

**944DMS SERIES 22mm PLANETRY (EPICYCLIC) MINIATURE METAL GEARBOX**

**(RE280/5 VAR Motor)**



**RATIOS NOW AVAILABLE AS EX-STOCK ITEMS.**

**Fitted with RE280/5 VAR (4.5v - 6v) Motor**

944D41MS	Ratio	4:1
944D621MS	Ratio	62:1
944D1041MS	Ratio	104:1
944D2311MS	Ratio	231:1

Designed for smaller industrial and model applications this robust unit boasts a powerful high quality motor with carbon brushes & sintered bronze bearings. The gearbox incorporates sleeved bearings, enabling the high torque transfer from the motor to be transmitted through the gearbox.

**MOTOR DATA. (RE280/5 VAR)**

MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY					STALL TORQUE		
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE		OUTPUT	EFF	TORQUE	
			R.P.M.	A	R.P.M.	A	oz-in	g-cm	W	%	oz-in	g-cm
RE280/5 VAR	4.5 - 6	6v Constant	9256	0.108	7703	0.53	0.33	23.7	1.87	58.4	1.96	141.2

**GEARBOX DATA.**

PART NO	RATIO	REDUCTION TABLE RPM (No Load) <sup>o</sup>		WEIGHT	TORQUE RATING AT: 12v (g.cm) <sup>^</sup>
		4.5v	6v		
944D41MS	4:1	1736	2314	69g	76
944D621MS	62:1	112	149	78g	882
944D1041MS	104:1	67	89	78g	1479
944D2311MS	231:1	30	40	104g	2500

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

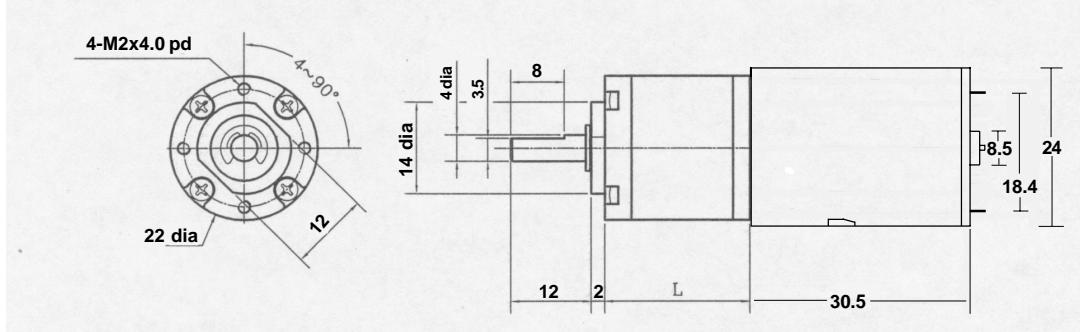
<sup>^</sup> Geared Motor Torque Ratings at Maximum Efficiency. To establish Torque Rating in Nm, divide g.cm by 10197.0

944DMS SERIES	
No Load Backlash	Max 3 deg.
Max Radial Load (10mm from flange)	800gf.
Shaft Axial Load	600gf.

**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).

**944DMS SERIES TECHNICAL DRAWING**



RATIO	L
4:1	14.4
62:1	21.7
104:1	21.7
231:1	25.35

NOTE: all diameters in mm

**FOR ACCESSORIES TO FIT THIS SERIES GEARBOX, REFER TO 918D SERIES.**

**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 100 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 14:1 with 280/5 motor  
 GEARBOX 16:1 with 280/5 motor  
 GEARBOX 19:1 with 280/5 motor  
 GEARBOX 53:1 with 280/5 motor

GEARBOX 72:1 with 280/5 motor  
 GEARBOX 84:1 with 280/5 motor  
 GEARBOX 198:1 with 280/5 motor  
 GEARBOX 270:1 with 280/5 motor

GEARBOX 316:1 with 280/5 motor  
 GEARBOX 370:1 with 280/5 motor  
 GEARBOX 455:1 with 280/5 motor  
 GEARBOX 742:1 with 280/5 motor

GEARBOX 1014:1 with 280/5 motor  
 GEARBOX 1249:1 with 280/5 motor  
 GEARBOX 1621:1 with 280/5 motor  
 GEARBOX 1996:1 with 280/5 motor