

Silencers made of SIPERM® materials



Pneumatically operated machines such as compressed air motors, compressed air cylinders, pneumatic control units and pneumatic valves cause considerable noise due to effluent air which exits the devices at high speed. An accumulation of such facilities can lead to annoyance and, in the long run, damage to health of people working in this area.

The solution: Reduction of the sound emission

In the above-mentioned cases and in case of continuous air release as in air motors and explosively released air as in pistons, silencers made of SIPERM® provide an effective way to reduce the noise significantly.

Due to their long, tortuous pore channels, SIPERM® materials achieve excellent sound reduction. In the pores, the air flow is

strongly swirled, the direction of flow is split and the air flow is slowed down. While the flow speed is slowing down, the sound energy is converted to frictional heat and part of the sound wave energy is absorbed by the porous body (absorption attenuation).

With conventional SIPERM® silencers, the total sound insulation effect is up to 20 dB (A).

♦ Bronze silencers made of SIPERM® B

Silencers made of porous bronze are available in various standard versions with thread. The material provides high resistance against petrol, all kinds of oils and e.g. carbonic acid. In oxidative gases such as air, silencers can be used up to 180°C.



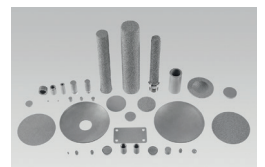
♦ Polyethylene silencers made of SIPERM® HP

Silencers made of porous polyethylene are available in various geometries. Dimensions, designs and quantities can be manufactured according to customer requirements. If necessary, the silencers can be mechanically reworked or welded. This material is advantageous due to its high chemical resistance, elasticity and low weight.



♦ Stainless steel silencers made of SIPERM® R

Silencers made of porous stainless steel have proven their worth for special challenges regarding temperature (up to 500°C), corrosion and strength. In this case as well, we manufacture customized solutions according to your drawings, e.g. with threaded connection, which can be ideally adjusted to your requirements.



Please do not hesitate to contact us!

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