

## 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

<b>Model Number:</b>	SV7-Q-AF
<b>Part Number:</b>	5000-174
<b>Supply Voltage:</b>	24-80 VDC
<b>Supply Voltage Type:</b>	DC
<b>Control Modes:</b>	Streaming Commands Analog Positioning Encoder Following Q Programming
<b>Output Current, Continuous:</b>	7.0
<b>Output Current, Peak:</b>	14.0
<b>Communication Ports:</b>	RS-232
<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>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>	Short circuit Over-voltage Under-voltage Over-temp

## Software

<b>Software:</b>	<a href="#">DSP Firmware Downloader</a> <a href="#">Q Programmer™</a> <a href="#">Quick Tuner™</a> <a href="#">SCL Utility</a>
<b>Sample Code:</b>	 <a href="#">scldemo.zip</a>

## Downloads

<b>Manuals:</b>	<a href="#">SV7_HardwareManual_920-0012.pdf</a> <a href="#">SV7-S_Q_QuickSetup_920-0062.pdf</a> <a href="#">Host Command Reference Rev I.pdf</a>
<b>Datasheet:</b>	<a href="http://s3.amazonaws.com/applied-motion-pdf/SV7-Q-AF.pdf">http://s3.amazonaws.com/applied-motion-pdf/SV7-Q-AF.pdf</a>
<b>Family Datasheet:</b>	<a href="#">Servo-Products-Datasheet-925-0008.pdf</a>
<b>2D Drawing:</b>	<a href="#">SV7-S-AF_simple3D.pdf</a> <a href="#">SV7_2D_Drawing.pdf</a>
<b>3D Drawing:</b>	<a href="#">SV7-S-AE_solid.igs</a>
<b>Speed-Torque Curves:</b>	<a href="#">SV7_speed-torque.pdf</a>
<b>Agency Approvals:</b>	<a href="#">SV7-S_Q_Si_CE_DOC.pdf</a>
<b>Application Notes:</b>	<a href="#">APPN0026B-LabVIEW-communication-using-streaming-commands.zip</a> <a href="#">APPN0019_Analog-positioning-using-Q-program.zip</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-Q-AF Part No. 5000-174	
1pc.	\$530.00
25pc.	\$455.80
50pc.	\$397.50
100pc.	<a href="#">Request a Quote</a> for 100+ piece pricing.

### Mechanical Outline

