



Side Channel Blower Silencers SLCR/SLCRT 1/2" – 4"

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Note: Please read the maintenance instructions given by the OEM for the machinery first. The OEM's manual should be adhered to in order to protect the equipment. Solberg Manufacturing, Inc has made every effort to make sure that these instructions are accurate but is not responsible for any typos, slight variations or for human errors that may occur.

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Maintenance Manual

Side Channel Blower Silencers

SLCR/SLCRT 1/2" – 4"

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**For Further Information Please Call: 630-773-1363*

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Section A

INTRODUCTION

The purpose of this manual is instruction on the proper assembly and care of Solberg side channel blower silencers.

WARNING

This manual must be read and thoroughly understood before using and caring for this air filter. Failure to comply could result in explosion, product/system contamination or personal injury.

This manual should be used as a supplement to the user's understanding of the proper care needed to maintain a safe and dependable silencer. It is the responsibility of the user to interpret and explain all instructions to persons who do not read or understand English BEFORE they are allowed to maintain and use this silencer.

This manual should be readily available to all operators responsible for operation and maintenance of the silencers.

We thank you for selecting products from Solberg Manufacturing, Inc. We are confident that our superior filter and silencer designs will meet your application requirements.

Section B

GENERAL INFORMATION

1. Identification of Solberg Side Channel Blower Silencers.

All Solberg side channel blower silencers should have an identification label/nameplate that gives the following information:

Assembly Model #

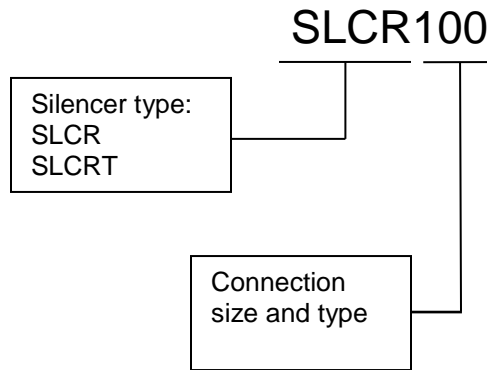
(The exception is OEM supplied units. In this case, please enter the OEM part numbers below.)

Fill in the actual nameplate data from your new Solberg product(s):

No.	Filter Model Number	Replacement Element	Initial Delta P Readings
1			
2			
3			
4			
5			

Table 1

The model number designates the silencer type and connection size. For example, the following part number identifies the product as being a ‘SLCR’ design side channel blower silencer with a 1” FPT connection size:



Note: The inlet connection greatly influences the overall pressure drop of the filter system. To minimize the restriction contributed by a side channel blower silencer, a velocity of 6,000 ft/min (10200m³/h) or less is suggested through the outlet pipe. The table below lists the suggested flows based on pipe size:

Pipe Size (inches)	Max Airflow		Pipe Size (inches)	Max Airflow	
1/2"	10 CFM	17m ³ /h	2"	135 CFM	230m ³ /h
3/4"	20 CFM	34m ³ /h	2 1/2"	195 CFM	332m ³ /h
1"	35 CFM	60m ³ /h	3"	300 CFM	510m ³ /h
1 1/4"	60 CFM	102m ³ /h	4"	520 CFM	884m ³ /h
1 1/2"	80 CFM	136m ³ /h			

Table 3 *Note: This information is for general use only. A qualified engineer must properly design each system.



2. Side Channel Blower Silencer Specifications.

The Solberg side channel blower silencer is made with polyester as a standard, but Nomex material is available for high temperature applications.

Temperature Range: -15° to 220°F / -26° to 105°C

Filter Change-Out Differential: 10" to 15" / 250-380mm H₂O Over Initial Delta P

Media	Micron Rating
Standard Polyester	99+% @ 5 micron

Table 4

Temperature Range: -15° to 385°F / -26° to 196°C

Filter Change-Out Differential: 10" to 15" / 250-380mm H₂O Over Initial Delta P

Media	Micron Rating
"MX" & "MXD" Series – Nomex Cloth	99+% @ 5 micron

Table 5

Section C **PROCEDURES**

1. Installation.



Figure C.1: Housing Terms

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- A. Maximum operating temperature for most Solberg side channel blower silencers is 275°F / 135°C. Temperatures in excess of this could cause damage. High temperature products are available.
- B. Ensure that pipe connections are adequately sealed so the potential for leaks is reduced to a minimum.

2. Securing Silencer to Application Inlet or Outlet.

Place silencer on inlet or outlet connection and rotate to tighten. Note: Do NOT over tighten!

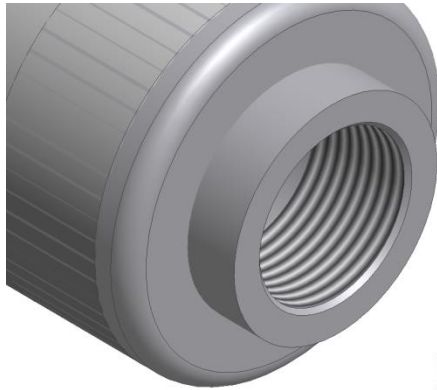


Figure C.2.1: Silencer and inlet/outlet connection.

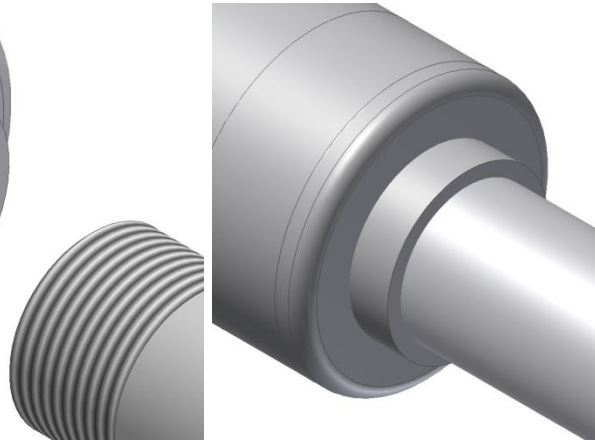


Figure C.2.2: Silencer in secured position.

3. Equipment Startup.

- A. Be sure to read the instructions on installation as listed above before starting equipment.

WARNING

If at any time the operator is unable to verify the integrity of the silencer, the factory or a regional representative should be contacted prior to start-up.

- B. Please check the listed steps prior to startup.
 1. Check silencer to make sure it is securely tightened onto inlet/outlet connection. See figure C.2.2

WARNING

Failure to seat the element properly may result in contaminant by-pass resulting in damage to equipment.

WARNING

If the air flow is reversed through a Solberg filter unit, be sure to check the element and housing internals for damage. Failure to do so may result in damage to equipment.

Section D

MAINTENANCE RECOMMENDATIONS

1. Operate only when a proper seal exists.

