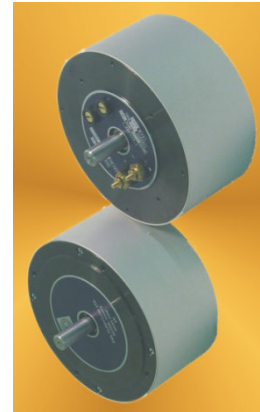


Peak Torque **360 to 3200 Ncm**  
 Cont. Torque **36 to 320 Ncm**  
 Power **113 to 1000 Watts**  
 Speed **<1 to 6000 rpm**

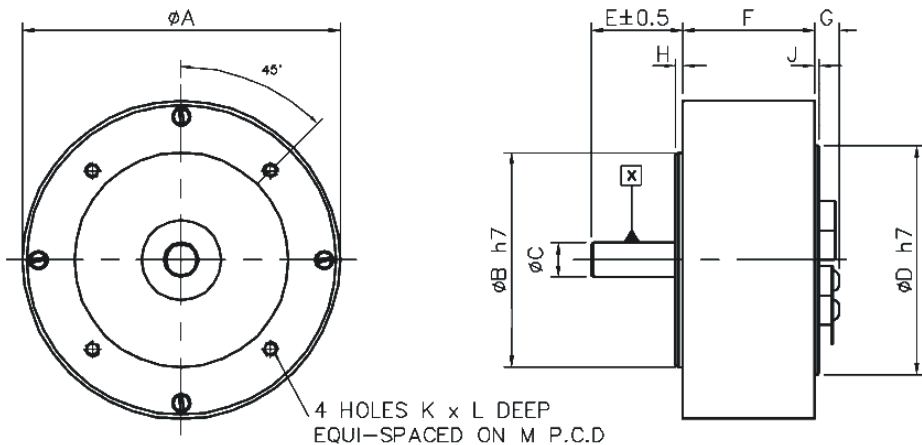
The Printed Motor Works *GM* series is the original printed armature motor. Extremely powerful and accurate, the *GM* range brings all the benefits of printed armature technology to industrial applications. Higher torque 'H' versions offer more torque for the same package and weight. Low voltage versions are available for vehicle applications (details on application). The *GM* range is available with a host of options such as: encoders, imperial mounting, adaptors, gearboxes, tachos, resolvers and with custom mounting plates & shafts.



Motor Ratings	Symbol	Unit	GM9	GM9H	GM12	GM12H	GM16	GM16H
Power	P	Watt	113	201	284	411	700	1000
Torque	T	Ncm	36	64	90	131	225	320
Speed	N	rpm	3000	3000	3000	3000	3000	3000
Voltage	V	Volt	22	34	43	64	80	126
Current	I	Amp	8.7	8.2	8.8	8.0	11	9.3
Cont. Stall Current	IS	Amp	7	7	8	8	8	8

### General benefits

- High peak torque output
- Zero cogging
- Low inertia
- Rapid acceleration
- Stable up to high temperatures
- High instantaneous torque
- Long brush life
- Controllable with PMA and PMC drives
- Design options with special shaft and additional ancillaries such as encoders, gearboxes and pulleys



Motor type	Dimensions												Wt (Kg)
	A	B	C	D	E	F	G	H	J	K	L	M	
GM9	111	75h7	12j6	80d7	32	46	11	2.5	1.5	M5	6	88	2.1
GM9H	111	75h7	12j6	80d7	32	57	11	2.5	1.5	M5	6	88	2.5
GM12	140	75h7	12j6	80d7	32	53	11	2.5	1.5	M5	6	88	3.5
GM12H	140	75h7	12j6	80d7	32	70	11	2.5	1.5	M5	8	88	4.7
GM16*	188	95h7	14g6	100d7	34	61	11	3.0	1.0	M8	8	115	8.0
GM16H*	188	95h7	16g6	100d7	40	73	11	3.0	1.0	M8	8	115	8.5

\*Supplied with keyway in output shaft

### Sample applications

#### Scientific

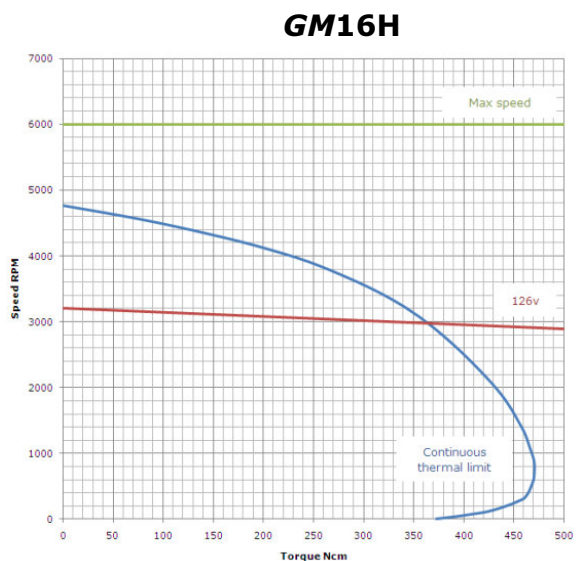
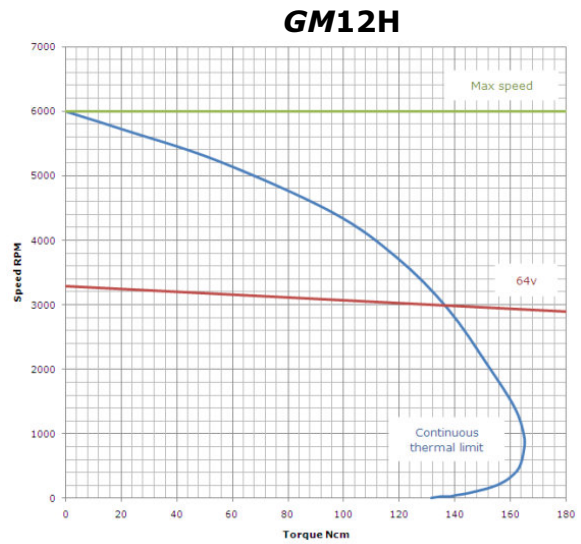
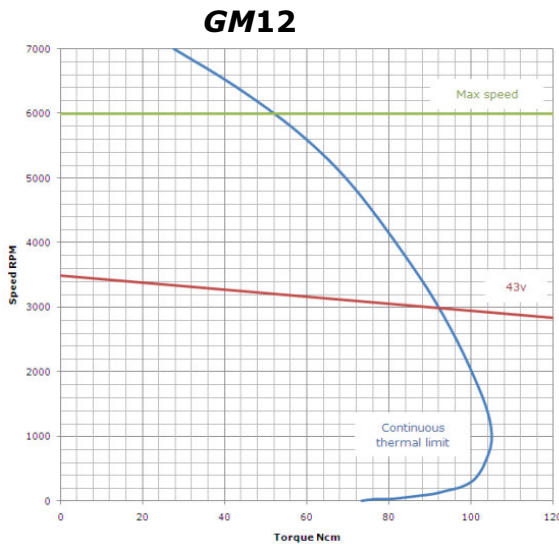
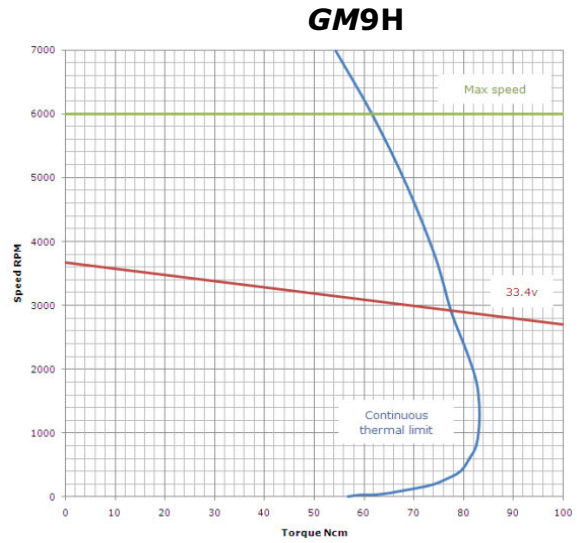
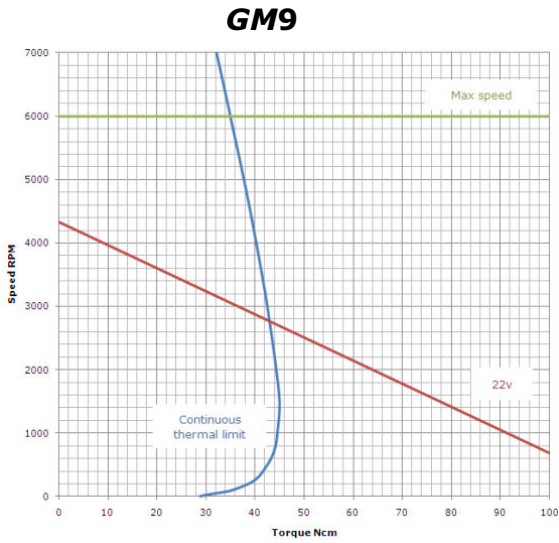
Seismic analysers  
 Inspection systems  
 X-Y gantries  
 Bio-medical

#### Industrial

Tensile testing  
 Paper slitting  
 Film processing  
 Piston manufacture

#### Military

Elevation adjustment  
 Turret annulus drive  
 Submersible drive



NOTE: The angle of the Torque/Speed curve remains the same for higher and lower voltages. The speed varies proportionally from zero rpm relative to the voltage supplied. The stated voltage is an example, not a predefined maximum or minimum. Due to ongoing product improvement data in this datasheet may be subject to change without notice.