

**944D SERIES 22mm PLANETRY (EPICYCLIC) MINIATURE METAL GEARBOX (PRECIOUS METAL BRUSHES)**



**IMPORTANT NOTICE**  
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).

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

944D41	(6v - 12v)	RATIO 4:1
944D621	(6v - 12v)	RATIO 62:1
944D1041	(6v - 12v)	RATIO 104:1
944D2311	(6v - 12v)	RATIO 231:1

Designed for smaller industrial and model applications this robust unit boasts a powerful high quality motor with precious metal 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.**

MODEL	VOLTAGE		NO LOAD		MAX EFFICIENCY						STALL TORQUE	
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE		OUTPUT	EFF	oz - in	g - cm
			R.P.M.	mA	R.P.M.	mA	oz - in	g - cm	W	%		
(944D)	6 - 12.0v	12.0v CONSTANT	8000	70	6650	200	0.25	18	1.25	52	1.4	100

**REDUCTION TABLE. R.P.M.**

SUPPLY VOLTAGE	4.5v	6.0v	9.0v	12.0v
944D41	800	1100	1550	2000
944D621	41	64	97	128
944D1041	24	35	55	76
944D2311	11.5	16.5	25.5	34

WEIGHT	
944D41	52g
944D621	65g
944D1041	67g
944D2311	70g

**GEARBOX RATINGS**

Note: Motor speeds may vary by (+) or (-) 12.5%

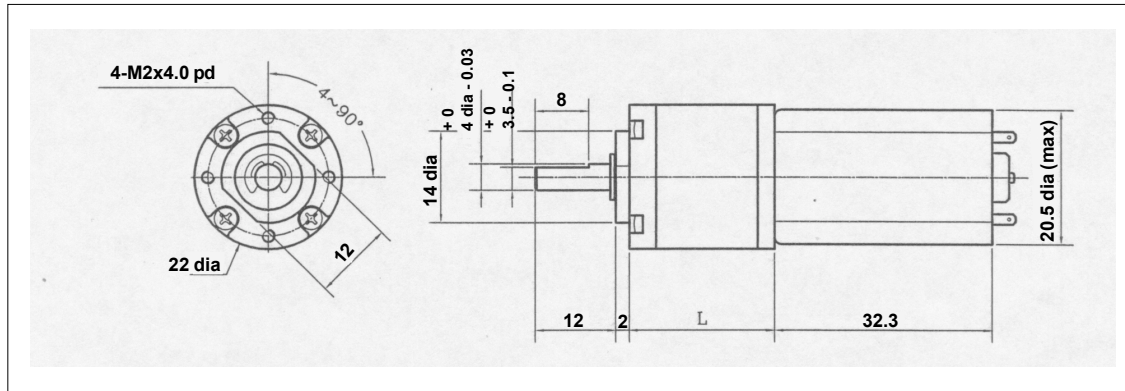
RATED TOLERANCE TORQUE (g.cm)	MAX MOMENTARY TOLERANCE TORQUE
4:1	1000
62:1	2000
104:1	2000
231:1	2500

NOTE: To establish Torque Rating in nM, divide g.cm by 10,197.0

**IMPORTANT NOTICE**  
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. Please refer to the table of the gearbox ratings to ascertain the appropriate geared motor combination.

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**GEARBOX DIMENSIONS**



GEARBOX REF.	L
944D41 (4:1)	14.4
944D621 (62:1)	21.7
944D1041 (104:1)	21.7
944D2311 (231:1)	25.35

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

<b>ADVANTAGES OF PLANETARY GEARBOXES.</b>	
<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.

14:1	16:1	19:1
53:1	72:1	84:1
198:1	270:1	316:1
370:1	455:1	742:1
1014:1	1249:1	1621:1
1996:1		