

**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
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		
			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	15800	0.52	13360	2.85	2.14	154.4	21.2	61.9	13.9	1000

Stall Current RE540/1 at 6v = 8.24A

Current RE540/1 at 1.5v = 2.41A

**REDUCTION TABLE. R.P.M.**

SUPPLY VOLTAGE	4.5v	6.0v	9.0v	12.0v	15.0v
919D2.51	2250	3000	4500	6300	7900
919D61	990	1316	1975	2633	3295
919D111	540	718	1077	1436	1800
919D501	120	158	237	316	395
919D1001	59	79	119	158	198
919D1481	40	53	80	106	132
919D5001	9.75	14	21.5	30	37.5
919D8101	8	10	15	20	25
919D30001	1.5	2	3	5	6

WEIGHT	
919D2.51	240g
919D61	234g
919D111	238g
919D501	246g
919D1481	255g
919D5001	260g
919D8101	255g
919D30001	262g

**GEARBOX RATINGS**

RATED TOLERANCE TORQUE (g.cm)		MAX. MOMENTARY TOLERANCE TORQUE
2.5:1	1000	6000
6:1	3000	9000
11:1	3000	9000
50:1	3000	9000
100:1	6000	18000
148:1	6000	18000
500:1	6000	18000
810:1	6000	18000
3000:1	6000	18000

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. Please refer to the table of the gearbox ratings to ascertain the appropriate geared motor combination.

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