

# 34K65 Series - Sealed Stepper Motors



## FEATURES

- **NEMA 34 Frame Size**
- **1.8° Natural Step Angle**
- **Holding Torque Ratings Up to 2790 oz-in**
- **Splashproof IP65 Sealed Stepper Motor**
- **Substantial Increase In Torque Over Standard Motors**
- **High Acceleration and Increased Rotor Inertia**
- **4 Stack Lengths**
- **Microstep Increments as Small as 0.0072° (with our MBC082561 driver)**
- **1.5% Typical Step Accuracy**
- **Rugged Construction**
- **Higher Temperature Characteristics**
- **CE Certified and RoHS Compliant**



## DESCRIPTION

The 34K65 Series High Torque Stepper Motors use advanced magnetic technologies to provide significantly higher torque levels than what is available in standard round motors. They are also sealed around the shaft and lead-wire making them splashproof and perfect for applications specific requirement. The torque levels reached with this step motor line make them cost-effective alternatives to servo motors in many applications. These motors can be specified in place of standard motors to reduce system size and cost, or increase system performance, without the need to go to larger sized motors or drivers. [See Accessories on our website for optional motor adders such as encoders, brakes, cables and connectors.](#) For compatible drivers, consider our popular MBC082561, MBC10641 and MBC12101 drivers or Driver Packs.

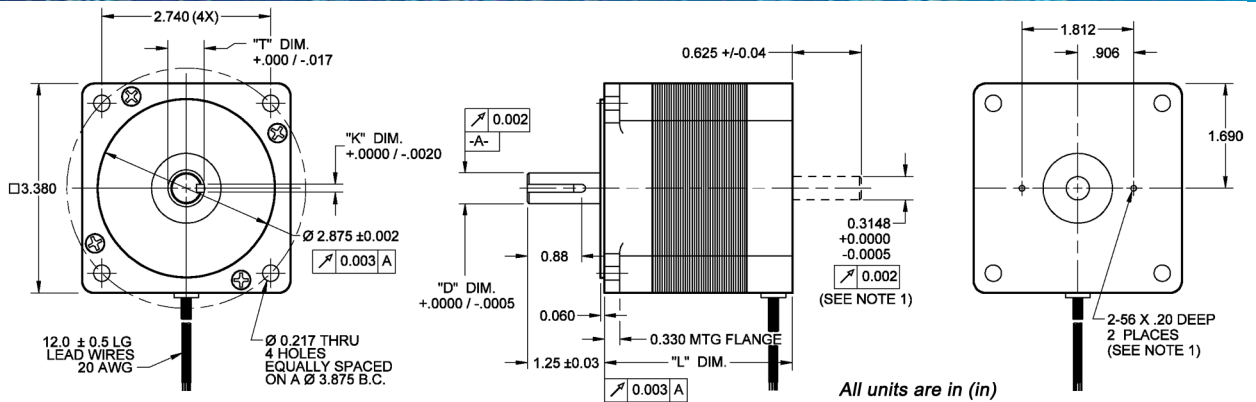
## SPECIFICATIONS

Model #	NEMA Size	Bipolar Torque (oz-in)	Series Current (A)	Unipolar Current (A)	Parallel Current (A)	Unipolar Inductance (mH)	Rotor Inertia (oz-in-sec <sup>2</sup> )	Shaft Diameter (in)	# of Terminals	Weight (lbs)	L Length (in)
34K65104S-CB8	34	805	1.4	2.0	2.80	10.2	0.02	0.500	8	5.00	4.44
34K65108S-CB8	34	820	2.7	3.9	5.40	2.80	0.02	0.500	8	5.00	4.44
34K65112S-CB8	34	830	4.3	6.1	8.60	1.20	0.02	0.500	8	5.00	4.44
34K65207S-CB8	34	1510	2.5	3.5	5.00	5.70	0.038	0.500	8	8.40	5.96
34K65214S-CB8	34	1535	5.0	7.1	10.0	1.40	0.038	0.500	8	8.40	5.96
34K65307S-CB8	34	2145	2.5	3.5	5.00	7.00	0.057	0.625	8	11.9	7.48
34K65314S-CB8	34	2150	5.0	7.0	10.0	1.70	0.057	0.625	8	11.9	7.48
34K65412S-CB8	34	2790	4.4	6.2	12.4	3.60	0.075	0.625	8	15.1	8.99
34K65416S-CB8	34	2725	5.6	8.0	16.0	2.00	0.075	0.625	8	15.1	8.99

Notes: The 9<sup>th</sup> character "S" denotes a single shaft, use "D" for double shaft. Custom leadwires, cables, connectors, and windings are available upon request.

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DIMENSIONS

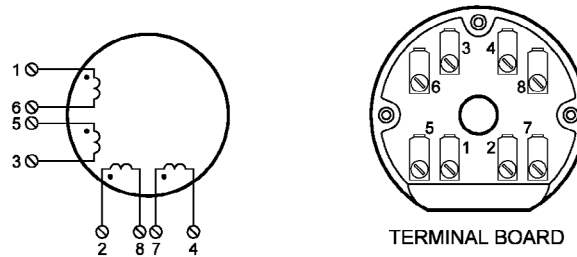


All units are in (in)

Part Number	"D"	"K"	"T"	"X"	"L"
34X1XXS-CB8	0.500	0.1250	0.555	3.70	4.44
34X2XXS-CB8	0.500	0.1250	0.555	5.22	5.96
34X3XXS-CB8	0.625	0.1875	0.705	6.74	7.48

WIRING INFORMATION

Connection	Lead Wire Connection	Lead Wire Color	Terminal #
4 - Lead Bipolar Series MBC or MLP Series	(A)	Black	1
	(/A)	Orange	3
	(B)	Red	2
	(/B)	Yellow	4
	None	White/Black & White/Orange White/Red & White/Yellow	6 & 5 8 & 7
4 - Lead Bipolar Parallel MBC or MLP Series	(A)	Black & White/Orange	1 & 5
	(/A)	Orange & White/Black	3 & 6
	(B)	Red & White/Yellow	2 & 6
	(/B)	Yellow & White/Red	4 & 8
6 - Lead Unipolar BLD, TM Series	Phase 1	Black	1
	Phase 3	Orange	3
	Phase 2	Red	2
	Phase 4	Yellow	4
	Common Phase 1 & 3 Common Phase 2 & 4	White/Black & White/Orange White/Red & White/Yellow	6 & 5 8 & 7



SPECIFICATIONS

Step Angle Accuracy:	±1.5%	Insulation Type:	Class B
Resistance Accuracy:	±10%	Insulation Resistance:	100M ohms @ 500VAC
Full Step Angle:	1.8°	Max Radial Force:	20lbs
Ambient Temperature:	-20° C - +40° C	Max Axial Force:	13lbs