

TIG1

series



Product Segments

• Industrial Motion

TiMOTION's TIG1 is a brushed DC gear motor using a bronze worm wheel. It is suitable for general industrial applications such as material handling and adapted automobiles.

General Features

Max. rated torque60NmMax. speed at max. load24RPMMax. speed at no load40RPMOutput signalsHall sensor(s)

Voltage 12V DC (thermal cutoff)

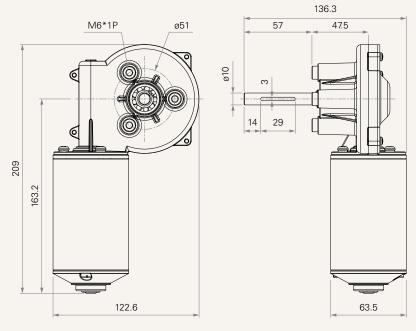
Operational temperature range $+5^{\circ}\text{C} \sim +45^{\circ}\text{C}$

at full performance

1

Drawing

Standard Dimensions (mm)



Load and Speed											
CODE	Rated Voltage	No Load		Rated				Max.			
		Current (A)	RPM (RPM)	Torque (Nm)	Current (A)	RPM (RPM)	Duty cycle (%)	Torque (Nm)	Current (A)	RPM (RPM)	Duty cycle (%)
Motor Speed	(3800RPM)										
В	12VDC	2.5	40	9	4.5	38	100%	60	19.5	24	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)

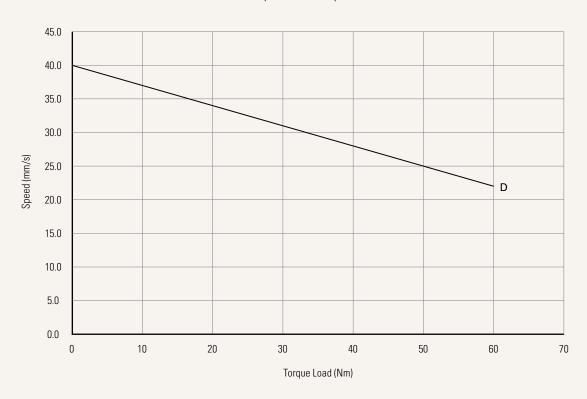


2

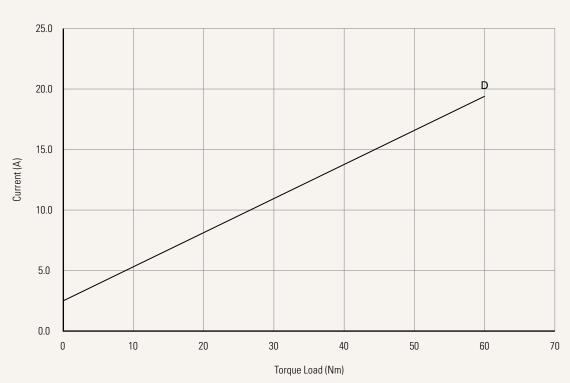
Performance Data (12V DC Motor)

Motor Speed (3800RPM)

Speed vs. Torque Load



Current vs. Torque Load





TIG1 Ordering Key



Version: 20211220-B

TIG1

Voltage	6 = 12V, thermal cutoff			
Torque & RPM	See page 3			
Brake	0 = Without			
Torque Output	K = Output shaft with ke	ey slot		
Position Feedback	0 = Without	1 = Hall sensor*1	2 = Hall sensor*2	
Connecter	G = Tinned leads			
Cable Length (mm)	1 = Straight, 1000	2 = Straight, 2000		
Covering	0 = Without			
IP Rating	1 = Without			

TIG1 Ordering Key Appendix



Connector

G = Tinned leads



Output Signals

Wire Definitions			Wire Gauge (AWG)	Output Signal Code			
				0. Without	4. 1 Hall	5. 2 Hall	
without T-Smart	Limit Switches Cut	Red	14	CW+	CW+	CW+	
	Off the Acutator	Black	14	CCW+	CCW+	CCW+	
		Red	26	-	+5V	+5V	
		O White	26	-	S1	S1	
		Blue	26	-	-	S2	
		Black	26	-	GND	GND	

Terms of Use