



SILENTstep™

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Hybrid technology to get more from your Stepper motor.

Agile Systems has developed SILENTstep™, a breakthrough hybrid technology drive for stepper motors. Without the need for encoder feedback, SILENTstep™ is able to eliminate stalling, reduce audible noise, and increase motor speed. This patent-pending control technology boosts stepper motor operation into the range of servomotor performance while maintaining the inherent simplicity of a conventional stepper motor drive system.

Key Features

- Breakthrough Hybrid Technology
- Decreases excitement of mechanical resonance
- Eliminates stalling
- Sensorless control method substantially reduces audible noise and increases motor speed while eliminating the need for encoder feedback
- Boosts stepper motor operation into the range of servo motor performance while maintaining inherent simplicity of conventional stepper motor drive system.
- Operates stepper motors in a closed position loop without position sensors

Product Benefits

- Minimizes audible noise by 75%
- Offers stall prevention and detection
- Increases usable motor speed
- Acceleration at full torque or torque limit
- No position loss during acceleration/deceleration or full speed
- Efficient use of power
- Slim down the amount of hardware needed to track position of motor
- Higher performance over traditional stepper motors

Applications

- Low Cost Automation
- PCB Assembly Equipment
- Lab Automation
- Semi Fab Automation
- Packaging Equipment
- Medical Robotics
- DeCoilers

Verticals

- Life Science
- Semiconductor
- Automation
- Photonics
- Automotive



Application Software

- DP•SS™ tuning tools with graphical analysis, data logging and frequency analysis

Product Specification

Product	SILENTstep
Part Number	10-S013-01
Operating Mode	Pulse and Direction
Amplifiers	1
Amplifier Options	7A (Peak)
Operating Options	12V Min—28V Max

Part Number System

Example: 10-S013-01

Description: 1 Axis Pulse and Direction SILENTstep controller, with the amplifiers setup at 75V 7A.

10	Product Class	10- Controller Only, 11—Evaluation Kit
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S	Family Series	S-SILENTstep
0	Custom	0- Standard, 1- Custom
1	Number of Axis	1—1 Axis
3	Network Type	3-Pulse Direction
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01	Axis 1 Amplifier Type	01-75V, 7A

Accessories

Product	Part Number
SILENTstep Cable Kit	18-0031
SILENTstep Connector Kit	18-0030
SILENTstep Communication Cable	18-0032
DP•SS Application Software	35-0027
SILENTstep Getting Started Guide	34-2108
SILENTstep Evaluation Kit	11-S013-01