



DC Planetary Gearmotor

Planetary gearboxes have the highest continuous and peak torque capability of any gearbox type. They also feature a very compact, low-weight design.

The first stage planet gears are helical plastic for low noise. The pinion is hobbled directly on the motor shaft. The ring gear and secondary planet gears are sintered metal. The output shaft is stainless steel and is supported by dual ball bearings.



Features

DC motor ratings

- Output shaft: 1500 – 6000 RPM
- Output shaft: 2-40 oz-in cont. torque
- Input voltage 6 – 220V DC

Gearbox ratings

- Up to 24 Ncm continuous torque
- 4.5:1 to 288:1 gear ratios

Specifications

- Compact, high-torque design
- Low noise, plastic helical 1st stage gearing
- High shock load capacity
- U/L construction recognized
- Dual ball bearings on output shaft
- Stainless steel shaft
- Synthetic grease: -30°C to +140°C
- High radial loads
- Long-life brushes

Optional features

- Magnetic encoder
- Optical encoder
- Clutch
- Electro-mechanical brake
- Anti-vibration mounting

Applications

- Door automation
- Laminating machines
- Packaging equipment
- Material handling
- Textile industry
- Satellite positioning
- Medical pumps
- Distributed power generation

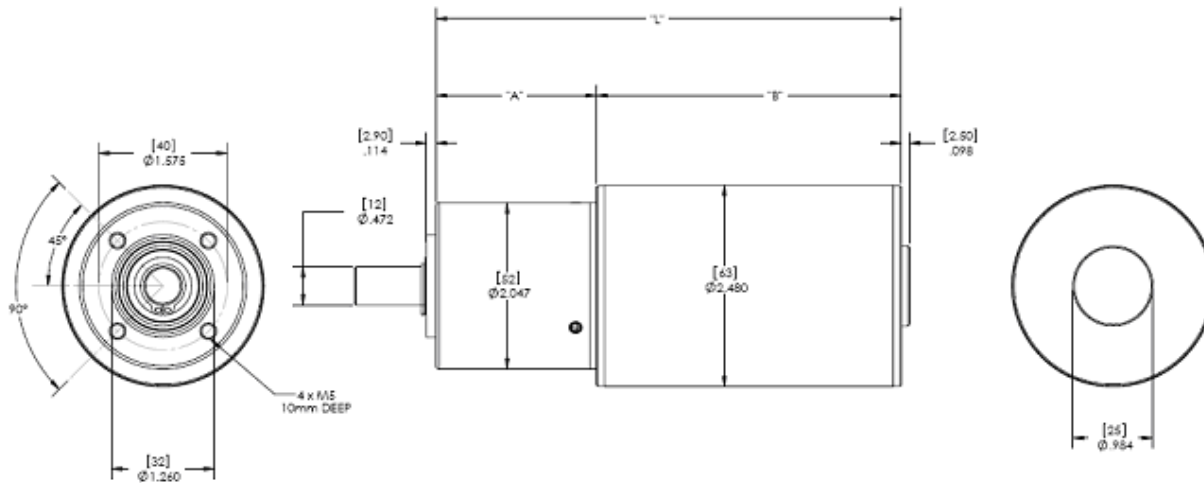


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Dimensional diagram



Planetary Gearbox

	1 Stage		1 Stage		2 Stage		2 Stage		3 Stage		3 Stage	
Gearbox length	1.97 in	50 mm	1.97 in	50 mm	2.58 in	65.5 mm	2.58 in	65.5 mm	3.19 in	81 mm	3.19 in	81 mm
Motor length	3.74 in	95 mm	4.92 in	125 mm	3.74 in	95 mm	4.92 in	125 mm	3.74 in	95 mm	4.92 in	125 mm
Overall length	5.71 in	145 mm	6.89 in	175 mm	6.32 in	160.5 mm	7.5 in	190.5 mm	6.93 in	176 mm	8.11 in	206 mm

PM DC Motor Performance Data

Motor Size	mm	ø63 x 95 long		ø63 x 125 long	
Voltage*	V	12	24	12	24
Continuous speed	rpm	3100	3300	3000	3350
Continuous torque	Ncm	13.7	14	24	27
Continuous current	Amps	5.2	2.7	8.7	4.9
Continuous power	Watts	44	48	75	95

Planetary Gearbox

Gear ratio**	4.5:1	36:1	64:1	162:1	288:1
Efficiency	0.9	0.81	0.81	0.73	0.73
Gear stages	1	2	2	3	3
Cont. torque	1.2 Nm	8 Nm	8 Nm	24 Nm	24 Nm
Radial load	350 N	350 N	350 N	350 N	350 N

* Other windings available upon request.
 ** Other gear ratios available upon request.

