

**RATIOS NOW AVAILABLE.**

**Fitted with RE996 (12v) Motor:**

996D41	Ratio	4:1
996D501	Ratio	50:1
996D1021	Ratio	102:1
996D4931	Ratio	493:1

**Fitted with RE996 (24v) Motor:**

996D41/24V	Ratio	4:1
996D501/24V	Ratio	50:1
996D1021/24V	Ratio	102:1
996D4931/24V	Ratio	493:1

Designed for industrial applications this robust unit boasts a powerful high quality 12 pole motor with carbon brushes & ball raced bearings. The metal gearbox incorporates ballrace bearings, enabling the high torque transfer from the motor to be transmitted through the gearbox.

**MOTOR DATA. (RE996)**

MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY						STALL TORQUE	
	OPERATING RANGE	NOMINAL	SPEED R.P.M.	CURRENT A	SPEED R.P.M.	CURRENT A	TORQUE oz-in	TORQUE g-cm	OUTPUT W	EFF %	oz-in	g-cm
RE996 (12V)	12	12v Constant	2000	0.8	1800	3.0	21	1500	27.7	77	115	8250
RE996 (24V)	24	24v Constant	2000	0.4	1800	3.0	35	2500	46.2	64		13750

**GEARBOX DATA.**

PART NO	RATIO	REDUCTION TABLE RPM (No Load) <sup>o</sup>		WEIGHT	TORQUE RATING AT:	
		12v	24v		12v (g.cm) <sup>^</sup>	24v (g.cm) <sup>^</sup>
996D41	4:1	500		2.43kg	4800	
996D41/24V	4:1		500	2.43kg		8000
996D501	50:1	40		3.09kg	45000	
996D501/24V	50:1		40	3.09kg		75000
996D1021	102:1	20		3.09kg	91800	
996D1021/24V	102:1		20	3.09kg		125000
996D4931	493:1	4		3.43kg	125000	
996D4931/24V	493:1		4	3.43kg		125000

NOTES:<sup>o</sup> Motor speeds may vary by + or - 12.5%

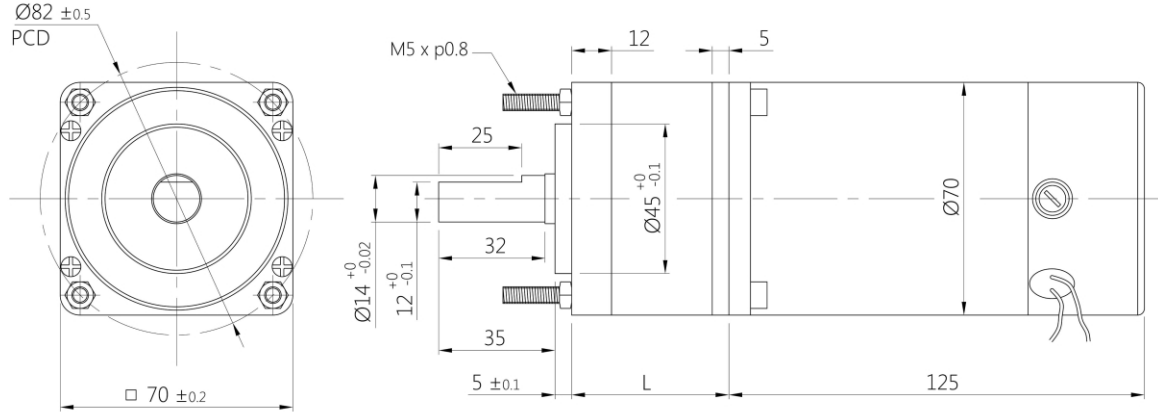
<sup>^</sup> Geared Motor Torque Ratings at Maximum Efficiency. To establish Torque Rating in Nm, divide g.cm by 10197.0

996D SERIES	
No Load Backlash	Max 3 deg.
Max Radial Load (10mm from flange)	25000gf.
Shaft Axial Load	10000gf.

**IMPORTANT NOTICES:**

At very low ratios the torque produced by this geared motor combination may exceed the maximum permissible torque of the gearbox. In this situation the unit must not be allowed to stall as this may damage the gears. Due to the wide range of applications for this product it is the users responsibility to establish the products suitability for their individual purpose(s).

**996D SERIES TECHNICAL DRAWING**



RATIO	L
4:1	47.3
50:1	80.3
102:1	80.3
493:1	96.8

NOTE: all diameters in mm

**ADVANTAGES OF PLANETRY GEARBOXES**

<b>EFFICIENCY:</b>	Efficiencies of planetary gearboxes can be above 90% while some other types of transmission can be 50% or less. This allows the use of smaller motors.
<b>SIZE:</b>	Planetary gearboxes can be half the size of conventional boxes.
<b>WEIGHT:</b>	Weight savings can be as high as 60%, allowing smaller, lighter support structures.
<b>MAINTENANCE:</b>	Other than routine oil changes, no maintenance is required, eliminating the need to hold spares.
<b>REVERSIBLE:</b>	Planetary gears can be equally efficient in either direction. This is an advantage for use in running machinery in both clockwise and anti-clockwise directions.
<b>COAXIAL:</b>	The coaxial configuration of input and output shafts allows planetary gears to be installed in line with a motor and a machine.

Subject to minimum order quantities of 250 units, the following ratios are also available with a six week lead-time. The physical dimensions of these other gearboxes may vary from the data as illustrated above. Details of individual gearboxes are available upon request.

GEARBOX 13:1 with 996 motor  
 GEARBOX 16:1 with 996 motor  
 GEARBOX 20:1 with 996 motor  
 GEARBOX 60:1 with 996 motor

GEARBOX 75:1 with 996 motor  
 GEARBOX 91:1 with 996 motor  
 GEARBOX 126:1 with 996 motor  
 GEARBOX 189:1 with 996 motor

GEARBOX 242:1 with 996 motor  
 GEARBOX 300:1 with 996 motor  
 GEARBOX 363:1 with 996 motor  
 GEARBOX 414:1 with 996 motor

GEARBOX 543:1 with 996 motor  
 GEARBOX 611:1 with 996 motor