SILENCERS

For ventilation of chemical process air





Application Effect

- Sound insulation in pipelines
- The thickness of the sound insulation depends on the length and the packing thickness.



beck silencers are designed for effective use in ventilation systems. Various thermoplastic materials, such as PVC, PVC-UV, PP, PPs, PPs-el and PE, are available for both the outer pipe and the perforated inner pipe. These are particularly suitable for chemically contaminated exhaust air.

beck silencers are made from high-quality materials. The specified sound insulation values have been tested in-house and confirmed by accredited laboratories.



Product range Design Variants Portfolio

The choice of silencer and insulating material depends on the properties of the chemical process air.

For chemical contamination or moisture in the exhaust air, mineral wool is a good choice of insulating material. The non-flammable mineral wool (DIN 4201) is permanently protected against moisture by a chemically resistant plastic film. Our mineral wool silencers are supplied with packing thicknesses of 50 and 100, as well as with a nominal diameter of 110 to 400 and a length of 750 to 1,500.

For applications with low chemical contamination and minimal moisture in the exhaust air, silencers with non-flammable insulating foam (DIN 4201) can be used.

Our insulating foam silencers are supplied with a packing thickness of 50, as well as with a nominal diameter of 110 to 400 and a length of 750 to 1,500.

How a silencer works

Sound energy

→ in -

Heat energy

By absorbing the sound energy, the sound propagation in the pipelines and building outlets is converted into heat energy.

Sound insulation thickness

Regulated by two parameters

Silencer length

Packing thickness

750 mm

1,000 mm

1,250 mm

1,500 mm

Sound insulation values Insertion loss in conformity with DIN EN ISO 7235

Our table "Nominal width selection diagram" on page 127 of the Technical Catalogue will help you simply and accurately determine diameters based on volume flow and flow velocity.

Length: 750 mm	Octave mid frequency [Hz]					
d	125	250	500	1,000	2,000	4,000
0110-07,5	9	17	27	29	23	15
0125-07,5	8	16	26	28	21	15
0140-07,5	7	14	21	23	17	10
0160-07,5	7	13	20	21	18	17
0180-07,5	5	12	19	21	15	10
0200-07,5	4	11	18	19	15	9
0225-07,5	4	10	16	18	13	7
0250-07,5	4	9	14	17	12	7
0280-07,5	3	7	13	14	9	4
0315-07,5	3	6	12	13	7	3
0355-07,5	2	6	13	14	9	3
0400-07,5	1	6	8	7	3	1

Length: 1,000 mm	Octave mid frequency [Hz]					
d	125	250	500	1,000	2,000	4,000
0110-10	13	24	34	35	28	15
0125-10	11	20	30	34	26	16
0140-10	9	18	29	31	24	13
0160-10	9	15	27	31	26	14
0180-10	8	15	26	28	20	11
0200-10	6	13	25	27	19	12
0225-10	5	12	21	23	16	8
0250-10	6	11	21	23	17	9
0280-10	4	10	19	21	12	5
0315-10	4	8	16	17	9	4
0355-10	2	7	13	14	10	4
0400-10	2	7	11	9	4	2

Length: 1,250 mm	Octave mid frequency [Hz]					
d	125	250	500	1,000	2,000	4,000
0110-15	18	27	37	40	32	20
0125-15	16	25	35	37	30	19
0140-15	11	21	33	34	26	17
0160-15	11	19	31	33	27	19
0180-15	10	18	29	31	25	14
0200-15	10	16	29	30	24	13
0225-15	6	15	25	26	19	10
0250-15	9	13	25	26	19	12
0280-15	6	12	24	25	16	9
0315-15	4	11	18	20	10	4
0355-15	4	9	16	17	12	4
0400-15	3	9	13	10	6	3

Length: 1,500 mm	Octave mid frequency [Hz]					
0110-15	21	33	42	45	35	25
0125-15	20	29	39	44	34	25
0140-15	16	25	39	43	30	21
0160-15	13	23	38	41	29	19
0180-15	10	21	34	36	27	16
0200-15	11	19	34	35	26	15
0225-15	8	16	30	33	23	13
0250-15	8	16	28	30	20	12
0280-15	6	14	27	28	17	8
0315-15	5	12	23	25	15	5
0355-15	4	11	20	21	13	4
0400-15	4	11	16	12	7	4
0400-10	2	7	11	9	4	2



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PRICE LIST

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