Specification Oil-Less Rotary Vane Vacuum Pump

MEDICAL VACUUM SYSTEM

Triplex Modular Stack Mount 5, 7.5, 4, & 10 HP #3607 Rev 10/01/14

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

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

Package Details:

Triplex medical vacuum system, consisting of three continuous duty, oil-less rotary vane, air cooled vacuum pumps. The vacuum pumps, vacuum receiver and control panel shall be factory assembled in a three 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:

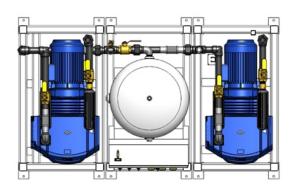
The system includes a Duplex control panel in a NEMA 12 enclosure. The control panel is UL 508 listed and is designed to operate an NFPA 99 compliant medical vacuum system. The panel includes: individual through-the-door disconnects for each motor, motor circuit breakers, magnetic starters, adjustable 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:

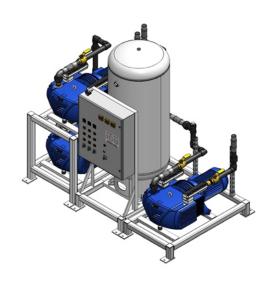
- Galvanized tank.
- Touch-Screen Interface Control System (HMI/PLC) with built-in ethernet, system monitoring, maintenance alerts and multiple protocols for facility automation systems.



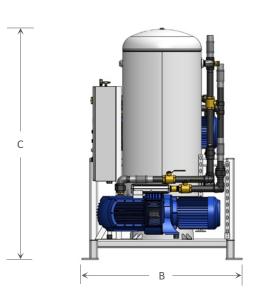
Oil-Less Rotary Vane Vacuum Package Triplex Modular Stack Mount 5, 7.5, & 10 HP











SHOWN: Triplex 10 HP, 200 gallon, modular stack mount, standard oil-less rotary vane configuration.

| NFPA Compliant Medical Vacuum Package - Technical Data | | | | | | | | | | | | | | | | | | |
|--|------|---------|------|-----------------------|-------|-----------|-------------------|------|------|--------|------------|------|------|------|------|------|------|--------|
| | Tank | Tank HP | | SCFM @19" HG (1,2) dl | | dB(A) (3) | A) (3) System FLA | | LA | вти | Dimensions | | | | | NPT | NPT | Weight |
| Model Number | Gals | each | pkg | each | pkg | Level | 208V | 230V | 460V | HR | Α | В | С | D | E | In | Out | (LBS) |
| V34M-TSE-4VS | 120 | 5.0 | 15.0 | 22.1 | 44.2 | 77 | 43 | 39 | 20 | 12,722 | 98.5 | 61.0 | 77.0 | 32.5 | 32.5 | 1.50 | 1.50 | 3,150 |
| V34M-TSE-5VS | 200 | 5.0 | 15.0 | 22.1 | 44.2 | 77 | 43 | 39 | 20 | 12,722 | 98.5 | 61.0 | 88.0 | 32.5 | 32.5 | 1.50 | 1.50 | 3,250 |
| V34M-TSF-4VS | 120 | 7.5 | 22.5 | 41.4 | 82.8 | 79 | 63 | 59 | 29 | 19,083 | 98.5 | 61.0 | 77.0 | 32.5 | 32.5 | 1.50 | 1.50 | 3,250 |
| V34M-TSF-5VS | 200 | 7.5 | 22.5 | 41.4 | 82.8 | 79 | 63 | 59 | 29 | 19,083 | 98.5 | 61.0 | 88.0 | 32.5 | 32.5 | 2.00 | 2.00 | 3,350 |
| V34M-TSH-4VS | 120 | 10.0 | 30.0 | 55.4 | 110.8 | 81 | 84 | 78 | 39 | 25,444 | 98.5 | 61.0 | 77.0 | 32.5 | 32.5 | 2.00 | 2.00 | 3,250 |
| V34M-TSH-5VS | 200 | 10.0 | 30.0 | 55.4 | 110.8 | 81 | 84 | 78 | 39 | 25,444 | 98.5 | 61.0 | 88.0 | 32.5 | 32.5 | 2.00 | 2.00 | 3,450 |

^{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°.











