

LAGUNA

B&R CONTROLLER



LAGUNA TOOLS
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B&R CONTROLLER
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The market demands cost-effective solutions. To meet this demand, B&R offers their stepper motors as an inexpensive and powerful addition to their existing product portfolio.



- ▶ High torque
- ▶ High overload capability
- ▶ Cost-effective encoder option
- ▶ Operation in parallel and in series

Components & Modules

- ▶ Stepper motors without encoder
- ▶ Stepper motors with incremental encoder IP20

- ▶ Stepper motors with incremental encoder IP65
- ▶ Stepper motors with SSI encoder IP65
- ▶ Stepper motors with Hiperface encoder IP65
- ▶ Stepper motors with incremental encoder and brake IP65
- ▶ Incremental encoder cables
- ▶ SSI encoder cables
- ▶ Hiperface encoder cables
- ▶ Motor cables
- ▶ Motor cables with brake
- ▶ Hiperface motor cables

Position Accuracy

The manner in which the desired position is ultimately reached depends on the applied load torque as well as how accurate the stepper motor is when it is manufactured. The position accuracy within one step is always dependent on the load and the resulting angular slip. However, this can never be higher than one full step because otherwise the motor gets out of sync and steps are lost. The best way to compensate for this load angle is via position feedback. This is why all B&R stepper motors are also available in affordable encoder variations, which achieve a resolution of up to 12 bits. Therefore, positioning precision is possible with an angular deviation of less than 0.1 degrees, even under considerable load torque.

Concentricity & Angular Precision

A majority of the 2-phase hybrid stepper motors have a stepping angle of 1.8 degrees. In addition to this however, are the versions with 0.9 degrees and the even less common with 0.45 degrees. The smaller stepping angle often results in poorer torque characteristics. However, only stepper motor drivers that support micro-steps can achieve higher positioning accuracy. Moreover, a high step resolution produces excellent concentricity properties and reduces potential problems resulting from resonance effects.

FOR MORE INFORMATION
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Philosophy

Setting our sights on the future

"Perfection in Automation" means we put all of our knowledge and creativity into developing products that become trendsetting innovations. At B&R, we turn this motto into reality by providing our customers with a complete automation solution that provides maximum flexibility and economic efficiency. From customized products to large-scale series production, meeting our customers' needs is our main focus.

From the first prototype to devices ready for mass production, every component is developed and manufactured at our Eggelsberg location. Advanced production methods and fully automatic test procedures using the latest technology ensure our high quality standards.

Relationships that endure

We do not consider relationships with our customers and suppliers to be short-term or one-off situations. We look for partnerships based on lasting trust and a high level of expertise. Loyalty, trust and confidence in all areas are the hallmarks of a good, effective partnership.

As an independent, privately owned company, we are a reliable partner. As such, you need not worry about sudden changes to our corporate strategy or philosophy. This we *guarantee*.



Power Panel 65

The PP65 is especially suitable for multi-axis applications that require lots of computing power but only have limited space in the control cabinet.

The PP65 is equipped with a powerful Geode LX800 processor with 500 MHz clock frequency. With this computing power, the PP65 provides performance that was previously only achieved by the PP400. Therefore, the PP65 is especially suitable for multi-axis applications that require lots of computing power but only have limited space in the control cabinet. This panel has the same compact dimensions of the

Components & Modules

- ▶ Power Panel 65
- ▶ Interface modules
- ▶ Legend strips

Display and interfaces provide flexibility

The PP65 is available with two different display types that have identical installation dimensions. A 5.7" model with touch screen (without function keys) and a 3.5" model with touch screen and 30 function keys allow flexible machine implementation. The PP65 is equipped with 2 USB ports and a fast Ethernet port for exchanging data with higher level systems. The PP65 is available with integrated X2X or POWERLINK interfaces options for connecting remote I/O and drives. The devices can be extended with RS232/RS485, CAN and PROFIBUS DP slave interfaces depending on the requirements.



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