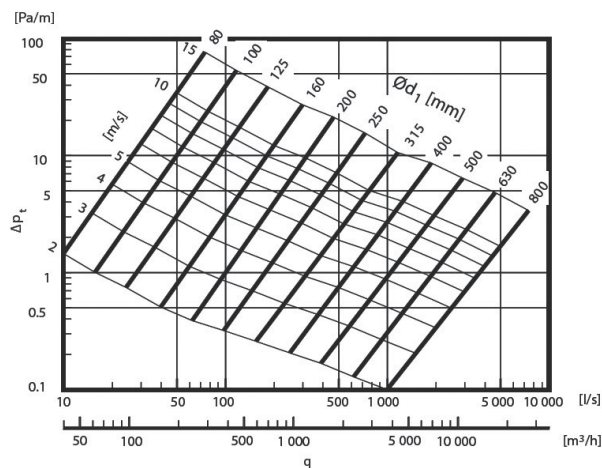


DZO silencers are mounted in round air duct systems and are easily mounted. At high noise levels, two sound dampers are mounted in the system. The housing is made of galvanized sheet metal strip, the inner partition is made of perforated galvanized sheet metal, which is filled with silencer rock wool.

Pressure drop DZO-50

Pressure drop DZO-100



Thickness 25 mm

| Type | Ø d [mm] | Ø D [mm] | Lange [mm] | Damping (dB) | | | | Octave bands (kHz) | | | | Weight m [kg] |
|--------|----------|----------|------------|--------------|-----|-----|-----|--------------------|----|----|----|---------------|
| | | | | 63 | 125 | 250 | 500 | 1 | 2 | 4 | 8 | |
| DZO-25 | 80 | 125 | 300 | 1 | 3 | 7 | 14 | 23 | 23 | 14 | 11 | 1,8 |
| DZO-25 | 80 | 125 | 600 | 1 | 5 | 8 | 19 | 32 | 45 | 27 | 14 | 2,2 |
| DZO-25 | 80 | 125 | 900 | 2 | 6 | 10 | 22 | 41 | 50 | 38 | 28 | 3,2 |
| DZO-25 | 80 | 125 | 1200 | 2 | 7 | 11 | 23 | 45 | 53 | 41 | 32 | 4,0 |
| DZO-25 | 100 | 150 | 300 | 1 | 3 | 6 | 14 | 20 | 28 | 22 | 15 | 2,6 |
| DZO-25 | 100 | 150 | 600 | 1 | 4 | 8 | 21 | 35 | 45 | 36 | 18 | 3,2 |
| DZO-25 | 100 | 150 | 900 | 1 | 5 | 10 | 27 | 45 | 50 | 44 | 27 | 4,1 |
| DZO-25 | 100 | 150 | 1200 | 1 | 6 | 10 | 29 | 51 | 51 | 48 | 29 | 5,1 |
| DZO-25 | 100 | 150 | 1500 | 2 | 5 | 11 | 30 | 52 | 51 | 49 | 30 | 6,4 |
| DZO-25 | 125 | 180 | 300 | 1 | 2 | 5 | 13 | 25 | 27 | 23 | 14 | 2,8 |
| DZO-25 | 125 | 180 | 600 | 1 | 3 | 8 | 18 | 38 | 45 | 35 | 17 | 3,5 |
| DZO-25 | 125 | 180 | 900 | 1 | 4 | 9 | 24 | 51 | 50 | 39 | 24 | 4,9 |
| DZO-25 | 125 | 180 | 1200 | 1 | 4 | 11 | 28 | 53 | 53 | 41 | 25 | 6,1 |
| DZO-25 | 125 | 180 | 1500 | 1 | 5 | 13 | 29 | 51 | 57 | 44 | 24 | 7,3 |
| DZO-25 | 160 | 200 | 600 | 1 | 2 | 6 | 17 | 31 | 43 | 21 | 15 | 4,5 |
| DZO-25 | 160 | 200 | 900 | 1 | 3 | 8 | 22 | 43 | 50 | 28 | 19 | 5,6 |
| DZO-25 | 160 | 200 | 1200 | 1 | 3 | 9 | 21 | 48 | 56 | 33 | 22 | 7,0 |
| DZO-25 | 160 | 200 | 1500 | 1 | 3 | 11 | 20 | 51 | 57 | 42 | 25 | 8,4 |
| DZO-25 | 200 | 250 | 600 | 1 | 3 | 6 | 17 | 25 | 30 | 19 | 13 | 5,1 |
| DZO-25 | 200 | 250 | 900 | 1 | 4 | 9 | 21 | 30 | 38 | 25 | 15 | 7,2 |
| DZO-25 | 200 | 250 | 1200 | 1 | 4 | 9 | 28 | 35 | 40 | 26 | 14 | 9,0 |
| DZO-25 | 200 | 250 | 1500 | 1 | 5 | 11 | 27 | 39 | 44 | 26 | 14 | 10,1 |
| DZO-25 | 250 | 300 | 600 | 1 | 2 | 5 | 14 | 34 | 26 | 15 | 11 | 6,8 |
| DZO-25 | 250 | 300 | 900 | 1 | 3 | 6 | 18 | 35 | 32 | 18 | 13 | 9,7 |
| DZO-25 | 250 | 300 | 1200 | 1 | 3 | 7 | 22 | 38 | 35 | 19 | 14 | 12,1 |
| DZO-25 | 250 | 300 | 1500 | 1 | 5 | 9 | 23 | 40 | 36 | 20 | 14 | 14,5 |
| DZO-25 | 315 | 355 | 600 | 1 | 2 | 4 | 10 | 15 | 12 | 9 | 7 | 8,9 |
| DZO-25 | 315 | 355 | 900 | 1 | 3 | 5 | 14 | 23 | 19 | 11 | 8 | 12,8 |
| DZO-25 | 315 | 355 | 1200 | 1 | 3 | 8 | 19 | 25 | 21 | 14 | 10 | 16,2 |
| DZO-25 | 315 | 355 | 1500 | 1 | 4 | 9 | 18 | 27 | 22 | 14 | 9 | 19,4 |
| DZO-25 | 400 | 450 | 600 | 1 | 1 | 3 | 6 | 7 | 4 | 3 | 2 | 11,9 |
| DZO-25 | 400 | 450 | 900 | 1 | 2 | 4 | 10 | 11 | 7 | 4 | 3 | 16,9 |
| DZO-25 | 400 | 450 | 1200 | 1 | 2 | 4 | 10 | 12 | 7 | 5 | 3 | 21,1 |
| DZO-25 | 400 | 450 | 1500 | 1 | 2 | 5 | 11 | 12 | 8 | 5 | 3 | 25,3 |
| DZO-25 | 500 | 560 | 600 | 1 | 1 | 3 | 7 | 8 | 5 | 3 | 3 | 15,1 |
| DZO-25 | 500 | 560 | 900 | 1 | 2 | 4 | 9 | 10 | 7 | 4 | 2 | 21,5 |
| DZO-25 | 500 | 560 | 1200 | 1 | 2 | 6 | 10 | 12 | 8 | 8 | 6 | 26,8 |
| DZO-25 | 500 | 560 | 1500 | 1 | 2 | 7 | 12 | 13 | 10 | 9 | 8 | 32,1 |

Thickness 50 mm

| Type | Ø d [mm] | Ø D [mm] | Lange [mm] | Damping (dB) | | | | Octave bands (kHz) | | | | Weight m [kg] |
|--------|----------|----------|------------|--------------|-----|-----|-----|--------------------|----|----|----|---------------|
| | | | | 63 | 125 | 250 | 500 | 1 | 2 | 4 | 8 | |
| DZO-50 | 80 | 180 | 300 | 2 | 6 | 11 | 19 | 32 | 31 | 28 | 19 | 3,1 |
| DZO-50 | 80 | 180 | 600 | 3 | 9 | 16 | 28 | 46 | 53 | 46 | 25 | 3,8 |
| DZO-50 | 80 | 180 | 900 | 4 | 8 | 20 | 36 | 56 | 57 | 58 | 41 | 5,5 |
| DZO-50 | 80 | 180 | 1200 | 5 | 6 | 23 | 40 | 62 | 61 | 62 | 45 | 6,9 |
| DZO-50 | 100 | 200 | 300 | 2 | 6 | 9 | 19 | 28 | 32 | 26 | 18 | 3,2 |
| DZO-50 | 100 | 200 | 600 | 3 | 8 | 13 | 25 | 40 | 50 | 40 | 21 | 4,8 |
| DZO-50 | 100 | 200 | 900 | 3 | 7 | 18 | 33 | 53 | 55 | 48 | 28 | 6,2 |
| DZO-50 | 100 | 200 | 1200 | 3 | 6 | 22 | 39 | 60 | 61 | 53 | 33 | 7,9 |
| DZO-50 | 100 | 200 | 1500 | 2 | 7 | 23 | 38 | 59 | 60 | 52 | 32 | 9,7 |
| DZO-50 | 125 | 225 | 300 | 2 | 5 | 8 | 17 | 27 | 31 | 24 | 13 | 3,3 |
| DZO-50 | 125 | 225 | 600 | 2 | 7 | 12 | 23 | 39 | 47 | 32 | 18 | 5,2 |
| DZO-50 | 125 | 225 | 900 | 1 | 6 | 16 | 29 | 53 | 52 | 39 | 24 | 7,3 |
| DZO-50 | 125 | 225 | 1200 | 1 | 5 | 18 | 37 | 60 | 59 | 52 | 28 | 9,1 |
| DZO-50 | 125 | 225 | 1500 | 1 | 8 | 20 | 36 | 63 | 59 | 46 | 31 | 10,9 |
| DZO-50 | 160 | 250 | 600 | 3 | 4 | 8 | 21 | 37 | 40 | 22 | 14 | 6,3 |
| DZO-50 | 160 | 250 | 900 | 1 | 4 | 14 | 27 | 46 | 51 | 29 | 20 | 8,9 |
| DZO-50 | 160 | 250 | 1200 | 1 | 3 | 14 | 34 | 51 | 53 | 33 | 18 | 11,1 |
| DZO-50 | 160 | 250 | 1500 | 1 | 6 | 19 | 33 | 55 | 58 | 34 | 17 | 13,4 |
| DZO-50 | 200 | 300 | 600 | 2 | 4 | 8 | 20 | 31 | 32 | 20 | 15 | 7,5 |
| DZO-50 | 200 | 300 | 900 | 1 | 4 | 13 | 25 | 32 | 40 | 24 | 18 | 10,7 |
| DZO-50 | 200 | 300 | 1200 | 1 | 4 | 13 | 32 | 51 | 48 | 28 | 17 | 13,5 |
| DZO-50 | 200 | 300 | 1500 | 1 | 7 | 18 | 31 | 38 | 46 | 28 | 17 | 15,9 |
| DZO-50 | 250 | 355 | 600 | 2 | 3 | 8 | 16 | 38 | 26 | 16 | 15 | 9,2 |
| DZO-50 | 250 | 355 | 900 | 1 | 3 | 10 | 23 | 38 | 35 | 19 | 16 | 12,8 |
| DZO-50 | 250 | 355 | 1200 | 1 | 2 | 10 | 28 | 42 | 39 | 20 | 18 | 16,5 |
| DZO-50 | 250 | 355 | 1500 | 1 | 6 | 13 | 28 | 44 | 39 | 21 | 17 | 19,8 |
| DZO-50 | 315 | 400 | 600 | 3 | 3 | 7 | 12 | 17 | 14 | 11 | 10 | 12,5 |
| DZO-50 | 315 | 400 | 900 | 1 | 3 | 9 | 17 | 25 | 20 | 14 | 13 | 17,4 |
| DZO-50 | 315 | 400 | 1200 | 2 | 3 | 12 | 24 | 37 | 23 | 17 | 15 | 22,5 |
| DZO-50 | 315 | 400 | 1500 | 1 | 6 | 11 | 21 | 30 | 23 | 16 | 14 | 26,8 |
| DZO-50 | 400 | 500 | 600 | 1 | 3 | 4 | 6 | 8 | 4 | 4 | 4 | 20,5 |
| DZO-50 | 400 | 500 | 900 | 1 | 4 | 6 | 10 | 12 | 8 | 6 | 5 | 24,8 |
| DZO-50 | 400 | 500 | 1200 | 1 | 4 | 7 | 11 | 13 | 8 | 6 | 4 | 29,2 |
| DZO-50 | 400 | 500 | 1500 | 1 | 4 | 8 | 13 | 14 | 9 | 7 | 5 | 34,8 |
| DZO-50 | 500 | 600 | 600 | 2 | 4 | 7 | 10 | 18 | 16 | 12 | 8 | 21,4 |
| DZO-50 | 500 | 600 | 900 | 2 | 5 | 8 | 12 | 23 | 18 | 19 | 15 | 25,7 |
| DZO-50 | 500 | 600 | 1200 | 2 | 6 | 10 | 13 | 24 | 19 | 20 | 16 | 29,8 |
| DZO-50 | 500 | 600 | 1500 | 1 | 6 | 12 | 15 | 25 | 23 | 21 | 14 | 35,8 |
| DZO-50 | 630 | 710 | 900 | 1 | 6 | 8 | 10 | 22 | 17 | 15 | 14 | 32,2 |
| DZO-50 | 630 | 710 | 1200 | 1 | 3 | 8 | 15 | 14 | 10 | 4 | 4 | 35,3 |
| DZO-50 | 630 | 710 | 1500 | 1 | 4 | 9 | 18 | 16 | 8 | 3 | 3 | 39,4 |
| DZO-50 | 800 | 900 | 900 | 1 | 4 | 6 | 7 | 16 | 10 | 8 | 5 | 42,3 |
| DZO-50 | 800 | 900 | 1200 | 1 | 3 | 8 | 11 | 14 | 9 | 5 | 3 | 59,5 |
| DZO-50 | 800 | 900 | 1500 | 1 | 3 | 9 | 18 | 13 | 7 | 2 | 2 | 75,5 |

Thickness 100 mm

| Type | Ø d [mm] | Ø D [mm] | Lange [mm] | Damping (dB) | | | | Octave bands (kHz) | | | | Weight m [kg] |
|---------|----------|----------|------------|--------------|-----|-----|-----|--------------------|----|----|----|---------------|
| | | | | 63 | 125 | 250 | 500 | 1 | 2 | 4 | 8 | |
| DZO-100 | 80 | 280 | 300 | 10 | 8 | 10 | 16 | 21 | 27 | 24 | 16 | 4,1 |
| DZO-100 | 80 | 280 | 600 | 12 | 13 | 19 | 27 | 37 | 50 | 46 | 24 | 6,9 |
| DZO-100 | 80 | 280 | 900 | 14 | 18 | 28 | 38 | 50 | 49 | 49 | 33 | 8,5 |
| DZO-100 | 80 | 280 | 1200 | 16 | 23 | 37 | 49 | 50 | 50 | 49 | 42 | 11,4 |
| DZO-100 | 100 | 300 | 300 | 5 | 4 | 11 | 14 | 18 | 24 | 20 | 11 | 4,5 |
| DZO-100 | 100 | 300 | 600 | 8 | 8 | 18 | 25 | 34 | 46 | 38 | 19 | 7,2 |
| DZO-100 | 100 | 300 | 900 | 11 | 5 | 28 | 36 | 50 | 50 | 48 | 26 | 10,7 |
| DZO-100 | 100 | 300 | 1200 | 14 | 14 | 32 | 47 | 50 | 50 | 48 | 33 | 12,8 |
| DZO-100 | 100 | 300 | 1500 | 16 | 18 | 35 | 49 | 50 | 50 | 48 | 35 | 15,1 |
| DZO-100 | 125 | 315 | 300 | 5 | 4 | 9 | 11 | 16 | 19 | 15 | 10 | 4,9 |
| DZO-100 | 125 | 315 | 600 | 7 | 7 | 16 | 20 | 28 | 37 | 24 | 14 | 7,2 |
| DZO-100 | 125 | 315 | 900 | 9 | 14 | 25 | 29 | 41 | 50 | 33 | 18 | 9,8 |
| DZO-100 | 125 | 315 | 1200 | 11 | 16 | 31 | 38 | 50 | 50 | 42 | 22 | 13,6 |
| DZO-100 | 125 | 315 | 1500 | 13 | 18 | 33 | 40 | 50 | 50 | 43 | 24 | 17,9 |
| DZO-100 | 160 | 355 | 600 | 5 | 6 | 13 | 16 | 23 | 28 | 15 | 12 | 9,2 |
| DZO-100 | 160 | 355 | 900 | 6 | 9 | 20 | 24 | 34 | 42 | 21 | 16 | 12,5 |
| DZO-100 | 160 | 355 | 1200 | 8 | 12 | 27 | 32 | 46 | 50 | 28 | 20 | 16,7 |
| DZO-100 | 160 | 355 | 1500 | 9 | 14 | 29 | 35 | 48 | 50 | 33 | 25 | 19,8 |
| DZO-100 | 200 | 400 | 600 | 5 | 6 | 11 | 14 | 19 | 22 | 10 | 8 | 9,6 |
| DZO-100 | 200 | 400 | 900 | 6 | 9 | 17 | 21 | 29 | 33 | 14 | 11 | 14,2 |
| DZO-100 | 200 | 400 | 1200 | 7 | 11 | 22 | 29 | 38 | 45 | 18 | 13 | 17,9 |
| DZO-100 | 200 | 400 | 1500 | 8 | 13 | 25 | 33 | 40 | 48 | 19 | 15 | 20,2 |
| DZO-100 | 250 | 450 | 600 | 6 | 5 | 10 | 11 | 16 | 16 | 8 | 7 | 9,8 |
| DZO-100 | 250 | 450 | 900 | 7 | 7 | 15 | 18 | 25 | 23 | 10 | 9 | 17,2 |
| DZO-100 | 250 | 450 | 1200 | 7 | 9 | 20 | 25 | 34 | 30 | 13 | 11 | 20,7 |
| DZO-100 | 250 | 450 | 1500 | 7 | 9 | 22 | 28 | 36 | 31 | 14 | 11 | 23,5 |
| DZO-100 | 315 | 500 | 600 | 1 | 4 | 7 | 9 | 12 | 10 | 5 | 6 | 15,4 |
| DZO-100 | 315 | 500 | 900 | 2 | 6 | 12 | 14 | 19 | 15 | 7 | 8 | 20,6 |
| DZO-100 | 315 | 500 | 1200 | 2 | 8 | 16 | 18 | 26 | 21 | 9 | 10 | 27,4 |
| DZO-100 | 315 | 500 | 1500 | 2 | 9 | 17 | 20 | 28 | 23 | 11 | 10 | 32,9 |
| DZO-100 | 400 | 600 | 600 | 1 | 5 | 7 | 10 | 12 | 9 | 8 | 4 | 19,7 |
| DZO-100 | 400 | 600 | 900 | 3 | 7 | 10 | 13 | 15 | 12 | 9 | 5 | 29,1 |
| DZO-100 | 400 | 600 | 1200 | 4 | 8 | 12 | 15 | 19 | 13 | 10 | 6 | 36,5 |
| DZO-100 | 400 | 600 | 1500 | 4 | 9 | 14 | 17 | 20 | 14 | 12 | 7 | 42,1 |
| DZO-100 | 500 | 710 | 600 | 2 | 4 | 7 | 10 | 13 | 12 | 10 | 8 | 32,2 |
| DZO-100 | 500 | 710 | 900 | 2 | 5 | 8 | 12 | 15 | 14 | 12 | 10 | 36,2 |
| DZO-100 | 500 | 710 | 1200 | 3 | 6 | 12 | 18 | 21 | 17 | 14 | 12 | 44,5 |
| DZO-100 | 500 | 710 | 1500 | 3 | 7 | 13 | 19 | 23 | 18 | 14 | 12 | 50,6 |
| DZO-100 | 630 | 800 | 900 | 2 | 5 | 8 | 11 | 11 | 12 | 9 | 7 | 47,6 |
| DZO-100 | 630 | 800 | 1200 | 3 | 5 | 11 | 16 | 15 | 15 | 11 | 9 | 57,9 |
| DZO-100 | 630 | 800 | 1500 | 3 | 6 | 12 | 18 | 16 | 16 | 12 | 10 | 65,2 |
| DZO-100 | 800 | 1000 | 900 | 2 | 3 | 5 | 7 | 4 | 3 | 4 | 4 | 70,2 |
| DZO-100 | 800 | 1000 | 1200 | 2 | 4 | 6 | 8 | 5 | 3 | 4 | 4 | 79,5 |
| DZO-100 | 800 | 1000 | 1500 | 2 | 5 | 8 | 10 | 6 | 4 | 4 | 5 | 95,6 |



The silencers are composed of flexible aluminum tubes (the inside is perforated), a sound-absorbing pack (resin-bonded mineral wool) and 2 end caps for pipe connection. The standard insulation thickness is 25 or 50 mm.

| | |
|-------------------------------|---|
| Application | Sound dampening in ventilation systems. |
| Standard lengths | 500 mm, 1000 mm, 1500 mm and 2000 mm, other lengths on request |
| Temperature resistance | -125 °C to + 200 °C |
| Fire protection | Not flammable according to DIN 4102 class A1. |
| Bending radius | $r = 3 \times \text{DN outer tube}$ |
| Other | Tubes are silicone free; Resin bonded mineral wool (asbestos free). |

| DN inner | Outside DN Insulat. 25 mm | Outside DN Insulat. 50 mm | Sound absorption (dB) at octave bands (Hz) DZG 500 mm long | | | | | | | | | | | |
|----------|---------------------------|---------------------------|--|-----|--------|------|--------|------|---------|------|---------|----|---------|------|
| | | | 125 Hz | | 250 Hz | | 500 Hz | | 1000 Hz | | 2000 Hz | | 4000 Hz | |
| | | | 25 | 50 | 25 | 50 | 25 | 50 | 25 | 50 | 25 | 50 | 25 | 50 |
| 100 | 150 | 200 | 0,50 | 1,0 | 5,0 | 11,0 | 10,0 | 16,0 | 23 | 30,0 | 42,0 | 39 | 26,0 | 22,6 |
| 125 | 180 | 224 | 0,50 | 3,0 | 5,0 | 8,8 | 10,0 | 14,5 | 23 | 28,0 | 42,0 | 29 | 25,5 | 16,0 |
| 160 | 200 | 250 | 0,40 | 1,0 | 2,4 | 6,0 | 6,0 | 12,5 | 14 | 24,0 | 31,0 | 20 | 18,0 | 12,0 |
| 200 | 250 | 300 | 0,41 | 1,1 | 2,4 | 6,0 | 4,5 | 9,8 | 10 | 24,8 | 12,2 | 14 | 5,0 | 9,3 |

| DN inner | Outside DN Insulat. 25 mm | Outside DN Insulat. 50 mm | Sound absorption (dB) at octave bands (Hz) DZG 1000 mm long | | | | | | | | | | | | | |
|----------|---------------------------|---------------------------|---|----|--------|----|--------|----|---------|----|---------|----|---------|----|---------|----|
| | | | 125 Hz | | 250 Hz | | 500 Hz | | 1000 Hz | | 2000 Hz | | 4000 Hz | | 8000 Hz | |
| | | | 25 | 50 | 25 | 50 | 25 | 50 | 25 | 50 | 25 | 50 | 25 | 50 | 25 | 50 |
| 80 | 125 | 180 | 6 | 13 | 10 | 19 | 20 | 30 | 38 | 47 | | 58 | 33 | 33 | 28 | 28 |
| 100 | 150 | 200 | 5 | 11 | 8 | 16 | 18 | 28 | 35 | 46 | 58 | 36 | 33 | 36 | 27 | 36 |
| 125 | 180 | 224 | 5 | 7 | 8 | 13 | 18 | 24 | 35 | 41 | 58 | 45 | 33 | 29 | 27 | 28 |
| 160 | 200 | 250 | 2 | 5 | 4 | 10 | 10 | 21 | 23 | 39 | 43 | 30 | 18 | 20 | 14 | 18 |
| 200 | 250 | 300 | 2 | 4 | 4 | 9 | 9 | 16 | 20 | 32 | 27 | 22 | 13 | 15 | 11 | 15 |
| 250 | 300 | 355 | 2 | 4 | 4 | 8 | 9 | 16 | 18 | 33 | 19 | 15 | 9 | 11 | 9 | 12 |
| 315 | 355 | 400 | 2 | 3 | 3 | 6 | 5 | 11 | 11 | 25 | 13 | 11 | 7 | 8 | 8 | 11 |