

## NFPA 99 Compliant Duplex Oil-Less Rotary Vane Medical Vacuum Package 3 HP Horizontal Tank Mounted

### Vacuum Package

- Fully compliant with the latest edition of NFPA 99
- Two oil-less rotary vane type vacuum pumps with inlet filter and isolation valve for each
- Two motors
- ASME coded vacuum receiver with bypass and manual drain
- Duplex control panel with automatic lead/lag controls
- System designed for access through a standard 36" doorway
- All components completely pre-piped and pre-wired to single point service connections
- Liquid tight conduit, fittings and junction boxes for all control and power wiring
- All interconnecting piping and wiring is completed and operationally tested prior to shipment

### Vacuum Pump

- Dry rotary vane type pump
- Self-lubricating carbon/graphite vanes
- Direct-driven through a shaft coupling
- Air-cooled
- 2 micron inlet filter
- Vacuum relief valve
- Check valve to prevent backflow through off-cycle units
- Sealing fluid not required
- Vibration isolation

### Vacuum Motor

- NEMA rated
- C-face
- TEFC
- 1800 RPM, with 1.15 service factor
- 208 or 230/460V 3-phase

### Intake Piping

- Vacuum pumps are connected to a common manifold and piped to a horizontal receiver
- Inlet check valve on each pump
- Inlet isolation valve on each pump
- Flexible connector between pump and manifold
- Flexible connectors for discharge connections

### Vacuum Receiver

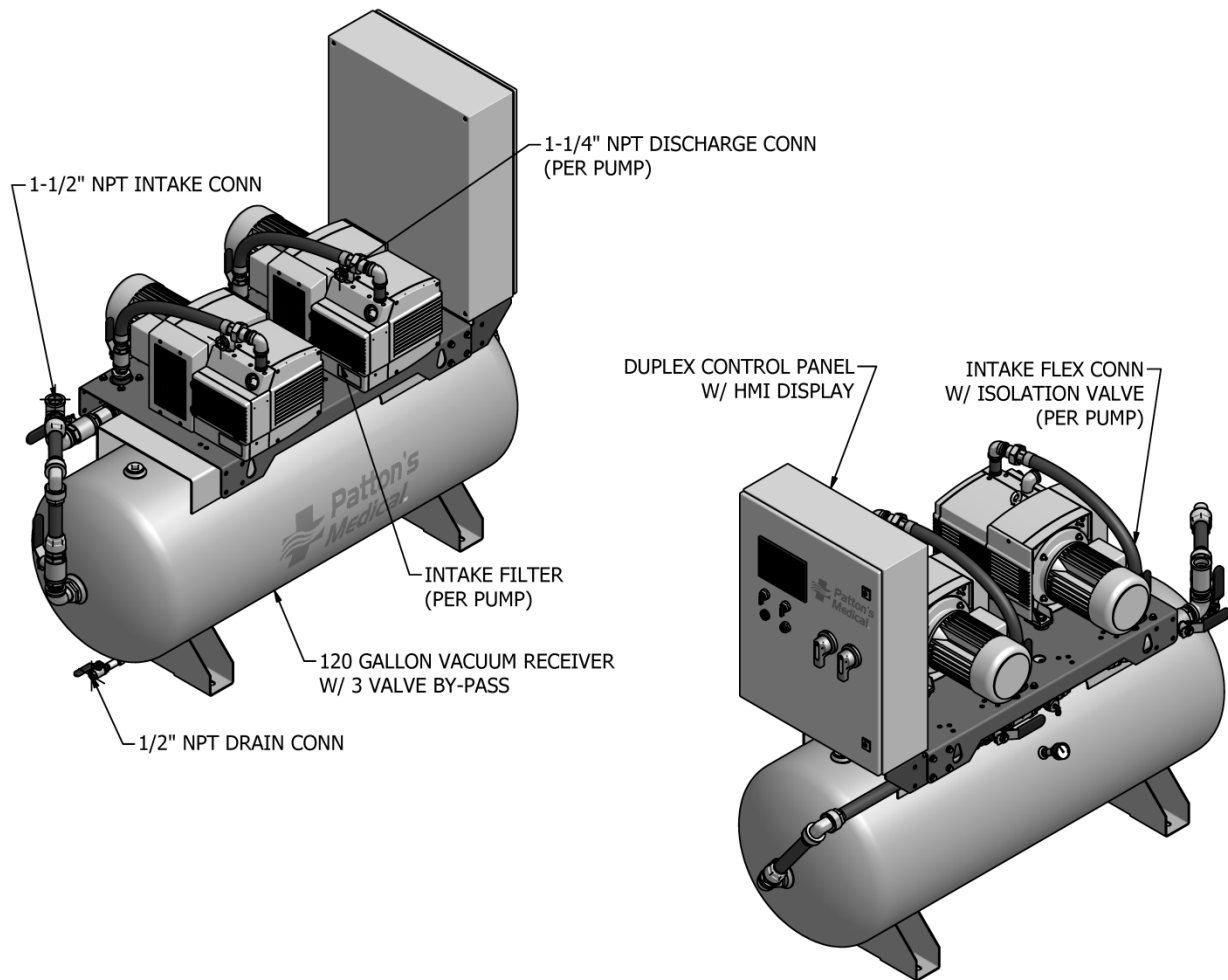
- Horizontal orientation with integrally mounted bypass and manual drain
- ASME Code stamped
- National Board Certified
- Rated for a minimum 150 PSIG design pressure
- Vacuum gauge
- Manual drain

### Control System

- Mounted and wired duplex control system
- NEMA 12 and UL 508A labeled
- Automatic lead/lag sequencing
- Circuit breaker disconnects for each motor with external operators
- Full voltage motor starters with overload protection
- 120V control circuit transformers for each motor circuit
- Visual and audible reserve unit alarm with isolated contacts for remote alarm
- Hand-off-auto selector switches for reliable back-up
- Automatic alternation of all vacuum pumps based on a first-on/first-off principle with provisions for simultaneous operation
- Automatic activation of reserve unit if required
- SIGNAL 1™ – touch screen gateway

#### Standard Screen Displays

- + Air level/Runtime
- + Alarm history
- + Service indicator
- + Maintenance schedule
- + Replacement parts
- + Troubleshooting guidelines
- + Historical Trending of system status
- + 7" Wide TFT Graphic Touch Screen with Motion Actuated Backlit LED and Bright 65,536 (16-bit) Colors
- + Downloadable Trend Information via USB Host Port or Network Device
- + 128MB Flash Memory, 64MB DRAM
- + Built-in Ethernet Port 10/100 Base-T (RJ45)
- + Supports over 100 Communication Protocols including BACnet IP, Ethernet IP, and Modbus TCP/IP
- + Built-in Multiple Ports it can handle three (3) additional Protocols simultaneously
- + Built-in VNC server allowing remote monitoring over Ethernet/Internet network for "Real Time" monitoring of live graphics through standard browser, smart phones & mobile devices
- + Share data between HMI and Building Management systems with no additional software to implement



Duplex Dry Vane Medical Vacuum Package Specifications <sup>1</sup>										
Complete Package Model No.	HP	Capacity @19" Hg <sup>2</sup>		Package BTU/HR <sup>3</sup>	Noise Level <sup>4</sup>	System FLA			Weight (lbs)	L x W x H (in)
		Pump (SCFM)	System (SCFM)			208V	230V	460V		
70-21-033A	3	12	12	6,108	74	19.2			934	76.25 x 28 x 62.75
70-21-033B							17.2			
70-21-033C								8.6		

Notes:

<sup>1</sup> Normal Operating conditions at a maximum ambient of 105° F. Consult factory for higher ambient conditions.

<sup>2</sup> Capacities are shown as NFPA system capacities (reserve vacuum pump on standby).

<sup>3</sup> Package BTU/HR are shown with the reserve pump on standby.

<sup>4</sup> Noise levels are shown in dB(A) and reflect one pump running.

**Statement of Warranty**

Patton's Medical warrants all Medical Vacuum packages, to be free of defects in material and workmanship under normal use for a period not to exceed thirty (30) months from date of shipment, or twenty-four (24) months from date of start-up.