ABS

www.t2e.com.br | t2e@t2e.com.br

ACOUSTIC – Acoustic Blower Silencer (ABS)

The ABS (Acoustic Blower Silencer) reactive silencer is a noise attenuation and pulsation control solution specifically engineered for positive displacement (Roots-type) blowers in pneumatic conveying, aeration, and industrial air lines. Sized to meet plant noise requirements without compromising blower performance, its 100% fiber-free stainless steel construction eliminates any risk of process air contamination from rock wool or fiberglass.

Our engineering allows the unit to be configured in both Inline (-L) and Side-Entry (-S) arrangements, delivering significant noise reduction across the blower's fundamental and harmonic frequencies with low pressure drop.





Technical Features:

- Full metallic construction in AISI 304L or 316L stainless steel;
- 100% reactive attenuation effect (multi-chamber design with offset multi-tubes) — zero internal fibrous media;
- Zero risk of fiber shedding into the pneumatic conveying air stream;
- Consistent acoustic performance throughout its entire service life (will not soak, degrade, or clog);
- Available in standardized sizes from 2" to 6" (models ABS-050 through ABS-150);
- Inline (-L) or Side-Entry (-S) configurations to optimize space;
- Integrated bottom drain connection for condensate removal;
- Withstands high discharge temperatures and continuous Roots blower pulsations;
- **Ideal for food, dairy, sugar, pharmaceutical, and chemical industries;**
- **Low pressure drop (ΔP ≤ 200 mmWC);**
- **Virtually maintenance-free and suitable for wet and washdown areas.**

> **Notice:** This is an engineered solution built entirely in stainless steel and 100% free of fibers. Lower-cost alternatives exist on the market made of carbon steel packed with rock wool. We do not supply those solutions for critical processes, as fibers break loose under blower pulsation, soak up oil and moisture, and contaminate the line. The ABS is designed for plants demanding sanitary reliability, durability, and stable acoustic performance.

Copyright © 2026 T2E. All rights reserved.

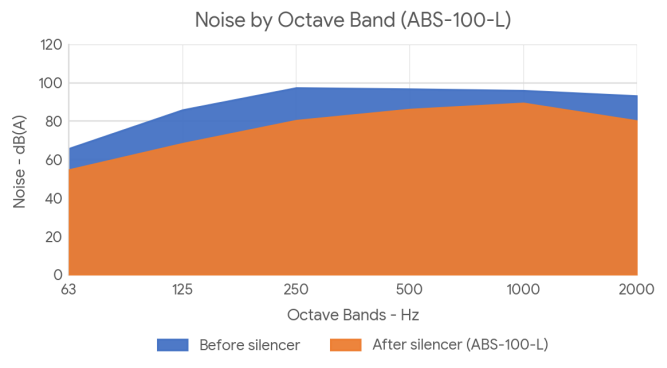
ACOUSTIC – Acoustic Blower Silencer (ABS)

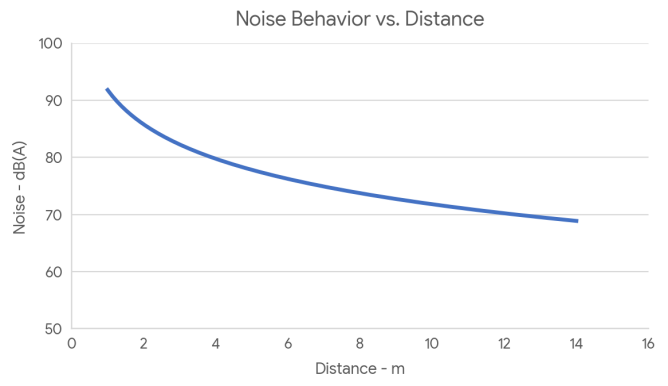
Standard Models — ABS Series (2" to 6"):

Model	Nominal Size (DN)	Shell OD (mm)	Overall Length -L (mm)	Overall Length -S (mm)	Drain
ABS-050	2"	168.3	800	700	1/2"
ABS-065	2.1/2"	219.1	900	800	1/2"
ABS-080	3"	273.0	1,050	950	1/2"
ABS-100	4"	323.9	1,200	1,100	3/4"
ABS-125	5"	406.4	1,350	1,250	3/4"
ABS-150	6"	500.0	1,550	1,450	3/4"

Practical Example:

Installation location:	4" Roots blower discharge (pneumatic conveying line)
Selected model:	ABS-100-L (Inline — 4")
Inlet air flow (FAD):	1,100 m³/h
Discharge pressure / temperature:	0.6 bar g | 95 °C
Speed / Lobes:	2,600 rpm | 3-lobe rotor (f_0 = 260 Hz)
Shell / Overall dimensions:	Ø 323.9 mm × 1,000 mm (overall length 1,200 mm)
Overall inlet noise:	102.2 dB(A)
Overall outlet noise (at 1 m):	91.8 dB(A) (~16 to 17 dB attenuation at 250–260 Hz)
Pressure drop:	179 mmWC





Prolonged exposure to loud noise without hearing protection may cause permanent hearing loss. For permissible exposure time limits, consult OSHA Safety Standards.

Copyright © 2026 T2E. All rights reserved.