

## Specification Oil-Less Rotary Vane Vacuum Pump

**Duplex Modular Stack Mount 5, 7.5, & 10 HP**

#3605 Rev 5/12/14

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### Description:

NFPA 99 compliant Duplex oil-less rotary vane medical vacuum package. One piece vertical tank mount system is designed for single point connections. All systems are thoroughly tested prior to shipping. This system ships with:

- Inlet and discharge threaded flex connectors
- Hard copy and CD of O&M manuals

### Package Details:

Duplex medical vacuum system, consisting of two continuous duty, oil-less rotary vane, air cooled vacuum pumps. The vacuum pumps, vacuum receiver and control panel shall be factory assembled in a two piece package, pre-plumbed and pre-wired for single point connections. The package includes: 5.0 micron inlet filters, vibration isolation feet under each pump, exhaust and intake manifold plumbing with flexible metal vibration isolators, pump isolation valves, sight gauge, 3-valve bypass, and main system shutoff valve with flexible metal isolator for connecting to piping system. The package meets or exceeds NFPA 99 current edition.

### Oil-less Rotary Vane Vacuum Pump:

Each medical vacuum pump is 100% dry oil-less rotary vane vacuum pump technology, requiring no oil and no water in its operation. The oil-less rotary vane pump is a single stage, positive displacement, continuous duty type vacuum pump, capable of operating continuously through its full range up to 27" HG. The pump requires no routine maintenance due to the use of sealed-for-life bearings and dry running, self lubricating graphite composite vanes (rated for 20,000 minimum running hours). The direct shaft-driven vanes generate vacuum efficiently and economically with a long service life. Maintenance is simple and cost effective, due to the longevity of the pump. This technology is environmentally friendly since no hazardous waste oil disposal is necessary. The compact design lends itself to small spaces. Each vacuum pump is equipped with an inlet check valve, anti-suck back valve and an inlet filter with a 5.0 micron replaceable element. Each vacuum pump is air cooled and no water is required for normal operations.

### Electric Motor/Drive:

Each vacuum pump shall be direct driven by a 1,740 RPM (10 HP 1,150 RPM) C-face, totally enclosed, fan cooled, TEFC electric motor. Motor shall be 208-230/460 volt, three phase with a service factor of 1.15.



### Vibration Isolation:

Each pump and motor assembly shall be mounted to the base frame/tank with seismically restrained vibration isolators.

### Vacuum Receiver:

The tank shall be constructed in accordance with A.S.M.E. standards and shall be equipped with 3 valve by-pass piping, vacuum gauge, double valve drain system and sight gauge.

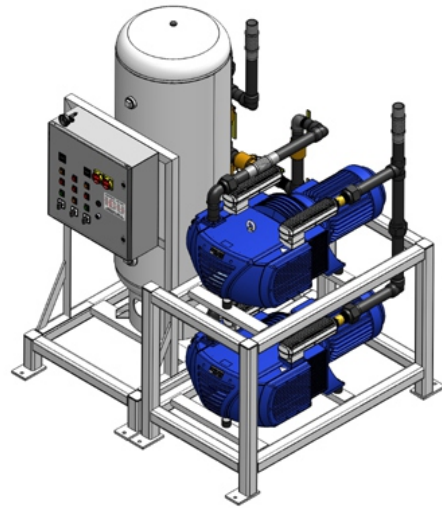
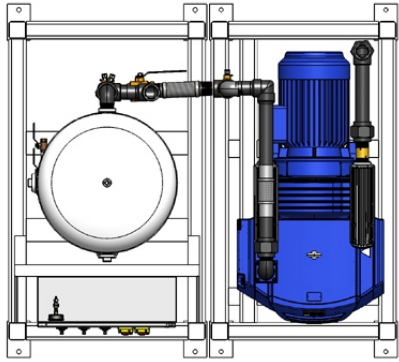
### Standard Control Panel:

The system includes a Duplex control panel in a NEMA 12 enclosure. The control panel is UL 508 listed and is designed to operate an NFPA 99 compliant medical vacuum system. The panel includes: individual through-the-door disconnects for each motor, motor circuit breakers, magnetic starters, adjustable motor overload protection, dual control voltage transformers, alternating circuit, hand-off-auto switches, auto/lead pump selector switch, power on light, high temperature lights, transformer failure light, pump run lights, vacuum switches and alarm contact connection points. The control panel will start up immediately after power failure and no boot-up time is required.

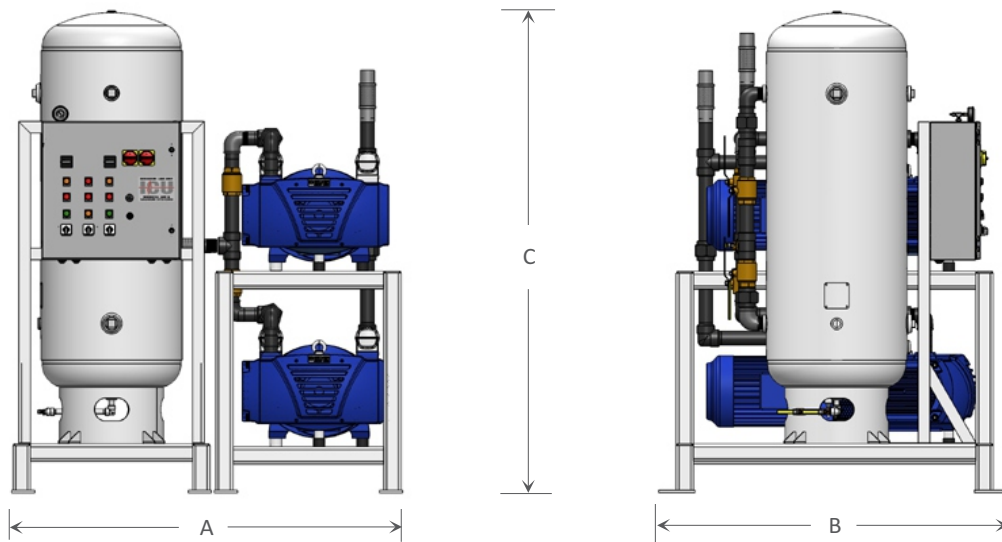
### Optional:

- Galvanized tank.
- Touch-Screen Interface Control System (HMI/PLC) with built-in ethernet, system monitoring, maintenance alerts and multiple protocols for facility automation systems.

## Oil-Less Rotary Vane Vacuum Package plex al Mount & HP



There are recommended minimum clearances for equipment maintenance and ventilation. Please contact us at 800-743-8280 for more information.



SHOWN: Duplex 10 HP, 120 gallon, modular stack mount, standard oil-less rotary vane configuration.

### NFPA Compliant Medical Vacuum Package - Technical Data

Model Number	Tank Gals	HP		SCFM @19" HG <sup>(1,2)</sup>		dB(A) <sup>(3)</sup> Level	System FLA			BTU HR	Dimensions					NPT In	NPT Out	Weight (LBS)
		each	pkg	each	pkg		208V	230V	460V		A	B	C	D	E			
V34M-DSE-4VS	120	5.0	10.0	22.1	22.1	77	28	26	13	12,722	65.0	61.0	77.0	32.5	32.5	1.50	1.50	2,100
V34M-DSE-5VS	200	5.0	10.0	22.1	22.1	77	28	26	13	12,722	65.0	61.0	88.0	32.5	32.5	1.50	1.50	2,200
V34M-DSF-4VS	120	7.5	15.0	41.4	41.4	79	42	40	20	19,083	65.0	61.0	77.0	32.5	32.5	1.50	1.50	2,250
V34M-DSF-5VS	200	7.5	15.0	41.4	41.4	81	42	40	20	19,083	65.0	61.0	88.0	32.5	32.5	2.00	2.00	2,350
V34M-DSH-4VS	120	10.0	20.0	55.4	55.4	81	56	52	26	25,444	65.0	61.0	77.0	32.5	32.5	2.00	2.00	2,400
V34M-DSH-5VS	200	10.0	20.0	55.4	55.4	81	56	52	26	25,444	65.0	61.0	88.0	32.5	32.5	2.00	2.00	2,475

1. Vacuum pump data is shown with one pump in reserve. 2. Pump capacities are shown in SCFM (Standard Cubic Feet per Minute). 3. dB(A) levels are shown as only one pump running. 4. Data is shown with equipment running at normal operating conditions with a maximum ambient temperature of 105°.