

News Release

Moog brushless motor gives oxygen therapy the silent treatment

EAST AURORA, N.Y. – June 25, 2021 – For patients reliant on oxygen therapy for a severe lung disease, oxygen concentrators offer more mobility than heavy, bulky oxygen tanks. But patients say even smaller devices weighing as little as five pounds and measuring less than 12 inches wide and tall can be noisy and tiring to carry. To hurdle these challenges, Moog Industrial Controls segment, a division of Moog Inc. (NYSE: MOG.A and MOG.B), offers designers and makers of medical equipment the Silencer® BN Series Brushless DC Motors for oxygen concentrators. The smallest Silencer motor, including housing, measures 1.2 inches in diameter and 1.3 inches long. The Silencer series motors have a continuous torque ranging from 2.4 to 519 ounces per inch, speeds up to 20,000 rpm and range-rated power up to 874 watts.

“By using the compact Silencer motor series in an oxygen concentrator’s compressor system, designers can make these systems far smaller and more easily carried,” said Michael Starks, Moog’s Design Engineering Manager in Murphy (NC), “The smooth-running Silencer means low noise—hardly perceptible acoustically—for patients requiring an oxygen concentrator throughout their daily activities and at night while sleeping.”



The Silencer motors are low-noise medical technology, at left with housing and right with stator-rotor set.

Advantages over competing designs

The Silencer’s high level of efficiency also ensures a longer battery operating life for oxygen concentrators, whether running in a pulse-flow or continuous mode. Moog also designed the Silencer with high-energy magnets and exceptional winding density to not only reduce the motor’s size but also generate nearly twice as much torque as conventional stator technology.

“Along with oxygen concentrators, ventilators are an application in which medical equipment makers successfully use Silencer motors,” added Moog’s Robbie Queen, Sales Manager at Moog Murphy. “We supply the entire air blower, consisting of both motor and integrated fan.”

In addition to the Silencer motors, Moog offers machine designers precision drive technology for medical and laboratory applications such as centrifuges, filling and metering systems, shaker incubators and heart-lung machines.

For more information, please visit the [Silencer product page on www.moog.com](https://www.moog.com/Silencer)



About Moog Inc.

Moog Inc. is a worldwide designer, manufacturer and integrator of precision control components and systems. Moog Industrial Controls segment designs and manufactures high performance motion control products, solutions and services combining electric, hydraulic, and hybrid technologies with expert consultative support in a range of applications in energy, industrial machinery, simulation and test markets. We help performance-driven companies to design and develop their next-generation equipment. Moog Industrial Controls segment, which had fiscal year 2020 sales of US \$909 million and over 40 locations worldwide, is part of Moog Inc., which had fiscal year 2020 sales of US \$2.9 billion. For more information, please visit www.Moog.com

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