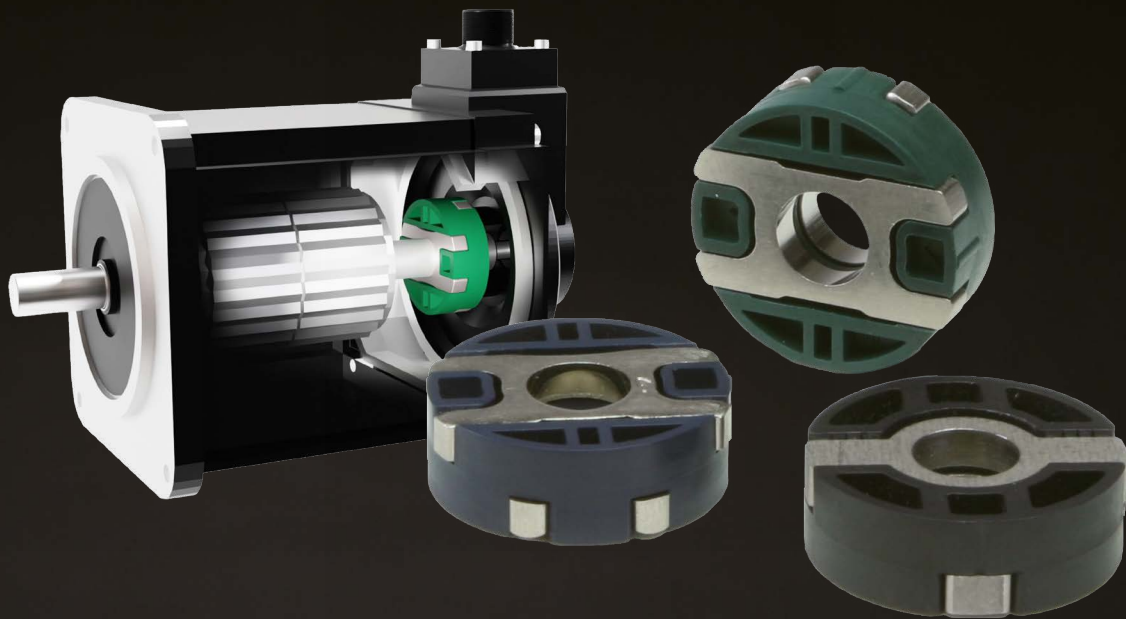


# OLDHAM COUPLING CPG



CPG is an Oldham coupling that connects the motor section and encoder section inside the servo motor.

- **Easy to install**

Using Oldham coupling makes the encoder field replaceable. With settled initialization, the position can be retained after encoder replacement. This feature is ideal for field repairing of medium/large servo motor while encoder can be replaced without removing the motor.

- **Heat isolation from motor**

Slider of the Oldham coupling made in resin prevents the temperature rise caused by coil heat generation from being transmitted to the encoder side, eliminating encoder malfunction.

- **Shaft misalignment absorption**

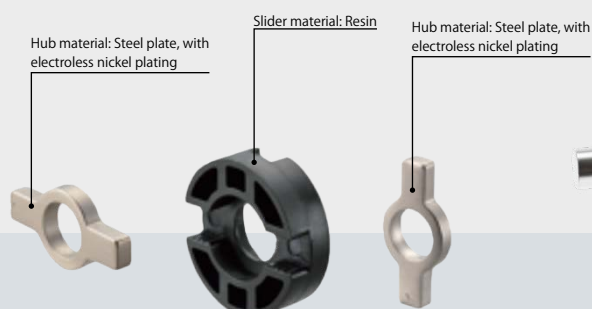
Oldham coupling absorbs installation errors of shafts of motor and encoder, resulting in encoder protection.

- **High-precision and smooth torque transmission**

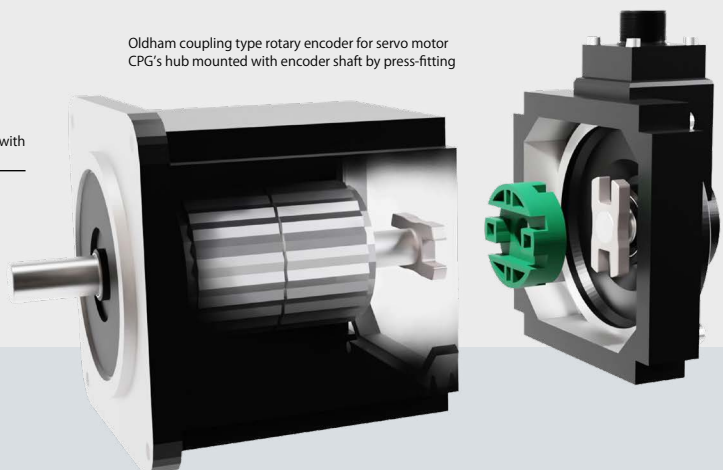
Coupling's components are machined with high precision.

- **Small hysteresis loss and excellent durability**

## ■ Structure and Materials



Oldham coupling type rotary encoder for servo motor  
CPG's hub mounted with encoder shaft by press-fitting



Shaft diameters:  $\Phi 10\text{mm}$  (both motor and encoder sides)  
Others: The sliding surfaces of the hub and slider are lubricated with recommended grease.  
The shaft fastening method is press fit.

# OLDHAM COUPLING CPG

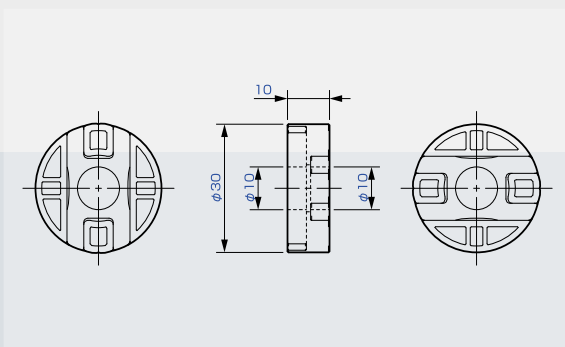
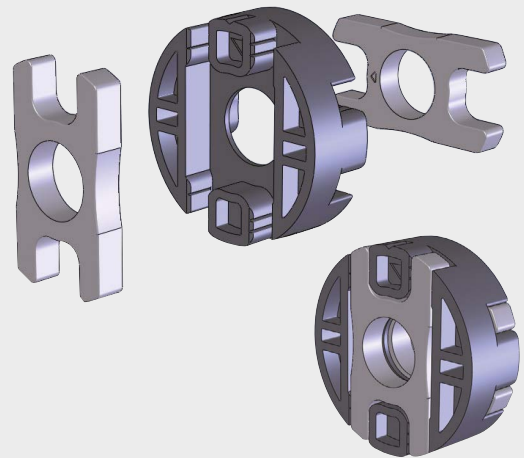
## Application 1

### Specifications

- Rated torque: 0.05 Nm
- Rated rotation speed: 3000 min<sup>-1</sup>
- Operating temperature: 0-110 °C
- Misalignment:
- Parallel 0.1 mm Angular 0.1° Axial ± 0.3 mm

### Dimensions

- Outer diameter: 30 mm
- Shaft diameter: 10 mm
- Overall length: 10 mm



- Low reaction force and excellent in heat isolation. Avoid the negative effect to encoder applications.
- Coupling absorbs the eccentric contraction by thermal expansion of motor shaft
- High resistance to abrasion in sliding part. Long life.

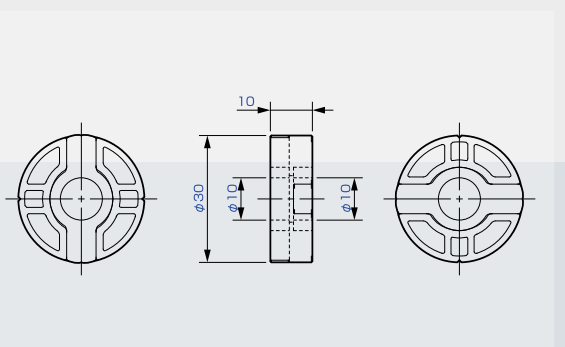
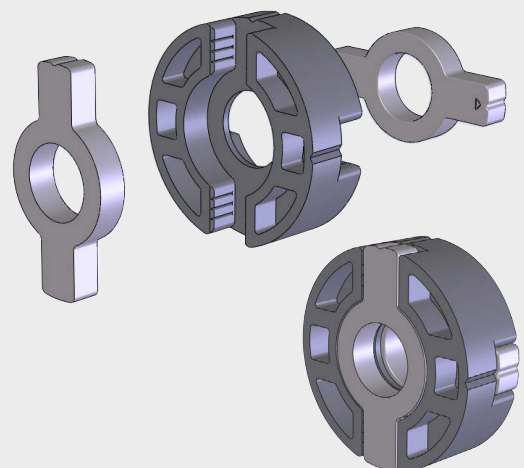
## Application 2

### Specifications

- Rated torque: 0.05 Nm
- Rated rotation speed: 3000 min<sup>-1</sup>
- Operating temperature: 0-110 °C
- Misalignment:
- Parallel 0.1 mm Angular 0.1° Axial ± 0.3 mm

### Dimensions

- Outer diameter: 30 mm
- Shaft diameter: 10 mm
- Overall length: 10 mm



- Low reaction force and excellent in heat isolation. Avoid the negative effect to encoder applications.
- Coupling absorbs the eccentric contraction by thermal expansion of motor shaft
- High resistance to abrasion in sliding part. Long life.