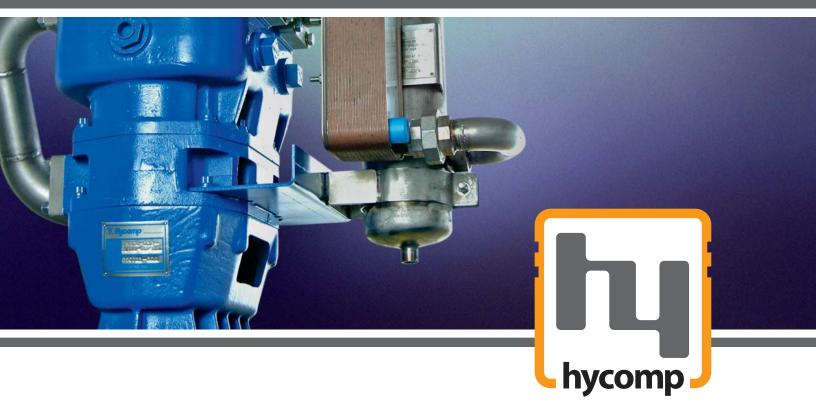
Oil Free Gas Compressors



Performance Under Pressure™

Trust... it's what we build

Who is Hycomp?

Hycomp has been earning our customers' trust and respect since 1969 by manufacturing quality oil free air and gas compressors, while providing unparalleled engineering and service expertise.

We begin by acknowledging that every application, and therefore every customer, has unique requirements. With this open mind set we investigate the details of your application, allowing us to solve problems before they occur. Trust Hycomp to understand your needs and provide you with a reliable solution.



Building Trust... Since 1969

Have Your Engineer Talk To Our Engineer



Hycomp engineers get involved from inquiry through installation to ensure the compressor system provided is an exact match to your application. We follow an Engineer-to-Engineer (E2E) process as we work through the specifics of the application and as we design your system.

Endless Tech Support

Need technical guidance? Unlimited tech support is included at no additional charge with every Hycomp compressor. There are no annual tech subscription fees, just Hycomp technicians that are available to assist you 24 hours a day.

Large Design - Small Compressor

Hycomp utilizes heavy duty construction that incorporates the benefits of larger designs into our compressors and boosters. We manufacture compressors that provide longevity and continuous oil free service by taking advantage of cast iron cylinders and heads, pressure oil lubricated crankcases and a variety of ring and packing materials.

Made In The USA & Fully Stocked

Every compressor we build is manufactured at our plant in Utah. Replacement parts are stocked on our shelves and available for next day delivery.



Modular Design

Hycomp compressors are completely modular. We offer 2 cooling methods, 9 block sizes, 18 packing arrangements and 20 cylinder sizes. Our modular style of engineering and manufacturing creates nearly endless compression possibilities, so that when you bring us your problem, we give you an exact solution.



Hycomp Gas Compression

Hycomp oil free gas compressors are capable of delivering a wide range of flows at pressures from a few psig to over 1,500 psig. Based on over 40 years of proven compressor design and engineering, the addition of multiple gas packing options to the broad variety of existing units allows us to offer an extremely versatile line of gas compressors.

Safety: Gas Containment & Interaction

Hycomp provides three increasingly secure methods of gas leakage control, including our 'B' series for inert gases, our 'G' series for standard industrial gases and our 'H' series for extreme gas control.

When dealing with gas mixtures it is important to examine not only the individual gas constituents and their individual effect on design, but also to examine the mixture as a whole as certain gases interact with others to become more corrosive, toxic or flammable than in their pure form. For the assurance that your system is safe, trust Hycomp

Flexibility: Materials & Conditions

Our engineered solutions are flexible to your requirements. Bring us your conditions and we will engineer a compressor to match your needs. We gauge compatibility and select materials accordingly. Our wide range of high quality materials provides many options to match the compatibility requirements of most industrial gases. When you need an exact solution to a specific application, trust Hycomp.

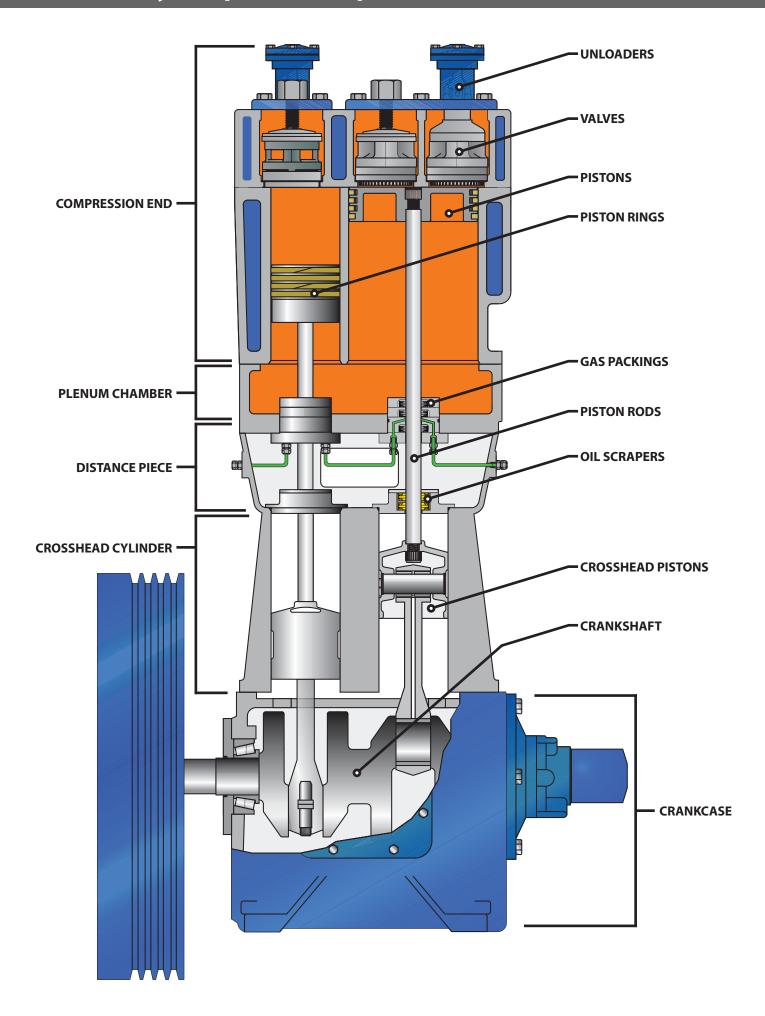
Reliability: Continuous & Oil Free

Hycomp gas compressors are continuous duty. Our compressors are engineered for slower running speeds to handle a full 60 minutes per hour, 24 hours a day, 365 days a year of continuous operation, while your process remains pure. When unplanned downtime is not an option, trust Hycomp.

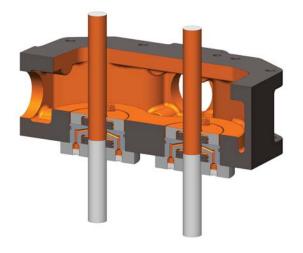
The Bottom Line.

Your Hycomp gas compressor will provide safe, reliable and continuous compression while keeping your product free from oil contaminates. For peace of mind, trust Hycomp.

Inside A Hycomp Gas Compressor

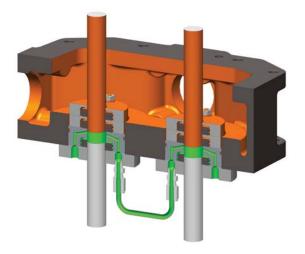


Multiple Gas Packing Configurations



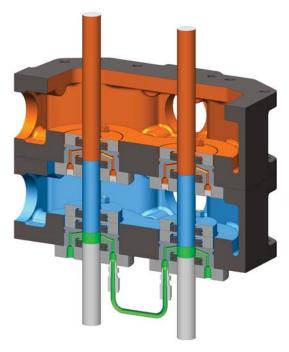
B Series: Inert Gases

The B-Series compressor is designed to compress air or non-hazardous/non-contaminating gases. Suction gas is plumbed through the plenum chamber, equalizing pressure on, and providing cooling to, the packings. Two pairs of segmented packings per rod, set for suction pressures above ambient, is standard configuration. A third packing may be added to increase leakage control (B301 configuration). Vacuum applications can also be handled with two pairs of packings (B202 configuration) or three pairs of packings (B302 configuration) per rod.



G Series: Industrial Gases

The G-Series compressor is designed to compress standard industrial gases. Suction gas is plumbed through the plenum chamber, equalizing pressure on, and providing cooling to, the packings. Three pairs of segmented packings per rod, with a purge/vent chamber between the top two sets and the bottom-most set, configured for suction pressures above ambient, is the standard G211 configuration. Two packings may be added, one above & one below, to increase leakage control (G321 configuration). Applications where the suction pressure is lower than the pressure in the vent chamber (vacuum or high pressure padding) can be handled with three pairs of packings (G212 configuration) or five pairs of packings (G322 configuration) per rod.



H Series: Extreme Control

The H-Series compressor is designed to compress difficult to contain industrial gases. Suction gas is plumbed through the upper plenum chamber, equalizing pressure on, and providing cooling to, the upper packings. Two pairs of packings per rod provide the first isolation of the process gas. A second plenum chamber is added, through which purge gas may be run. Three pairs of segmented packings per rod, with a purge chamber between the top two and the bottom-most packings are located in the bottom of the lower plenum chamber. This combination of B & G series options provides the standard H2211 configuration. Additional quantities of packings may be added for tighter control. Applications where the suction pressure is lower than the pressure in the upper vent/purge chamber (vacuum or high pressure padding) can also be handled in standard configuration. Contact us for further configuration details.

Pad Gas

No Small Details



Valves:

Hycomp valve bodies are made from only the highest quality 400 series stainless steels which have been heat treated for hardness and toughness. Our valve plates are machined precipitation hardenable stainless steel or crystallized PEEK, depending upon the pressures and temperatures of the service.

By design, our valve plates are frictionless guided so there is no valve cage wear. The port design of our valves has been refined to provide improved flow efficiency, saving power and decreasing valve impact forces. Our larger valves are dampened, providing additional wear reduction without sacrificing flow efficiency. And of course, all of our valves are removable with minimal effort and rebuildable on site.

Piston Rings:

The proper selection of a piston ring material and design will add years of reliable service to your gas compressor. We stock seven different polymer based piston ring materials to meet today's varying gas demands. From PTFE to PEEK and PPS, we can provide the right ring material for your application.

Our angle cut design allows for flexing of the ring end to seal the gap better than butt cut designs, yet retains its strength vs. step cut designs. In situations where gap leakage becomes significant, such as low molecular weight gases and small cylinder bores, we use a 2-piece 'L' style design that removes the end gap by using an inner and outer ring for sealing.

Rod Packings:

Piston rod gas packings perform the critical function of containing the gas in the compressor, while providing pressure on the underside of the pistons to balance the rod loads. Our tangentially cut segmented packings are free floating and self adjusting for long wear life. The design inherently continues to seal as the packing wears. A pair of packings are pinned together at the proper rotational offset to ensure that the leakpath created by the cuts are sealed.

Just like our piston rings, we stock seven different packing materials to meet your needs. And unlike chevron type packings, our segmented packings do not need constant adjustment to ensure a tight seal.

Piston Rod Oil Scrapers:

Oil scrapers perform the essential service of preventing oil from migrating out of the crankcase and into the gas stream. Combined with our open distance piece design which allows residual oil vapor to escape the machine, our piston rod oil scrapers provide a leak free seal on our pressure oil lubricated bottom end.

Our segmentally cut scrapers are based on a similar principal to our gas packings, as they continue to adjust as they wear. The sharp edges machined into the brass scraper removes oil from the rods, while the liberal porting allows the oil to flow back into the crankcase. As they are a softer material than the piston rod, the brass scraper wears while the rod does not.

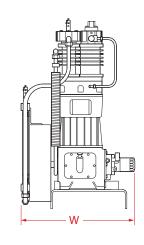
Continuous Oil Free Gas Standard Up To 1500 psig

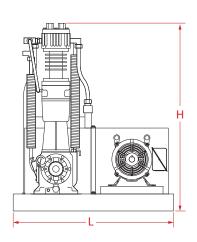
			A Block	B Block	C Block	D Block	E Block	F Block	G Block	H Block	V Block
Stroke		in cm)	2.5 (6.35)	2.5 (6.35)	3 (7.62)	3.5 (8.89)	4 (10.16)	5 (12.7)	4 (10.16)	5 (12.7)	4 (10.16)
Number of Stages			1	1 or 2	1 or 2	1 or 2	1 or 2	1 or 2	1 or 2	1 or 2	1, 2 or 3
Number of Cylinders			1	2	2	2	2	2	2	2	4
Maximum Bore Diameter	Single Stage	in (cm)	3 (7.6)	3 (7.6)	4 (10.2)	4 (10.2)	5.75 (14.6)	7.5 (19.1)	4.5 (11.4)	5.75 (14.6)	4.5 (11.4)
	Two Stage	in (cm)		3.5x2 (8.9x5.1)	4.5x2.5 (11.4x6.4)	6x3.25 (15.2x8.3)	7.5x4 (19.1x10.2)	10.56x5.25 (26.8x13.3)	6x3.25 (15.2x8.3)	7.5x4 (19.1x10.2)	6x3.25 (15.2x8.3)
	Three Stage	in (cm)									4.5x3.5x2.0 (11.4x8.9x5.1)
Maximum Displacement at 600 RPM	Single Stage	f ³ /min (m ³ /hr)	6.1 (10.4)	12.3 (20.8)	26.2 (44.5)	38.7 (65.6)	72.1 (122.9)	153.4 (260.5)	44.2 (75.0)	90.1 (153.5)	88.4 (150.0)
	Two Stage	f ³ /min (m ³ /hr)		8.2 (14.2)	16.6 (28.1)	34.4 (58.3)	61.4 (104.2)	152.1 (258.2)	39.3 (66.7)	76.7 (130.2)	78.5 (133.4)
	Three Stage	f ³ /min (m ³ /hr)									44.2 (75.0)
		psig (bar)	250 (17.2)	165 (11.4)	165 (11.4)	150 (10.3)	150 (10.3)	140 (9.6)	150 (10.3)	150 (10.3)	150 (10.3)
Maximum Discharge Pressure		psig (bar)	800 (54.7)	500 (34.2)	1250 (85.4)	750 (51.2)	750 (51.2)	1000 (68.3)	750 (51.2)	750 (51.2)	1500 (102.5)
Horse Power Range		2 - 7.5	2 - 7.5	2 - 15	5 - 25	10 - 40	25 - 75	5 - 20	10 - 40	10 - 40	
Minimum RPM		370	370	370	370	370	370	370	370	370	
Maximum RPM			900	900	900	900	900	850	900	900	900
Cooling Method			Air	Air/Water	Air/Water	Air/Water	Air/Water	Air/Water	Air/Water	Air/Water	Air
Lubrication Method			Splash	Pressure	Pressure	Pressure	Pressure	Pressure	Pressure	Pressure	Pressure
Oil Capacity		qt [lt]	0.88 (0.83)	1.5 (1.4)	2 (1.9)	6 (5.7)	7 (6.6)	10 (9.5)	6 (5.7)	7 (6.6)	7 (6.6)
Approx. Shipping Weight ★		lbs kg)	330 (149.7)	420 (190.5)	375 (306.2)	985 (446.8)	1540 (698.5)	2550 (1156.7)	985 (446.8)	1540 (698.5)	2325 (1054.6)

 $\bigstar \, \mathsf{Skid} \, \mathsf{Mounted} \, \mathsf{Gas} \, \mathsf{Compressor} \, \mathsf{with} \, \mathsf{Motor} \,$

Dim	ensions:	in	(cm
			т

		L	W	Н
Block Sizes	Α	35.0 (88.9)	21.0 (53.3)	38.8 (95.6)
	В	37.0 (94.0)	23.0 (58.4)	39.4 (100.1)
	С	41.0 (104.1)	25.3 (64.3)	45.2 (114.8)
	D	48.3 (122.7)	29.5 (74.9)	53.0 (134.6)
	Ε	50.1 (127.3)	37.1 (94.2)	55.0 (139.7)
	F	61.5 (156.2)	42.6 (108.2)	66.2 (168.1)
	G	48.3 (122.7)	29.5 (74.9)	53.0 (134.6)
	Н	50.1 (127.3)	37.1 (94.2)	58.0 (147.3)
	V	70.4 (178.8)	37.1 (94.2)	60.1 (152.7)





Additional Products:

Air Boosters

When your plant pressure isn't enough.

Hycomp oil free air boosters are engineered to increase existing plant air pressure. Our oil free air boosters are a smart alternative to stand-alone compressors or air amplifiers because Hycomp air boosters are more cost effective, last longer and increase your overall energy efficiency.



Air Compressors

When you need continuous oil free air.

Hycomp reciprocating air compressors are designed to provide continuous duty oil free air up to 450 psig standard. We apply heavy duty construction to incorporate the benefits of large industrial designs into our smaller oil free compressors.



We do more than manufacture oil free compressors... We build trust.

Contact Hycomp today for your oil free compression solution. We will work with you throughout the design, manufacturing and delivery process to provide you with a compressor tailored to your application.



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