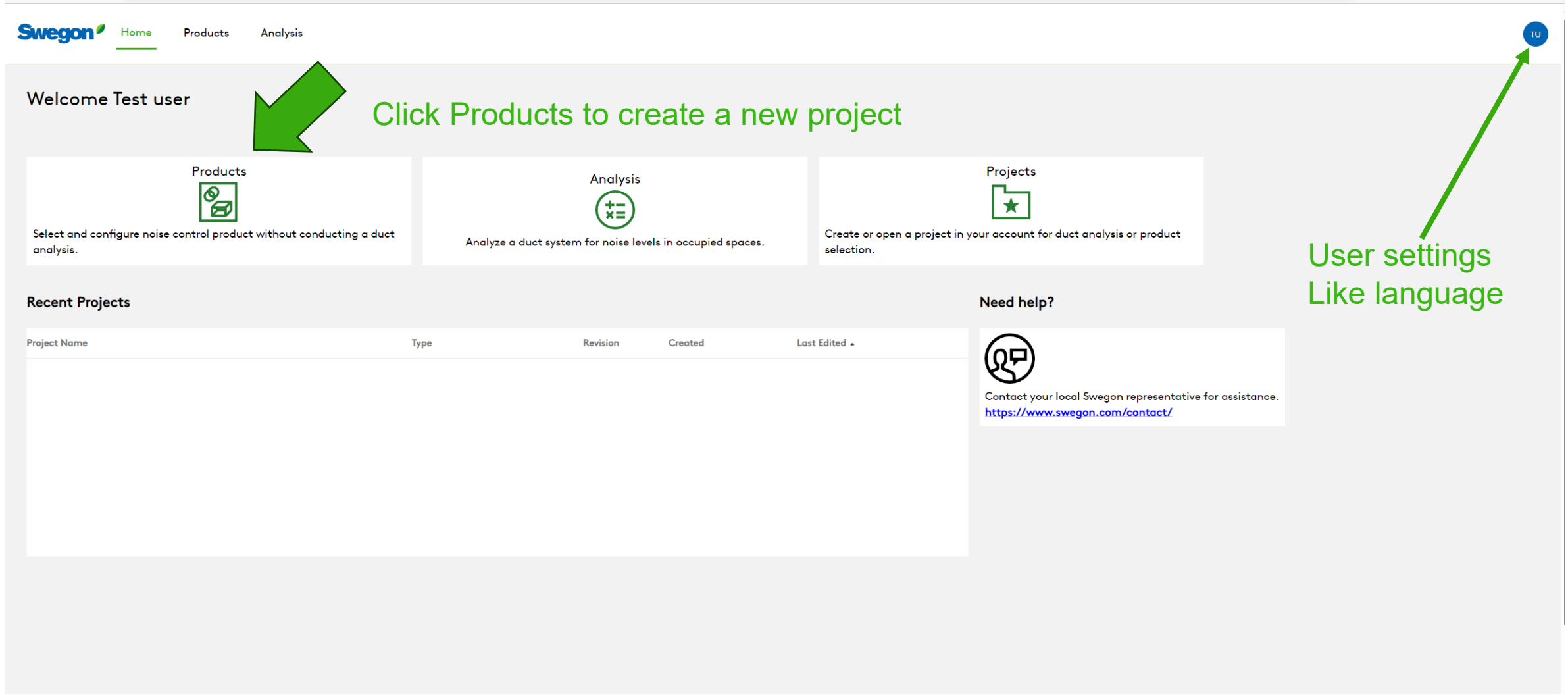
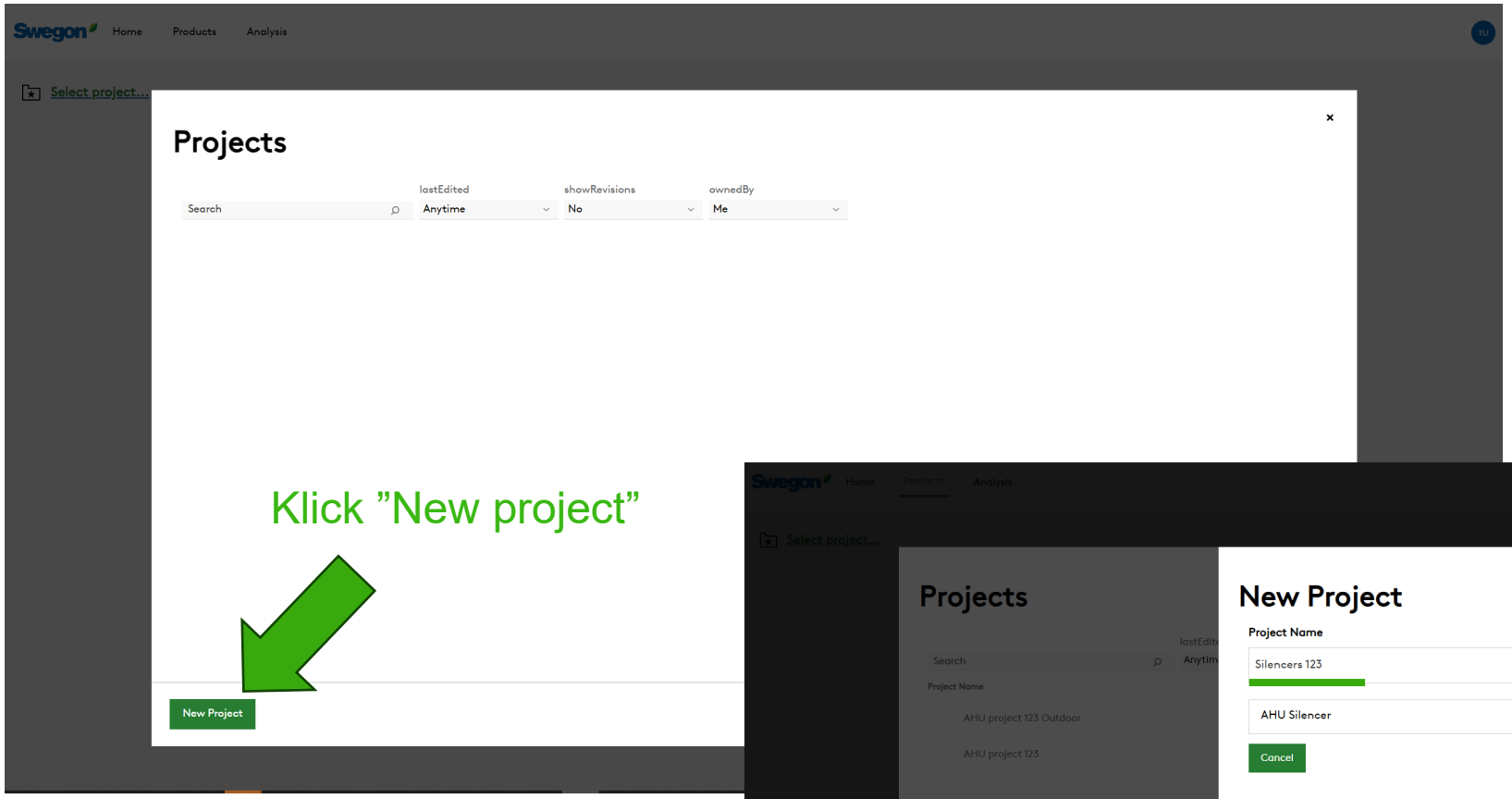
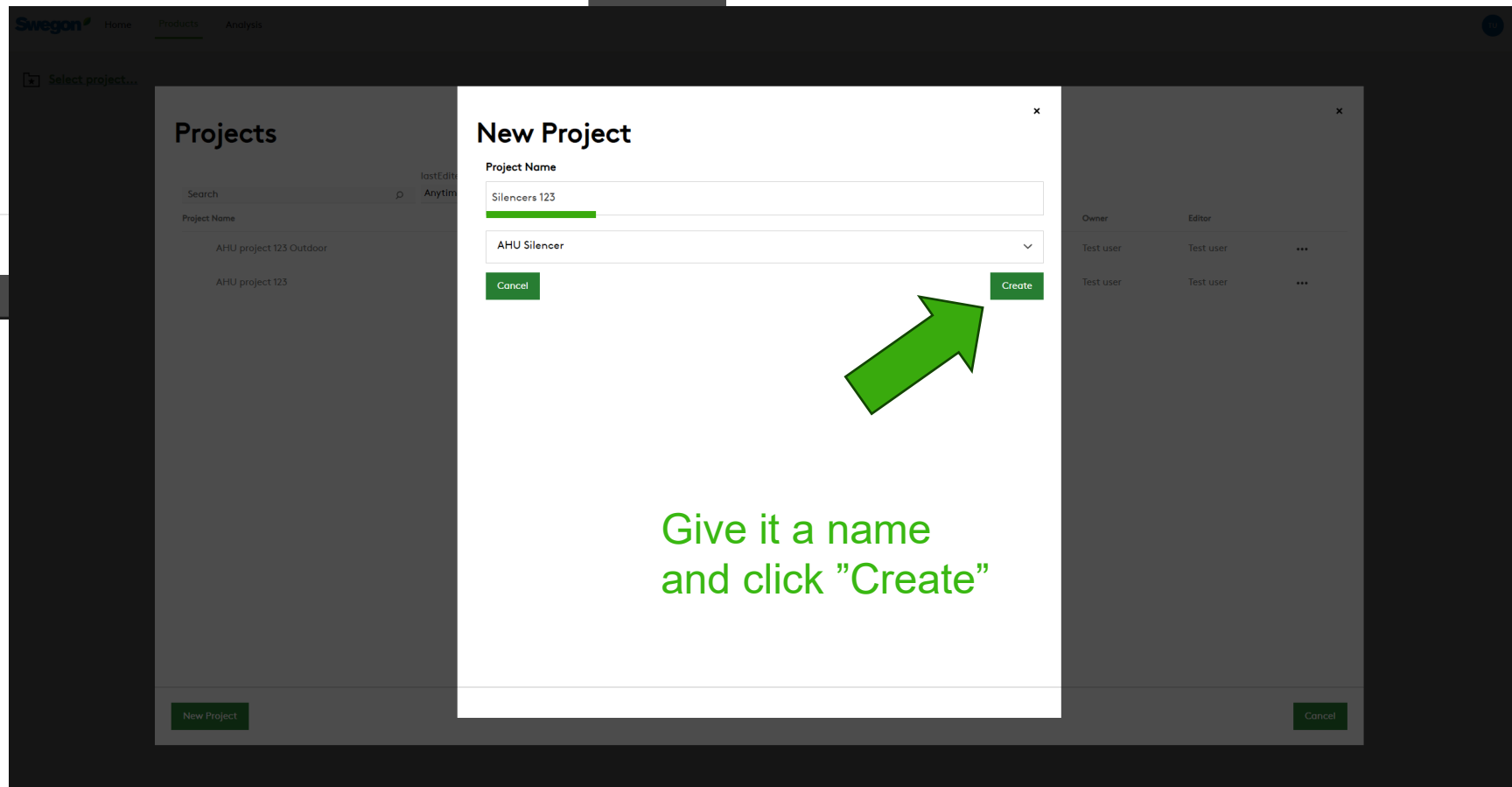
Silencer Selection in Acoustic Design Products


Swegon
Home
Products
Analysis
TU
Welcome Test user
Click Products to create a new project
Products
Select and configure noise control product without conducting a duct analysis.
Analysis
Analyze a duct system for noise levels in occupied spaces.
Projects
Create or open a project in your account for duct analysis or product selection.
User settings
Like language
Recent Projects
Project Name
Type
Revision
Created
Last Edited
Need help?
Contact your local Swegon representative for assistance.
https://www.swegon.com/contact/


Swegon
Home
Products
Analysis
Select project...
Projects
lastEdited
showRevisions
ownedBy
Search
Anytime
No
Me
Klick ”New project”
New Project


Swegon
Home
Products
Analysis
Select project...
Projects
New Project
Project Name
Silencers 123
AHU Silencer
Cancel
Create
Owner
Editor
AHU project 123 Outdoor
AHU project 123
Test user
Give it a name
and click ”Create”
New Project
Cancel

Swegon Home Products Analysis Reporting TU

Silencers 123

Swegon Silencers

Noise Control

View	System	Tag	W (mm)	H (mm)	Dia (mm)	I+U	L (mm)	l/s	m/s	Pa	63	125	250	500	1k	2k	4k	8k	Weight (kg)	Model

Add new

Click Add New to open configurator.

Silencer Selection

Always give the Silencer a Tag

Identity

Tag

Tag is required

Quantity

1

Dimensions & Airflow

Shape

Rectangular

Duct Width

150 mm

Duct Height

150 mm

Max Length

650 mm

Silencer Flow Rate

0 l/s

Velocity

0 m/s

Maximum Pressure Drop

87.18 Pa

System Effects

Silencer Inlet Condition

Ideal Outlet Conditions - 3 to 4 diameters of straight duct

Diameter from Silencer

0

Transition Length

Required Insertion Loss

Frequency	dBA	63	125	250	500	1k	2k	4k	8k
Sound Before Attenuator	7	0	0	0	0	0	0	0	0
Required Insertion Loss	**7**	-	-	-	-	-	-	-	-
Calculated Insertion Loss		0	0	0	0	0	0	0	0
Safety Factor		0	0	0	0	0	0	0	0

Silencer Selection

					Octave Midband Frequency, Hz							
Model	**L**	**PD**	**w/SE**	**A**	**63**	**125**	**250**	**500**	**1k**	**2k**	**4k**	**8k**
MORENDO a-0151-150-150-650	650	0	0		3	7	15	25	34	34	21	17
Generated Noise					<10	<10	<10	<10	<10	<10	<10	<10
End Result				7	2	1	0	0	0	0	0	0

Options

Unisunlated Cleaning Cover

None

Fire-Resistant Insulated Cleaning Cover

None

- [ ] Insulated 50mm Stone Wool
- [ ] Perforated Sheet Metal Lining
- [ ] Flange Connection

Resources

Product Sheet
Rectangular sound attenuator with low build-in heights

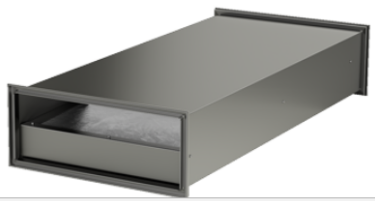
Brochure
Acoustics Overview

Instruction
Installation, commissioning, maintenance

Quality
Approval 2706/92, Duct insulation

Building product declaration

Image



Cancel Create

Silencer Selection

Identity

Tag: Silencer 123

Quantity: 1

Dimensions & Airflow

Shape: Rectangular

- Rectangular
- Rectangular/CADENZA
- Rectangular/CALMO
- Rectangular/FACILE
- Rectangular/MORENDO
- Rectangular Elbow
- Rectangular Elbow/LENTO
- Rectangular Elbow/LARGO
- Circular
- Circular/CLA-A
- Circular/CLA-B
- Circular/SORDO-A
- Circular/SORDO-B
- Circular/SORDO-C
- Circular/SORDO-P
- Circular/SORDO-PF
- Acoustical Louver
- Acoustical Louver/ALD

87.18 Pa

System Effects

Silencer Inlet Condition: Ideal Outlet Conditions - 3 to 4 diameters of straight duct

Diameter from Silencer: 0

Transition Length:

Required Insertion Loss

Frequency	dBA	63	125	250	500	1k	2k	4k	8k
Sound Before Attenuator	7	0	0	0	0	0	0	0	0
Required Insertion Loss	**7**	-	-	-	-	-	-	-	-
Calculated Insertion Loss		0	0	0	0	0	0	0	0
Safety Factor		0	0	0	0	0	0	0	0

Silencer Selection

				Octave Midband Frequency, Hz								
Model	**L**	**PD**	**w/SE**	**A**	**63**	**125**	**250**	**500**	**1k**	**2k**	**4k**	**8k**
MORENDO a-0151-150-150-650	650	0	0		3	7	15	25	34	34	21	17
Generated Noise					<10	<10	<10	<10	<10	<10	<10	<10
End Result				7	2	1	0	0	0	0	0	0

Choose shape to get all products with that shape, or a Product if you already know which to use.

Options

Unisunlated Cleaning Cover: None

Fire-Resistant Insulated Cleaning Cover: None

- ☐ Insulated 50mm Stone Wool
- ☐ Perforated Sheet Metal Lining
- ☐ Flange Connection

Resources

Product Sheet
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Image

Cancel Create

Silencer Selection

Choose duct dimensions and your maximum length for a silencer (space)

Identity

Tag: Silencer 123

Quantity: 1

Dimensions & Airflow

Shape: Rectangular

Duct Width: 1600 mm

Duct Height: 800 mm

Max Length: 1250 mm

Silencer Flow Rate: 0 l/s

Velocity: 0 m/s

Maximum Pressure Drop: 87.18 Pa

System Effects

Silencer Inlet Condition: Ideal Outlet Conditions - 3 to 4 diameters of straight duct

Diameter from Silencer: 0

Transition Length:

Required Insertion Loss

Frequency	dBA	63	125	250	500	1k	2k	4k	8k
Sound Before Attenuator	7	0	0	0	0	0	0	0	0
Required Insertion Loss	**7**	-	-	-	-	-	-	-	-
Calculated Insertion Loss		0	0	0	0	0	0	0	0
Safety Factor		0	0	0	0	0	0	0	0

Silencer Selection

					Octave Midband Frequency, Hz							
Model	**L**	**PD**	**w/SE**	**A**	**63**	**125**	**250**	**500**	**1k**	**2k**	**4k**	**8k**
CALMO a-1611-1600-800-650	650	0	0		5	10	15	23	27	27	15	10
Generated Noise					<10	<10	<10	<10	<10	<10	<10	<10
End Result				7	1	0	0	0	0	0	0	0
FACILE a-1610-1600-800-750	750	0	0		3	7	12	18	26	25	15	11
Generated Noise					<10	<10	<10	<10	<10	<10	<10	<10
End Result				7	2	1	0	0	0	0	0	0
CADENZA a-1627-1600-800-1250	1250	0	0		5	11	18	27	32	22	13	12
Generated Noise					<10	<10	<10	<10	<10	<10	<10	<10
End Result				7	1	0	0	0	0	0	0	0
CADENZA a-1628-1600-800-1250	1250	0	0		7	12	21	33	39	33	18	14
Generated Noise					<10	<10	<10	<10	<10	<10	<10	<10
End Result				7	1	0	0	0	0	0	0	0
CALMO a-1621-1600-800-1250	1250	0	0		7	15	24	39	45	40	23	17
Generated Noise					<10	<10	<10	<10	<10	<10	<10	<10
End Result				7	1	0	0	0	0	0	0	0
CALMO a-1622-1600-800-1250	1250	0	0		4	9	16	21	25	18	11	11
Generated Noise					<10	<10	<10	<10	<10	<10	<10	<10
End Result				7	1	1	0	0	0	0	0	0

Options

Unisunlated Cleaning Cover: None

Fire-Resistant Insulated Cleaning Cover: None

- [ ] Insulated 50mm Stone Wool
- [ ] Perforated Sheet Metal Lining
- [ ] Flange Connection

Resources

Product Sheet
Attenuator with recessed connection for rectangular ducts

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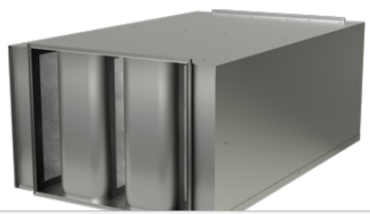
Image



Cancel Create

Silencer Selection

Write the current airflow

Identity

Tag: Silencer 123

Quantity: 1

Dimensions & Airflow

Shape: Rectangular

Duct Width: 1600 mm

Duct Height: 800 mm

Max Length: 1250 mm

Silencer Flow Rate: 3000 l/s

Velocity: 2.34 m/s

Velocity in duct

Maximum Pressure Drop: 87.18 Pa

System Effects

Silencer Inlet Condition: Ideal Outlet Conditions - 3 to 4 diameters of straight duct

Diameter from Silencer: 0

Transition Length:

Required Insertion Loss

Frequency	dBA	63	125	250	500	1k	2k	4k	8k
Sound Before Attenuator	7	0	0	0	0	0	0	0	0
Required Insertion Loss	**7**	-	-	-	-	-	-	-	-
Calculated Insertion Loss		0	0	0	0	0	0	0	0
Safety Factor		0	0	0	0	0	0	0	0

Silencer Selection

					Octave Midband Frequency, Hz							
Model	**L**	**PD**	**w/SE**	**A**	**63**	**125**	**250**	**500**	**1k**	**2k**	**4k**	**8k**
CALMO a-1611-1600-800-650	650	6	6		5	10	15	23	27	27	15	10
Generated Noise					28	28	24	22	19	16	15	13
End Result				25	28	28	24	22	19	16	15	13
FACILE a-1610-1600-800-750	750	11	11		3	7	12	18	26	25	15	11
Generated Noise					20	20	16	14	11	<10	<10	<10
End Result				17	20	20	16	14	11	8	7	5
CALMO a-1622-1600-800-1250	1250	3	3		4	9	16	21	25	18	11	11
Generated Noise					11	11	<10	<10	<10	<10	<10	<10
End Result				8	11	11	7	5	2	0	0	0
CADENZA a-1627-1600-800-1250	1250	7	7		5	11	18	27	32	22	13	12
Generated Noise					17	17	13	11	<10	<10	<10	<10
End Result				14	17	17	13	11	8	5	4	2
CALMO a-1621-1600-800-1250	1250	7	7		7	15	24	39	45	40	23	17
Generated Noise					28	28	24	22	19	16	15	13
End Result				25	28	28	24	22	19	16	15	13
CADENZA a-1628-1600-800-1250	1250	9	9		7	12	21	33	39	33	18	14
Generated Noise					23	23	19	17	14	11	10	<10
End Result				20	23	23	19	17	14	11	10	8

Options

Unisunlated Cleaning Cover: None

Fire-Resistant Insulated Cleaning Cover: None

- [ ] Insulated 50mm Stone Wool
- [ ] Perforated Sheet Metal Lining
- [ ] Flange Connection

Resources

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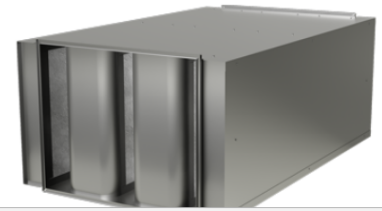


Cancel Create

Silencer Selection

Identity

Tag: Silencer 123

Quantity: 1

Dimensions & Airflow

Shape: Rectangular

Duct Width: 1600 mm

Duct Height: 800 mm

Max Length: 1250 mm

Silencer Flow Rate: 5000 l/s

Velocity: 3.91 m/s

Maximum Pressure Drop: 5 Pa

System Effects

Silencer Inlet Condition: Ideal Outlet Conditions - 3 to 4 diameters of straight duct

Diameter from Silencer: 0

Transition Length:

Required Insertion Loss

Frequency	dBA	63	125	250	500	1k	2k	4k	8k
Sound Before Attenuator	92	89	88	88	87	86	85	84	82
Required Insertion Loss	**7**	-	-	-	-	-	-	-	-
Calculated Insertion Loss		0	0	0	0	0	0	0	0
Safety Factor		0	0	0	0	0	0	0	0

Silencer Selection

				Octave Midband Frequency, Hz							
Model	L	PD	w/SE	A	63	125	250	500	1k	2k	4k	8k

No silencers found matching your parameters

Options

Please select a silencer to configure options

If there is no Silencer matching the parameters,
1. Check if maximum pressure drop is set to low, increase to 50 Pa or higher.
2. Flow rate is to high for the duct dimension, try a larger duct dimension.

Cancel | Create

Silencer Selection

If you know the sound power (Lw) in the duct, write it here for each octave band

Identity

Tag: Silencer 123

Quantity: 1

Dimensions & Airflow

Shape: Rectangular

Duct Width: 1600 mm

Duct Height: 800 mm

Max Length: 1250 mm

Silencer Flow Rate: 3000 l/s

Velocity: 2.34 m/s

Maximum Pressure Drop: 87.18 Pa

System Effects

Silencer Inlet Condition: Ideal Outlet Conditions - 3 to 4 diameters of straight duct

Diameter from Silencer: 0

Transition Length:

Required Insertion Loss

Frequency	dBA	63	125	250	500	1k	2k	4k	8k
Sound Before Attenuator	92	89	88	88	87	86	85	84	82
Required Insertion Loss	**7**	-	-	-	-	-	-	-	-
Calculated Insertion Loss		0	0	0	0	0	0	0	0
Safety Factor		0	0	0	0	0	0	0	0

Silencer Selection

					Octave Midband Frequency, Hz							
Model	**L**	**PD**	**w/SE**	**A**	**63**	**125**	**250**	**500**	**1k**	**2k**	**4k**	**8k**
CALMO a-1611-1600-800-650	650	6	6		5	10	15	23	27	27	15	10
Generated Noise					28	28	24	22	19	16	15	13
End Result				75	84	78	73	64	59	58	69	72
FACILE a-1610-1600-800-750	750	11	11		3	7	12	18	26	25	15	11
Generated Noise					20	20	16	14	11	<10	<10	<10
End Result				75	86	81	76	69	60	60	69	71
CALMO a-1622-1600-800-1250	1250	3	3		4	9	16	21	25	18	11	11
Generated Noise					11	11	<10	<10	<10	<10	<10	<10
End Result				77	85	79	72	66	61	67	73	71
CADENZA a-1627-1600-800-1250	1250	7	7		5	11	18	27	32	22	13	12
Generated Noise					17	17	13	11	<10	<10	<10	<10
End Result				75	84	77	70	60	54	63	71	70
CALMO a-1621-1600-800-1250	1250	7	7		7	15	24	39	45	40	23	17
Generated Noise					28	28	24	22	19	16	15	13
End Result				67	82	73	64	48	41	45	61	65
CADENZA a-1628-1600-800-1250	1250	9	9		7	12	21	33	39	33	18	14
Generated Noise					23	23	19	17	14	11	10	<10
End Result				71	82	76	67	54	47	52	66	68

Options

Unisunlated Cleaning Cover: None

Fire-Resistant Insulated Cleaning Cover: None

- [ ] Insulated 50mm Stone Wool
- [ ] Perforated Sheet Metal Lining
- [ ] Flange Connection

Resources

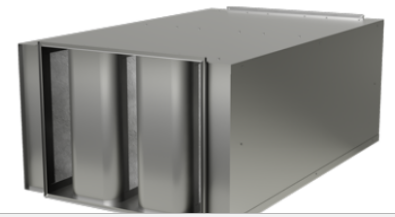
Product Sheet
Attenuator with recessed connection for rectangular ducts

Brochure
Acoustics Overview

Instruction
Installation, commissioning, maintenance

Quality
Approval 2706/92, Duct insulation
Building product declaration

Image



Cancel Create

Silencer Selection

Sound power (Lw) in duct before silencer in dB(A)

Identity

Tag: Silencer 123

Quantity: 1

Dimensions & Airflow

Shape: Rectangular

Duct Width: 1600 mm

Duct Height: 800 mm

Max Length: 1250 mm

Silencer Flow Rate: 3000 l/s

Velocity: 2.34 m/s

Maximum Pressure Drop: 87.18 Pa

System Effects

Silencer Inlet Condition: Ideal Outlet Conditions - 3 to 4 diameters of straight duct

Diameter from Silencer: 0

Transition Length:

Required Insertion Loss

Frequency	dBA	63	125	250	500	1k	2k	4k	8k
Sound Before Attenuator	92	89	88	88	87	86	85	84	82
Required Insertion Loss	7	-	-	-	-	-	-	-	-
Calculated Insertion Loss		0	0	0	0	0	0	0	0
Safety Factor		0	0	0	0	0	0	0	0

Silencer Selection

					Octave Midband Frequency, Hz							
Model	**L**	**PD**	**w/SE**	**A**	**63**	**125**	**250**	**500**	**1k**	**2k**	**4k**	**8k**
CALMO a-1611-1600-800-650	650	6	6		5	10	15	23	27	27	15	10
Generated Noise					28	28	24	22	19	16	15	13
End Result				75	84	78	73	64	59	58	69	72
FACILE a-1610-1600-800-750	750	11	11		3	7	12	18	26	25	15	11
Generated Noise					20	20	16	14	11	<10	<10	<10
End Result				75	86	81	76	69	60	60	69	71
CALMO a-1622-1600-800-1250	1250	3	3		4	9	16	21	25	18	11	11
Generated Noise					11	11	<10	<10	<10	<10	<10	<10
End Result				77	85	79	72	66	61	67	73	71
CADENZA a-1627-1600-800-1250	1250	7	7		5	11	18	27	32	22	13	12
Generated Noise					17	17	13	11	<10	<10	<10	<10
End Result				75	84	77	70	60	54	63	71	70
CALMO a-1621-1600-800-1250	1250	7	7		7	15	24	39	45	40	23	17
Generated Noise					28	28	24	22	19	16	15	13
End Result				67	82	73	64	48	41	45	61	65
CADENZA a-1628-1600-800-1250	1250	9	9		7	12	21	33	39	33	18	14
Generated Noise					23	23	19	17	14	11	10	<10
End Result				71	82	76	67	54	47	52	66	68

Sound power in duct after silencer in dB(A)

Options

Unisunlated Cleaning Cover: None

Fire-Resistant Insulated Cleaning Cover: None

- [ ] Insulated 50mm Stone Wool
- [ ] Perforated Sheet Metal Lining
- [ ] Flange Connection

Resources

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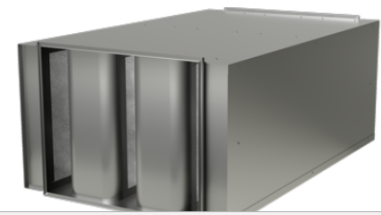

Cancel Create

For more correct pressure drop, use system effects

Silencer Selection

Shape

Rectangular

Duct Width 1600 mm

Duct Height 800 mm

Max Length

1250 mm

Silencer Flow Rate 3000 l/s

Velocity 2.34 m/s

Maximum Pressure Drop

87.18 Pa

System Effects

Silencer Inlet Condition

Ideal Outlet Conditions - 3 to 4 diameters of straight duct

- Ideal Outlet Conditions - 3 to 4 diameters of straight duct
- Transition - 7.5 degrees per side
- Transition - 25 degrees per side
- Transition - 45 degrees per side
- Radius Elbow with no turning vanes
- Mitered Elbow with short turning vanes
- Mitered Elbow with no turning vanes
- Abrupt Entry or Exit, Smooth Inlet or Discharge
- Abrupt Entry or Exit, Sharp Inlet or Discharge
- Centrifugal Fan
- Axial Fan
- Coils or Filters

0

Safety Factor	0	0	0	0	0	0	0	0

Silencer Selection

					Octave Midband Frequency, Hz							
Model	**L**	**PD**	**w/SE**	**A**	**63**	**125**	**250**	**500**	**1k**	**2k**	**4k**	**8k**
CALMO a-1611-1600-800-650	650	6	6		5	10	15	23	27	27	15	10
Generated Noise					28	28	24	22	19	16	15	13
End Result				75	84	78	73	64	59	58	69	72
FACILE a-1610-1600-800-750	750	11	11		3	7	12	18	26	25	15	11
Generated Noise					20	20	16	14	11	<10	<10	<10
End Result				75	86	81	76	69	60	60	69	71
CALMO a-1622-1600-800-1250	1250	3	3		4	9	16	21	25	18	11	11
Generated Noise					11	11	<10	<10	<10	<10	<10	<10
End Result				77	85	79	72	66	61	67	73	71
CADENZA a-1627-1600-800-1250	1250	7	7		5	11	18	27	32	22	13	12
Generated Noise					17	17	13	11	<10	<10	<10	<10
End Result				75	84	77	70	60	54	63	71	70
CALMO a-1621-1600-800-1250	1250	7	7		7	15	24	39	45	40	23	17
Generated Noise					28	28	24	22	19	16	15	13
End Result				67	82	73	64	48	41	45	61	65
CADENZA a-1628-1600-800-1250	1250	9	9		7	12	21	33	39	33	18	14
Generated Noise					23	23	19	17	14	11	10	<10
End Result				71	82	76	67	54	47	52	66	68

Choose current condition before and after silencer

None

- Insulated 50mm Stone Wool
- Perforated Sheet Metal Lining
- Flange Connection

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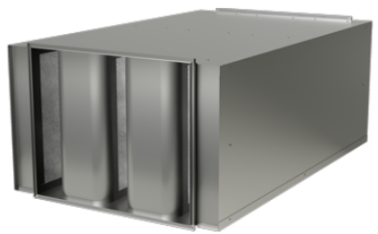
Building product declaration

Image



Cancel Create

Silencer Selection

Shape

Rectangular

Duct Width 1600 mm

Duct Height 800 mm

Max Length

1250 mm

Silencer Flow Rate 3000 l/s

Velocity 2.34 m/s

Maximum Pressure Drop

87.18 Pa

Current system effect

System Effects

Silencer Inlet Condition

Axial Fan

Diameter from Silencer 0

Transition Length

Silencer Outlet Condition

Radius Elbow with no turning vanes

Diameter from Silencer 0

Transition Length

Safety Factor	0	0	0	0	0	0	0	0

Silencer Selection

					Octave Midband Frequency, Hz							
Model	**L**	**PD**	**w/SE**	**A**	**63**	**125**	**250**	**500**	**1k**	**2k**	**4k**	**8k**
CALMO a-1611-1600-800-650	650	6	12		5	10	15	23	27	27	15	10
Generated Noise			+9		28	28	24	22	19	16	15	13
End Result				75	84	78	73	64	59	58	69	72
FACILE a-1610-1600-800-750	750	11	23		3	7	12	18	26	25	15	11
Generated Noise			+9		20	20	16	14	11	<10	<10	<10
End Result				75	86	81	76	69	60	60	69	71
CALMO a-1622-1600-800-1250	1250	3	7		4	9	16	21	25	18	11	11
Generated Noise			+9		11	11	<10	<10	<10	<10	<10	<10
End Result				77	85	79	72	66	61	67	73	71
CADENZA a-1627-1600-800-1250	1250	7	14		5	11	18	27	32	22	13	12
Generated Noise			+9		17	17	13	11	<10	<10	<10	<10
End Result				75	84	77	70	60	54	63	71	70
CALMO a-1621-1600-800-1250	1250	7	14		7	15	24	39	45	40	23	17
Generated Noise			+9		28	28	24	22	19	16	15	13
End Result				67	82	73	64	48	41	45	61	65
CADENZA a-1628-1600-800-1250	1250	9	19		7	12	21	33	39	33	18	14
Generated Noise			+9		23	23	19	17	14	11	10	<10
End Result				71	82	76	67	54	47	52	66	68

Pressure drop at ideal conditions
(3 to 4 diameter straight duct before and after silencer)

Pressure drop with current System Effects

None

- [ ] Insulated 50mm Stone Wool
- [ ] Perforated Sheet Metal Lining
- [ ] Flange Connection

Resources

Product Sheet
Attenuator with aerodynamically shaped splitters

Brochure
Acoustics Overview

Instruction
Installation, commissioning, maintenance

Quality
Building product declaration
Approval 2706/92, Duct insulation

Image

Cancel Create

Silencer Selection

Identity

Tag: Silencer 123

Quantity: 1

Dimensions & Airflow

Shape: Rectangular

Duct Width: 1600 mm

Duct Height: 800 mm

Max Length: 1250 mm

Silencer Flow Rate: 3000 l/s

Velocity: 2.34 m/s

Maximum Pressure Drop: 87.18 Pa

System Effects

Silencer Inlet Condition: Axial Fan

Diameter from Silencer: 0

Transition Length:

Required Insertion Loss

Frequency	dBA	63	125	250	500	1k	2k	4k	8k
Sound Before Attenuator	92	89	88	88	87	86	85	84	82
Required Insertion Loss	**7**	-	-	-	-	-	-	-	-
Calculated Insertion Loss		0	0	0	0	0	0	0	0
Safety Factor		0	0	0	0	0	0	0	0

Silencer Selection

					Octave Midband Frequency, Hz							
Model	**L**	**PD**	**w/SE**	**A**	**63**	**125**	**250**	**500**	**1k**	**2k**	**4k**	**8k**
CALMO a-1611-1600-800-650	650	6	12		5	10	15	23	27	27	15	10
Generated Noise			+9		28	28	24	22	19	16	15	13
End Result				75	84	78	73	64	59	58	69	72
FACILE a-1610-1600-800-750	750	11	23		3	7	12	18	26	25	15	11
Generated Noise			+9		20	20	16	14	11	<10	<10	<10
End Result				75	86	81	76	69	60	60	69	71
CALMO a-1622-1600-800-1250	1250	3	7		4	9	16	21	25	18	11	11
Generated Noise			+9		11	11	<10	<10	<10	<10	<10	<10
End Result				77	85	79	72	66	61	67	73	71
CADENZA a-1627-1600-800-1250	1250	7	14		5	11	18	27	32	22	13	12
Generated Noise			+9		17	17	13	11	<10	<10	<10	<10
End Result				75	84	77	70	60	54	63	71	70
CALMO a-1621-1600-800-1250	1250	7	14		7	15	24	39	45	40	23	17
Generated Noise			+9		28	28	24	22	19	16	15	13
End Result				67	82	73	64	48	41	45	61	65
CADENZA a-1628-1600-800-1250	1250	9	19		7	12	21	33	39	33	18	14
Generated Noise			+9		23	23	19	17	14	11	10	<10
End Result				71	82	76	67	54	47	52	66	68

Options

Unisunlated Cleaning Cover: None

Fire-Resistant Insulated Cleaning Cover: None

- [ ] Insulated 50mm Stone Wool
- [ ] Perforated Sheet Metal Lining
- [ ] Flange Connection

Resources

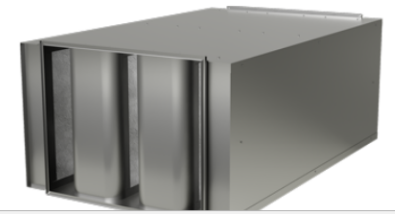
Product Sheet
Attenuator with recessed connection for rectangular ducts

Brochure
Acoustics Overview

Instruction
Installation, commissioning, maintenance

Quality
Approval 2706/92, Duct insulation
Building product declaration

Image



Cancel Create

Click on (highlight) the silencer you choose from the list, and click Create

Swegon

Swegon Home Products Analysis Reporting TU

The chosen product is added to the list

Silencers 123

Swegon Silencers

Noise Control

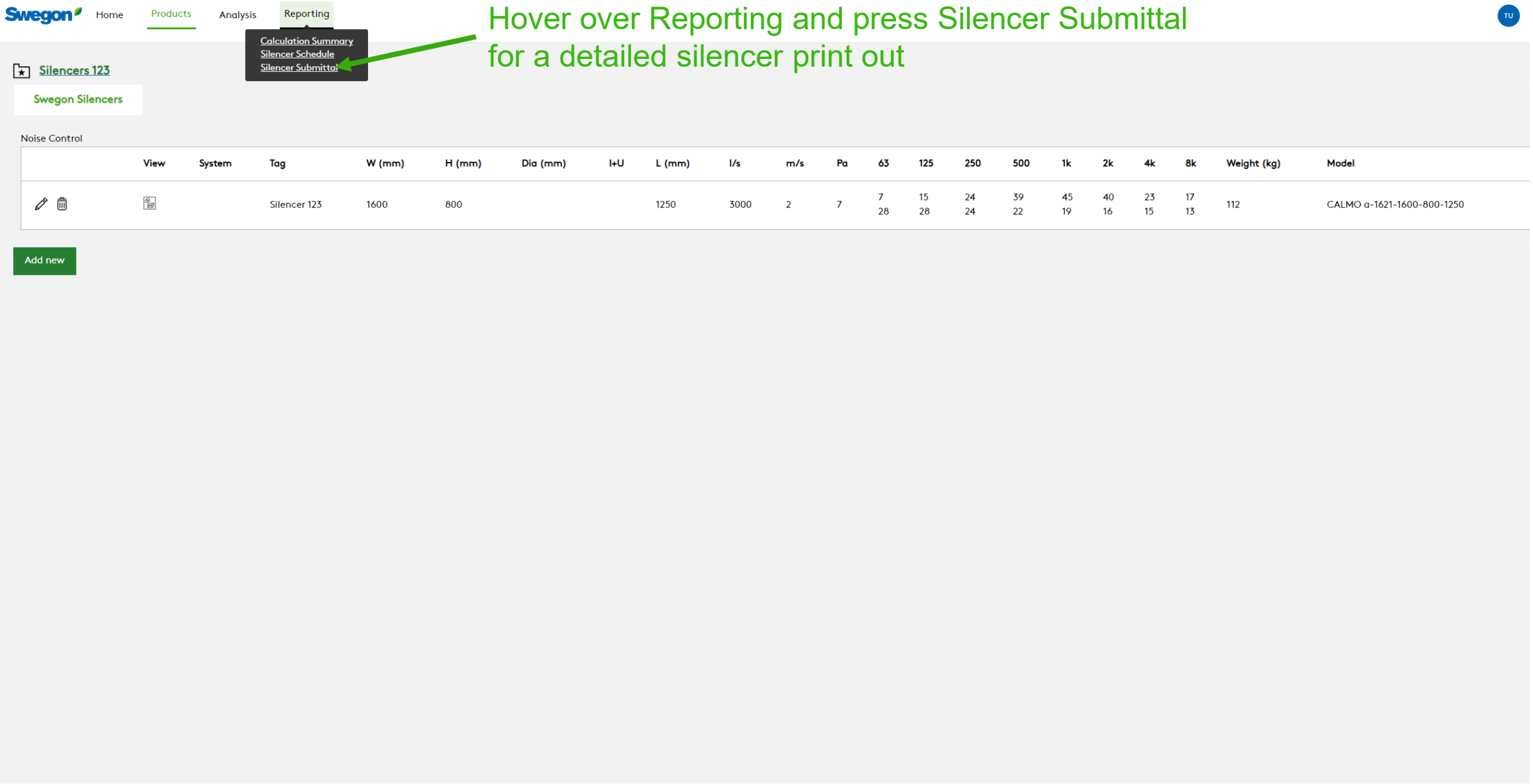
Edit

Erase

	View	System	Tag	W (mm)	H (mm)	Dia (mm)	I+U	L (mm)	l/s	m/s	Pa	63	125	250	500	1k	2k	4k	8k	Weight (kg)	Model
			Silencer 123	1600	800			1250	3000	2	7	7 28	15 28	24 24	39 22	45 19	40 16	23 15	17 13	112	CALMO a-1621-1600-800-1250

Add new

Press add new to add more silencers


Swegon
Home
Products
Analysis
Reporting
Calculation Summary
Silencer Schedule
Silencer Submittal
TU
Hover over Reporting and press Silencer Submittal
for a detailed silencer print out
Silencers 123
Swegon Silencers
Noise Control
View
System
Tag
W (mm)
H (mm)
Dia (mm)
I+U
L (mm)
l/s
m/s
Pa
63
125
250
500
1k
2k
4k
8k
Weight (kg)
Model
Silencer 123
1600
800
1250
3000
2
7
7
28
15
28
24
24
39
22
45
19
40
16
23
15
17
13
112
CALMO a-1621-1600-800-1250
Add new

Product name

Tag

Quick Facts

Dimensions and weight

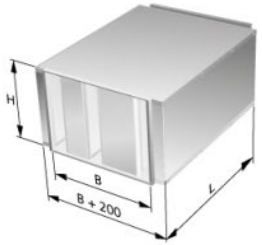
Pressure drop at current system effects and air flow

Sound calculation

Silencer Submittal

Project: Silencers 123

CALMO a-1621-1600-800-1250



Path

Position

Silencer 123

Quick facts

- Included in the MagiCAD database
- Excellent aerodynamic characteristics
- Available with cleaning cover
- Available in an insulated version with 50 mm thick fire-resistant stone wool
- Connection sizes ranging from 400x300 to 2200x2200
- Remarkably space-saving rectangular sound attenuator
- Extremely low pressure drop via tapered acoustic baffle surfaces
- Type-approved, environmentally friendly sound attenuating material, ISOVER Cleantec® PLUS
- ISOVER Cleantec® PLUS is cleanable using a wet method.

General

- The CALMO is, due to its unique design with connections facing the side baffles, suitable for use both in ducts and in direct connection to ventilation units.

Dimensions

Width, B	1600mm
Height, H	800mm
Length, L	1250mm
Weight	111.57kg

Data

Inlet	Axial Fan
Outlet	Radius Elbow with no turning vanes
Air flowl/s	3000
Velocity(m/s)	2
Pressure drop(Pa)	14

Frequency band	63	125	250	500	1k	2k	4k	8k	Sum db(A)
Lw before attenuator	89	88	88	87	86	85	84	82	92
Attenuation (Ld)	7	15	24	39	45	40	23	17	
Sound generation (Lw)	28	28	24	22	19	16	15	13	
Lw after attenuator	82	73	64	48	41	45	61	65	67

Swegon Home Products Analysis Reporting

Calculation Summary
Silencer Schedule
Silencer Submittal

TU

Hover over Reporting and click Silencer Schedule for a print out of the listed silencers below

Silencers 123

Swegon Silencers

Noise Control

	View	System	Tag	W (mm)	H (mm)	Dia (mm)	l+U	L (mm)	l/s	m/s	Pa	63	125	250	500	1k	2k	4k	8k	Weight (kg)	Model
			Silencer 1	1600	800			1250	3000	2	7	7 28	15 28	24 24	39 22	45 19	40 16	23 15	17 13	112	CALMO a-1621-1600-800-1250
			Silencer 2	236	177	125		1000	100	8	19	7 27	16 27	23 23	39 21	50 18	50 15	47 14	35 12	7	CLA-A-125-1000
			Silencer 3	1000	400		300	1300	1300	3	30	8 22	16 22	26 18	31 16	42 13	34 < 10	23 < 10	23 < 10	48	LENTO a-1032-1000-400-300
			Silencer 4	2000	1200			1950	8000	3	24	5 20	11 20	27 16	39 14	39 11	34 < 10	24 < 10	17 < 10	472	FACILE a-2030-2000-1200-1950

Add new

Silencer Schedule

Project: Silencers 123

Tag	Model	Dia/WxH (mm)	L/I+U (mm)	Weight (kg)	l/s	Pa		63	125	250	500	1k	2k	4k	8k
Silencer 1	CALMO a-1621-1600-800-1250	1600 x 800	1250	111.57	3000	7	Lw	28	28	24	22	19	16	15	13
							Ld	7	15	24	39	45	40	23	17
Silencer 2	CLA-A-125-1000	125	1000	7.2	100	19	Lw	27	27	23	21	18	15	14	12
							Ld	7	16	23	39	50	50	47	35
Silencer 3	LENTO a-1032-1000-400-300	1000 x 400	300	48.35	1300	30	Lw	22	22	18	16	13	<10	<10	<10
							Ld	8	16	26	31	42	34	23	23
Silencer 4	FACILE a-2030-2000-1200-1950	2000 x 1200	1950	472.49	8000	24	Lw	20	20	16	14	11	<10	<10	<10
							Ld	5	11	27	39	39	34	24	17

Tips and Tricks

Search silencer using required insertion loss

Silencer Selection

Add required insertion loss on the Calculated Insertion loss row

Identity

Tag: Silencer 1

Quantity: 1

Dimensions & Airflow

Shape: Rectangular/CALMO

Duct Width: 1600 mm

Duct Height: 800 mm

Max Length: 1250 mm

Silencer Flow Rate: 0 l/s

Velocity: 0 m/s

Maximum Pressure Drop: 87.18 Pa

System Effects

Silencer Inlet Condition: Ideal Outlet Conditions - 3 to 4 diameters of straight duct

Diameter from Silencer: 0

Transition Length:

Required Insertion Loss

Frequency	dBA	63	125	250	500	1k	2k	4k	8k
Sound Before Attenuator	7	0	0	0	0	0	0	0	0
Required Insertion Loss	**29**	**6**	**14**	**18**	**20**	**25**	**24**	**13**	**8**
Calculated Insertion Loss		6	14	18	20	25	24	13	8
Safety Factor		0	0	0	0	0	0	0	0

Silencer Selection

This silencer meets the required insertion loss (all figures are black)

					Octave Midband Frequency, Hz							
Model	**L**	**PD**	**w/SE**	**A**	**63**	**125**	**250**	**500**	**1k**	**2k**	**4k**	**8k**
CALMO a-1621-1600-800-1250	1250	0	0		7	15	24	39	45	40	23	17
Generated Noise					<10	<10	<10	<10	<10	<10	<10	<10
End Result				7	1	0	0	0	0	0	0	0
CALMO a-1611-1600-800-650	650	0	0		5	10	15	23	27	27	15	10
Generated Noise					<10	<10	<10	<10	<10	<10	<10	<10
End Result				7	1	0	0	0	0	0	0	0
CALMO a-1622-1600-800-1250	1250	0	0		4	9	16	21	25	18	11	11
Generated Noise					<10	<10	<10	<10	<10	<10	<10	<10
End Result				7	1	1	0	0	0	0	0	0

Figures are red if they don't meet the requirement

Options

Unisunlated Cleaning Cover: None

Fire-Resistant Insulated Cleaning Cover: None

- [ ] Insulated 50mm Stone Wool
- [ ] Perforated Sheet Metal Lining
- [ ] Flange Connection

Resources

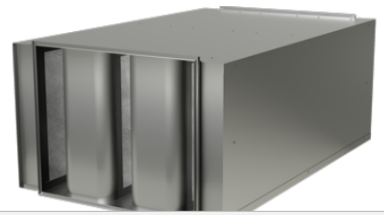
Product Sheet
Attenuator with recessed connection for rectangular ducts

Brochure
Acoustics Overview

Instruction
Installation, commissioning, maintenance

Quality
Approval 2706/92, Duct insulation
Building product declaration

Image



Cancel | Create

Silencer Selection

Identity

Tag

Tag is required

Quantity

1

Dimensions & Airflow

Shape

Rectangular

Duct Width

150 mm

Duct Height

150 mm

Max Length

650 mm

Silencer Flow Rate

0 l/s

Velocity

0 m/s

Maximum Pressure Drop

87.18 Pa

System Effects

Silencer Inlet Condition

Ideal Outlet Conditions - 3 to 4 diameters of straight duct

Diameter from Silencer

0

Transition Length

Required Insertion Loss

Frequency	dBA	63	125	250	500	1k	2k	4k	8k
Sound Before Attenuator	7	0	0	0	0	0	0	0	0
Required Insertion Loss	**7**	-	-	-	-	-	-	-	-
Calculated Insertion Loss		0	0	0	0	0	0	0	0
Safety Factor		0	0	0	0	0	0	0	0

Silencer Selection

					Octave Midband Frequency, Hz							
Model	**L**	**PD**	**w/SE**	**A**	**63**	**125**	**250**	**500**	**1k**	**2k**	**4k**	**8k**
MORENDO a-0151-150-150-650	650	0	0		3	7	15	25	34	34	21	17
Generated Noise					<10	<10	<10	<10	<10	<10	<10	<10
End Result				7	2	1	0	0	0	0	0	0

Links to documents for the selected silencer

Options

Unisunlated Cleaning Cover

None

Fire-Resistant Insulated Cleaning Cover

None

- ☐ Insulated 50mm Stone Wool
- ☐ Perforated Sheet Metal Lining
- ☐ Flange Connection

Resources

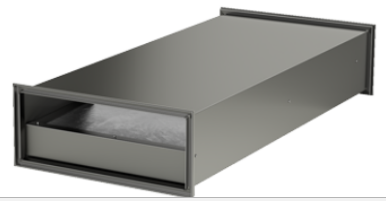
Product Sheet
Rectangular sound attenuator with low build-in heights

Brochure
Acoustics Overview

Instruction
Installation, commissioning, maintenance

Quality
Approval 2706/92, Duct insulation
Building product declaration

Image



Cancel Create

Swegon