

“C” Compressors

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CHOOSING THE RIGHT VIAIR MODEL – “C” COMPRESSORS

Want to know which of our product models suits your needs? With the extensive line of compressors we offer, the importance of choosing the right compressor cannot be stressed enough. That's why we've created this guide to help you pick the right “C” model compressor.

VIAIR “C” model compressors are intended to fill air tanks. They are not equipped with an ON/OFF switch or pressure sensitive shutoff device of any kind. The use of a pressure switch and relay is required. All “C” model VIAIR compressors (except certain 100 series units) are equipped with a stainless steel braided leader hose and a check valve. This keeps the compressor from restarting under high pressure which can create an amp draw spike and can cause motor damage. Most VIAIR compressors are equipped with a thermal overload protector that will shut down the unit when overheated. When cool, the thermal overload protector will disengage allowing the compressor to restart as normal.

C-Models

When looking for the right C-Model compressor for your application, here are the questions to ask.

What voltage does my application require?

Viair offers both 12 and 24v DC compressors to suit your needs.

How much PSI does my application require?

Viair offers multiple compressors in different sizes. The products are capable of filling from 0 to 200 psi in just a few minutes. It's important to keep in mind what working pressure your application requires. A traditional air ride set up will require tank pressure up to 200 psi. Other applications such as air lockers or air horns may only require 150 psi or less. Air Cylinders or Air Brakes may operate around 100 psi so it's always important to check your specs to make sure you choose the right compressor for your needs.

What duty cycle do I need to run the compressor at?

The run time of the compressor is important to consider. Do you need something to run continuously for hours throughout the day? Or are you looking for something that only needs to operate for a couple of minutes at a time?

Viair compressors feature duty cycles ranging from 9% to 100%. Duty cycle refers to the amount of time a compressor can be operated continuously in a given time period, at 100 psi, and a standard ambient temperature of 72 F. Duty cycle is commonly expressed in percentage format as compressor on time/ (on time + off time)= Duty Cycle %. For example, a

9% duty compressor has a max continuous run time of 5 minutes and a 100 % duty cycle compressor has a max continuous run time of 1 hour before needing to cool off and rest.

How much CFM does my application require?

CFM, which stands for Cubic Feet per Minute, can also play a huge role in choosing the right compressor. Certain applications may require a compressor that is pushing out a higher volume of air per minute. Though this may not be as important for all applications, it is always important to consider how this may affect your application. For example, most air tools like impact guns require at least 3.5 CFM. A single compressor may not achieve the desired CFM and two compressors may be required to fully operate the application. CFM requirements can be different for all job types but, adding a compressor with more CFM may be beneficial.

Applications of C Model Compressors

Our C Model compressors can be used for a variety of applications. Here are a few examples:

Air Suspension Systems: Viair compressors are used in many air suspension systems. Our C-models help to quickly fill the air tank which then sends air to the air bags which provide a smoother ride and a lowered sleek look.

Air Horns: Viair compressors help provide a constant air source for Train Horn applications.

Air Brakes: Viair compressors are used in many air brake applications, helping provide a constant air source for auxiliary braking systems. With many customers reporting seeing a less than 1 % percent failure rate in the field, Viair is the perfect solution for your everyday pneumatic needs. **Air Cylinders:** Viair compressors are used in many air cylinder applications as well. The compressors help fill these cylinders quickly which are then used to open doors, adjust seats, release levers in many industrial applications.

Aviation Tire Maintenance: Our compressors can be used to pump air into aircraft tires and service other aircraft equipment. One of our customers, an industrial aviation customer, builds aircraft tugs that help tow small airplanes. The use of Viair compressors saved the company resources and enabled them to do what they do best – build tugs and service aircrafts. **Oil and Gas Well Monitoring:** Our C Model compressors are also used in many well monitoring systems. The compressors help power Solar Monitoring systems which help release a safety valve if ever any signs of over pressurization. Viair has provided customers with a constant air source capable of withstanding the elements out in the field.