

# Booster Compressors

Pressures to 650 psig  
Capacities to 685 cfm



## Why use a booster?

Compressed air systems in industrial and commercial facilities are generally designed for pressures of 90 to 125 psig. However, some special applications such as plastics molding, printing, and leak testing require higher pressures. In these cases it is often effective and economical to take a portion of the existing plant air and apply a booster compressor sized specifically for the special need to achieve the desired pressure and flow. The alternatives of either installing a stand-alone, high pressure compressor or operating the whole plant at high pressure are costly and wasteful.



Pipeline Testing



Turbine Testing



PET Bottle Production



# High Pressure Systems from Kaeser

In addition to our complete line of industrial rotary screw compressors and accessories, Kaeser offers reciprocating booster compressors to increase air system pressure as high as 650 psig. These reliable units are compact, quiet, and offer an excellent alternative for high pressure. Simply install a Kaeser Booster to increase the pressure of the existing plant compressed air where it is needed.

With high volumetric efficiency, the booster compresses air from the main plant air system up to the desired pressure. This two-stage method is ideal and economical for many applications

where only a small to moderate amount of high pressure air is needed.

Kaeser has the technology and the ability to design a complete compressed air system to meet both your plant air and high pressure requirements. We offer a full line of accessories including high pressure dryers, filters and drain traps to achieve the high production quality you demand.

## High quality components



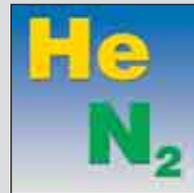
With over 85 years of experience machining quality components, Kaeser designs and builds its own pistons, cylinders, valves and other components to exacting specifications. Completed boosters are factory-tested to our rigorous quality standards.

## Advanced cylinder technology



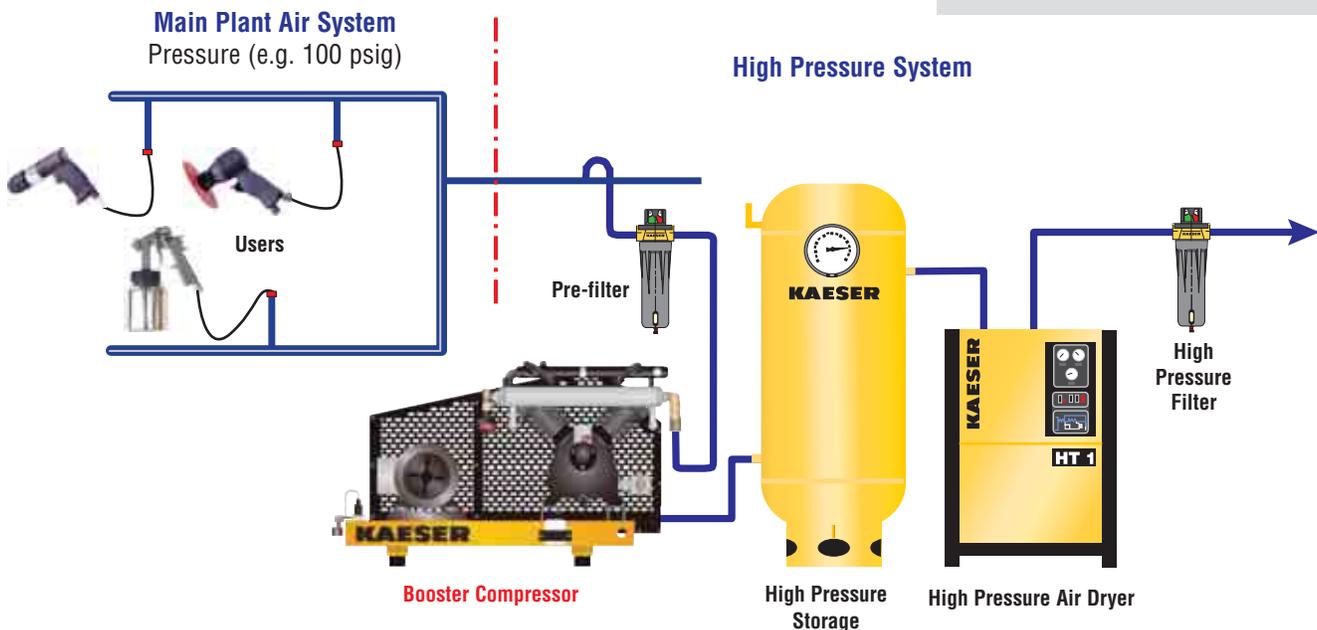
Kaeser industrial booster cylinders are bored with super precision and finished by a special process that ensures minimum oil consumption and negligible wear for great durability.

## Gas compression



Special models for nitrogen and helium are available.

## Schematic of Plant Air System with Booster



*NOTE: All components must be properly pressure-rated. Schematic does not show recommended accessories such as system controllers, drains, flow controller, or condensate management system.*

## Durable high pressure pumps



These single cylinder pumps feature lower rotational speeds to promote extended operational life and consistent efficiency.

## Effective cooling



The rugged aftercooler in our two-cylinder machines is efficient and maintenance free, achieving low compressed air outlet

temperatures ( $\Delta t < 27^\circ\text{F}$ ).

## Manual belt tensioning



A simple slide based v-belt tensioner makes it easy to adjust belt tension and avoid misalignment.

## Electric motor



Our high-efficiency, TEFC motors have class F insulation and are EPA compliant. Standard 3-phase, 60 Hz in 230, 460 or 575 V.

## Low Vibration



Our boosters are built on durable steel base frames with anti-vibration mounts for quiet, smooth operation.

# N 60-G and N 153-G Booster

N 60-G and N 153-G booster compressors are well suited to applications needing modest air volumes at pressures to 580 psig. Mounted on heavy-gauge baseplates with anti-vibration pads, Kaeser boosters eliminate the need for reinforced foundations and floor

fastenings. High efficiency TEFC motors provide energy savings and extend equipment life. Aluminum cylinder heads and finned copper cooling pipes promote efficient aftercooling for longer duty cycles.



N 60-G

## Additional features

These units include a high pressure discharge hose with check valve for flexible connection to the system. Inlet filters with automatic drain traps remove contaminants to protect the booster and improve compressed air quality. All components are arranged for both safety and easy service.

## Standard Starter Panel



Kaeser offers an enhanced starter control panel to monitor and regulate booster operation. Units from 3 to 25 hp are 230/460 V with direct on-line start. Units 30 hp and larger are 460 V with wye-delta start (consult factory for other voltages). The starter is designed to be wall-mounted.

## Durable high pressure pumps



Our high pressure pumps feature lower rotational speeds to promote extended operational life and consistent efficiency.

## Low discharge temperatures



A generously proportioned aftercooler keeps the compressed air outlet temperatures comfortably low on air-cooled models.

## Water-cooled aftercooler



A water-cooled aftercooler is offered on models N 753-G and larger to achieve discharge approach temperatures as low as 11°F.

## Automatic belt tensioning



V-belt drive with an easily accessible automatic tensioning device provides optimum power transfer and long belt life.

## Forced lubrication



A forced lubrication system provides increased reliability and service life of the pump. Full-flow filtration extends the oil change interval.

## Instrument panel



Our standard instrument panel contains gauges for air temperature, oil pressure, inlet air pressure, and discharge air pressure.

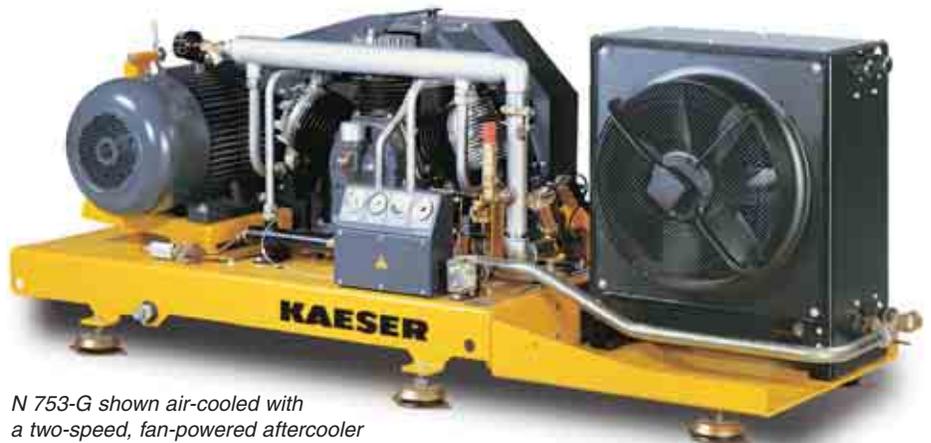
# N 253-G to N 2001-G Extra Pressure Boosters

For larger volumes of air, Kaeser's Extra Pressure (EP) models offer a combination of higher flows and increased discharge pressures to 650 psig.\* Mounted on heavy-gauge steel bases with vibration isolators, EP units offer smooth, quiet operation and eliminate the need for reinforced foundations and floor fastenings.

All Kaeser EP boosters feature precision manufactured pumps with high quality cylinders.

High efficiency TEFC motors offer energy savings and long equipment service life. The automatic drive belt tensioning system ensures consistently efficient power transmission and prolonged belt life. Other features, such as controls and coolers have been enhanced to meet the demands of larger applications.

*\*N 2001-G max outlet pressure is 360 psig*



*N 753-G shown air-cooled with a two-speed, fan-powered aftercooler*



*N 2001-G shown air-cooled with water-cooled aftercooler*

## Booster compressors with maximum discharge pressures up to 580 psig\*

Model	Cylinders	Displacement (cfm)	Compressor Speed (rpm)	Inlet Pressure (psig)	Max. Discharge Pressure (psig)	Installed Motor Horsepower (hp)	Free air delivery in cfm at various discharge pressures					Max. Dimensions L x W x H (in.)	Maximum Weight (lb.)
							215 psig	290 psig	360 psig	500 psig	580 psig		
N 60-G	1	2.12	1040	75	360	3	10.2	9.9	9.9	—	—	51 x 36 1/4 x 21	121
				110	500	3	15.2	14.8	14.1	13.8	—		
				145	500	3	—	19.8	19.1	18.4	—		
				190	500	3	—	25.8	25.1	24.4	—		
N 153-G	2	5.3	660	75	215	3	24.4	18.7	16.2	—	—	55 1/8 x 28 x 31 1/2	441
				75	360	5	—	—	—	—	—		
				110	215	3	38.1	32.1	28.6	24.0	—		
				110	500	5	—	—	—	—	—		
				145	215	3	49.4	45.9	42.4	35.3	32.8		
				145	580	5	—	—	—	—	—		
				190	580	5	—	63.6	56.5	49.4	45.9		

\* Except N 60-G (max. 500 psig)



N 60-G and N 153-G, air-cooled



N 253-G  
up to N 502-G, air-cooled



N 753-G  
up to N 2001-G, air-cooled



N 753-G  
up to N 2001-G, air-cooled with water-cooled aftercooler

## EP booster compressors with maximum discharge pressures up to 650 psig\*

Model	Cylinders	Displacement (cfm)	Compressor Speed (rpm)	Inlet Pressure (psig)	Max. Discharge Pressure (psig)	Installed Motor (hp)	Free Air Delivery in cfm at Various Discharge Pressures					Max. Dimensions L x W x H (in.)	Max. Weight (lb.)					
							290 psig	360 psig	500 psig	580 psig	650 psig							
N 253-G**	2	9	1120	75	360	10	41	37	—	—	—	air-cooled aftercooler 55 <sup>1</sup> / <sub>8</sub> x 28 x 31 <sup>1</sup> / <sub>2</sub>	530					
				110	290	10	55	51	50	—	—							
				145	290	10	85	81	75	72	68							
					650	15	112	107	100	100	96							
N 351-G**	2	12	910	75	360	15	58	55	—	—	—	air-cooled aftercooler 55 x 28 x 31 <sup>1</sup> / <sub>2</sub>	529					
				110	360	15	91	88	83	—	—							
				145	360	15	129	125	116	113	106							
					650	20	177	173	155	152	148							
N 502-G**	2	18	970	75	360	15	77	71	—	—	—	air-cooled aftercooler 61 <sup>1</sup> / <sub>2</sub> x 34 <sup>1</sup> / <sub>4</sub> x 39 <sup>1</sup> / <sub>2</sub>	1014					
				110	360	15	119	114	103	—	—							
				145	360	15	162	156	145	140	134							
					650	20	216	201	191	185	180							
N 753-G	3			75	360	30	180	167	—	—	—	water-cooled aftercooler 78 x 40 <sup>1</sup> / <sub>4</sub> x 40 <sup>1</sup> / <sub>4</sub>	2094					
					290	30	278	252	212	245	—							
					360	30												
					500	40												
				145	290	30	378	328	329	297	270							
					360	30												
					500	40												
					580	40												
				190	650	40	487	466	431	378	345							
					290	30												
					360	40												
					500	40												
N 1100-G	3			75	360	40	259	241	—	—	—	water-cooled aftercooler 78 <sup>1</sup> / <sub>3</sub> x 39 x 40 <sup>1</sup> / <sub>4</sub>	2094					
					290	40	401	380	327	—	—							
					360	50												
					500	50												
				145	290	40	533	524	400	371	340							
					360	50												
					500	50												
					580	50												
				190	650	50	652	580	527	437	428							
					290	40												
					360	50												
					500	50												
N 1400-G	3			110	500	60	—	—	373	—	—	water-cooled aftercooler 78 <sup>3</sup> / <sub>4</sub> x 39 x 40 <sup>1</sup> / <sub>4</sub>	2425					
					500		—	—	501	438	412							
				145	580		190	580	—	685	640	553	506					
					650													
				N 2001-G	3				75	290	50	371	319	—	—	—	water-cooled aftercooler 78 x 38 <sup>1</sup> / <sub>4</sub> x 41	2205
										360		473	392	—	—	—		
110	290	632	544			—			—	—								
360																		
145	290	731	682			—			—	—								
	360																	
190	290																	

\* Except N 2001-G (max. 360 psig)

\*\* Not available with water-cooled aftercoolers

All EP models are available with air-cooled aftercoolers (fan-powered for N 753-G to N 2001-G). Please consult factory for performance, dimensional drawings, and other technical data.

Specifications are subject to change without notice.



Kaeser's U.S. headquarters in Fredericksburg, Virginia

### Mission Statement

We strive to earn our customer's trust by supplying high quality Kaeser air compressors, related compressed air equipment and premium blower systems. Our products are designed for reliable performance, easy maintenance, and energy efficiency. Prompt and dependable customer service, quality assurance, training, and engineering support contribute to the value our customers have come to expect from Kaeser. Our employees are committed to implementing and maintaining the highest standards of quality to merit customer satisfaction. We aim for excellence in everything we do.

Our engineers continue to refine manufacturing techniques and take full advantage of the newest machining innovations. Extensive commitment to research and development keeps our products on the leading edge of technology to benefit our customers.



**Built for a lifetime.™**

*Corporate Headquarters:*  
P.O. Box 946  
Fredericksburg, Virginia 22404  
Phone 540-898-5500  
Fax 540-898-5520  
www.kaeser.com

Certified Management Systems



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## The Air Systems Specialist

With over 85 years of experience, Kaeser is the air systems specialist. Our extensive 100,000 square foot facility allows us to provide unequaled product availability. With service centers nationwide and our 24-hour emergency parts guarantee, Kaeser customers can rely on the best after-sales support in the industry. Kaeser stands committed to providing the highest quality air system for your specific compressed air needs.

