

Compressor Application Guideline

Engineered and built for better performance today and tomorrow.

This useful Compressor Application Guide is a simple point system using vehicle configuration and vocation options to help calculate the Bendix compressor that's right for your vehicle. Review items 1–12, fill in the applicable points on each line, then refer to the application grid on page 2 for the proper Bendix compressor selections that can meet your vehicle's intended use. When completing the worksheet, if a particular entry is not valid for your application, enter zero on that line. Page 3 of this guide provides several examples of how to use this helpful calculator.



Vehicle Configuration		Points
1. Vehicle is equipped with bulk off-loading or central tire inflation		(See Note 1)
2. For every axle (tractor & trailer – including lifts):	Add 1.0 point/axle ▶	
3. For each non-steerable lift axle (additional points):	Add 1.0 point/axle ▶	
4. For each steerable lift axle (additional points):	Add 0.5 points/axle ▶	
5. Tractor and/or trailer is equipped with air suspension	Add 0.5 points ▶	

Vocation Options (Select the description that best fits)

6. Vehicle is used as a city transit bus		(See Note 1)
7. Vehicle is used for pickup & delivery	a) Non-fuel hauler: Add 0.5 points ▶	
	b) Fuel hauler: Add 1.0 point ▶	
8. Vehicle is used for residential refuse		
	• Vehicle with a work brake	Add 4.5 points ▶
	• Vehicle without a work brake	Add 7.5 points ▶
9. Vehicle is used for rural or commercial refuse		Add 3.5 points ▶
10. Vehicle is used as a yard or terminal jockey		Add 7.5 points ▶
11. Vehicle is a dump truck, a concrete mixer, or is used in logging or construction		Add 2.0 points ▶
12. Vehicle is a fire truck – “Fast Fill” system (See Note 2)		Add 6.0 points ▶
13. Vehicle is used for line haul		Add 0.0 points ▶

Total Score

(Add lines 1 – 13 and use that sum on page 2 of this guide)






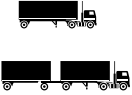


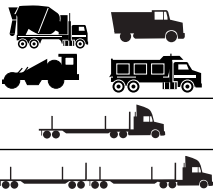



Note 1: Vehicles equipped with either bulk off-loading, central tire inflation, or used in city transit bus applications should use a Bendix® BA-922® compressor... no further calculations are required.

Note 2: To reduce the complexity of the “Fast Fill” system, Bendix recommends that a Bendix BA-922 compressor be used on all fire truck and aircraft rescue applications.



For generations, the Bendix name has meant quality, reliability and durability when it comes to your vehicle's air charging system. Let us show you what we can do for you.



Compressor Application		Increasing Performance 				
		Point Total	Bendix® Compressors			
			Tu-Flo® 550	Tu-Flo® 750	BA-921®	BA-922®
	School Bus / RV / Air over Hydraulic	any	✓		✓	
	City Transit Bus / Highway Travel Coach / Express Route Coach	any				✓
	School Bus Rural Route (no Auto Brake)	any	✓		✓	
	School Bus City Route (no Auto Brake)	any		✓	✓	
	Pick-up & Delivery	2.5 - 6	✓		✓	
		6.5 - 9		✓	✓	
		9.5 - 13				✓
	Line Haul	3 - 6	✓		✓	
		6.5 - 9		✓	✓	
		9.5 - 13				✓
	Rural or Commercial Refuse	6.5 - 9		✓	✓	
	Rural or Commercial Refuse / Yard or Terminal Jockey	9.5 - 13				✓
	Residential Refuse (with Work Brake)	6.5 - 9		✓	✓	
	Residential Refuse (no Work Brake)	9.5 - 13				✓
	Concrete Mixer / Dump Truck / Off-Highway / Construction / Logger	4 - 6	✓		✓	
		6.5 - 9		✓	✓	
		9.5 - 13				✓
	Fire Trucks	6.5 - 9		✓	✓	
		9.5 - 13				✓
	Bulk Off-loader	any				✓
	Central Tire Inflation	any				✓

This compressor application matrix offers directional information when sizing a Bendix compressor for the applicable vehicle vocation. Testing should still be performed on the specific application to verify that the compressor remains within the 25% maximum allowable duty cycle. This application matrix assumes that all compressor installations use an air induction system that is naturally aspirated. The "Compressor Installation & Application Review" form explains the methods used to measure the vehicle's duty cycle.

Compressor Selections	Point Totals																
	2.5	3	4	5	6	6.5	7	8	9	9.5	10	11	12	13	14	15	16 or above
Bendix® Tu-Flo® 550	■	■	■	■	■												
Bendix® Tu-Flo® 750						■	■	■	■								
Bendix® BA-921®	■	■	■	■	■	■	■	■	■								
Bendix® BA-922®										■	■	■	■	■	■	■	■
Points	2.5	3	4	5	6	6.5	7	8	9	9.5	10	11	12	13	14	15	16 or above

Certification to all applicable vehicle regulations is the sole responsibility of the vehicle manufacturer.

The application chart is for reference only. If your truck/tractor does not fall into these guidelines, please contact the Bendix Compressor Engineering or Technical Services team at 1-800-AIR-BRAKE (1-800-247-2725).

Example #1: Typical Line Haul Application

Vehicle Configuration		Points
1. Not Applicable		
2. Total number of all axles	=	3.0
3. Total number of non-steerable lift axles	=	0.0
4. Total number of steerable lift axles	=	0.0
5. Tractor is equipped with air suspension	=	0.5
Vocation Options		
6, 7, 8, 9, 10, 11, 12 (Not Applicable)	=	0.0
Total [3.0 + 0.5 = 3.5 points]	=	3.5

Selection choices include: Bendix® Tu-Flo® 550 or Bendix® BA-921® air compressors

Example #2: Line Haul Pulling Single Axle Double

Vehicle Configuration		Points
1. Not Applicable		
2. Total number of all axles	=	5.0
3. Total number of non-steerable lift axles	=	0.0
4. Total number of steerable lift axles	=	0.0
5. Tractor is equipped with air suspension	=	0.5
Vocation Options		
6, 7, 8, 9, 10, 11, 12 (Not Applicable)	=	0.0
Total [5.0 + 0.5 = 5.5 points]	=	5.5

Selection choices include: Bendix Tu-Flo 550 or Bendix BA-921 air compressors

Example #3: Bulk Gravel Hauler

Vehicle Configuration		Points
1. Not Applicable		
2. Total number of all axles	=	6.0
3. Total number of non-steerable lift axles	=	2.0
4. Total number of steerable lift axles	=	0.0
5. Tractor is equipped with air suspension	=	0.5
Vocation Options		
6, 7, 8, 9, 10, 12, 13 (Not Applicable)	=	0.0
11 (Vehicle is used as a dump truck/construction)	=	2.0
Total [6 + 2 + 0.5 + 2 = 10.5 points]	=	10.5

Selection choices include: Bendix® BA-922® air compressor

Example #4: Fuel Hauler (Not Equipped with Bulk Off-loading)

Vehicle Configuration		Points
1. Not Applicable		
2. Total number of all axles	=	5.0
3. Total number of non-steerable lift axles	=	1.0
4. Total number of steerable lift axles	=	0.0
5. Tractor is equipped with air suspension	=	0.5
Vocation Options		
6 (Vehicle is used as a fuel hauler)	=	1.0
7, 8, 9, 10, 11, 12, 13 (Not Applicable)	=	0.0
Total [5 + 1 + 0.5 + 1 = 7.5 points]	=	7.5

Selection choices include: Bendix® Tu-Flo® 750 or BA-921 air compressor



A typical single axle, line haul vehicle:

- Air suspension
- Three (3) axles total



A 4x2 line haul vehicle pulling:

- (2) single axle trailers
- (1) single axle dolly
- Tractor air suspension
- Five (5) axles total



A bulk gravel hauling vehicle:

- Two (2) non-steerable lift axles
- Truck equipped with air suspension
- Six (6) axles total



A fuel delivery vehicle:

- Air suspension
- One (1) non-steerable lift axle
- Five (5) axles total

Experience Counts. Count On Bendix.

Experience counts. Since 1924, the year our first compressor was installed on a commercial vehicle, Bendix has been leading the way in air charging system experience and expertise. Today, Bendix Commercial Vehicle Systems continues as the top supplier of compressors, air treatment components and complete air braking control systems throughout North America. More fleets spec our hard-working products and systems than any other.

Best Overall Value On The Market ... Period.

From initial design, state-of-the-art Six-Sigma manufacturing, rigorous testing and ISO/TS16949 certified quality, to award winning customer service, technical field sales support, and a powerful guaranteed warranty, Bendix delivers for you.

Bendix Compressors.

Reliable

•

Long-Lasting

•

High-Performing

•

Energy-Saving

•

Genuine Bendix® Quality

Focused Expertise For The Future.

At Bendix, we never stop. Commercial vehicles are becoming more sophisticated and compressed air requirements are increasing daily. That's why we're hard at work testing the next generation of air charging system components. With highly sophisticated R&D activities and industry leading expertise around the globe, we continue to ensure each new design meets and exceeds your needs.

Bendix compressors provide the power that keeps you on the road and the value that keeps you coming back.

To find out more, talk to your Bendix account manager, call us at 1-800-AIR-BRAKE (1-800-247-2725) or visit us on the web at www.bendix.com.

