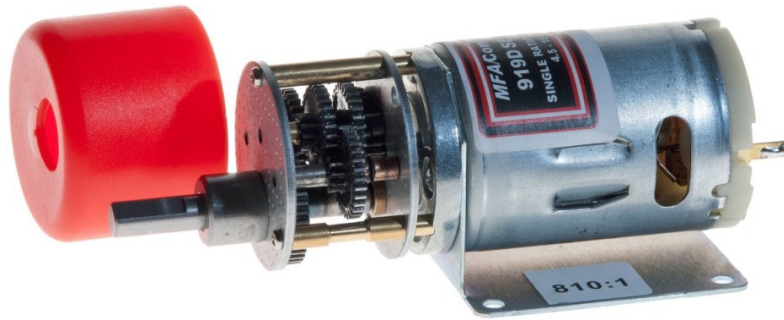


## 919D SERIES 35mm SINGLE RATIO METAL GEARBOX

(RE 540/1 MOTOR)



RATIOS NOW AVAILABLE AS EX-STOCK ITEMS.

919D2.51	(4.5v - 15v)	WITH RE 540/1 MOTOR.	RATIO 2.5:1
919D61	(4.5v - 15v)	WITH RE 540/1 MOTOR.	RATIO 6:1
919D111	(4.5v - 15v)	WITH RE 540/1 MOTOR.	RATIO 11:1
919D301	(4.5v - 15v)	WITH RE540/1 MOTOR.	RATIO 30:1
919D501	(4.5v - 15v)	WITH RE 540/1 MOTOR.	RATIO 50:1
919D1001	(4.5v - 15v)	WITH RE 540/1 MOTOR.	RATIO 100:1
919D1481	(4.5v - 15v)	WITH RE 540/1 MOTOR.	RATIO 148:1
919D5001	(4.5v - 15v)	WITH RE 540/1 MOTOR.	RATIO 500:1
919D8101	(4.5v - 15v)	WITH RE 540/1 MOTOR.	RATIO 810:1
919D30001	(4.5v - 15v)	WITH RE 540/1 MOTOR.	RATIO 3000:1

**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, 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. (RE-540/1)

MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY						STALL TORQUE	
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE		OUTPUT	EFF	STALL TORQUE	
			R.P.M.	A	R.P.M.	A	oz - in	g - cm	W	%	oz - in	g - cm
RE - 540/1	4.5 - 15.0	6.0v CONSTANT	7500	0.45	6180	2.1	1.64	118.2	7.49	59.4	9.31	670
		12.0v CONSTANT	14724	0.52	12380	2.75	2.11	144.29	19.35	58.6	13.28	961.9

Stall Current RE540/1 at 6v = 8.24 Stall Current RE540/1 at 1.5v = 2.41AA

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

SUPPLY VOLTAGE	4.5v	6.0v	9.0v	12.0v	15.0v
919D2.51	2209	2945	4417	5890	7900
919D61	920	1227	1841	2454	3068
919D111	502	669	1004	1338	1673
919D301	184	245	368	491	614
919D501	110	147	221	294	368
919D1001	55	74	110	147	184
919D1481	37	50	75	99	124
919D5001	11	15	22	29	37
919D8101	7	9	14	18	23
919D30001	1.8	2.45	3.7	5	6

WEIGHT	
919D2.51	240g
919D61	234g
919D111	238g
919D301	249g
919D501	255g
919D1001	255g
919D1481	255g
919D5001	260g
919D8101	255g
919D30001	262g

### GEARED MOTOR TORQUE RATINGS AT MAX. EFFICIENCY

At 12V (g.cm)	
2.5:1	309
6:1	741
11:1	1000
30:1	2000
50:1	3000
100:1	6000
148:1	6000
500:1	6000
810:1	6000
3000:1	6000

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

919D SERIES	
No load Backlash:	Max 2 deg.
Max Radial Load: (10mm from flange)	1000gf.
Shaft Axial Load:	700gf.

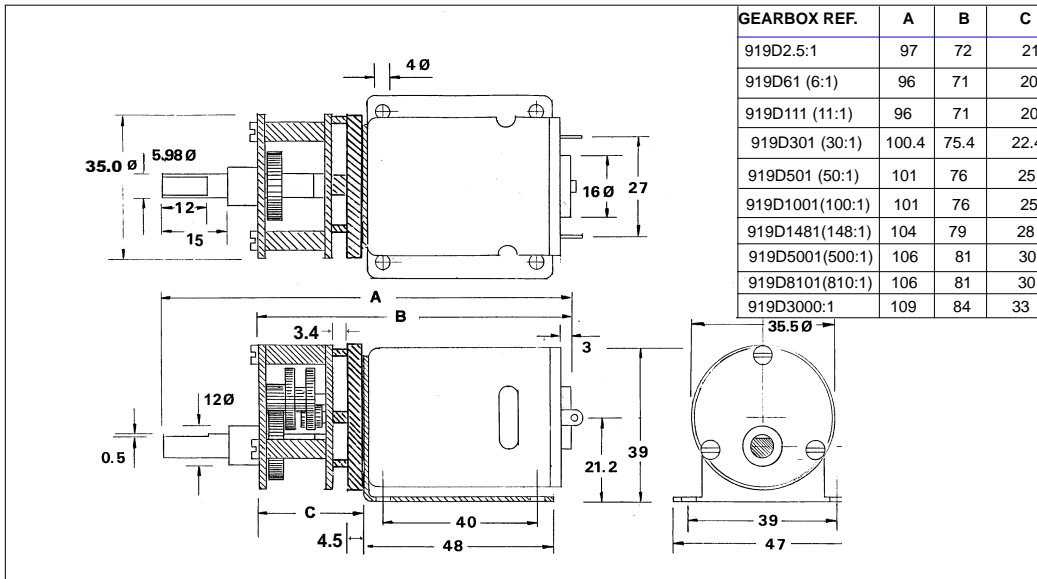
**IMPORTANT NOTICE**  
At very low ratios the torque produced by this geared motor combination may exceed the maximum permissible torque of the gearbox. In this situation the unit must not be allowed to stall as this may damage the gears.

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. 919D111 will be 919D11124V

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

## 919D SERIES 35mm SINGLE RATIO METAL GEARBOX

(RE 540/1 MOTOR)



**Part No. 1071.**  
M3 Anti vibration mount. 9g  
**Part No. 1072**  
M4 Anti vibration mount. 30g



**Part No. 919D30**  
Bearing Blocks. 5mm I.D.  
(19.06 x 19.0mm x 10mm). 32g  
**Part No. 919D30/1**  
Bearing Blocks. 6mm I.D.  
(20 x 20mm x 12.5mm). 32g  
**Part No. 919D30/2**  
Bearing Blocks. 8mm I.D.  
(19.0 x 19.0mm x 13.0mm). 32g

**TIMING PULLEYS**

**TIMING BELTS**

**FOR FURTHER DETAILS SEE PAGE 2**



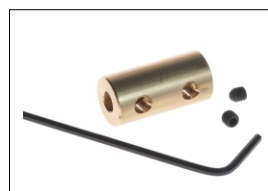
**Pt No. 919D2.** Voltage Regulator. (6-15v DC Input. 4v-12v output). 26mm x 31mm x 15.5mm. 30g



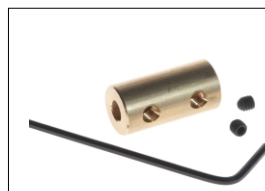
**Part No. 919D26**  
Stainless Steel shaft 5mmOD x 150mm. 23g  
**Part No. 919D26/1**  
Stainless Steel Shaft 6mmOD x 150mm. 36g  
**Part No. 919D26/2**  
Stainless Steel Shaft 8mmOD x 150mm. 59g



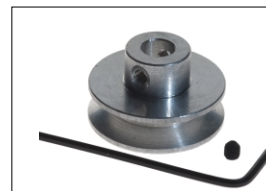
**Pt No. 919D1.** In-Line Coupling. 6mm - 6mm. (Dia. 12.67mm x 24.8mm). 23g



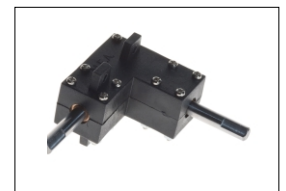
**Pt No. 919D1/2.** In-line Coupling. 6mm-8swg (Meccano) Dia. 10mm x 20mm. 23g



**Pt No. 919D1/8.** In-line Coupling. 8mm-8mm Dia. 12.67mm x 24.8mm. 23g



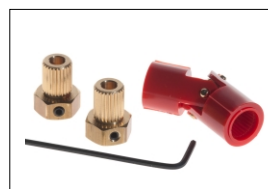
**Pt No. 919D4.** Pulley 25mm dia. (Aluminium). 10g



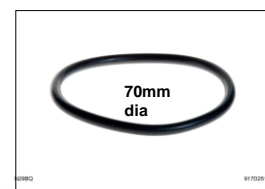
**Pt.No.919D24.** Bevel Gearbox. (Right Angle). 42g



**Pt No. 919D5.** Pulley 16mm dia. (Aluminium). 4g



Universal Couplings. 12.5mm dia. 44mm length. **Pt No. 1105/60.** 6mm - 6mm. See Page 63 for full range of combinations



**Pt No. 917D2515.** "O" Ring 70mm x 5mm Dia. 5g



**Pt No. 919D27.** Gear Adapter. 6mm bore. M10 thread. 12g



**Pt No. 919D25.** Nylon Bevel Gears 1:1. OD30.7mm ID 6mm. Module 1.0. 6g

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 10:1 WITH 540/1 MOTOR  
GEARBOX 70:1 WITH 540/1 MOTOR.  
GEARBOX 120:1 WITH 540/1 MOTOR  
GEARBOX 250:1 WITH 540/1 MOTOR  
GEARBOX 400:1 WITH 540/1 MOTOR  
GEARBOX 700:1 WITH 540/1 MOTOR  
GEARBOX 1000:1 WITH 540/1 MOTOR

GEARBOX 18:1 WITH 540/1 MOTOR.  
GEARBOX 75:1 WITH 540/1 MOTOR.  
GEARBOX 180:1 WITH 540/1 MOTOR  
GEARBOX 300:1 WITH 540/1 MOTOR  
GEARBOX 450:1 WITH 540/1 MOTOR  
GEARBOX 750:1 WITH 540/1 MOTOR  
GEARBOX 1500:1 WITH 540/1 MOTOR

GEARBOX 60:1 WITH 540/1 MOTOR  
GEARBOX 90:1 WITH 540/1 MOTOR.  
GEARBOX 200:1 WITH 540/1 MOTOR  
GEARBOX 350:1 WITH 540/1 MOTOR  
GEARBOX 600:1 WITH 540/1 MOTOR  
GEARBOX 900:1 WITH 540/1 MOTOR