BASIC INFORMATION & RECOMMENDATION

Drive Ratings

Standard CYCLO speed reducers are designed and built for long, maintenance-free, 10-hour daily service under conditions of uniform load. When your application involves more severe conditions, catalog ratings must be divided by the proper service factor, or the actual load must be multiplied by this factor.

Shaft Rotation

For single and triple reduction units, the slow speed shaft turns in the direction opposite to that of the high speed shaft. For double reduction units, the slow speed and high speed shafts turn in the same direction. The slow and high speed shafts are coaxial for all reductions.

Shaft Connections

A pulley, sprocket or pinion should be mounted as close to the shaft bearing as possible and ideally, in order to avoid undue bearing load and shaft deflection, not with the point of radial load beyond the midpoint of the protruding shaft. Never over tighten belts or chains. Careful and accurate installation is essential for efficient and trouble-free operation. Before installing, the shafts should be checked to make sure that they are parallel and level. Accuracy of alignment after mounting can be checked with a string or straight edge held against the faces of the sprocket or pulley hubs.

Couplings should be properly aligned the limits specified by the manufacturer and checked carefully prior to initial startup. In order for it to give the required fit, the coupling bore diameter and tolerance should be appropriate to the gearbox shaft diameter and tolerance.

Control of Shaft Load

When power is transmitted through spur gear, belts, pulleys, or chains, radial forces are applied to the shafts. The radial capacities are calculated from load centering and compared to the allowable radial load.

Installation

Be sure to install and operate CYCLO drives in compliance with applicable local and national safety codes. Appropriate guards for rotating shafts should always be used.

Mounting Considerations

Horizontal and vertical oil-lubricated units should be mounted in exact planes whenever possible. When they are mounted on inclined surfaces, minor modifications are necessary since inclined mounting could lower the oil level. However, overfilling the unit with oil may cause leakage through the air vent, foaming, churning and consequently overheating. Please contact the factory.

Lubrication Information

The smaller CYCLO units up to size 6125 and some multiple reduction units are grease lubricated. All other units are oil lubricated as standard.

Grease Lubricated

All grease lubricated units are filled with grease at our factory and arrive ready for use.

a)Lifetime Grease Lubrication

CYCLO units up to size 6125 are grease lubricated for life and suitable for any mounting position.
These sizes are filled with SHELL ALVANIA RA grease at our factory and are maintenance-free for 20,000 operating hours or 4 to 5 years.

b)Other Grease Lubrication

Grease lubricated units larger than size 6125 are usually filled with SHELL ALVANIA R2 grease at our factory. These units are quipped with grease nipples and vent plugs to allow for periodic regreasing.

Oil Lubricated Units

Oil lubricated units must be filled to the correct level with oil before operating. Choose an appropriate oil viscosity that suits the installation ambient temperature. For recommended oil types and viscosity grades, please refer to our current Operating and maintenance manual.