

SV7-Q-AF

Q Programmable Servo Drive w/ Encoder outputs

1pc. - \$530.00
50pc. - \$397.50



Product Features

- Programmable 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
- Q Programmer™ for robust motion control programming
- 744 lines of stored Q program capability
- Math calculations using analog and digital parameters
- Supports all SV7-S control modes as well
- Compatible with many 3rd party HMIs
- 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

Model Number	SV7-Q-AF
Part Number	5000-174
Supply Voltage	24-80 VDC
Supply Voltage Type	DC
Control Modes	• Streaming Commands • Analog Positioning • Encoder Following • Q Programming
Output Current, Continuous	7.0 A rms
Output Current, Peak	14.0 A rms
Communication Ports	• RS-232
Feedback	Halls + Incremental encoder
Setup Method	Software setup
Digital Inputs	8
Digital Outputs	4
Analog Inputs	1 differential or 2 single-ended
Dimensions	5 x 3 x 1.78 inches
Weight	10.0 oz
Operating Temperature Range	NA
Ambient Temperature Range	0 to 40 °C
Ambient Humidity	90% max, non-condensing
Status LEDs	1 red, 1 green
Circuit Protection	• Short circuit • Over-voltage • Under-voltage • Over-temp

Software

Software Downloads	• DSP Firmware Downloader • Q Programmer™ • Quick Tuner™ • SCL Utility
Sample Code	•  scldemo.zip

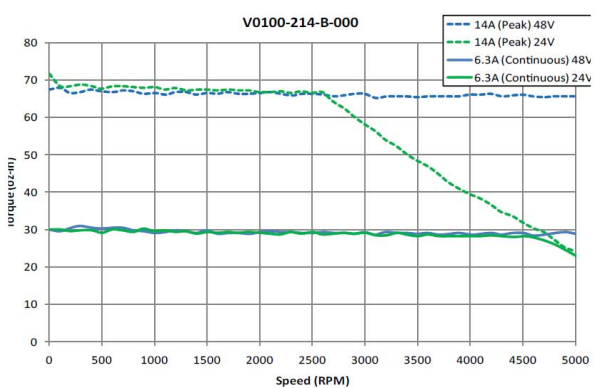
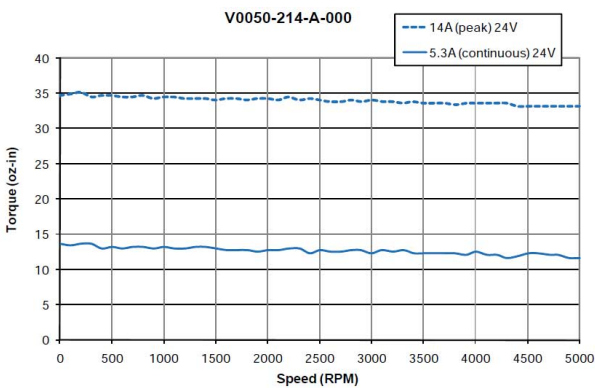
Downloads

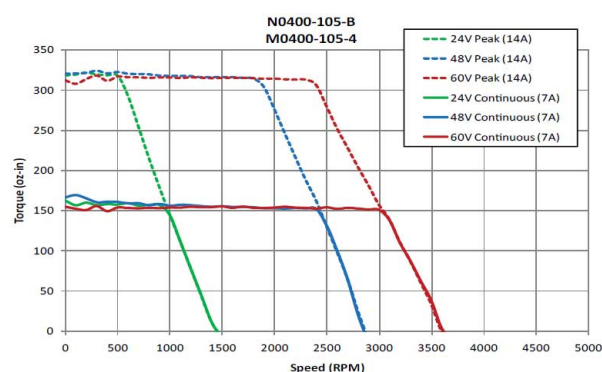
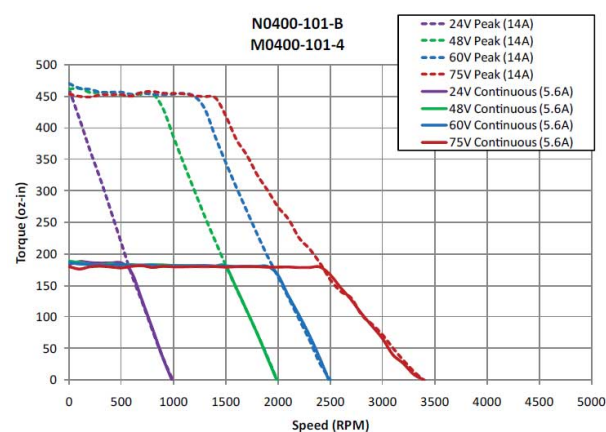
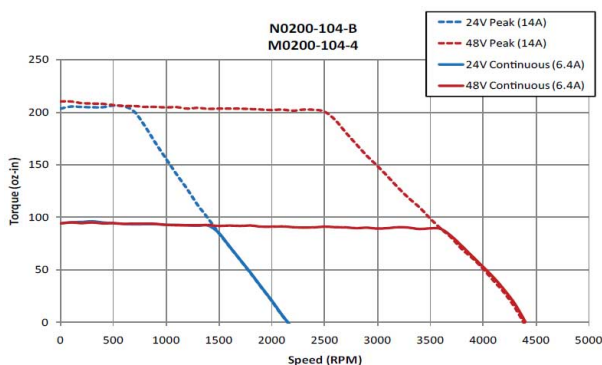
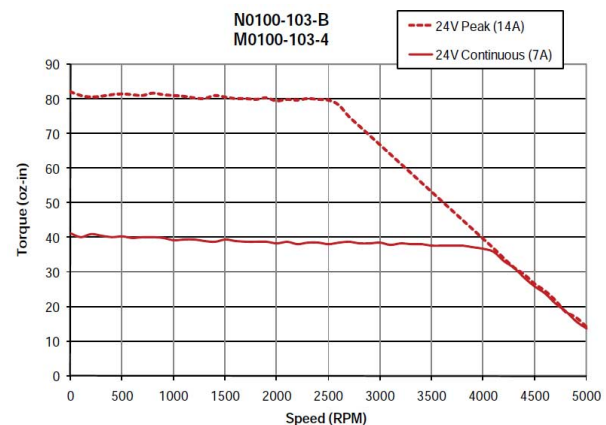
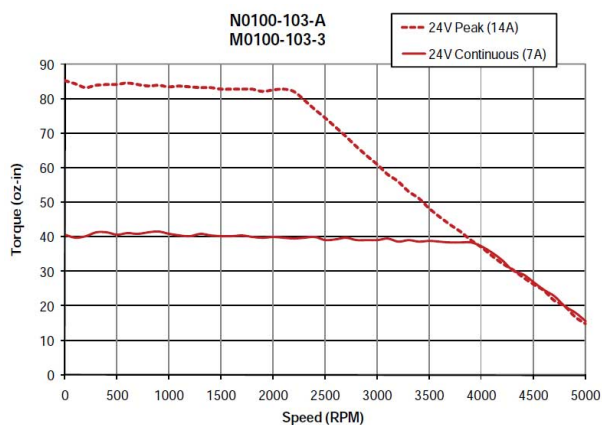
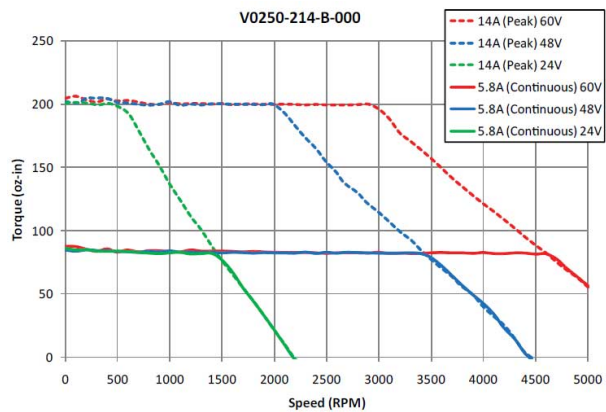
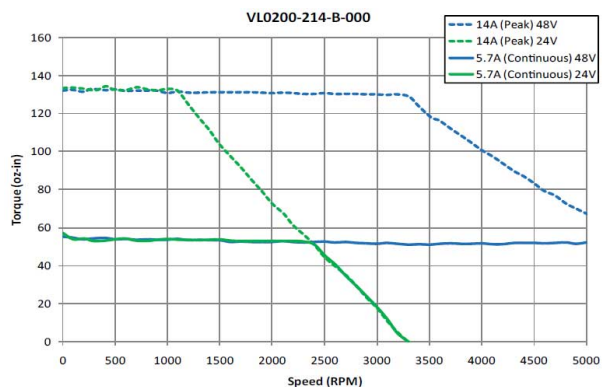
Manuals	SV7_HardwareManual_920-0012.pdf SV7-S_Q_QuickSetup_920-0062.pdf Host Command Reference Rev I.pdf
Datasheet	Servo-Products-Datasheet-925-0008.pdf
2D Drawing	SV7-S-AF_simple3D.pdf SV7_2D_Drawing.pdf
3D Drawing	SV7-S-AE_solid.igs
Speed-Torque Curves	SV7_speed-torque.pdf
Agency Approvals	SV7-S_Q_Si_CE_DOC.pdf
Application Notes	APPN0021_5V-Keepalive-Circuit.pdf APPN0019_Analog-positioning-using-Q-program.zip APPN0018_EZ-Series-Touchpanel-HMI.zip APPN0017_Wiring-integral-holding-brakes.pdf APPN0016_Simple-25-pin-mating-connections.pdf APPN0015_Make-a-serial-programming-cable.pdf

Pricing

	SV7-Q-AF Part No. 5000-174
1pc.	\$530.00
25pc.	\$455.80
50pc.	\$397.50
100pc.	Contact us for 100+ piece pricing.

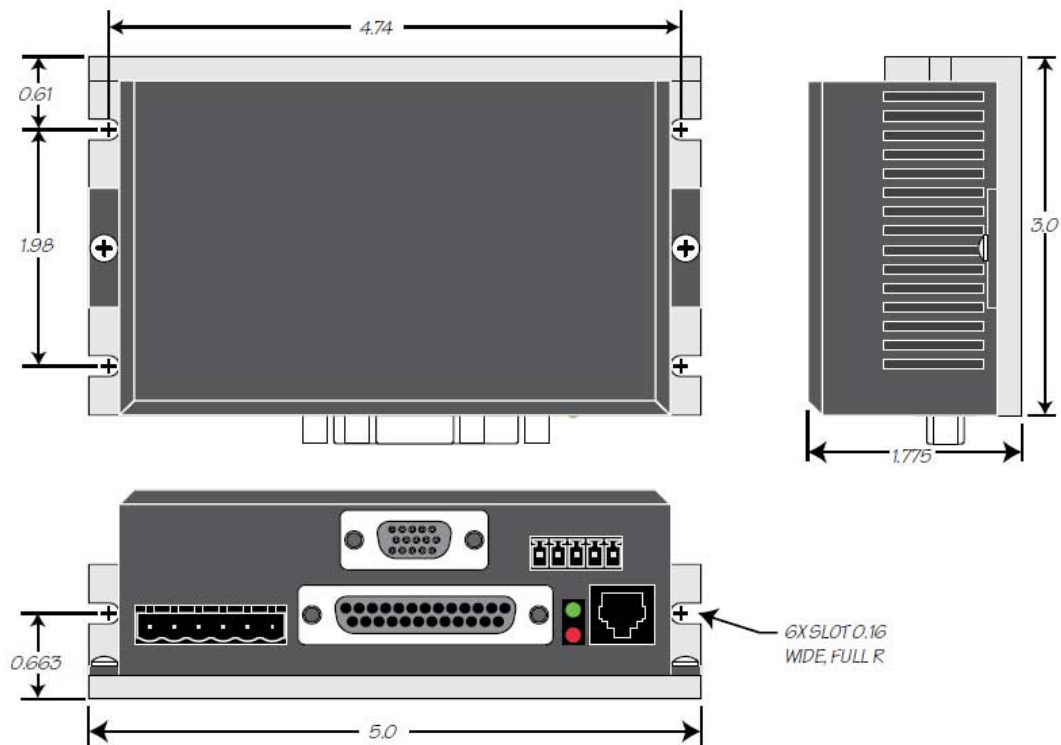
Torque Curves





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.
<u>SV7-C-CE</u>	24-80 VDC	CANopen	7.0	14.0	RS-232 CANopen	\$585.00 / \$438.75
<u>SV7-IP-EE</u>	24-80 VDC	Streaming Commands Analog Positioning Encoder Following Q Programming EtherNet/IP	7.0	14.0	Ethernet EtherNet/IP	\$597.00 / \$447.75
<u>SV7-Q-AE</u>	24-80 VDC	Streaming Commands Analog Positioning Encoder Following Q Programming	7.0	14.0	RS-232	\$450.00 / \$337.50
<u>SV7-Q-AF</u>	24-80 VDC	Streaming Commands Analog Positioning Encoder Following Q Programming	7.0	14.0	RS-232	\$530.00 / \$397.50
<u>SV7-Q-EE</u>	24-80 VDC	Streaming Commands Analog Positioning Encoder Following Q Programming	7.0	14.0	Ethernet	\$597.00 / \$447.75
<u>SV7-Q-RE</u>	24-80 VDC	Streaming Commands Analog Positioning Encoder Following Q Programming	7.0	14.0	RS-232 RS-485	\$560.00 / \$420.00
<u>SV7-S-AE</u>	24-80 VDC	Step & Direction Analog Torque / Velocity Streaming Commands SiNet Hub Compatible	7.0	14.0	RS-232	\$422.00 / \$316.50
<u>SV7-S-AF</u>	24-80 VDC	Step & Direction Analog Torque / Velocity Streaming Commands	7.0	14.0	RS-232	\$478.00 / \$358.50
<u>SV7-S-RE</u>	24-80 VDC	Step & Direction Analog Torque / Velocity Streaming Commands	7.0	14.0	RS-232 RS-485	\$484.00 / \$363.00
<u>SV7-Si-AE</u>	24-80 VDC	Si Programming	7.0	14.0	RS-232	\$490.00 / \$367.50
<u>SV7-Si-AF</u>	24-80 VDC	Si Programming	7.0	14.0	RS-232	\$606.00 / \$454.50