

Electric and Pneumatic Screwdrivers Feature Comparison

Compare the features of each to help you decide which is best for your application.

Electric Auto Shutoff Screwdrivers



AE-4010

Lever Start
Power Supply Required



AE-5681

Push-to-Start
Direct Plug In



AE-4510ESD

Lever Start
Static Sensitive Assembly

PRECISE TORQUE CONTROL

Air screwdrivers with automatic shutoff clutches are sensitive to large swings in air pressure. Electric drivers use adjustable micro switches for fast and precise response.

LOW SOUND LEVELS

The average auto shutoff electric screwdriver has a dbA range of 65-69 decibels.

LOW VIBRATION

Electric drivers provide the operator ergonomic relief from (RSS) Repetitive Stress Syndrome. There is also less chance of damaging delicate electronic components.

NO AIR EXHAUST CONTAMINATION

There is no lubricated air being exhausted into the ambient work area. Non-lubricated models still exhaust certain amounts of moisture and oil carry over from the air compressors. There is less chance of contaminating the finished product. However, minute amounts of carbon dust are emitted as the motor brushes wear.

EASY SET UP / VERSATILITY

There is no need to install costly air compressors, piping, FRLs, hoses and air connections. Most electric screwdrivers and/or controllers can be connected directly to any grounded 110V outlet. Tools can be quickly changed to different positions on the assembly line without having to make major changes.

ENERGY EFFICIENT

The average electric screwdriver draws only a mere 0.75 amps. Small .20 HP screwdrivers require 8-12 cfm @ 90 PSI. Even calculating only a 30% dwell time (4.0 cfm) you would need to figure each air screwdriver requires 1 HP of compressor power.

EASY TORQUE ADJUSTMENT

External torque adjustment rings make calibrating electric screwdrivers easy. No special tools are required. Operators can use the reference scales to set the torque. Torque adjustment covers are available to avoid accidentally changing the setting.

Pneumatic Auto Shutoff Screwdrivers



US-LT40B SERIES

Push-to-Start



USLT41PB SERIES

Trigger Start



US-LT30BL SERIES

Lever Start

TORQUE PRECISION

Both electric and pneumatic screwdrivers have mechanical clutches. The shutoff mechanisms of both (micro switches or air valves) are designed to shut off the power source whether compressed air or electricity. Accuracy is more a function of choosing the correct speed and clutch spring.

POWER TO WEIGHT RATIO

Typically, hand held air screwdrivers are lighter and smaller than electric screwdrivers. They have a better power to weight ratio. This is an advantage in tight access areas or where balancers cannot be used.

HIGHER PRODUCTION RATES

Air screwdrivers are able to deliver higher production rates since they are not limited by the dwell time required to drive a fastener, or cycle time between fasteners. Generally, electric drivers require a minimum of 3-4 seconds between driven fasteners, and should not be on more than 0.5 seconds. This eliminates heat build up and prevents electronic component failure.

BROADER TORQUE RANGES AND VERSATILITY

Air screwdrivers offer a greater range of torque capacities and speeds to fit various applications. Air screwdrivers are typically available as straight, pistol or angle head models.

EASIER MAINTENANCE

Fewer moving parts. Therefore, fewer parts to keep on inventory. There is no wiring or de-soldering to consider. No delicate electronic components to handle or adjust. Air screwdrivers are more "forgiving" than electric drivers. If you assembly the motor incorrectly it simply stalls. Typically, the maintenance department is able to provide a quicker turn around time to return the units back to production.

EXHAUST AND SOUND EMISSIONS

Exhaust hoses can be used to channel away any exhaust discharge away from the product and operator. It also lessens the sound emission.