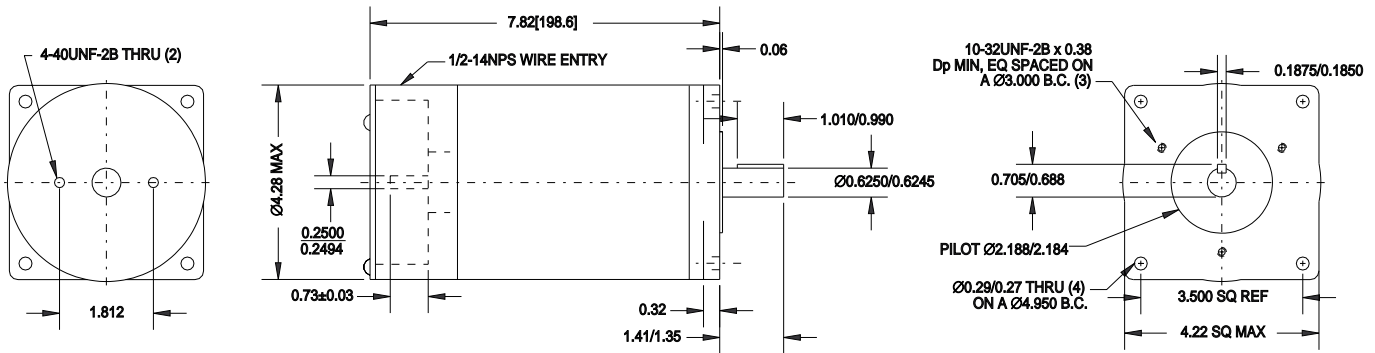




S42 Hybrid Step Motor Specifications



Electrical Data

		S42T (Series)	S42V (Parallel)
Continuous Stall Torque	oz-in [N-m]	1000 [7.1]	725 [5.1]
Recommended Current/Phase	Amps	6.0	7.9
Winding Resistance @ Ambient	Ohms	.36	.09
Inductance	mH	7	1.75
Max. Winding Temperature	°F [°C]	212 [100]	

Mechanical Data

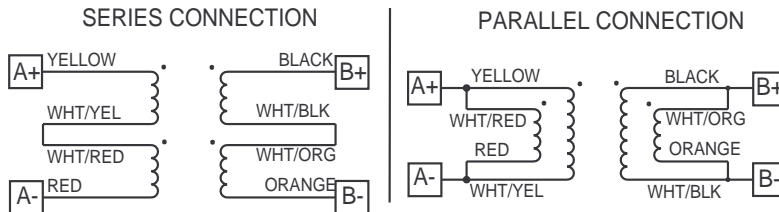
		S42 (T/V)
Rotor Inertia	oz-in-s ² [kg-m ²]	114×10 ⁻³ [80.5×10 ⁻⁵]
Axial Shaft Load	lbs [N]	65 [289]
Radial Shaft Load - @ 0.5"	lbs [N]	23.6 [105]
Motor Weight	lbs [kg]	19.1 [8.66]
Step Angle (full step)	degrees	1.8

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 ft [3.7m] Wire Leads : S42N



S6000 Drive Settings

S42T (Series)

Motor Current	Inductance
6.0 Amps	8* mH
Tenths of Amps	Tenths of mH

S42V (Parallel)

Motor Current	Inductance
7.9* Amps	4* mH
Tenths of Amps	Tenths of mH

*Drive setting closest to actual motor specifications.

Quick-Disconnect : S42(T/V)

Quick Disconnect Wire Color	Drive Connection
RED	A+
RED w/ ORANGE	A-
RED w/ WHITE	B+
RED w/ BLACK	B-
GREEN	GND

