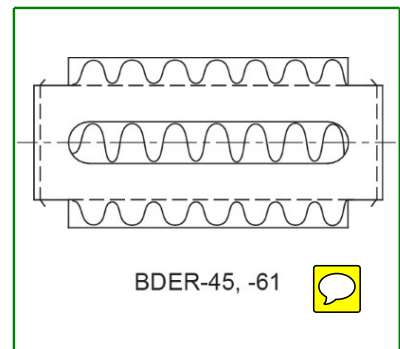
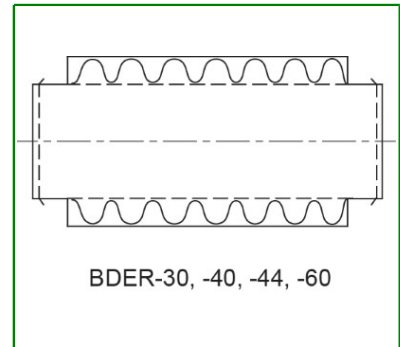


## Round sound absorber for round ducts BDER



The sound absorber BDER is used in round general-ventilation ducts. The maximum air velocity through absorbers BDER-30, -40, -44 and -60 is approx. 10 m/s, the recommended velocity rate being less than 5 m/s. With baffle-equipped absorbers BDER-45 and -61, the maximum air velocity before the absorber is 6 m/s (size 031) or 7 m/s (sizes 040 - 063), and the recommended velocity rate through the absorber is 3 or 3.5 m/s respectively.

### Product Facts

- Type approval for strength and leakage - Sitac / Svenskt Byggsökännande AB, No. 1718/88, tightness class D (EN 12237)
- Acoustic performance in accordance with ISO 7235
- Polyester absorbers certified for cleanliness class M1
- Made of hot-dip galvanised sheet metal with a Z275 coating, corrosion category C2 (EN-ISO 12944-2)
- Absorbing materials polyester and mineral wool

### Product code example

Sound absorber BDER-30-016-060

# Round sound absorber for round ducts BDER

## Description

The sound absorber BDER is used in round general-ventilation ducts.

The maximum air velocity through absorbers BDER-30, -40, -44 and -60 is approx. 10 m/s, the recommended velocity rate being less than 5 m/s. With baffle-equipped absorbers BDER-45 and -61, the maximum air velocity before the absorber is 6 m/s (size 031) or 7 m/s (sizes 040 - 063), and the recommended velocity rate through the absorber is 3 or 3.5 m/s respectively.

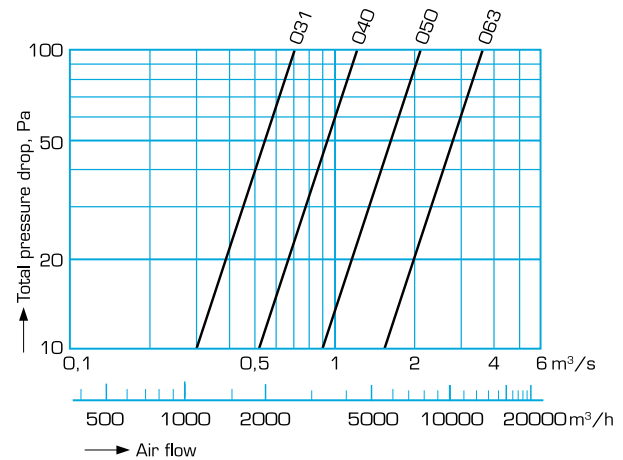
- Type approval for strength and leakage - Sitac / Svenskt Byggsökännande AB, No. 1718/88, tightness class D (EN 12237)

- Acoustic performance in accordance with ISO 7235
- Polyester absorbers certified for cleanliness class M1
- Made of hot-dip galvanised sheet metal with a Z275 coating, corrosion category C2 (EN-ISO 12944-2)
- Absorbing materials polyester and mineral wool

<b>BDER-40</b>	straight M1-certified sound absorber with 50 mm polyester fibre filling
<b>BDER-44</b>	straight M1-certified sound absorber with 100 mm polyester fibre filling
<b>BDER-45</b>	straight M1-certified sound absorber with 100 mm polyester fibre filling and a 100 mm baffle
<b>BDER-30</b>	straight sound absorber with 50 mm mineral wool filling, fire resistance class EI 30 *) (SITAC 2525/80)
<b>BDER-60</b>	straight sound absorber with 100 mm mineral wool filling, fire resistance class EI 60 *) (SITAC 2525/80)
<b>BDER-61</b>	straight sound absorber with 100 mm mineral wool filling and a 100 mm baffle, fire resistance class EI 60 *) (SITAC 2525/80)

\*) provided that the safety distance to an escape route and combustible material is at least that specified in the tables below (Swedish Fire Regulation BBR 5:6213)

## Pressure drop BDER-45, BDER-61



The pressure drop across other sound absorbers is the same as that of an equivalent length of ducting.

## Installation, handling and storage

BDER is a Veloduct component. Please see the installation, handling and storage instructions for the Veloduct / Ekoduct ducting system.

## Operation and maintenance

The product can be used without any maintenance other than cleaning, which should be done with a nylon brush as part of normal duct cleaning. The frequency of cleaning should be the same as that specified for the entire ventilation system.

## Packaging

Normally packed in cardboard, with the ends covered in plastic. The packaging may vary depending on the number and size of the products ordered.

## Disposal

The metal casings can be recycled as metal, the fillings are landfill waste.

## Product code

**Sound absorber**  
**BDER-aa-bbb-ccc**

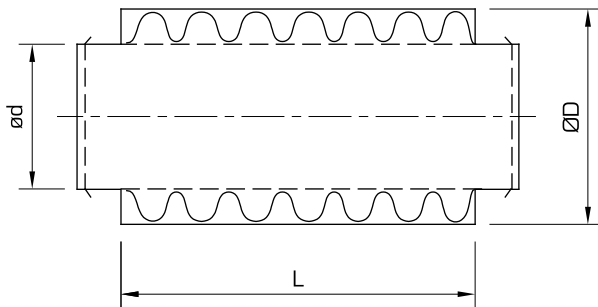
Model (aa)  
30, 40, 44, 45, 60, 61

Size, cm (bbb)

Length, cm (ccc)

## BDER-30

### Dimensions and weight, BDER-30



BDER-30 size - length	Ød	Dimensions (mm)			Weight (kg)	Ei30 2,5 kW safety distance
		L	ØD			
008	-030	80	300	200	1,7	60
	-060	80	600	200	3,0	60
010	-030	100	300	200	2,0	60
	-060	100	600	200	3,8	60
	-090	100	900	200	5,7	60
	-120	100	1200	200	7,0	80
012	-030	125	300	225	2,1	80
	-060	125	600	225	4,5	80
	-090	125	900	225	6,3	80
	-120	125	1200	225	8,7	80
016	-030	160	300	260	2,9	80
	-060	160	600	260	5,1	80
	-090	160	900	260	7,8	80
	-120	160	1200	260	10,5	100
020	-060	200	600	300	6,2	100
	-090	200	900	300	10,0	100
	-120	200	1200	300	12,0	100
025	-060	250	600	355	7,8	100
	-090	250	900	355	11,5	100
	-120	250	1200	355	14,5	200
031	-060	315	600	415	9,1	200
	-090	315	900	415	13,1	200
	-120	315	1200	415	17,2	220
040	-090	400	900	500	18,3	220
	-120	400	1200	500	23,5	220
050	-090	500	900	630	24,7	220
	-120	500	1200	630	31,2	220

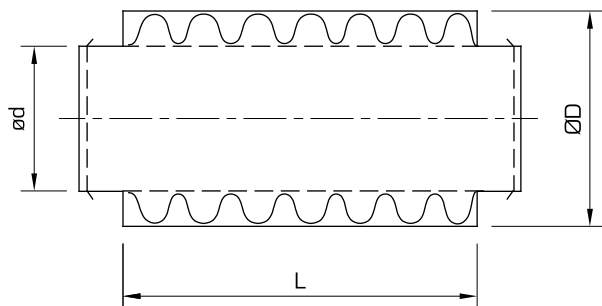
# BDER-30

## Sound attenuation, BDER-30

BDER-30 size - length		Attenuation (dB)							
		Mid frequency (Hz)							
		63	125	250	500	1000	2000	4000	8000
008	-030	6	4	9	20	24	28	35	17
	-060	9	5	13	31	38	41	41	23
010	-030	4	5	8	17	20	26	30	16
	-060	11	7	12	29	37	45	42	23
	-090	11	9	17	39	44	47	45	29
	-120	11	11	21	40	49	48	46	31
012	-030	3	5	6	14	16	21	21	14
	-060	4	7	10	25	30	39	36	19
	-090	6	8	13	35	44	47	45	24
	-120	5	9	17	40	47	48	47	31
016	-030	1	2	4	11	13	20	16	12
	-060	3	5	7	21	24	35	27	17
	-090	6	6	9	30	36	46	33	21
	-120	6	6	12	33	42	45	40	25
020	-060	3	3	6	19	22	30	20	16
	-090	7	5	9	26	29	42	27	20
	-120	7	6	11	34	37	50	33	23
025	-060	7	2	4	15	18	25	17	16
	-090	6	3	6	21	26	34	21	19
	-120	6	4	8	28	34	41	25	22
031	-060	1	2	4	12	16	19	15	14
	-090	3	3	5	18	24	25	17	16
	-120	3	3	7	20	26	30	20	17
040	-090	2	2	6	20	22	21	18	15
	-120	3	2	7	25	29	25	21	17
050	-090	3	1	5	19	19	13	15	11
	-120	3	2	7	23	24	17	17	12
Tolerance ±		6	3	2	2	2	2	2	3

## BDER-40

### Dimensions and weight, BDER-40



BDER-40 size - length		Ød	Dimensions (mm)		Weight (kg)
			L	ØD	
008	-030	80	300	200	1,4
	-060	80	600	200	2,5
010	-030	100	300	200	2,1
	-060	100	600	200	3,3
	-090	100	900	200	3,7
	-120	100	1200	200	4,7
012	-030	125	300	225	1,9
	-060	125	600	225	3,7
	-090	125	900	225	4,9
	-120	125	1200	225	5,5
016	-030	160	300	260	2,6
	-060	160	600	260	3,6
	-090	160	900	260	5,9
	-120	160	1200	260	6,4
020	-060	200	600	300	5,2
	-090	200	900	300	7,7
	-120	200	1200	300	7,6
025	-060	250	600	355	6,5
	-090	250	900	355	9,9
	-120	250	1200	355	11,9
031	-060	315	600	415	7,6
	-090	315	900	415	10,8
	-120	315	1200	415	14,2
040	-090	400	900	500	15,0
	-120	400	1200	500	18,8
050	-090	500	900	630	20,6
	-120	500	1200	630	25,9

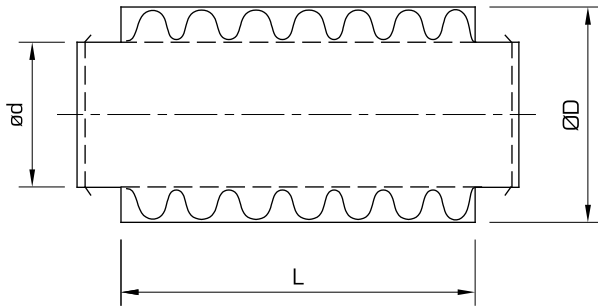
# BDER-40

## Sound attenuation, BDER-40

BDER-40 size - length		Attenuation (dB)							
		Mid frequency (Hz)							
		63	125	250	500	1000	2000	4000	8000
008	-030	6	4	9	14	18	22	17	15
	-060	8	7	14	21	27	36	29	22
010	-030	3	5	9	10	14	20	15	13
	-060	12	9	13	18	25	37	27	21
	-090	14	12	18	24	32	43	34	26
	-120	15	14	23	30	39	45	40	30
012	-030	4	5	7	9	13	19	11	12
	-060	3	8	11	16	21	29	18	17
	-090	7	10	15	23	30	39	25	23
	-120	7	11	20	29	37	45	32	27
016	-030	1	2	4	8	12	17	10	11
	-060	3	5	8	13	19	25	16	16
	-090	6	7	11	19	26	32	20	20
	-120	8	8	15	24	32	38	25	22
020	-060	2	4	7	13	16	21	14	16
	-090	7	6	10	18	24	27	17	19
	-120	8	7	13	21	29	32	21	22
025	-060	7	3	5	10	14	17	13	15
	-090	7	4	7	15	21	23	16	19
	-120	7	5	9	20	27	26	19	22
031	-060	1	2	4	9	15	13	10	13
	-090	3	3	6	13	20	18	14	16
	-120	3	4	8	15	24	21	16	17
040	-090	3	3	5	14	18	15	15	15
	-120	3	3	6	18	22	18	17	17
050	-090	4	2	3	13	14	10	13	11
	-120	4	3	5	17	17	12	14	13
Tolerance ±		6	3	2	2	2	2	2	3

## BDER-60

### Dimensions and weight, BDER-60



BDER-60 size - length		Ød	Dimensions (mm)		Weight (kg)	EI30 2,5 kW safety distance	EI60 2,5 kW safety distance
			L	ØD			
010	-030	100	300	300	3,4	0	0
	-060	100	600	300	6,0	0	0
	-090	100	900	300	9,8	0	0
	-120	100	1200	300	12,7	0	100
012	-030	125	300	315	4,1	0	100
	-060	125	600	315	7,9	0	100
	-090	125	900	315	11,6	0	100
	-120	125	1200	315	13,3	0	100
016	-030	160	300	355	4,8	0	100
	-060	160	600	355	8,5	0	100
	-090	160	900	355	12,8	0	100
	-120	160	1200	355	16,0	0	100
020	-060	200	600	400	10,2	0	100
	-090	200	900	400	14,8	0	100
	-120	200	1200	400	19,5	0	100
025	-060	250	600	450	11,7	0	100
	-090	250	900	450	16,8	0	100
	-120	250	1200	450	21,4	0	200
031	-060	315	600	515	13,8	0	200
	-090	315	900	515	21,1	0	200
	-120	315	1200	515	25,8	0	370
040	-090	400	900	630	29,8	0	370
	-120	400	1200	630	35,3	0	370
050	-090	500	900	711	34,5	0	370
	-120	500	1200	711	44,2	0	370
063	-090	630	900	812	38,7	0	370
	-120	630	1200	812	47,7	0	370

## BDER-60

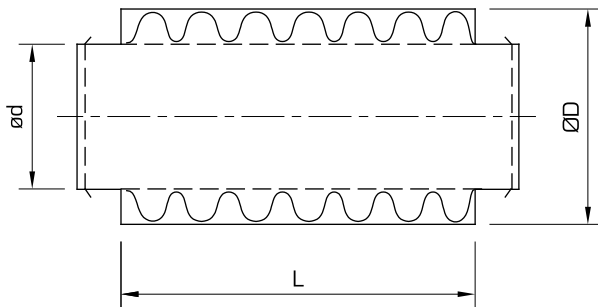
### Sound attenuation, BDER-60

BDER-60 size - length		Attenuation (dB)							
		Mid frequency (Hz)							
		63	125	250	500	1000	2000	4000	8000
010	-030	10	8	11	14	17	24	29	17
	-060	16	12	20	27	33	43	44	24
	-090	18	16	27	35	44	47	46	27
	-120	18	21	30	36	43	47	45	32
012	-030	3	7	8	12	15	20	22	14
	-060	8	11	15	23	29	38	37	21
	-090	10	14	21	33	42	49	45	26
	-120	13	17	27	39	49	49	48	32
016	-030	2	5	6	9	12	19	17	13
	-060	5	7	13	17	22	33	28	18
	-090	9	10	21	28	34	47	34	21
	-120	11	13	24	34	43	49	42	26
020	-060	7	6	13	17	20	29	21	16
	-090	9	9	20	23	29	43	26	19
	-120	11	11	25	31	36	48	33	23
025	-060	9	4	10	12	15	25	19	17
	-090	8	7	15	19	24	34	22	20
	-120	10	8	19	25	30	38	26	22
031	-060	2	5	8	12	16	19	15	14
	-090	4	6	12	17	23	26	18	16
	-120	5	7	16	19	27	30	21	17
040	-090	4	7	11	19	22	21	19	15
	-120	5	9	15	24	27	25	21	17
050	-090	4	6	8	16	18	15	16	11
	-120	4	8	11	21	23	18	18	13
063	-090	3	3	6	13	13	12	7	7
	-120	5	5	8	16	16	14	9	9
Tolerance ±		6	3	2	2	2	2	2	3



## BDER-44

### Dimensions and weight, BDER-44



BDER-44 size - length		Ød	Dimensions (mm)		Weight (kg)
			L	ØD	
010	-030	100	300	300	2,6
	-060	100	600	300	4,3
	-090	100	900	300	6,3
	-120	100	1200	300	9,7
012	-030	125	300	315	3,3
	-060	125	600	315	5,6
	-090	125	900	315	7,9
	-120	125	1200	315	10,4
016	-030	160	300	355	3,9
	-060	160	600	355	6,4
	-090	160	900	355	9,4
	-120	160	1200	355	12,0
020	-060	200	600	400	7,5
	-090	200	900	400	10,6
	-120	200	1200	400	13,8
025	-060	250	600	450	8,9
	-090	250	900	450	12,4
	-120	250	1200	450	16,4
031	-060	315	600	515	10,2
	-090	315	900	515	14,4
	-120	315	1200	515	19,1
040	-090	400	900	630	22,4
	-120	400	1200	630	28,0
050	-090	500	900	711	26,0
	-120	500	1200	711	42,6
063	-090	630	900	812	30,5
	-120	630	1200	812	21,4

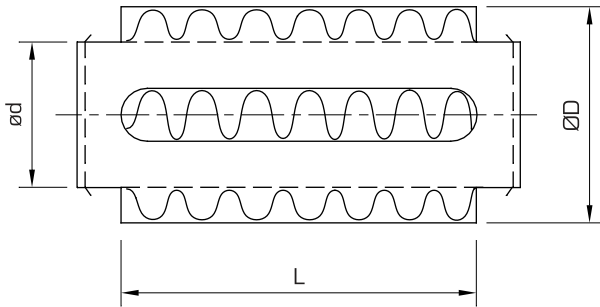
## BDER-44

### Sound attenuation, BDER-44

BDER-44 size - length		Attenuation (dB)							
		Mid frequency (Hz)							
		63	125	250	500	1000	2000	4000	8000
010	-030	13	10	16	19	26	22	23	14
	-060	18	14	20	27	34	34	35	21
	-090	20	19	27	36	45	46	44	27
	-120	17	23	28	36	42	46	45	32
012	-030	3	8	12	18	23	19	16	13
	-060	8	12	16	24	31	30	29	19
	-090	10	16	25	33	43	41	39	25
	-120	12	20	28	36	47	46	44	29
016	-030	2	6	10	17	20	16	13	11
	-060	6	10	13	22	28	25	22	18
	-090	10	13	20	30	39	35	29	21
	-120	11	16	24	36	47	43	37	25
020	-060	8	8	12	22	26	21	18	16
	-090	11	11	18	29	36	29	24	20
	-120	11	14	20	34	43	34	28	22
025	-060	9	6	9	20	21	18	17	17
	-090	10	8	13	27	28	23	20	20
	-120	11	10	15	31	35	27	23	22
031	-060	2	5	9	18	19	14	14	13
	-090	5	7	13	22	25	19	17	16
	-120	5	8	15	20	26	21	19	17
040	-090	4	5	10	24	19	17	18	15
	-120	4	6	12	26	22	19	20	18
050	-090	5	4	8	25	16	12	15	12
	-120	5	6	10	29	18	14	18	14
063	-090	4	3	6	20	12	9	7	6
	-120	5	4	8	23	14	10	8	8
Tolerance ±		6	3	2	2	2	2	2	3

## BDER-61

### Dimensions and weight, BDER-61



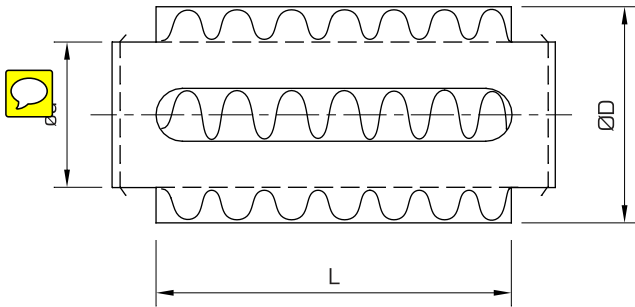
BDER-61 size - length		Ød	Dimensions (mm)		Weight (kg)	EI30 2,5 kW safety distance	EI60 2,5 kW safety distance
			L	ØD			
031	-060	315	600	515	16,6	0	180
	-090	315	900	515	20,5	0	180
	-120	315	1200	515	31,3	180	360
040	-090	400	900	630	33,9	180	360
	-120	400	1200	630	42,7	180	360
050	-090	500	900	711	39,6	180	360
	-120	500	1200	711	53,7	180	360
063	-090	630	900	812	47,2	180	360
	-120	630	1200	812	57,5	180	360

### Sound attenuation, BDER-61

BDER-61 size - length		Attenuation (dB)							
		Mid frequency (Hz)							
		63	125	250	500	1000	2000	4000	8000
031	-060	4	6	12	21	28	36	33	23
	-090	5	9	18	25	35	41	41	27
	-120	7	11	24	25	34	43	44	32
040	-090	5	8	16	27	32	40	28	22
	-120	6	11	20	34	42	44	34	24
050	-090	5	8	11	25	29	30	23	17
	-120	5	10	15	28	32	34	26	18
063	-090	4	4	8	18	21	21	12	11
	-120	5	6	10	21	26	25	15	14
Tolerance ±		6	3	2	2	2	2	2	3

# BDER-45

## Dimensions and weight, BDER-45



BDER-45 size - length		Ød	Dimensions (mm)		Weight (kg)
			L	ØD	
031	-060	315	600	515	13,0
	-090	315	900	515	18,4
	-120	315	1200	515	24,4
040	-090	400	900	630	27,6
	-120	400	1200	630	34,4
<b>050</b>	-090	500	900	711	32,0
	<b>-120</b>	<b>500</b>	<b>1200</b>	<b>711</b>	<b>40,0</b>
063	-090	630	900	812	35,2
	-120	630	1200	812	44,3

## Sound attenuation, BDER-45

BDER-45 size - length		Attenuation (dB)							
		Mid frequency (Hz)							
		63	125	250	500	1000	2000	4000	8000
031	-060	4	6	11	22	28	25	26	22
	-090	6	10	15	25	34	33	33	26
	-120	8	12	19	22	32	38	39	32
040	-090	5	7	12	29	33	29	27	21
	-120	6	9	16	33	38	32	31	25
<b>050</b>	-090	6	7	10	29	30	24	22	17
	<b>-120</b>	<b>7</b>	<b>8</b>	<b>13</b>	<b>31</b>	<b>30</b>	<b>23</b>	<b>24</b>	<b>19</b>
063	-090	5	4	7	20	21	15	11	11
	-120	5	6	9	24	23	16	13	13
Tolerance ±		6	3	2	2	2	2	2	3