

# EXHAUST SILENCERS & EXHAUST SILENCERS KITS 55 & 23 SERIES

## **PRODUCT CATALOG**





## **ALUMINUM EXHAUST SILENCERS**



Illustrations example.

	Silencer Material	Pressure Range psig (bar)	Schematic
SPECIFICATIONS	Aluminum	0-290 (0-20) maximum	-

Port Size	Port Size Thread Type		Model Number		<b>Dimensions</b> inches (mm)		Weight
	,	C <sub>v</sub> (NI/min)	NPT Thread	R/Rp Thread	Length	Hex Size (D)	lb (kg)
1/8	Male	1.3 (1300)	5500A1003	D5500A1003	2.0 (5)	0.81 (21)	
1/4	Male	2.3 (2300)	5500A2003	D5500A2003	2.2 (6)	0.81 (21)	0.07 (0.03)
3/8	Male	9.0 (8900)	5500A3013	D5500A3013	2.2 (6)	0.81 (21)	
3/0	Iviale	4.9 (4800)	5500A3003	D5500A3003	3.5 (9)	1.25 (32)	
1/2	Male	6.8 (6700)	5500A4003	D5500A4003	3.6 (9)	1.25 (32)	0.2 (0.1)
3/4	Male	7.2 (7100)	5500A5013	D5500A5013	3.6 (9)	1.25 (32)	
3/4	Iviale	15 (15000)	5500A5003	D5500A5003	5.3 (14)	2.0 (51)	
1	Male	18 (18000)	5500A6003	D5500A6003	5.4 (14)	2.0 (51)	0.9 (0.4)
1-1/4	Male	24 (23000)	5500A7013	D5500A7013	5.5 (14)	2.0 (51)	
1-1/4	Female	42 (41000)	5500A7001	D5500A7001	5.7 (14)	2.5 (64)	1.4 (0.6)
1-1/2	Female	39 (38000)	5500A8001	D5500A8001	5.7 (14)	2.5 (64)	1.3 (0.6)
2	Female	59 (58000)	5500B9001	D5500B9001	6.6 (17)	3.0 (76)	1.7 (0.8)
2-1/2	Female	104 (100000)	5500A9002	D5500A9002	4.0 (102)	5.7 (145)	2.9 (1.4)

## **FEMALE SILENCER CONNECTORS**

Hex Nipples	Material	Fitting Pipe Size	Thread Type	Model Number		
				NPT Thread	BSPT Thread	
	Steel	1-1/4	Male - Male	491J27	106J39	
		1-1/2	Male - Male	488J27	122J39	
		2	Male - Male	489J27	108J39	
	Stainless Steel	2-1/2	Male - Male	490J27	123J39	





## STAINLESS STEEL EXHAUST SILENCERS



Illustrations example.

	Silencer Material	Pressure Range psig (bar)	Schematic
SPECIFICATIONS	Stainless Steel	0-175 (0-12.3) maximum	
	316 Stainless Steel Sintered Element	0-125 (0-8.6)	

Silencer Material	Port Size Thread Type	Model Number		Flow	Dimensions inches (mm)		Weight	
			NPT Thread	R/Rp Thread	C <sub>v</sub> (NI/min)	Length	Hex Size (D)	lb (kg)
	1/4	Male	5500B2004	D5500B2004	1.4 (1400)	1.8 (45)	0.56 (14)	0.05 (0.23)
Stainless Steel	1/2	Male	5500B4004	D5500B4004	3.0 (3000)	2.8 (70)	0.87 (22)	0.25 ( 0.11)
	1	Male	5500B6004	D5500B6004	10 (9800)	3.9 (98)	1.31 (33)	0.45 (0.20)
	2	Male	5500A9004	D5500A9004	28 (28000)	5.5 (140)	2.37 (60)	1.5 (0.68)
	1/4	Male	5500A2005	D5500A2005	2.3 (2300)	2.2 (6)	0.81 (21)	0.07 (0.03)
316 Stainless Steel Sintered Element	1/2	Male	5500A4005	D5500A4005	6.8 (6700)	3.6 (9)	1.25 (32)	0.2 (0.1)
	1	Male	5500A6005	D5500A6005	18 (18000)	5.4 (14)	2.0 (51)	0.9 (0.4)

#### HIGH FLOW NOISE REDUCTION SILENCER KITS

	Silencer Material	Pressure Range psig (bar)
Silencers	Corrosion-resistant aluminum end covers Zinc-plated steel components Cellulose fiber element	0-125 (0-8.6) maximum



Reduces the Exponentially Perceived Noise (EPNdB), Impact noise reduction in the 17–25 dB range. Kits include all plumbing required for installation.

# Exhaust Flange Kit required, see below ordering information.

Double Valve Basic Size	Model N	Flow	
	NPT Thread	R/Rp Thread	scfm (L/s)
2	2323H77	2328H77	800 (380)
4	2324H77	2329H77	800 (380)
8	2325H77	2329H77	800 (380)
12	2326H77	2330H77	2100 (1000)
30	2327H77	2331H77	7200 (3400)

<sup>\*</sup> For DM<sup>2®</sup> Series Valves an **Exhaust Flange Kit is required**, see below for ordering information.

<sup>\*\*</sup> Dimensions reflect valve with installed silencer.

Basic Size	Dimensions ** inches (mm)				
	Width	Height (NPT)	Height (R/Rp)	Depth	lb (kg)
2	4.96 (126.1)	14.24 (361.7)	16.05 (407.7)	5.73 (145.5)	
4	4.34 (110.2)	19.06 (484.1)	21.40 (543.6)	7.27 (184.7)	1.42 (0.6)
8	5.41 (137.4)	21.18 (538.0)	23.52 (597.4)	8.41 (213.6)	
12	6.74 (117.2)	25.85 (656.6)	28.20 (716.3)	10.66 (270.8)	3.27 (1.5)
30	9.85 (250.2)	41.55 (1055.4)	41.55 (1055.4)	13.47 (342.1)	13.43 (6.1)

<sup>\*</sup> For DM<sup>2®</sup> Series Valves an **Exhaust Flange Kit is required**, see below for ordering information.

#### **EXHAUST FLANGE KITS**

Valve	Valve	Kit No	umber
Basic Size	Port Size	NPT Thread	G Thread
4	1	726B25	D276B25
8	1	617B25	D617B25
12	1-1/2	619B25	D619B25
30	2-1/2	621B25	D621B25

<sup>\*\*</sup> Dimensions reflect valve with installed silencer.

## **Notes**



## Notes

## **CAUTIONS, WARNINGS And STANDARD WARRANTY**



ROSS OPERATING VALVE, ROSS CONTROLS®, ROSS DECCO®, and AUTOMATIC VALVE INDUSTRIAL, collectively the "ROSS Group".

#### PRE-INSTALLATION or SERVICE

- 1. Before servicing a valve or other pneumatic component, be sure all sources of energy are turned off, the entire pneumatic system is shut down and exhausted, and all power sources are locked out (ref: OSHA 1910.147, EN 1037).
- 2. All ROSS Group Products, including service kits and parts, should be installed and/or serviced only by persons having training and experience with pneumatic equipment. Because any product can be tampered with and/or need servicing after installation, persons responsible for the safety of others or the care of equipment must check ROSS Group Products on a regular basis and perform all necessary maintenance to ensure safe operating conditions.
- 3. All applicable instructions should be read and complied with before using any fluid power system to prevent harm to persons or equipment. In addition, overhauled or serviced valves must be functionally tested prior to installation and use. If you have any questions, call your nearest ROSS Group location.
- 4. Each ROSS Group Product should be used within its specification limits. In addition, use only ROSS Group components to repair ROSS Group Products.

#### WARNINGS

Failure to follow these instructions can result in personal injury and/or property damage.

#### FILTRATION and LUBRICATION

- 1. Dirt, scale, moisture, etc., are present in virtually every air system. Although some valves are more tolerant of these contaminants than others, best performance will be realized if a filter is installed to clean the air supply, thus preventing contaminants from interfering with the proper performance of the equipment. The ROSS Group recommends a filter with a 5-micron rating for normal applications.
- 2. All standard ROSS Group filters and lubricators with polycarbonate plastic bowls are designed for compressed air applications only. Use the metal bowl guard, where provided, to minimize danger from high pressure fragmentation in the event of bowl failure. Do not expose these products to certain fluids, such as alcohol or liquefied petroleum gas, as they can cause bowls to rupture, creating a combustible condition and hazardous leakage. Immediately replace crazed, cracked, or deteriorated bowls.
- 3. Only use lubricants which are compatible with materials used in the valves and other components in the system. Normally, compatible lubricants are petroleum base oils with oxidation inhibitors, an aniline point between 180°F (82°C) and 220°F (104°C), and an ISO 32, or lighter, viscosity. Avoid oils with

phosphate type additives which can harm polyurethane components, potentially leading to valve failure which risks personal injury, and/or damage to property.

#### **WARNINGS:**

Failure to follow these instructions can result in personal injury and/or property damage.

#### **AVOID INTAKE/EXHAUST RESTRICTION**

- 1. Do not restrict air flow in the supply line. To do so could reduce the pressure of the supply air below minimum requirements for the valve and thereby causing erratic action.
- 2. Do not restrict a valve's exhaust port as this can adversely affect its operation. Exhaust silencers must be resistant to clogging and must have flow capacities at least as great as the exhaust capacities of the valves. Contamination of the silencer can result in reduced flow and increased back pressure.

WARNINGS: Failure to follow these instructions can result in personal injury and/or property damage.

#### SAFETY APPLICATIONS

- 1. Mechanical Power Presses and other potentially hazardous machinery using a pneumatically controlled clutch and brake mechanism must use a press control double valve with a monitoring device. A double valve without a self-contained monitoring device should be used only in conjunction with a control system which assures monitoring of the valve. All double valve installations involving hazardous applications should incorporate a monitoring system which inhibits further operation of the valve and machine in the event of a failure within the valve mechanism.
- 2. Safe Exhaust (dump) valves without a self-contained monitoring device should be used only in conjunction with a control system which assures monitoring of the valve. All Safe Exhaust valve installations should incorporate a monitoring system which inhibits further operation of the valve and machine in the event of a failure within the valve mechanism.
- 3. Per specifications and regulations, the ROSS L-O-X® and L-O-X® with EEZ-ON®, NO6 and N16 Series operation products are defined as energy isolation devices. NOT AS EMERGENCY STOP DEVICES.

#### **WARNINGS:**

Failure to follow these instructions can result in personal injury and/or property damage.

#### STANDARD WARRANTY

All products sold by the ROSS Group are warranted for a one-year period [with the exception of Filters, Regulators and Lubricators ("FRLs") which are warranted for a period of seven (7) years] from the date of purchase. All products are, during their respective warranty periods, warranted to be free of defects in material and workmanship. The ROSS Group's obligation under this warranty is limited to repair, replacement or refund of the purchase price paid for products which the ROSS Group has determined, in its sole discretion, are defective. All warranties become void if a product has been subject to misuse, misapplication, improper maintenance, modification or tampering. Products for which warranty protection is sought must be returned to the ROSS Group freight prepaid.

THE WARRANTY EXPRESSED ABOVE IS IN LIEU OF AND EXCLUSIVE OF ALL OTHER WARRANTIES AND THE ROSS GROUP EXPRESSLY DISCLAIMS ALL OTHER WARRANTIES EITHER EXPRESSED OR IMPLIED WITH RESPECT TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THE ROSS GROUP MAKES NO WARRANTY WITH RESPECT TO ITS PRODUCTS MEETING THE PROVISIONS OF ANY GOVERNMENTAL OCCUPATIONAL SAFETY AND/OR HEALTH LAWS OR REGULATIONS. IN NO EVENT IS THE ROSS GROUP LIABLE TO PURCHASER, USER, THEIR EMPLOYEES OR OTHERS FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES WHICH MAY RESULT FROM A BREACH OF THE WARRANTY DESCRIBED ABOVE OR THE USE OR MISUSE OF THE PRODUCTS. NO STATEMENT OF ANY REPRESENTATIVE OR EMPLOYEE OF THE ROSS GROUP MAY EXTEND THE LIABILITY OF THE ROSS GROUP AS SET FORTH HEREIN.



	ROSS CONTROLS	USA	Tel: +1-248-764-1800	www.rosscontrols.com
AMERICAS	ROSS CONTROLS CANADA Ltd.	Canada	Tel: +1-416-251-7677	www.rosscanada.com
	ROSS DO BRASIL LTDA	Brazil	Tel: +55-11-4335-2200	www.rosscontrols.com.br
	ROSS EUROPA GmbH	Germany	Tel: +49 (0)6103-7597-100	www.rosseuropa.com
EUROPE	ROSS FRANCE SAS	France	Tel: +33-(0)1-49-45-65-65	www.rossfrance.com
	ROSS PNEUMATROL Ltd.	United Kingdom	Tel: +44 (0)1254 872277	www.rossuk.co.uk
	ROSS CONTROLS INDIA Pvt. Ltd.	India	Tel: +91-44-2624-9040	www.rosscontrolsindia.com
Asia & Pacific	ROSS CONTROLS (CHINA) Ltd.	China	Tel: +86-21-6915-7961	www.rosscontrolschina.com
	ROSS ASIA K.K.	Japan	Tel: +81-42-778-7251	www.rossasia.co.jp
	AUTOMATIC VALVE INDUSTRIAL LLC	USA	Tel: +1-248-474-6700	www.automaticvalve.com
	ROSS DECCO COMPANY	USA	Tel: +1-248-764-1800	www.rossdecco.com
	ROSS PNEUMATROL Ltd.	United Kingdom	Tel: +44 (0)1254 872277	www.pneumatrol.com
	manufactIS GmbH	Germany	Tel: +49 (0)2013-16843-0	www.manufactis.net

## Full-Service Global Locations

There are ROSS Distributors Throughout the World

To meet your requirements across the globe, ROSS distributors are located throughout the world. Through ROSS or its distributors, guidance is available for the selection of ROSS products, both for those using fluid power components for the first time and those designing complex systems.

Other literature is available for engineering, maintenance, and service requirements.

If you need products or specifications not shown in this catalog, please visit ROSS' website, contact ROSS or your ROSS distributor. The ROSS Support Team will be happy to assist you in selecting the best product for your application.

For a current list of countries and local distributors, visit ROSS' at www.rosscontrols.com.