

ERVG Vacuum Generator

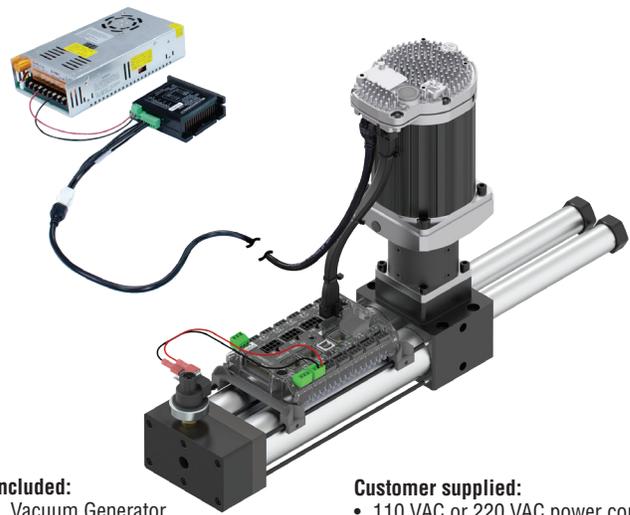
The PHD Vacuum Generator electrically produces vacuum on demand to power suction cups and vacuum pick-up devices.

Major Benefits

- Provides improved energy efficiency compared with pneumatically powered Venturi vacuum generators
- Uses standard valves and air lines to control application of vacuum to devices
- Can be used to evacuate an external accumulator (tank) to create a vacuum reservoir
- Reduced noise compared with Venturi vacuum generators
- Consult PHD for other sizes and options and reservoir tanks

Operation

- Two servo motor driven pistons alternately extend and retract to rarefy connected air volume.
- Integrated check-valves allow air to flow into ERVG and close to prevent loss of generated vacuum
- On-off signal commands ERVG to begin producing vacuum
- Integral vacuum switch monitors vacuum level and stops ERVG cycling when vacuum of 24 inches of mercury (-80 kPa) is reached.

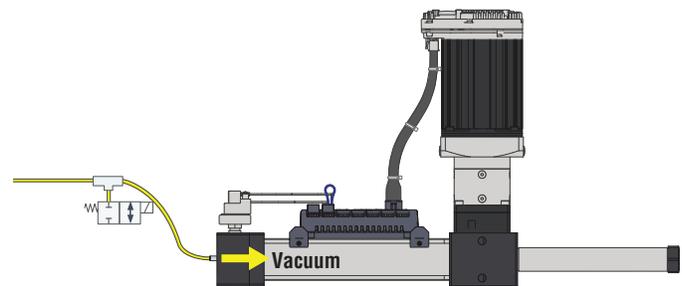
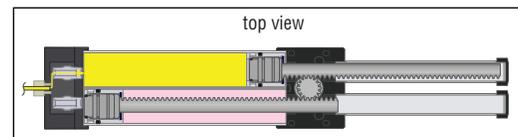


Included:

- Vacuum Generator
- Vacuum Generator Controller
- Regeneration Clamp
- Motor Power Supply - 50/60 Hz at 110 VAC or 220 VAC adjustable input

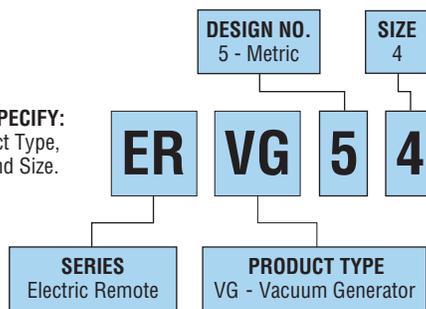
Customer supplied:

- 110 VAC or 220 VAC power cord
- 24 VDC power supply for controller
- PLC connection
- Air lines



ORDERING DATA

TO ORDER, SPECIFY:
Series, Product Type,
Design No., and Size.



NOTES:

- 1) Accumulators are available from PHD and are optimized for the specific application. Contact PHD for more information.
- 2) Other sizes, options, and accessories available. Consult PHD.

Foldback motor models available
for reduced footprint



Uses

- Provides an electric alternative to pneumatic vacuum generation
- Reduces energy consumption and carbon footprint
- Supplies vacuum where centrally produced compressed air is not available
- Provides quiet operation
- One generator can power multiple vacuum devices

Application Examples

- Package handling
- Windshield installation
- Robotic EOAT
- Crossbar robotic feeding
- Assembly cells
- Food processing

And many others. Consult PHD with your application needs.

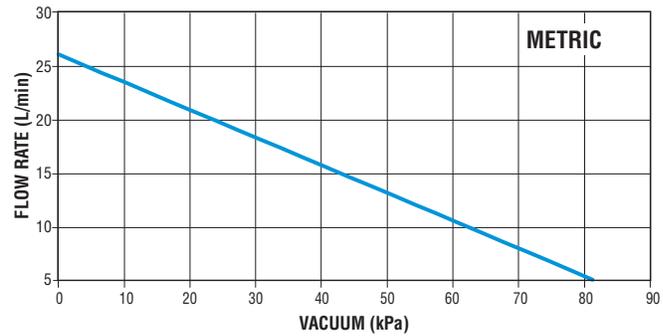
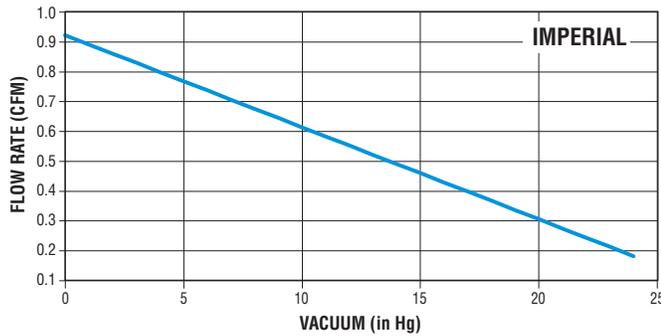
ENGINEERING DATA & DIMENSIONS: Series ERVG Vacuum Generator

SPECIFICATIONS	ERVG54
MOTOR POWER SUPPLY ⁽¹⁾	480 W ⁽³⁾ , 110/220 VAC, 50/60 Hz Input
MOTOR CONTROLLER POWER SUPPLY ⁽²⁾	5 W Minimum, 24 VDC
TYPICAL NOISE LEVEL	50 dB
WEIGHT	18.25 lb [8.28 kg]

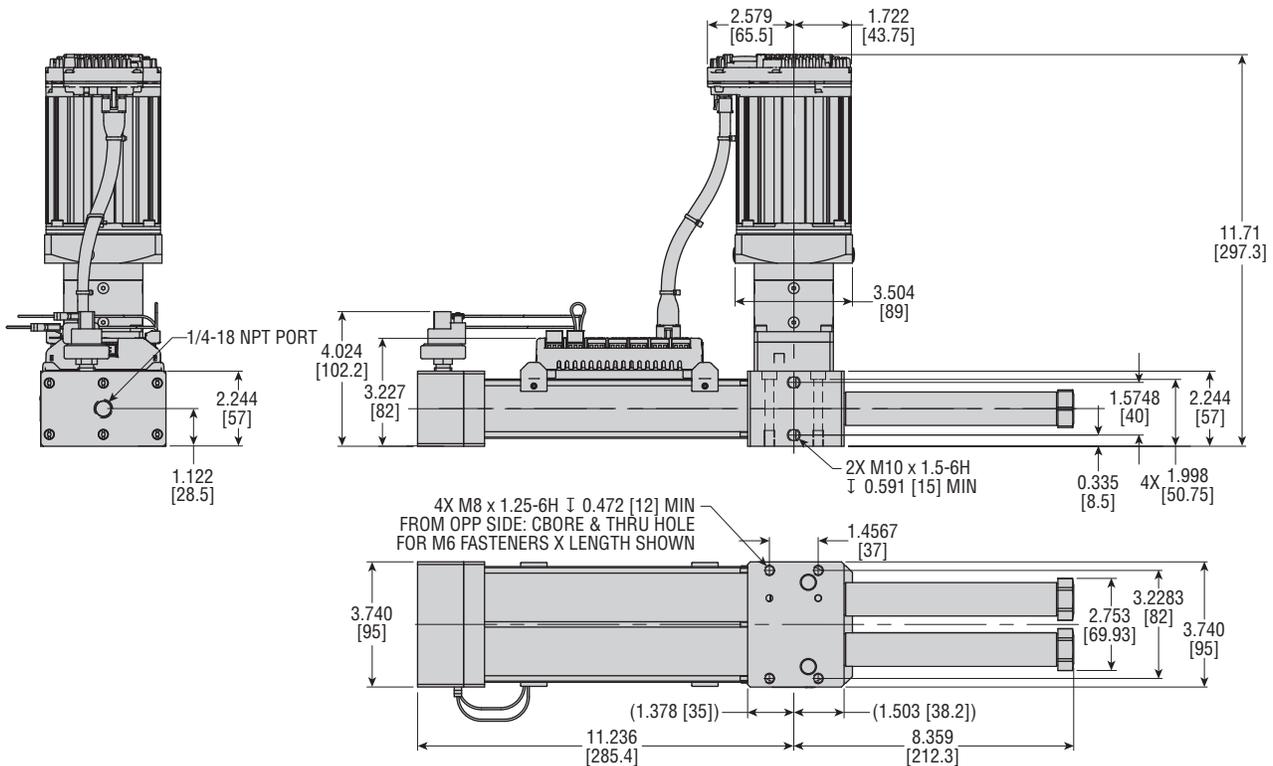
NOTES:

- 1) Supplied with vacuum generator
- 2) Supplied by customer
- 3) Maximum capability of power supply; typical power consumption during operation can be much lower depending on application

ERVG FLOW RATE VS. VACUUM LEVEL



DIMENSIONS



NOTES:

- 1) DESIGNATED ϕ IS CENTERLINE OF MOUNTING PATTERN
- 2) ALL DIMENSIONS ARE REFERENCE ONLY UNLESS SPECIFICALLY TOLERANCED