

### General

The Powerex vacuum system is designed provide vacuum for applications such as laboratories, molding, packaging, printing and other similar facilities.

### Vacuum System

The package shall include one or two vacuum pumps and associated equipment, one ASME tank and one control panel. Each pump is factory piped to a common intake manifold. The system shall be completely tested prior to shipment.

### Rotary Vane Vacuum Pump

The vacuum pumps shall be of the rotary vane air-cooled design. Each vacuum pump shall be direct driven through a shaft coupling by a TEFC electric motor. Belt drives shall not be permitted. Each vacuum pump shall be air-cooled and have absolutely no water requirements. Each vacuum pump shall have an end (ultimate) vacuum of 29.3" Hg (15 torr). Lubrication shall be provided by an integral, fully recirculating oil supply that is filtered by an automotive type, spin-on oil filter. Non-recirculating (once through) or partial re-circulating oil supply systems shall not be permitted. Each vacuum pump shall be capable of operation with standard SAE 30 weight oil. The oil separation systems shall be integral and shall consist of no less than three stages of internally installed oil and smoke eliminators through which the exhaust gas stream must pass. This system shall consist of bulk separation, oil mist elimination, and smoke elimination, and shall be capable of removing 99.9+ percent of all oil and smoke particles from the exhaust gas stream. Each vacuum pump shall include a built-in, anti-suck-back valve, mounted at the pump inlet, and three sliding vanes. Each vacuum pump shall be equipped with a 10 micron inlet filter for removal of particulates. The vacuum pumps shall be mounted on vibration isolators. The system shall also include a supplementary check valve between the inlet filter and the pump.

### Motor

The motor is continuous duty, NEMA rated, C-face, TEFC, suitable for 208-230, or 460V, 3 phase, 60 hertz electrical operation.

### Receiver

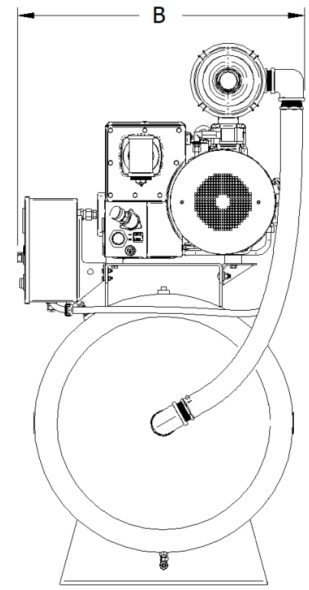
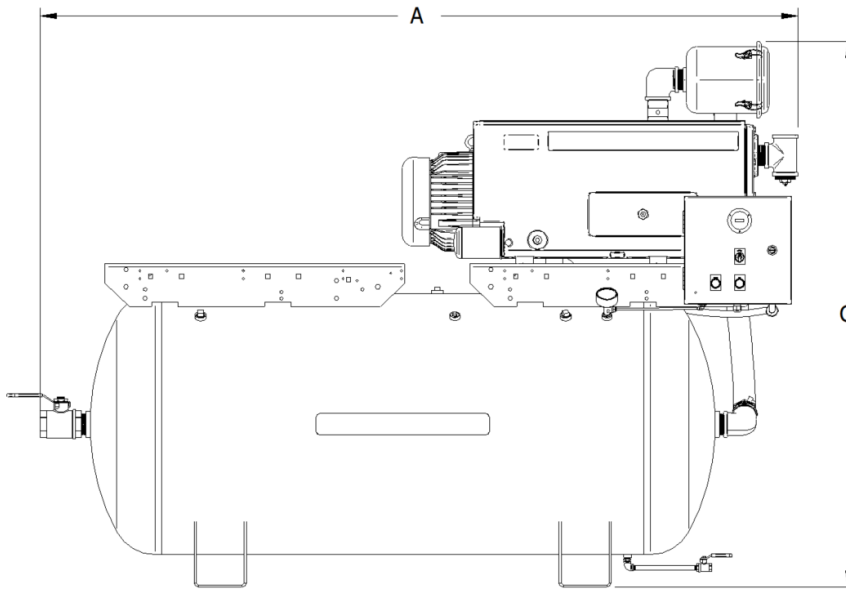
The system shall include an ASME rated receiver rated for full vacuum. The tank shall be equipped with a vacuum gauge and a manual drain.

### Control Panel

The system shall include a UL listed control panel in a NEMA 1 enclosure in simplex or duplex configurations utilizing a 120V control transformer with fused primary and secondary protection. The control panel also includes the following accessories for each pump: Run time indicator, magnetic starter with 3-leg overload protection and Hand/Off/Auto selector switch. Standard features shall also include minimum run timers via a PLC or time delay relay for each pump and timed lead/lag pump alternation to maintain even run hours on each pump. The lag vacuum pump shall be able to start automatically if the lead vacuum pump fails to operate.

### Available Options

- Internal tank lining for corrosion resistance
- Tank Sight Gauge
- Exhaust flex hose



Industrial Vacuum System Specification

Model	HP	SCFM @ 19" Hg	SCFM @ 0" Hg	Tank (gal)	BTU/Hr	dB(A) Level	System F.L.A.			Weight	Dimensions			Inlet/Outlet
							208V	230V	460V		A	B	C	
IBVS0403	5	25	71	80 H	10838	68	17.0	15.2	8.5	522	73"	31"	46"	1 1/4"
IBVS0503	5	37	103	80 H	10838	72	16.8	14.9	8.5	569	72"	33"	51"	2"
IBVS0754	7.5	52	141	120 H	16256	80	28.2	23.8	14.1	905	80"	34"	58"	2"
IBVS1004	10	77	212	120 H	21675	81	35.4	28.2	16.3	998	80"	36"	58"	2"
IBVS1005	10	77	212	200 H	21675	81	35.4	28.2	16.3	1138	88"	34"	63"	2"