940D SERIES 32mm PLANETRY (EPICYCLIC) METAL GEARBOX (RE385 Motor)

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

RATIOS NOW AVAILABLE AS EX-STOCK ITEMS.
Fitted with RE385 (4.5v - 15v) Motor:

940D51	Ratio	5:1
940D271	Ratio	27:1
940D511	Ratio	51:1
940D711	Ratio	71:1
940D1001	Ratio	100:1
940D1391	Ratio	139:1
940D2641	Ratio	264:1
940D5161	Ratio	516:1
940D7211	Ratio	721:1
940D9391	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. (RE385)

MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY						STALL TORQUE	
	OPERATING RANGE	NOMINAL	SPEED R.P.M.	CURRENT A	SPEED R.P.M.	CURRENT A	TORQUE oz-in	TORQUE g-cm	OUTPUT W	EFF %	oz-in	g-cm
RE385	4.5 - 15	12v Constant	11646	0.18	9869	0.99	1.09	78.4	7.9	66.1	7.13	513.5

Stall Current: RE385 at 12v = 5.55A

GEARBOX DATA.

PART NO	RATIO	REDUCTION TABLE RPM (No Load)°					WEIGHT	TORQUE RATING AT: 12v (g.cm)^
		4.5v	6v	9v	12v	15v		
940D51	5:1	873	1165	1747	2329	2912	167g	314
940D271	27:1	162	216	324	431	539	187g	1482
940D511	51:1	86	114	171	228	285	213g	2399
940D711	71:1	61	82	123	164	205	207g	3340
940D1001	100:1	44	58	87	116	146	211g	4704
940D1391	139:1	31	42	63	84	104	211g	6539
940D2641	264:1	17	22	33	44	55	236g	10349
940D5161	516:1	8	11	17	23	28	239g	12000
940D7211	721:1	6	8	12	16	20	235g	12000
940D9391	939:1	4.7	6.2	9.3	12.4	15.4	239g	12000

NOTES:° 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

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. ie: 940D1001 will be 940D100124V

MOTOR DATA. (RE385/24V)

MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY						STALL TORQUE	
	OPERATING RANGE	NOMINAL	SPEED R.P.M.	CURRENT A	SPEED R.P.M.	CURRENT A	TORQUE oz-in	TORQUE g-cm	OUTPUT W	EFF %	oz-in	g-cm
RE385/24V	12-24	24v Constant	11748	0.090	9946	0.499		76.9	15.10	65.5		501.4

Stall Current: 2.26A

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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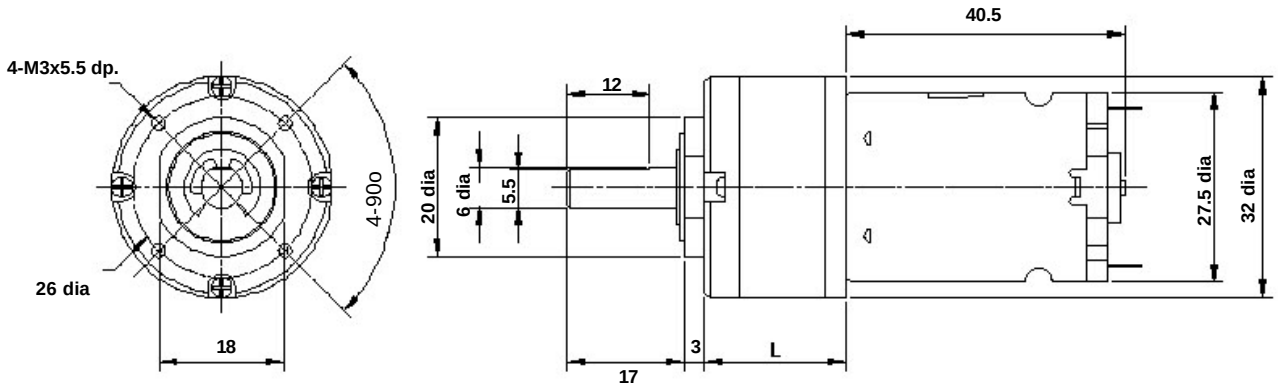
940D SERIES TECHNICAL DRAWING



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.

ADVANTAGES OF PLANETRY GEARBOXES	
EFFICIENCY:	Efficiencies of planetary gearboxes can be above 90% while some other types of transmission can be 50% of 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

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