TGM5

series

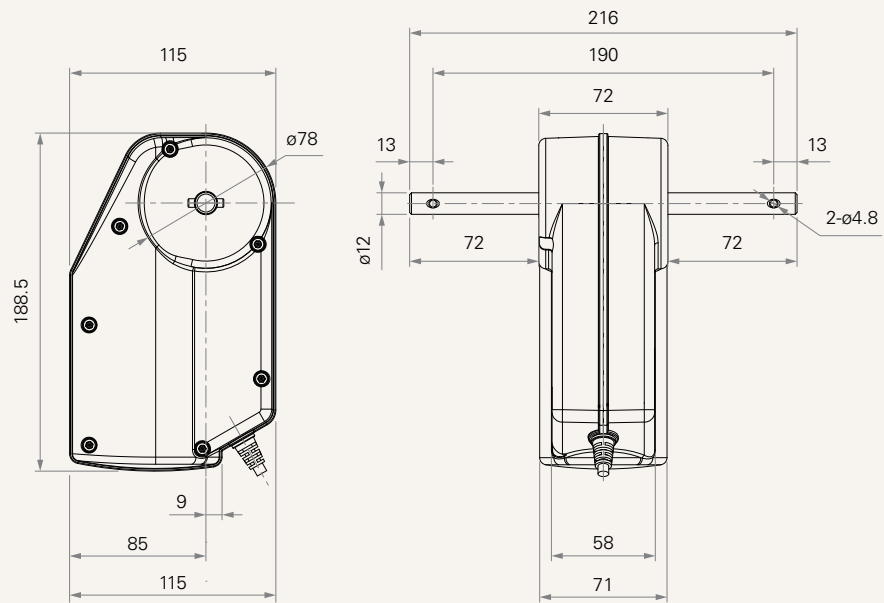## Product Segments

• Care Motion

TiMOTION's TGM5 series gear motor was designed primarily for medical applications, but can be used in a wide range of other applications that require a water resistant motion product. This economical, high torque 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

Max. rated torque	18.3Nm
Max. speed at max. load	88RPM (±5%)
Max. speed at no load	117RPM (±5%)
IP rating	IP66
Certificate	UL962
Options	Hall sensors, motor brake
Voltage	12, 24, 36V DC or 24V DC (PTC)
Operational temperature range at full performance	+5°C~+45°C
Hexagon hole for the shaft by 12mm diameter	
Low noise	

Drawing

Standard Dimensions
(mm)

Load and Speed

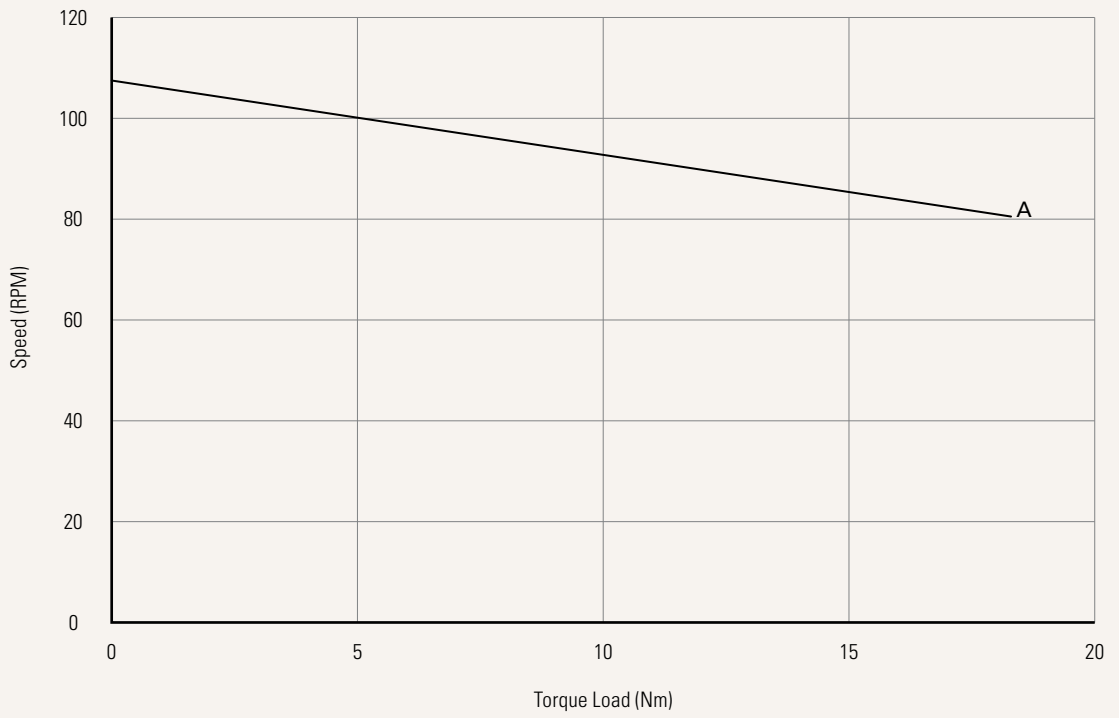| CODE	Torque Load (Nm)	Self locking force (Nm)		Typical Current (A)		Typical Speed (RPM, ±5%)		Hall Sensor Output		
		Brake		No Load 32V DC	With Load 24V DC	No Load 32V DC	With Load 24V DC	Magnet Poles	Period (ms)	
		#0	#M						No Load 32V DC	With load 24V DC
Motor Speed (3800RPM)										
A	18.3	5	11	≤ 1.5	12.0	98~117	73~88	2	11.0~12.3	24.8~27.5

Note

1 Please refer to the approved drawing for the final authentic value.

2 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)
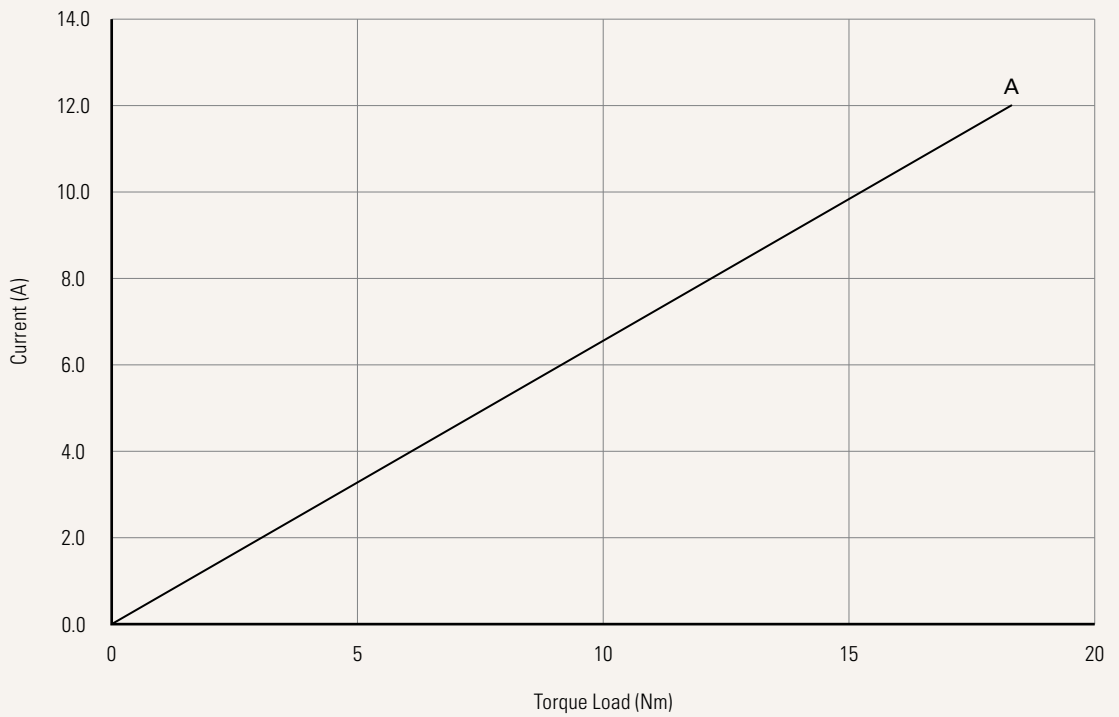
Performance Data (24V DC Motor)

Motor Speed (3800RPM)
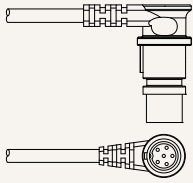
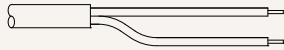### Speed vs. Torque Load

Current vs. Torque Load

TGM5 Ordering Key

TGM5

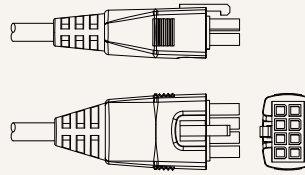| Voltage	1 = 12V DC	2 = 24V DC	3 = 36V DC	5 = 24V DC, PTC
Load and Speed	See page 2			
Output Signal	0 = Without	2 = Hall sensor*2		
Brake	0 = Without	M = Motor brake		
Motor Brake	0 = Two way			
Color	1 = Black	2 = Pantone 428C		
IP Rating	1 = Without	2 = IP54	3 = IP66	
Connector See page 5	1 = DIN 6P, 90°	2 = Tinned leads	E = Molex 8P	
Cable Length (mm)	1 = Straight, 500 2 = Straight, 750	3 = Straight, 1000 4 = Straight, 1250	5 = Straight, 1500 6 = Straight, 2000	7 = Curly, 200 8 = Curly, 400
Internal Limit Switch	0 = Without	1 = With		
Output Spindle Rotation Number	00 = Without internal limit switch XX = With internal limit switch, number of output rotations (between25-58 rotations, factory preset)			

Connector

1 = DIN 6P, 90°

2 = Tinned leads

E = Molex 8P