

942DLN SERIES NOISE ATTENUATED 32mm (37mm Motor) PLANETRY (EPICYCLIC) METAL GEARBOX (RE540LN Motor)



Geared motor bracket (90 degree)
sold separately
Part No. 727/1



**RATIOS NOW AVAILABLE AS EX-STOCK ITEMS.
Fitted with RE540LN (4.5v - 15v) Motor:**

942D51LN	Ratio	5:1
942D271LN	Ratio	27:1
942D511LN	Ratio	51:1
942D1001LN	Ratio	100:1
942D1391LN	Ratio	139:1
942D2641LN	Ratio	264:1
942D5161LN	Ratio	516:1
942D7211LN	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. (RE540LN)

MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY					STALL TORQUE		
	OPERATING RANGE	NOMINAL	SPEED R.P.M.	CURRENT A	SPEED R.P.M.	CURRENT A	TORQUE oz-in	TORQUE g-cm	OUTPUT W	EFF %	oz-in	g-cm
RE540LN	4.5 - 15	12v Constant	6000	0.26	5258	1.42	3.1	223	12.8	71	25.3	1825

Stall Current: RE-540/1 at 6v = 8.24A

GEARBOX DATA.

PART NO	RATIO	REDUCTION TABLE RPM (No Load) ^o					WEIGHT	TORQUE RATING AT: 12v (g.cm) [^]	
		4.5v	6v	9v	12v	15v		oz-in	g-cm
942D51LN	5:1	450	600	900	1200	1500	314g	892	
942D271LN	27:1	83	111	167	222	278	334g	4214	
942D511LN	51:1	44	59	89	118	148	359g	6823	
942D1001LN	100:1	23	30	45	60	75	359g	10000	
942D1391LN	139:1	16	22	32	43	54	359g	10000	
942D2641LN	264:1	9	12	17	23	29	385g	12000	
942D5161LN	516:1	4.5	6	9	12	15	385g	12000	
942D7211LN	721:1	3	4	6	8	10	385g	12000	

NOTES:^o Motor speeds may vary by + or - 12.5%

[^] Geared Motor Torque Ratings at Maximum Efficiency. To establish Torque Rating in Nm, divide g.cm by 10197.0

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

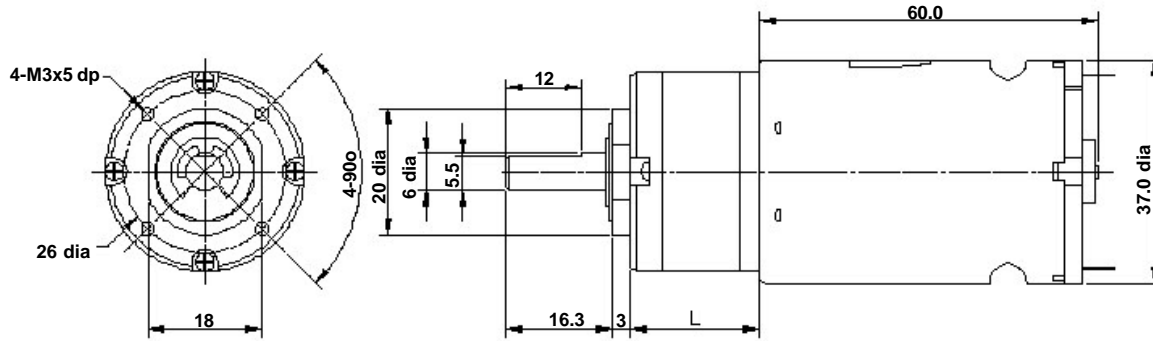
IMPORTANT NOTICES:

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).

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

(RE540LN Motor)

942DLN SERIES TECHNICAL DRAWING



RATIO	L
5:1LN	22.0
27:1LN	28.4
51:1LN	34.8
100:1LN	34.8
139:1LN	34.8
264:1LN	41.2
516:1LN	41.2
721:1LN	41.2

NOTE: all diameters in mm

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

ADVANTAGES OF PLANETRY GEARBOXES	
EFFICIENCY:	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.
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 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