

## 942DLN SERIES NOISE ATTENUATED 32mm (37mm motor) PLANETARY (EPICYCLIC) METAL GEARBOX

(RE 540LN 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.

942D51LN	(4.5v - 15v)	RATIO 5:1
942D271LN	(4.5v - 15v)	RATIO 27:1
942D511LN	(4.5v - 15v)	RATIO 51:1
942D1001LN	(4.5v - 15v)	RATIO 100:1
942D1391LN	(4.5v - 15v)	RATIO 139:1
942D2641LN	(4.5v - 15v)	RATIO 264:1
942D5161LN	(4.5v - 15v)	RATIO 516:1
942D7211LN	(4.5v - 15v)	RATIO 721:1

Designed for heavier duty industrial and modelling applications. These units boast a high quality five pole low rpm motor providing approximately 33% more torque than the standard 540/1 motor, **with considerable reduction in noise levels**. The metal gearbox incorporates sleeve bearings, enabling the high torque transfer to be transmitted through the gearbox. **The 721:1 ratio version has a ballraced output bearing.**

### 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.	A	R.P.M.	A	oz - in	g - cm	W	%		
RE540LN	4.5 - 15.0	12.0v CONSTANT	6,000	0.17	4930	1.6	2.88	250	12.8	67	24.4	1375

Stall Current RE540/1 at 6v = 8.24A

### REDUCTION TABLE. R.P.M. (no load)

SUPPLY VOLTAGE	4.5v	6.0v	9.0v	12.0v	15.0v
942D51LN	450	600	900	1200	1500
942D271LN	83	111	167	222	277
942D511LN	44	59	88	118	147
942D1001LN	23	30	45	60	75
942D1391LN	16	22	32	43	53
942D2641LN	9	11	17	23	28
942D5161LN	4	6	9	12	15
942D7211LN	3	4	6.2	8.3	10

WEIGHT	
942D51LN	320g
942D271LN	337g
942D511LN	364g
942D1001LN	363g
942D1391LN	362g
942D2641LN	390g
942D5161LN	390g
942D7211LN	387g

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

At 12V (g.cm)	
5:1LN	824
27:1LN	3893
51:1LN	6304
100:1LN	10000
139:1LN	10000
264:1LN	12000
516:1LN	12000
721:1LN	12000

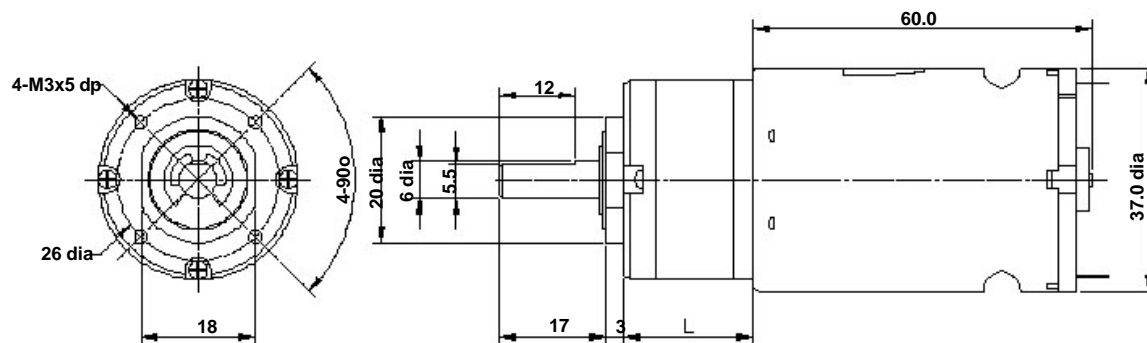
942DLN SERIES	
No load Backlash:	Max 2.5 deg.
Max Radial Load:	3000gf. (10mm from flange)
Shaft Axial Load:	2500gf.

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

**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.

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

**942DLN SERIES NOISE ATTENUATED 32mm (37mm motor) PLANETRY (EPICYCLIC) METAL GEARBOX**



**Pt. No. 727/1**  
**Geared motor bracket (90 degree)**

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

GEARBOX REF.	L
942D51LN (5:1)	20.8
942D271LN (27:1)	26.5
942D511LN (51:1)	32.5
942D1001LN (100:1)	33.6
942D1391LN (139:1)	33.4
942D2641LN (264:1)	40.0
942D5161LN (516:1)	40.0
942D7211LN (721:1)	40.0

**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 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 540/1 MOTOR      GEARBOX 19:1 WITH 540/1 MOTOR.  
GEARBOX 35:1 WITH 540/1 MOTOR      GEARBOX 71:1 WITH 540/1 MOTOR.  
GEARBOX 189:1 WITH 540/1 MOTOR      GEARBOX 939:1 WITH 540/1 MOTOR