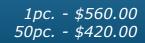


Applied Motion Products, Inc. 404 Westridge Dr. Watsonville, CA 95076, USA 1-800-525-1609 Tel (831) 761-6555 Fax (831) 761-6544

SV7-Q-RE

Q Programmable Servo Drive w/ RS-485





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
- 8 digital inputs, 4 digital outputs, all optically isolated
- 2 analog inputs, +/-10 volt range
- *RS-232 port for programming and communications*
- RS-485 port for serial networking up to 32 axes



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-RE				
Part Number	5000-162				
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-232RS-485				
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	• Escldemo.zip

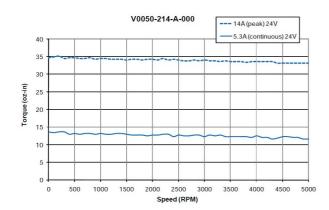
Downloads

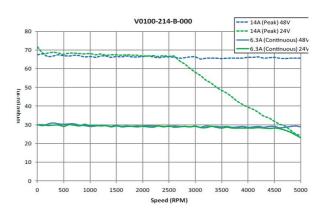
Manuals	SV7 HardwareManual 920-0012.pdf SV7-S Q QuickSetup 920-0062.pdf Host Command Reference Rev I.pdf
Datasheet	Servo-Products-Datasheet-925-0008.pdf
2D Drawing	SV7_simple_3D.pdf
3D Drawing	SV7-S-AE_solid.igs
Speed-Torque Curves	SV7 speed-torque.pdf
Agency Approvals	SV7-S_Q_Si_CE_DOC.pdf
Application 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

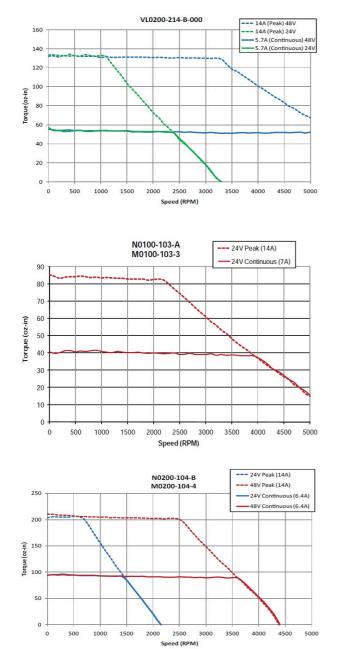
Pricing

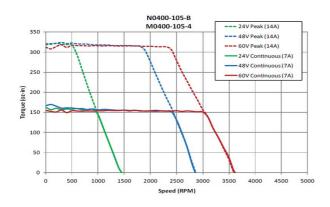
	SV7-Q-RE Part No. 5000-162
1pc.	\$560.00
25pc.	\$481.60
50pc.	\$420.00
100pc.	Contact us for 100+ piece pricing.

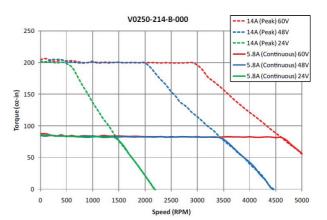
Torque Curves

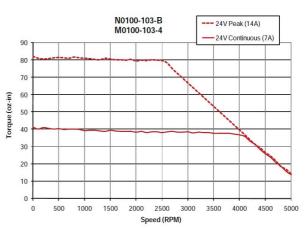


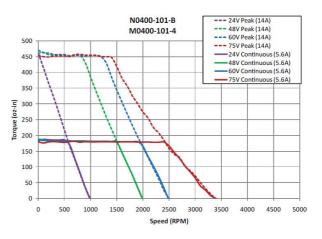






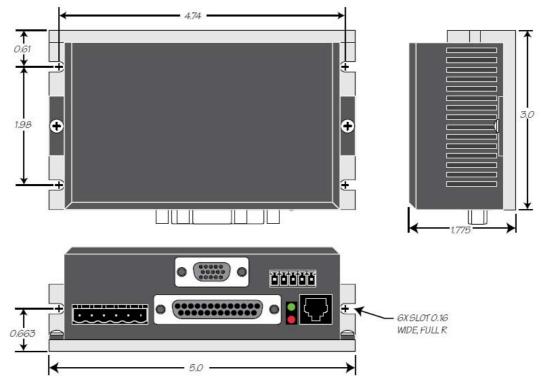






2D Drawings





Products in the Series SV7 Servo Drives

Model Number	Supply Voltage	<mark>hlighted in green.</mark> Control Modes	Output Current, Continuous (A rms)	Output Current, Peak (A rms)	Communication Ports	<mark>ighlighted in</mark> 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
SV7-Q-AE	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