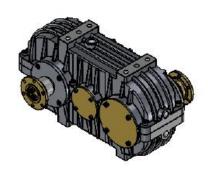


# KRD.01.2013 3 AXIS REDUCER OWNER'S INSTRUCTIONS



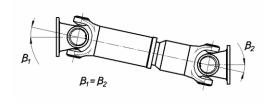
# 1. **DEFINITION**

KRD.01.2013 reductor, designed as 3 axis and able to increase or decrease the RPM or used for changing the axis distance.

This gearbox system; the power is taken by the resource( engine or main transmission) and transferred to the equipment by reductor. During this operation RPM can be manipulate, additionally axis distance can be moved thanks to the reductor. The direction of rotation of the input and output movements is the same because of the reductor is three axis. For example; If sense of rotation of the inlet is clockwise, also the sense of rotation of the outlet is the same as inlet. The reductor directs the movement. There is no such thing as engage or disengage

# 2. ASSEMBLY

Before mounting the reductor; the recommended oil should be added into the reductor by opening the oil plug. The reductor position must be adjusted and fixed from the connecting feet. When flange connections are made, shaft angles must be taken into account. (angles can be between 3 °-7° according to RPM value) (It should not forgotten that unproper mounting will be cause noise and damage on the system)





#### 3. TECHNICAL DATA

INPUT:

Maximum Continues Torque: 477 (Nm) @ 1000 RPM

Maximum Instant Torque: 620 (Nm)

Maximum Rotation: 2500-3300 RPM

**OUTPUT:** 

Torque: 280 (Nm) Ratio: 1/1.8

<u>Direction of Rotation</u>: Inverse of input direction

Available Ratios: 1/1 - 1/1.2 - 1/1.4 - 1/1.8 -1/2 - 1/2.4 - 1/2.8 - 1/3.25

# 4. SERVICE OIL FILLING

The gearboxes are shipped as unoiled. Oil should be filled into the reductor using the oil filling mechanism, before running the vehicle. The oil filling operation should be made on the ground. The correct oil level is the top level shown on the indicator. The oil should be totally clean. You are required to use only the recommended oil. (SAE 80 W 90 EP or equivalent oil) In case of using any oil other than the recommended oil, the vehicle is out of warranty coverage.

### **5. MAINTENANCE**

# **5.1 OIL LEVEL CONTROL**

Maintenance should be made before and after long trips. Maintenance should be made at ground level and when the vehicle is not running. In case the oil level is less than required, oil should be added.

#### **5.2 OIL REPLACEMENT**

Make sure that old oil is totally drained and make sure that you are using recommended (correct) oil. In case of mixing old and new oil;

This situatation is going to cause damage of components of gearbox (shaft, gear, bearing etc.)

# **5.3 OIL CHANGING**



First oil changing should be made following 100 hours after the Reductor has started to run. Oil changing should be made when the oil is cold. Draining could be made by removing the drain plug. In order to accelerate the process, it is recommended to remove the filling plug also. Before re-starting, the drain plug is required to be cleaned. Subsequent oil replacements should be made once in every 1000 hours or once a year..

#### **IMPORTANT**

During oil replacement, do not touch the hot oil. Act in compliance with the country legislations in the disposal of the waste oil. Do not pollute the environment.

#### 5.4 IDENTIFICATION of OIL LEAKS

Check for oil leaks periodically. Check for any oil leaks in the area where the vehicle is operated and the surroundings. In case of detecting any oil leaks,

Prevent oil leaking, add oil if necessary, contact with manufacturer firm KOZANOĞLU KOZMAKSAN.

#### 5.5 GENERAL EQUIPMENT CONTROL

Check for equipments and parts of product periodically. If needed, make bolts tighten.

# 6. DIMENSIONS

