

# RotorChamp

ROTARY SCREW AIR COMPRESSORS, 5 & 7.5 HP

▶ Convenient



▶ Efficient



▶ Available



▶ Flexible



**CHAMPION**<sup>®</sup>

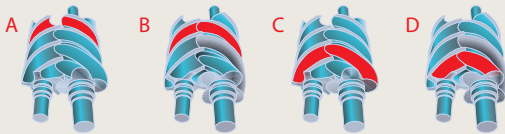
A Gardner Denver Product

*Always be one.*

# More of what you need.

Compressed air is one of the utilities required to operate an automotive shop. Today's automotive shop is highly dependent on compressed air. When a compressor goes down, it does not just hurt your reputation, it effects your bottom line, and may even temporarily shut you down.

## Rotary Screw Compressor Principle



A – Air Inlet  
B, C – Air Compression  
D – Compressed Air Discharge

At Champion, air compressors are the only product we think about. We know and understand the application of this product in the automotive aftermarket. We are always conceptualizing and developing new ways to make your compressed air system more reliable and user-friendly. We understand that a reliable source of compressed air is part of the service that you provide your customers.

Our new RotorChamp compressor packages are addressing and fulfilling the specific needs and requirements of your specific applications and much more. At just 5 and 7.5 horsepower, this state-of-the-art small rotary screw compressor uses all the technology that is currently provided by much larger compressors to industrial users. Drawing from our experience in the automotive markets, we designed a very compact, ultra-efficient compressor package that is able to provide additional value to your compressed air system.

Maybe you have never thought about using a rotary screw compressor. Or maybe you are not sure that rotary screw compressors fit your operation's needs. After looking at the RotorChamp, you will agree that this new generation of rotary screw compressors is a reliable, highly efficient alternative to any reciprocating compressor.

## A Better Rotary Screw Compressor.

Not all screw compressors are designed equally. RotorChamp utilizes a European-inspired rotary design that makes them the most efficient, worry-free air compressors in today's market. This state-of-the-art design allows the compressor to operate continuously with an absolute minimum of service and maintenance compared to other compressors of its size.

## An Air End that Works Harder.

The unique air end of the RotorChamp has been designed for continuous operation. It is known for reliability, operator convenience and low operating costs. This air end evolved from train air-braking

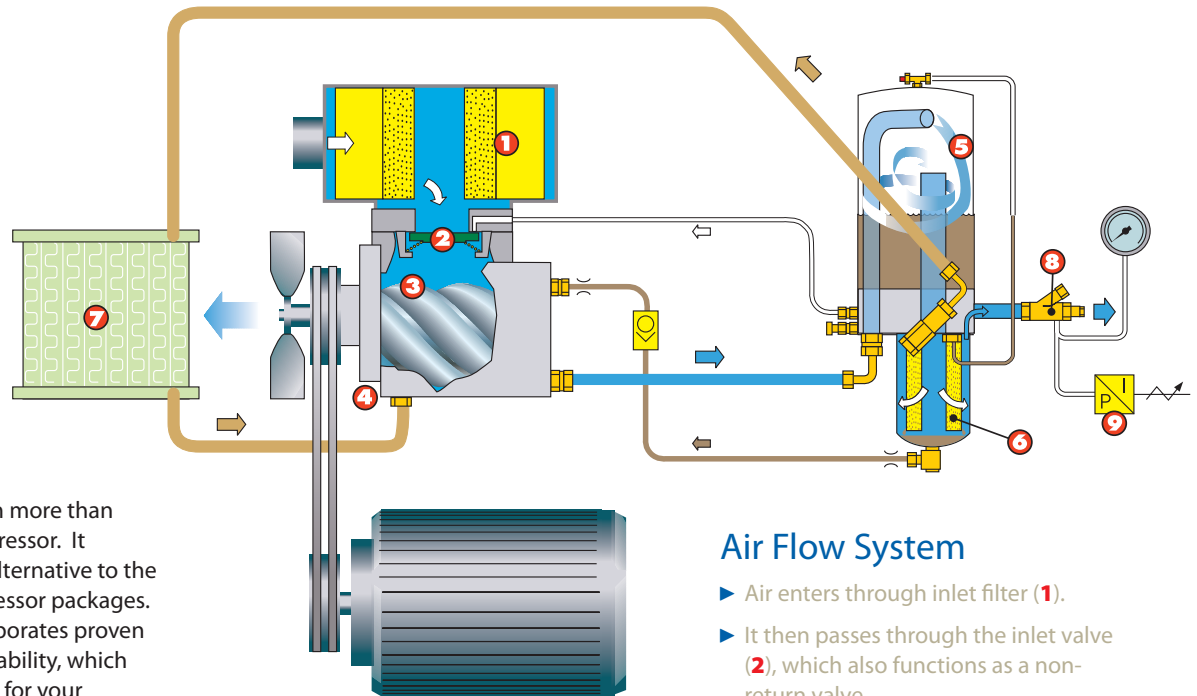
applications where dust, dirt and wide temperature ranges are extreme and where absolute reliability is crucial. So it is sure to stand up to your toughest applications.

## A Configuration that Is Smarter.

The RotorChamp uses a modular, all-integrated air end configuration that includes the air end, electric motor, oil cooling and circulation system, air/oil separation system and an automatic start/stop control mounted on an air receiver.



# Less of what you don't.



The RotorChamp is much more than just another screw compressor. It represents the modern alternative to the traditional piston compressor packages. An alternative that incorporates proven technology and high reliability, which makes it a perfect choice for your application.

## Maximum Convenience.

We package this compressor for the specific needs of the automotive aftermarket. The air ends are designed to minimize oil leaks, keeping lubricant where it should be — inside your compressor, not on your shop floor. Unlike most reciprocating air compressors, the RotorChamp provides you with cool, clean air. The built-in, two-stage oil separation system minimizes the oil carryover in the compressed air, making it very user-friendly and easy to work with.

## Maximum Efficiency.

The state-of-the-art rotors of the screw air ends are designed to maximize efficiency. An automatic start/stop control ensures an effective control method that only operates the compressor when there is air demand. Therefore, the RotorChamp offers trouble-free operation and low operating costs.

## Maximum Running Time.

The RotorChamp, compared to reciprocating compressors, is designed

to provide continuous, 24-hour-a-day operation. Proven components provide a long and trouble-free operating life and ensure that your compressed air needs are met.

## Maximum Compressor Availability.

We engineered the RotorChamp compressors to make maintenance easy and fast. In most cases, three simple filter element changes are all it takes to keep your compressor running at peak efficiency.

## Maximum Flexibility.

The RotorChamp modular air end configuration offers a flexible solution for customers with an existing air tank. A perfect opportunity for any current user who wants to change his reciprocating compressor pump to the RotorChamp integrated screw air end design.

## Air Flow System

- ▶ Air enters through inlet filter (1).
- ▶ It then passes through the inlet valve (2), which also functions as a non-return valve.
- ▶ Air then enters the RotorChamp air end (3), where twin rotors compress the air.
- ▶ Cooling oil is injected through the oil filter (4) into the air end.
- ▶ This air/oil mixture flows into a two-step separation system. The air/oil receiver (5) removes most of the oil from the air with a centrifugal force.
- ▶ An oil separator (6) removes the balance of the oil.
- ▶ The oil flows through the oil cooler (7) and returns to the oil filter.
- ▶ Air flows through the discharge valve (8) to the pipelines or main tank.
- ▶ The compressor is controlled by a pressure switch (9).

# RotorChamp Specifications

Model	Motor HP	Discharge Pressure Range, PSIG	Capacity CFM	Motor Speed RPM	Cooling Air Flow CFM	Sound Level (+/- 3dBA) @ 1 Meter	Weight (lb.)	Receiver Capacity (gallons)
5RC8	5	100-125 125-150	18.7 16.4	3600	530	79	444	80
7RC8	7.5	100-125 125-150	26.5 22.3	3600	530	81	451	80
5RC12	5	100-125 125-150	18.7 16.4	3600	530	79	559	120
7RC12	7.5	100-125 125-150	26.5 22.3	3600	530	81	566	120

Units tested in accordance with CAGI/PNEUROP acceptance test code PN2CPTC2.

# RotorChamp Dimensions

Model	A	B	C	D	E	F	G	H	J	K	L
5RC8	63.00	22.25	43.50	44.00	9.50	18.00	9.00	13.00	20.00	1/2	31.50
5RC12	69.00	24.00	49.87	42.00	13.50	18.25	9.12	15.12	24.00	3/4	34.50
7RC8	63.00	22.25	43.50	44.00	9.50	18.00	9.00	13.00	20.00	1/2	31.50
7RC12	69.00	24.00	49.87	42.00	13.50	18.25	9.12	15.12	24.00	3/4	34.50

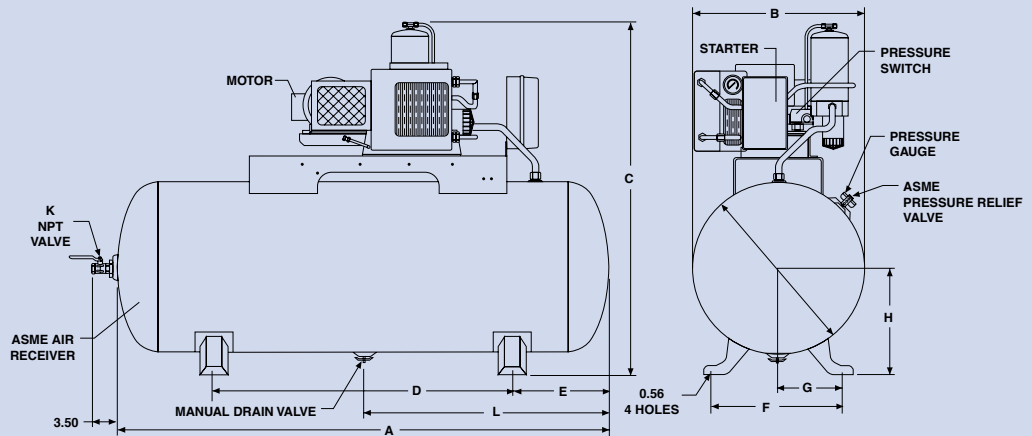
All dimensions shown in inches.

## Standard Equipment

- Complete compressor unit, including electric motor mounted on 80- or 120-gallon air receiver
- Mounted air inlet filters
- Automatic start/stop control
- Mounted and wired NEMA 1 starter
- Mounted and wired on/off switch
- Mounted check valve
- ASME pressure relief valve
- Pressure gauge
- Manual tank drain
- NPT discharge air valve
- Vibro Isolators

## Optional Equipment

- Electric tank drain



## Available Voltages

5 HP	7.5 HP
208v/1/60	208v/3/60
208v/3/60	230v/3/60
230v/1/60	460v/3/60
230v/3/60	
460v/3/60	

Please note the 7.5 HP motor is only available in three phase

Other voltages available on request

Maximum discharge pressure is 150 PSIG



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