

**975D SERIES 42mm (45mm Motor) PLANETRY (EPICYCLIC) METAL GEARBOX (RE975 Motor)**



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

Fitted with RE975 (4.5v - 15v) Motor:

975D41	Ratio	4:1
975D491	Ratio	49:1
975D1041	Ratio	104:1
975D2121	Ratio	212:1
975D5041	Ratio	504:1

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

**MOTOR DATA. (RE975)**

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
RE975	6 - 12	12v Constant	7000	0.9	5700	5.5	9.72	700	41.3	63		3850est

**GEARBOX DATA.**

PART NO	RATIO	REDUCTION TABLE RPM (No Load) <sup>o</sup>			WEIGHT	TORQUE RATING AT: 12v (g.cm) <sup>^</sup>
		6v	9v	12v		
975D41	4:1	875	1313	1750	529g	2240
975D491	49:1	72	107	143	624g	18000
975D1041	104:1	34	50	67	624g	20000
975D2121	212:1	17	25	33	668g	25000
975D5041	504:1	7	11	14	669g	30000

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

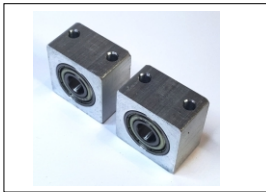
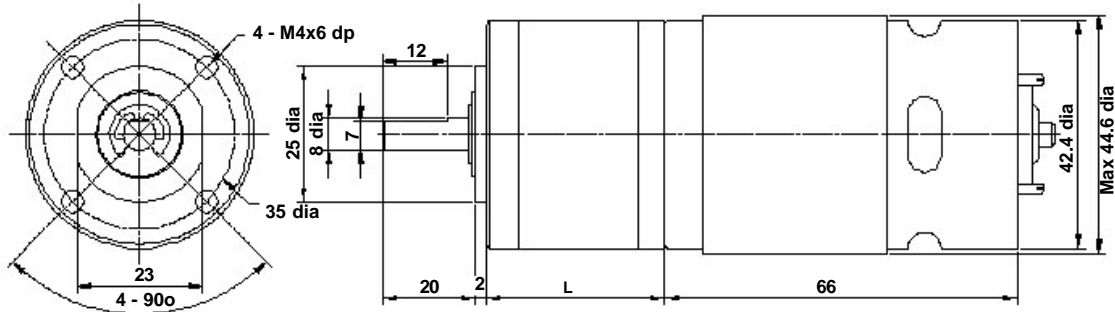
975D SERIES	
No Load Backlash	Max 3 deg.
Max Radial Load (10mm from flange)	5000gf.
Shaft Axial Load	3000gf.

**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).

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**975D SERIES TECHNICAL DRAWING**



Bearing Blocks. 8mm I.D.  
(19.0mm x 19.0mm x 13.0mm)  
Part No: 919D30/2

RATIO	L
4:1	32.5
49:1	45.9
104:1	45.9
212:1	52.6
504:1	52.6

NOTE: all diameters in mm

**FOR ACCESSORIES TO FIT THIS SERIES GEARBOX, REFER TO 919D 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% of 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 975 motor  
GEARBOX 17:1 with 975 motor  
GEARBOX 24:1 with 975 motor  
GEARBOX 61:1 with 975 motor  
GEARBOX 84:1 with 975 motor

GEARBOX 144:1 with 975 motor  
GEARBOX 294:1 with 975 motor  
GEARBOX 624:1 with 975 motor  
GEARBOX 720:1 with 975 motor  
GEARBOX 864:1 with 975 motor

GEARBOX 1062:1 with 975 motor  
GEARBOX 1470:1 with 975 motor  
GEARBOX 2500:1 with 975 motor  
GEARBOX 3000:1 with 975 motor  
GEARBOX 3600:1 with 975 motor