

TGM2

series



Product Segments

- Ergo Motion
- Industrial Motion

The TGM2 series is TiMOTION's most powerful gear motor. It was designed primarily for ergonomic applications like height adjustable workstations and tables, but can be used in many other applications. This economical product allows for fast, smooth and quiet adjustment of built-in spindles through the use of external limit switches. Shafting allows for the mechanical synchronization of dual spindles.

General Features

 $\begin{array}{lll} \text{Max. rated torque} & 18.3 \text{Nm} \\ \text{Max. speed at max. load} & 60 \text{RPM ($\pm 5\%$)} \\ \text{Max. speed at no load} & 108 \text{RPM ($\pm 5\%$)} \\ \text{Output signals} & \text{Hall sensors} \\ \text{Options} & \text{Motor brake} \\ \end{array}$

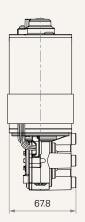
Voltage 12V DC or 24V DC (thermal protector)

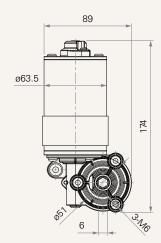
Low noise

TGM2 series

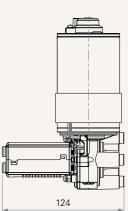
Drawing

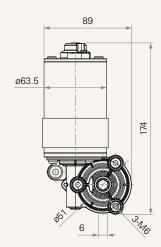
Standard Dimensions -Without TES2 (mm)





Standard Dimensions -With TES2 (mm)





Load	and	Speed
------	-----	-------

CODE	Rated Voltage (V DC)	No Load		Rated Load			
		32V DC		Torque (Nm)	Current	RPM	Duty Cycle
		Current	RPM				
Motor Spee	ed (3800RPM)						
Α	24	1.5	108	18.3	12.0	60	10%
Motor Spee	d (2200RPM)						
В	24	1.0	60	12.0	4.3	28	10%

Note

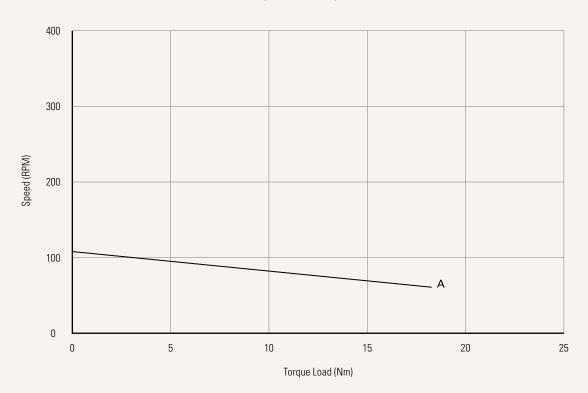
- 1 Please refer to the approved drawing for the final authentic value.
- 2 Operational temperature range at full performance: +5°C~+45°C
- 3 The current & speed in table and diagram are tested with TiMOTION control boxes, and there will be around 10% tolerance depending on different models of the control box. (Under no load condition, the voltage is around 32V DC. At rated load, the voltage output will be around 24V DC)



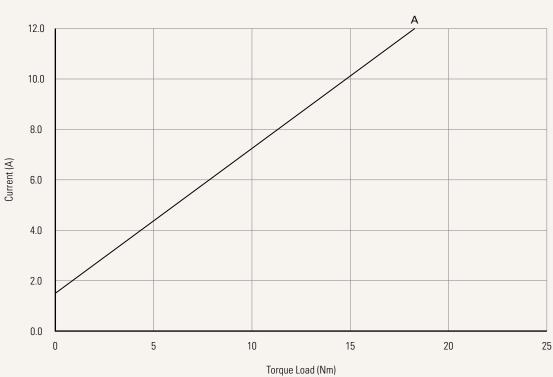
Performance Data (24V DC Motor)

Motor Speed (3800RPM)

Speed vs. Torque Load



Current vs. Torque Load

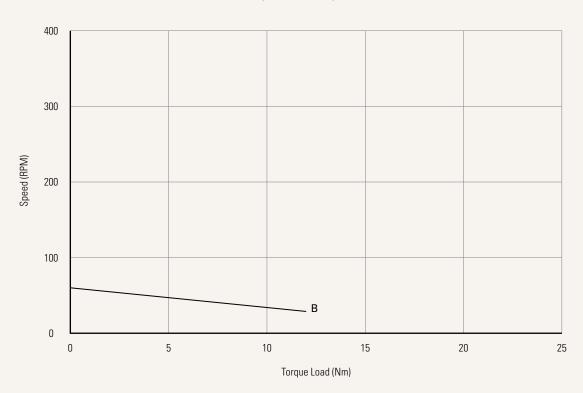




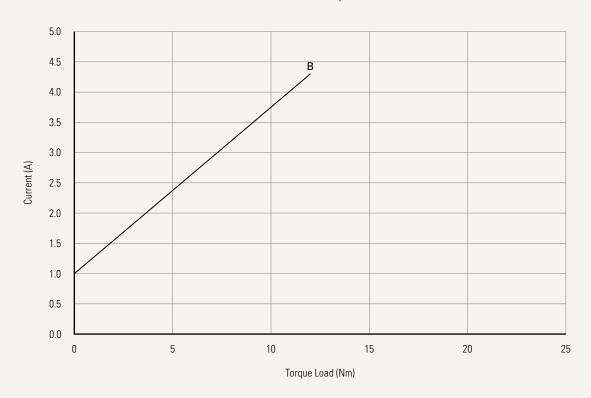
Performance Data (24V DC Motor)

Motor Speed (2200RPM)

Speed vs. Torque Load



Current vs. Torque Load





TGM2 Ordering Key



TGM2

				Version: 20240415	
Voltage	1 = 12V	5 = 24V, thermal protector			
Load and Speed	See page 2				
Output Signal	0 = Without	2 = Hall sensor*2			
Brake	0 = Without	1 = Motor brake			
Plug See page 6	0 = Tinned leads	1 = DIN 6P, 90°	2 = Molex 8P		
Cable Length (mm)	0 = Straight, 1000	1 = Straight, 1500	2 = Straight, 2000	3 = Curly, 1000	
Output Torque (mm)	1 = Drive shaft hole (inner hexagon 9)		4 = Two sides drive sha	ft (Ø12, with Ø4.8 latch hole)	
See page 6	2 = One side drive shaft (Ø12, knurling) 3 = Two sides drive shaft (Ø12, knurling)		5 = Drive shaft hole (inner hexagon 6)		
External Limit Switch (TES2)	00 = Without XX = Number of output rotations (between13~17 & 25~35 rotations, factory preset)				

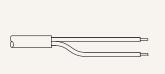
5

TGM2 Ordering Key Appendix

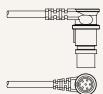


Plug

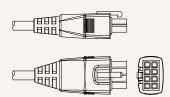






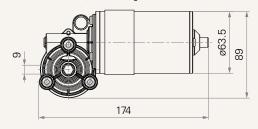


2 = Molex 8P

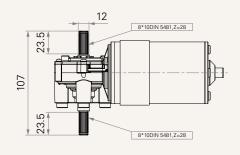


Output Torque (mm)

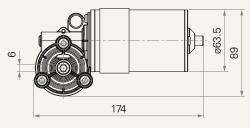
1 = Drive shaft hole (inner hexagon 9)



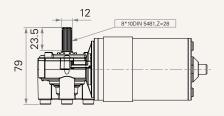
3 = Two sides drive shaft (Ø12, knurling)



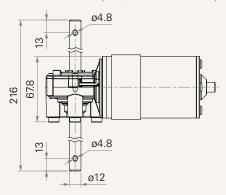
5 = Drive shaft hole (inner hexagon 6)



2 = One side drive shaft (Ø12, knurling)



4 = Two sides drive shaft (Ø12, with Ø4.8 latch hole)



TGM2 Ordering Key Appendix



TBS Series - the combination of TGM and TBS

TBS	Input Torque	TGM				
		TGM1	TGM2	TGM3	TGM4	TGM7
TBS1	#1	V	V	V	V	-
TBS2	#1	-	-	-	-	V
TBS3	#1	-	-	-	-	V
TBS4	#1	V	V	V	V	-
TBS5	#1	V	V	V	V	-
TBS9	#1	V	V	V	V	-
TBS10	#1	V	V	V	V	-

Note

- 1 The combinations of TGM and TBS are marked as "v" on the above table.
- 2 When choosing the combination of TBS2 / 3 and TGM7, the hexagonal drive shaft is not required.
- 3 When choosing the combination of TBS1 / 4 / 5 / 9 / 10 and TGM1 / 3 / 4, the extra order of hexagonal drive shaft is needed.
- 4 Please refer to the table below for the serial numbers and the dimensions of the component.

Hexagonal drive shaft



CODE	L (mm)
32709-0101-175-1	175
32709-0101-200-1	200
32709-0101-270-1	270
32709-0101-375-1	375
32709-0101-470-1	470
32709-0101-570-1	570

Terms of Use