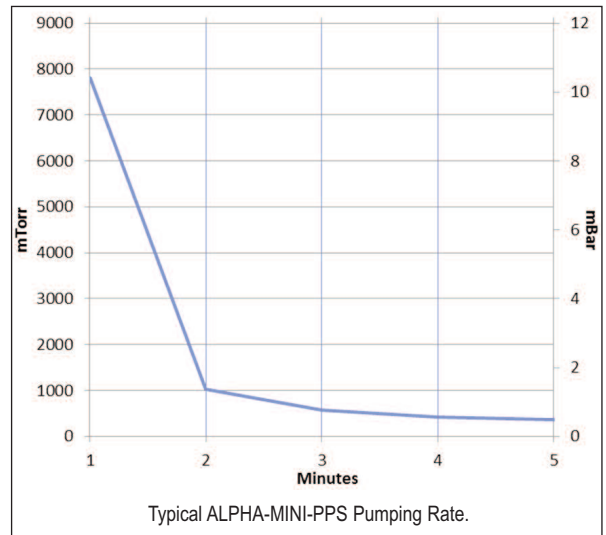
ALPHA-MINI-PPS

ALPHA-MINI-PPS-REPKIT

#### Description

Miniature Diaphragm Pump. Includes power supply, power control cable, and vacuum tubes [25.4 cm (10 in.) and 0.9 m (3 ft.)].

Maintenance Overhaul Kit. Includes replacement diaphragm and parts for ALPHA-MINI-PPS.



\*The volumes of the ALPHA-ARIA and ALPHA-DUO are approximately 0.25 and 0.50 liters respectively.