

Compressor Duty Cycle Chart and Standard Features

Guide | 8 Dec 2022 | OBA Guide

Standard Compressor Features:

- IP 54 through IP 67 Rated
- Gearless, direct-driven electric motors
- 12-volt and 24-volt motors
- Oil-less design requires no maintenance (besides filter inspection/replacement)
- High performance and highly reinforced PTFE piston ring
- Anodized piston cylinder for increased wear protection
- Precision, high speed, durable bearings for increased piston & motor life
- Sealed motor housing for moisture resistance
- Environmental seals where electrical connections enter motor housing
- Efficient, oversized heat sink head assembly for increased heat dissipation, duty cycle & performance
- High performance check valve to eliminate restart pressure on head and piston
- Direct or remote mount option air filter assembly
- Replacement air filter elements (filtration to 10 microns)
- Stainless steel braided leader hose (PTFE lined where applicable)
- Heavy duty mounting feet (omega and standard styles, as applicable)
- Reinforced vibration isolators for safe & quiet operation
- Mounting hardware (bolts, washers, locking washers, nuts)
- Thermal Overload Protection (T.O.P. equipped compressors only) to protect compressor from overheating during normal operational duty cycle
- Maximum operating temperature of 158° F
- Minimum operating temperature of -40° F (unless otherwise noted)
- Wire terminal ends to simplify installation (ring ground terminal, spade positive lead terminal)

Duty Cycle Reference Chart:

Duty cycle refers to the amount of time a compressor can be operated in a given time period at 100 PSI, and a standard ambient temperature of 72° F. It is commonly expressed in percentage format:

Compressor on time ÷ (on time + off time) = Duty Cycle %.

Please Note: All compressors, regardless of rated duty cycle, require sufficient rest time in between cycles to allow for partial or complete heat dissipation. Heat dissipation rates may vary depending on ambient temperatures and operating conditions.

All VIAIR compressors are tested at an ambient temperature of 72 degrees Fahrenheit, with a supply voltage of 13.8 volts for 12-volt models & 28 volts for 24-volt models. It is recommended that you always operate VIAIR compressors with charging voltage or maintain recommended supply voltage for best performance.

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