Product Code

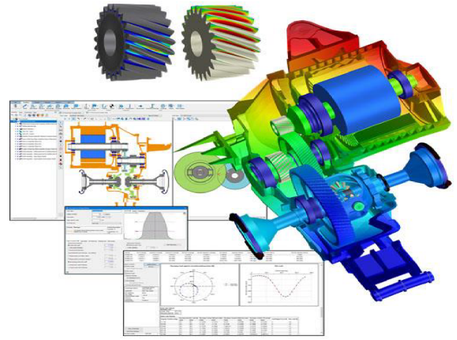
UARA.2400

Rev.No-Date

00 / 10.12.2024

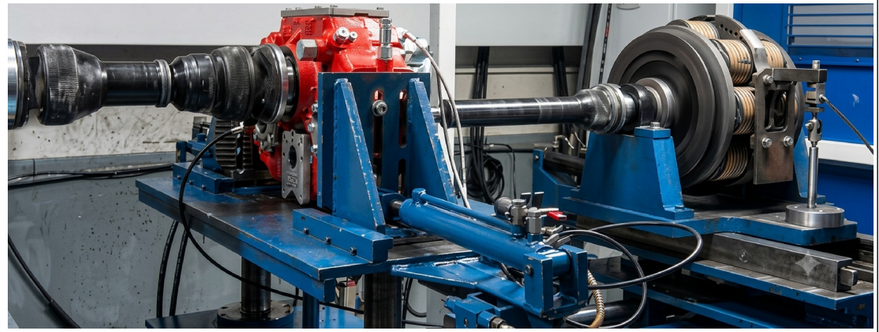
Design and Layout / Romax Software

With its capability for detailed structural analysis, Romax Enduro offers a reliable solution for durability simulation and optimization of powertrain components. In addition to performing component-level structural analysis, it also conducts structural analysis of the entire powertrain system,



Test Equipment / Product Validation

Testing is conducted at specified intervalsto verify the design outputs.



Bearings

ROMAX software analysis result of the evaluation Suitable bearings are used. BEARING DIN 623-1:1993 DIN 625-1:2011 standard products are used

RPM counter sensor

VDO brand RPM sensors with stable and long-lasting structure are used.

Engage - Disengage sensor

KISSLING branded sensor that can be engaged or disengaged is used.

Rotary Unions

Rotary joints are manufactured in Italy. They are equipped with two different micro-face sealing systems: carbon-graphite-carbide sealing elements; for air, vacuum, and hydraulic oil, at a maximum pressure of 20 bar.

Side Exit Commissioning system

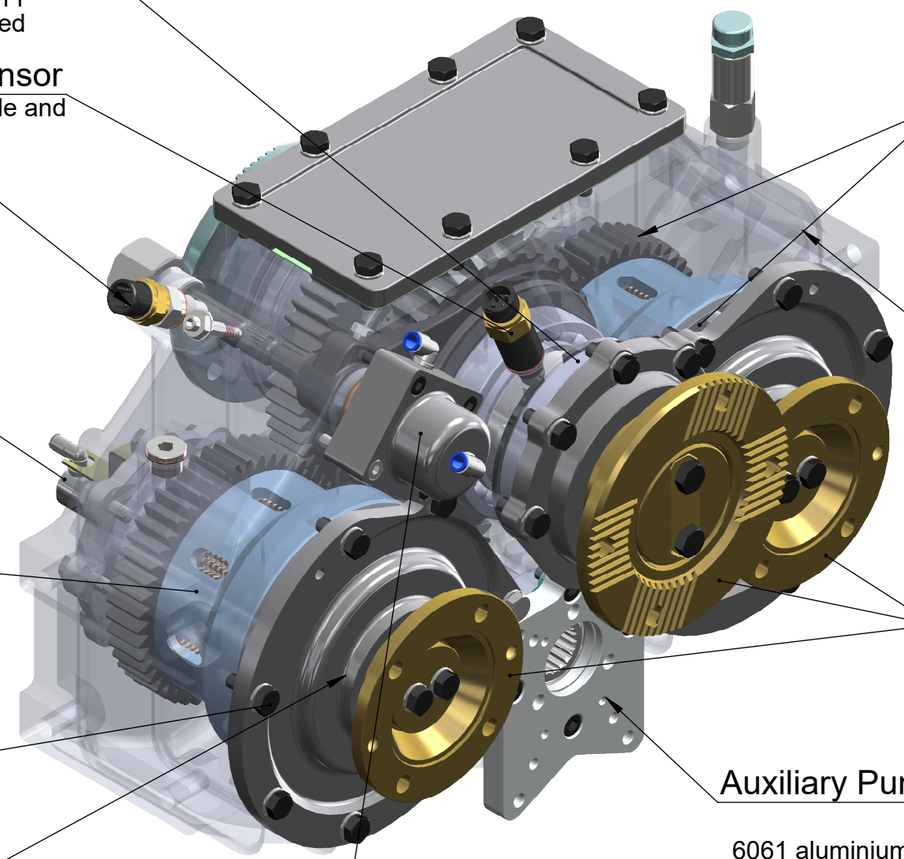
Kinetic friction coefficient has the best structure; Sintered bronze and steel lamellae are used. With this structure , the commissioning system is stable and long-lasting.

Fasteners / DIN 912&DIN 931&DIN 933

According to the place of use, DIN standards 8.8-12.9 quality bolts are used to fix the connection point

Sealing Elements / ISO 6194-1

Elastomer sealing elements with FKM-type content are used. Sealing seals are used in double-lip structures (oil and dust lips). FKM Rubber contains strong carbon-fluorine bonds that provide high chemical, thermal and oxidation resistance; thanks to this structure, it fulfils its function reliably for a long time even in high temperature, high cycle and dirty environments.



Control System

With its double-acting cylinder piston structure, it has a stable and effective activation and deactivation structure.

Gear & Shaft / Materials; DIN-1.7131 & AISI 8620

It is a flexible structural steel where ductility and toughness are desired in the core and hardness and wear resistance are desired on the surface and preferred in impact areas. It is also a material suitable for carburizing and nitriding heat treatment. Gears and shafts in UARA.2400 product has 58-62 Hrc surface hardness and 1.1-1.2 mm hardness depth.

Body Material / EN-GJS-400-15

DIN GGG40 / EN-GJS-400-15 The material is a ductile cast iron alloy and has a predominantly ferritic structure. The main advantages of this material are that it is extremely hard. It is especially used in gearboxes with its high impact resistance and ductile structure.

All Flanges/ Material ; ANSI 1050 İmalat Çeliği

Couplings are produced using medium tensile steels with high impact strength.
ISO 7646 & ISO 7647 & ISO 8667 & SAE J1946
Standard couplings are produced.

Auxiliary Pump Connection Adapter/Material: AlMg1SiCu/Al 6061

6061 aluminium alloy is another versatile material known for its excellent combination of strength and corrosion resistance.
The adapter to the additional pump connection outlet;
- Group 1, 2, and 1,2,3 / SAE A/ISO 4-bolt/UNI 3-bolt pump connection options are available.
- A flashed outlet connection option is also available with the KIT adaptation.

KOZANOĞLU KOZMAKSAN

UARA.2400

RPM Counter
Sensor can operate at 6 -15 Volt, Max. 16 mA, -30°C ...+ 145°C, and has Ml8x1,5 teeth connection, and 4 pin output ports

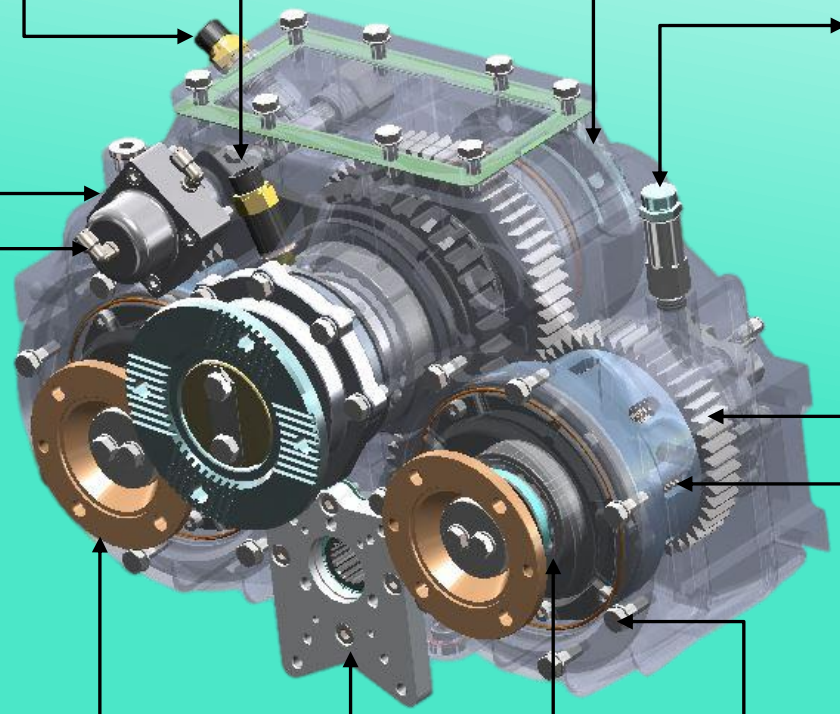
On/Off sensor
Sensor can operate at 9 - 32 Volt , 10 mA-3A, -30°C ...+ 150°C has Ml8x1,5 teeth connection, and 2 pin output ports

Air Tube Components / DIN AlMg1Si0.8CuMn
It is a shapable corrosion-resistant, high-strength material.
The aloy can go through heat treatment.
It has high corrosion resistance.

Pneumatic Fittings
It can be engaged/disengaged by 6-8 bar pneumatic pressure. The pressure must be continuous for both conditions. The air must go through drier-conditioner system.

Flange
Universal connection with equipments. ISO 7647 / ISO 7646

Pump Output / DIN 5462 / ISO 4 holes
Universal connection with pumps.



Body Material / GJS-400-15 / DIN EN 1563
GJS-400-15 spheroidal cast iron widely used in the automotive industry. It has a specific weight of 7,15 gr/cm^3 , and fusion temperature interval of 1200-1250 °C. It has advanced corrosion , high wear and fatigue resistance. The basic advantages of this alloy include durability, high strength, good vibration damping and leak-proof properties.

Air Plug
This is an aluminum air plug calibrated at +0,5 Bar with an in-built valve. It opens from time to time and lets the internal pressure accumulate due to fluid turbulence. Besides blocking foreign matter penetration, it also prevents oil leakage that may happen during transportation. It has an operation temperature of -20/+120°C.

Gear & Shaft Components/ DIN-1.7131
The steel is soft in its core tough, hard, and wear-resistant on the surface, and elastic on the impact points. It is also good for cementation and nitration heat treatment. The gears on UARA.2400 have 58-61 HRC surface hardness, and hardness depth of 1-1,2 mm

Disc Clutch Mechanism
Our product features disc clutch side outputs.
Thanks to the clutch mechanism not necessary to press clutch pedal during engage/disengage process.

Connection Components / DIN 912
It has min. 8.8 quality level and strength of min 800Nm/mm^2

Sealing Components / ISO 6194
These are elastomeric sealing components. They are chosen double-lip type (oil/dust). They can stand -40/+140°C operating conditions according to the climate and temperature. They offer good resistance to climate conditions, aging ozone and oxygen thanks to high chemical stability.