

975D SERIES 42mm (45mm motor) PLANETRY (EPICYCLIC) METAL GEARBOX

(RE 975 MOTOR)



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.

975D41	(4.5v - 15v)	RATIO 4:1
975D491	(4.5v - 15v)	RATIO 49:1
975D1041	(4.5v - 15v)	RATIO 104:1
975D2121	(4.5v - 15v)	RATIO 212:1
975D5041	(4.5v - 15v)	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.

MODEL	VOLTAGE		NO LOAD		MAX 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	%	g - cm	
RE975	6.0 - 12.0	12v CONSTANT	7000	0.9	5700	5.5		700	41.3	63		3850

REDUCTION TABLE. R.P.M. (NO LOAD)

SUPPLY VOLTAGE	6.0v	9.0v	12.0v
975D41	875	1313	1750
975D491	71	107	143
975D1041	34	50	67
975D2121	17	25	33
975D5041	6.9	10.4	14

WEIGHT	
975D41	541g
975D491	625g
975D1041	632g
975D2121	669g
975D5041	683g

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

GEARED MOTOR TORQUE RATINGS AT MAX. EFFICIENCY.

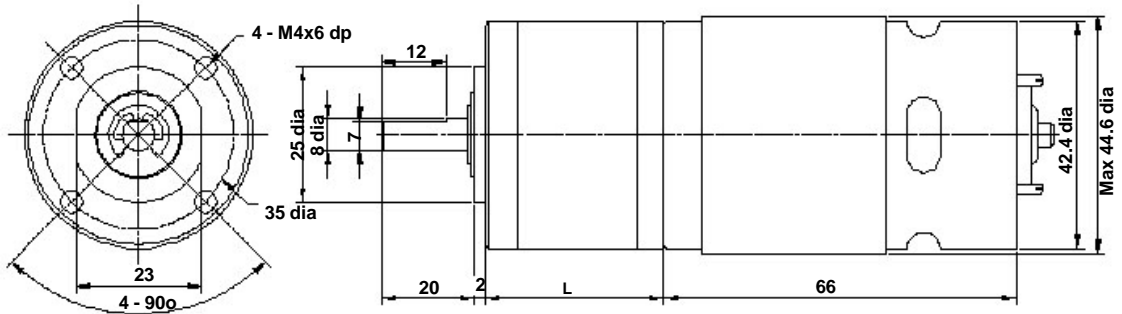
	At 12V (g.cm)
4:1	2240
49:1	18000
104:1	20000
212:1	25000
504:1	30000

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

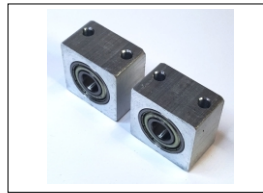
NOTE: To establish Torque Rating in Nm, divide g.cm by 10,197.0

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.

975D SERIES 42mm (45mm motor) PLANETARY (EPICYCLIC) METAL GEARBOX



	Rated Tolerance Torque. g.cm	Max momentary Tolerance Torque g.cm	Efficiency %
975D41 (4:1)	5,000	15,000	80
975D1041 (104:1)	20,000	60,000	61
975D5041 (504:1)	30,000	90,000	52



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

GEARBOX REF.	L
975D41 (4:1)	32.5
975D491 (49:1)	45.9
975D1041 (104:1)	45.9
975D2121 (212:1)	52.6
975D5041 (504:1)	52.6

FOR ACCESSORIES TO FIT THIS SERIES GEARBOX, REFER TO 919D SERIES PAGE.

ADVANTAGES OF PLANETARY GEARBOXES.

EFFICIENCY:	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.
SIZE:	Planetary gearboxes can be half the size of conventional boxes.
WEIGHT:	Weight savings can be as high as 60%, allowing smaller, lighter support structures.
MAINTENANCE:	Other than routine oil changes, no maintenance is required, eliminating the need to hold spares.
REVERSIBLE:	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.
COAXIAL:	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 61:1 with 975 motor
Gearbox 294:1 with 975 motor
Gearbox 864:1 with 975 motor
Gearbox 2500:1 with 975 motor

Gearbox 17:1 with 975 motor
Gearbox 84:1 with 975 motor
Gearbox 624:1 with 975 motor
Gearbox 1062:1 with 975 motor
Gearbox 3000:1 with 975 motor

Gearbox 24:1 with 975 motor
Gearbox 144:1 with 975 motor
Gearbox 720:1 with 975 motor
Gearbox 1470:1 with 975 motor
Gearbox 3600:1 with 975 motor