

# Booster Compressors

Pressures to 650 psig  
Capacities to 629 cfm



# Applications

## Booster applications

Compressed air systems in industrial and commercial facilities are generally designed for pressures of 90 to 100 psig. However, some special applications such as molding, printing, and leak testing require higher pressures.

Kaeser Booster Compressors increase air system pressure up to 580 psig. Kaeser Booster Extra Pressure (EP) Compressors increase air system pressure up to 650 psig. These reliable units are compact, quiet, and offer an economical alternative to designing the main compressed air system for high pressure. Simply install a Kaeser Booster Compressor to increase the pressure of the existing compressed air where it is needed.

## Booster operation

Compressed air from the main air system is piped to the booster. Using precompressed air is more economical than starting with ambient air. With high volumetric efficiency, the booster compresses the air up to the desired pressure. This two-stage system is ideal and economical for many applications when only a moderate amount of high-pressure air is required.

Kaeser has the technology and the ability to design a compressed air system suited specifically to your application.



*Pipeline Testing*



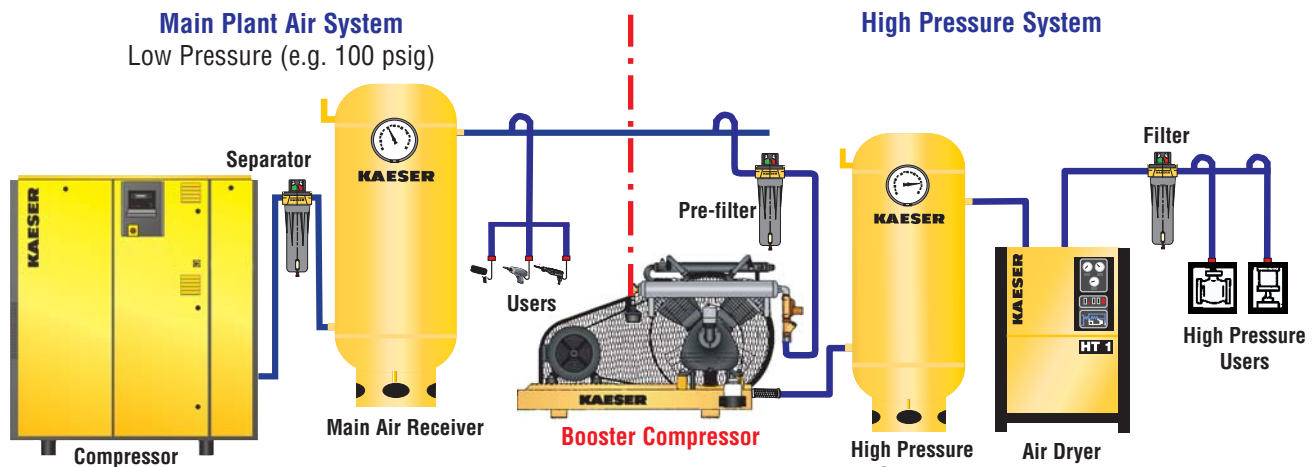
*Turbine Testing*



*PET Bottle Production*

Kaeser's Booster EP compressors are perfectly suited for PET bottle production, which requires air up to 600 psig. These new models are also ideal for applications such as turbine testing and pipeline testing

## Installation Schematic with Booster Compressors



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

# Booster Compressor



- Booster compressor and motor are baseplate mounted and include anti-vibration pads
- High-pressure discharge hose with check valve for flexible connection to the system
- Booster inlet filter with automatic drain trap
- Air-cooled, short-stroke design with low piston velocity for extended service life

- Aluminum cylinder heads, finned copper cooling pipes and/or aftercooler for improved heat dissipation
- Large flywheel also serves as cooling fan
- Stand-alone control panel for remote monitoring

## Standard Features

### Controls

- Compressor ON light
- Low oil level shutdown switch
- High discharge air-temperature shutdown
- Motor starter with overload protection
- Service hour meter
- Automatic solenoid valve, provides unloaded starting
- Solenoid valve to close booster inlet air line during shut-off
- Air-pressure switch to control the booster compressor
- Idle timer shuts unit down after preset time to save energy

### 1 Convenient v-belt tensioner

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



### 2 Solid base plates

Solid base plates



### High quality components

High-quality components engineered with over 80 years of experience





## Electric Motor

- 3600 rpm
- 230/460 V, 3 phase, 60 Hz direct-online start
- TEFC, with Class F insulation
- High-efficiency, EPA-compliant motor

## Kaeser Control Safety System

- 5-LED Kaeser Control
- Motor overload, high air discharge temperature, and low oil level are signaled by lighted indicators
- Units shuts down immediately if a malfunction occurs
- ASME safety relief valve
- Emergency stop switch

## Optional Accessories

- High-pressure gauge
- High-pressure inlet hose
- Other motor voltages
- Soundproof enclosure reduces noise up to 15 dB(A)
- Automatic Wye-Delta starter

# Booster EP Compressor



- 100% duty cycle, pressurized oil circulation, and intensive cylinder cooling
- Booster compressor and motor are baseplate mounted and include anti-vibration pads
- Proprietary synthetic lubricant extends oil-change intervals up to 2000 hours
- Low compressed air approach temperature for watercooled units: 5° to 11°F
- High-pressure discharge hose for flexible connection to the system
- Booster inlet filter with automatic drain trap
- Air-cooled, short-stroke design with low piston velocity for extended service life
- Large flywheel also serves as cooling fan
- PTC thermistor protection for each cylinder
- Low oil-pressure shutdown
- High discharge air-temperature shutdown

## 1 Automatic v-belt tensioning

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



## 2 Instrument panel (Booster EP compressors only)

Instrument panel contains gauges for air temperature, oil pressure, inlet air pressure, and discharge air pressure.



## 3 Water-cooled aftercooler

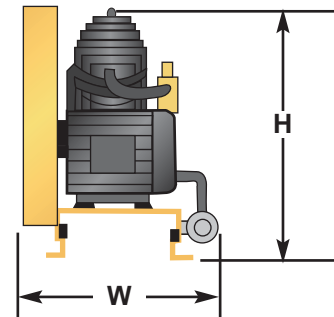
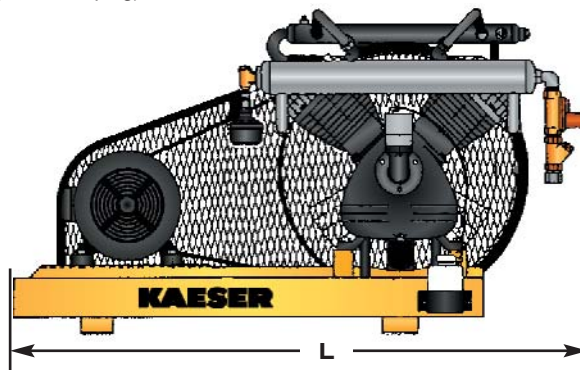
Water-cooled aftercooler provides low outlet temperature (approximately 5° to 11°F approach temperature); air-cooled aftercoolers also available on N753-G through N2001-G.



### Boosters from 10 to 220 cfm fad, maximum discharge pressure 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.)	Max. 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	—	—	36 1/4 x 51 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	25.8	24.7	24.0	—	—	52 1/2 x 19 3/4 x 28 3/4	397
				75	360	5							
				110	215	3	38.1	37.1	35.7	24.0	—		
				110	500	5							
				145	290	3	—	49.4	48.0	34.3	32.8		
				145	580	5							
				190	290	3	—	64.6	63.2	45.9	45.2		
				190	580	5							
N 251-G	2	8.83	1090	75	360	10	42.4	41.3	40.6	—	—	51 1/2 x 19 1/4 x 28 1/2	485
				110	290	10	63.9	61.8	59.3	57.9	—		
				110	500	15							
				145	290	10	84.4	82.6	80.2	76.3	74.2		
				145	580	15							
				190	290	10	—	107.4	105.2	101.4	100.3		
190	580	15											
N 350-G	2	12.36	870	75	215	10	59.3	57.8	56.9	—	—	63 1/2 x 30 1/2 x 37 1/2	683
				75	360	15							
				110	215	10	89.3	86.2	83	80.9	—		
				110	360	15							
				110	500	20	118.3	115.6	112.2	106.7	—		
				145	215	10							
				145	360	15	—	150.5	147.1	141.9	140.2		
				145	580	20							
				190	360	15	—	220	215	202.7	200.2		
				190	580	20							
N 501-G	2	17.66	990	75	360	15	85	78.8	81.2	—	—	63 1/2 x 30 1/2 x 37 1/2	970
				110	290	15	127	125.4	119	115.5	—		
				110	500	20							
				145	290	15	169	165.1	160.2	152.6	148.7		
				145	500	20							
				145	580	25	—	220	215	202.7	200.2		
				190	290	15							
				190	500	20							
190	580	25											

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



## Booster EP Compressors, maximum discharge pressure 650 psig\*, with water-cooled aftercooler

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.)	Max. Weight (lb.)
							290 psig	360 psig	500 psig	580 psig	650 psig		
N 753-G	3	36.4	1300	75	360	30	—	166	—	—	77 3/4 x 38 1/4 x 41	1918	
		36.4	1300	110	500	40	—	—	244.7	—			
		35.3	1250	145	500	40	—	328.8	299.5	270.9			
		33.2	1170	145	580	40							
		31.1	1100	145	650	40	—	416.7	381.8	342.6			
		33.2	1170	190	500	40							
		31.1	1100	190	580	40							
		29.0	1250	190	650	40	—	—	—	—			
N 1100-G	3	51.6	1300	75	360	40	—	240	—	—	77 3/4 x 38 1/4 x 41	2094	
		50.5	1250	110	435	50	—	—	324.9	—			
		48.0	1180	110	500	50	—	409.7	367.3	342.6			
		43.4	1080	145	500	50							
		40.3	990	145	580	50							
		38.1	940	145	650	50	—	519.1	473.2	427.3			
		41.3	1020	190	500	50							
		38.1	940	190	580	50							
		35.0	870	190	650	50	—	—	—	—			
N 1400-G	3	52.6	1300	110	500	60	—	—	374.3	—	77 3/4 x 38 1/4 x 41	2425	
		52.6	1230	145	500	60	—	480.3	448.5	409.7			
		49.1	1210	145	580	60							
		45.6	1120	145	650	60							
		49.8	1230	190	500	60	—	628.6	565	508.5			
		45.6	1120	190	580	60							
		36.4	1030	190	650	60							
N 2001-G	3	65	880	75	290	50	286.0	268.4	—	—	77 3/4 x 38 1/4 x 41	1984	
		65	880	75	360	50							
		65	880	145	290	50	603.9	508.5	—	—			
		56	760	145	360	50							

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

All EP models are also available with air-cooled aftercoolers. Please consult factory for performance, dimensional drawings, and other technical data.

Specifications are subject to change without notice.

# KAESER COMPRESSORS

**Built for a lifetime.™**

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### The Air Systems Specialist

With over 80 years of experience, Kaeser is the air systems specialist. Our extensive 100,000 square foot facility allows us to provide unequalled 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.