PlasmaFlo



Features:

 Harrick Plasma's PlasmaFlo is an optional process gas flow mixer and pressure monitor for use with Harrick Plasma's Plasma Cleaner models

model: PDC-FMG-2

Dual gas feeds for process gas mixing

Dual calibrated process gas flowmeters (1.0 SCFH & 2.0 SCFH)

Thermocouple vacuum gauge for measuring total chamber pressure

Weight: 7 lbs

Size: 8 1/2"H x 10"W x 8"D

PDC-FMG-2 气体计量混合器:

Harrick 等离子体气体计量混合器是一个可选配的二路气体气体混合器,

并可监测 PDC-002 等离子清洗器使用中清洗舱的压力。

提供二路气体混合

二路计量气体流量计(1.0 SCFH & 2.0 SCFH)

热电偶真空计用于测量清洗舱压力

设备重量: 7磅 (3.2 Kg)

外形尺寸: **8 1/2 x 10 x 8** (高 x 宽 x 长) 英寸; (216 x 254 x 203) mm

Vacuum Pump Features - Standard Pumps

Not intended for pumping oxygen; see below for suitable Oxygen Service Pumps

- Rotary vane pump
- Uses hydrocarbon oil (included with pump)
- Suitable for pumping inert process gases (e.g. room air, N₂ or Ar)
- Includes hose, hose clamps, and hose adaptors to connect plasma cleaner to vacuum pump

PDC-VP-2:

Premium Quality Model (higher reliability) Pumping Speed (50/60 Hz): 3.2/3.6 m³/hr

Ultimate Total Pressure (gas ballast closed): 1.5 mTorr Ultimate Total Pressure (gas ballast open): 23 mTorr

Motor Power (50/60 Hz): 250/300 W

Weight: 34 lbs

Size: 9"H x 15"W x 5"D

PDC-VP-OIL:

Replacement oil for Premium Quality Vacuum Pumps PDC-VP-2 (1 quart)

PDC-VPE-2

Basic Model (lower cost)

Pumping Speed (50/60 Hz): 5.1 m³/hr

Ultimate Total Pressure (gas ballast closed): 7.5 mTorr Ultimate Total Pressure (gas ballast open): 150 mTorr

Motor Power (50/60 Hz): 373 W

Weight: 27 lbs

Size: 9 3/4"H x 14"W x 5 1/2"D

PDC-VPE-OIL:

Replacement oil for Basic Vacuum Pumps PDC-VPE-2(1 quart)

标准泵:

不能够抽氧气;另外可见下文适合抽氧气的旋片泵

使用碳氢油(包括泵)

适合抽惰性类的气体(如室内空气,或氮气、氩气)

包括有软管、喉箍、和软管适配器方便连接等离子清清洗机和真空泵

PDC-VP-2:

优良型(具有较高的可靠性)

抽速(50/60 Hz): 3.2/3.6 m³/hr

最终总压(关气镇): 1.5 mTorr

最终总压(开气镇): 23 mTorr

电机功率(50/60 Hz): 250/300 W

重量: 34磅

大小: 9x15x5 (高 x 宽 x 长) 英寸

PDC-VP-OIL :

为 PDC-VP-2 真空泵配套的真空油(1 夸托)。

PDC-VPE-2

基本型 (较便宜的价格)

抽速(50/60 Hz): 5.1 m³/hr

最终总压(关气镇): 7.5 mTorr

最终总压(开气镇): 150 mTorr

电机功率 (50/60 Hz): 373 W

重量: 27磅

大小: 93/4x14x51/2(高x宽x长)英寸

PDC-VPE-OIL (1 夸托):

为 PDC-VPE-2 真空泵配套的真空油(1 夸托)。

Vacuum Pump Features - Oxygen Service Pumps

- Suitable for pumping concentrated oxygen gas as well as inert gases (e.g. room air, N_2 or Ar)
- Does not use hydrocarbon oil (the combination of concentrated oxygen and hydrocarbon oil is an explosion hazard)
- Includes hose, hose clamps, inlet port adaptor, centering ring, and swing clamp to connect plasma cleaner to vacuum pump

PDC-OPF-2

Fomblin-Based Vacuum Pump for Oxygen Service (not including Fomblin Fluid)

Pumping speed (50/60 Hz): 3.3/3.9 m³/hr

Ultimate total pressure (gas ballast closed): 1.5 mTorr Ultimate total pressure (gas ballast open): 90 mTorr

Motor power (50/60 Hz): 250/300 W

Weight: 48 lbs

Dimensions: 9" H x 17" W x 6 1/2" D

PDC-FMB (1kg; 0.532L)

Fomblin Fluid for Fomblin-Based Vacuum Pump PDC-OPF-2

PDC-OPD-2

Dry Scroll Vacuum Pump for Oxygen Service

Uses no oil or fluid

Pumping speed (50/60 Hz): 4.8/6 m³/hr

Ultimate total pressure (gas ballast closed; 50/60 Hz): 53/45 mTorr Ultimate total pressure (gas ballast open; 50/60 Hz): 263/225 mTorr

Motor power (50/60 Hz): 250/300 W

Weight: 51 lbs

Dimensions: 11 1/2"H x 17"W x 10"D

真空泵 (可以使用氧气)

适合抽氧气以及惰性气体(如室内空气,氮气或氩气)

不使用真空泵油(氧气和泵油相遇具有爆炸的危险)

包括有软管、喉箍、进气道适配器、围绕环、和回旋钳有利等离子清清洗机与真空泵的连接。

PDC-OPF-2

可以抽氧气的 Fomblin-Based 真空泵(不包含 Fomblin 液体)

抽速(50/60 Hz): 3.3/3.9 m³/hr

最终的总压力(关气镇): 1.5 mTorr

最终的总压力(开气镇): 90 mTorr

电机功率(50/60 Hz): 250/300 W

重量: 48磅

尺寸: 9x 17 x 6 1/2 (高 x 宽 x 长) 英寸

PDC-FMB (1kg; 0.532L)

为 Fomblin-Based 真空泵 (型号 PDC-OPF-2) 配套的 Fomblin 液体

PDC-OPD-2

可以抽氧气的干式真空泵

干式真空泵不需要使用真空泵油或其它液体

抽速(50/60 Hz): 4.8/6 m³/hr

最终的总压力(关气镇; 50/60 Hz): 53/45 mTorr

最终的总压力(开气镇; 50/60 Hz): 263/225 mTorr

电机功率(50/60 Hz): 250/300 W

重量: 51磅

尺寸: 11 1/2x 17 x 10 (高 x 宽 x 长) 英寸

Quartz Plasma Chamber Features

Quartz Plasma Chamber Features PDC-00Q:

- Optional replacement for standard Pyrex vacuum chamber
- Beneficial for plasma processes that require extremely clean processing conditions

石英清洗舱 PDC-00Q:

可以替代原配置的清洗舱。

有利于等离子体处理样品的过程,保证达到极其干净的工艺条件。

Quartz Sample Tray Features

Quartz Sample Tray Features PDC-00T:

- Useful for holding small samples for cleaning or treatment
- *Sizes*: 5 1/2" x 6 1/2" (for PDC-002)

石英样品托盘 PDC-00T:

有利于进行小样品的清洗或处理。

尺寸: 51/2x61/2(宽x长)英寸





使用 CF4 气体配套的连接配件

The required connection accessories for use with CF₄ process gas are as follows:

- 1. 2 Ft. PTFE Tubing, 1/4" o.d.
- 2. 1x 1/4" o.d. Tube Fitting to 1/8" Female NPT Connector
- 3. 3x Nut and Ferrule Set
- 4. 3 Ft. RFRT FEP-Lined Vacuum Hose

Customer will also need to provide a CF₄ compatible gas line from the canister regulator to the PlasmaFlo input (PTFE material is recommended)

使用 CF4 气体需要的连接配件:

- 1. 2 英尺长、1/4 英寸外径的聚四氟乙烯管。
- 2. 1 个 1/4" 英寸外径管件转换到 1/8" NPT 的接口。
- 3.3个螺母和插芯。
- 4. 3 英尺长材料为 RFRT FEP 的真空软管。

另外客户还需要准备一段连接 CF4 气瓶到气体计量混合器(PlasmaFlo)的管线(推荐用户使用聚四氟乙烯材料)。