

942D SERIES 32mm (37mm motor) PLANETARY (EPICYCLIC) METAL GEARBOX

(RE 540/1 MOTOR)



RATIOS NOW AVAILABLE AS EX-STOCK ITEMS.

942D51	(4.5v - 15v)	RATIO 5:1
942D271	(4.5v - 15v)	RATIO 27:1
942D511	(4.5v - 15v)	RATIO 51:1
942D1001	(4.5v - 15v)	RATIO 100:1
942D1391	(4.5v - 15v)	RATIO 139:1
942D2641	(4.5v - 15v)	RATIO 264:1
942D5161	(4.5v - 15v)	RATIO 516:1
942D7211	(4.5v - 15v)	RATIO 721:1

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).

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		
			R.P.M.	A	R.P.M.	A	oz - in	g - cm	W	%	oz - in	g - cm
540/1	4.5 - 15.0	12.0v CONSTANT	14,724	0.52	12380	2.75	2.14	152	19.35	58.6	13.9	956

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
942D51	1104	1472	2209	2945	3681
942D271	205	273	409	545	682
942D511	108	144	217	289	361
942D1001	55	74	110	147	184
942D1391	40	53	79	106	132
942D2641	21	28	42	56	70
942D5161	11	14	21	29	36
942D7211	7.6	10	15	20	26

WEIGHT	
942D51	254g
942D271	279g
942D511	306g
942D1001	303g
942D1391	306g
942D2641	329g
942D5161	333g
942D7211	350g

GEARED MOTOR TORQUE RATINGS AT MAX. EFFICIENCY.

	At 12V (g.cm)
5:1	618
27:1	2918
51:1	4725
100:1	9264
139:1	10000
264:1	12000
516:1	12000
721:1	12000

942D 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%

24 volt versions are available for this range of motor-gearboxes. Performance data is similar to 12 volt versions. This version also has an extended 10mm rear shaft to accommodate motor encoders. When ordering please use 12v version part number suffixed with 24V. I.E. 942D1001 will be 942D100124V

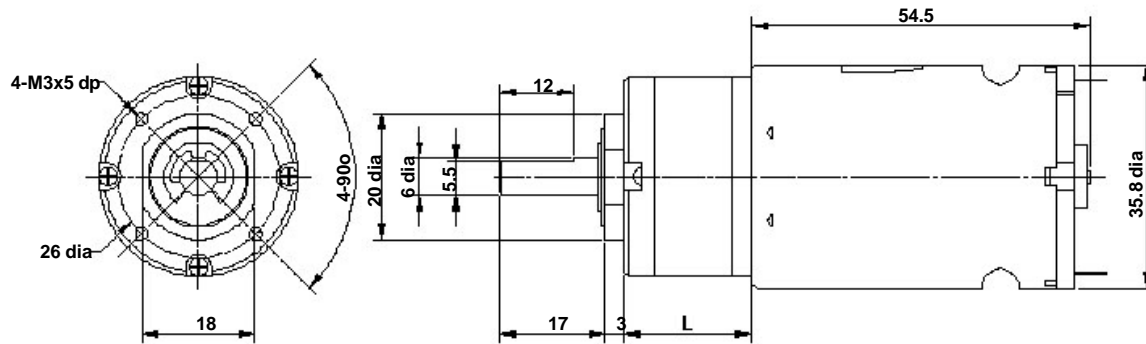
IMPORTANT NOTICE
At very low ratios the torque produced by this geared motor combination may exceed the maximum permissible torque of the gearbox. In this situation the unit must not be allowed to stall as this may damage the gears.

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

MOTOR DATA. (RE-540/1 24v).

MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY						STALL TORQUE	
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE		OUTPUT	EFF		
			R.P.M.	A	R.P.M.	A	oz - in	g - cm	W	%	oz - in	g - cm
RE - 540/1 24v	12 - 24v	24v CONSTANT	14452	0.30	12111	1.57		177	22	65		1094

942D SERIES 32mm (37mm motor) PLANETRY (EPICYCLIC) METAL GEARBOX



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

GEARBOX REF.	L
942D51 (5:1)	20.8
942D271 (27:1)	26.5
942D511 (51:1)	32.5
942D1001 (100:1)	33.6
942D1391 (139:1)	33.4
942D2641 (264:1)	40.0
942D5161 (516:1)	40.0
942D7211 (721:1)	40.0

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 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