

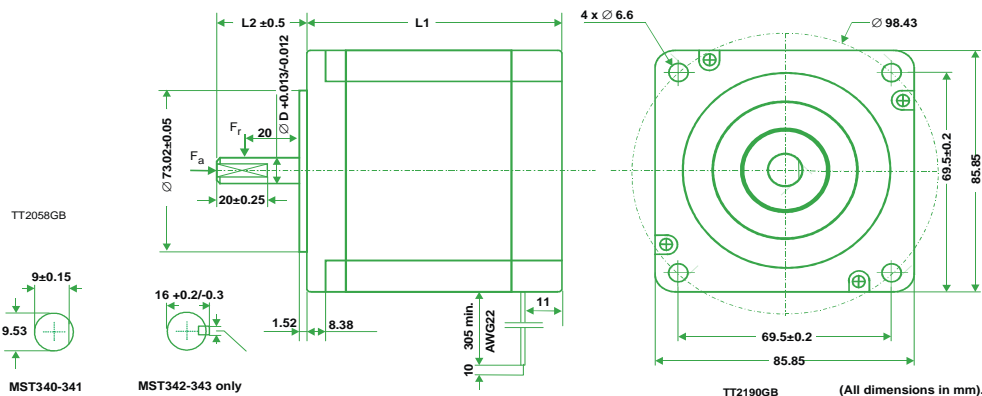


High Torque Step Motors MST340B03, 341B03 342B03 and 343B03



- Highest torque density rating in the industry
- High torque-to-inertia for faster start and stop
- Rugged design and long life bearings
- High power, cooler running, rare-earth magnet design
- Exposed-lamination housing, optimized for high torque and smooth, accurate microstepping
- Standard NEMA34 mounting
- Facilities for encoders, double shaft, different shaft types, etc.
- High axial and radial shaft load
- Cost-effective alternative to servo motors
- Low noise
- Option for planetary gearhead etc.

Model	Length L1	Shaft dia.:D	Shaft length: L2
MST340B03	65±1	9.53	30.5
MST341B03	80±1	9.53	30.5
MST342B03	118±1	14.0	37.0
MST343B03	156±1	14.0	37.0



High Torque Step Motors MST340-343B03

Specifications

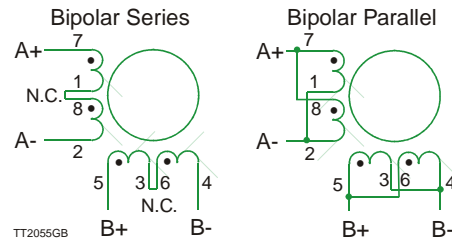
Step motors MST340, 341, 342 have been designed by JVL for use with the entire range of JVL Step Motor Drivers and Controllers. MST340/41/42 are high torque step motors especially made for mini- and microstep operation.

General Specifications	
Step angle	1.8 Deg/200 steps/rev.
Number of phases	4 (8 leads)
Fullstep angle accuracy. No load	±5% of 1.8° = 0.09°
Microstep angle accuracy. No load	±5% of 1.8° = 0.09°
Ambient temperature	-20°C to 50°C
Operating temperature	Max. 130°C
Insulation resistance	100 MOhm Min. (500V DC)
Insulation class	Class B=130
Cable Length	300mm
Protection	IP41 Option IP54 with oil seal
Radial play	Max. 0.02mm (0.45kg load)
End play	Max. 0.08mm (0.45kg load)
Radial load (F _r)	Max. 22kg (applied 20mm from the flange)
Thrust load (F _t)	Max. 6kg
Max. drive voltage	165 VDC

Nominal data at 25°C. Actual data will vary ±10%

Electrical and Mechanical Specifications	MST340B03		MST341B03		MST342B03		MST343B03	
	Parl.	Ser.	Parl.	Ser.	Parl.	Ser.	Parl.	Ser.
Holding Torque (Nm)	3.2		4.6		8.5		12.5	
Running Torque (low speed)(Nm)	2.8		4.0		7.2		11.0	
Phase Current (A)	4.0	2.0	6.5	3.3	6.6	3.3	6.6	3.3
Phase Resistance (Ohm)	0.2	0.8	0.2	0.9	0.45	1.8	0.55	2.2
Phase Inductance (mH)	0.9	3.4	1.3	5.2	4.9	19.6	6.6	26.4
Phase Voltage (V)	1.9	3.8	3.0	6.0	3.5	7.0	3.0	6.0
Weight (kg)	1.7		2.3		3.8		5.4	
Rotor Inertia (kgcm ²)	1.0		1.4		2.7		4.0	

Connections



Color	Pin no.	Bipolar Series	Bipolar Parallel
Black	7	A+	A+
White/Black	1	Pin 8 and 1 connected together	A-
White/Orange	8		A+
Orange	2	A-	A-
Red	5	B+	B+
White/Red	3	Pin 3 and 6 connected together	B-
White/Yellow	6		B+
Yellow	4	B-	B-

Motor direction can be reversed by changing A+ and A-
Note: N.C. not to be connected to other places in Bipolar Series.

Option: IP54 Oil Seal MST340-SMI1



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