EXAIR

MANUFACTURING INTELLIGENT COMPRESSED AIR® PRODUCTS SINCE 1983

COAT

COOL

CONSERVE

CLEAN

CONVEY

35 CATALOG

NEW

TECHELP DIRECT
1-800-903-9247

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

Stay up to date by visiting our website and take advantage of the information and services we didn't have room to display in this catalog.

EXAIR.com®

The digital home of Intelligent Compressed Air® products for industry

Where you can
- **Chat live** with our problem solving, technical expert Application Engineers
- **Watch product videos** to learn more about the features and benefits of our engineered products
- Quickly **order online** with a purchase order or credit card (US & Canada)
- **Access product presentation slides** you can use to educate others
- **Find International Distributors** all across the world

Access our Knowledge Base to
- **Download 3D models** and CAD drawings in multiple formats to place into your drawings
- **Calculate air savings and ROI** to see how quickly EXAIR products will pay off
- Search our **Case Study Library & Applications database** and become familiar with how our products solve problems
- **Use our product FAQ's** for quick access to our most common questions
- Learn about our free **Efficiency Lab** service and use it to **determine air and money savings** you can achieve when installing EXAIR engineered solutions
- Collect compressed air data and pipe sizing recommendations
- **Find** Flow, Force and Heat conversions

Visit our PDF library and download
- Electronic files of **the entire catalog** or individual sections
- **Installation and Maintenance Guides** on every EXAIR product
- Our current **price list** to have all product prices in one convenient location
- EXAIR's **Air Nozzle Blowoff Guide** to see the details on our enormous selection of sizes, materials and performance options

Follow our blog for 5 new entries a week and learn
- Details and installations of widely varied applications
- The methodology and results of critical mathematical formulas which help determine money savings, air savings, performance benefits and more
- New product releases before they reach our catalog or website
- More about EXAIR, our team and community involvement
- **Go to** blog.exair.com

Make social connections
- Watch over **150 videos** on EXAIR's YouTube Channel and see product features and benefits, applications, Tips & Tricks, How-to, and our team members.
- Follow our Company on Twitter @EXAIR or our Application Engineers and learn more about promotions, updates on manufacturing, engineering and international industry perspective.

@EXAIR

@EXAIR_BF   @EXAIR_EK   @EXAIR_JB   @EXAIR_JS   @EXAIR_NR   @EXAIR_RB   @EXAIR_TD

- Connect with us on Facebook at facebook.com/exair or follow us on Linked In, Twitter and Instagram.

Not on a PC? Our website is mobile friendly

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

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

Cards

ICC (International Chamber of Commerce) INCOTERM 2010: EX WORKS (EXAIR, 11510 Goldcoast Dr., Cincinnati, Ohio 45249, USA.)

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 +1-513-671-3322   Worldwide 7:00 a.m. to 4:00 p.m. ET (Mon. - Fri.)
Fax toll free 1-866-329-3924 or   Worldwide +1-513-671-3363
E-mail: orders@exair.com   Secure website: www.exair.com

Remit to address (payments only): EXAIR 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)   e-mail at techelp@exair.com.

Built to Last 5 yr. WARRANTY

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, wear 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.

EXAIR unconditionally guarantees its cataloged products for 30 days. If you are not satisfied for any reason within that time, you may return the product for full credit with no restocking charge.

Copyright Restrictions: The content of the EXAIR Catalog, including all photos, graphics, drawings and arrangements are proprietary to EXAIR LLC 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. The content of the EXAIR Catalog is the intellectual property solely of EXAIR 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 EXAIR.

Trademarks: "EXAIR.com", "EXAIR", "Cabinet Cooler", "E-Vac", "Intelligent Compressed Air", "VariBlast", "Gen4", "Intellistat", "EasySwitch", "TurboBlast", "Varistat" and "Compressed Air Intelligence" are registered trademarks of the EXAIR LLC. The EXAIR logo, product names, designs and descriptive phrases are trademarked by EXAIR. These trademarks may not be used without prior written permission of EXAIR.

EXAIRLogger, EFC, Digital Flowmeter, Hot Tap Digital Flowmeter, Digital Sound Level Meter, High Power Cold Gun, Super Air Knife, Standard Air Knife, Full-Flow Air Knife, Air Cannon, Super Air Amplifier, Adjustable Air Amplifier, Super Air Nozzle, Micro Air Nozzle, High Power Safety Air Nozzle, Stay Set Hose, Soft Grip Super Air Scraper, Super Air Scraper, Super Blast Safety Air Gun, Super Air Wipe, Heavy Duty Line Vac, Light Duty Line Vac, Sanitary Flange Line Vac, Threaded Line Vac, FullStream, FloodStream, HollowStream, 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, Heavy Duty HEPA Vac, Reversible Drum Vac, High Lift Reversible Drum Vac, Chip Trapper, High Lift Chip Trapper, Vac-u-Gun, Deep Hole Vac-u-Gun, Air Disk, Air Stik, Mini Cooler, Cold Gun Aircoolant System, and ETC are trademarks of EXAIR LLC.

EXAIR.com

11510 Goldcoast Dr.
Cincinnati, Ohio 45249-1621
Phone Number: (513) 671-3322
Fax Number: (513) 671-3363
E-mail: techelp@exair.com
Web Site: www.exair.com

An INTELLIGENT COMPRESSED AIR® Product

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.

ENERGY STAR PARTNER

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.
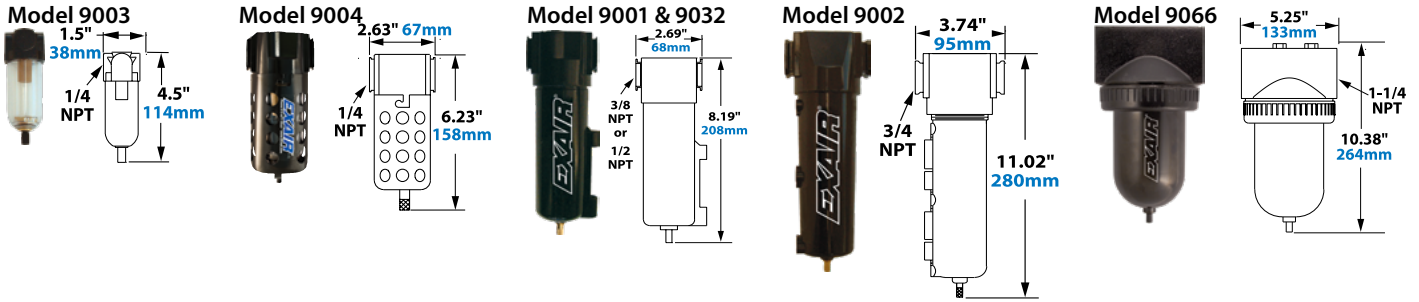
EXAIR products are subject to ongoing development. Specifications are subject to change without notice.
Some products in this catalog are covered by U.S. Patent #5402938, #8153001, #8268179, #D903,817, #10,779,698 and #9156045, and others may be U.S. Patent Pending.
EU Regd. Des. No.00770318-0001 and No. 009025463-0001 Ⓓ Mexico No.60723; Canada No.194141, UK Registered Design No. 6211314
Copyright ©2023 EXAIR LLC. All Rights Reserved.

EXAIR® For Technical Assistance, Call An EXAIR Application Engineer 1-800-903-9247
Toll Free FAX (866) 329-3924 • E-mail: techelp@exair.com • www.exair.com

@EXAIR

Filter Separators

Model 9003
1.5" 38mm
1/4 NPT
4.5" 114mm

Model 9004
2.63" 67mm
1/4 NPT
6.23" 158mm

Model 9001 & 9032
2.69" 68mm
3/8 NPT or 1/2 NPT
8.19" 208mm

Model 9002
3.74" 95mm
3/4 NPT
11.02" 280mm

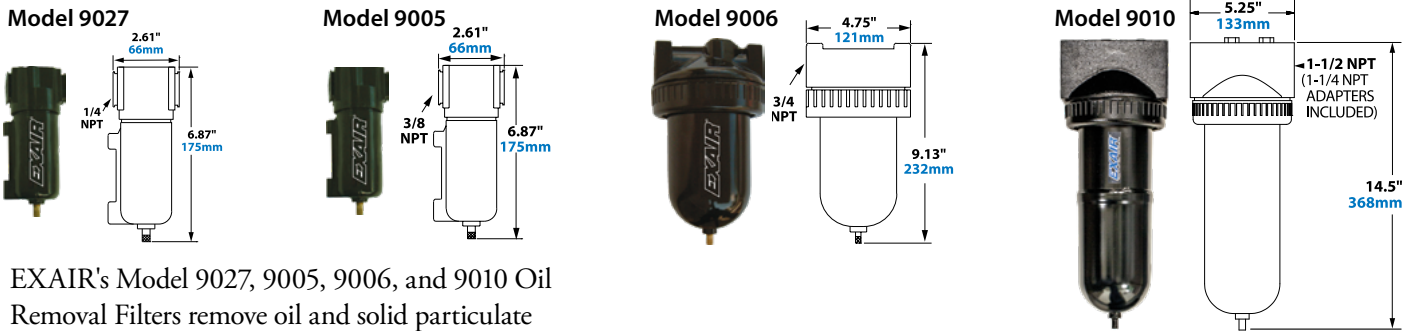**Model 9066**
5.25" 133mm
1-1/4 NPT
10.38" 264mm

EXAIR's Filter Separators remove water, dirt and rust from your compressed air system. They prevent these contaminants from plugging or damaging the compressed air products. A Filter Separator should be installed prior to an Oil Removal Filter, pressure regulator or valve.

Model #	Description	Max Pres.	Max Temp.
9003	Manual Drain Filter Separator, 1/4 NPT, 27 SCFM (765 SLPM)	150 PSIG	125°F (52°C)
9004	Automatic Drain Filter Separator, 1/4 NPT, 43 SCFM (1,218 SLPM)	150 PSIG	125°F (52°C)
9001	Automatic Drain Filter Separator, 3/8 NPT, 65 SCFM (1,841 SLPM)	175 PSIG	120°F (49°C)
9032	Automatic Drain Filter Separator, 1/2 NPT, 90 SCFM (2,549 SLPM)	175 PSIG	120°F (49°C)
9002	Automatic Drain Filter Separator, 3/4 NPT, 220 SCFM (6,230 SLPM)	175 PSIG	120°F (49°C)
9066	Automatic Drain Filter Separator, 1-1/4 NPT, 400 SCFM (11,327 SLPM)	175 PSIG	120°F (49°C)

The Model 9003 Manual Drain Filter has a polycarbonate bowl and a 20 micron filter element. A manual drain is used to empty the filter. Model 9001, 9002, 9004, 9032, and 9066 Automatic Drain Filter Separators have a metal bowl and a 5 micron filter element (Model 9004 has a polycarbonate bowl with a metal guard). An internal float automatically activates the drain to remove liquid condensate when the bowl becomes full.

Oil Removal Filters

Model 9027
2.61" 66mm
1/4 NPT
6.87" 175mm

Model 9005
2.61" 66mm
3/8 NPT
6.87" 175mm

Model 9006
4.75" 121mm
3/4 NPT
9.13" 232mm

Model 9010
5.25" 133mm
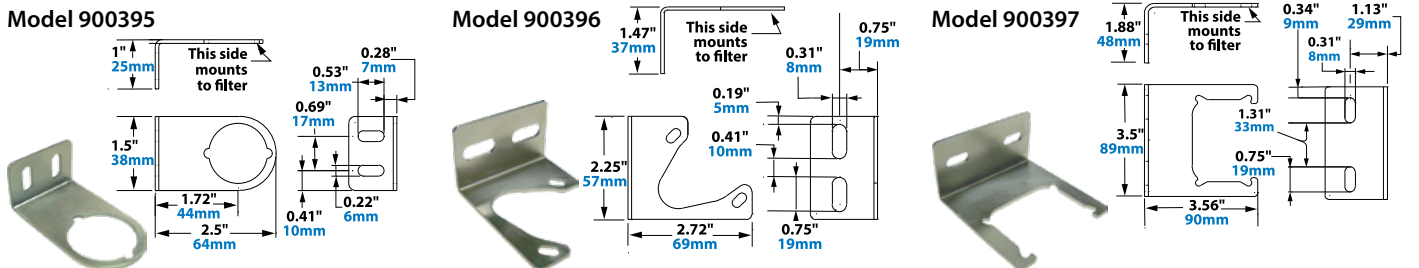1-1/2 NPT (1-1/4 NPT ADAPTERS INCLUDED)
14.5" 368mm

EXAIR's Model 9027, 9005, 9006, and 9010 Oil Removal Filters remove oil and solid particulate that is typical in many compressed air systems.

A 0.03 micron element is used to trap submicron particles. An internal float automatically activates the drain when full.

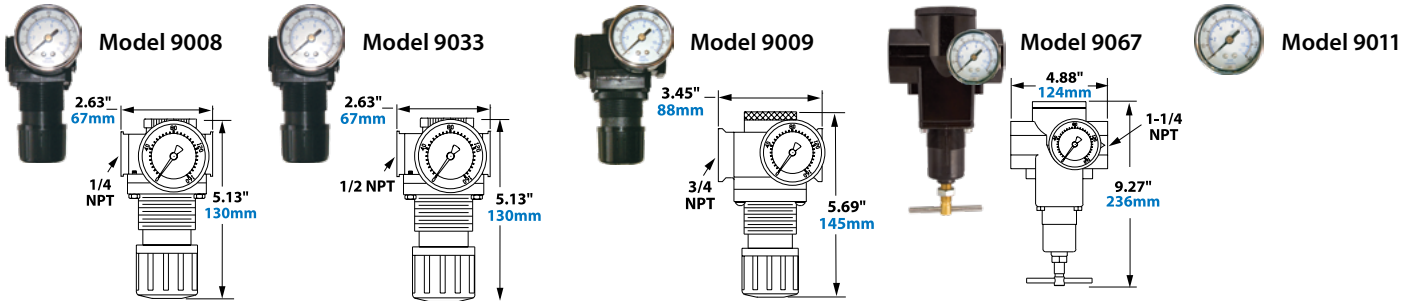| Model #	Description	Max Pres.	Max Temp.
9027	Oil Removal Filter, 1/4 NPT, 24 SCFM (680 SLPM)	175 PSIG	120°F (49°C)
9005	Oil Removal Filter, 3/8 NPT, 15-37 SCFM (425-1,048 SLPM)	175 PSIG	120°F (49°C)
9006	Oil Removal Filter, 3/4 NPT, 50-150 SCFM (1,416-4,248 SLPM)	175 PSIG	120°F (49°C)
9010	Oil Removal Filter, 1-1/2 NPT, 130-310 SCFM (3,679-8,773 SLPM)	175 PSIG	120°F (49°C)

Filter Mounting Brackets

Model 900395
1" 25mm
This side mounts to filter
0.28" 7mm
0.53" 13mm
0.69" 17mm
1.5" 38mm
1.72" 44mm
2.5" 64mm
0.41" 10mm
0.22" 6mm

Model 900396
1.47" 37mm
This side mounts to filter
0.75" 19mm
0.31" 8mm
0.19" 5mm
0.41" 10mm
2.25" 57mm
2.72" 69mm
0.75" 19mm

Model 900397
1.88" 48mm
This side mounts to filter
0.34" 9mm
1.13" 29mm
0.31" 8mm
3.5" 89mm
1.31" 33mm
0.75" 19mm
3.56" 90mm

Model #	Description
900395	Mounting Bracket for Model 9003
900396	Mounting Bracket for Model 9001, 9004, 9005, 9027, and 9032
900397	Mounting Bracket for Model 9002

EXAIR®

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

Order Direct
We Ship From Stock

231

Mufflers and Accessories

Accessories

Pressure Regulators

Model 9008
2.63" 67mm
1/4 NPT
5.13" 130mm

Model 9033
2.63" 67mm
1/2 NPT
5.13" 130mm

Model 9009
3.45" 88mm
3/4 NPT
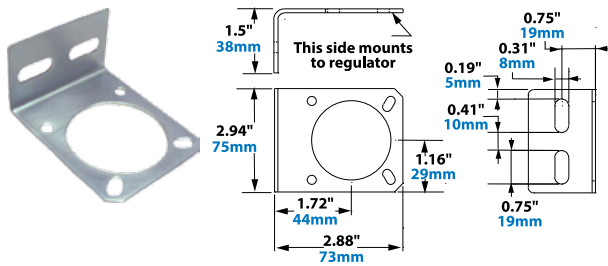5.69" 145mm

Model 9067
4.88" 124mm
1-1/4 NPT
9.27" 236mm

Model 9011

EXAIR's Model 9008, 9033, 9009 and 9067 Pressure Regulators permit easy selection of the operating pressure. A pressure gauge is included.

| Model #	Description	Max Pres.	Max Temp.
9008	Pressure Regulator with Gauge, 1/4 NPT, 50 SCFM (1,416 SLPM)	250 PSIG	120°F (49°C)
9033	Pressure Regulator with Gauge, 1/2 NPT, 100 SCFM (2,832 SLPM)	250 PSIG	120°F (49°C)
9009	Pressure Regulator with Gauge, 3/4 NPT, 220 SCFM (6,230 SLPM)	250 PSIG	120°F (49°C)
9067	Pressure Regulator with Gauge, 1-1/4 NPT, 700 SCFM (19,822 SLPM)	250 PSIG	120°F (49°C)
9011	Pressure Gauge Only, 1/4 NPT, 0-160 PSI (0-11 BAR)	250 PSIG	120°F (49°C)

Pressure Regulator Mtg Brackets

1.5" 38mm
This side mounts to regulator
2.94" 75mm
1.72" 44mm
2.88" 73mm
0.19" 5mm
0.41" 10mm
0.75" 19mm
0.31" 8mm
1.16" 29mm
0.75" 19mm

This optional mounting bracket fits Models 9008, 9033 and 9009 Pressure Regulators and includes a locking ring.

Model #	Description
900398	Mounting Bracket for Model 9008, 9033 and 9009

Mounting and Coupling Kits
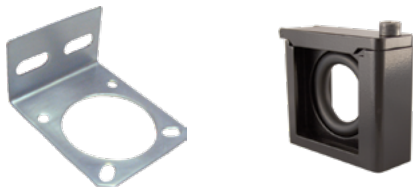
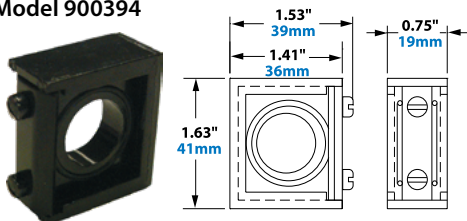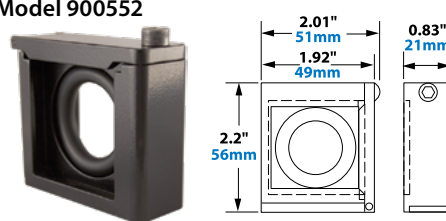| Model #	Description
9046	Mounting and Coupling Kit for Model 9001 Filter/Model 9008 Regulator and Model 9032 Filter/ Model 9033 Regulator
9047	Mounting and Coupling Kit for Model 9002 Filter/Model 9009 Regulator
9048	Mounting and Coupling Kit for Model 9004 Filter/Model 9005 Oil Removal Filter

Coupling Kits

EXAIR's Coupling Kits are interlocking slides that couple the modular filters and pressure regulators together.

Model #	Description
900394	Fits auto drain filters and regulators with 1/4 NPT, 3/8 NPT and 1/2 NPT threads
900552	Fits auto drain filters and regulators with 3/4 NPT threads

Model 900394
1.53" 39mm
1.41" 36mm
0.75" 19mm
1.63" 41mm

Model 900552
2.01" 51mm
1.92" 49mm
0.83" 21mm
2.2" 56mm

EXAIR

For Technical Assistance, Call An EXAIR Application Engineer 1-800-903-9247
Toll Free FAX (866) 329-3924 • E-mail: techelp@exair.com • www.exair.com

blog.exair.com @EXAIR

Silencing Mufflers

EXAIR Silencing Mufflers help to reduce work area noise produced by air exhausting from cylinders, valves and other air powered equipment. Per OSHA Standard 1910.95(a), a worker must not be exposed to sound levels above 90 dBA for any eight hour shift of a 40 hour work week. Silencing Mufflers help plants meet this OSHA requirement by reducing the sound to safe levels below 90 dBA. They also eliminate harmful dead end pressures. Each style of Silencing Muffler shown has a high airflow capacity, with low back pressure. Popular NPT sizes are ideal for new and existing installations.

Reclassifying Mufflers

Reclassifying Mufflers are an upgrade from Sintered Bronze Mufflers (*see next page*). They offer the best noise reduction - up to 35 dB. Available from 1/8 NPT through 1 NPT, Reclassifying Mufflers eliminate oil mist. Exhaust air from cylinders and valves often contain oil mists that can contaminate the workers' breathing air, affecting their health. Per OSHA Standard 29 CFR 1910.1000, a worker's cumulative exposure to oil mist must not exceed 5mg/m³ by volume in any eight hour shift of a 40 hour work week.

The patented wrap design of the removable element separates oil from the exhausted air so virtually no oil is released into the environment. Based on an intake of 50 PPM at 100 PSIG, the Reclassifying Mufflers reclassify and reduce the exhausted oil mist to 0.015 PPM. A reservoir where oil accumulates at the bottom can be drained by attaching a 1/4" tube.

Each Reclassifying Muffler passes a certain volume of air with minimal back pressure restriction so it doesn't interfere with the operation of the cylinder or valve. When used with cylinders, the "Muffler Quick Pick" table (*right*) helps you select the appropriate model based on the actual bore and stroke of the cylinder.
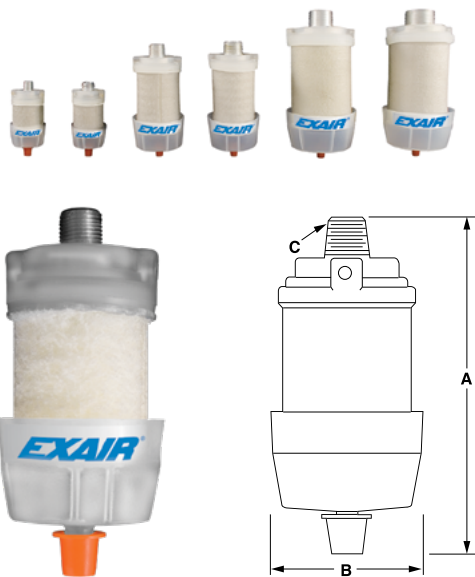
Model 9070
Model 9071
Model 9072
Model 9073
Model 9074
Model 9075

☐ Contact an Application Engineer for more information.

Muffler Needed To Exhaust In 1/2 Second For A Cylinder Charged To 100 PSIG

Muffler Quick Pick

Bore (in.)	Stroke (in.)									
	3	6	9	12	18	24	30	36	42	48
0.5										
1.0										
1.5										
2.0										
2.5										
3.0										
3.5										
4.0										
4.5										
5.0										
5.5										
6.0										

Model #	Description		A	B	C	Replacement Element #
9070	Reclassifying Muffler	in	3.13	1.63	1/8 NPT	900553
		mm	80	41		
9071	Reclassifying Muffler	in	3.13	1.63	1/4 NPT	
		mm	80	41		
9072	Reclassifying Muffler	in	4.75	2.44	3/8 NPT	900554
		mm	121	62		
9073	Reclassifying Muffler	in	4.75	2.44	1/2 NPT	
		mm	121	62		
9074	Reclassifying Muffler	in	6.25	3.31	3/4 NPT	900555
		mm	159	84		
9075	Reclassifying Muffler	in	6.25	3.31	1 NPT	
		mm	159	84		

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

Order Direct We Ship From Stock **233**

Mufflers and Accessories

Accessories

Sintered Bronze Mufflers

EXAIR's low cost Sintered Bronze Mufflers are easy to install in new and existing exhaust ports of valves, cylinders and other air powered equipment. Each Sintered Bronze Muffler is capable of passing a certain volume of air with minimal back pressure restriction so it doesn't interfere with the operation of the cylinder or valve. When used with cylinders, the "Muffler Quick Pick" table helps you select the appropriate model based on the actual bore and stroke of the cylinder. (Note: Model 9089 has a 1/2"-20 UNF straight thread to fit most solenoid valves.)
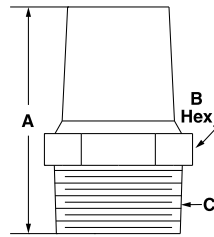
Model #		Overall Length A	Hex B	Thread Size C
9080	in	0.72	0.31	#10-32
	mm	18	8	
9081	in	1.13	0.44	1/8 NPT
	mm	29	11	
9082	in	1.38	0.56	1/4 NPT
	mm	35	14	
9083	in	1.50	0.69	3/8 NPT
	mm	38	18	
9084	in	1.88	0.88	1/2 NPT
	mm	48	22	
9085	in	2.25	1.06	3/4 NPT
	mm	57	27	
9086	in	2.91	1.31	1 NPT
	mm	74	33	
9087	in	3.25	1.69	1-1/4 NPT
	mm	83	43	
9088	in	3.69	2	1-1/2 NPT
	mm	94	51	
9089*	in	1.19	0.63	1/2"-20 UNF FEMALE
	mm	30	16	

* Model 9089 for solenoid valves only.

Muffler Quick Pick

Bore (in.)	Stroke (in.)									
	3	6	9	12	18	24	30	36	42	48
0.5										
1.0										
1.5										
2.0										
2.5										
3.0										
3.5										
4.0										
4.5										
5.0										
5.5										
6.0										

Model 9080 | **Model 9085**
Model 9081 | **Model 9086**
Model 9082 | **Model 9087**
Model 9083 | **Model 9088**
Model 9084 | Contact an Application Engineer

Muffler will exhaust cylinder in 1/2 second for a cylinder charged to 100 PSIG

Straight-Through Mufflers

Straight-Through Silencing Mufflers feature a corrosion-resistant aluminum outer shell lined with sound absorbing foam for better noise reduction. The typical noise reduction is up to 20 dB.

Model #	Description		A	B	C	D	Rated Flow
3914	Straight-Through Muffler	in	4	1.50	1/4 MNPT	1/4 FNPT	22 SCFM
		mm	102	38			623 SLPM
3911	Straight-Through Muffler	in	4.13	1.50	3/8 MNPT	3/8 FNPT	50 SCFM
		mm	105	38			1,416 SLPM
3913	Straight-Through Muffler	in	9.75	2	3/4 MNPT	3/4 FNPT	73 SCFM
		mm	248	51			2,066 SLPM

Flow rated at 1/2 PSIG back pressure

Caution: Operations approaching 32°F (0°C) or below could result in freeze-up due to moisture in the compressed air line.

Heavy Duty Mufflers
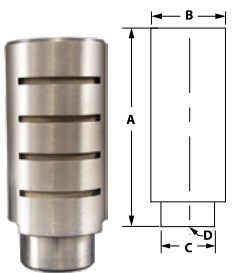
Heavy Duty Silencing Mufflers feature a corrosion-resistant aluminum outer shell with an internal stainless steel screen that protects valves and cylinders from contamination that could enter through the exhaust ports. This also keeps contaminants such as rust from being ejected at high speed from the exhaust port. The typical noise reduction is up to 14 dB.

Model #	Description		A	B	C	D
3903	Heavy Duty Muffler	in	1.81	0.81	0.63	1/4 FNPT
		mm	46	21	16	
3907	Heavy Duty Muffler	in	4.50	2	1.50	3/4 FNPT
		mm	114	51	38	

Caution: Operations approaching 32°F (0°C) or below could result in freeze-up due to moisture in the compressed air line.

Accessories

Solenoid Valves

Solenoid Valves are available in a variety of flow rates and voltages. All models are UL Listed and are CE and RoHS compliant.

Model #	Description
9020	Solenoid Valve, 120V, 50/60Hz, 1/4 NPT, 40 SCFM (1,133 SLPM)
9018	NEMA 4-4X Solenoid Valve, 120V, 50/60Hz, 1/4 NPT, 40 SCFM (1,133 SLPM)
9034	NEMA 4-4X Solenoid Valve, 120V, 50/60Hz, 1/2 NPT, 100 SCFM (2,832 SLPM)
9036	NEMA 4-4X Solenoid Valve, 120V, 50/60Hz, 3/4 NPT, 200 SCFM (5,664 SLPM)
9021	Solenoid Valve, 200-240V, 50/60Hz, 1/4 NPT, 40 SCFM (1,133 SLPM)
9024	NEMA 4-4X Solenoid Valve, 240V, 50/60Hz, 1/4 NPT, 40 SCFM (1,133 SLPM)
9035	NEMA 4-4X Solenoid Valve, 240V, 50/60Hz, 1/2 NPT, 100 SCFM (2,832 SLPM)
9037	NEMA 4-4X Solenoid Valve, 240V, 50/60Hz, 3/4 NPT, 200 SCFM (5,664 SLPM)
9031	NEMA 4-4X Solenoid Valve, 24VDC, 1/4 NPT, 40 SCFM (1,133 SLPM)
9058	NEMA 4-4X Solenoid Valve, 24VDC, 1/2 NPT, 100 SCFM (2,832 SLPM)
9059	NEMA 4-4X Solenoid Valve, 24VDC, 3/4 NPT, 200 SCFM (5,664 SLPM)
9065	NEMA 4-4X Solenoid Valve, 24VDC, 1 NPT, 350 SCFM (9,911 SLPM)

Valves

Model #	Description
9012	Manual Valve, 1/4 NPT
900340	Manual Valve, 3/8 NPT
900343	Manual Valve, 1/2 NPT
900743	Manual Valve, 3/4 NPT
900346	Manual Valve, 1 NPT
900744	Manual Valve, 1-1/4 NPT

Swivel Fittings

EXAIR's Swivel Fittings make it easy to adjust the position of the Air Nozzles, Air Jets, and Air Amplifiers. Swivel Fittings permit a movement of 25 degrees from the center axis for a total movement of 50 degrees. Type 303 and 316 stainless steel.

Model #	Description
9201	M4 x 0.5mm female x 1/8 MNPT Swivel Fitting, 316 SS
9202	M5 x 0.5mm female x 1/8 MNPT Swivel Fitting, 316 SS
9203	M6 x 0.75mm female x 1/8 MNPT Swivel Fitting, 316 SS
9052	1/8 NPT Swivel Fitting, 303 SS
9053	1/4 NPT Swivel Fitting, 303 SS
9068	3/8 NPT Swivel Fitting, 303 SS
9069	1/2 NPT Swivel Fitting, 303 SS
9023	3/4 NPT Swivel Fitting, 303 SS
9204	1 MNPT x 1 FNPT, 303 SS

ETC™ Electronic Temperature Control

Model	Voltage	Flow
9238	120VAC 50/60HZ	1/4 NPT 40 SCFM (1,133 SLPM)
9258	120VAC 50/60Hz	1/2 NPT 100 SCFM (2,832 SLPM)
9239	240VAC 50/60Hz	1/4 NPT 40 SCFM (1,133 SLPM)
9259	240VAC 50/60Hz	1/2 NPT 100 SCFM (2,832 SLPM)

ETC enclosure: Polycarbonate NEMA 4X, IP 66, UL508, UL94-5V

CE and ROHS Compliant

For more about the ETC, see page 217 of this catalog.

EXAIR's digital ETC™ (Electronic Temperature Control) provides precise temperature control for your electrical enclosure. The LED readout of the ETC displays the internal temperature of the electrical enclosure (°F or °C) that is constantly being monitored by a quick response thermocouple.

Thermostat

The adjustable thermostat is factory set at 95°F (35°C). It will normally hold ±2°F (1°C) of the desired temperature setting. It is rated 24V-240V AC or DC, 50/60Hz and is UL Recognized, CSA Certified.

Model #	Description
9017	Thermostat

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

Order Direct We Ship From Stock 235

Mufflers and Accessories

Accessories

Magnetic Bases

Model 9042 **Model 9043** **Model 9029**

Magnetic bases are suited to applications where frequent movement of the air product is required. The powerful magnet permits horizontal or vertical mounting. A valve is provided that can be used to vary the force and flow.
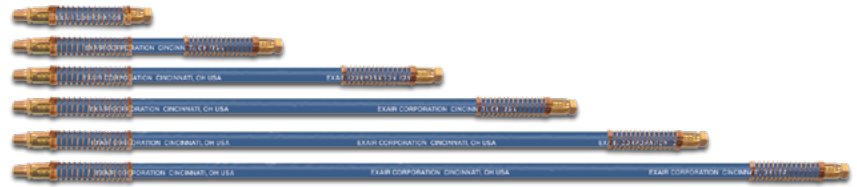
Model #	Description
9042	One Outlet Magnetic Base with Shutoff Valve (1/4 NPT)
9043	Two Outlet Magnetic Base with Shutoff Valve (1/4 NPT)
9029	One Outlet Swivel Magnetic Base with Shutoff Valve (1/4 NPT)

Stay Set Hoses

For applications where frequent repositioning of the air product is required, the Flexible Stay Set Hoses™ are ideal. Simply mount the hose in close proximity to the application and bend it. Since the hose has "memory", it will not creep or bend. It will always keep the aim until physically moved to the next position and will withstand temperatures of up to 158°F (70°C).

(1/4 male NPT fitting on one end, 1/8 female NPT on the other)

Model #	Description
9256	6" (152mm) 1/4 MNPT x 1/8 FNPT
9262	12" (305mm) 1/4 MNPT x 1/8 FNPT
9268	18" (457mm) 1/4 MNPT x 1/8 FNPT
9274	24" (610mm) 1/4 MNPT x 1/8 FNPT
9280	30" (762mm) 1/4 MNPT x 1/8 FNPT
9286	36" (914mm) 1/4 MNPT x 1/8 FNPT

(1/4 male NPT fitting on each end)

Model #	Description
9206	6" (152mm) 1/4 MNPT x 1/4 MNPT
9212	12" (305mm) 1/4 MNPT x 1/4 MNPT
9218	18" (457mm) 1/4 MNPT x 1/4 MNPT
9224	24" (610mm) 1/4 MNPT x 1/4 MNPT
9230	30" (762mm) 1/4 MNPT x 1/4 MNPT
9236	36" (914mm) 1/4 MNPT x 1/4 MNPT
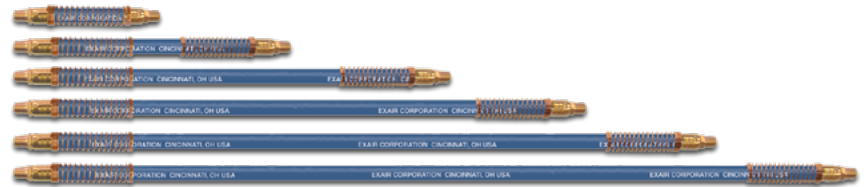
Hoses

12 Foot (3.66m) Coiled Hoses					
Model #	Description	Model #	Description	Model #	Description
900106	1/8 NPT x 1/4" ID Coiled Hose With Swivel	900750	1/4 NPT x 3/8" ID Coiled Hose With Swivel	900751	3/8 NPT x 3/8" ID Coiled Hose With Swivel

Conveying Hose					
Hose lengths are 10', 20', 30', 40' and 50'. 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.					
Model #	Description	Model #	Description	Model #	Description
6928-	Hose 3/8" ID	6931-	Hose 1" ID	6934-	Hose 2" ID
6929-	Hose 1/2" ID	6932-	Hose 1-1/4" ID	6935-	Hose 2-1/2" ID
6930-	Hose 3/4" ID	6933-	Hose 1-1/2" ID	6936-	Hose 3" ID

Compressed Air Hose	
Compressed air hose is made of reinforced synthetic rubber to assure long life and protection against ozone, weathering, and temperatures up to 158°F (70°C). Hose lengths are 10', 15', 20', 30', 40' and 50'. Indicate the length with a dash. Example: A Model 900061-30 is 3/8" ID Hose x 30' long.	
Model #	Description
900061	Compressed Air Hose, 1/4 MNPT x 1/4 MNPT (3/8" ID Hose)
901179	Compressed Air Hose, 1/2 MNPT x 1/2 MNPT (1/2" ID Hose)

For Technical Assistance, Call An EXAIR Application Engineer 1-800-903-9247
Toll Free FAX (866) 329-3924 • E-mail: techelp@exair.com • www.exair.com

blog.exair.com @EXAIR

Compressed Air Fittings

Hex Nipple		
Model #	Material	Thread Size
9890	Brass	1/8 MNPT x 1/8 MNPT
9944	Brass	1/4 MNPT x 1/4 MNPT
9759	Brass	3/8 MNPT x 3/8 MNPT
9760	Brass	1/2 MNPT x 1/2 MNPT
9761	Brass	3/4 MNPT x 3/4 MNPT
9958	304SS	1/8 MNPT x 1/8 MNPT
9959	304SS	1/4 MNPT x 1/4 MNPT
9960	304SS	3/8 MNPT x 3/8 MNPT
9961	304SS	1/2 MNPT x 1/2 MNPT

Close Nipple		
Model #	Material	Thread Size
9551	Brass	1/4 MNPT x 1/4 MNPT
9752	Brass	3/8 MNPT x 3/8 MNPT
900745	Brass	1/2 MNPT x 1/2 MNPT
900559	Brass	3/4 MNPT x 3/4 MNPT
900309	NP Brass	1/8 MNPT x 1/8 MNPT
900084	NP Brass	1/4 MNPT x 1/4 MNPT
900435	NP Brass	3/8 MNPT x 3/8 MNPT
900436	NP Brass	1/2 MNPT x 1/2 MNPT
900409	316SS	1/8 MNPT x 1/8 MNPT
900160	316SS	1/4 MNPT x 1/4 MNPT
900505	316SS	3/8 MNPT x 3/8 MNPT
900506	316SS	1/2 MNPT x 1/2 MNPT

Coupler		
Model #	Material	Thread Size
900453	NP Brass	1/8 FNPT x 1/8 FNPT
9871	Brass	1/4 FNPT x 1/4 FNPT

MNPT = Male NPT NP = Nickel Plated
FNPT = Female NPT UNF = Unified Fine Thread

Reducer		
Model #	Material	Thread Size
900405	Brass	1/4 MNPT x 1/8 FNPT
900105	Brass	1/4 FNPT x 1/8 MNPT
9553	Brass	3/8 MNPT x 1/4 MNPT
9897	Brass	1/2 MNPT x 3/8 MNPT
900736	Brass	1/2 MNPT x 1/4 MNPT
900622	Brass	1/2 MNPT x 1/4 FNPT
900985	Brass	1/2 FNPT x 3/8 MNPT

Tee		
Model #	Material	Thread Size
900005	Brass	1/4 FNPT x 1/4 FNPT x 1/4 MNPT
9851	Brass	1/4 MNPT x 1/4 MNPT x 1/4 MNPT
9971	Brass	3/8 FNPT x 1/4 FNPT x 3/8 MNPT
9896	Brass	3/8 FNPT x 3/8 FNPT x 3/8 FNPT
900621	Brass	1/2 FNPT x 1/2 FNPT x 1/2 FNPT
900734	Brass	1/2 FNPT x 1/4 FNPT x 1/2 FNPT

Elbow		
Model #	Material	Thread Size
7674	Brass	1/8 MNPT x 1/8 FNPT 45°
9555	Brass	1/4 MNPT x 1/4 FNPT 90°
9895	Brass	3/8 MNPT x 3/8 FNPT 90°
900073	Brass	1/4 MNPT x 3/8 Tube 90°

Cross		
Model #	Material	Thread Size
900735	Brass	1/2 FNPT

| Bulkhead Fitting		
Model #	Material	Thread Size
900069	Brass	3/4-16 UNF x 1/4 FNPT x 1/4 FNPT

60 Gallon Receiver Tank

Some applications require an intermittent demand for a high volume of compressed air. This can cause fluctuations in pressure and volume throughout the compressed air system with some points being "starved" for compressed air. EXAIR's Model 9500-60 60 Gallon Receiver Tank can be installed near the point of high demand so there is an additional supply of compressed air available for a short duration. The time between the high volume demand occurrences should be long enough so the compressor has enough time to replenish the EXAIR 60 Gallon Receiver Tank.

The 60 gallon (227 liter) vertical steel tank with mounting feet saves floor space and meets the American Society of Mechanical Engineers (ASME) pressure vessel code. (It is not ASME rated for vacuum.) A drain valve is provided for placement at the bottom of the tank to discharge liquid and contaminants.

A user supplied check valve installed upstream of the receiver tank will maintain the tank at maximum pressure so upstream uses of compressed air do not deplete the tank. A user supplied needle valve can regulate the refilling of the Receiver Tank, effectively reducing the large intermittent air requirement into a smaller average demand.

1 NPT **20" / 508mm** **1/2 NPT** **2 NPT Inspection Ports** **50.38" / 1280mm** **1/4 NPT** **1/2 NPT - Drain**
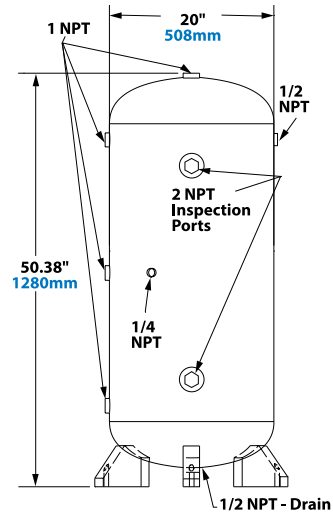
Receiver Tank	
Model #	Description
9500-60	60 Gallon Receiver Tank

- Pressure tank has a primer finish
- Temperature rating is -20° to 450°F (-29° to 232°C)
- Tank maximum pressure is 200 PSIG (13.8 BAR)
- No plugs are included for open ports. User must
- supply pressure rated plugs and pressure relief valve.
- Weight is 165 lbs. (75 kg)
- Please consult your local code requirements prior to installation.

EXAIR®

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

Order Direct We Ship From Stock **237**

Mufflers and Accessories

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 ¼ NPT	**2** 1/8" tube x ¼ NPT	**3** 1/8" tube x ¼ NPT	**4** 1/8" tube x ¼ NPT	**5** 1/8" tube x ¼ NPT	**6** 1/8" tube x ¼ NPT	**7** 1/8" tube x ¼ NPT	**8** 1/8" tube x ¼ NPT	**9** 1/8" tube x ¼ 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

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

Order Direct We Ship From Stock   239

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:

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

Metric Units:

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

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:

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

Metric Units:

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

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.

For Technical Assistance, Call An EXAIR Application Engineer 1-800-903-9247
Toll Free FAX (866) 329-3924 • E-mail: techelp@exair.com • www.exair.com

@EXAIR
blog.exair.com