Press Release

Dynamic air delivery for sleep apnea and challenging technology applications

Silent centrifugal fans not only for medicine

About 2% of women and 4% of men worldwide suffer with the respiratory dysfunction obstructive sleep apnea (OSA), the remedy is a ventilation aid. The lungs of the person asleep are regularly provided sufficient air and thereby oxygen with the use of a respiratory mask. In order to establish the required air pressure, ebm-papst has developed a new centrifugal fan which has been adapted to the requirements of medical technology. The RV-45 fan (Image 1) is available in 12 V and 24 V versions, with 40 W power, a small assembly space of 64 x 64 x 55 mm, high dynamics during pressure increase and a low operating noise of just 43.5 dB(A). With this it operates very efficiently and delivers up to 540 l/min air or a pressure increase of up to 5000 Pa. All air-carrying plastic components are made up of biocompatible plastic and are physiologically safe. The fan supports the body’s own breathing reflex with targeted control of feed pressure and amount of air (Image 2). It even supports CPAP: Continuous Positive Airway Pressure, therefore constant positive pressure, as well as APAP, the automatic tuning of pressure. The BIPAP and BiLevel versions, two different pressure levels for the inhalation and exhalation process, are equally possible due to the newly developed motor which enables control with higher dynamics. Due to these features, the smooth-operating fan also lends itself to further technical areas of application in industry with high requirements for reliability and dynamics, e.g. fuel cells, smoke detectors, packaging machines and much more.

Image 1: The RV-45 fan available in 12 V and 24 V with 40 W scores with small assembly space and high dynamics.
(Source: ebm-papst)

Characters approx. 1,725; with headline and sub-heads

Links: www.ebmpapst.com/rv45
Press Release

Dynamic air delivery for sleep apnea and challenging technology applications

Silent centrifugal fans not only for medicine

About ebm-papst

The ebm-papst Group is the world’s leading manufacturer of fans and motors. Since it was founded, the technology company has continuously set global industry standards: from the digital interconnection of electronically controlled EC fans to aerodynamic improvements for fan blades to the use of eco-friendly materials.

In fiscal year 2016/17, the company achieved sales of almost €1.9 billion. ebm-papst employs over 14,000 people at 26 production sites (e.g. in Germany, China and the US) and in 49 sales offices worldwide. Fans and motors from the world market leader are used in many industries, including ventilation, air conditioning and refrigeration, household appliances, heating, automotive and drive engineering.