

940D SERIES 32mm PLANETRY (EPICYCLIC) METAL GEARBOX

(RE 385 MOTOR)



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).

RATIOS NOW AVAILABLE AS EX-STOCK ITEMS.

940D51	(4.5v - 15v)	RATIO 5:1
940D271	(4.5v - 15v)	RATIO 27:1
940D511	(4.5v - 15v)	RATIO 51:1
940D711	(4.5v - 15v)	RATIO 71:1
940D1001	(4.5v - 15v)	RATIO 100:1
940D1391	(4.5v - 15v)	RATIO 139:1
940D2641	(4.5v - 15v)	RATIO 264:1
940D5161	(4.5v - 15v)	RATIO 516:1
940D7211	(4.5v - 15v)	RATIO 721:1
940D9391	(4.5v - 15v)	RATIO 939:1

Designed for heavy-duty industrial and model applications this robust unit boasts a powerful high quality, five 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.

MOTOR DATA. (RE-385)

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 - 385	6.0 - 15.0	12v CONSTANT	11646	0.18	9869	0.99	1.09	78.4	7.98	66.1	7.13	513.5

Stall Current RE385 at 12v = 4.62A

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

SUPPLY VOLTAGE	4.5v	6.0v	9.0v	12.0v	15.0v
940D51	873	1165	1747	2329	2912
940D271	162	216	324	431	539
940D511	86	114	171	228	285
940D711	61	82	123	164	205
940D1001	44	58	87	116	146
940D1391	31	42	63	84	104
940D2641	17	22	33	44	55
940D5161	8	11	17	23	28
940D7211	6	8	12	16	20
940D9391	4.7	6.2	9.3	12.4	15.4

WEIGHT	
940D51	167g
940D271	185g
940D511	213g
940D711	208g
940D1001	214g
940D1391	212g
940D2641	235g
940D5161	239g
940D7211	241g
940D9391	239g

GEARED MOTOR TORQUE RATINGS AT MAX. EFFICIENCY.

At 12V (g.cm)	
5:1	314
27:1	1482
51:1	2352
71:1	5566
100:1	4704
139:1	6539
264:1	10349
516:1	12000
721:1	12000
939:1	12000

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

940D SERIES	
No load Backlash:	Max 2.5 deg.
Max Radial Load: (10mm from flange)	3000gf.
Shaft Axial Load:	2500gf.

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.

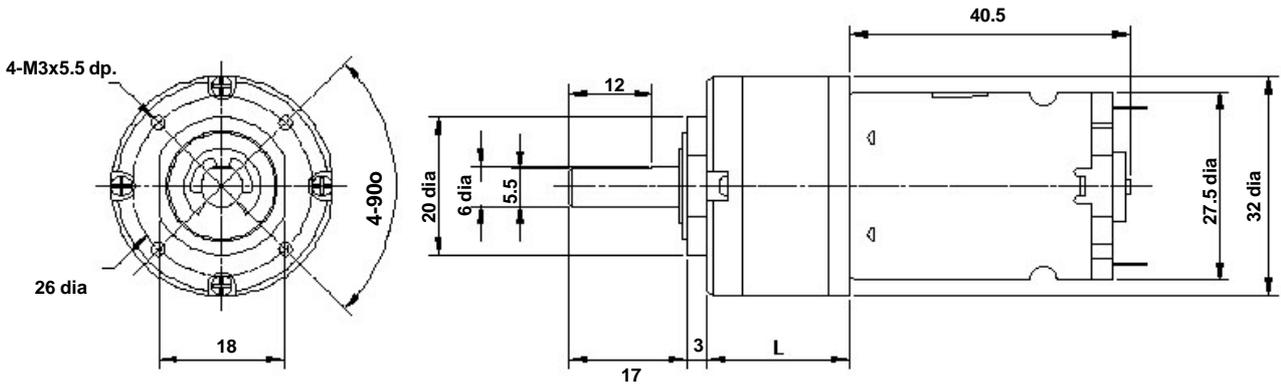
24 volt versions are available for this range of motor-gearboxes. Performance data is similar to 12 volt versions. This version also has an extended 10mm rear shaft to accommodate motor encoders. When ordering please use 12v version part number suffixed with 24V. I.E. 940D1001 will be 940D100124V

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

MOTOR DATA. (RE-385/24v). Current at stall 2.26A

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 - 385/24v	12 - 24v	24v CONSTANT	11748	0.090	9946	0.499		76.9	15.10	65.5		501.4

940D SERIES 32mm PLANETRY (EPICYCLIC) METAL GEARBOX



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

GEARBOX REF.	L
940D51 (5:1)	20.8
940D271 (27:1)	26.5
940D511 (51:1)	32.5
940D711 (71:1)	33.4
940D1001 (100:1)	33.6
940D1391 (139:1)	33.4
940D2641 (264:1)	40.0
940D5161 (516:1)	40.0
940D7211 (721:1)	40.0
940D9391 (939:1)	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 385 MOTOR
GEARBOX 35:1 WITH 385 MOTOR

GEARBOX 19:1 WITH 385 MOTOR.
GEARBOX 189:1 WITH 385 MOTOR