



## LUBRICATION, MAINTENANCE and INSTALLATION INSTRUCTIONS for CSK FREEWHEELS.

### LUBRICATION

The CSK freewheels are supplied filled with grease. This lubrication is adequate for normal operating conditions and need not be re-greased.

### MAINTENANCE

The CSK freewheels are grease filled at the factory and have a **maintenance free** for life design that **does not require lubrication**. No attempt to re-grease this clutch should be made, as additional grease in the sprag assembly can cause the clutch to fail, and will **void the warranty**.

### INSTALLATION

The installation of the CSK freewheel is the same as a ball bearing.

Direct blows on the races or cages will damage the freewheel. When pressing into the housing, pressure must only be exerted on the outer race. When pressing onto the shaft apply pressure only on the inner race.

#### **Important steps to remember:**

- A.) Check bore and shaft tolerances.
- B.) Check clutch for proper rotation.
- C.) To fit clutch in bore, apply pressure only to the end face of the outer race.
- D.) To mount clutch on shaft, apply pressure only to the end face of the inner race.
- E.) Freewheel the clutch by hand before subjecting to test operation.
- F.) Clutches are greased for life and do not need re-greasing.

## GENERAL INFORMATION

### DESIGN

CSK freewheels have the outer dimensions of type 62 ball bearings. On the side of the balls, sprags are mounted. The sprags and balls are arranged in a plastic cage to hold them. The CSK freewheels have the same characteristics as ball bearings and additional bearing is not necessary.

### TEMPERATURE

The admissible operating temperature is -40°F (-40°C) to 212°F (+100°C). Peaks up to 248°F (+120°C) are acceptable for short periods.

### TORQUE TRANSMISSION

The transmission of rated torque of these units is ensured by a press fit into a rigid outer housing with N6 tolerance, and onto a shaft with n6 tolerance. The initial bearing radial clearance is set at C5, and is reduced if using the press fit as specified.

One race may be glued. If both races are to be glued, performance will be reduced or a C3 bearing clearance will be necessary.

### MAXIMUM SPEED

The maximum allowable speed with standard grease is shown in the table below. The speeds are for operation in a clean environment within the specified temperature range.

Size	RPM
CSK 8	15,000
CSK 12	10,000
CSK 15	8,400
CSK 17	7,350
CSK 20	6,000
CSK 25	5,200
CSK 30	4,200
CSK 35	3,600
CSK 40	3,000