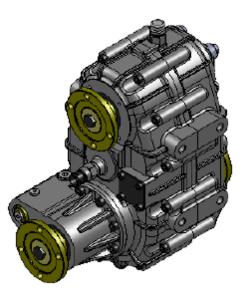
# **UARA.303**

# **4X4 Terrain Transmission**

# (Single Cycle – Directly Transmit)



# **1. INTRODUCTION**

The UARA.303 is a split shaft unit with self-differential, produced for 4x4 terrain vehicles. Increases the driving torque for using under field conditions.

# 2. TECHNICAL SPECIFICATIONS

The input flange of the split shaft unit is connected directly to the shaft from the main transmission, and transmits motion to both the front and the rear differential through the bottom outputs. It is capable of transforming available  $4x^2$  vehicles to  $4x^4$  by the addition of the front differential equipment.

# **3. ENGAGING-DISENGAGING**

UARA.303 split shaft unit can not be engaged or disengaged. It transmits directly the rotation came from transmission, with low rotative speed and high torque.

#### 4. TECHNICAL DATA

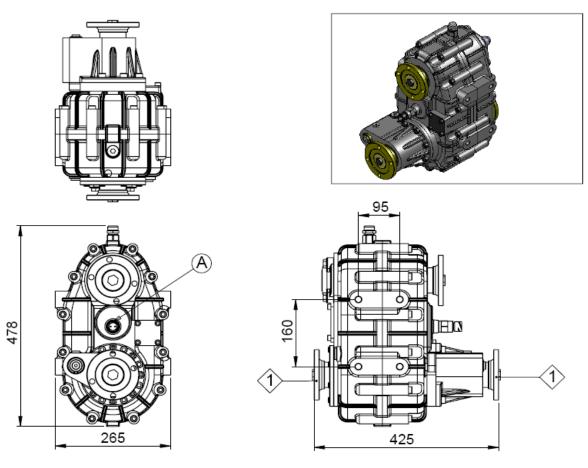
**4.1. INPUT** 

| Power (Max.)    | : 178 KW                      |
|-----------------|-------------------------------|
| Torque (Max.)   | : 1700 Nm-175 Kgm. (1000 rpm) |
| Rotation (Max.) | : 3000-3900 rpm               |
| Weight          | : 64 Kg.                      |

# **4.2. DIFFERENTIAL OUTPUTS**

| Torque (Max.)        | : 1700 Nm-175 Kgm. (1000 rpm)                      |
|----------------------|--|
| Rotation Direction   | : CCW (in the same direction with the drive shaft) |
| Rotation (Max.)      | : 2500-3000 rpm                                    |
| Ratio (Diff. Output) | : 1/0.735  |
| Control Type         | : Directly Transmit                                |
|                      |  |

# **4.3. DIMENSIONS**



# **5. INSTALLATION**

In the installation of the UARA.303 split shaft unit on the vehicle, the chassis should not be in direct contact with the split shaft unit, wedging should definitely be made between the connection apparatus and the chassis. The angle of the split shaft unit position connection shafts should be adjusted so as not to exceed 7°. In case this rule is not taken observed, there may be a knocking-type noise during the operation of the split shaft unit.

### **6. SERVICE-MAINTENANCE**

#### **6.1. OIL FILLING**

The split shaft units are shipped as unoiled. Oil should be filled into the intermediate transmission using the oil filling mechanism, before running the split shaft unit. 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 (75W80 or 80W90). In case of using any oil other than the recommended oil, the vehicle is out of warranty coverage.

#### 6.2. Oil Level Control

The oil level should be checked by removing the oil level plug. Maintenance should be made on a weekly basis. 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.

#### 6.3. Oil replacement

First oil replacement should be made following 100 hours after the split shaft unit has started to run. Oil replacement should be made when the oil is hot. Draining may 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 500 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.

#### 6.4. 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, check the oil level. Replace the seals if necessary.

#### 6.5. General Equipment Control

Control the equipment periodically. Check the installation equipment, transmission elements and the transmission casing. Re-tighten, if necessary.