

970D SERIES 35mm SINGLE RATIO METAL GEARBOX (CENTRAL OUTPUT SHAFT)

(RE540/1 Motor)



Metal gearbox cover & bracket included with this series.

RATIOS NOW AVAILABLE AS EX-STOCK ITEMS.

Fitted with RE540/1 (4.5v - 15v) Motor:

970D61	Ratio	6:1
970D161	Ratio	16:1
970D471	Ratio	47:1
970D1561	Ratio	156:1
970D7501	Ratio	750:1
970D28131	Ratio	2813:1

Designed for heavy-duty industrial and model applications this robust unit boasts a powerful high quality, three pole 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. The unit is mounted on a 1mm thick plated steel bracket.

MOTOR DATA. (RE540/1)

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
RE540/1	4.5 - 15	12v Constant	14500	0.7	12048	2.81	2.22	160	19.8	62.71	14.29	1029

Stall Current: RE540/1 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		
970D61	6:1	906	1209	1813	2417	3021	274g	778
970D161	16:1	340	453	680	906	1133	278g	1869
970D471	47:1	116	155	232	309	386	285g	3000
970D1561	156:1	35	47	70	93	116	293g	3000
970D7501	750:1	7	10	14	19	24	304g	3000
970D28131	2813:1	2	3	4	5	6	305g	3000

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

970D SERIES	
No Load Backlash	Max 2 deg.
Max Radial Load (10mm from flange)	1000gf.
Shaft Axial Load	700gf.

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. ie: 970D161 will be 970D16124V

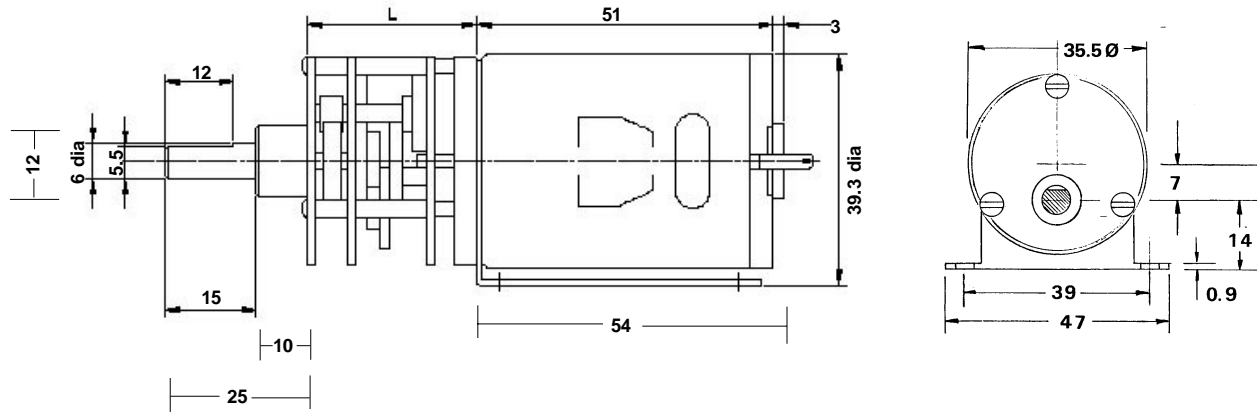
IMPORTANT NOTICES:

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).

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(RE540/1 Motor)

970D SERIES TECHNICAL DRAWING



RATIO	L
6:1	26.0
16:1	28.5
47:1	31.5
156:1	34.0
750:1	39.0
2813:1	41.5

NOTE: all diameters in mm

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

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 19:1 with 540/1 motor
 GEARBOX 21:1 with 540/1 motor
 GEARBOX 31:1 with 540/1 motor
 GEARBOX 38:1 with 540/1 motor
 GEARBOX 56:1 with 540/1 motor
 GEARBOX 63:1 with 540/1 motor
 GEARBOX 69:1 with 540/1 motor
 GEARBOX 75:1 with 540/1 motor

GEARBOX 94:1 with 540/1 motor
 GEARBOX 104:1 with 540/1 motor
 GEARBOX 113:1 with 540/1 motor
 GEARBOX 125:1 with 540/1 motor
 GEARBOX 169:1 with 540/1 motor
 GEARBOX 188:1 with 540/1 motor
 GEARBOX 219:1 with 540/1 motor
 GEARBOX 234:1 with 540/1 motor

GEARBOX 250:1 with 540/1 motor
 GEARBOX 281:1 with 540/1 motor
 GEARBOX 312:1 with 540/1 motor
 GEARBOX 375:1 with 540/1 motor
 GEARBOX 422:1 with 540/1 motor
 GEARBOX 438:1 with 540/1 motor
 GEARBOX 469:1 with 540/1 motor
 GEARBOX 563:1 with 540/1 motor

GEARBOX 625:1 with 540/1 motor
 GEARBOX 938:1 with 540/1 motor
 GEARBOX 1250:1 with 540/1 motor
 GEARBOX 1875:1 with 540/1 motor
 GEARBOX 3750:1 with 540/1 motor
 GEARBOX 5625:1 with 540/1 motor