

**949DRA SERIES 35mm PLANETRY (EPICYCLIC) GEARED MOTOR (CARBON BRUSHES).
OUTPUT VIA RIGHT ANGLE DRIVE BEVEL GEARBOX. (RE385RA Motor)**



RATIOS NOW AVAILABLE AS EX-STOCK ITEMS.

Fitted with RE385RA (6v - 15v) Motor:

949DRA51	Ratio	5:1
949DRA141	Ratio	14:1
949DRA711	Ratio	71:1
949DRA1001	Ratio	100:1
949DRA5161	Ratio	516:1

Designed for medium duty industrial applications. This precise and robust bevel geared unit with 1:1 final drive, boasts a quality 5 pole motor with carbon brushes. Reduction is via steel gears with acetyl first stage. The output shaft is 6mm dia with a key flat. These units are suitable in low noise applications.

MOTOR DATA. (RE385RA)

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
RE385RA	6 - 12	12v Constant	7300	0.15	5950	0.9	1.53	110	7	65	8.4	605est

GEARBOX DATA.

PART NO	RATIO	REDUCTION TABLE RPM (No Load) ^o		WEIGHT	TORQUE RATING AT: 12v (g.cm) [^]
		6v	12v		
949DRA51	5:1	730	1460	319g	429
949DRA141	14:1	261	521	340g	1047
949DRA711	71:1	52	103	361g	4530
949DRA1001	100:1	37	73	365g	6380
949DRA5161	516:1	7	14	389g	12000

NOTES:^o 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

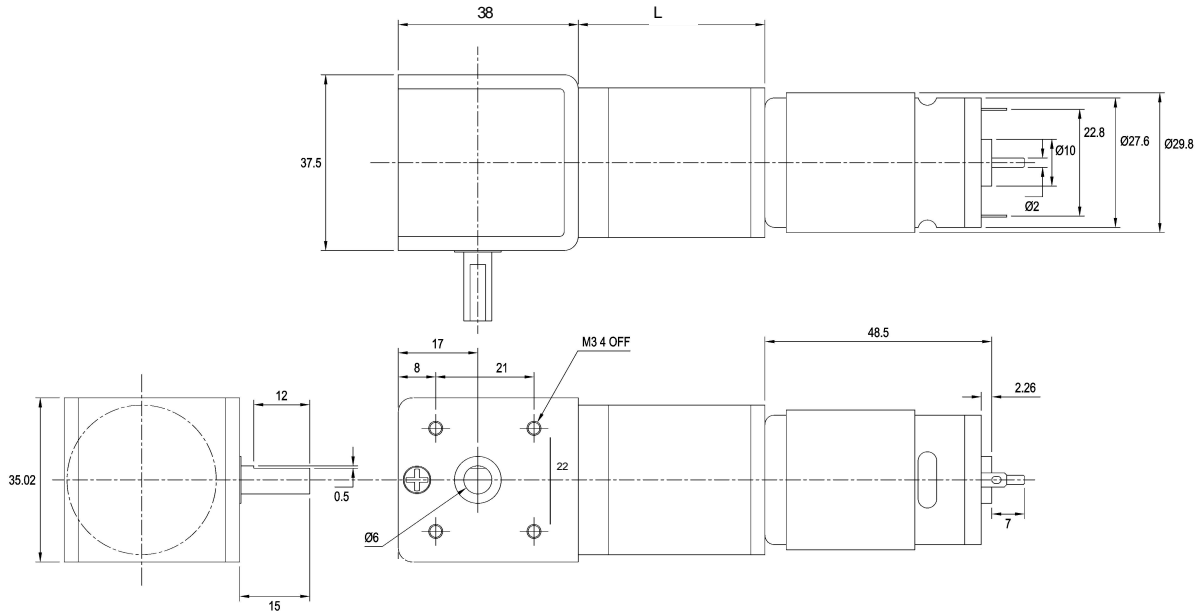
949DRA SERIES	
No Load Backlash	Max 3 deg.
Max Radial Load (10mm from flange)	3000gf.
Shaft Axial Load	2500gf.

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).

**949DRA SERIES 35mm PLANETRY (EPICYCLIC) GEARED MOTOR (CARBON BRUSHES).
OUTPUT VIA RIGHT ANGLE DRIVE BEVEL GEARBOX. (RE385RA Motor)**

949DRA SERIES TECHNICAL DRAWING



RATIO	L
5:1	20.6
14:1	27.0
71:1	33.4
100:1	33.4
516:1	39.8

NOTE: all diameters in mm

FOR ACCESSORIES TO FIT THIS SERIES GEARBOX, REFER TO 918D 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 19:1 with 385 motor
GEARBOX 27:1 with 385 motor
GEARBOX 35:1 with 385 motor

GEARBOX 51:1 with 385 motor
GEARBOX 139:1 with 385 motor
GEARBOX 189:1 with 385 motor

GEARBOX 264:1 with 3835 motor
GEARBOX 721:1 with 385 motor
GEARBOX 939:1 with 385 motor