



## AG2300 | High-end gear series for AM8000 and AM8500 servomotors

The low-backlash, high-performance planetary gear units of the AG2300 series offer high torque, low torsional backlash and a very low noise level in all 14 gear ratios. The high-end gear units for the AM8000 and AM8500 servomotors have a high power density and are able to absorb high radial and axial forces. The high quality and running smoothness of this helical gear unit series meet the highest control quality demands.

The MF standard variant allows high positioning accuracy and highly dynamic operating cycles (duty cycle < 60 %). The high-speed MC variant is suited for positioning with high nominal speeds in continuous operation (duty cycle > 60 %).

The gear units of the AG2300 series are perfectly matched to the AM8000 and AM8500 motor series. The inertia ratios, the required torques and therefore the suitable motors can be calculated conveniently with the CYMEX® calculation tool. In addition, the tool checks in a single step whether the selected motor can be adapted to the gear unit. The planetary gear units are fitted to the respective motor in the factory and delivered as a complete motor/gear unit.

### Features

- standard version MF for high positioning quality in highly dynamic operating cycles
- high-speed version MC for high speeds in continuous operation
- low-backlash planetary gear unit with output shaft
- absolutely maintenance-free, thanks to unique lubrication concept
- high axial and radial forces
- long service life (MF > 20,000 h, MC > 30,000 h)
- maximum efficiency
- maximum power density
- low running noise and smooth running thanks to helical gearing
- flexible installation position
- output shaft with feather key or smooth shaft
- available in 7 or 6 sizes
  - MF: SP060 to SP240
  - MC: SP075 to SP240
- 14 gear ratios,  $i = 3, 4, 5, 7, 10$  (single-stage),  $i = 16, 20, 25, 28, 35, 40, 50, 70, 100$  (two-stage)
- acceleration torques between 30 and 4500 Nm
- low torsional backlash (1...8 arcmin)

Technical data	AG2300
Type of gear	planetary gear with two variants
Variant	MF (standard), MC (high-speed)
Life span	MF > 20,000 h/MC > 30,000 h
Coating/surface	RAL7016 (grey)
Ambient temperature	-15 °C...+40 °C
Lubrication	lubricated for life
Installation position	variable
Protection class	IP 65
Mechanically compatible with	flange size F (typical combination according to specifications)

Options	AG2300
Feather key groove	according to DIN 6885 P1
Sizes	MF: 7 sizes (060, 075, 100, 140, 180, 210, 240) MC: 6 sizes (075, 100, 140, 180, 210, 240)
Gear ratios	14 gear ratios; 1-stage with $i = 3, 4, 5, 7, 10$ ; 2-stage with $i = 16, 20, 25, 28, 35, 40, 50, 70, 100$

Accessories	
AM85xx	Servomotors with increased rotor moment of inertia
AM80xx	Dynamic power packages made in Germany