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CONVEY

35 CATALOG

NEW

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EXAIR products are subject to ongoing development. Specifications are subject to change without notice.

Some products in this catalog are covered by U.S. Patent #5402938, #8153001, #8268179, #D903,817, #10,779,698 and #9156045, and others may be U.S. Patent Pending.

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Line Vac™

**Convey parts, materials,
waste - with no moving parts!**

- ✓ **High Conveying Rates!**
- ✓ **Ideal For Long Distance!**
- ✓ **Mounting Brackets Available!**

What Is The Line Vac?

A fast, low cost way to convey:

- Plastic pellets
- Scrap trim
- Textiles
- Bulk solids
- Food products
- Chips
- Paper
- Pills/tablets
- Small parts
- Shavings
- Sawdust
- Granules



EXAIR's compressed air operated Line Vac connects to standard hose or tube to create a powerful in-line conveyor. The compact design features large throat diameters for maximum throughput capability. Eleven sizes in aluminum and ten in stainless steel are suited to a wide variety of transfer applications.

Why The Line Vac?

Line Vac conveyors are ideal for moving large volumes of material over long distances. A small amount of compressed air is injected through directed nozzles to produce a vacuum on one end and high output flows on the other, with instantaneous response. The material flow rate is easily controlled with a pressure regulator. An optional bracket permits easy mounting. No moving parts or electricity assures maintenance free operation.

Applications

- Hopper loading
- Fiber tensioning
- Material conveying
- Waste/trim removal
- Chip removal
- Part transfer
- Filling operations

Advantages

- Compact
- Quiet
- No moving parts
- Fits standard hose or tube
- Aluminum or stainless steel
- Eleven sizes
- High throughput capability



A Model 6084 2" (51mm) Line Vac transports scrap cellophane trim to a waste barrel.

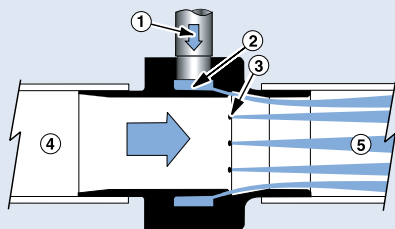


The Model 6083 1-1/2" (38mm) Line Vac conveys plastic granules to the gravity feed hopper on an extruder.

Air Operated
Conveyors

Line Vac

How The Line Vac Works



Compressed air flows through the inlet (1) into an annular plenum chamber (2). It is then injected into the throat through directed nozzles (3). These jets of air create a vacuum at the intake (4) which draws material in and accelerates it through the unit (5) for conveying over long vertical or horizontal distances.

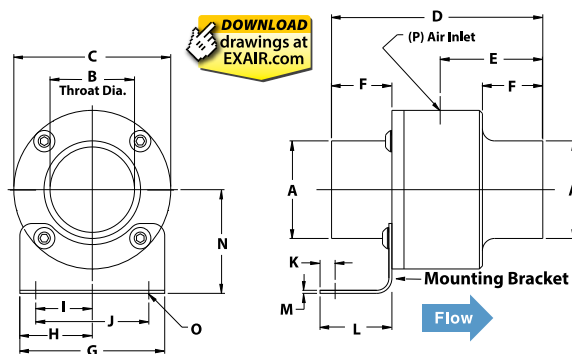
Line Vac Conveying Rates

Line Vacs are available in a number of styles, materials, and sizes. Each has a large, smooth, straight bore that allows as much material to pass through as possible. Infinite control of the flow rate through the Line Vac can be controlled by a pressure regulator. Kits include a pressure regulator that is sized properly for flow.

The actual conveying rate is affected by the size, mass and geometry of the part to be conveyed along with the length, lift and number of bends in the hose, tube or pipe. These variables make it difficult to determine the exact conveying rate for any product, however, our Application Engineers can assist you by comparing the material you want to convey with something that has already been tested.



Line Vacs are available in many sizes in both aluminum and stainless steel.



Line Vac Dimensions

| Line Vac Dimensions | | | | | | | | | | | | | | | | | | | |
|---------------------|---------------------------------------|------------|----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------------|
| Line Vac Models | | | Hose Size A | | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P |
| Alum. | St. St. | Heavy Duty | | | | | | | | | | | | | | | | | |
| 6078 | 6058, 6058-316 | N/A | in | 0.38 | 0.19 | 1 | 2.18 | 1 | 0.63 | 1.25 | 0.63 | 0.41 | 0.82 | 0.17 | 1.13 | 0.06 | 1.07 | 0.18 | 1/8 NPT |
| | | | mm | 10 | 5 | 25 | 55 | 25 | 16 | 32 | 16 | 10 | 21 | 4 | 29 | 2 | 27 | 5 | |
| 6079 | 6059, 6059-316 | N/A | in | 0.50 | 0.31 | 1.25 | 2.62 | 1.23 | 0.75 | 1.25 | 0.63 | 0.34 | 0.68 | 0.13 | 1 | 0.06 | 1.18 | 0.18 | 1/8 NPT |
| | | | mm | 13 | 8 | 32 | 66 | 31 | 19 | 32 | 16 | 9 | 17 | 3 | 25 | 2 | 30 | 5 | |
| 6080 | 6060, 6060-316, HT6060, HT6060-316 | 150075 | in | 0.75 | 0.50 | 1.88 | 3.88 | 1.88 | 1 | 2 | 1 | 0.76 | 1.52 | 0.25 | 1.38 | 0.06 | 1.44 | 0.20 | 1/4 NPT |
| | | | mm | 19 | 13 | 48 | 99 | 48 | 25 | 51 | 25 | 19 | 39 | 6 | 35 | 2 | 37 | 5 | |
| 6081 | 6061, 6061-316, HT6061, HT6061-316 | 150100 | in | 1 | 0.75 | 2.13 | 3.88 | 1.88 | 1 | 2 | 1 | 0.65 | 1.30 | 0.26 | 1.32 | 0.06 | 1.56 | 0.20 | 1/4 NPT |
| | | | mm | 25 | 19 | 54 | 99 | 48 | 25 | 51 | 25 | 17 | 33 | 7 | 34 | 2 | 40 | 5 | |
| 6082 | 6062, 6062-316, HT6062, HT6062-316 | 150125 | in | 1.25 | 1 | 2.38 | 3.88 | 1.88 | 1 | 2.50 | 1.25 | 1 | 2 | 0.31 | 1.61 | 0.06 | 1.68 | 0.28 | 1/4 NPT |
| | | | mm | 32 | 25 | 61 | 99 | 48 | 25 | 64 | 32 | 25 | 51 | 8 | 41 | 2 | 43 | 7 | |
| 6083 | 6063, 6063-316, HT6063, HT6063-316 | 150150 | in | 1.50 | 1.25 | 2.75 | 4.38 | 2.13 | 1.25 | 2.50 | 1.25 | 0.86 | 1.73 | 0.25 | 1.44 | 0.06 | 1.88 | 0.28 | 3/8 NPT |
| | | | mm | 38 | 32 | 70 | 111 | 54 | 32 | 64 | 32 | 22 | 44 | 6 | 37 | 2 | 48 | 7 | |
| 6084 | 6064, 6064-316, HT6064, HT6064-316 | 150200 | in | 2 | 1.75 | 3.25 | 4.38 | 2.13 | 1.25 | 3 | 1.50 | 1.17 | 2.34 | 0.28 | 1.48 | 0.06 | 2.13 | 0.28 | 3/8 NPT |
| | | | mm | 51 | 45 | 83 | 111 | 54 | 32 | 76 | 38 | 30 | 59 | 7 | 38 | 2 | 54 | 7 | |
| 6085 | 6065, 6065-316, HT6065, HT6065-316 | 150250 | in | 2.50 | 2.25 | 3.75 | 4.38 | 2.13 | 1.25 | 3 | 1.50 | 1 | 2 | 0.31 | 1.44 | 0.06 | 2.38 | 0.28 | 3/8 NPT |
| | | | mm | 64 | 57 | 95 | 111 | 54 | 32 | 76 | 38 | 25 | 51 | 8 | 37 | 2 | 60 | 7 | |
| 6086 | 6066, 6066-316, HT6066, HT6066-316 | 150300 | in | 3 | 2.75 | 4.25 | 5.63 | 2.75 | 1.75 | 3.25 | 1.63 | 1.20 | 2.41 | 0.41 | 1.44 | 0.06 | 2.63 | 0.28 | 1/2 NPT |
| | | | mm | 76 | 70 | 108 | 143 | 70 | 45 | 83 | 41 | 31 | 61 | 10 | 37 | 2 | 67 | 7 | |
| 6087 | 6067 | N/A | in | 4 | 3.75 | 5.25 | 5.63 | 2.75 | 1.75 | 3.25 | 1.63 | 1.34 | 2.70 | 0.31 | 1.59 | 0.06 | 3.13 | 0.28 | 1/2 NPT |
| | | | mm | 102 | 95 | 133 | 143 | 70 | 45 | 83 | 41 | 34 | 69 | 8 | 40 | 2 | 80 | 7 | |
| 6088 | N/A | N/A | in | 5 | 4.75 | 6.25 | 5.63 | 2.75 | 1.75 | 4.13 | 2.06 | 1.70 | 3.47 | 0.33 | 1.52 | 0.06 | 3.63 | 0.28 | 1/2 NPT |
| | | | mm | 127 | 121 | 159 | 143 | 70 | 45 | 105 | 52 | 43 | 88 | 8 | 39 | 2 | 92 | 7 | |

Line Vac Performance

| 80 PSIG (5.5 BAR) | | Air Consumption | | Vacuum | |
|--|--|-----------------|-------|-------------------|-------|
| Model | | SCFM | SLPM | "H ₂ O | kPa |
| 6058, 6058-316, 6078 | | 5.60 | 158 | -120 | -29.9 |
| 6059, 6059-316, 6079 | | 7 | 198 | -100 | -24.9 |
| 6060, HT6060, 6060-316, HT6060-316, 6080 | | 10.70 | 303 | -72 | -18 |
| 6061, HT6061, 6061-316, HT6061-316, 6081 | | 14.70 | 416 | -42 | -11 |
| 6062, HT6062, 6062-316, HT6062-316, 6082 | | 25.90 | 733 | -42 | -11 |
| 6063, HT6063, 6063-316, HT6063-316, 6083 | | 33 | 934 | -36.8 | -9 |
| 6064, HT6064, 6064-316, HT6064-316, 6084 | | 45 | 1,274 | -28.5 | -7 |
| 6065, 6065-316, HT6065, HT6065-316, 6085 | | 58.50 | 1,656 | -23.5 | -6 |
| 6066, 6066-316, HT6066, HT6066-316, 6086 | | 68.50 | 1,939 | -14.7 | -4 |
| 6067, 6087 | | 95 | 2,690 | -13.6 | -3.4 |
| 6088 | | 128 | 3,625 | -10.5 | -2.6 |



Line Vac Kits include a Line Vac, mounting bracket, filter separator and pressure regulator (with coupler).

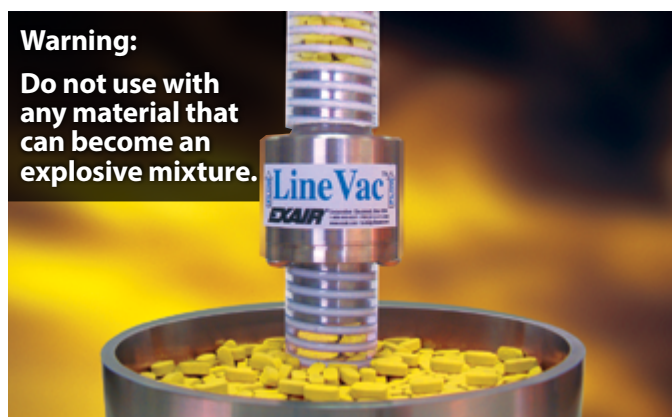
Sound levels for the individual Line Vac units are not provided. The length, bends and configuration of the hose, tube or pipe used in conjunction with the Line Vac to form the complete conveying system will determine the actual sound levels (which can vary greatly).

Selecting The Right Model

Line Vac is available in a wide range of sizes to fit your application. Some of the criteria used to select the proper model are:

- Diameter of parts being conveyed
- Diameter of hose or tube
- Rate (weight or volume)
- Stainless steel (Type 303 and 316) or aluminum

Aluminum is the economical choice for general purpose conveying. Our standard stainless steel models (Type 303) offer good corrosion resistance and are ideal for food service, abrasive or corrosive applications. For critical applications including certain foods and pharmaceutical products, Type 316 stainless steel models provide excellent corrosion resistance.



Warning:
Do not use with any material that can become an explosive mixture.

A 316 Stainless Steel Line Vac is used by a pharmaceutical company to convey pills and tablets to a packaging station.

For assistance with product selection, contact an Application Engineer at 1-800-903-9247.

| Line Vac Comparison | | |
|--|--------------------|----------------------|
| Material Type | Temperature Rating | Corrosion Resistance |
| Aluminum Line Vac | 275°F (135°C) | Fair |
| Stainless Steel Line Vac (Type 303) | 400°F (204°C) | Good |
| Stainless Steel Line Vac (Type 316) | 400°F (204°C) | Excellent |
| High Temperature Stainless Steel Line Vac (Type 303) | 900°F (482°C) | Good |
| High Temperature Stainless Steel Line Vac (Type 316) | 900°F (482°C) | Excellent |
| Heavy Duty Line Vac Hardened Alloy Construction | 400°F (204°C) | Good |
| Flanged Line Vac (Type 316) | 400°F (204°C) | Excellent |

The High Temperature Line Vac models are suited for temperatures up to 900°F (482°C). Frequently used for sampling hot flue gases, this High Temperature Line Vac can resist back pressure from long pipe lengths with numerous bends. The Heavy Duty Line Vac shown on page 170 moves the highest volumes and resists wear.



High Temperature Line Vacs can resist temperatures to 900°F (482°C) and are available from stock in hose or threaded models.

Line Vac

Clear PVC Hose

EXAIR stocks 3/8" (10mm), 1/2" (13mm), 3/4" (19mm), 1" (25mm), 1-1/4" (32mm), 1-1/2" (38mm), 2" (51mm), 2-1/2" (64mm) and 3" (76mm) I.D. PVC hose in lengths up to 50' (15.2m). Ideal for conveying applications, the hose is very flexible and has a smooth internal bore that eliminates material build up. The reinforced, heavy wall of this clear hose provides visual confirmation that the material is moving when air is supplied to the Line Vac. Temperature rating is -4 to 150°F (-20 to 66°C).



Special Line Vacs

EXAIR manufactures special Line Vacs suited to specific application requirements. Configurations and materials can be made to facilitate your requirements.

The Line Vac can be engineered to retrofit existing machinery. The Line Vac (*shown below*) has special flanges that permit direct mounting to a machine used in the manufacturing of silicon wafers for the semiconductor industry.



A special 3/4" (19mm) Stainless Steel Line Vac evacuates fumes from a silicon wafer etching operation.

This flanged Line Vac is used to remove acidic vapors resulting from surface etching of a silicon wafer. Ordinarily, EXAIR's Stainless Steel Air Amplifier would have been used since it moves much higher volumes of air. In this case, the Line Vac was the better choice since the exhaust piping was long with many bends that would have created high back pressure. The directed nozzles of the Line Vac overcame this downstream resistance.



This special 1-1/2" (38mm) Line Vac is made of PVDF to withstand a chloride washdown.

The special flanged Line Vac (*shown above*) is made of PVDF, a plastic that has high chemical resistance. In this case, the 1-1/2" (38mm) Line Vac was regularly exposed to a chloride wash, a chemical that would corrode stainless steel. QF flanges were provided on each end to allow easy removal of the conveying hoses for cleaning purposes.



This special Line Vac is used to fill small packets.

Filling small packets with fine powders or granulated materials such as salt or barite is done using

If you have special requirements, please contact an Application Engineer to discuss the application.

small tubes that are gravity fed from a hopper. This works well when the material is dry, however, moist materials would often pack the tube, blocking the flow. The special funnel shaped Line Vac (*shown bottom center*) created a suction on the existing tube to permit continuous product flow.



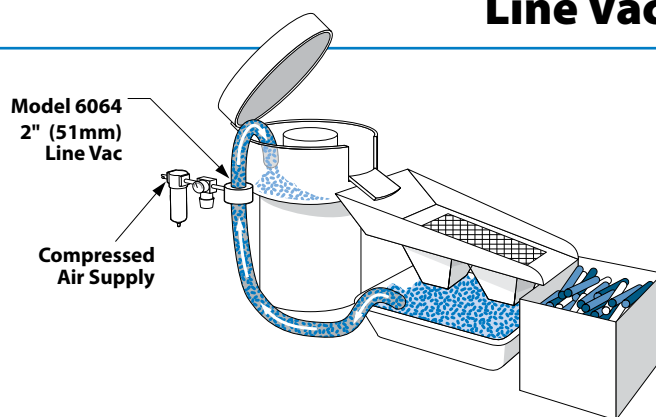
A special miniature Line Vac used to vacuum microscopic debris measures the same size as a penny!

The special miniature Line Vac with barb fittings (*shown above*) was designed for a manufacturer of integrated circuit chips. It was used to remove microscopic debris during the chip making process. This small Line Vac generated high vacuum and was the perfect configuration for the confined working space. It has also been used by another manufacturer to vacuum liquid and chips from small drilled holes.

Refilling A Vibratory Bowl

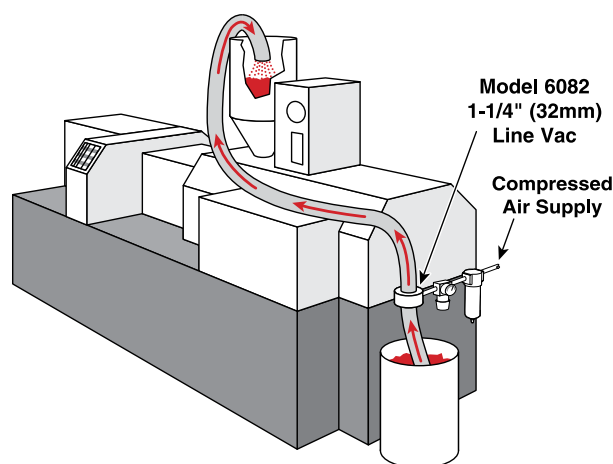
The Problem: A manufacturer of metal products deburrs aluminum sleeves in a vibratory bowl filled with abrasive media. As the parts complete the deburring cycle, they are discharged to a screened bed. The abrasive media drops through the bed and the finished parts roll into a box. Refilling the bowl was a back breaking operation that required repetitious lifting of heavy buckets.

The Solution: A **Model 6064 2" (51mm) Stainless Steel Line Vac** was installed on the vibratory bowl. In minutes, the media was conveyed back up to the bowl through a hose, without the heavy lifting.



Comment: The ability to convey the abrasive media with air was the key to success. The Line Vac is easy to use, and in this case, was the best choice since it will hold up better to the abrasive media conveyed through it.

Conveying Plastic Pellets



The Problem: Injection molding machines transform plastic pellets into various plastic products. The pellets are gravity fed from a hopper on top of the machine. The “bucket and ladder” method of replenishing the hopper was inefficient and expensive.

The Solution: A **Model 6982 1-1/4" (32mm) Line Vac Kit** was used to convey the pellets up to the hopper. The mounting bracket included with the kit was used to secure the Line Vac to the machine. A filter assured no contamination of the plastic material and a regulator controlled the plastic flow rate.

Comment: Unlike mechanical transfer systems that break down or wear out, the **Line Vac has no moving parts.** This low cost method of conveying also gives precise control of material flow into the hopper.

Line Vac for Matrix Removal from Labeling Application

The Problem: A manufacturer applies labels to their products. After they have been applied, there is a waste stream that is referred to as “the matrix”. The matrix is the release liner that labels are affixed to in bulk format prior to being used. The normal method for taking up this waste stream was to use a winder. However, after some amount of time, the winder inevitably becomes filled. Once full, the line is stopped and the winder is manually emptied. They needed a better way to dispose of the matrix.

The Solution: The **Line Vac** presents a unique advantage in that it can pull the matrix from the machine and convey it out to a waste receptacle. This requires no winder, no stopping the line and no emptying. This solution freed up personnel for other tasks and increased production. The compact design and powerful operation of the Line Vac allowed it to be placed close to the generation of scrap,

trim, or waste. Its powerful conveying capacity allowed it to transport the material to a remote and central location.

Comment: This application illustrates the versatility of the Line Vac product line. Commonly used for hopper loading products in the plastics industry, a Line Vac is also a strong performer for applications like waste/trim removal, assembly parts conveyance, blasting media recovery, gas sampling and chip removal. Its large variety of materials and sizes makes it well suited for industrial, pharmaceutical, laboratory, high temperature and corrosive environments. No moving parts or electricity assures maintenance free operation.



1" (25mm) Line Vacs remove and discard a label matrix.

Line Vac

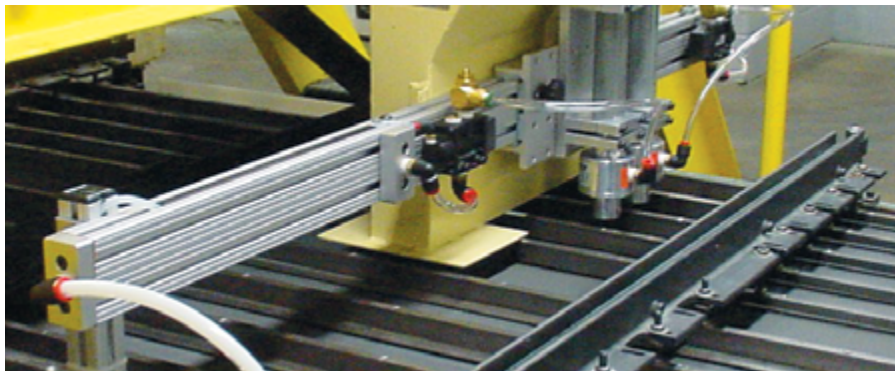
| Line Vac Only Models | | | | | |
|-----------------------|-------------------------|---|---|--|--|
| Inlet/Outlet Diameter | Aluminum Line Vac Model | Type 303 Stainless Steel Line Vac Model | Type 316 Stainless Steel Line Vac Model | High Temperature Type 303 Stainless Steel Line Vac Model | High Temperature Type 316 Stainless Steel Line Vac Model |
| 3/8" (10mm) | 6078 | 6058 | 6058-316 | N/A | N/A |
| 1/2" (13mm) | 6079 | 6059 | 6059-316 | N/A | N/A |
| 3/4" (19mm) | 6080 | 6060 | 6060-316 | HT6060 | HT6060-316 |
| 1" (25mm) | 6081 | 6061 | 6061-316 | HT6061 | HT6061-316 |
| 1-1/4" (32mm) | 6082 | 6062 | 6062-316 | HT6062 | HT6062-316 |
| 1-1/2" (38mm) | 6083 | 6063 | 6063-316 | HT6063 | HT6063-316 |
| 2" (51mm) | 6084 | 6064 | 6064-316 | HT6064 | HT6064-316 |
| 2-1/2" (64mm) | 6085 | 6065 | 6065-316 | HT6065 | HT6065-316 |
| 3" (76mm) | 6086 | 6066 | 6066-316 | HT6066 | HT6066-316 |
| 4" (102mm) | 6087 | 6067 | N/A | N/A | N/A |
| 5" (127mm) | 6088 | N/A | N/A | N/A | N/A |

| Line Vac Kit Models | | | | | |
|---|-----------------------------|---|---|--|--|
| Line Vac Kits - include the Line Vac, mounting bracket, filter separator and pressure regulator (with coupler). | | | | | |
| Inlet/Outlet Diameter | Aluminum Line Vac Kit Model | Type 303 Stainless Steel Line Vac Kit Model | Type 316 Stainless Steel Line Vac Kit Model | High Temperature Type 303 Stainless Steel Line Vac Kit Model | High Temperature Type 316 Stainless Steel Line Vac Kit Model |
| 3/8" (10mm) | 6978 | 6958 | 6958-316 | N/A | N/A |
| 1/2" (13mm) | 6979 | 6959 | 6959-316 | N/A | N/A |
| 3/4" (19mm) | 6980 | 6960 | 6960-316 | HT6960 | HT6960-316 |
| 1" (25mm) | 6981 | 6961 | 6961-316 | HT6961 | HT6961-316 |
| 1-1/4" (32mm) | 6982 | 6962 | 6962-316 | HT6962 | HT6962-316 |
| 1-1/2" (38mm) | 6983 | 6963 | 6963-316 | HT6963 | HT6963-316 |
| 2" (51mm) | 6984 | 6964 | 6964-316 | HT6964 | HT6964-316 |
| 2-1/2" (64mm) | 6985 | 6965 | 6965-316 | HT6965 | HT6965-316 |
| 3" (76mm) | 6986 | 6966 | 6966-316 | HT6966 | HT6966-316 |
| 4" (102mm) | 6987 | 6967 | N/A | N/A | N/A |
| 5" (127mm) | 6988 | N/A | N/A | N/A | N/A |

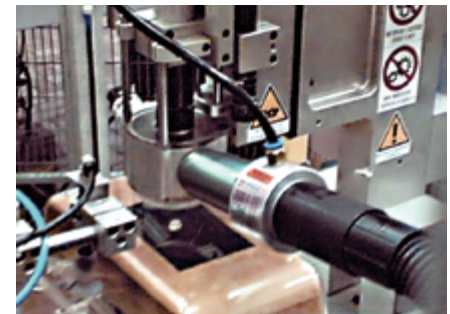
| Accessories | |
|-------------|---|
| Model # | Description |
| 6994 | Mounting Bracket for 3/8" (10mm) and 1/2" (13mm) Line Vac Units |
| 6995 | Mounting Bracket for 3/4" (19mm) and 1" (25mm) Line Vac Units |
| 6996 | Mounting Bracket for 1-1/4" (32mm) and 1-1/2" (38mm) Line Vac Units |
| 6997 | Mounting Bracket for 2" (51mm) and 2-1/2" (64mm) Line Vac Units |
| 6998 | Mounting Bracket for 3" (76mm) and 4" (102mm) Line Vac Units |
| 6999 | Mounting Bracket for 5" (127mm) Line Vac Unit |
| 9001 | Auto Drain Filter Separator, 3/8 NPT, 65 SCFM (1,841 SLPM) |
| 9032 | Auto Drain Filter Separator, 1/2 NPT, 90 SCFM (2,549 SLPM) |
| 9002 | Auto Drain Filter Separator, 3/4 NPT, 220 SCFM (6,230 SLPM) |
| 9005 | Oil Removal Filter, 3/8 NPT, 15-37 SCFM (425-1,048 SLPM) |
| 9006 | Oil Removal Filter, 3/4 NPT, 50-150 SCFM (1,416-4,248 SLPM) |
| 9008 | Pressure Regulator with Gauge, 1/4 NPT, 50 SCFM (1,416 SLPM) |
| 9033 | Pressure Regulator with Gauge, 1/2 NPT, 100 SCFM (2,832 SLPM) |
| 9009 | Pressure Regulator with Gauge, 3/4 NPT, 220 SCFM (6,230 SLPM) |

Hose is available in 10', 20', 30', 40' and 50' lengths. Select the hose model number (diameter) and indicate the length with a dash. Example: A Model 6931-20 is 1" ID Hose x 20' long.

| | |
|-------|----------------|
| 6928- | Hose 3/8" ID |
| 6929- | Hose 1/2" ID |
| 6930- | Hose 3/4" ID |
| 6931- | Hose 1" ID |
| 6932- | Hose 1-1/4" ID |
| 6933- | Hose 1-1/2" ID |
| 6934- | Hose 2" ID |
| 6935- | Hose 2-1/2" ID |
| 6936- | Hose 3" ID |



(2) Model 6083 1-1/2" (38mm) Line Vacs convey rejected metal caps from a fluorescent lamp operation to a scrap bin.



1-1/4" (32mm) Line Vac is mounted on a burr removal tool to suction the plastic shavings and transport them to a waste container.

Threaded Line Vac™

Low cost conveyor uses ordinary pipe!

Ideal for long distance conveying!

What Is The Threaded Line Vac?

A fast, low cost way to convey:

- Plastic pellets
- Scrap trim
- Textiles
- Bulk solids
- Chips
- Paper
- Small parts
- Shavings
- Sawdust
- Granules



EXAIR's Threaded Line Vac air operated conveyors convert ordinary pipe into a powerful conveying system for parts, scrap, trim and other bulk materials. The Threaded Line Vac attaches easily to plumbing pipe couplers, making it easy to build a complete system using ordinary pipe and fittings available from any home center, hardware store or plumbers supply. Performance is the same as our standard Line Vac shown on page 161.

Threaded Line Vac conveyors are ideal for conveying large volumes of material over long distances. They eject a small amount of compressed air to produce a vacuum on one end with high output flows on the other. Response is instantaneous. Regulating the compressed air pressure provides infinite control of the conveying rate. Models from 3/8 NPT to 3 NPT are available in aluminum and stainless steel, which are suited to a wide variety of conveying applications. An optional mounting bracket permits easy mounting. No moving parts or electricity assures maintenance free operation.

Applications

- Hopper loading
- Fiber tensioning
- Material conveying
- Waste/trim removal
- Chip removal
- Part transfer
- Filling operations

Advantages

- Compact
- Quiet
- No moving parts
- Fits standard pipe
- Aluminum or stainless steel
- Available from stock
- High throughput capability



Plastic color concentrate pellets are added to a plastic extrusion process.



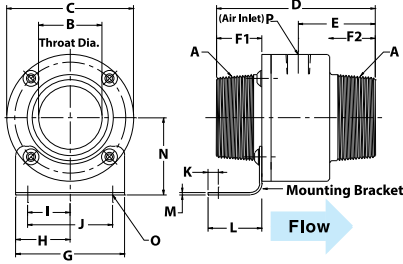
A drawer slide manufacturer conveys ball bearings with the Model 141125 1-1/4 NPT Stainless Steel Threaded Line Vac to an assembly station.



A special Threaded Line Vac has a smooth diameter for hose on the intake and threads on the exhaust that attach to PVC pipe.

Threaded Line Vac

Dimensions



Threaded Line Vac Performance

| 80 PSIG (5.5 BAR) | | Air Consumption | | Vacuum | |
|--|--|-----------------|-------|-------------------|-------|
| Model | | SCFM | SLPM | "H ₂ O | kPa |
| 140038, 141038, 141038-316 | | 5.60 | 158 | -120 | -29.9 |
| 140050, 141050, 141050-316 | | 7 | 198 | -100 | -24.9 |
| 140075, 141075, 141075-316, HT141075, HT141075-316 | | 10.70 | 303 | -72 | -18 |
| 140100, 141100, 141100-316, HT141100, HT141100-316 | | 14.70 | 416 | -42 | -11 |
| 140125, 141125, 141125-316, HT141125, HT141125-316 | | 25.90 | 733 | -42 | -11 |
| 140150, 141150, 141150-316, HT141150, HT141150-316 | | 33 | 934 | -36.8 | -9 |
| 140200, 141200, 141200-316, HT141200, HT141200-316 | | 45 | 1,274 | -28.5 | -7 |
| 140250, 141250, 141250-316, HT141250, HT141250-316 | | 58.50 | 1,656 | -23.5 | -6 |
| 140300, 141300, 141300-316, HT141300, HT141300-316 | | 68.50 | 1,939 | -14.7 | -4 |

Threaded Line Vac Dimensions

| Line Vac Models | | | A Pipe Size | | B | C | D | E | F1 | F2 | G | H | I | J | K | L | M | N | O | P |
|-----------------|-------------|-------------|----------------|----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------------|
| Alum. | 303 St. St. | 316 St. St. | | | | | | | | | | | | | | | | | | |
| 140038 | 141038 | 141038-316 | 3/8 NPT | in | 0.19 | 1.00 | 2.83 | 1.13 | 1.23 | 0.72 | 1.25 | 0.63 | 0.41 | 0.82 | 0.17 | 1.13 | 0.06 | 1.07 | 0.18 | 1/8 NPT |
| | | | | mm | 5 | 25 | 72 | 29 | 31 | 18 | 32 | 16 | 10 | 21 | 4 | 29 | 2 | 27 | 5 | |
| 140050 | 141050 | 141050-316 | 1/2 NPT | in | 0.31 | 1.25 | 3.38 | 1.38 | 1.31 | 0.88 | 1.25 | 0.63 | 0.34 | 0.68 | 0.13 | 1.00 | 0.06 | 1.18 | 0.18 | 1/8 NPT |
| | | | | mm | 8 | 32 | 86 | 35 | 33 | 22 | 32 | 16 | 9 | 17 | 3 | 25 | 2 | 30 | 5 | |
| 140075 | 141075 | 141075-316 | 3/4 NPT | in | 0.50 | 1.88 | 3.88 | 1.88 | 1 | 1 | 2 | 1 | 0.76 | 1.52 | 0.25 | 1.38 | 0.06 | 1.44 | 0.20 | 1/4 NPT |
| | | | | mm | 13 | 48 | 99 | 48 | 25 | 25 | 51 | 25 | 19 | 39 | 6 | 35 | 2 | 37 | 5 | |
| 140100 | 141100 | 141100-316 | 1 NPT | in | 0.75 | 2.13 | 4.25 | 2.06 | 1.19 | 1.19 | 2 | 1 | 0.65 | 1.30 | 0.25 | 1.32 | 0.06 | 1.56 | 0.20 | 1/4 NPT |
| | | | | mm | 19 | 54 | 108 | 52 | 30 | 30 | 51 | 25 | 17 | 33 | 6 | 34 | 2 | 40 | 5 | |
| 140125 | 141125 | 141125-316 | 1-1/4 NPT | in | 1 | 2.38 | 4.63 | 2.25 | 1.38 | 1.38 | 2.50 | 1.25 | 1 | 2 | 0.31 | 1.61 | 0.06 | 1.68 | 0.28 | 1/4 NPT |
| | | | | mm | 25 | 60 | 118 | 57 | 35 | 35 | 64 | 32 | 25 | 51 | 8 | 41 | 2 | 43 | 7 | |
| 140150 | 141150 | 141150-316 | 1-1/2 NPT | in | 1.25 | 2.75 | 4.63 | 2.25 | 1.38 | 1.38 | 2.50 | 1.25 | 0.86 | 1.73 | 0.25 | 1.44 | 0.06 | 1.88 | 0.28 | 3/8 NPT |
| | | | | mm | 32 | 70 | 118 | 57 | 35 | 35 | 64 | 32 | 22 | 44 | 6 | 37 | 2 | 48 | 7 | |
| 140200 | 141200 | 141200-316 | 2 NPT | in | 1.75 | 3.25 | 4.63 | 2.25 | 1.38 | 1.38 | 3 | 1.50 | 1.17 | 2.34 | 0.28 | 1.48 | 0.06 | 2.13 | 0.28 | 3/8 NPT |
| | | | | mm | 44 | 83 | 118 | 57 | 35 | 35 | 76 | 38 | 30 | 59 | 7 | 38 | 2 | 54 | 7 | |
| 140250 | 141250 | 141250-316 | 2-1/2 NPT | in | 2.25 | 3.75 | 5.38 | 2.56 | 1.81 | 1.69 | 3 | 1.50 | 1 | 2 | 0.31 | 1.44 | 0.06 | 2.38 | 0.28 | 3/8 NPT |
| | | | | mm | 57 | 95 | 137 | 65 | 46 | 43 | 76 | 38 | 25 | 51 | 8 | 37 | 2 | 60 | 7 | |
| 140300 | 141300 | 141300-316 | 3 NPT | in | 2.75 | 4.25 | 5.67 | 2.75 | 1.81 | 1.75 | 3.25 | 1.63 | 1.20 | 2.41 | 0.41 | 1.44 | 0.06 | 2.63 | 0.28 | 1/2 NPT |
| | | | | mm | 70 | 108 | 144 | 70 | 46 | 45 | 83 | 41 | 31 | 61 | 10 | 37 | 2 | 67 | 7 | |

Threaded Line Vac Dimensions

| Line Vac Models | | | A Pipe Size | | B | C | D | E | F1 | F2 | G | H | I | J | K | L | M | N | O | P |
|-----------------|---------------------|---------------------|----------------|----------|------------|-------------|-------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Heavy Duty | High Temp 303 SS | High Temp 316 SS | | | | | | | | | | | | | | | | | | |
| 151075 | HT141075 | HT141075-316 | 3/4 NPT | in mm | 0.50 13 | 1.88 48 | 3.88 99 | 1.88 48 | 1 25 | 1 25 | 2 51 | 1 25 | 0.76 19 | 1.52 39 | 0.25 6 | 1.38 35 | 0.06 2 | 1.44 37 | 0.20 5 | 1/4 NPT |
| 151100 | HT141100 | HT141100-316 | 1 NPT | in mm | 0.75 19 | 2.13 54 | 4.25 108 | 2.06 52 | 1.19 30 | 1.19 30 | 2 51 | 1 25 | 0.65 17 | 1.30 33 | 0.25 6 | 1.32 34 | 0.06 2 | 1.56 40 | 0.20 5 | 1/4 NPT |
| 151125 | HT141125 | HT141125-316 | 1-1/4 NPT | in mm | 1 25 | 2.38 60 | 4.63 118 | 2.25 57 | 1.38 35 | 1.38 35 | 2.50 64 | 1.25 32 | 1 25 | 0.31 8 | 1.61 41 | 0.06 2 | 1.68 43 | 0.28 7 | 1/4 NPT | |
| 151150 | HT141150 | HT141150-316 | 1-1/2 NPT | in mm | 1.25 32 | 2.75 70 | 4.63 118 | 2.25 57 | 1.38 35 | 1.38 35 | 2.50 64 | 1.25 32 | 0.86 22 | 1.73 44 | 0.25 6 | 1.44 37 | 0.06 2 | 1.88 48 | 0.28 7 | 3/8 NPT |
| 151200 | HT141200 | HT141200-316 | 2 NPT | in mm | 1.75 44 | 3.25 83 | 4.63 118 | 2.25 57 | 1.38 35 | 1.38 35 | 3 76 | 1.50 38 | 1.17 30 | 2.34 59 | 0.28 7 | 1.48 38 | 0.06 2 | 2.13 54 | 0.28 7 | 3/8 NPT |
| 151250 | HT141250 | HT141250-316 | 2-1/2 NPT | in mm | 2.25 57 | 3.75 95 | 5.38 137 | 2.56 65 | 1.81 46 | 1.69 43 | 3 76 | 1.50 38 | 1 25 | 0.31 8 | 1.44 37 | 0.06 2 | 2.38 60 | 0.28 7 | 3/8 NPT | |
| 151300 | HT141300 | HT141300-316 | 3 NPT | in mm | 2.75 70 | 4.25 108 | 5.67 144 | 2.75 70 | 1.81 46 | 1.75 45 | 3.25 83 | 1.63 41 | 1.20 31 | 2.41 61 | 0.41 10 | 1.44 37 | 0.06 2 | 2.63 67 | 0.28 7 | 1/2 NPT |

Threaded Line Vac Models

Threaded Line Vac Only

| Inlet/Outlet Thread Size | Aluminum Threaded Line Vac Only Model | Type 303 Stainless Steel Threaded Line Vac Only Model | High Temperature Type 303 Stainless Steel Threaded Line Vac Only Model | Type 316 Stainless Steel Threaded Line Vac Only Model | High Temperature Type 316 Stainless Steel Threaded Line Vac Only Model |
|--------------------------|---------------------------------------|---|--|---|--|
| 3/8 NPT | 140038 | 141038 | N/A | 141038-316 | N/A |
| 1/2 NPT | 140050 | 141050 | N/A | 141050-316 | N/A |
| 3/4 NPT | 140075 | 141075 | HT141075 | 141075-316 | HT141075-316 |
| 1 NPT | 140100 | 141100 | HT141100 | 141100-316 | HT141100-316 |
| 1-1/4 NPT | 140125 | 141125 | HT141125 | 141125-316 | HT141125-316 |
| 1-1/2 NPT | 140150 | 141150 | HT141150 | 141150-316 | HT141150-316 |
| 2 NPT | 140200 | 141200 | HT141200 | 141200-316 | HT141200-316 |
| 2-1/2 NPT | 140250 | 141250 | HT141250 | 141250-316 | HT141250-316 |
| 3 NPT | 140300 | 141300 | HT141300 | 141300-316 | HT141300-316 |

Threaded Line Vac Kit Models

Threaded Line Vac Kits - include the Line Vac, mounting bracket, filter separator and pressure regulator (with coupler).

| Inlet/Outlet Thread Size | Aluminum Threaded Line Vac Kit Model | Type 303 Stainless Steel Threaded Line Vac Kit Model | High Temperature Type 303 Stainless Steel Threaded Line Vac Kit Model | Type 316 Stainless Steel Threaded Line Vac Kit Model | High Temperature Type 316 Stainless Steel Threaded Line Vac Kit Model |
|--------------------------|--------------------------------------|--|---|--|---|
| 3/8 NPT | 142038 | 143038 | N/A | 143038-316 | N/A |
| 1/2 NPT | 142050 | 143050 | N/A | 143050-316 | N/A |
| 3/4 NPT | 142075 | 143075 | HT143075 | 143075-316 | HT143075-316 |
| 1 NPT | 142100 | 143100 | HT143100 | 143100-316 | HT143100-316 |
| 1-1/4 NPT | 142125 | 143125 | HT143125 | 143125-316 | HT143125-316 |
| 1-1/2 NPT | 142150 | 143150 | HT143150 | 143150-316 | HT143150-316 |
| 2 NPT | 142200 | 143200 | HT143200 | 143200-316 | HT143200-316 |
| 2-1/2 NPT | 142250 | 143250 | HT143250 | 143250-316 | HT143250-316 |
| 3 NPT | 142300 | 143300 | HT143300 | 143300-316 | HT143300-316 |

Air Operated
Conveyors

Accessories

| Model # | Description |
|---------|--|
| 6994 | Mounting Bracket for 3/8 NPT and 1/2 NPT Threaded Line Vac Units |
| 6995 | Mounting Bracket for 3/4 NPT and 1 NPT Threaded Line Vac Units |
| 6996 | Mounting Bracket for 1-1/4 NPT and 1-1/2 NPT Threaded Line Vac Units |
| 6997 | Mounting Bracket for 2 NPT and 2-1/2 NPT Threaded Line Vac Units |
| 6998 | Mounting Bracket for 3 NPT Line Vac Units |
| 9001 | Auto Drain Filter Separator, 3/8 NPT, 65 SCFM (1,841 SLPM) |
| 9005 | Oil Removal Filter, 3/8 NPT, 15-37 SCFM (425-1,048 SLPM) |
| 9008 | Pressure Regulator with Gauge, 1/4 NPT, 50 SCFM (1,416 SLPM) |



Threaded Line Vac Kits include the Threaded Line Vac, mounting bracket, filter separator and pressure regulator (with coupler).

Heavy Duty Line Vac™

**Our most powerful Line Vac
moves high volumes of
material and resists wear!**



What Is The Heavy Duty Line Vac?

The Heavy Duty Line Vac is EXAIR's most powerful conveyor. The appearance is similar to the standard Line Vac but performance has been boosted dramatically. The Heavy Duty Line Vac has been engineered to convey materials over longer vertical and horizontal distances. The hardened alloy construction helps prevent premature wear that could occur with ordinary aluminum or stainless steel Line Vacs.

Why The Heavy Duty Line Vac?

Many applications require that materials be transported over longer distances. The Heavy Duty Line Vac can move more material over longer lengths. They have been designed for rugged, industrial applications.

The table below gives a quick comparison of our Light Duty Line Vac, standard Line Vac, and the Heavy Duty Line Vac models. For comparison, the test shows the 2" (51mm) model of each style conveying the same material over various lengths. Heavy Duty Line Vac conveys more material in less time.

Rock Salt Conveying Rate Comparison

| | 100 Feet (30.5m) | 200 Feet (61m) |
|--|----------------------------|---------------------------|
| Model 130200 2" (51mm) Light Duty Line Vac | 166 lbs/hr. (75.3 kg/hr.) | N/A |
| Model 6084 2" (51mm) Line Vac | 334 lbs/hr. (151.5 kg/hr.) | 85 lbs/hr. (38.6 kg/hr.) |
| Model 150200 2" (51mm) Heavy Duty Line Vac | 524 lbs/hr. (237.7 kg/hr.) | 200 lbs/hr. (90.7 kg/hr.) |

Horizontal conveying tested at 80 PSIG (5.5 BAR)



The hardened alloy construction of the Heavy Duty Threaded Line Vac resists wear when conveying abrasive steel shot.



Metal parts are conveyed with the Model 150200 2" (51mm) Heavy Duty Line Vac as they drop off the edge of the conveyor.

Applications

- Hopper loading
- Fiber tensioning
- Material conveying
- Waste/trim removal
- Chip removal
- Part transfer
- Filling operations

Advantages

- Hardened alloy construction
- Highest throughput capability
- Compact
- Quiet
- No moving parts
- Fits standard hose, tube and pipe
- Available from stock

Heavy Duty Line Vac



Heavy Duty Threaded Line Vac

EXAIR's Heavy Duty Threaded Line Vac air operated conveyors convert ordinary pipe into a powerful conveying system for parts, scrap, trim and other bulk materials. The engineered Heavy Duty Threaded Line Vac attaches easily to ordinary NPT pipe and fittings available from any home center, hardware store or plumbers supply. With its hardened alloy construction, the Heavy Duty Threaded Line Vac withstands premature wear which could occur with aluminum and stainless steel.

Heavy Duty Line Vac Performance

| Model | Size | | Air Consumption | | Vacuum | |
|----------------|------|----|-----------------|-------|-------------------|-----|
| | in | mm | SCFM | SLPM | "H ₂ O | kPa |
| 150075, 151075 | 0.75 | 19 | 26 | 736 | -144 | -36 |
| 150100, 151100 | 1 | 25 | 35 | 991 | -105 | -26 |
| 150125, 151125 | 1.25 | 32 | 49 | 1,388 | -83 | -21 |
| 150150, 151150 | 1.50 | 38 | 55 | 1,557 | -60 | -15 |
| 150200, 151200 | 2 | 51 | 75 | 2,124 | -42 | -10 |
| 150250, 151250 | 2.50 | 64 | 90 | 2,548 | -28 | -7 |
| 150300, 151300 | 3 | 76 | 108 | 3,058 | -20 | -5 |



Dimensions

For Heavy Duty Line Vac Dimensions, see:

Line Vacpg 162
Threaded Line Vacpg 168

Heavy Duty Line Vac Models

Heavy Duty Line Vac Only

Heavy Duty Line Vac Kits - include the Line Vac, mounting bracket, filter separator and pressure regulator (with coupler).

| Inlet/Outlet Diameter | Heavy Duty Line Vac Only Model | Heavy Duty Line Vac Kit Model | Inlet/Outlet Thread Size | Heavy Duty Threaded Line Vac Only Model | Heavy Duty Threaded Line Vac Kit Model |
|-----------------------|--------------------------------|-------------------------------|--------------------------|---|--|
| 3/4" (19mm) | 150075 | 152075 | 3/4 NPT | 151075 | 153075 |
| 1" (25mm) | 150100 | 152100 | 1 NPT | 151100 | 153100 |
| 1-1/4" (32mm) | 150125 | 152125 | 1-1/4 NPT | 151125 | 153125 |
| 1-1/2" (38mm) | 150150 | 152150 | 1-1/2 NPT | 151150 | 153150 |
| 2" (51mm) | 150200 | 152200 | 2 NPT | 151200 | 153200 |
| 2-1/2" (64mm) | 150250 | 152250 | 2-1/2 NPT | 151250 | 153250 |
| 3" (76mm) | 150300 | 152300 | 3 NPT | 151300 | 153300 |



An automotive manufacturer vacuums chips from drive train differentials with a Model 150200 2" (51mm) Heavy Duty Line Vac.



Heavy Duty Line Vac Kits include a Heavy Duty Line Vac, mounting bracket, filter separator and pressure regulator (with coupler).

Accessories

| Model # | Description |
|---------|---|
| 6995 | Mounting Bracket for 3/4" (19mm) and 1" (25mm) Line Vac Units |
| 6996 | Mounting Bracket for 1-1/4" (32mm) and 1-1/2" (38mm) Line Vac Units |
| 6997 | Mounting Bracket for 2" (51mm) and 2-1/2" (64mm) Line Vac Units |
| 6998 | Mounting Bracket for 3" (76mm) Line Vac Units |
| 9001 | Auto Drain Filter Separator, 3/8 NPT, 65 SCFM (1,841 SLPM) |
| 9032 | Auto Drain Filter Separator, 1/2 NPT, 90 SCFM (2,549 SLPM) |
| 9002 | Auto Drain Filter Separator, 3/4 NPT, 220 SCFM (6,230 SLPM) |
| 9005 | Oil Removal Filter, 3/8 NPT, 15-37 SCFM (425-1,048 SLPM) |
| 9006 | Oil Removal Filter, 3/4 NPT, 50-150 SCFM (1,416-4,248 SLPM) |
| 9008 | Pressure Regulator with Gauge, 1/4 NPT, 50 SCFM (1,416 SLPM) |
| 9033 | Pressure Regulator with Gauge, 1/2 NPT, 100 SCFM (2,832 SLPM) |
| 9009 | Pressure Regulator with Gauge, 3/4 NPT, 220 SCFM (6,230 SLPM) |

Hose is available in 10', 20', 30', 40' and 50' lengths. Select the hose model number (diameter) and indicate the length with a dash.
 Example: A Model 6931-20 is 1" ID Hose x 20' long.

| | |
|-------|----------------|
| 6930- | Hose 3/4" ID |
| 6931- | Hose 1" ID |
| 6932- | Hose 1-1/4" ID |
| 6933- | Hose 1-1/2" ID |
| 6934- | Hose 2" ID |
| 6935- | Hose 2-1/2" ID |
| 6936- | Hose 3" ID |

If you have special requirements, please contact an Application Engineer to discuss the application.



11510 Goldcoast Drive • Cincinnati, OH 45249-1621 • Phone (513) 671-3322
 FAX (513) 671-3363 • E-mail: techhelp@exair.com • www.exair.com



Sanitary Flange Line Vac™

**Convey materials,
parts, waste - with
easy disassembly
and cleanup!**



What Is The Sanitary Flange Line Vac?

EXAIR's Sanitary Flange Line Vac is the best way to convey materials in systems which require frequent or mandatory cleaning. The Sanitary Flange Line Vac fits within your current sanitary flange piping system and converts it into a conveyor for waste, parts and bulk materials.

Why The Sanitary Flange Line Vac?

When your piping system requires sanitary flanges, which make it easy to dismantle and clean its components, the Sanitary Flange Line Vac will suit your needs. They are made from Type 316SS to provide superior corrosion resistance and cleanliness. These flanged Line Vacs limit entrapment areas where bacteria can grow and the clamp style sanitary flanges are compatible with ISO 2852. Sanitary Flange Line Vacs are designed with the same performance characteristics of EXAIR's standard and

Threaded Line Vacs which makes them a versatile solution for your conveying needs. Conveying rates are easy to control by regulating the compressed air supply pressure.

The Sanitary Flange Line Vacs are available from stock in four common flange sizes, 1-1/2" (38mm), 2" (51mm), 2-1/2" (64mm) and 3" (76mm). All metal parts are made from Type 316SS. No moving parts or electricity assures maintenance free operation.

Sanitary Flange Line Vac Performance

| 80 PSIG (5.5 BAR) | | Size | | Air Consumption | | Vacuum | |
|-------------------|-----|------|------|-----------------|-------------------|--------|--|
| Model | in | mm | SCFM | SLPM | "H ₂ O | kPa | |
| 161150-316 | 1.5 | 38 | 33 | 934 | -36.8 | -9 | |
| 161200-316 | 2 | 51 | 45 | 1,274 | -28.5 | -7 | |
| 161250-316 | 2.5 | 64 | 58.5 | 1,657 | -23.5 | -6 | |
| 161300-316 | 3 | 76 | 68.5 | 1,939 | -14.7 | -4 | |

Horizontal conveying tested at 80 PSIG (5.5 BAR)

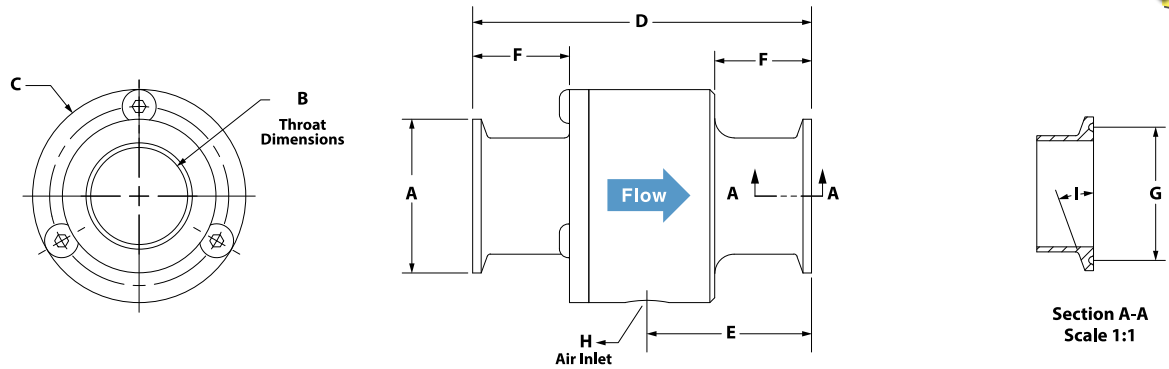
Applications

- Material conveying
- Part transfer
- Waste/trim removal
- Hopper loading
- Filling operations
- Chip removal
- Fiber tensioning

Advantages

- ISO 2852 compatible
- Type 316SS
- Fits standard sanitary flanges
- Four sizes available from stock
- No moving parts
- Compact
- High throughput capability
- Quiet

Dimensions



| Sanitary Flange Line Vac Dimensions | | | | | | | | | | |
|-------------------------------------|----|------|------|------|------|------|------|------|---------------|-------|
| Sanitary Flange Line Vac Models | | A | B | C | D | E | F | G | H (air inlet) | I |
| 161150-316 | in | 2 | 1.25 | 2.75 | 4.38 | 2.13 | 1.25 | 1.69 | 3/8 NPT | 20° |
| | mm | 51 | 32 | 70 | 111 | 54 | 32 | 43 | | |
| 161200-316 | in | 2.52 | 1.75 | 3.25 | 4.38 | 2.13 | 1.25 | 2.22 | 3/8 NPT | 20° |
| | mm | 64 | 44 | 83 | 111 | 54 | 32 | 56 | | |
| 161250-316 | in | 3.05 | 2.25 | 3.75 | 4.38 | 2.13 | 1.25 | 2.78 | 3/8 NPT | 20° |
| | mm | 77 | 57 | 95 | 111 | 54 | 32 | 71 | | |
| 161300-316 | in | 3.58 | 2.75 | 4.25 | 5.63 | 2.75 | 1.75 | 3.28 | 1/2 NPT | 21.3° |
| | mm | 91 | 70 | 108 | 143 | 70 | 44 | 83 | | |

| Sanitary Flange Line Vac Models | | |
|---|-------------------------------------|------------------------------------|
| Sanitary Flange Line Vac Only | | |
| Sanitary Flange Line Vac Kits - include the Line Vac, mounting bracket, filter separator and pressure regulator (with coupler). | | |
| Inlet/Outlet Diameter | Sanitary Flange Line Vac Only Model | Sanitary Flange Line Vac Kit Model |
| 1-1/2" (38mm) | 161150-316 | 163150-316 |
| 2" (51mm) | 161200-316 | 163200-316 |
| 2-1/2" (64mm) | 161250-316 | 163250-316 |
| 3" (76mm) | 161300-316 | 163300-316 |

| Accessories | |
|-------------|---|
| Model # | Description |
| 9001 | Auto Drain Filter Separator, 3/8 NPT, 65 SCFM (1,841 SLPM) |
| 9002 | Auto Drain Filter Separator, 3/4 NPT, 220 SCFM (6,230 SLPM) |
| 9005 | Oil Removal Filter, 3/8 NPT, 15-37 SCFM (425-1,048 SLPM) |
| 9006 | Oil Removal Filter, 3/4 NPT, 50-150 SCFM (1,416-4,248 SLPM) |
| 9008 | Pressure Regulator with Gauge, 1/4 NPT, 50 SCFM (1,416 SLPM) |
| 9009 | Pressure Regulator with Gauge, 3/4 NPT, 220 SCFM (6,230 SLPM) |

Line Vac Drum Cover

Line Vac Drum Cover

EXAIR's fine mesh non-woven Drum Cover is built to fit over the top of 55 or 30 gallon drums. The breathable material allows the air from a Line Vac air operated conveyor to circulate, whether moving material in or out of the drum. The cover prevents contamination of your material and keeps material from escaping the drum, which keeps your work environment cleaner and safer. Since it is fabricated to fit 55 or 30 gallon drums, it is the simplest of solutions when needing a containment vessel for your transferred scrap, trim, waste, parts, chips or pellets. It is suitable for Line Vac conveyance hoses from 3/4" through 3" inside diameters and comes complete with hose clamps and a durable spring buckle strap for quick and easy installation.



If you have special requirements, please contact an Application Engineer to discuss the application.

| Line Vac Drum Cover | |
|---------------------|-------------|
| Model # | Description |
| 6850 | Drum Cover |

Light Duty Line Vac™

An effective way to convey small volumes of material over short distances!

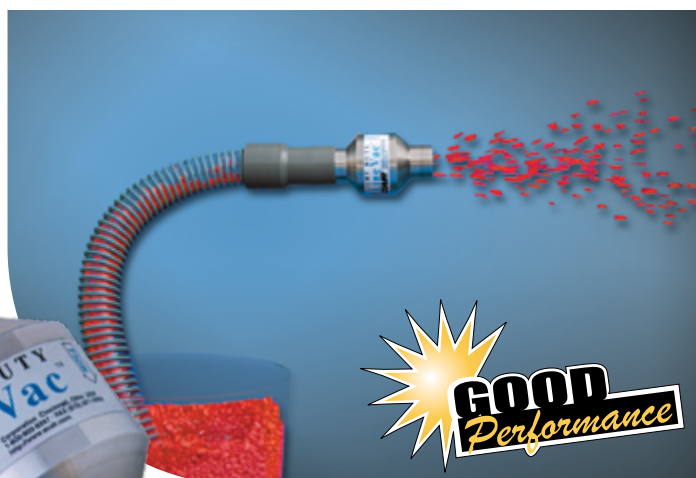
What Is The Light Duty Line Vac?

EXAIR's Light Duty Line Vac is the ideal way to convey small volumes of materials over short distances. Like the Line Vac shown on page 161, the Light Duty Line Vac converts an ordinary hose or tube into a conveyor for scrap, trim and bulk materials.

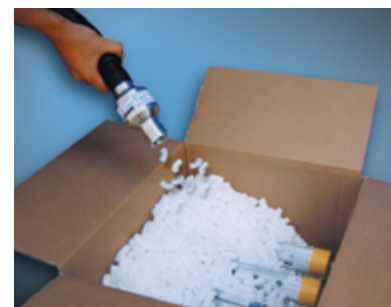
Why The Light Duty Line Vac?

When lower throughputs at short distances are desired, the Light Duty Line Vac is a good choice. This simplified design utilizes a two-part threaded construction to provide effective conveying at a lower cost. Air consumption is reduced to a volume appropriate for moving small volumes of material at short distances. Conveying rates are easy to control by regulating the compressed air supply pressure.

The Light Duty Line Vac features inlet and outlet diameters common to hose and tube sizes. Eight sizes for diameters from 3/4" to 6" (19 to 152mm) are available. Standard construction is aluminum. (For corrosion resistant stainless steel models that are suitable for high temperature and food service, please see Line Vac models on page 166.) No moving parts or electricity assures maintenance free operation. (If higher conveying rates or mounting brackets are desired, see the Line Vac models on page 166.)



The low cost Model 130200 2" (51mm) Light Duty Line Vac conveys fibers to fill pillows, stuffed animals, diapers, etc.



A Model 130125 1-1/4" (32mm) Light Duty Line Vac can fill or empty the packing peanuts from shipping cartons.

Applications

- Hopper loading
- Fiber tensioning
- Material conveying
- Waste/trim removal
- Chip removal
- Part transfer
- Filling operations

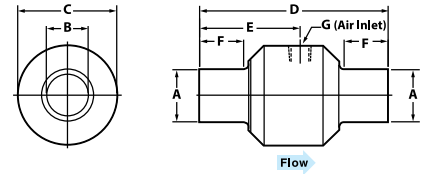
Advantages

- Compact
- Quiet
- No moving parts
- Fits standard hose or tube
- Aluminum
- Eight sizes
- Moderate throughput capability



Light Duty Line Vac

DOWNLOAD
drawings at
EXAIR.com



Light Duty Performance

| Model # | 80 PSIG (5.5 BAR) | |
|---------|----------------------|-------|
| | Air Consumption | |
| Model # | SCFM | SLPM |
| 130075 | 7.30 | 207 |
| 130100 | 10.70 | 303 |
| 130125 | 14.70 | 501 |
| 130150 | 20 | 566 |
| 130200 | 27.50 | 778 |
| 130300 | 45 | 1,274 |
| 130400 | 58.50 | 1,656 |
| 130600 | 80.20 | 2,270 |

| Light Duty Line Vac Dimensions | | | | | | | | |
|--------------------------------|----|------|------|------|------|------|------|---------|
| Model # | | A | B | C | D | E | F | G |
| 130075 | in | 0.75 | 0.50 | 1.88 | 4.53 | 2.31 | 1.06 | 1/4 NPT |
| | mm | 19 | 13 | 48 | 115 | 59 | 27 | |
| 130100 | in | 1 | 0.75 | 2.13 | 4.53 | 2.41 | 1.06 | 1/4 NPT |
| | mm | 25 | 19 | 54 | 115 | 61 | 27 | |
| 130125 | in | 1.25 | 1 | 2.38 | 4.53 | 2.41 | 1.06 | 1/4 NPT |
| | mm | 32 | 25 | 60 | 115 | 61 | 27 | |
| 130150 | in | 1.50 | 1.25 | 2.75 | 4.63 | 2.41 | 1.06 | 3/8 NPT |
| | mm | 38 | 32 | 70 | 117 | 61 | 27 | |
| 130200 | in | 2 | 1.75 | 3.25 | 4.66 | 2.47 | 1.06 | 3/8 NPT |
| | mm | 51 | 45 | 83 | 118 | 63 | 27 | |
| 130300 | in | 3 | 2.75 | 4.25 | 5.06 | 2.75 | 1.06 | 3/8 NPT |
| | mm | 76 | 70 | 108 | 129 | 70 | 27 | |
| 130400 | in | 4 | 3.75 | 5.25 | 5.06 | 2.75 | 1.06 | 1/2 NPT |
| | mm | 102 | 95 | 133 | 129 | 70 | 27 | |
| 130600 | in | 6 | 5.75 | 7.38 | 5.56 | 2.88 | 1.06 | 1/2 NPT |
| | mm | 152 | 146 | 187 | 141 | 73 | 27 | |



Light Duty Line Vacs are available in eight sizes for diameters from 3/4" to 6" (19 to 152mm).



Kits include a Light Duty Line Vac, filter separator and pressure regulator (with coupler).

Light Duty Line Vac Systems

| Light Duty Line Vac Models | | |
|---|--------------------------------|-------------------------------|
| Light Duty Line Vac Only Light Duty Line Vac Kits - include the Light Duty Line Vac, filter separator and pressure regulator (with coupler). | | |
| Inlet/Outlet Diameter | Light Duty Line Vac Only Model | Light Duty Line Vac Kit Model |
| 3/4" (19mm) | 130075 | 132075 |
| 1" (25mm) | 130100 | 132100 |
| 1-1/4" (32mm) | 130125 | 132125 |
| 1-1/2" (38mm) | 130150 | 132150 |
| 2" (51mm) | 130200 | 132200 |
| 3" (76mm) | 130300 | 132300 |
| 4" (102mm) | 130400 | 132400 |
| 6" (152mm) | 130600 | 132600 |

| Accessories | |
|-------------|---|
| Model # | Description |
| 9001 | Auto Drain Filter Separator, 3/8 NPT, 65 SCFM (1,841 SLPM) |
| 9002 | Auto Drain Filter Separator, 3/4 NPT, 220 SCFM (6,230 SLPM) |
| 9005 | Oil Removal Filter, 3/8 NPT, 15-37 SCFM (425-1,048 SLPM) |
| 9006 | Oil Removal Filter, 3/4 NPT, 50-150 SCFM (1,416-4,248 SLPM) |
| 9008 | Pressure Regulator with Gauge, 1/4 NPT, 50 SCFM (1,416 SLPM) |
| 9009 | Pressure Regulator with Gauge, 3/4 NPT, 220 SCFM (6,230 SLPM) |

Hose is available in 10', 20', 30', 40' and 50' lengths. Select the hose model number (diameter) and indicate the length with a dash. Example: A Model 6931-20 is 1" ID Hose x 20' long.

| | |
|-------|----------------|
| 6930- | Hose 3/4" ID |
| 6931- | Hose 1" ID |
| 6932- | Hose 1-1/4" ID |
| 6933- | Hose 1-1/2" ID |
| 6934- | Hose 2" ID |
| 6936- | Hose 3" ID |



PVC hose is available in lengths up to 50' (15.2m) and diameters up to 3" (76mm).

ORDER ONLINE
at **EXAIR.com**

GO GREEN

SAVE MONEY

Order EXAIR's EFC™ electronic flow control to minimize compressed air use. See page 7 for details.

Light Duty Line Vac

Live Vac Conveyance Data

The table below shows conveyance rates for EXAIR 1", 1-1/2" and 2" Line Vacs in both standard and heavy duty styles when used with various materials and bulk densities. Exact, application-specific conveyance rates are best determined through hands-on testing. Contact an EXAIR Application Engineer to learn more and configure a system suitable for your application.

| Description | Line Vac Model | Horizontal Run (ft) | Vertical Rise (ft) | Rate (lb/min) |
|---|----------------------------|---------------------|--------------------|---------------|
| Ground Corn Cobs (density: 25 lbs/cu.ft) | 6081 (1" Aluminum) | 7 | 5 | 8.8 |
| | 6083 (1-1/2" Aluminum) | 7 | 5 | 13.8 |
| | 6084 (2" Aluminum) | 7 | 5 | 26 |
| | 150100 (1" Heavy Duty) | 7 | 5 | 12.9 |
| | 150150 (1-1/2" Heavy Duty) | 7 | 5 | 20.3 |
| | 150200 (2" Heavy Duty) | 7 | 5 | 40 |
| Tumbling Media (density: 64 lbs/cu.ft) | 6081 (1" Aluminum) | 50 | 0 | 3.68 |
| | | 100 | 0 | 1.23 |
| | | 0 | 11.33 | 3.69 |
| | | 0 | 20.75 | 1.03 |
| | | 25 | 11 | 2.6 |
| | 6083 (1-1/2" Aluminum) | 50 | 0 | 9.3 |
| | | 100 | 0 | 2.89 |
| | | 0 | 11.33 | 13.58 |
| | | 0 | 20.75 | 5.54 |
| | | 25 | 11 | 11.16 |
| | 6084 (2" Aluminum) | 50 | 0 | 15.52 |
| | | 100 | 0 | 5.41 |
| | | 0 | 11.33 | 16.39 |
| | | 0 | 20.75 | 8.03 |
| | | 25 | 11 | 15.52 |
| | 150100 (1" Heavy Duty) | 50 | 0 | 6.43 |
| | | 100 | 0 | 1.18 |
| | | 0 | 11.33 | 9.54 |
| | | 0 | 20.75 | 4.35 |
| | | 25 | 11 | 4.84 |
| | 150150 (1-1/2" Heavy Duty) | 50 | 0 | 18.98 |
| | | 100 | 0 | 9.02 |
| | | 0 | 11.33 | 22.52 |
| | | 0 | 20.75 | 8.62 |
| | | 25 | 11 | 16.13 |
| | 150200 (2" Heavy Duty) | 50 | 0 | 30.93 |
| | | 100 | 0 | 10.86 |
| | | 0 | 11.33 | 24.97 |
| | | 0 | 20.75 | 7.73 |
| | | 25 | 11 | 24.42 |

(Note: all measurements taken at 80 PSIG supply pressure)



| Description | Line Vac Model | Horizontal Run (ft) | Vertical Rise (ft) | Rate (lb/min) |
|--|----------------------------|---------------------|--------------------|---------------|
| Rock Salt (density: 68 lbs/cu.ft) | 6083 (1-1/2" Aluminum) | 50 | 0 | 1.6 |
| | | 35 | 15 | 0.6 |
| | 6084 (2" Aluminum) | 100 | 0 | 5.57 |
| | | 200 | 0 | 1.42 |
| | | 35 | 15 | 0.6 |
| | 150150 (1-1/2" Heavy Duty) | 50 | 0 | 8.32 |
| | | 35 | 15 | 5.62 |
| | 150200 (2" Heavy Duty) | 100 | 0 | 8.73 |
| | | 200 | 0 | 3.33 |
| Crushed Glass (density: 85 lbs/cu.ft) | 6081 (1" Aluminum) | 50 | 0 | 2.57 |
| | | 100 | 0 | 1.18 |
| | | 0 | 11.33 | 2.85 |
| | | 0 | 20.75 | 1.1 |
| | 6083 (1-1/2" Aluminum) | 50 | 0 | 6 |
| | | 100 | 0 | 3.12 |
| | | 0 | 11.33 | 8.67 |
| | | 0 | 20.75 | 3.37 |
| | 6084 (2" Aluminum) | 50 | 0 | 10.29 |
| | | 100 | 0 | 4.73 |
| | | 0 | 11.33 | 10.12 |
| | | 0 | 20.75 | 5.21 |
| | 150100 (1" Heavy Duty) | 50 | 0 | 2.55 |
| | | 100 | 0 | 0.85 |
| | | 0 | 11.33 | 3.72 |
| | | 0 | 20.75 | 1.42 |
| | 150150 (1-1/2" Heavy Duty) | 50 | 0 | 6.48 |
| | | 100 | 0 | 2.83 |
| | | 0 | 11.33 | 9.39 |
| | | 0 | 20.75 | 4.17 |
| | 150200 (2" Heavy Duty) | 50 | 0 | 12 |
| | | 100 | 0 | 4.83 |
| | | 0 | 11.33 | 13.26 |
| | | 0 | 20.75 | 5.35 |

EXAIR®

Standards Compliance

As the leader in standards compliance, EXAIR's products come with more than engineered performance, peak efficiency, the best technical knowledge and unmatched customer service...

EXAIR is dedicated to providing products that have been manufactured to meet the strict requirements of the following standards. These standards provide confidence that you are receiving reliable, high quality products which will perform as stated within the performance charts provided.

Our products meet or exceed the strict safety standards of OSHA and the European Union to ensure the safety of your personnel. Many of these standards will allow your products a smoother transaction when selling your products into international markets.



OSHA and CE Compliance:

EXAIR compressed air products comply with OSHA's Safety Requirements (29 CFR 1910.242(b)), the EU General Product Safety Directive (2001/95/EC) and meet the noise limitation requirements (29 CFR-1910.95(a)), of the EU Machinery Directive (2006/42/EC). EXAIR's Electronic Flow Control and Electronic Temperature Control meet the low voltage standards of the EU Low Voltage Directive (2006/95/EC). Some EXAIR products display the CE mark where there are applicable directives. All sound level measurements are taken at 3 feet from product.



RoHS:

Electrical portions of EXAIR's Static Eliminators, EFC, ETC, Digital Flowmeter solenoid valves, and thermostats comply with the RoHS (Restriction of Hazardous Substances) Directive 2011/65/EU, including the amendment outlined in the European Commission decision L 214/65.



Conflict Mineral Free:

Look for this symbol to designate conflict mineral free products throughout our catalog. EXAIR supports Section 1502 of the Dodd-Frank Wall Street Reform and Consumer Protection Act. We are committed to compliance with the conflict minerals rule in order to curb the illicit trade of tin, tantalum, tungsten and gold in the DRC region. EXAIR is using the CMRT 4.20 template to document our supply chain and commitment to conflict free products.



Reach:

Per Regulation (EC) No 1907/2006 Title I, Article 3, paragraph 3, the European Union has recently enacted legislation to register chemicals and substances imported into the EU to ensure a high level of protection of human health and the environment.

Per Title II, Article 7, paragraph 1, articles (products) must be registered when a substance is intended to be released under normal or reasonably foreseeable conditions of use and it is present in those articles in quantities totaling over 1 metric ton per producer or importer per year. Registration of EXAIR products is not required since they do not contain substances that are intentionally released.

Best Practices for Using **EXAIR** Intelligent Compressed Air™ Products



In order to achieve the best performance of your EXAIR Intelligent Compressed Air Product, a steady flow of compressed air must be supplied at the optimal pressure. Compressor output pressure, air flow rate, piping ID (inner diameter), the smoothness of the inside of the pipe, and connector type all contribute to the performance.

Air Compressor Capability

Especially for manufacturing uses, it is important to consider both the air pressure and air flow being produced by the air compressor providing the supply for all tooling. It is possible for an air compressor to produce sufficient supply pressure for an EXAIR product while not having adequate air flow to use the product for very long!

Air Pressure

The optimal operating pressure for most EXAIR products is 80 PSIG, with the exception of Vortex Tube based products, which are rated at 100 PSIG. Operating EXAIR products at air pressures less than 80 PSIG may lead to lower performance, but EXAIR encourages operating any blowoff product at as low a pressure as possible to achieve your desired result. A simple pressure regulator can lower your pressure and save energy. As a general rule near the 100 PSIG level, lowering air pressure by 2 PSIG will save 1% of energy used by an air compressor. Operating the product at pressures greater than 80 PSIG may produce slightly higher performance, but will require more energy to produce only a small gain.

Connectors and Fittings

Make sure that connectors and fittings do not restrict compressed air flow in any manner. Quick connectors can be especially problematic in this area. Because of their construction, quick connections that are rated at the same size as the incoming pipe or hose may actually have a much smaller inner diameter than that associated pipe or hose. This will significantly restrict the amount of air that is being supplied to the tool, starving it of the air flow it needs for best performance. In some cases, if the fitting is too small, the tool may not work at all!

In most cases we do not recommend any of the fittings numbered 1-5. Our minimum recommendation is represented in numbers 6-9

| | | | | | | | | |
|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| 1 1/8" tube x 1/4 NPT | 2 1/8" tube x 1/4 NPT | 3 1/8" tube x 1/4 NPT | 4 1/8" tube x 1/4 NPT | 5 1/8" tube x 1/4 NPT | 6 1/8" tube x 1/4 NPT | 7 1/8" tube x 1/4 NPT | 8 1/8" tube x 1/4 NPT | 9 1/8" tube x 1/4 NPT |
| | | | | | | | | |
| | | | | | | | | |
| 1/8" I.D. | 13/64" I.D. | 1/4" I.D. | 1/4" I.D. | 1/4" I.D. | 9/32" I.D. | 9/32" I.D. | 9/32" I.D. | 11/32" I.D. |

Not Recommended

Recommended

Best Practices for Using **EXAIR** Intelligent Compressed Air™ Products

continued

Proper Air Pipe Sizing

In addition to all of the items above, it is also important to select the proper compressed air pipe size from the compressor to the point of use. Because the inside of a pipe is not perfectly smooth, the volume of air will become more restricted as it passes through a greater distance, thus reducing the available pressure at the point of use. To compensate for this loss, a larger diameter pipe is needed for a longer run. The table below shows the typical pressure loss in pounds per square inch for 100 feet of 1" Schedule 40 pipe. For lengths other than 100 feet, the pressure drop is proportional to the ratio of difference in lengths. For instance, the pressure drop in 50 feet of pipe will be approximately one-half the value on the table.

| 1" Schedule 40 Pipe - 1.049 actual I.D. | | | | | | | | |
|---|----------------------|-------|------|------|-------|------|-------|------|
| Free Air (SCFM) | Line Pressure (PSIG) | | | | | | | |
| | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 |
| 50 | 1.66 | 1.33 | 1.11 | 0.95 | 0.83 | 0.75 | 0.66 | 0.60 |
| 60 | 2.33 | 1.86 | 1.55 | 1.33 | 1.16 | 1.03 | 0.93 | 0.85 |
| 70 | 3.09 | 2.47 | 2.06 | 1.77 | 1.55 | 1.37 | 1.24 | 1.12 |
| 80 | 3.96 | 3.17 | 2.64 | 2.26 | 1.98 | 1.76 | 1.58 | 1.44 |
| 90 | 4.92 | 3.94 | 3.28 | 2.81 | 2.46 | 2.19 | 1.97 | 1.79 |
| 100 | 5.98 | 4.79 | 3.99 | 3.42 | 2.99 | 2.66 | 2.39 | 2.18 |
| 125 | 9.04 | 7.23 | 6.03 | 5.17 | 4.52 | 4.02 | 3.62 | 3.29 |
| 150 | - | 10.13 | 8.44 | 7.24 | 6.33 | 5.63 | 5.07 | 4.61 |
| 175 | - | - | - | 9.63 | 8.42 | 7.49 | 6.74 | 6.13 |
| 200 | - | - | - | - | 10.78 | 9.59 | 8.63 | 7.84 |
| 225 | - | - | - | - | - | - | 10.73 | 9.75 |

How to Calculate Compressed Air Consumption

| Method 1 |
|---|
| Air consumption is directly proportional to absolute inlet pressure |

$$\frac{SCFM_2}{SCFM_1} = \frac{P_2 + 1 \text{ atmosphere}}{P_1 + 1 \text{ atmosphere}}$$

Example: A Model 3215 Vortex Tube consumes 15 SCFM at 100 PSIG (425 SLPM @ 6.9 BAR). To calculate the airflow with an inlet pressure of 80 PSIG (5.5 BAR), the calculation is as follows:

English Units:

$$SCFM_2 = \frac{15 \times \frac{80 \text{ PSIG} + 14.7}{100 \text{ PSIG} + 14.7}}$$

Metric Units:

$$SLPM_2 = \frac{424.752 \times \frac{5.156 \text{ BAR} + 1.014}{6.895 \text{ BAR} + 1.014}}$$

| Method 2 |
|---|
| Multiply the known flow by the ratio of the input pressures converted to absolute |

Step 1: Calculate the ratio of absolute inlet pressures.

English Units:

$$\frac{80 \text{ PSIG} + 14.7}{100 \text{ PSIG} + 14.7} = 0.8256$$

Metric Units:

$$\frac{5.516 \text{ BAR} + 1.014}{6.895 \text{ BAR} + 1.014} = 0.8256$$

Step 2: Multiply known flow by the above ratio you just calculated.

English Units:

$$15 \text{ SCFM} \times 0.8256 = 12.384 \text{ SCFM}$$

Metric Units:

$$424.752 \text{ SLPM} \times 0.8256 = 350.693 \text{ SLPM}$$

Therefore

Model 3215 consumes 15 SCFM @ 100 PSIG (425 SLPM @ 6.9 BAR) and will consume 12.4 SCFM @ 80 PSIG (351 SLPM @ 5.5 BAR).

Note: To convert SCFM to SLPM, multiply by the factor 28.3168

To convert PSIG to BAR multiply by the factor 0.0689

For more information on pipe sizing, pipe selection, conversion, and consumption, please visit our website at <https://exair.co/04-airdata> or scan this qr code provided.

