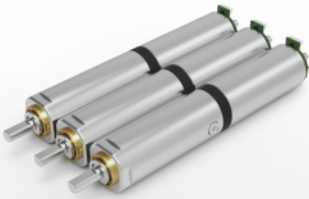


# MD006006

Φ6mm MD planetary gearbox

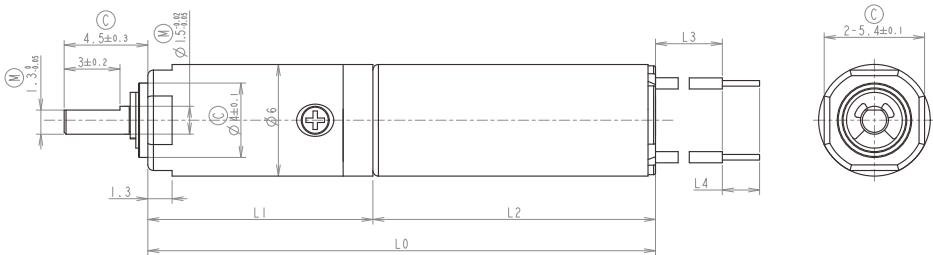


## Gearbox Specifications

|                       |          |                             |                          |                 |
|-----------------------|----------|-----------------------------|--------------------------|-----------------|
| Outer diameter        | 6mm      | Bearing                     | oil-impregnated bearings | Rolling bearing |
| Material              | Metal    | Axial Play                  | ≤0.3mm                   | ≤0.3mm          |
| Direction of rotation | cw & ccw | Radial Load at Output Shaft | ≤0.5N                    | ≤5N             |
| Backlash              | ≤3°      | Operating temperature range | -20 ~ +85°C              |                 |

| Gearbox Stages                      | 1     | 2            | 3                     | 4                             |
|-------------------------------------|-------|--------------|-----------------------|-------------------------------|
| Reduction ratio                     | 5 / 6 | 23 / 31 / 41 | 110 / 148 / 198 / 266 | 531 / 711 / 952 / 1275 / 1708 |
| Max rated torque of gearbox (gf.cm) | 330   | 330          | 330                   | 600                           |
| Max. intermittent torque (gf.cm)    | 800   | 800          | 800                   | 1500                          |
| Gearbox efficiency (%)              | 87    | 74           | 63                    | 56                            |
| Gearbox length L1 (mm)              | 9.7   | 12.1         | 14.5                  | 16.9                          |

## Technical Drawing



## Motor Specifications

|                       |                               |              |           |
|-----------------------|-------------------------------|--------------|-----------|
| Motor type (optional) | Coreless motor, Stepper motor | Input speed  | ≤30000rpm |
| Voltage (optional)    | 3-12V                         | Load current | 100mA max |

| Model         | Rated Speed | Max Speed | Max. Rated Torque of Gearbox | Max. Intermittent Torque of Gearbox | Reduction Ratio | Gearbox Length | Overall Length |
|---------------|-------------|-----------|------------------------------|-------------------------------------|-----------------|----------------|----------------|
|               | rpm         | rpm       | gf.cm                        | gf.cm                               |                 | mm             | mm             |
| MD006006-5    | 1563        | 6250      | 330                          | 800                                 | 4.8             | 9.7            | 23.7           |
| MD006006-6    | 1166        | 4666      | 330                          | 800                                 | 6.43            |                |                |
| MD006006-23   | 326         | 1302      | 330                          | 800                                 | 23.04           |                |                |
| MD006006-31   | 243         | 972       | 330                          | 800                                 | 30.86           | 12.1           | 26.1           |
| MD006006-41   | 181         | 726       | 330                          | 800                                 | 41.33           |                |                |
| MD006006-110  | 68          | 271       | 330                          | 800                                 | 110.6           |                |                |
| MD006006-148  | 51          | 203       | 330                          | 800                                 | 148.1           | 14.5           | 28.5           |
| MD006006-198  | 38          | 151       | 330                          | 800                                 | 198.4           |                |                |
| MD006006-266  | 28          | 113       | 330                          | 800                                 | 265.7           |                |                |
| MD006006-531  | 14          | 57        | 600                          | 1500                                | 530.8           | 16.9           | 30.9           |
| MD006006-711  | 11          | 42        | 600                          | 1500                                | 711.0           |                |                |
| MD006006-952  | 8           | 32        | 600                          | 1500                                | 952.2           |                |                |
| MD006006-1275 | 6           | 24        | 600                          | 1500                                | 1275.2          |                |                |
| MD006006-1708 | 4           | 18        | 600                          | 1500                                | 1707.9          |                |                |