

Servo Drive Electric

SDE



DESCRIPTION

E.H. Wachs Servo Drive Electric (SDE) is a high powered, smooth and efficient electric drive system that's an alternative to traditional pneumatic and hydraulic drives for larger machine tools. Compact and highly portable, the Servo Drive Electric utilizes a maintenance free, moisture and dust resistant AC high inertia brushless servo motor.

Wachs Servo Drive is a complete system that includes the drive motor, power controller and remote control pendant. It's powerful - the standard 3.8 kW servo motor produces the equivalent of 5 hp, greater than the typical hydraulic 4 hp motor or pneumatic 2.5hp drive motor. Highly efficient, it eliminates the energy loss inherent in converting electric power to pneumatic or hydraulic power, then to mechanical energy.

POWER CONTROLLER

The heart of the SDE is the power controller, featuring the Baldor® Flex Drive System with its powerful DSP (Digital Signal Processor) core. It's designed to vary the power delivered to the servo motor while automatically maintaining the desired

torque and rotational speed. The controller, depending on the configuration, will autoline 380-480V or 200-240V 3 phase AC, with a 575V 3 phase unit for Canadian voltage available by special order.

A major advantage of the SDE is a torque curve that remains virtually flat at all rotational speeds, unlike traditional air motors where torque diminishes as speed increases. The SDE is able to produce peak torque at very low speeds, allowing the operator to set the ideal cutting speed without worrying about tool stalling or chattering. Easy to install, easy to control and nearly silent in operation the SDE offers the ultimate in operator control and productivity.

SERVO MOTOR FEATURES

- Premium construction for durability
- Maintenance free brushless design
- Moisture and dust resistant to IP60
- High torque output at low speed
- High voltage and current spike protection
- Rated for high continuous operating temperatures
- Over temperature protective thermal switch

POWER CONTROLLER FEATURES

- Advanced AC Servo Drive Controller
- OSHA lock out tag out compliant closure
- Driven by Baldor® Flex Drive System
- Programmable controller for flexibility
- Steel cabinet enclosure for durability
- Wheels and folding handle for portability
- External red emergency stop button
- Illuminated green power indicator

REMOTE CONTROL FEATURES

- On/Off control
- Emergency stop button
- Motor speed control up and down
- Hold to run trigger

ELECTRIC DRIVE CLEAN. POWERFUL. EFFICIENT.



Servo Drive Electric is available to power Wachs LCSF split frames and EP 424 end prep machines



Remote control pendant allows operation of the machine tool from a distance



Control machine power and rotating speed from up to 20 feet (6m) away with the hand pendant

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SPECIFICATIONS

System Function:

Electric servo drive motor system for E.H. Wachs LCSF split frame model 814/3 and larger, EP 424 Form Tool and EP 424 Single Point models

Servo Motor:

Powder coated AC high inertia brushless servo motor with aluminum housing and stainless steel shielding, high voltage, current spike and over temperature protected. Lubricated for life, output speed 0-300 rpm infinitely variable

Power Controller:

Flex Drive System with DSP (Digital Signal Processor) core in a steel, lock out tag out powder coated enclosure. Top mounted e-stop and lighted power on indicator, wheels and handle, 20 foot (6M) power cord and feedback cables. Power cord ships without wall receptacle, user installation required

Hand Pendant Construction:

Black thermal plastic housing with on/off, e-stop, motor speed control and hold to run trigger, 20 foot (6M) cable

Power Requirements: Varies by unit, 380-480V 50/60Hz 30 Amp Service

Dimensions and Weights:

Servo Drive Motor 19"L x 7"W x 7"H (482mm x 179mm x 179mm), 45 lbs (20.4kg)

Power Controller 28"L x 19"W x 36"H (711 x 483 x 914mm), 70 lbs (31.8kg)

LCSF Part #	VOLTAGE	EP 424 Part #
11-028-400	380-480 V	11-028-401
11-028-402	200-240 V	11-028-403
11-028-404	575 V	11-028-405

Servo drive quickly connects to machine or pinion housing using 4 captivated mounting bolts

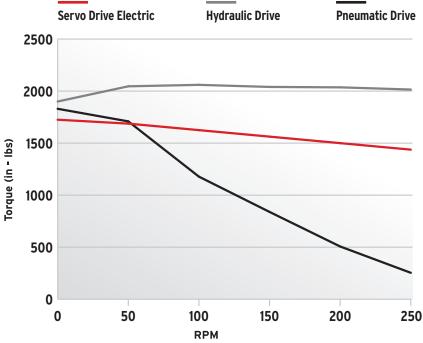


Servo drive motor has a flat torque curve to better handle tough materials and heavy wall applications



Power controller is compact and portable, includes lock out tag out closure and top mounted controls

LCSF TORQUE COMPARISON PNEUMATIC DRIVE & HYDRAULIC DRIVE VS. SERVO DRIVE ELECTRIC



Although initially providing more torque below 50 RPM, as the speed of operation increases the torque is drastically reduced for the pneumatic drive.

CONTACT US FOR A DEMO OR QUOTE

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