

P R E S S R E L E A S E

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Miniature diaphragm pumps with durability

Gardner Denver Thomas in Puchheim has once again expanded the successful product platforms of the JADE miniature diaphragm pumps. The model series Jade 1410 and 1420 are now equipped with electronically commutated motors (BLDC). This provides unique advantages for the user.

The high torque and wide speed control range of the motors makes it possible to infinitely adjust the pneumatic output of the diaphragm pumps.

Accordingly, the free volume flow of the Model 1410 can be infinitely adjusted from < 1.0 to 5.5 l/min, the twin version 1420 from < 2.0 to 11.0 l/min.

The motors are equipped with integrated control electronics and are supplied with DC voltage (12 or 24V) by means of a 4-core cable incl. plug. The motor speed and thus the pneumatic output of the pump are changed by means of the set point input. This is performed either analog from 0 to 5 VDC or by means of pulse width modulation (also PWM signal). When the pressure increases, the speed is adjusted, which gives the pump a very stiff characteristic curve. In addition, a signal which stands for the current motor speed can be used.

The completely maintenance-free pump is practically wear-free due to the electronic commutation and has a useful life of up to 20000 hours in normal operation. The ultra-light, compact, and closed construction is ideally suited for installation in various devices in medical and analytical systems, laboratory applications, or general mechanical engineering. The pumps are also already being used in fuel cells due to the fact that they have the best efficiency rating in this performance class.

The entire JADE product platform has a modular design and offers users a wide variety of applications due to the availability of different membrane technologies, motors and head configurations. Datasheets for the pumps are available on the Internet.



Series JADE 1410 BLDC



Series JADE 1420 BLDC