

KENDRION

KENDRION SOLUTIONS

Trendsetting. Intelligent. Efficient.
Decoupling Systems for Modern Drive Technology

PRECISION. SAFETY. MOTION.



99.5%
Efficiency

>100%
Extended service
life of FEAD
components

±11°
Torsional angle

300 Nm
Maximum
transmissible
torque

>95%
Vibration isolation

Contact-free. Reliable. Wear-free.

Our Permanent-magnet Systems

The development of new, low-emission engine generations and increasing electrification demand products that meet these requirements. In line with this, Kendrion offers you the decisive unique characteristic feature. Permanent-magnet systems:

Contact-free power or load transmission means wear-free operation. Vibrations in the drive train are considerably reduced. With this technology, Kendrion Commercial Vehicles offers you a system that is used in various technologies.

Decoupling systems for state-of-the-art drive technologies

What Kendrion products achieve

In doing so, we support customers with our reliable products, contributing to the realization of your future-oriented drive technologies.

We provide technical solutions for:

- increasing hybridization
- downsizing and reducing displacement
- downspeeding and operation at low speeds
- increased compression and pressures in injection systems

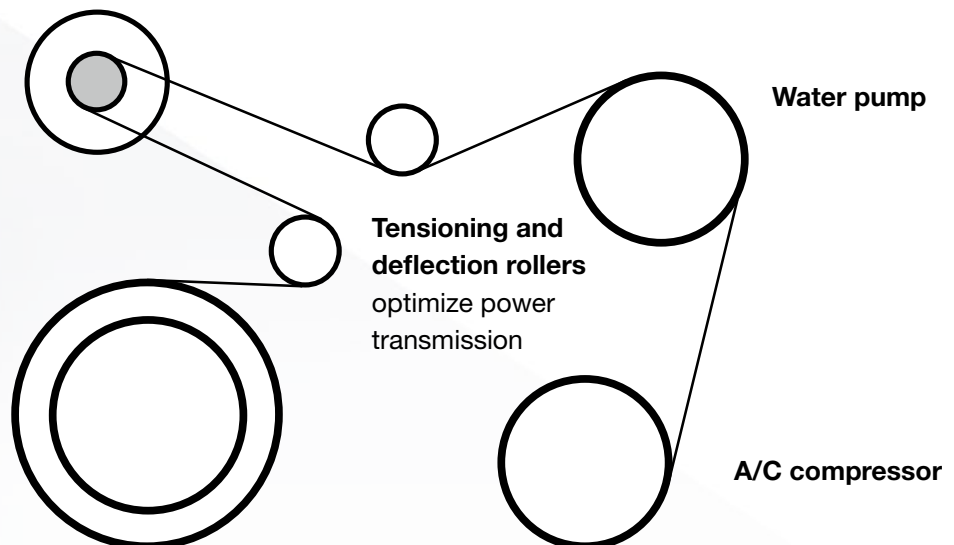
Your advantages:

- Low NVH (noise, vibration, harshness) loads in form of noise emissions
- Reduction of wear and strength problems
- Increased belt and pulley drive efficiency
- Service-life requirements for FEAD components, such as belt tensioners, deflection rollers, idler pulleys, alternators and A/C compressors are reached.

Kendrion FEAD (Front End Accessory Drive) products

Alternator damper
decouples belt drive
and rotor mass

Crankshaft damper
decouples belt drive
from crankshaft

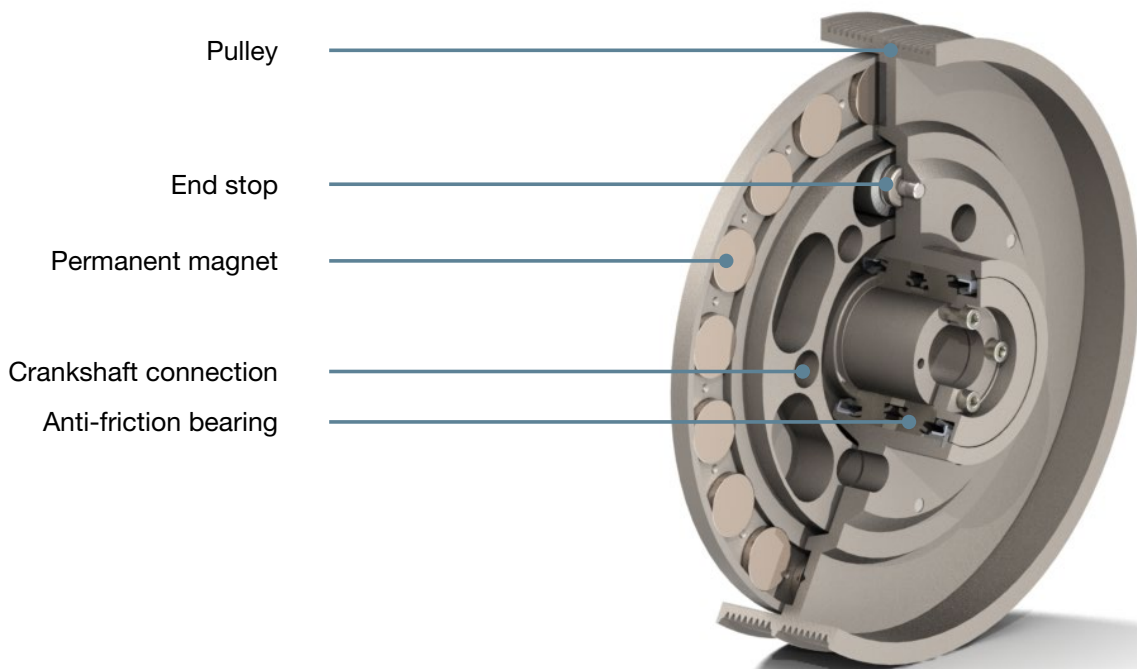


Optimum vibration reduction at the alternator

Our operating principle

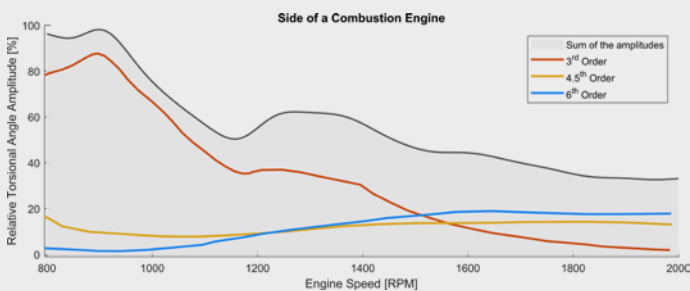
The LDD lite is a bidirectional decoupling system used as a pulley on alternators. We use permanent magnets to produce a soft, non-linear stiffness. This particularly brings advantages in bus and truck applications.

The LDD lite (KDS) decouples consumers such as alternators (generators), A/C compressors, pumps and fans in commercial vehicle applications. Based on this unique technology, Kendrion's decoupling systems are very compact, robust and maintenance-free. The characteristic curve is highly adaptable (progressive, linear, degressive) and depends on customer requirements (maximum differential rotation angle and torque). The system provides over-resonance isolation of vibrations. Due to the nature of the magnetic system, there is almost no energy loss, and properties are independent of normal work-ing conditions (temperature, angular velocity). The self-heating is very low compared to other damping or decoupling systems. A rubber contact provides for rotation-angle limitation.

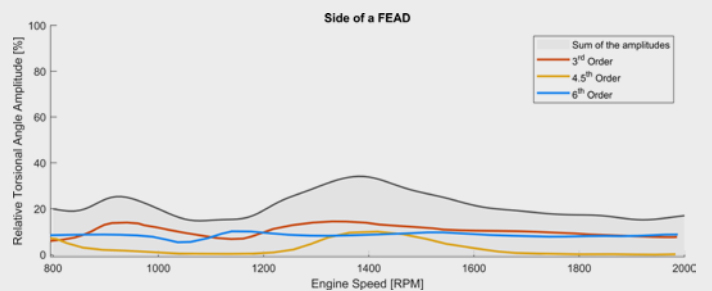


Vibration reduction right at the crankshaft

Engine-side



Belt-drive-side



Kendrion's torsional vibration decoupler

Quiet in the engine compartment

- Practically vibration-free belt run
- Significantly reduced transmission of vibrations to the vehicle structure, auxiliary units, belt tensioning elements and add-on components
- Increased efficiency through extended service life of belts and auxiliary units
- Application-specific adjustable torque characteristic curve
- Wear-free damping stage through permanent magnets
- Isolation or minimization of vibrations
- Simple assembly by replacement of the present pulley package
- Easy to service

LDD – The classic on the crankshaft

Description	High transmissible torques for belt drives with extended power requirement.
Applications	For driving A/C compressors, pumps and fans
Technical specifications	Torque: Up to 300 Nm Torsional angle: Up to 13°



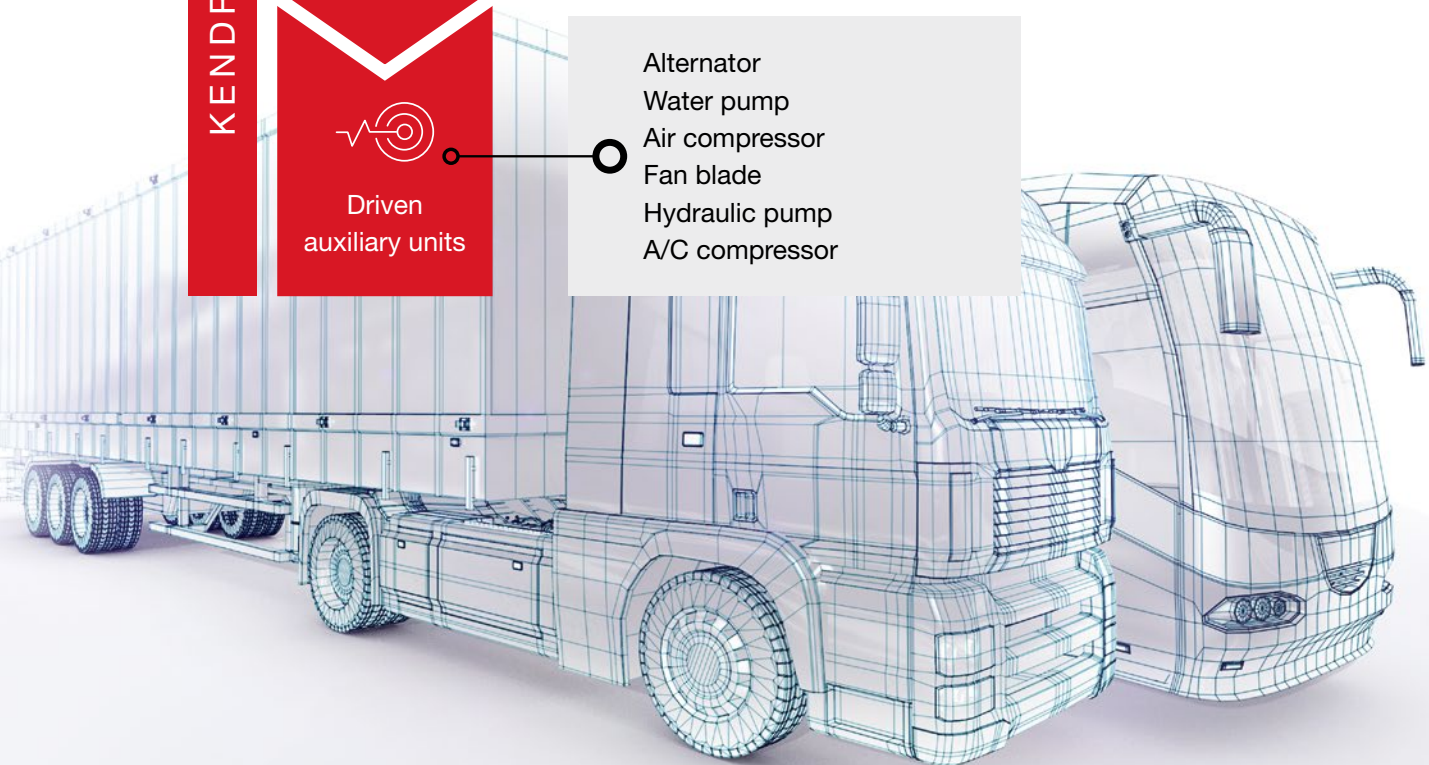
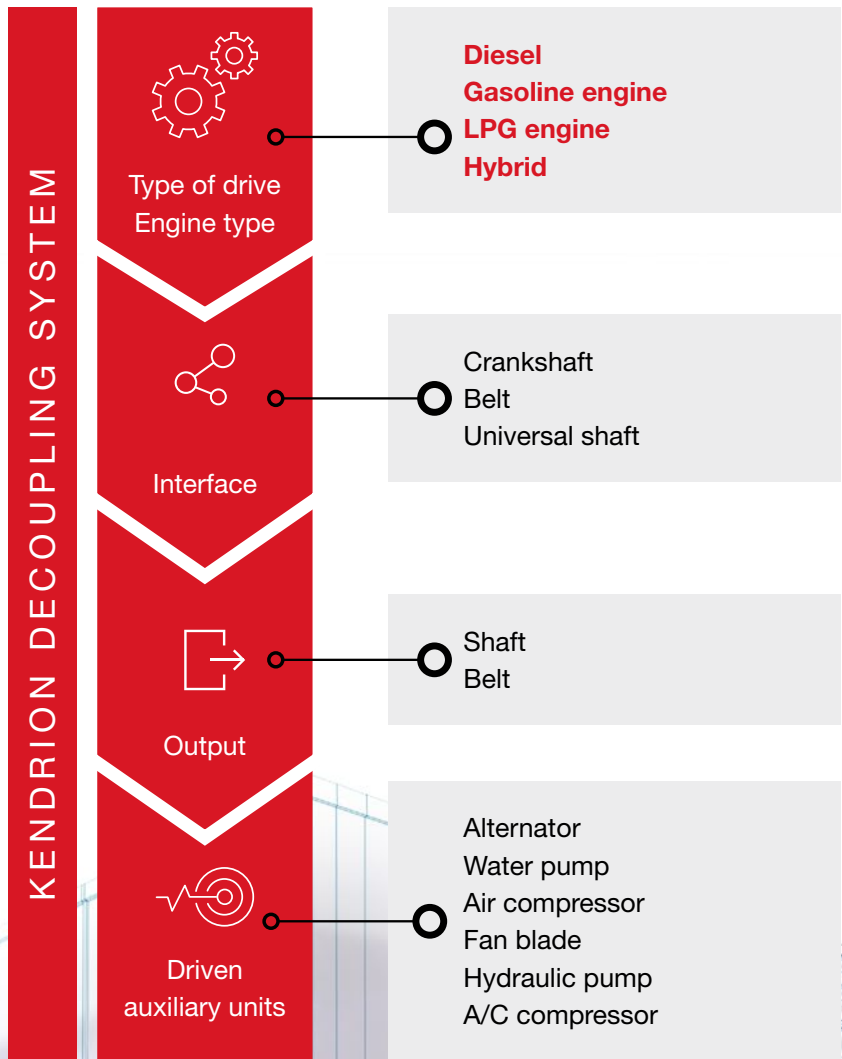
LDD lite – The innovative solution on the alternator

Description	Protects smaller, uniformly-running auxiliary units against damaging torsional vibrations, while enabling large torsional angles. The LDD lite plays a role on calming down the belt drive
Applications	For driving alternators
Technical specifications	Torque: 30 Nm Torsional angle: 25°



i. e. SPR0099 – Decoupling system with integrated idler pulley

Applications	Fan drives
Allowable ambient temperature	-30 °C to +110 °C (optionally down to -50 °C)
Max. input speed	3,000 rpm
Max. torque	M = 200 Nm



Contact us

We'll find the right product for your application!

Our qualified employees, the precisely defined manufacturing processes and globally-uniform, strict quality guidelines ensure top quality at the end of every production process – worldwide.

Our customers trust us because we have successfully been on the market for over 100 years, and always with the optimum for them in our focus. The cooperation with leading automotive manufacturers continually improves our know-how and processes. In this, we rely on production and logistics processes that enable both modular and individual production – regardless if large or small-lot orders are placed.



Feel free to contact us!

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