

SPECIFICATION




Combination TIGEAR

The speed reducer shall be a double reduction unit incorporating an input worm set and a helical output set. Motor coupling shall be provided by a 3 piece coupling configuration. The reducer shall be manufactured in the United States of America. Wormgear geometry shall be a single enveloping helicoid design. The gearcase, bearing housings, and motor adaptor shall be manufactured from Class 30 gray iron. A bolt on foot shall be available. Output configurations offered shall be solid shaft, hollow shaft straight bore, or hollow shaft with twin tapered bushings.

The reducer shall be sealed with no direct passage from the oil sump to the ambient atmosphere. Lubrication shall be a factory supplied synthesized hydrocarbon that requires no periodic changes and is filled to a level suitable for the mounting position specified on the order. If no mounting position is specified, the oil level is appropriate for K-1/L-1 only. USDA Class AA, Class H1 food grade, and low temperature lubricants shall be available to accommodate different applications.

The input worm set shall consist of a hardened steel worm shaft and a copper-tin bronze alloy wormgear for superior

wear resistance. All units shall have the wormgear set properly centered during assembly to produce an optimum contact pattern. The contact pattern of each set shall be manually checked to ensure that the optimum pattern is present. The output gearset set shall be of an involute helical design with case carburized gear teeth. Output shafts shall incorporate tapered roller bearings shimmed for proper running clearances. Seals shall have a rubber coated O.D. and operate on plunge ground journals having a 10-20 μ in. finish. Joints shall be sealed with a silicon rubber or anaerobic sealant. No gaskets or O-rings shall be used. All fasteners shall be minimum grade 8.8 metric. Motor mounting bolts and input/output keys shall be provided.

The standard construction shall be suitable for duty in ambient temperatures from -10°F to +165°F. When used without the bolt-on foot, the reducer shall be BISSC certified. Severe operating conditions shall be addressed with a Nylon 11 coated gearcase incorporating stainless steel hardware and nickel plated output shaft extensions or teflon coated twin tapered bushings.

FEATURES/BENEFITS PAGE G5-2	NOMENCLATURE PAGE G5-5	DIMENSIONS PAGE G5-24	MODIFICATION/ACCESSORIES PAGE G5-34
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