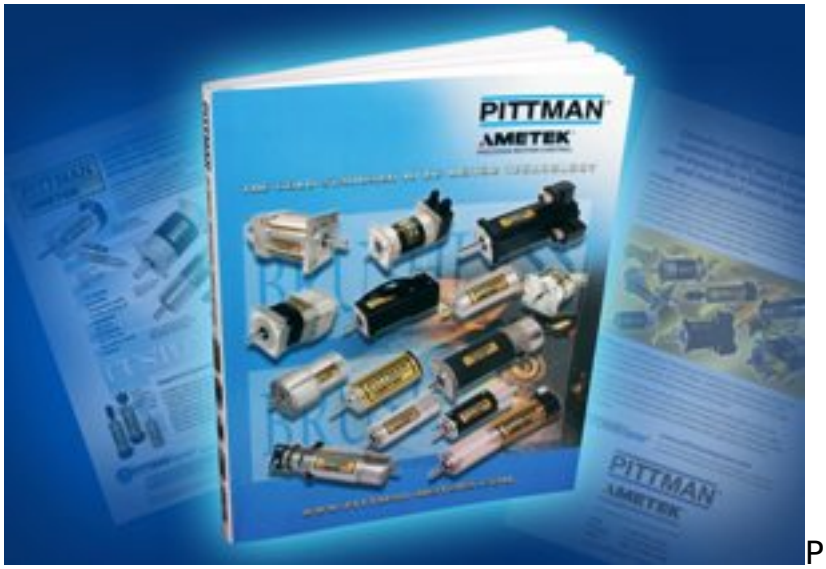
DC Motor Catalog



PITTMAN Motors, a brand of AMETEK Precision Motion Control, introduces a new DC brush and brushless motor catalog, available on request. The new catalog serves as a “starting point” for helping mechatronics and motion control engineers design a DC motor solution perfectly suited for a particular application. The catalog also contains detailed sections on readily available options including gearboxes, encoders, and brakes.

PITTMAN offers a wide variety of motor technologies. The new catalog is divided into the following sections…

Brush Commutated DC Motors
Brush commutated motors are easy to control and are perfect for most general purpose motion applications. To optimize performance, motors can be designed with various brush materials, permanent magnet materials, EMI/RFI suppression networks, bearing systems, and output shaft devices.

Instrument Grade Brushless DC Motors
These are general purpose NEMA frame motors with an IP42 rated construction or greater. The instrument grade motors can be used in a multitude of industrial or OEM applications.

Automation Grade Brushless DC Motors
Heavy-duty NEMA frame motors capable of very high output torque and power. Motors are manufactured using IP65 rated construction and include Mil-Spec connectors. Maximum torque output is 114 lb-in (12.880 Nm).

High Performance Slotless Brushless DC Motors
This is the smallest motor offering perfect for applications requiring a miniature motor capable of very high speeds. These motors are ideal for applications such as medical instruments and dental tools.

Slotless Brushless DC Motors
The slotless brushless motor design exhibits negligible magnetic cogging allowing extremely smooth motion even at low shaft speeds. The low inductance and high current bandwidth results in fast responses to “move” commands when used as a closed-loop positioning servo.

Brushless DC Motors with Integrated Control
Integrated brushless DC motor and controller packages are designed to simplify system integration, and minimize interconnection cabling.

PITTMAN DC brush and brushless motors are available in a broad range of sizes, torque and power ratings. DC brush motor diameters range from 0.866-in (22mm) to 3.25-in (83mm) and torque output from 0.8 oz-in (0.005Nm) to 225 oz-in (1.588Nm) without a gear box. Brushless DC motors are available in frame sizes ranging from 0.375-in (9.5mm) diameter up to 5.25-in (133 mm) and torque output from 0.3 oz-in (0.002 Nm) to 1824 oz-in (12.880 Nm).

Both planetary and spur gearboxes are available for almost all DC motor designs, greatly increasing design flexibility. Gear ratios up to 4732.5:1 are possible. For closed-loop servo control, a wide variety of encoder types are also available, including models with differential line drivers and commutation signals for 4 pole and 8 pole brushless motors.

Product applications for Pittman motors are diverse and span a wide variety of high tech industries including medical instruments, laboratory automation, semiconductor manufacturing equipment, laser and optics equipment, or just about any other application where precision motion is needed.

Pittman
www.Pittman-Motors.com [1]

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