



Modular Worm Product Introduction

Oversized Output Shaft Bearings

NORD modular worm gear units are designed with oversized output bearings. Bearing sizes are significantly larger than required to absorb the internal forces within the gear unit. As a by-product of the larger bearings, the internal shaft diameters increase, resulting in increased shaft strength and durability as well as larger hollow-shaft bore capacities. Compared to competitive worm gear units, NORD'S intentional selection of oversized output bearings provides the following advantages:

- Longer bearing life.
- Ability to support large overhung and thrust loads.
- Larger internal shaft diameters/Increased strength.
- Larger hollow bore capacities.



Optimized Worm-Gear Design

Optimized worm-gear design includes the selection of high quality materials combined with state-of-the-art design techniques and manufacturing. Surface hardened steel pinion gears and bronze-alloy worm wheels are designed for superior wear resistance and long life.

The precise sliding interaction of worm gear teeth eliminates abrupt tooth to tooth contact, and will minimize vibrations as well as noise. The optimization between materials and gear design also provide increased resistance to intermittent shock and overload conditions found in many applications.

- Designed for superior wear resistance / long life.
- Smooth and guite operation.
- Increased resistance to shock & overload conditions.

Size Offering

The FLEXBLOC™ (SI) and MINICASE® (SMI) gear unit share the following common sizes.

	Туре	SK 1Slxx / SK 1SMlxx (xx = mm, center distant							
	Center Distance	31 mm	40 mm	50 mm	63 mm	75 mm			
		1.2 inch	1.6 inch	2.0 inch	2.5 inch	3.0 inch			

Industry-Standard Worm Ratios

NORD FLEXBLOC[™] and MINICASE® modular worm gear units cover a wide-range of industry-standard ratios from 5:1 to 100:1.

	Standard Worm Ratios											
5	7.5	10	12.5	15	20	25	30	40	50	60	80	100

- By adding a helical pre-stage option standard ratios are expandable up to 1000:1.
- Compound configurations are easily assembled to create ratios up to 10,000:1.

High Performance Motors and Brake Motors

High performance NORD motors and brake motors are internationally accepted, conforming to North American (NEMA MG 1) and international (IEC) electrical specifications. NORD motors are constructed with high quality materials and insulating components, are designed to run cool as well as provide exceptional service life. Low rotor inertia and high starting torque capabilities allow for peak performance in the most difficult dynamic applications.

NORD motors are inverter and vector duty rated and designed to handle voltage spikes in accordance with NEMA MG 1-2009, Section 31.4.4.2. NORD offers standard-efficiency, high-efficiency and premium-efficiency motors designed to meet the latest global energy requirements. Motor options are numerous and include a wide variety of options such as brakes, thermal overload protection, space heaters, encoders, and forced cooling fans.

Close-Coupled Input Adapters (NEMA or IEC)

Modular worm gear reducers are offered with both NEMA or IEC motor input adapters. The worm pinion shaft includes a male gear spline and the c-face adapter utilizes a one-piece coupling sleeve to offer a compact or close-coupled design. The proprietary light-weight nylon coupling sleeve offers very high torsional stiffness, minimal backlash and low inertia. The coupling is easy to install and helps to eliminate motor misalignment and shaft fretting corrosion that are common with quill-type input adapters.