

## SV7-S-AF

*Motion Controller Compatible Servo Drive*

1pc. - \$478.00  
50pc. - \$358.50



### **Product Features**

- Digital servo drive in a compact package
- DSP-based current control, sinusoidal commutation and jerk filter
- Operates from 24-80 VDC
- Provides motor current up to 7.0 A rms continuous, 14.0 A rms peak
- Analog torque/velocity control
- Three pulse-based control modes: step & direction, A/B quadrature, CW/CCW pulse
- Streaming serial command mode (SCL) for commands sent from a host controller
- Buffered encoder outputs for connection to external motion controller or other devices
- 8 digital inputs, 4 digital outputs, all optically isolated
- 2 analog inputs, +/-10 volt range
- RS-232 port for programming and communications



### **Description**


The SV series servo drives are suitable for a wide range of motion applications. They are built around a powerful digital signal processor coupled to an efficient MOSFET PWM amplifier. The SV drives include 12 optically isolated I/O points plus analog inputs. A sophisticated, yet easy to tune position loop has independent digital settings for proportional, integral and derivative gains plus velocity feedback and velocity and acceleration feedforward.

All SV drives are capable of running brushless, brushed, and linear servo motors. A timing wizard automatically configures the encoder and commutation timing for virtually any brushless or brushed DC motor. Tuning is easy with our Quick Tuner™ software, featuring a built-in digital oscilloscope.

## Specifications

<b>Model Number</b>	SV7-S-AF
<b>Part Number</b>	5000-169
<b>Supply Voltage</b>	24-80 VDC
<b>Supply Voltage Type</b>	DC
<b>Control Modes</b>	<ul style="list-style-type: none"><li>• Step &amp; Direction</li><li>• Analog Torque / Velocity</li><li>• Streaming Commands</li></ul>
<b>Output Current, Continuous</b>	7.0 A rms
<b>Output Current, Peak</b>	14.0 A rms
<b>Communication Ports</b>	<ul style="list-style-type: none"><li>• RS-232</li></ul>
<b>Feedback</b>	Halls + Incremental encoder
<b>Setup Method</b>	Software setup
<b>Digital Inputs</b>	8
<b>Digital Outputs</b>	4
<b>Analog Inputs</b>	1 differential or 2 single-ended
<b>Dimensions</b>	5 x 3 x 1.78 inches
<b>Weight</b>	10.0 oz
<b>Operating Temperature Range</b>	NA
<b>Ambient Temperature Range</b>	0 to 40 °C
<b>Ambient Humidity</b>	90% max, non-condensing
<b>Status LEDs</b>	1 red, 1 green
<b>Circuit Protection</b>	<ul style="list-style-type: none"><li>• Short circuit</li><li>• Over-voltage</li><li>• Under-voltage</li><li>• Over-temp</li></ul>

## Software

<b>Software Downloads</b>	<ul style="list-style-type: none"><li>• <a href="#">DSP Firmware Downloader</a></li><li>• <a href="#">Quick Tuner™</a></li><li>• <a href="#">SCL Utility</a></li></ul>
<b>Sample Code</b>	<ul style="list-style-type: none"><li>•  <a href="#">scldemo.zip</a></li></ul>

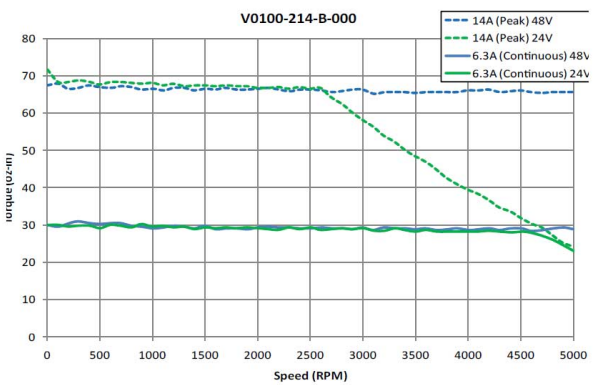
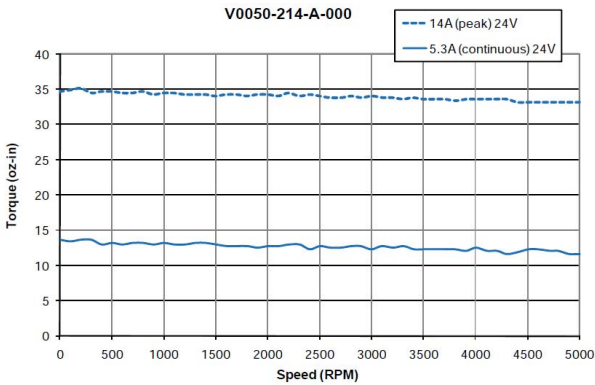
Downloads

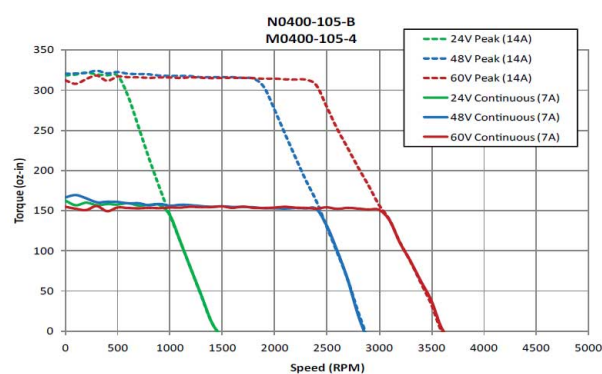
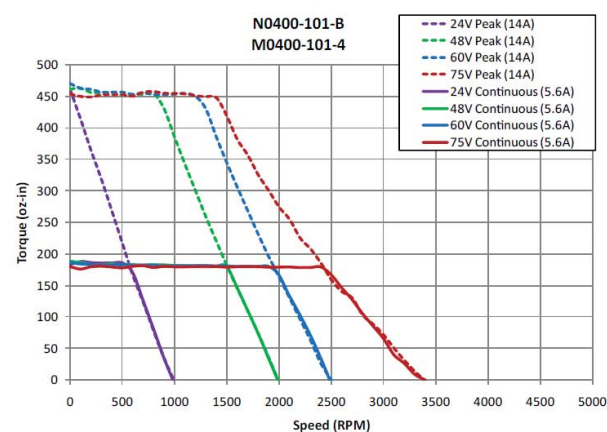
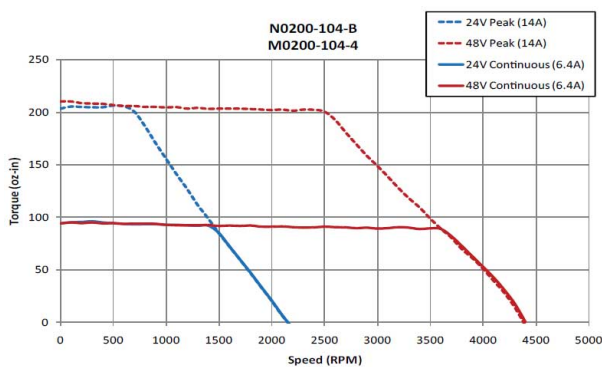
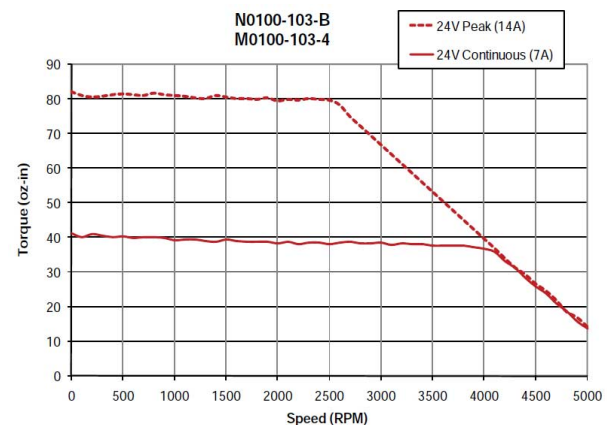
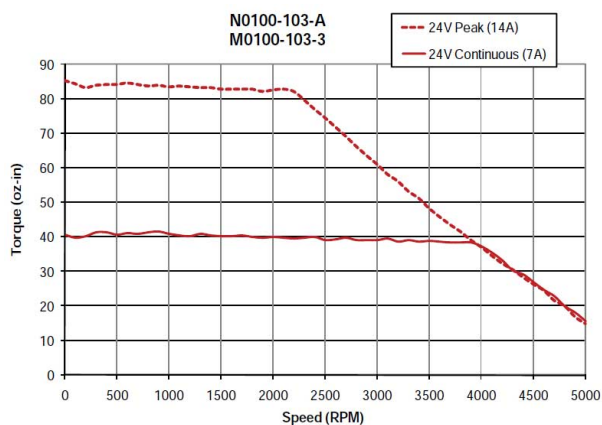
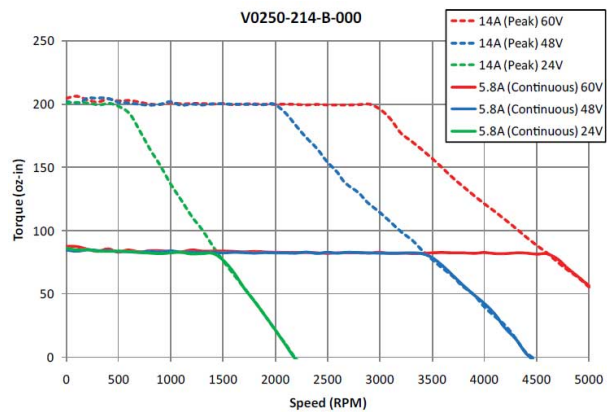
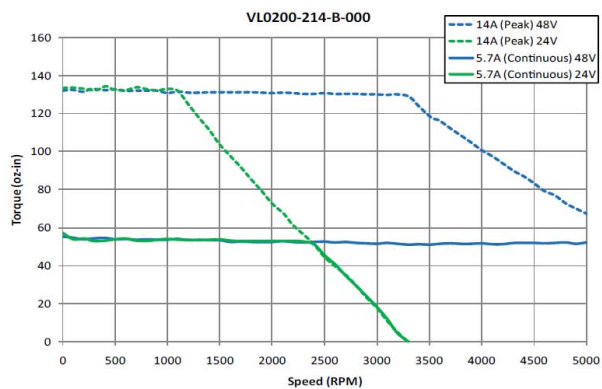
Manuals	<a href="#">SV7_HardwareManual_920-0012.pdf</a> <a href="#">SV7-S_Q_QuickSetup_920-0062.pdf</a> <a href="#">Host_Command_Reference.pdf</a>
Datasheet	<a href="#">Servo-Products-Datasheet-925-0008.pdf</a>
2D Drawing	<a href="#">SV7-S-AF_simple3D.pdf</a> <a href="#">SV7_2D_Drawing.pdf</a>
3D Drawing	<a href="#">SV7-S-AE_solid.igs</a>
Speed-Torque Curves	<a href="#">SV7_speed-torque.pdf</a>
Agency Approvals	<a href="#">SV7-S_Q_Si_CE_DOC.pdf</a>
Application Notes	<a href="#">APPN0021_5V-Keepalive-Circuit.pdf</a> <a href="#">APPN0018_EZ-Series-Touchpanel-HMI.zip</a> <a href="#">APPN0017_Wiring-integral-holding-brakes.pdf</a> <a href="#">APPN0016_Simple-25-pin-mating-connections.pdf</a> <a href="#">APPN0015_Make-a-serial-programming-cable.pdf</a>

Pricing

	SV7-S-AF Part No. 5000-169
1pc.	\$478.00
25pc.	\$411.08
50pc.	\$358.50
100pc.	<a href="#">Contact us</a> for 100+ piece pricing.

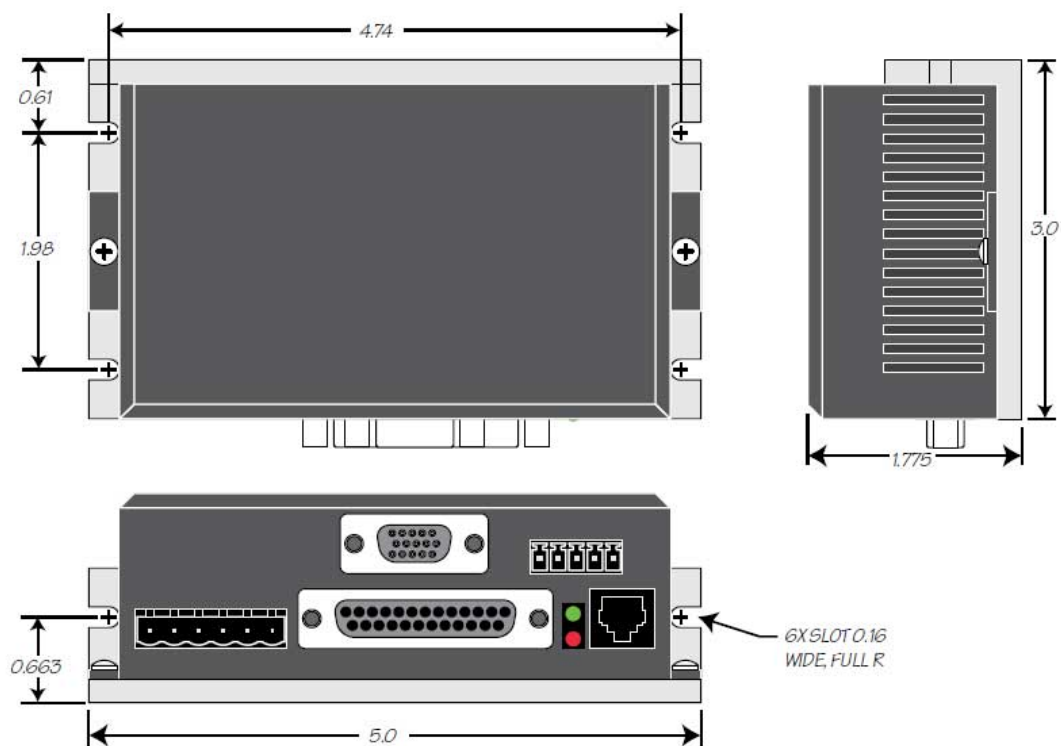
Torque Curves





## 2D Drawings

### Mechanical Outline



## Products in the Series *SV7 Servo Drives*

\* Closeout priced products are highlighted in green.

\* Items with web only pricing are highlighted in yellow.

Model Number	Supply Voltage	Control Modes	Output Current, Continuous (A rms)	Output Current, Peak (A rms)	Communication Ports	1pc./50pc.
<a href="#"><u>SV7-C-CE</u></a>	24-80 VDC	CANopen	7.0	14.0	RS-232 CANopen	\$585.00 / \$438.75
<a href="#"><u>SV7-IP-EE</u></a>	24-80 VDC	Streaming Commands Analog Positioning Encoder Following Q Programming EtherNet/IP	7.0	14.0	Ethernet EtherNet/IP	\$597.00 / \$447.75
<a href="#"><u>SV7-Q-AE</u></a>	24-80 VDC	Streaming Commands Analog Positioning Encoder Following Q Programming	7.0	14.0	RS-232	\$450.00 / \$337.50
<a href="#"><u>SV7-Q-AF</u></a>	24-80 VDC	Streaming Commands Analog Positioning Encoder Following Q Programming	7.0	14.0	RS-232	\$530.00 / \$397.50
<a href="#"><u>SV7-Q-EE</u></a>	24-80 VDC	Streaming Commands Analog Positioning Encoder Following Q Programming	7.0	14.0	Ethernet	\$597.00 / \$447.75
<a href="#"><u>SV7-Q-RE</u></a>	24-80 VDC	Streaming Commands Analog Positioning Encoder Following Q Programming	7.0	14.0	RS-232 RS-485	\$560.00 / \$420.00
<a href="#"><u>SV7-S-AE</u></a>	24-80 VDC	Step & Direction Analog Torque / Velocity Streaming Commands SiNet Hub Compatible	7.0	14.0	RS-232	\$422.00 / \$316.50
<a href="#"><u>SV7-S-AF</u></a>	24-80 VDC	Step & Direction Analog Torque / Velocity Streaming Commands	7.0	14.0	RS-232	\$478.00 / \$358.50
<a href="#"><u>SV7-S-RE</u></a>	24-80 VDC	Step & Direction Analog Torque / Velocity Streaming Commands	7.0	14.0	RS-232 RS-485	\$484.00 / \$363.00
<a href="#"><u>SV7-Si-AE</u></a>	24-80 VDC	Si Programming	7.0	14.0	RS-232	\$490.00 / \$367.50
<a href="#"><u>SV7-Si-AF</u></a>	24-80 VDC	Si Programming	7.0	14.0	RS-232	\$606.00 / \$454.50