

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



**RE-385RA MOTOR**

RATIOS NOW AVAILABLE AS EX-STOCK ITEMS.

949DRA51	(6v - 15v)	RATIO 5:1
949DRA141	(6v - 15v)	RATIO 14:1
949DRA711	(6v - 15v)	RATIO 71:1
949DRA1001	(6v - 15v)	RATIO 100:1
949DRA5161	(6v - 15v)	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. (RE-385RA)

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-385RA	6 - 12	12v Constant	7300	0.15	5950	0.9	1.53	110	7	65	8.4	605est

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

SUPPLY VOLTAGE	6v	12v
949DRA51	730	1460
949DRA141	261	521
949DRA711	52	103
949DRA1001	37	73
949DRA5161	7	14

WEIGHT	
949DRA51	319g
949DRA141	340g
949DRA711	361g
949DRA1001	365g
949DRA5161	389g

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

### GEARED MOTOR TORQUE RATINGS AT MAX. EFFICIENCY.

	At 12v (g.cm)
5:1	429
14:1	1047
71:1	4530
100:1	6380
516:1	12000

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

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

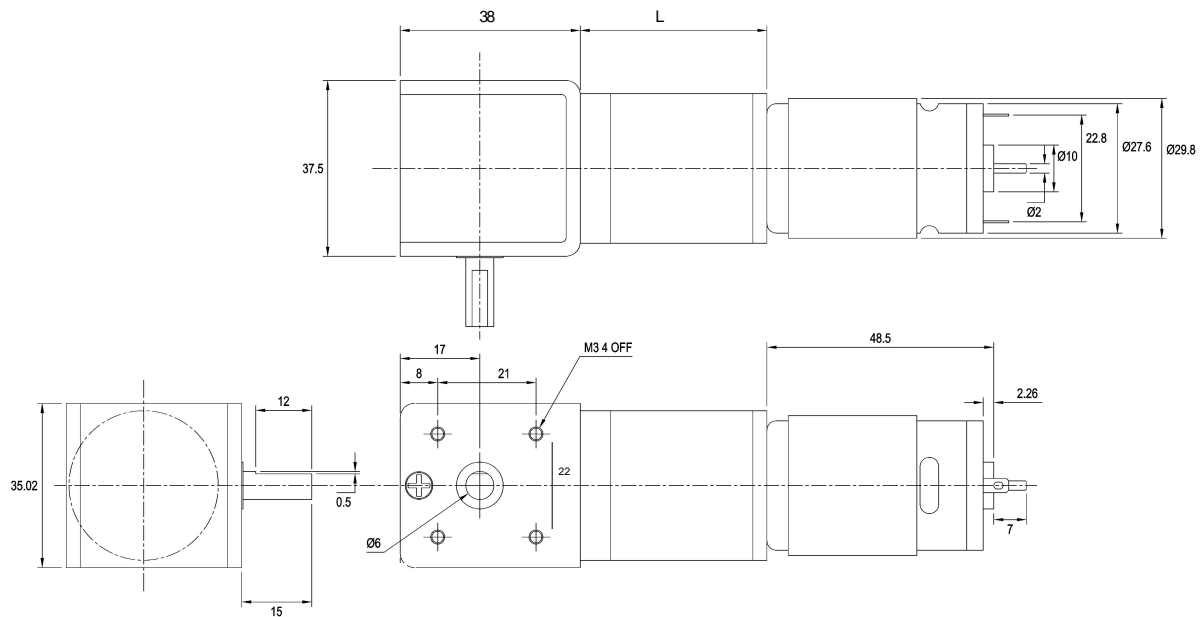
#### IMPORTANT NOTICE

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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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 PAGE.

ADVANTAGES OF PLANETARY GEARBOXES.	
<b>EFFICIENCY:</b>	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.
<b>SIZE:</b>	Planetary gearboxes can be half the size of conventional boxes.
<b>WEIGHT:</b>	Weight savings can be as high as 60%, allowing smaller, lighter support structures.
<b>MAINTENANCE:</b>	Other than routine oil changes, no maintenance is required, eliminating the need to hold spares.
<b>REVERSIBLE:</b>	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.
<b>COAXIAL:</b>	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 385 MOTOR  
GEARBOX 721:1 WITH 385 MOTOR  
GEARBOX 939:1 WITH 385 MOTOR