

EXAIR®

MANUFACTURING INTELLIGENT COMPRESSED AIR® PRODUCTS SINCE 1983

Super Air Nozzles

Vortex Tubes

Chip Vac

Air Amplifiers

Silencing Mufflers

Chip Trapper

Leak Detector

Safety Air Guns

Super Air Wipes

Super Air Knife

Cabinet Cooler® Systems

Air Operated Conveyors

E-Vac® Vacuum Generators

Static Eliminators

Reversible Drum V

Adjustable



CONSERVE



COOL



CLEAN



CONVEY



NEW

**Adjustable E-Vac®
Modular E-Vac®**



**23
CATALOG**



YOU REQUESTED THIS CATALOG AND PRICE LIST.
PLEASE SEE MAILING LABEL ON BACK COVER.

| | | | | | |
|-----------------|--|--|-----------------|---|--|
| Page 3 | EXAIR Optimization Minimize Compressed Air Use and Detect Wasteful Leaks |  | Page 11 | Air Knives Blowoff, Clean, Dry and Cool With Less Noise and Air Consumption |  |
| Page 29 | Air Wipes Blowoff, Dry, Clean and Cool Pipe, Cable, Extruded Shapes and Hose |  | Page 35 | Air Amplifiers Vent, Exhaust, Cool, Dry and Clean - With No Moving Parts |  |
| Page 43 | Air Nozzles and Jets Reduce Noise Levels and Air Costs on Blowoff Operations |  | Page 59 | Safety Air Guns Safety Air Guns Use Engineered Air Nozzles for High Performance |  |
| Page 65 | Static Eliminators Eliminate Static Electricity, Dust and Shock Hazard |  | Page 87 | E-Vac® Vacuum Generators Vacuums for Lifting, Clamping, Mounting and Placement |  |
| Page 103 | Air Operated Conveyors Convey Parts, Materials and Waste - With No Moving Parts |  | Page 115 | Industrial Housekeeping Reliable Vacuums for Chip Removal, Liquid Transfer and Cleaning |  |
| Page 129 | Vortex Tubes and Spot Cooling Cold Air for Industrial Spot Cooling Problems |  | Page 141 | Cold Gun Aircoolant Systems Cool Machining Operations With Clean, Cold Air |  |
| Page 145 | Cabinet Cooler® Systems Cool and Purge NEMA 12, 4 and 4X Electrical Control Panels |  | Page 154 | Accessories Mufflers, Filters, Regulators, Valves, Swivel Fittings and More |  |

| | | | |
|--|-----------|---|--|
| Terms and Conditions | 2 | Safety Air Guns..... 59 | Industrial Housekeeping.....115 |
| EXAIR Optimization | 3 | Soft Grip Safety Air Guns | 115 |
| Electronic Flow Control | 4 | Heavy Duty Safety Air Guns | 117 |
| Ultrasonic Leak Detector | 7 | NEW Super Blast Safety Air Guns | 119 |
| Digital Flowmeter | 9 | Static Eliminators | 65 |
| Digital Sound Level Meter | 10 | Super Ion Air Knife | 67 |
| Air Knives.....11 | | Power Supplies | 69 |
| Super Air Knife | 11 | Standard Ion Air Knife | 73 |
| NEW PVDF Super Air Knife..... | 17 | Ionizing Bars | 75 |
| Universal Mounting System..... | 20 | Super Ion Air Wipes..... | 77 |
| NEW Long Super Air Knife..... | 22 | Ion Air Cannon..... | 79 |
| Standard Air Knife..... | 24 | Ion Air Gun | 81 |
| Full-Flow Air Knife..... | 27 | Ion Air Jet | 83 |
| Air Wipes | 29 | Stay Set Ion Air Jet..... | 83 |
| Super Air Wipes | 29 | Ionizing Point..... | 85 |
| Standard Air Wipes | 33 | Static Meter | 86 |
| Air Amplifiers | 35 | AC Sensor | 86 |
| Super Air Amplifiers | 37 | E-Vac® Vacuum Generators..... 87 | |
| Adjustable Air Amplifiers..... | 41 | In-Line..... | 90 |
| Air Nozzles and Jets | 43 | NEW Modular | 90 |
| Air Nozzles | 43 | NEW Adjustable | 95 |
| Super Air Nozzles..... | 46 | Vacuum Cups | 98 |
| Air Jets | 50 | Air Operated Conveyors | 103 |
| High Force Air Nozzles | 52 | Line Vac..... | 103 |
| NEW Large Super Air Nozzles | 53 | Threaded Line Vac..... | 109 |
| Super Air Nozzle Clusters | 56 | Heavy Duty Line Vac..... | 111 |
| Stay Set Hoses | 57 | Light Duty Line Vac..... | 113 |
| | | Vortex Tubes & Spot Cooling .. 129 | |
| | | Vortex Tubes | 129 |
| | | Adjustable Spot Cooler..... | 137 |
| | | Mini Cooler | 140 |
| | | Cold Gun Aircoolant Systems... 141 | |
| | | Cold Gun | 141 |
| | | Cabinet Cooler® Systems | 145 |
| | | NEMA 12, 4 and 4X | 145 |
| | | NEW Electronic Temperature Control | 150 |
| | | Accessories | 154 |
| | | Silencing Mufflers | 154 |
| | | Filters | 156 |
| | | Regulators | 157 |
| | | Valves, Swivels, Thermostats | 158 |
| | | Magnetic Bases, Stay Sets, Hoses | 159 |
| | | Receiver Tank, Fittings | 160 |

Terms and Conditions (U.S. and Canada Only)

Terms: Net 30 days upon credit approval, Visa, MasterCard, Discover and American Express.



Cards

F.O.B. Point: EXAIR Corporation, Cincinnati, Ohio. For U.P.S. shipment, freight is prepaid and added to the invoice.

Delivery: All cataloged products are shipped from stock, via U.P.S. within 24 hours after receipt of order. Priority shipment is available upon request.

Ordering: Call 1-800-903-9247 or 513-671-3322 Worldwide

8:00 a.m. to 5:00 p.m. ET (Mon. - Fri.)

Fax toll free 1-866-329-3924 or

513-671-3363 Worldwide

E-mail: orders@exair.com

www.exair.com (secure web site)

Remit to address (payments only):

EXAIR Corporation

Location 00766

Cincinnati, Ohio 45264-0766

Tax: Sales and use tax, where applicable, are not included.

Technical Assistance: Please call our Application Engineering Department, 1-800-90-EXAIR (1-800-903-9247).

OSHA and CE Compliance: EXAIR compressed air products comply with OSHA's Safety Requirements, the EU General Product Safety Directive (2001/95/EC) and meet the noise limitation requirements of the EU Machinery Directive (98/37/EC). They help companies comply with the Noise Directive (86/188/EEC) along with pending changes to the workplace noise requirements due to the implementation of the Physical Agents Directive (2003/10/EC). These directives are non-marking directives and do not allow display of the CE mark. Some EXAIR products display the CE mark where there are applicable directives.

RoHS: Electrical portions of EXAIR's static eliminators, EFC, ETC, solenoid valves, and thermostats comply with the RoHS (Restriction of Hazardous Substances) Directive 2002/95/EC, including the amendment outlined in the European Commission decision L 214/65.

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.

Copyright Restrictions: The content of the EXAIR Catalog, including all photos, graphics, drawings and arrangements are proprietary to EXAIR Corporation and are protected by the United States and international copyright and trademark laws. You are authorized to use the contents of the EXAIR Catalog for personal use or as it relates to your role as a current or prospective customer of EXAIR. The contents of this catalog may not be copied or modified for any type of publication or distribution without the prior written consent of EXAIR Corporation. The content of the EXAIR Catalog is the intellectual property solely of the EXAIR Corporation with no rights transferred to other parties. No part of this catalog may be reproduced for any commercial purposes without the express authorization in writing by the EXAIR Corporation.

Trademarks: "EXAIR", "Cabinet Cooler", "E-Vac", "Intelligent Compressed Air", and "Compressed Air Intelligence" are registered trademarks of the EXAIR Corporation. The EXAIR logo, product names, designs and descriptive phrases are trademarked by EXAIR Corporation. These trademarks may not be used without prior written permission of the EXAIR Corporation.

EFC, Digital Flowmeter, Digital Sound Level Meter, High Power Cold Gun, Super Air Knife, Standard Air Knife, Full-Flow Air Knife, Super Air Amplifier, Adjustable Air Amplifier, Super Air Nozzle, Micro Air Nozzle, High Power Safety Air Gun, Stay Set Hose, Super Blast Safety Air Gun, Super Air Wipe, Standard Air Wipe, Super Ion Air Knife, Standard Ion Air Knife, Super Ion Air Wipe, Ion Air Cannon, Ion Air Gun, Ion Air Jet, Ionizing Point, Stay Set Ion Air Jet, Line Vac, Chip Vac, Heavy Duty Dry Vac, Reversible Drum Vac, Chip Trapper, Vac-u-Gun, Air Disk, Air Stik, Mini Cooler, Cold Gun Aircoolant, and ETC are trademarks of EXAIR Corporation.



Intelligent Compressed Air® products are identified throughout this catalog that can help your plant save tens of thousands of dollars over the course of a single year. *The Best Practices for Compressed Air Systems* manual published by the Compressed Air Challenge® recommends products like the Super Air Knife™, Super Air Amplifier™, and the family of Super Air Nozzles™ for energy conservation. Many of the products shown offer unique ways to solve common industrial problems using compressed air. Compressed Air Challenge is a registered trademark of Compressed Air Challenge, Inc.



EXAIR has partnered with Energy Star, a voluntary program of the U.S. Department of Energy and the Environmental Protection Agency. Energy Star offers energy efficient solutions to help save money while protecting the environment for future generations. EXAIR has implemented improved energy management practices and technologies throughout our facility, including energy efficient lighting, HVAC systems, and electronic thermostats. EXAIR's participation in this program underscores our commitment to conserving energy.

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 and others may be U.S. Patent Pending. Copyright ©2009 EXAIR Corporation. All Rights Reserved.

Warranty: 5 Year "Built To Last" Warranty against defects in workmanship and materials on all compressed air products*. Defective products must be returned freight prepaid for repair or replacement at our option. This warranty applies under conditions of normal use, but does not apply to defects that result from intentional damage, negligence, unreasonable use or exposure.



*5 Year Warranty applies to compressed air products only.

A 1 Year Warranty applies to all accessories and electrically powered products.

EXAIR's Unconditional Guarantee: Extends to all U.S. and Canadian customers and includes invoiced U.P.S. Ground Service shipping charges. Products returned after the 30 day guarantee period are subject to a 15% restocking charge. Products must be returned freight prepaid.



11510 Goldcoast Dr.
Cincinnati, Ohio 45249-1621

Phone Number: (513) 671-3322

Fax Number: (513) 671-3363

E-mail: techhelp@exair.com

Web Site: www.exair.com

Optimization

"Go Green" with Intelligent Compressed Air® Products!

It's a worldwide problem. Compressed air leaks and inefficient blowoffs can waste thousands of dollars of electricity per year, affecting your company's production costs and bottom line. For many plants, the leakage alone accounts for up to 30% of the total compressed air cost.

EXAIR can help your company "go green" with six easy to follow steps. It's as simple as finding the leaks, making the repairs, controlling the air use, and upgrading to efficient blowoffs. EXAIR's Intelligent Compressed Air® Products can help you accomplish these steps so your compressed air system becomes more efficient, along with the benefit of drastically lowering your energy costs.

Six Steps To Optimizing Your Compressed Air System

- 1** Measure the air consumption to find sources that use a lot of compressed air.
- 2** Find and fix the leaks in your compressed air system.
- 3** Upgrade your blowoff, cooling and drying operations using engineered compressed air products.
- 4** Turn off the compressed air when it isn't in use.
- 5** Use intermediate storage of compressed air near the point of use.
- 6** Control the air pressure at the point of use to minimize air consumption.



EXAIR's **Digital Flowmeter™** accurately measures compressed air usage and monitors waste. Trends can be monitored to find excessive air use. Detects leaks at compressed air fittings when the machinery is off. Regular monitoring can detect leaks that develop as the machinery ages.

- Easy to install - No adjustments or calibrations needed
- Digital readout displays actual airflow through pipe

Page
9



EXAIR's **Ultrasonic Leak Detector** can help you identify costly leaks in your compressed air system. Leaks can account for 30% of total compressor output! In many cases, finding one small leak can quickly pay for the leak detector.

- Detects leaks up to 20' (6.1m) away
- Accurate in noisy industrial environments

Page
7



EXAIR's engineered **Super Air Nozzles™**, **Super Air Knives™**, and **Super Air Amplifiers™** dramatically reduce air consumption and noise. EXAIR's **Digital Sound Level Meter** can identify and isolate the source of the noisy blowoffs.

- Low cost - replaces noisy blowers
- Improves blowoff performance and safety

Page
43



EXAIR's **EFC™** is an electronic flow control that minimizes compressed air use by turning off the compressed air when no part is present. For use on blowoff, drying, cooling, conveying and static elimination operations.

- Easy hook up; 100-240 VAC with eight function timer
- Photoelectric sensor withstands water and dust

Page
4



An EXAIR 60 gallon **Receiver Tank** can be installed at the point of high demand so there is an additional supply of compressed air available for a short duration. Meets ASME pressure vessel code.

- Eliminates fluctuations in pressure and volume
- Vertical, space saving design

Page
160



EXAIR **Pressure Regulators** permit easy selection of an operating pressure that will allow the air product to work properly without using excessive amounts of compressed air. Reducing the air pressure from 100 PSIG to 80 PSIG reduces energy use by almost 20%.

- Modular design pressure gauge
- Many sizes available

Page
157

EFC™

Electronic flow control minimizes compressed air use for blow off, drying, cooling, conveying and static elimination operations!

Dramatically reduces compressed air costs by turning off the air when no part is present!

What Is The EFC?

EXAIR's EFC™ is a user-friendly electronic flow control for compressed air that is designed to minimize compressed air use on blow off, drying, cooling, conveying and static elimination operations. The EFC combines a photoelectric sensor with a timing control that limits compressed air use by turning it off when no part is present. The timing control permits easy tuning to the application requirements while providing flexibility in sensing distance.



Why The EFC?

For most companies, the air compressor uses more electricity than any other type of equipment. One simple operation that uses compressed air can easily waste thousands of those electricity dollars per year if not properly controlled. The EFC has been designed to improve efficiency by minimizing compressed air use and, as a result, reduce compressed air costs. It turns on the air only when a part is present and provides just enough air to complete a specific task or operation.

The EFC has an easy electrical connection for voltages from 100 to 240VAC, 50/60Hz making it suitable for applications throughout the world. The compact photoelectric sensor has a sensitivity adjustment and detects objects up to 3' (1 meter) away. The sensor has superior immunity to noise and inductive loads that are common to industrial environments and installs easily in tight spaces with the supplied mounting bracket. The control system provides flexibility with numerous valve operating modes and timing delays. The polycarbonate enclosure is suitable for use in a wide range of applications including those located in wet environments.

Applications

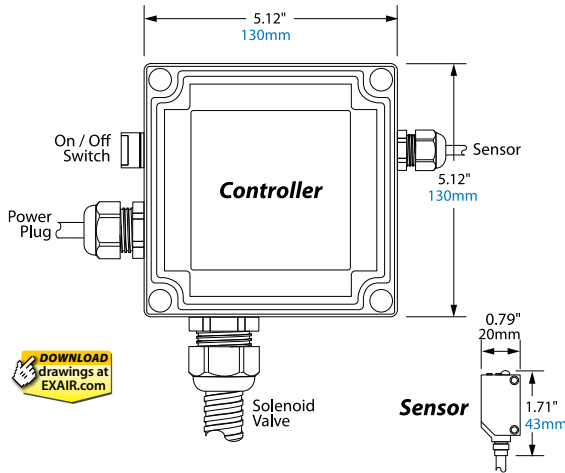
- Auto body blowoff
- Package cleaning
- Part drying after wash
- Dust removal prior to packaging
- Scrap removal
- Filling operations
- Pre-paint dust removal
- Wiping contaminants
- Cooling hot parts
- Neutralizing static
- Cleaning molded parts

Advantages

- Easy electrical hook-up; 100-240VAC, 50/60Hz
- NEMA 4/IP66 environments
- Compact sensor for mounting in tight spaces
- Eight function analog timer for on/off, pulsing and delay control
- Timer setting from 0.10 sec. to 120 hrs.
- Sensor withstands water and dust for accurate readings
- Sensor has superior immunity to noise and inductive loads
- Sensor has long distance sensing up to 3 feet (1 meter)



Photoelectric sensor withstands water and dust.



The timing control unit and the photoelectric sensor are equipped with a 9' (2.74m) power cord. The timing control unit is housed in a polycarbonate NEMA 4 / IP66 water tight enclosure.

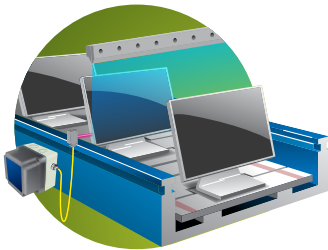
There are four models of the EFC. Each includes the timing control unit and photoelectric sensor with a choice of solenoid valve sizes of 40, 100, 200 and 350 SCFM (1133, 2832, 5664 and 9911 SLPM).

| Specifications | |
|---------------------------------|------------------------------------|
| Power Supply Input | 100-240VAC, 50/60Hz, 0.25 - 0.45A |
| Power Supply Output (To Sensor) | 24VDC at .65A |
| Sensor | 12-24VDC input, consumes 30mA |
| Sensing Range | Diffuse reflective to 3' (1 meter) |
| Enclosure Rating | NEMA 4 / IP66 |
| Temperature Rating | -13°F to 131°F (-25°C to 55°C) |
| RoHS Compliant | Yes |
| CE Compliant | Yes |



\$2,045.22 Annual Air Savings On A Flat Panel Display Blowoff

A flat panel display manufacturer runs 3 shifts. It takes a 40 second cycle to produce one fully assembled display. Prior to packaging, they use EXAIR's 12" (305mm) Super Ion Air Knife at 40 PSIG to blow across the display to remove any static electricity, dust, debris and plastic flash from the panel surface. The air ran constantly. The displays are under the airflow only 10 seconds. Thirty seconds pass until the next display is in position. They manufacture 675 displays per shift (7.5 hrs.) for a total of 2025 displays manufactured per day.



The timer was set to the "interval" setting when detecting the flat panel displays. The sensor was mounted 1" (25mm) prior to the Super Ion Air Knife blowoff station. When it detected the flat panel, it turned the air on immediately and started the 10 second timing sequence for closing the valve (shutting the air off). In the event the conveyor stopped, the air would no longer cycle on again until the next flat panel was detected.

Old Method

EXAIR's 12" (305mm) Super Ion Air Knife was supplied at 40 PSIG to clean the displays.

At 40 PSIG, EXAIR's 12" (305mm) Super Ion Air Knife consumes 20.4 SCFM (577 SLPM)

Non-stop blowing of 1440 minutes (24 hours) per day x 20.4 SCFM = 29,376 SCF (831,341 SL) air usage per day.

EFC Solution

The EFC was installed to shut off the compressed air for 30 seconds of the 40 second cycle. (Turns air off for 75% of the cycle.)

Cost Difference

Most large plants know their air cost. If the actual cost is unknown, \$0.25 per 1000 SCF (28,329 SL) is reasonable.

Before the EFC installation:

29,376 SCF/1000 = 29.38 x \$0.25 = \$7.34 air cost per day.

With the EFC installed:

The EFC shut the air off during the three 30 minute shift changes. Upon sensing the display, the timer turned on the compressed air for only 10 seconds of each 40 second cycle (25% of the time).

1440 minutes per day – 90 minutes between shifts = 1350 minutes of operation per day.
1350 minutes x 25% = 337.5 minutes of air per day
337.5 minutes x 20.4 SCFM = 6,885 SCF (194,846 SL) air usage per day.

6,885 SCF/1000 = 6.89 x \$0.25 = \$1.72 air cost per day
\$7.34 (old air cost) – \$1.72 (new air cost) =

\$5.62 savings per day x 7 days a week =

\$39.33 savings per week x 52 weeks a year =

\$2,045.22 savings per year.

EFC

\$5,030.48 Annual Air Savings For Pre-Paint Bumper Cleaning

A manufacturer of car bumpers installed a 60" (1524mm) Super Ion Air Knife in the down draft cleaning area prior to their paint booth. The bumpers enter that area in the same orientation as they would when mounted to the automobile, moving at 10' (3m) per minute with a 12" (305mm) space between bumpers. The bumpers are under the blow off for 10 seconds. 6 seconds pass with no bumper in the ionized airflow. The operation runs around the clock with three shifts.

Old Method

EXAIR's 60" (1524mm) Super Ion Air Knife was supplied at 40 PSIG to clean the bumper.

At 40 PSIG, EXAIR's 60" (1524mm) Super Ion Air Knife consumes 102 SCFM (2,887 SLPM).

Non-stop blowing of 1440 minutes (24 hours) per day x 102 SCFM = 146,880 SCF (4,156,704 SL) air usage per day.

EFC Solution

The EFC was installed to shut off the compressed air for the 6 seconds where no bumper was present - an on cycle reduction of 37.5%. 1440 minutes x 37.5% = 540 minutes of off time per day

Cost Difference

Most large plants know their air cost. If the actual cost is unknown, \$0.25 per 1000 SCF (28,329 SL) is reasonable.

Before the EFC installation:

146,880 SCF/1000 = 146.88 x \$0.25 = \$36.77 air cost per day.

With EFC installed: 146,880 SCF x 62.5% on cycle = 91,800 SCF/1000 = 91.8 x \$0.25 = \$22.95 air cost per day.

\$36.77 (old air cost) - \$22.95 (new air cost) =

\$13.82 savings per day

x 7 days per week =

\$96.74 savings per week

x 52 weeks per year =

\$5,030.48 savings per year.



The timer was set to "interval" and the sensor mounted next to the Super Ion Air Knives. When it detected a bumper, it immediately turned on the air for 10 seconds. If the conveyor stopped, it would not turn the air on again until it detected the next bumper.

\$3,393 Annual Air Savings On A Tank Blowoff Operation

A company that refurbishes large pressurized tanks runs the tanks through an oven to burn off the old paint. Only one tank at a time can be processed. The single tank is loaded onto the conveyor and the system is turned on. The conveyor starts to move and the series of Super Air Knives used for blowoff at the exit of the oven is turned on. At 80 PSIG, the four Super Air Knives consume 348 SCFM (9,848 SLPM). The blowoff runs for 5 minutes waiting for the first tank to make it through the oven and approach the airflow (wastes 1740 SCF/49,242 SL of air). It takes one minute to pass through the airstream. Once the blowoff is complete, the conveyor stops and the air is shutoff. The stripped tank is taken off the conveyor and another tank is loaded at the other end. They typically run 30 pressurized tanks per day, five days per week.

Old Method

It takes 6 minutes to complete the process.

6 minutes x 348 SCF = 2,088 SCFM (59,090 SLPM)
2,088 SCFM x 30 tanks =
62,640 SCFM (1,772,712 SLPM)

EFC Solution

The EFC was installed to shut off the compressed air for the 5 minutes where no tank was present (one minute of air on).

1 minute x 348 SCFM = 348 SCF x 30 tanks = 10,440 SCF (295,452 SL)

Cost Difference

Most large plants know their air cost. If the actual cost is unknown, \$0.25 per 1000 SCF (28,329 SL) is reasonable.

Before the EFC installation: 62,640 SCF/1000 = 62.64 x \$0.25 = \$15.66 air cost per day.

With the EFC installed: 10,440 SCF/1000 = 10.44 x \$0.25 = \$2.61 air cost per day.

\$15.66 (old air cost) - \$2.61 (new air cost) =

\$13.05 savings per day x 5 days per week =

\$65.25 savings per week x 52 weeks per year =

\$3,393 savings per year.



The timer was set to "on/off delay". The sensor was mounted at the oven exit (1 minute away from the blowoff station). When the sensor detected a tank, the timer turned the air on for one minute, just as the next tank reached the blowoff station.

EFC Systems

| Electronic Flow Control | |
|-------------------------|--|
| Model # | Description |
| 9055 | EFC Electronic Flow Control, 40 SCFM (1133 SLPM), solenoid valve, 1/4 NPT |
| 9056 | EFC Electronic Flow Control, 100 SCFM (2832 SLPM), solenoid valve, 1/2 NPT |
| 9057 | EFC Electronic Flow Control, 200 SCFM (5664 SLPM), solenoid valve, 3/4 NPT |
| 9064 | EFC Electronic Flow Control, 350 SCFM (9911 SLPM), solenoid valve, 1 NPT |

 **Order Direct**
We Ship From Stock
p:1-800-903-9247 f:1-866-329-3924

Ultrasonic Leak Detector

Locate costly leaks in your compressed air system!

What Is The Ultrasonic Leak Detector?

The Ultrasonic Leak Detector (ULD) is a hand-held, high quality instrument that can locate costly leaks in a compressed air system.

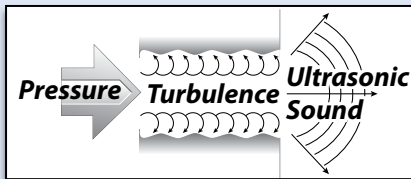
A person using the ULD need only aim it in the direction of a suspected leak. When a leak is present, an audible tone can be heard with the use of the headphones, and the LED display will light. Testing the various unions, pipes, valves and fittings of a complete installation can be done quickly and effectively at distances up to 20' (6.1m) away!

Why The Ultrasonic Leak Detector?

Plants that aren't maintained can easily waste **up to 30%** of the compressor output through leaks that go undetected. Compressing air is an expensive operation. Saving the wasted compressed air reduces overall operating costs. In large plants, the cost of a small air leak may be insignificant, but many small leaks when located and repaired can amount to huge energy savings.



What is Ultrasound?



Ultrasonic sound is a range of sound that is above human hearing capacity. Most people can hear frequencies from 20 Hz to 20 kHz. Sound from 20 kHz to 100 kHz can not be heard and is called "ultrasonic". The Model 9061 Ultrasonic Leak Detector converts ultrasonic sound emissions to a range that is audible to people. (The sound generated by the ULD is 32 times lower in frequency than the sound that is received.)

Advantages

- Detects any pressurized air leak up to 20 feet (6.1m) away
- Converts ultrasound to an audible frequency
- LED display confirms the leak location
- Detects leaks in noisy industrial environments
- Sensitivity controls provide accurate detection
- Not affected by contaminants or windy conditions
- Includes accessories to detect leaks in hard to reach areas
- Rugged carrying case
- Meets ASTM standards

Applications

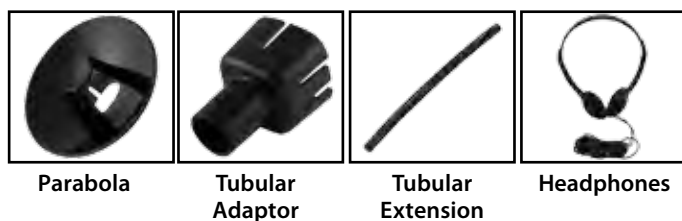
- Locates leaks in air, steam and non-flammable gas systems including pipes, fittings, valves, cylinders and pressure vessels
- Finds the source of bearing and gear wear
- Locates arcing in an electrical system
- Detects refrigeration and air conditioning system leaks
- Locates leaks in brake systems, tubes, tires and radiators
- Senses cracks in moving rubber v-belts
- Detects leaks in vacuum systems
- Check condition of engine seals



LED indicators on the Ultrasonic Leak Detector show the exact source of the leak or problem.

Ultrasonic Leak Detector

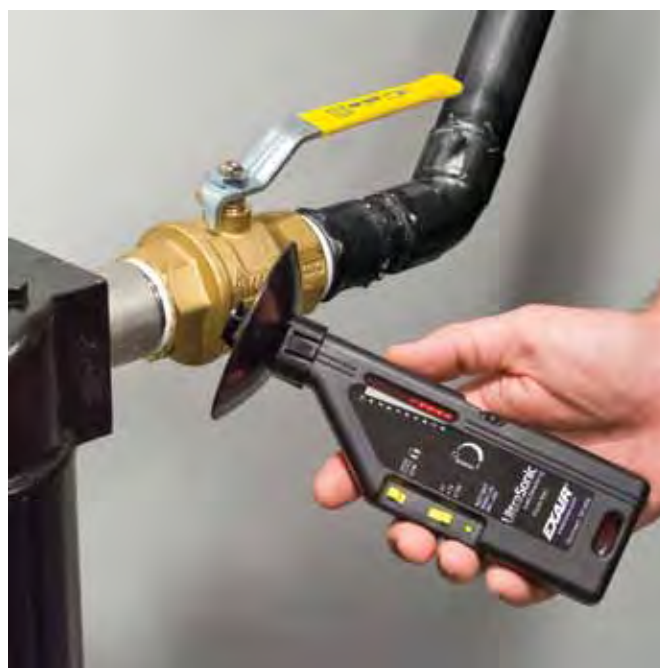
In a plant where loud noise levels exist, it is very difficult to locate leaks by merely listening for them. Most plant noises are in the normal audible range of human hearing, while air escaping from a small orifice is ultrasonic. The ULD can be adjusted to filter out background noise using the three sensitivity settings of X1, X10 and X100 along with an “on/off” thumb wheel for fine sensitivity adjustment. The parabola or tubular extension (*shown below*) can also be attached to the ULD to mask out intense background noise. The ULD detects only the ultrasonic sounds that are generated.



Ultrasound is directional in transmission and is loudest at the source. Turbulence created by the air forced through a small orifice generates ultrasonic sound. This emitted sound is called “white noise” and occurs when the air moves from a high pressure area such as a pipe or vessel and escapes to a low pressure area such as the room. The Ultrasonic Leak Detector converts the turbulent flow to a frequency that can be heard using the headphones. As the ULD moves closer to the leak, more LEDs on the display light to confirm the source of the leak.



The Model 9061 Ultrasonic Leak Detector comes complete with a hard-shell plastic case, headphones, parabola, tubular adaptor, tubular extension and 9 volt battery.



The Model 9061 Ultrasonic Leak Detector quickly pinpoints a costly leak in a noisy, industrial environment.

In some cases, the suspected leak is in a hot area and/or close to moving parts. The tubular extension and parabola make it possible to probe these difficult locations from a distance to isolate the leak.

Find One Leak -

Pay For Your Ultrasonic Leak Detector

Consider one small leak that is equivalent to a 1/16" diameter hole. At 80 PSIG, it consumes 3.8 SCFM (Standard Cubic Feet per Minute) or 108 SLPM (Standard Liters Per Minute).

Most large plants know their air cost. If you don't know your actual cost per 1000 SCF (Standard Cubic Feet), a reasonable average is \$0.25 per 1000 SCF (28,329 Standard Liters).

Dollars consumed per hour = SCFM consumed x 60 minutes x cost/1000 SCF
 = 3.8 x 60 x \$0.25/1000
 = \$0.06 per hour
 = \$1.37 per 24 hour period
 = \$9.58 per week
 = \$497.95 per year



Order Direct
We Ship From Stock

p:1-800-903-9247 f:1-866-329-3924

Digital Flowmeter™

Monitor compressed air usage and waste!

What Is The Digital Flowmeter?

EXAIR's Digital Flowmeter is the easy way to monitor compressed air consumption and waste! The digital display shows the exact amount of compressed air being used downstream. This makes it possible to save thousands of dollars per year in compressed air waste – helping to identify costly leaks or inefficient air products. Many companies install the Digital Flowmeter on each major leg of their air distribution system to constantly monitor and reduce compressed air usage.

Why The Digital Flowmeter?

The Digital Flowmeter has an LED display that directly indicates the SCFM of airflow through that pipe (other flowmeters require the reading to be multiplied by a specific conversion factor to be accurate). Two models are available for use on Schedule 40 iron pipe – one designed for 1" Schedule 40 iron pipe and the other for 2". Each Digital Flowmeter is calibrated for the specific pipe size it is mounted to.

The Digital Flowmeter is designed for permanent mounting to the pipe. It requires the user to drill two 3/16" diameter holes through the pipe using the included drill bit and locating fixture. The two flow sensing probes of the flowmeter are inserted in these holes. The unit seals to the pipe once the two clamps are tightened. No cutting, welding, adjustments or calibration are ever required.

| Specifications | |
|--------------------|---|
| Accuracy | 5% of reading. Add 1% of full scale for air temperature between 40° to 120°F (4° to 49°C). Accuracy will be reduced when flow is outside the specified range. |
| Operating Pressure | 30 to 140 PSIG for best accuracy - 200 PSIG max. |
| Input Power | 250 mA at 18 VDC / Power Adapter 120VAC |
| Wetted Materials | Stainless steel, gold, thermal epoxy and Viton (seal) |
| Ring Material | Aluminum |
| Display | Four-digit LED display |
| Compliance | CE and RoHS |

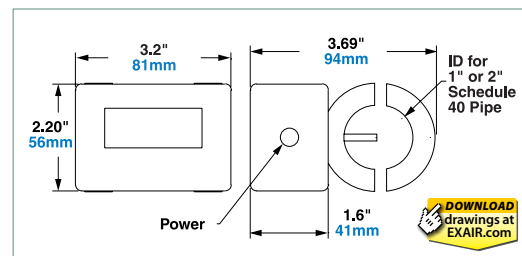
Note: For use with compressed air and nitrogen only.



| Model # | Pipe Size | Range |
|---------|-----------------------|--------------|
| 9092 | 1" (Schedule 40 iron) | 1 – 80 SCFM |
| 9095 | 2" (Schedule 40 iron) | 2 – 350 SCFM |

Other sizes and flow rates available. Please contact our factory.

Dimensions



Advantages

- Easy to install
- No moving parts
- Sensitive at low flows
- No calibration or setup required
- Includes necessary components for installation
- Two models for use on 1" and 2" Schedule 40 iron pipe



Each Digital Flowmeter comes complete with 18 VDC power supply, 3/16 drill bit, and hole locating fixture.

Digital Sound Level Meter



Digital Sound Level Meter™

Prevent worker-related hearing loss!

What Is The Digital Sound Level Meter?

EXAIR's Model 9104 Digital Sound Level Meter is an easy to use instrument that can measure and monitor the sound level pressure in a wide variety of industrial environments. The source of loud noises can be quickly identified and isolated so corrective measures can be taken to reduce or eliminate the problem. For compressed air noise, it is often as simple as replacing the existing inefficient blowoffs with EXAIR's engineered compressed air products such as the Super Air Knife, Super Air Amplifier or Super Air Nozzles. In many cases, the EXAIR products can reduce noise levels by 10dBA which is perceived as cutting the sound volume in half.

Why The Digital Sound Level Meter?

Hearing loss induced by high noise in the workplace is a common problem. Exposure to high noise levels for an extended period of time can lead to permanent hearing loss for workers not wearing proper hearing protection. The Digital Sound Level Meter can help employers protect workers by monitoring noise levels so they don't exceed the limits shown in OSHA Standard 29 CFR – 1910.95(a). Failure to comply can result in hefty fines.

OSHA Maximum Allowable Noise Exposure

| Hours per day (constant noise) | 8 | 7 | 4 | 3 | 2 | 1 | 0.5 |
|--------------------------------|----|----|----|----|-----|-----|-----|
| Sound level dBA | 90 | 91 | 95 | 97 | 100 | 105 | 110 |

OSHA Standard 29 CFR - 1910.95 (a)

Accurate and responsive, the Digital Sound Level Meter measures the decibels of the sound and displays the reading on the large LCD display that has a backlight button for easier viewing. An "F/S" response time button provides a choice of slow response measurements for comparatively stable noise measurement or fast for varying noise. The "Max Hold" setting will measure the maximum noise level of sounds and update continuously if a louder sound is detected. Certification of accuracy and calibration traceable to NIST (National Institute of Standards and Technology) is included.



The Sound Level Meter identifies a potential source of hearing loss.



Model 9104 Digital Sound Level Meter comes complete with removable wind screen, battery, and a protective case.

Advantages

- Measuring sound level range from 35dB - 130dB (Low: 35 to 100; High: 65 to 130dBA)
- Frequency range 31.5Hz - 8kHz
- A and C weightings (check compliance with safety regulations and acoustic analysis)
- Slow (1 sec) and fast (125ms) response settings to check peak and average noise levels
- Maximum hold feature to measure peak sound levels
- Accuracy is $\pm 1.5\text{dB}$
- NIST Certification
- Four digit LCD display in 0.1dB steps with backlight
- Battery life is 50 hours (typical) with low battery alert
- Automatic power off after 15 minutes of non-use
- Meets CE, ANSI and IEC Type 2 SLM standards
- Tripod mounting ideal for taking long term measurements (tripod not included)
- Removable windscreen for use in windy conditions to reduce misreads
- Includes protective carrying case, 9V battery, instruction manual, and removable windscreen