

Air Motors

Air motors are versatile power sources which can be used to power many kinds of operations requiring a rotational drive. They have many advantages over electric motors, and often become the only feasible method of operation.



Advantages

Desoutter offers a wide range of rotating vane type air motors within a power range of 0.26 kW (0.35 hp) to 0.66 kW (0.85 hp). Most motors can be supplied as single rotation or reversible. Reversible motors have keyed shafts, while single direction motors can be supplied with threaded shafts or alternatives.

1. Compact, with high power to weight ratio. An air motor will often be one third or less than the size of a comparable electric motor. An air motor can be used in a portable application where the weight and/or physical size of the electric motor would preclude portable operations. For example, a 0.63 kW (0.85 hp) air motor running at 2000 rpm weighs 1.4 kg (3 lbs) and is approximately 200mm (8") long and just over 50mm (2") in diameter.
2. The output speed and torque can be simply controlled by regulating

either the air pressure or air flow. No expensive control equipment is required.

3. If a motor is loaded to a stalled condition, and held there for any length of time, no damage is caused to the motor. In certain applications, such as tightening fasteners, one acceptable method of control is to regulate the air pressure so that the motor stalls at the required torque.

4. When the load is released, the air motor will reach free running speed usually within one third to one half of a revolution.

5. No risk of overheating either when continuously run or frequent stop/starts or reversing. Note that this condition assumes the use of an inline lubrication system.

6. Reversing motors require simple control of air pressure into ports in the control top of the motor to determine direction of rotation. To reverse the direction of rotation takes milliseconds to complete.

7. Resists moisture, dust, heat. Is generally explosion proof and can be used safely in most hazardous situations.



For further information see catalogue LT1055



DM6, DM65 Series

0.26 kW (0.35 hp)

Maximum Torque 8 Nm (5.9 lbf ft), Non Reversible



2DM6 Series

0.26 kW (0.35 hp)

Maximum Torque 8 Nm (5.9 lbf ft), Reversible



HM Series

0.45 kW (0.6 hp)

Maximum Torque 41 Nm (30 lbf ft), Non Reversible



HM55 Series

0.63 kW (0.84 hp)

Maximum Torque 41 Nm (30 lbf ft), Non Reversible



2HM5 Series

0.66 kW (0.85 hp)

Maximum Torque 41 Nm (30 lbf ft), Reversible



2H410 Series

0.66 kW (0.85 hp)

Maximum Torque 106 Nm (78 lbf ft), Worm Drive Motors

