

940D SERIES 32mm PLANETRY (EPICYCLIC) METAL GEARBOX

RE-385 MOTOR



Part No. 727/1
Geared motor bracket (90 degree)
sold separately

RATIOS NOW AVAILABLE AS EX-STOCK ITEMS.

940D51	(4.5v - 15v)	RATIO 5:1	940D1391	(4.5v - 15v)	RATIO 139:1
940D271	(4.5v - 15v)	RATIO 27:1	940D2641	(4.5v - 15v)	RATIO 264:1
940D511	(4.5v - 15v)	RATIO 51:1	940D5161	(4.5v - 15v)	RATIO 516:1
940D711	(4.5v - 15v)	RATIO 71:1	940D7211	(4.5v - 15v)	RATIO 721:1
940D1001	(4.5v - 15v)	RATIO 100:1	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	TORQUE	
			R.P.M.	A	R.P.M.	A	oz-in	g-cm	W	%	oz-in	g-cm
RE-385	6 - 15	12v Constant	11646	0.18	9869	0.99	1.09	78.4	7.85	66.1	7.13	513.5

Stall Current RE-385 at 12v = 4.62A

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

SUPPLY VOLTAGE	4.5v	6v	9v	12v	15v
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	187g
940D511	213g
940D711	207g
940D1001	211g
940D1391	211g
940D2641	236g
940D5161	239g
940D7211	235g
940D9391	239g

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

GEARED MOTOR TORQUE RATINGS AT MAX. EFFICIENCY.

	At 12v (g.cm)
5:1	314
27:1	1482
51:1	2399
71:1	3340
100:1	4704
139:1	6539
264:1	10349
516:1	12000
721:1	12000
939:1	12000

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

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)

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

Current at Stall 2.26A

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.

IMPORTANT NOTICE

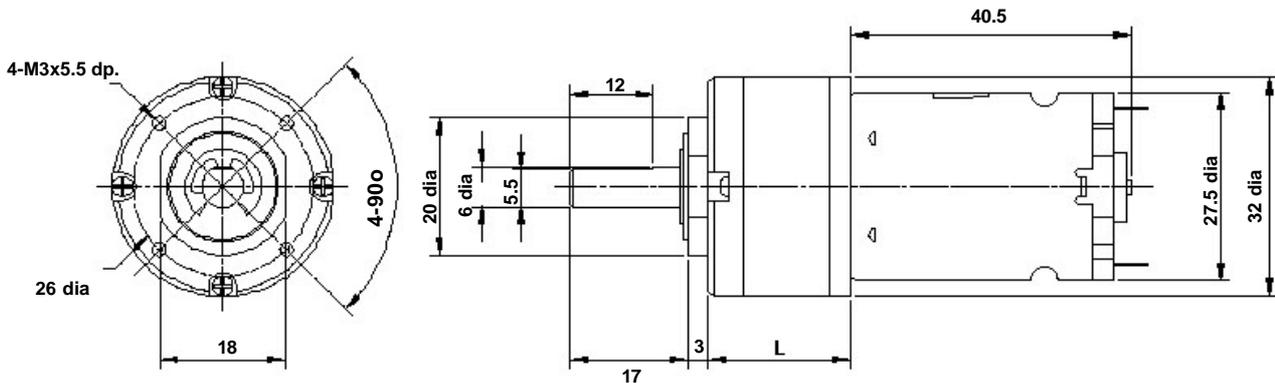
Due to the wide range of applications for this product it is the users responsibility to establish the products suitability for their individual purpose(s).

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940D SERIES 32mm PLANETRY (EPICYCLIC) METAL GEARBOX



RATIO	L
5:1	20.6
27:1	27.0
51:1	33.4
71:1	33.4
100:1	33.4
139:1	33.4
264:1	39.8
516:1	39.8
721:1	39.8
939:1	39.8

NOTE: all diameters in mm

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 19:1 WITH 385 MOTOR

GEARBOX 35:1 WITH 385 MOTOR

GEARBOX 189:1 WITH 385 MOTOR