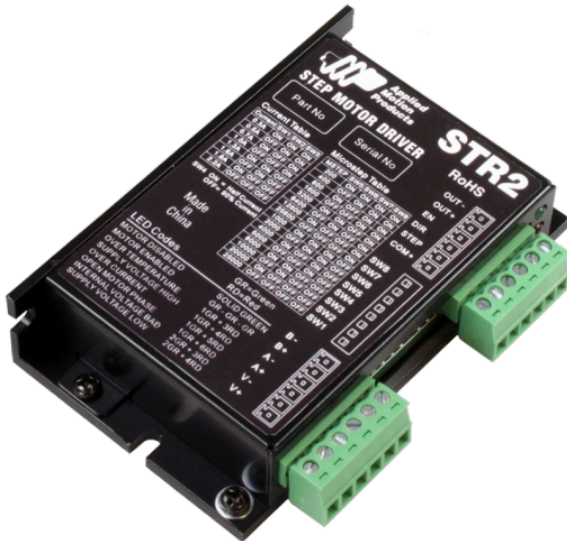


# STR2

DC Advanced Microstep Drive

1pc. - 97.00  
 50pc. - 72.75



## Product Features

- Ultra compact size
- Current range .3A to 2.2A peak of sine
- Electronic damping (anti-resonance)
- Microstepping & microstep emulation
- Built-in self test move profile
- Step & direction inputs
- CW Pulse/CCW pulse operation
- Idle current reduction
- Selectable digital input filter



## Description

The STR2 stepper drive is an ultra compact, digital step & direction drive, great for OEM applications requiring basic step & direction control of a 2-phase step motor. The STR2 outputs up to 2.2 A/phase to the step motor, and is compatible with a variety of 2-phase step motors that have been selected to optimize performance of both the drive and motor.

The STR2 drive features advanced microstepping performance and sophisticated current control with anti-resonance. Anti-resonance electronically damps motor and system resonances, which improves motor smoothness and torque over a wide speed range.

Each STR2 step motor drive operates in either Step & Direction or Pulse/Pulse control mode. Selecting between these two modes is done by moving a jumper located under the cover of the drive. Each STR2 drive can microstep up to 20,000 steps/rev with a 1.8° step motor (1/100 step), and can even microstep the step motor when the command pulses are low resolution. This feature is called Microstep Emulation. All drive setup is done via dip switches on the side of the drive, including motor selection, running current, idle current, and step resolution.

This step pulse & direction motor drive is designed with sourcing inputs and intended for use with PLC's and motion controllers that have sinking outputs. For more information on wiring, including example diagrams, please refer to the hardware manual in the Downloads section of this page.

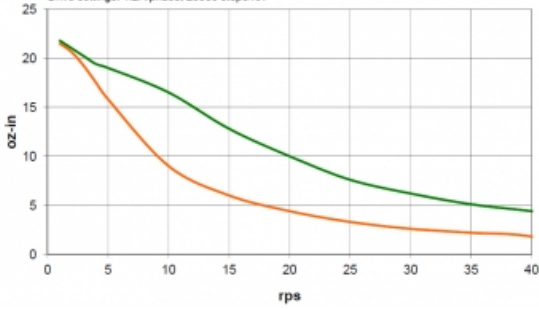
## Specifications

<b>Model Number:</b>	STR2
<b>Part Number:</b>	5000-235
<b>Supply Voltage:</b>	12-48 VDC
<b>Supply Voltage Type:</b>	DC
<b>Control Modes:</b>	Step & Direction
<b>Output Current:</b>	0.3-2.2 A/phase
<b>Encoder Feedback:</b>	No
<b>Step Resolution:</b>	Full Half Microstepping Microstep Emulation
<b>Idle Current Reduction:</b>	50% or 90%
<b>Setup Method:</b>	Switch / potentiometer
<b>Digital Inputs:</b>	3
<b>Digital Outputs:</b>	1
<b>Dimensions:</b>	3.65 x 2.21 x 0.82 inches
<b>Weight:</b>	4.7 oz
<b>Operating Temperature Range:</b>	0 to 85 °C
<b>Ambient Temperature Range:</b>	0 to 50 °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

# Torque Curves

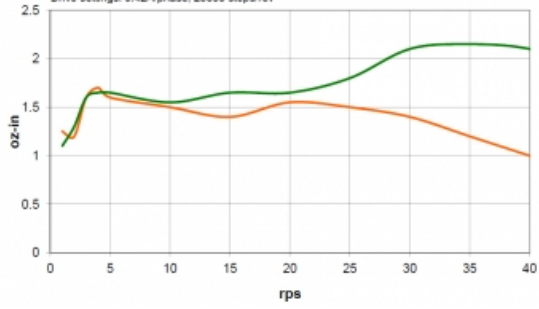
**5014-842, STR2**

Connection: 4 leads  
Drive settings: 1.2A/phase, 20000 steps/rev



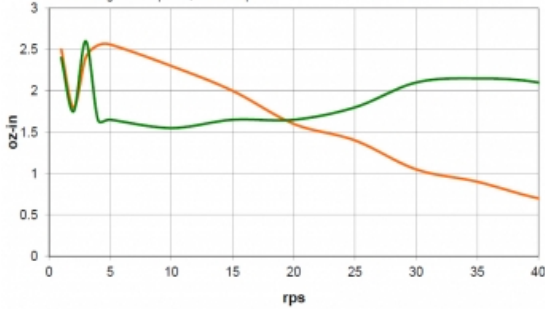
**HT08-020, STR2**

Connection: 4 leads  
Drive settings: 0.42A/phase, 20000 steps/rev



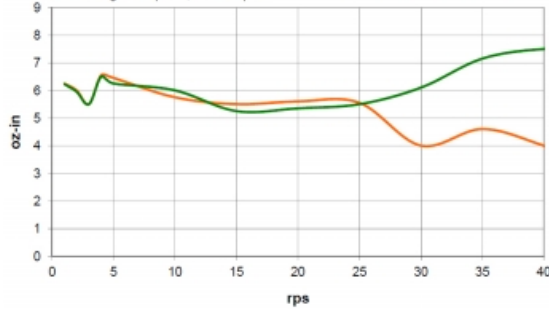
**HT08-021, STR2**

Connection: 4 leads  
Drive settings: 0.42A/phase, 20000 steps/rev



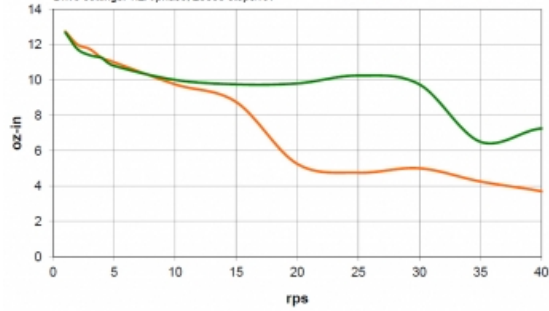
**HT11-012, STR2**

Connection: 4 leads  
Drive settings: 1.2A/phase, 20000 steps/rev



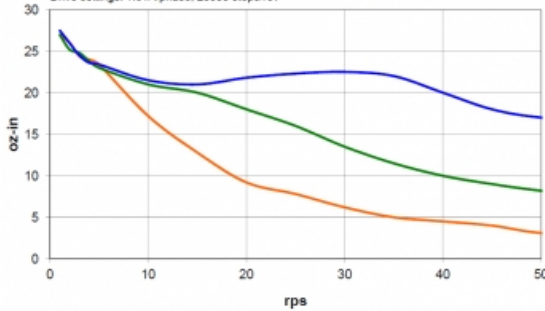
**HT11-013, STR2**

Connection: 4 leads  
Drive settings: 1.2A/phase, 20000 steps/rev



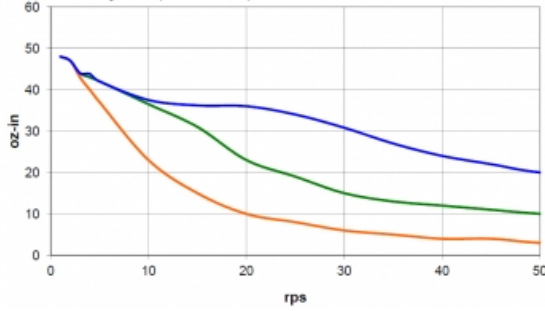
**HT17-268, STR2**

Connection: parallel  
Drive settings: 1.61A/phase, 20000 steps/rev



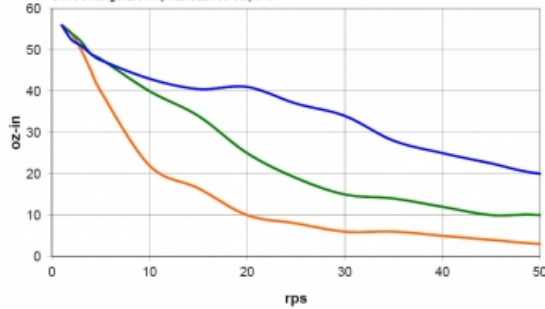
**HT17-271, STR2**

Connection: parallel  
Drive settings: 2.04A/phase, 20000 steps/rev



**HT17-275, STR2**

Connection: parallel  
Drive settings: 2.04A/phase, 20000 steps/rev



**HT23-595, STR2**

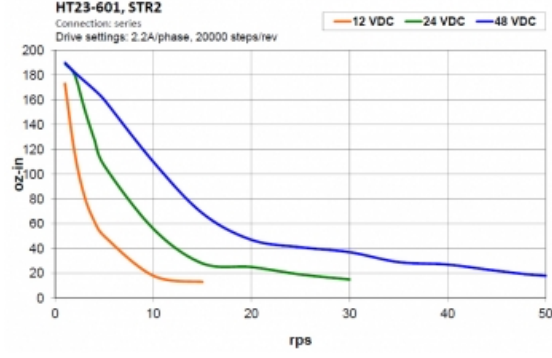
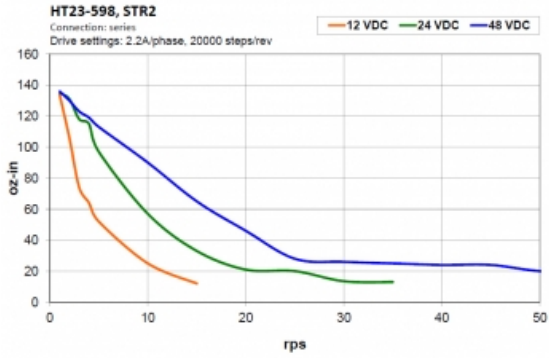
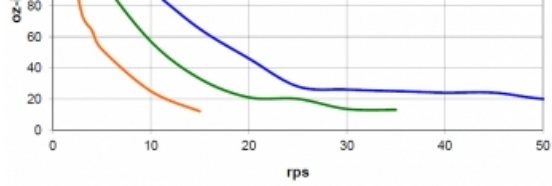
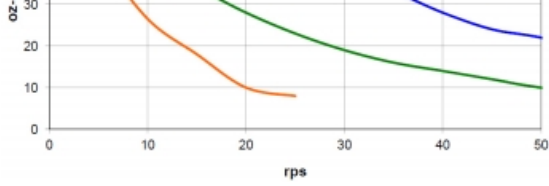
Connection: series  
Drive settings: 2.2A/phase, 20000 steps/rev



**HT23-598, STR2**

Connection: series  
Drive settings: 2.2A/phase, 20000 steps/rev





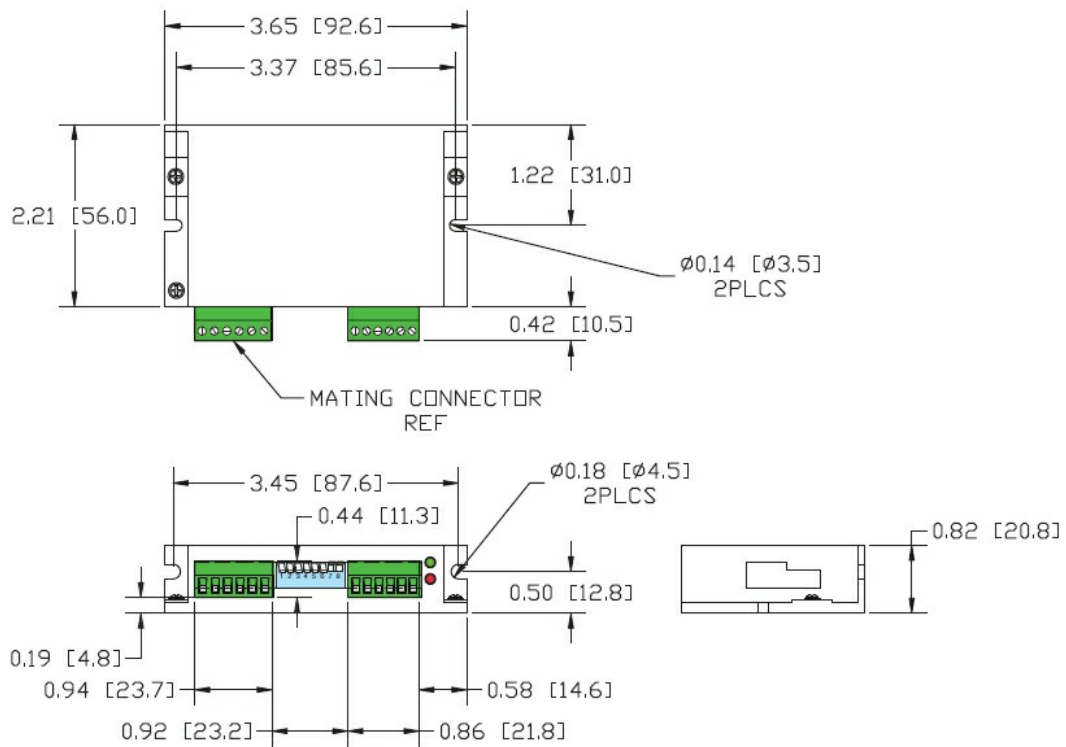
## Downloads

<b>Manuals:</b>	<a href="#">STR2_QuickSetup_920-0060.pdf</a> <a href="#">STR2_Hardware_Manual_920-0059B.pdf</a>
<b>Datasheet:</b>	<a href="http://s3.amazonaws.com/applied-motion-pdf/STR2.pdf">http://s3.amazonaws.com/applied-motion-pdf/STR2.pdf</a>
<b>Family Datasheet:</b>	<a href="#">STR_Datasheet_925-0002.pdf</a>
<b>2D Drawing:</b>	<a href="#">STR2_2D.pdf</a> <a href="#">STR2_heatsink-cover-model_3D.pdf</a>
<b>3D Drawing:</b>	<a href="#">STR2_heatsink-cover-model3.igs</a>
<b>Speed-Torque Curves:</b>	<a href="#">STR2_speed-torque.pdf</a>
<b>Agency Approvals:</b>	<a href="#">STR_CE_DOC.PDF</a>

## Pricing

<b>STR2</b> Part No. 5000-235	
<b>1pc.</b>	\$97.00
<b>25pc.</b>	\$83.42
<b>50pc.</b>	\$72.75
<b>100pc.</b>	<a href="#">Request a Quote</a> for 100+ piece pricing.

## 2D Drawings



## Products in the Series *STR Stepper Drives*

Number	Supply Voltage	Control Modes	Output Current	Communication Ports	Encoder Feedback	1pc./50pc.
<a href="#">STR2</a>	12-48 VDC	Step & Direction	0.3-2.2 A/Phase	NA	No	\$97.00 / \$72.75
<a href="#">STR4</a>	24-48 VDC	Step & Direction	1.12-4.5 A/Phase	NA	No	\$190.00 / \$142.50
<a href="#">STR8</a>	24-75 VDC	Step & Direction	2.35-8.0 A/Phase	NA	No	\$217.00 / \$162.75