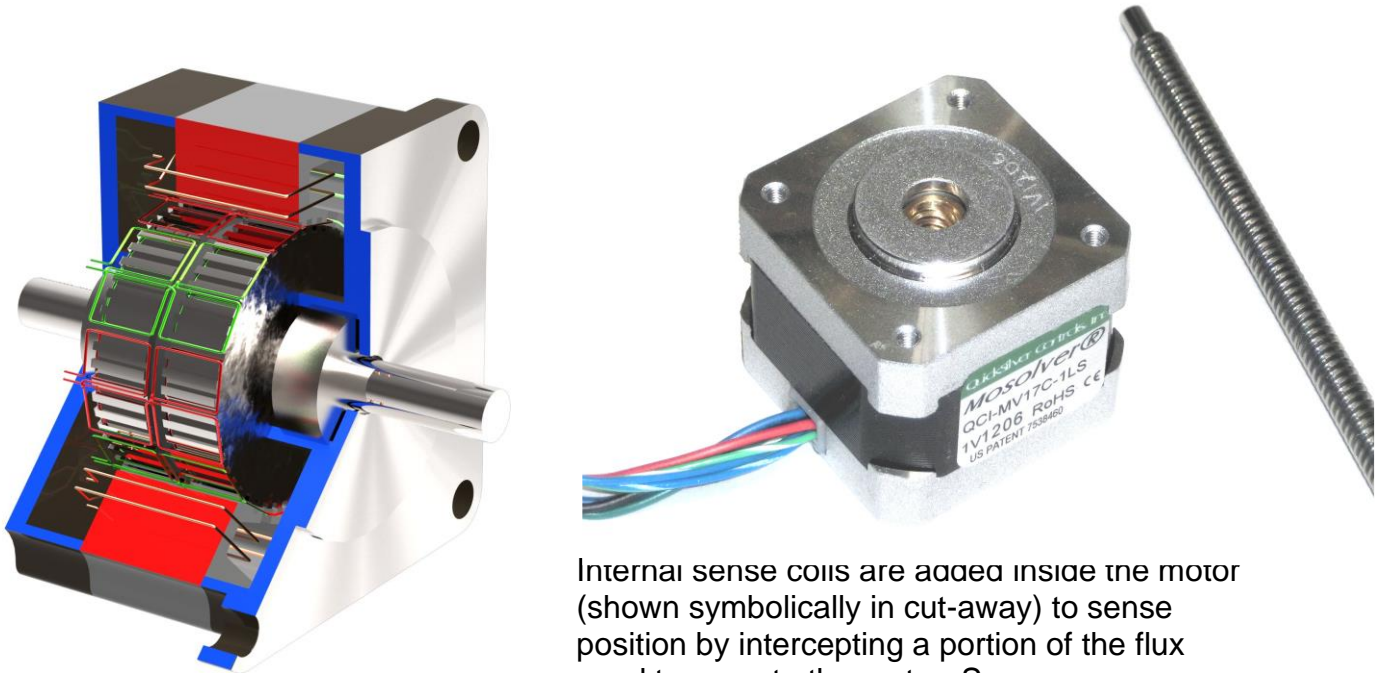


NEMA 17 Mosolver® - Motor with integrated feedback Non-Captive Leadscrew



Internal sense coils are added inside the motor (shown symbolically in cut-away) to sense position by intercepting a portion of the flux used to operate the motor. See www.Mosolver.com for more details.

Note: Motor specifications (including torque curves) are only true when the motors are used in conjunction with QuickSilver's SilverSterling™ controller. See the controller datasheets for more details.

Leadscrew pitch is TR6.35mm X 3.175 (dual start 1.5875mm pitch thread).
Contact factory for other leadscrew configurations.

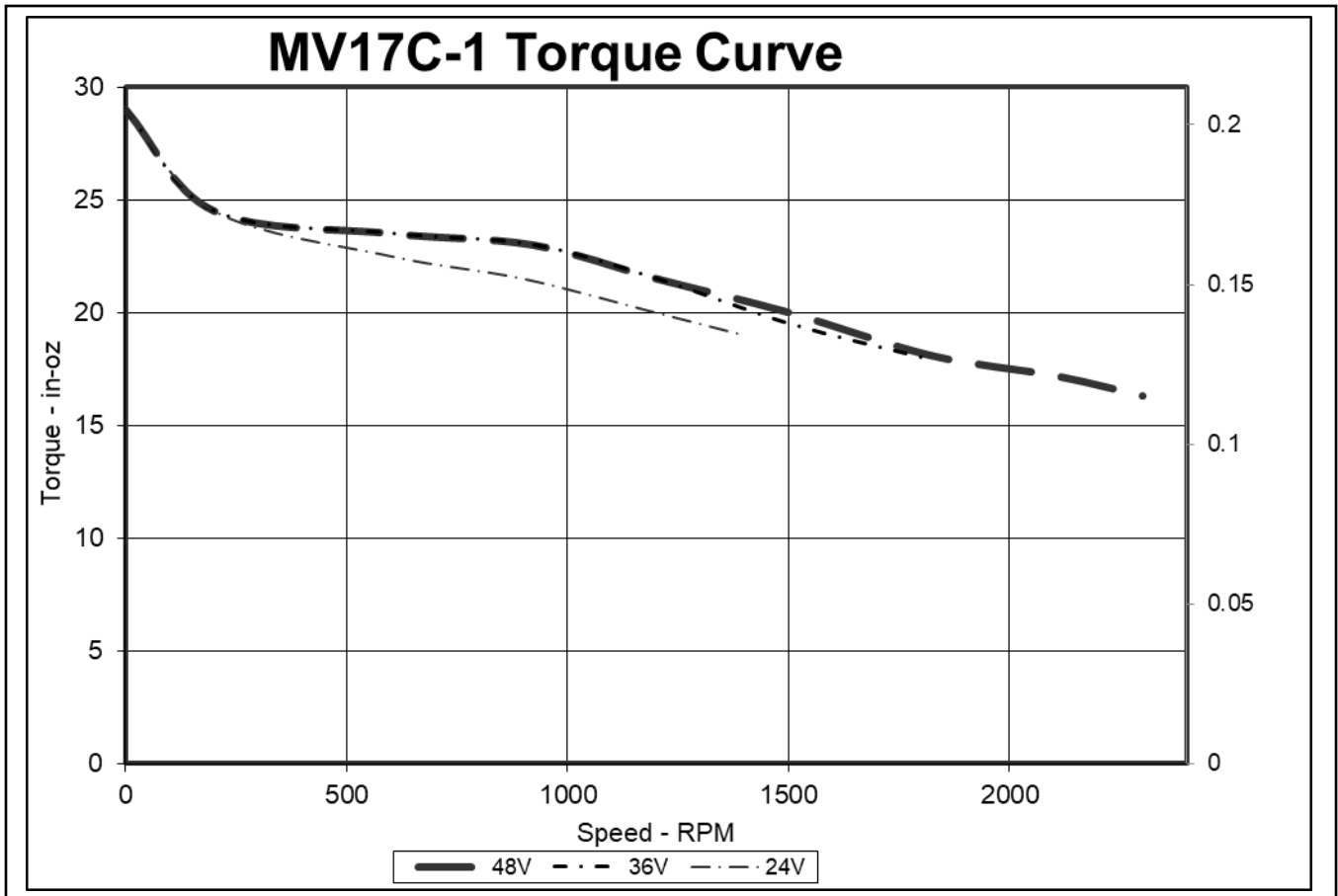
General Motor Specifications

Specifications	MV17C-1LS
Maximum Speed (RPM)	2300
In/sec (mm/sec)	4.7 (121)
48v Optimal Speed (RPM)	1700
In/sec (mm/sec)	3.5 (90)
Torque (oz-in / Nm) at Optimal Speed	18.5 0.135
Continuous Stall Torque oz-in / Nm (rotary nut)	30 0.22
Force Lbs. (N) (Linear shaft)	30 (134)
Peak Power (Mech. Watts) (rotary)	29
Rotor Inertia oz-in ² / Kg-m ²	.18 3.29e-6
Weight lb / Kg	.61 0.27
Maximum Driver Input Current (Amps - DC)	0.95 @ 48V 1.3A @24v
Shaft Diameter in / mm	.157 in 4.00 mm
Maximum Radial Force(lbs) @ .62" (15mm) from face	5.8 26

*RPM and torque ratings are at rotor. Linear speed and force are from leadscrew.
Measured lead-nut efficiency is approximately 30%

Force is actual measured force to stall motor.

Torque Curves



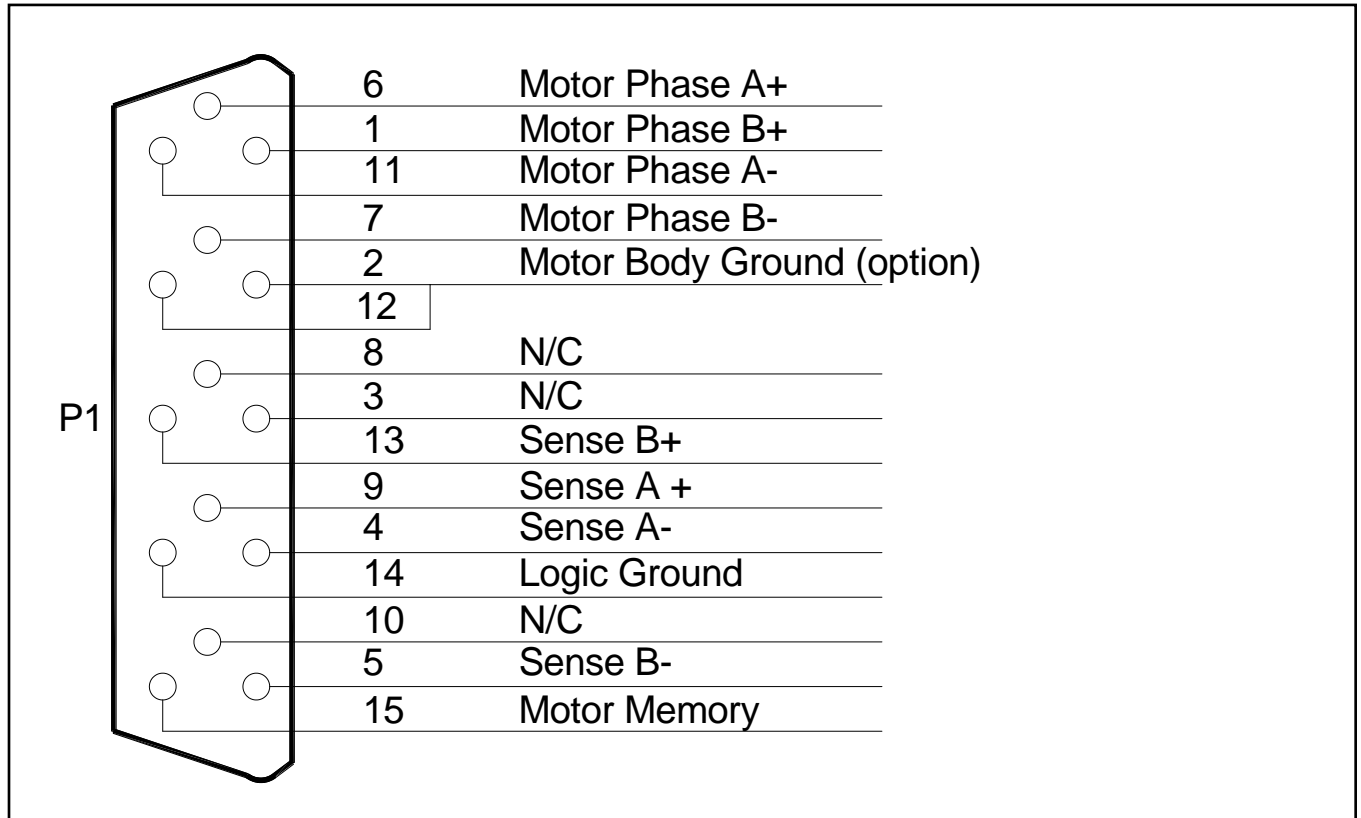
Wiring

Motor includes 36" cable (including connector) which may connect directly to the QCI-S2-IGHx motor/encoder connector, or may be used with up to a 10' QCI-C-D15P-D15S-xx motor/encoder cable.

** Mosolver functions available in SilverSterling S2-IGxx with S/N 2S2000 and higher.

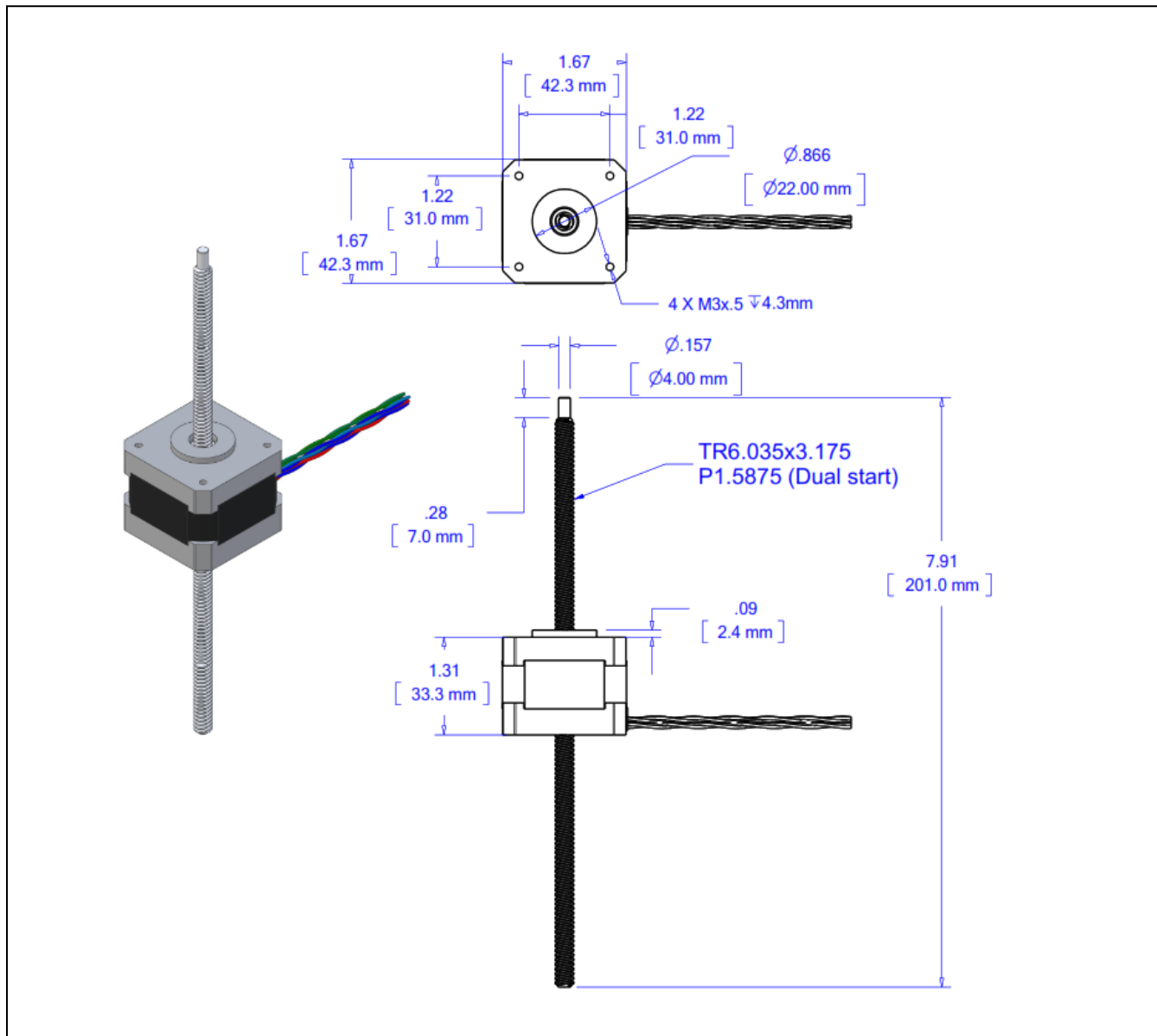
Connector Data

Standard DB-HD15 pin



⚠ Note: The motor construction uses a wave spring to compensate for mechanical tolerances and thermal expansion in the axial shaft direction. Pushing in / pulling out the shaft while operating may affect sensor accuracy. High forces on the shaft will shorten bearing life and excessive levels may cause immediate failure of the shaft and/or bearings. Do NOT strike with a hammer or impact tool! Support rear shaft if pressing a gear or pulley.

Mechanical Specifications



Motor Series	Shaft Length	Shaft diameter (top)	Mounting Hole
MV17C-1LS	See Drawing	.1575 [4.00 mm]	M3X.05 ↓0.17 [4.5mm] min

Environmental Specifications

Operational Temperature

-10 C to +80 C

Storage Temperature

-40 C to +85 C

Humidity

Continuous specification is 95% RH non-condensing.

Shock

Limitation is approximately 50g/11ms.

IP Rating - Standard

IP50

Part Numbers

NEMA17 Mosolver	
MOTOR TYPE/SIZE	MOTOR INTERFACE
<ul style="list-style-type: none"> • QCI-MV17C-1LS 	Blank – Standard <ul style="list-style-type: none"> • DB15HD Motor Interface Connector
To create a part number, choose one from each column above. For example: QCI-MV17C-1LS	
QCI-MV17C-1LS	
This selection creates the part number: QCI-M17C-1LS	

Contact Information

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