Applied Motion Products, Inc.
404 Westridge Dr.
Watsonville, CA 95076, USA

1-800-525-1609
Tel (831) 761-6555

Product Datasheet

www.Applied-Motion.com

TSM34Q-5RG

NEMA 34 StepSERVO Integrated Motor w/ Q Programming and Modbus RTU



Product Features

- *StepSERVO technology featuring space vector current control*
- *Peak torques for greater acceleration and throughput*
- *Higher efficiency, lower power consumption than open loop steppers*
- *Hi-resolution 20,000 count encoder for closed-loop control*
- *NEMA 34 frame size*
- *Q programming control mode for stand-alone operation*
- *RS-485 port for programming and communications*
- *Modbus RTU for easy PLC and HMI communication*



- StepSERVO technology featuring space vector current control
- Peak torques for greater acceleration and throughput
- Higher efficiency, lower power consumption than open loop steppers
- Hi-resolution 20,000 count encoder for closed-loop control
- NEMA 34 frame size
- Q programming control mode for stand-alone operation
- RS-485 port for programming and communications
- Modbus RTU for easy PLC and HMI communication

Description
Specifications
Torque Curves
Software
Downloads

The TSM34Q-5RG StepSERVO integrated motor is a drive+motor unit, fusing a NEMA 34 step motor and a servo drive into a single device. Power to the drive, located at the rear of the motor, must be supplied by an external DC supply. See Related and Recommended Products below for compatible 24 and 70 volt DC power supplies .

StepSERVO technology combines the high torque capabilities of a step motor with the closed loop dynamic control of a servo system. The result is a highly customizable all-in-one motion

control solution that operates quietly and efficiently, requiring only the minimum amount of current to maintain commanded position and velocity. Boost (or peak) torque that is higher than the rated holding torque increases the limits of acceleration, leading to faster cycle times. With software selectable servo loops that have been pre-tuned for various inertial loads, the TSM StepSERVO can be applied in systems where a traditional stepper would not be capable of achieving the high accuracy required.

The TSM34Q-5RG StepSERVO integrated motor can be operated in several different control modes, including streaming command mode using SCL commands or Modbus RTU, pulse & direction mode, velocity mode, and stored program mode which offers the ability to run a Q program stored in non-volatile memory. Q programs are created using Applied Motion's Q Programmer™ software, which provides powerful commands for motion, I/O, conditional processing, multi-tasking, math functions, and more. All TSM34 integrated motors are set up, configured and tuned using Applied Motion's Step-Servo Quick Tuner software with built in Q Programmer.

Each TSM34 integrated motor comes with 8 digital inputs, 4 digital outputs, and 1 analog input. The digital inputs accept signals of 5-24 VDC and can be used for connecting pulse & direction signals, end-of-travel limit switches, jog switches, quadrature encoder signals, PLC outputs, sensors, or many other signal types. The digital outputs can be connected to PLC inputs, counters, lights, relays, or other devices. The analog input accepts 0-5 VDC signals and can be used for velocity and position control.

The TSM34Q-5RG comes with an RS-485 port for programming and serial communications to allow for the use of either Modbus RTU or Applied Motion's Streaming Command Language (SCL). An integral 5000-line (20,000 count/rev) incremental encoder is housed inside the same enclosure as the drive electronics and used for closed-loop servo control to attain highly accurate position and velocity control. Encoder counts can be accessed over the network or from within the Q program using data registers.

What's in the Box?

- TSM34Q-5RG integrated motor
- Mating power connector (4-pin)
- 3004-310-1M RS-485 cable (for details see Accessories below)
- 3004-313-1M RS-485/CANopen cable (for details see Accessories below)
- 3004-308-2M or 3004-318-2M I/O cable (for details see Accessories below)
- Screwdriver
- Quick Setup Guide (also available in Downloads)

NOT included:

- DC power supply (required), see Power Supplies below
- Regen clamp (optional), see Accessories below
- Additional accessories available below

Archived:
Not Archived
Series:

- Modbus RTU Products
- NEMA 34 StepSERVO Integrated Motors
- StepSERVO Integrated Motors

Products in the Series *NEMA 34 StepSERVO Integrated Motors*

Part Number	Frame Size	Supply Voltage	Control Modes	Holding Torque	Communication Ports	Encoder Feedback	1pc.
TSM34C-1CG	NEMA 34	24-70 VDC	Q Programming, CANopen	382	CANopen	Yes	$585.00
TSM34C-3CG	NEMA 34	24-70 VDC	Q Programming, CANopen	736	CANopen	Yes	$644.00
TSM34C-5CG	NEMA 34	24-70 VDC	Q Programming, CANopen	949	CANopen	Yes	$720.00
TSM34C-6CG	NEMA 34	24-70 VDC	Q Programming, CANopen	1161	CANopen	Yes	$805.00
TSM34Q-1AG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	382	RS-232	Yes	$551.00
TSM34Q-1DG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus TCP	382	Ethernet	Yes	$619.00
TSM34Q-1RG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	382	RS-485	Yes	$568.00
TSM34Q-3AG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	736	RS-232	Yes	$610.00
TSM34Q-3DG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus TCP	736	Ethernet	Yes	$678.00
TSM34Q-3RG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	736	RS-485	Yes	$627.00
TSM34Q-5AG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	949	RS-232	Yes	$686.00
TSM34Q-5DG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus TCP	949	Ethernet	Yes	$754.00
TSM34Q-5RG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	949	RS-485	Yes	$703.00
TSM34Q-6AG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	1161	RS-232	Yes	$771.00
TSM34Q-6DG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus TCP	1161	Ethernet	Yes	$838.00
TSM34Q-6RG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	1161	RS-485	Yes	$788.00
TXM34C-1CG	NEMA 34	24-70 VDC	Q Programming, CANopen	382	CANopen	Yes	$992.00
TXM34C-3CG	NEMA 34	24-70 VDC	Q Programming, CANopen	736	CANopen	Yes	$1051.00
TXM34C-5CG	NEMA 34	24-70 VDC	Q Programming, CANopen	949	CANopen	Yes	$1127.00
TXM34C-6CG	NEMA 34	24-70 VDC	Q Programming, CANopen	1161	CANopen	Yes	$1212.00

TXM34Q-6CG	NEMA 34	24-70 VDC	Q Programming, CANopen	1161	CANopen	Yes	$1212.00
TXM34Q-1AG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	382	RS-232	Yes	$896.00
TXM34Q-1DG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus TCP	382	Ethernet	Yes	$1026.00
TXM34Q-1RG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	382	RS-485	Yes	$975.00
TXM34Q-3AG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	736	RS-232	Yes	$955.00
TXM34Q-3DG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus TCP	736	Ethernet	Yes	$1085.00
TXM34Q-3RG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	736	RS-485	Yes	$1034.00
TXM34Q-5AG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	949	RS-232	Yes	$1031.00
TXM34Q-5DG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus TCP	949	Ethernet	Yes	$1161.00
TXM34Q-5RG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	949	RS-485	Yes	$1110.00
TXM34Q-6AG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	1161	RS-232	Yes	$1116.00
TXM34Q-6DG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus TCP	1161	Ethernet	Yes	$1246.00
TXM34Q-6RG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	1161	RS-485	Yes	$1195.00

Products in the Series *StepSERVO Integrated Motors*

Part Number	Frame Size	Supply Voltage	Control Modes	Holding Torque	Communication Ports	Encoder Feedback	1pc.
SSM23IP-2EG	NEMA 23	12-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, EtherNet/IP, Velocity Control	142	Ethernet, EtherNet/IP	Yes	$575.00
SSM23IP-3EG	NEMA 23	12-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, EtherNet/IP, Velocity Control	212	Ethernet, EtherNet/IP	Yes	$585.00
SSM23IP-4EG	NEMA 23	12-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, EtherNet/IP, Velocity Control	340	Ethernet, EtherNet/IP	Yes	$595.00
TSM11Q-1RM	NEMA 11	15-30 VDC	Step & Direction, Streaming Commands, Encoder Following, Q Programming, Velocity Control, Modbus RTU	9.2	RS-485	Yes	$257.00
TSM11Q-2RM	NEMA 11	15-30 VDC	Step & Direction, Streaming Commands, Encoder Following, Q Programming, Velocity Control, Modbus RTU	11.3	RS-485	Yes	$264.00
TSM11Q-3RM	NEMA 11	15-30 VDC	Step & Direction, Streaming Commands, Encoder Following, Q Programming, Velocity Control, Modbus RTU	17.7	RS-485	Yes	$271.00
TSM17C-1CG	NEMA 17	12-48 VDC	Q Programming, CANopen	40	CANopen	Yes	$547.00
TSM17C-2CG	NEMA 17	12-48 VDC	Q Programming, CANopen	59	CANopen	Yes	$551.00
TSM17C-3CG	NEMA 17	12-48 VDC	Q Programming, CANopen	73	CANopen	Yes	$554.00
TSM17P-1AG	NEMA 17	12-48 VDC	Step & Direction, Encoder Following	40	RS-232	Yes	$378.00
TSM17P-2AG	NEMA 17	12-48 VDC	Step & Direction, Encoder Following	59	RS-232	Yes	$380.00
TSM17P-3AG	NEMA 17	12-48 VDC	Step & Direction, Encoder Following	73	RS-232	Yes	$383.00
TSM17Q-1AG	NEMA 17	12-48 VDC	Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	40	RS-232	Yes	$412.00
TSM17Q-1RG	NEMA 17	12-48 VDC	Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	40	RS-485	Yes	$418.00
TSM17Q-2AG	NEMA 17	12-48 VDC	Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	59	RS-232	Yes	$415.00
TSM17Q-2RG	NEMA 17	12-48 VDC	Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	59	RS-485	Yes	$421.00
TSM17Q-3AG	NEMA 17	12-48 VDC	Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	73	RS-232	Yes	$418.00
TSM17Q-3RG	NEMA 17	12-48 VDC	Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	73	RS-485	Yes	$424.00
TSM23C-2CG	NEMA 23	12-70 VDC	Q Programming, CANopen	142	CANopen	Yes	$562.00
TSM23C-3CG	NEMA 23	12-70 VDC	Q Programming, CANopen	212	CANopen	Yes	$576.00
TSM23C-4CG	NEMA 23	12-70 VDC	Q Programming, CANopen	340	CANopen	Yes	$631.00
TSM23P-2AG	NEMA 23	12-70 VDC	Step & Direction, Encoder Following	142	RS-232	Yes	$392.00
TSM23P-3AG	NEMA 23	12-70 VDC	Step & Direction, Encoder Following	212	RS-232	Yes	$403.00
TSM23P-4AG	NEMA 23	12-70 VDC	Step & Direction, Encoder Following	340	RS-232	Yes	$445.00
TSM23Q-2AG	NEMA 23	12-70 VDC	Analog Torque / Velocity, Streaming Commands, Analog Positioning,	142	RS-232	Yes	$507.00

			Encoder Following, Q Programming, Velocity Control, Modbus RTU			
TSM23Q-2RG	NEMA 23	12-70 VDC	Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	142	RS-485	Yes	$514.00
TSM23Q-3AG	NEMA 23	12-70 VDC	Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	212	RS-232	Yes	$521.00
TSM23Q-3RG	NEMA 23	12-70 VDC	Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	212	RS-485	Yes	$529.00
TSM23Q-4AG	NEMA 23	12-70 VDC	Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	340	RS-232	Yes	$576.00
TSM23Q-4RG	NEMA 23	12-70 VDC	Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	340	NA	Yes	$584.00
TSM23S-2AG	NEMA 23	12-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Velocity Control	142	RS-232	Yes	$427.00
TSM23S-2RG	NEMA 23	12-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Velocity Control	142	RS-485	Yes	$433.00
TSM23S-3AG	NEMA 23	12-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Velocity Control	212	RS-232	Yes	$439.00
TSM23S-3RG	NEMA 23	12-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Velocity Control	212	RS-485	Yes	$446.00
TSM23S-4AG	NEMA 23	12-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Velocity Control	340	RS-232	Yes	$485.00
TSM23S-4RG	NEMA 23	12-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Velocity Control	340	RS-485	Yes	$491.00
TSM34C-1CG	NEMA 34	24-70 VDC	Q Programming, CANopen	382	CANopen	Yes	$585.00
TSM34C-3CG	NEMA 34	24-70 VDC	Q Programming, CANopen	736	CANopen	Yes	$644.00
TSM34C-5CG	NEMA 34	24-70 VDC	Q Programming, CANopen	949	CANopen	Yes	$720.00
TSM34C-6CG	NEMA 34	24-70 VDC	Q Programming, CANopen	1161	CANopen	Yes	$805.00
TSM34Q-1AG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	382	RS-232	Yes	$551.00
TSM34Q-1DG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus TCP	382	Ethernet	Yes	$619.00
TSM34Q-1RG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	382	RS-485	Yes	$568.00
TSM34Q-3AG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	736	RS-232	Yes	$610.00
TSM34Q-3DG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus TCP	736	Ethernet	Yes	$678.00
TSM34Q-3RG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder	736	RS-485	Yes	$627.00

			Following, Q Programming, Velocity Control, Modbus RTU				
TSM34Q-5AG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	949	RS-232	Yes	$686.00
TSM34Q-5DG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus TCP	949	Ethernet	Yes	$754.00
TSM34Q-5RG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	949	RS-485	Yes	$703.00
TSM34Q-6AG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	1161	RS-232	Yes	$771.00
TSM34Q-6DG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus TCP	1161	Ethernet	Yes	$838.00
TSM34Q-6RG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	1161	RS-485	Yes	$788.00
TXM24C-1CG	NEMA 24	12-70 VDC	Q Programming, CANopen	116	CANopen	Yes	$824.00
TXM24C-3CG	NEMA 24	12-70 VDC	Q Programming, CANopen	340	CANopen	Yes	$868.00
TXM24IP-1EG	NEMA 24	12-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, EtherNet/IP, Velocity Control	116	Ethernet, EtherNet/IP	Yes	$854.00
TXM24IP-3EG	NEMA 24	12-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, EtherNet/IP, Velocity Control	340	Ethernet, EtherNet/IP	Yes	$898.00
TXM24Q-1AG	NEMA 24	12-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	116	RS-232	Yes	$763.00
TXM24Q-1EG	NEMA 24	12-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus TCP	116	Ethernet	Yes	$785.00
TXM24Q-1RG	NEMA 24	12-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	116	RS-485	Yes	$774.00
TXM24Q-3AG	NEMA 24	12-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	340	RS-232	Yes	$807.00
TXM24Q-3EG	NEMA 24	12-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus TCP	340	Ethernet	Yes	$829.00
TXM24Q-3RG	NEMA 24	12-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	340	RS-485	Yes	$818.00
TXM24S-1AG	NEMA 24	12-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Velocity Control	116	RS-232	Yes	$636.00
			Step & Direction, Analog Torque /				

TXM24S-1EG	NEMA 24	12-70 VDC	Velocity, Streaming Commands, Analog Positioning, Encoder Following, Velocity Control	116	Ethernet	Yes	$658.00
TXM24S-1RG	NEMA 24	12-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Velocity Control	116	RS-485	Yes	$647.00
TXM24S-3AG	NEMA 24	12-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Velocity Control	340	RS-232	Yes	$672.00
TXM24S-3EG	NEMA 24	12-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Velocity Control	340	Ethernet	Yes	$694.00
TXM24S-3RG	NEMA 24	12-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Velocity Control	340	RS-485	Yes	$683.00
TXM34C-1CG	NEMA 34	24-70 VDC	Q Programming, CANopen	382	CANopen	Yes	$992.00
TXM34C-3CG	NEMA 34	24-70 VDC	Q Programming, CANopen	736	CANopen	Yes	$1051.00
TXM34C-5CG	NEMA 34	24-70 VDC	Q Programming, CANopen	949	CANopen	Yes	$1127.00
TXM34C-6CG	NEMA 34	24-70 VDC	Q Programming, CANopen	1161	CANopen	Yes	$1212.00
TXM34Q-1AG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	382	RS-232	Yes	$896.00
TXM34Q-1DG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus TCP	382	Ethernet	Yes	$1026.00
TXM34Q-1RG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	382	RS-485	Yes	$975.00
TXM34Q-3AG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	736	RS-232	Yes	$955.00
TXM34Q-3DG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus TCP	736	Ethernet	Yes	$1085.00
TXM34Q-3RG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	736	RS-485	Yes	$1034.00
TXM34Q-5AG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	949	RS-232	Yes	$1031.00
TXM34Q-5DG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus TCP	949	Ethernet	Yes	$1161.00
TXM34Q-5RG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	949	RS-485	Yes	$1110.00
TXM34Q-6AG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	1161	RS-232	Yes	$1116.00
TXM34Q-6DG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus TCP	1161	Ethernet	Yes	$1246.00

TXM34Q-6RG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	1161	RS-485	Yes	$1195.00

Products in the Series *Modbus RTU Products*

Part Number	Frame Size	Supply Voltage	Control Modes	Holding Torque	Communication Ports	Encoder Feedback	1pc.
5000-128	NA	24-48 VDC	Step & Direction, Velocity (Oscillator), Streaming Commands, Analog Positioning, Encoder Following, Q Programming, SiNet Hub Compatible, Modbus RTU	NA	RS-232	No	$467.00
5000-130	NA	24-48 VDC	Step & Direction, Velocity (Oscillator), Streaming Commands, Analog Positioning, Encoder Following, Q Programming, SiNet Hub Compatible, Modbus RTU	NA	RS-232	Yes	$540.00
5000-132	NA	24-48 VDC	Step & Direction, Velocity (Oscillator), Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus RTU	NA	RS-232, RS-485	No	$570.00
5000-134	NA	24-48 VDC	Step & Direction, Velocity (Oscillator), Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus RTU	NA	RS-232, RS-485	Yes	$625.00
5000-138	NA	24-80 VDC	Step & Direction, Velocity (Oscillator), Streaming Commands, Analog Positioning, Encoder Following, Q Programming, SiNet Hub Compatible, Modbus RTU	NA	RS-232	No	$515.00
5000-140	NA	24-80 VDC	Step & Direction, Velocity (Oscillator), Streaming Commands, Analog Positioning, Encoder Following, Q Programming, SiNet Hub Compatible, Velocity Control, Modbus RTU	NA	RS-232	Yes	$580.00
5000-142	NA	24-80 VDC	Step & Direction, Velocity (Oscillator), Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus RTU	NA	RS-232, RS-485	No	$630.00
5000-144	NA	24-80 VDC	Step & Direction, Velocity (Oscillator), Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus RTU	NA	RS-232, RS-485	Yes	$690.00
5000-244	NA	24-48 VDC	Step & Direction, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, SiNet Hub Compatible, Velocity Control, Modbus RTU	NA	RS-232	Yes	$530.00
5000-245	NA	24-80 VDC	Step & Direction, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, SiNet Hub Compatible, Velocity Control, Modbus RTU	NA	RS-232	Yes	$557.00
STM17Q-1AE	NEMA 17	12-48 VDC	Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus RTU	31	RS-232	Yes	$347.00
STM17Q-1AN	NEMA 17	12-48 VDC	Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus RTU	31	RS-232	No	$272.00
STM17Q-1RE	NEMA 17	12-48 VDC	Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus RTU	31	RS-485	Yes	$353.00
STM17Q-1RN	NEMA 17	12-48 VDC	Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus RTU	31	RS-485	No	$278.00
STM17Q-2AE	NEMA 17	12-48 VDC	Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus RTU	54	RS-232	Yes	$350.00
STM17Q-2AN	NEMA 17	12-48 VDC	Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus RTU	54	RS-232	No	$275.00
STM17Q-2RE	NEMA 17	12-48 VDC	Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus RTU	54	RS-485	Yes	$356.00
STM17Q-2RN	NEMA 17	12-48 VDC	Streaming Commands, Analog Positioning, Encoder Following, Q	54	RS-485	No	$281.00

			Programming, Modbus RTU				
STM17Q-3AE	NEMA 17	12-48 VDC	Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus RTU	68	RS-232	Yes	$353.00
STM17Q-3AN	NEMA 17	12-48 VDC	Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus RTU	68	RS-232	No	$288.00
STM17Q-3RE	NEMA 17	12-48 VDC	Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus RTU	68	RS-485	Yes	$360.00
STM17Q-3RN	NEMA 17	12-48 VDC	Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus RTU	68	RS-485	No	$295.00
STM23Q-2AE	NEMA 23	12-70 VDC	Streaming Commands, Analog Positioning, Encoder Following, Q Programming, SiNet Hub Compatible, Modbus RTU	125	RS-232	Yes	$440.00
STM23Q-2AN	NEMA 23	12-70 VDC	Streaming Commands, Analog Positioning, Encoder Following, Q Programming, SiNet Hub Compatible, Modbus RTU	125	RS-232	No	$365.00
STM23Q-2RE	NEMA 23	12-70 VDC	Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus RTU	125	RS-485	Yes	$447.00
STM23Q-2RN	NEMA 23	12-70 VDC	Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus RTU	125	RS-485	No	$372.00
STM23Q-3AE	NEMA 23	12-70 VDC	Streaming Commands, Analog Positioning, Encoder Following, Q Programming, SiNet Hub Compatible, Modbus RTU	210	RS-232	Yes	$456.00
STM23Q-3AN	NEMA 23	12-70 VDC	Streaming Commands, Analog Positioning, Encoder Following, Q Programming, SiNet Hub Compatible, Modbus RTU	210	RS-232	No	$381.00
STM23Q-3RE	NEMA 23	12-70 VDC	Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus RTU	210	RS-485	Yes	$463.00
STM23Q-3RN	NEMA 23	12-70 VDC	Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus RTU	210	RS-485	No	$388.00
STM24QF-3AE	NEMA 24	12-70 VDC	Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus RTU	340	RS-232	Yes	$564.00
STM24QF-3AN	NEMA 24	12-70 VDC	Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus RTU	340	RS-232	No	$489.00
STM24QF-3RE	NEMA 24	12-70 VDC	Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus RTU	340	RS-485	Yes	$572.00
STM24QF-3RN	NEMA 24	12-70 VDC	Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus RTU	340	RS-485	No	$497.00
SV2A3-Q-RE	NA	78-139 VAC	Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus RTU	NA	RS-485	NA	$519.00
SV2A5-Q-RE	NA	78-139 VAC	Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus RTU	NA	RS-485	NA	$649.00
SV2B3-Q-RE	NA	156-264 VAC	Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus RTU	NA	RS-485	NA	$519.00
SV2B5-Q-RE	NA	156-264 VAC	Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus RTU	NA	RS-485	NA	$649.00
SWM24QF-3AE	NEMA 24	12-70 VDC	Step & Direction, Analog Torque / Velocity, Velocity (Oscillator), Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus RTU	340	RS-232	Yes	$772.00
TSM11Q-1RM	NEMA 11	15-30 VDC	Step & Direction, Streaming Commands, Encoder Following, Q Programming, Velocity Control, Modbus RTU	9.2	RS-485	Yes	$257.00
TSM11Q-2RM	NEMA 11	15-30 VDC	Step & Direction, Streaming Commands, Encoder Following, Q Programming, Velocity Control,	11.3	RS-485	Yes	$264.00

			Programming, Velocity Control, Modbus RTU				
TSM11Q-3RM	NEMA 11	15-30 VDC	Step & Direction, Streaming Commands, Encoder Following, Q Programming, Velocity Control, Modbus RTU	17.7	RS-485	Yes	$271.00
TSM17Q-1AG	NEMA 17	12-48 VDC	Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	40	RS-232	Yes	$412.00
TSM17Q-1RG	NEMA 17	12-48 VDC	Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	40	RS-485	Yes	$418.00
TSM17Q-2AG	NEMA 17	12-48 VDC	Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	59	RS-232	Yes	$415.00
TSM17Q-2RG	NEMA 17	12-48 VDC	Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	59	RS-485	Yes	$421.00
TSM17Q-3AG	NEMA 17	12-48 VDC	Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	73	RS-232	Yes	$418.00
TSM17Q-3RG	NEMA 17	12-48 VDC	Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	73	RS-485	Yes	$424.00
TSM23Q-2AG	NEMA 23	12-70 VDC	Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	142	RS-232	Yes	$507.00
TSM23Q-2RG	NEMA 23	12-70 VDC	Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	142	RS-485	Yes	$514.00
TSM23Q-3AG	NEMA 23	12-70 VDC	Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	212	RS-232	Yes	$521.00
TSM23Q-3RG	NEMA 23	12-70 VDC	Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	212	RS-485	Yes	$529.00
TSM23Q-4AG	NEMA 23	12-70 VDC	Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	340	RS-232	Yes	$576.00
TSM23Q-4RG	NEMA 23	12-70 VDC	Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	340	NA	Yes	$584.00
TSM34Q-1AG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	382	RS-232	Yes	$551.00
TSM34Q-1RG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	382	RS-485	Yes	$568.00
TSM34Q-3AG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	736	RS-232	Yes	$610.00
TSM34Q-3RG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	736	RS-485	Yes	$627.00
TSM34Q-5AG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	949	RS-232	Yes	$686.00
			Step & Direction, Analog Torque /				

TSM34Q-5RG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	949	RS-485	Yes	$703.00
TSM34Q-6AG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	1161	RS-232	Yes	$771.00
TSM34Q-6RG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	1161	RS-485	Yes	$788.00
TXM24Q-1AG	NEMA 24	12-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	116	RS-232	Yes	$763.00
TXM24Q-1RG	NEMA 24	12-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	116	RS-485	Yes	$774.00
TXM24Q-3AG	NEMA 24	12-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	340	RS-232	Yes	$807.00
TXM24Q-3RG	NEMA 24	12-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	340	RS-485	Yes	$818.00
TXM34Q-1AG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	382	RS-232	Yes	$896.00
TXM34Q-1RG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	382	RS-485	Yes	$975.00
TXM34Q-3AG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	736	RS-232	Yes	$955.00
TXM34Q-3RG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	736	RS-485	Yes	$1034.00
TXM34Q-5AG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	949	RS-232	Yes	$1031.00
TXM34Q-5RG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	949	RS-485	Yes	$1110.00
TXM34Q-6AG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	1161	RS-232	Yes	$1116.00
TXM34Q-6RG	NEMA 34	24-70 VDC	Step & Direction, Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus RTU	1161	RS-485	Yes	$1195.00