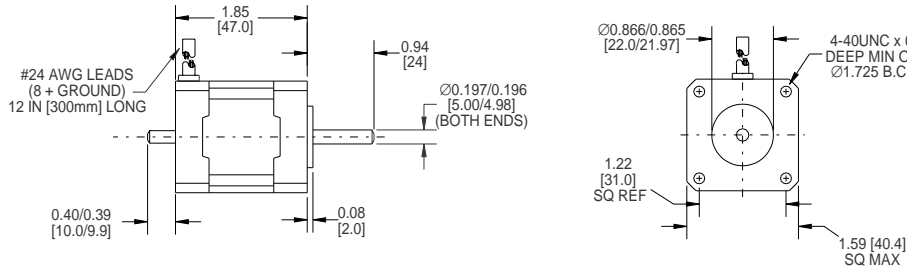




# S12 Hybrid Step Motor Specifications



## Electrical Data

		Series	Parallel
Continuous Stall Torque	oz-in [N-m]	35 [0.25]	
Recommended Current/Phase	Amps	1.0	2.0
Winding Resistance @ Ambient	Ohms	5.52	1.38
Inductance	mH	8.8	2.2
Max. Winding Temperature	°F [°C]	212 [100]	

## Mechanical Data

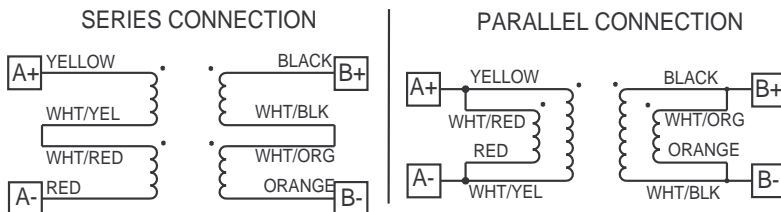
Rotor Inertia	oz-in-s <sup>2</sup> [kg-m <sup>2</sup> ]	5.1×10 <sup>-4</sup> [3.6×10 <sup>-6</sup> ]
Axial Shaft Load	lbs [N]	10 [45]
Radial Shaft Load - @ 0.5"	lbs [N]	5 [22]
Motor Weight	lbs [kg]	0.66 [0.3]
Step Angle (full step)	degrees	1.8

## Notes

- Parallel (V) Wiring: 60% Duty Cycle Max. Above 5 rps (300 rpm).
- Always use at least 50% torque safety margin when applying step motors.

## Motor Wiring

### 12" Wire Leads



## S6000 Drive Settings

S12 - Series		S12 - Parallel	
Motor Current	Inductance	Motor Current	Inductance
<b>1.0 Amps</b>	<b>8* mH</b>	<b>2.0 Amps</b>	<b>4* mH</b>
Tenths of Amps		Tenths of Amps	

\*Drive setting closest to actual motor specifications.