

## 990D SERIES 12mm DIA SUB MINIATURE (EPICYCLIC) METAL GEARBOX

### RE-990 MOTOR



RATIOS NOW AVAILABLE AS EX-STOCK ITEMS.

990D41	(3v)	RATIO 4:1
990D641	(3v)	RATIO 64:1
990D2561	(3v)	RATIO 256:1

A sub miniature epicyclic motor/gearbox combination with scintered steel output bearings and precious metal motor brushes. Ideal in situations requiring high torque in a limited space with low current consumption.

#### MOTOR DATA. (RE-990)

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
RE-990	3	3v Constant	12500	0.130	10000	450	0.08	6	0.62	57	0.46	33est

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

SUPPLY VOLTAGE	3v
990D41	3125
990D641	195
990D2561	49

WEIGHT	
990D41	26g
990D641	29g
990D2561	31g

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

#### GEARED MOTOR TORQUE RATINGS AT MAX. EFFICIENCY.

At 3v (g.cm)		990D SERIES	
4:1	20	No Load Backlash	Max 3 deg.
64:1	250	Max Radial Load (10mm from flange)	500gf.
256:1	845	Shaft Axial Load	500gf.

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

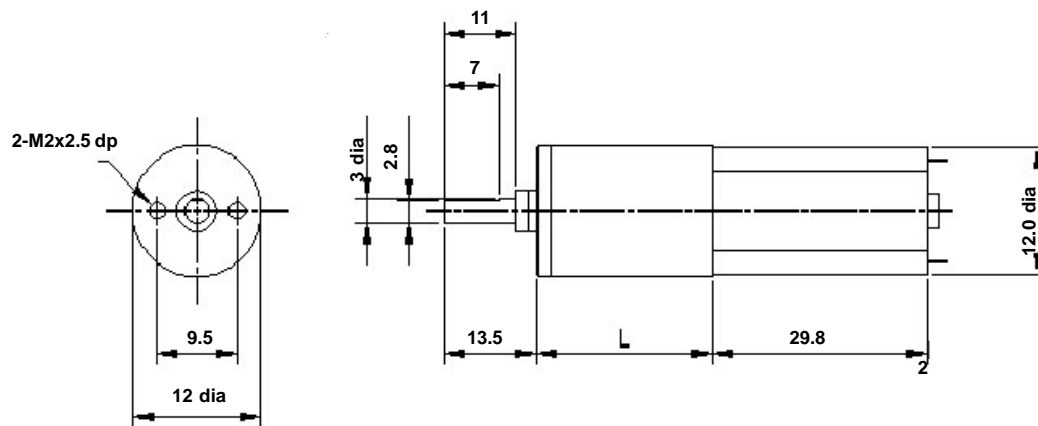
#### IMPORTANT NOTICE

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.

#### 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).

## 990D SERIES 12mm DIA SUB MINIATURE (EPICYCLIC) METAL GEARBOX



RATIO	L
4:1	15.3
64:1	22.0
256:1	24.7

NOTE: all diameters in mm

ADVANTAGES OF PLANETARY 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 16:1 WITH 990 MOTOR

GEARBOX 1024:1 WITH 990 MOTOR

GEARBOX 4096:1 WITH 990 MOTOR