

Precision Series

**Zero & Low
Backlash**

Features & Benefits

Precision Series

A list of additional benefits include:

- No mechanical backlash
- Very compact
- High stiffness for increased rigidity
- High efficiencies at large ratios
- Grease lubricated for life.
- Small hysteresis loss
- High shockload capacity

This product is readily available, and is ideal for machine tool and robotic applications.

Servo text here

The FINE CYCLO makes up part of Sumitomo Cyclo Europe's precision range of products offering precise technological solutions, specialised for the individual client's needs.

It is available in five model styles, up to seven mounting sizes with reduction ratios starting from 29:1 to 179:1.

It is available in low weights such as the FC-A 15G model weighting only 2.7 kg whilst allowing a maximum acceleration and deceleration torque of up to 335 Nm.

The FINE CYCLO provides an excellent torque to weight ratio.

FINE CYCLO characteristics include low mass moment of inertia, the gearbox also responds quickly to acceleration, deceleration and reversing torques.

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FINE CYCLO

Fine Cyclo

- No mechanical backlash
- Small hysteresis loss
- Compact size
- High torsional stiffness
- Low moment of inertia
- High shock load capacity
- High efficiency
- Easy mounting & motor fitting
- Lifetime grease lubrication
- High reliability/long life
- Easy motor connection via adaptor plate
- Optional connection to keyless motor shaft via clamping ring design
- Short delivery time

FA-Series for point to point applications

Cyclo system incorporating three discs and a single eccentric - Available in four mounting versions.

FC-A

without bearing support for Output Flange

- 6 mounting sizes
- single reduction ratios 29, 59, 89, 119, 179
- reduction kit for integrated design
- compact assembly by utilising customers bearing support
- rated output torque up to 5,140 Nm
- acceleration torque up to 7,610 Nm
- allowable peak torque for emergency stop up to 24,000 Nm
- input speeds up to 6,150 rpm
- Lost Motion down to 1 arcmin
- motor connection via intermediate flange
- optional connection to keyless motor shaft using clamp ring

F2C-A

with Output Flange and integrated Taper Roller Bearings

- 4 mounting sizes
- single reduction ratios 29, 59, 89, 119, 179
- smaller overall dimensions than F1C-A
- taper roller bearings with high moment ratings
- rated output torque up to 1,830 Nm
- acceleration torque up to 2,910 Nm
- allowable peak torque for emergency stop up to 7,210 Nm
- input speeds up to 6,150 rpm
- Lost Motion down to 1 arcmin
- motor connection via intermediate flange
- optional connection to keyless motor shaft using clamp ring
- optional F-casing design

F1C-A

with Output Flange and single Crossed Roller Bearing

- 6 mounting sizes
- single reduction ratios 29, 59, 89, 119, 179
- bearing supported output flange
- rated torque up to 5,140 Nm
- acceleration torque up to 7,610 Nm
- allowable peak torque for emergency stop up to 24,000 Nm
- input speeds up to 6,150 rpm
- Lost Motion down to 1 arcmin
- motor connection via intermediate flange
- optional connection to keyless motor shaft using clamp ring

F3C-A *

with Output Shaft, output housing and Taper Roller Bearings

- 6 mounting sizes
- single reduction ratios 29, 59, 89, 119, 179
- bearing supported output shaft
- high torsional stiffness
- rated output torque up to 5,140 Nm
- acceleration torque up to 7,610 Nm
- allowable peak torque for emergency stop up to 24,000 Nm
- input speeds up to 6,150 rpm
- Lost Motion down to 1 arcmin
- motor connection via intermediate flange
- optional connection to keyless shaft using clamp ring
- optional splined output shaft available

*Replaces F2C-A G

FT-Series for smooth traversing applications

Cyclo system with two discs and three eccentrics.

For the highest transmission accuracy with minimum speed ripple and minimum vibration.

F2C-T

with Output Flange and integrated Taper Roller Bearings

- new design
- new tooth profile
- increased torque ratings
- integrated planet gear
- 7 mounting sizes
- reduction ratios 81, 118.5, 141, 171
- rated output torque up to 6,140 Nm
- acceleration torque up to 11,000 Nm
- allowable peak torque for emergency stop up to 22,000 Nm
- input speeds up to 8,460 rpm (depends on size and ratio)
- high precision: Lost Motion < 0.5 arcmin
- extremely low transmission error
- high efficiency - even at low speeds
- high backdrive efficiency
- extremely low vibration
- motor connection via intermediate flange
- optional connection to keyless motor shaft using clamp ring
- optional F-casing design