

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



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.

| | | |
|-------------------|-------------------|--------------------|
| 949DRA51 | (6v - 15v) | RATIO 5:1 |
| 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.

| MODEL | VOLTAGE | | NO LOAD | | MAX EFFICIENCY | | | | | | STALL TORQUE | |
|-------|-----------------|--------------|---------|---------|----------------|---------|---------|--------|--------|-----|--------------|---------|
| | OPERATING RANGE | NOMINAL | SPEED | CURRENT | SPEED | CURRENT | TORQUE | | OUTPUT | EFF | STALL TORQUE | |
| | | | R.P.M. | mA | R.P.M. | mA | oz - in | g - cm | W | % | oz - in | g - cm |
| 385RA | 6 - 12v | 12v CONSTANT | 7000 | | 5950 | 900 | | 110 | 7 | 65 | | 733 est |

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

| SUPPLY VOLTAGE | 6v | 12v |
|----------------|-----|------|
| 949DRA51 | 680 | 1380 |
| 949DRA1001 | 36 | 73 |
| 949DRA5161 | 7 | 14.5 |

| WEIGHT | |
|------------|------|
| 949RA51 | 321g |
| 949RA1001 | 365g |
| 949RA51651 | 392g |

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

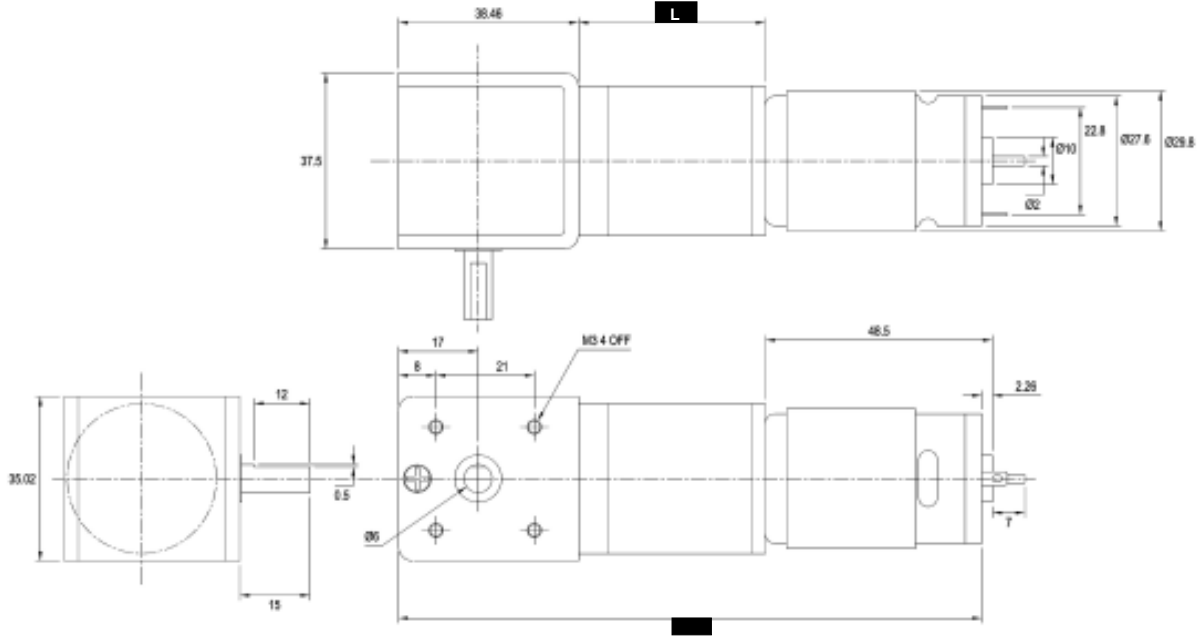
GEARED MOTOR TORQUE RATINGS AT MAX. EFFICIENCY.

| AT 12V (g.cm) | |
|---------------|-------|
| 5:1 | 440 |
| 100:1 | 6600 |
| 516:1 | 12000 |

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.

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| GEARBOX REF. | L |
|--------------------|------|
| 949DRA51 (5:1) | 20.6 |
| 949DRA1001 (100:1) | 33.4 |
| 949DRA5161 (516:1) | 39.8 |
| | |

FOR ACCESSORIES TO FIT THIS SERIES GEARBOX, REFER TO 918D 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.

| | | |
|-------|-------|-------|
| 14:1 | 19:1 | 27:1 |
| 35:1 | 51:1 | 71:1 |
| 139:1 | 189:1 | 264:1 |
| 721:1 | 939:1 | |