

# Unimotor

Servo  
solution

## The Flexible Servo solution for Mechatronics



### Servo drive systems

The Unimotor fm range provides a **flexible** offering to a wide range of **Mechatronics** applications.

Available in 7 sizes, from 55 to 250, this range provides **optimum performance** in terms of control **accuracy** and **dynamic** behaviour when it is driven by the latest generation of **Unidrive M** drives.

With a torque range up to 410 Nm, combined with a wide range of options, Unimotor fm provides a full range of solutions targeting the Mechatronics market.

Unimotor fm is also associated with the range of Dynabloc gearboxes to adapt to the speed / torque / inertia / accuracy needs required by the application.



[www.nidecautomation.com](http://www.nidecautomation.com)

**Nidec**  
All for dreams



## Unimotor fm servomotors

- Mechanical adaptation:
  - up to 3 shaft diameters
  - up to 3 flange diameters
  - finish: keyed or solid shaft
  - Nema or IEC execution
- Rated speed selection:
  - from 1000 rpm to 6000 rpm
- Feedback device:
  - 2048 or 4096 ppt encoders
  - SinCos single or multi-turn
  - SLM technology
  - resolver
- Space management:
  - 90° rotatable connectors
- Global solution:
  - adapted and tested cables for drive - motor connection (power and control)
- Choice of rotor inertia:
  - low
  - high
- Mechanical braking:
  - 2 types of brake standard parking and high torque
- High peak torque option
- Forced ventilation option

## Dynabloc servo geared motors

- This range of servo geared motors allows a variety of solutions adapted to all needs:
- backlash: choice of 1 to 30'
  - foot or flange mounting
  - orthogonal or axial output
  - solid or hollow shaft, keyed or plain with tightening clip.

## Unidrive M drives

- Ready to use application programs (positioning, synchronization, electronic cam, on-the-fly cut ...)
- Automation functions ...
- Up to 300 % of the drive overload capacity
- Synchronization of the internal control loops at 250 µs
- Automatic adjustment of gains by auto-calibration of motor and load characteristics
- Synchronization between drives
- Automatic loading of motors' characteristics on power-up (SinCos & SLM encoders)

