



**SOLERO**  
TECHNOLOGIES

**Trendsetting.  
Intelligent.  
Efficient.**

**Decoupling Systems for  
Modern Drive Technology**

**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, Solero 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, Solero offers you a system that is used in various technologies.

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

What Solero products achieve

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

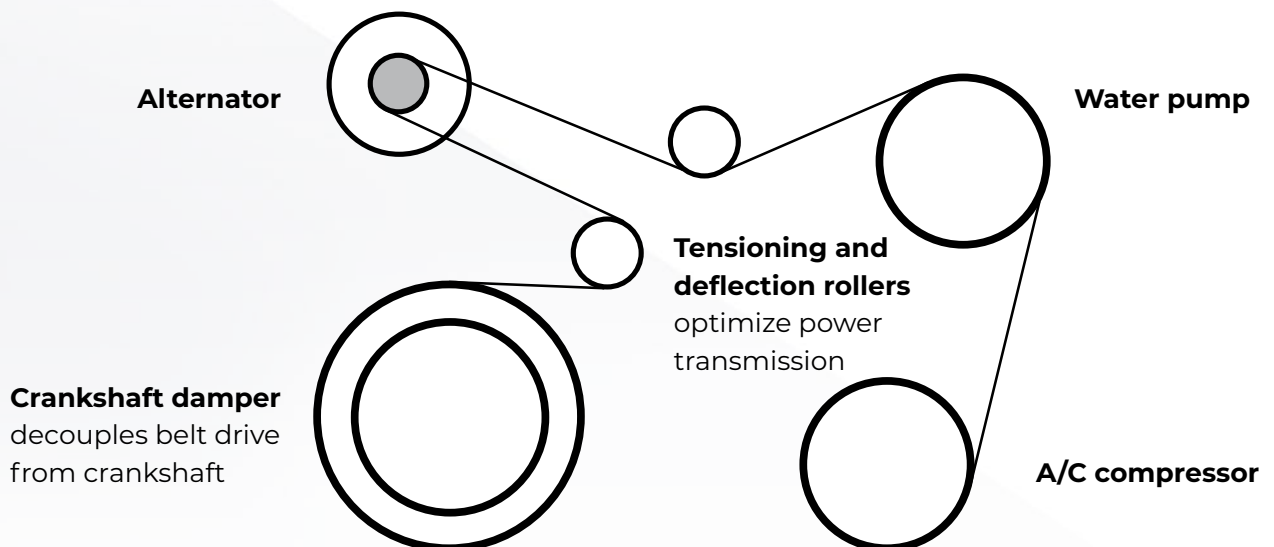
**We provide technical solutions for:**

- | 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.

Solero FEAD (Front End Accessory Drive) products

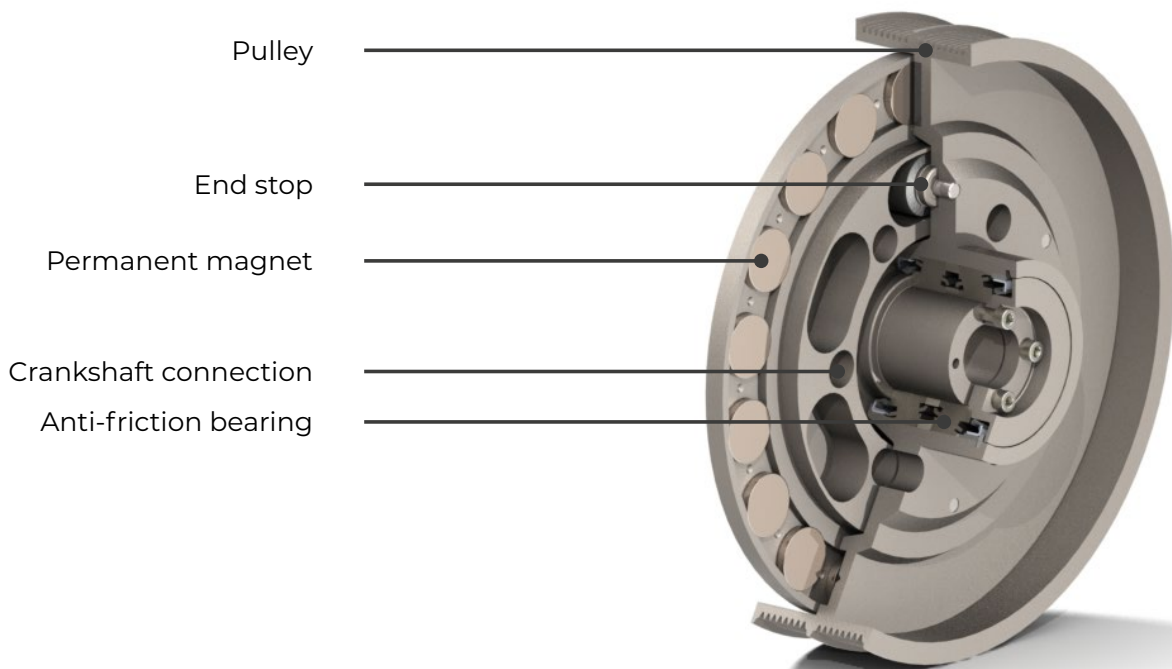


# Optimum vibration reduction at the alternator

Our operating principle

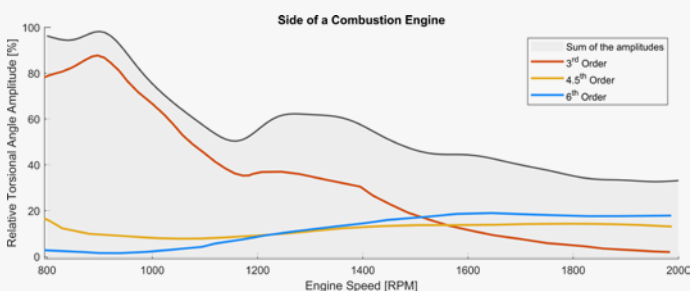
**The LDD lite is a bidirectional decoupling system used as a pulley on alternators. We use permanent magnets to produce a soft, non-linear stiffness. This particularly brings advantages in bus and truck applications.**

The LDD decouples consumers such as alternators (generators), A/C compressors, pumps and fans in commercial vehicle applications. Based on this unique technology, Solero'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 working 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.

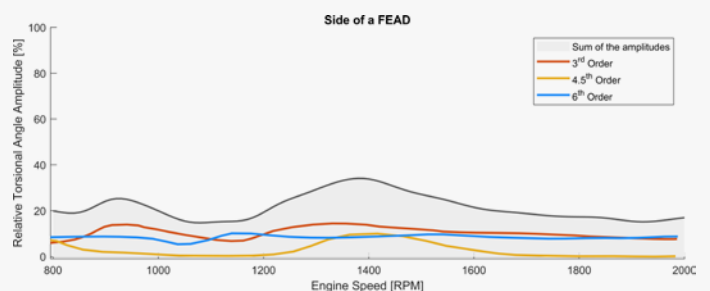


## Vibration reduction right at the crankshaft

Engine-side



Belt-drive-side



# Solero'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

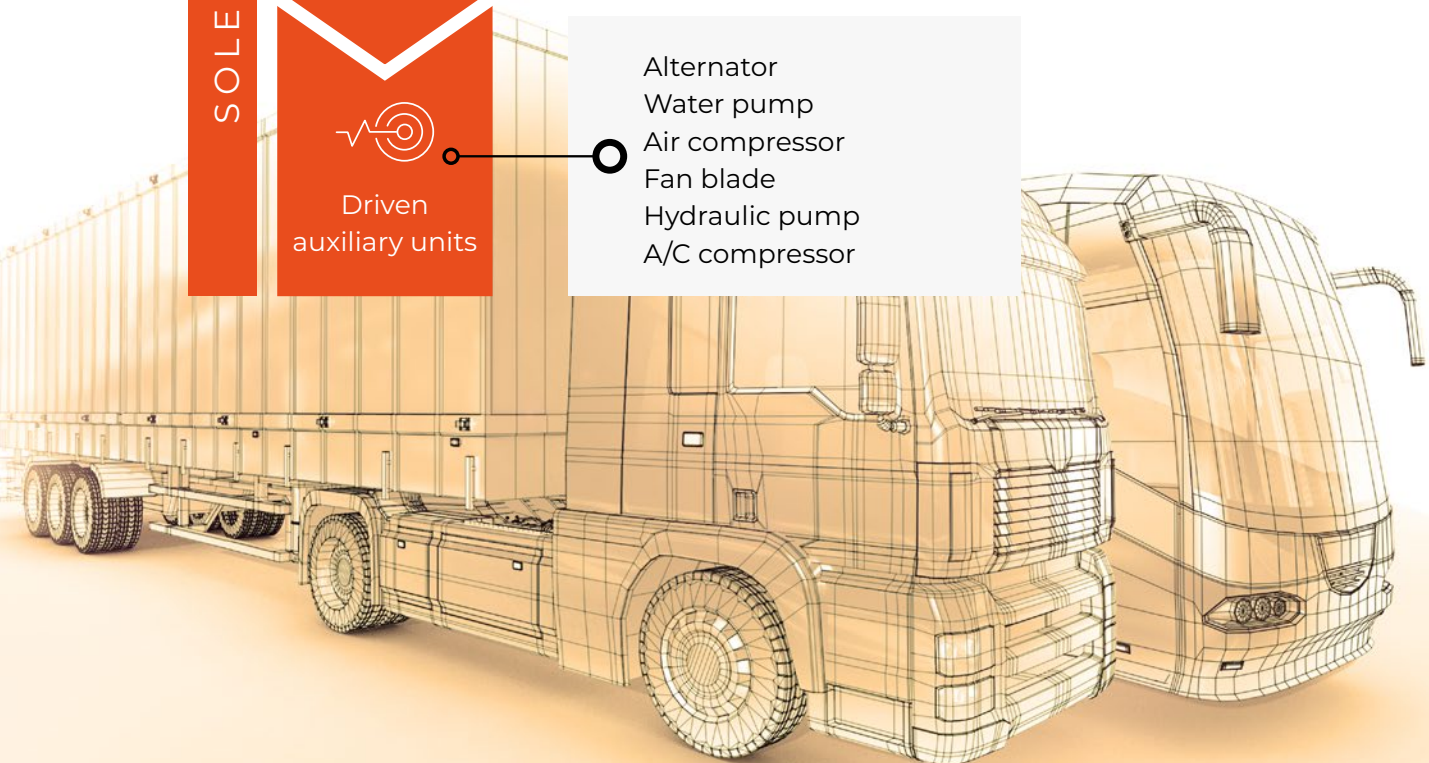
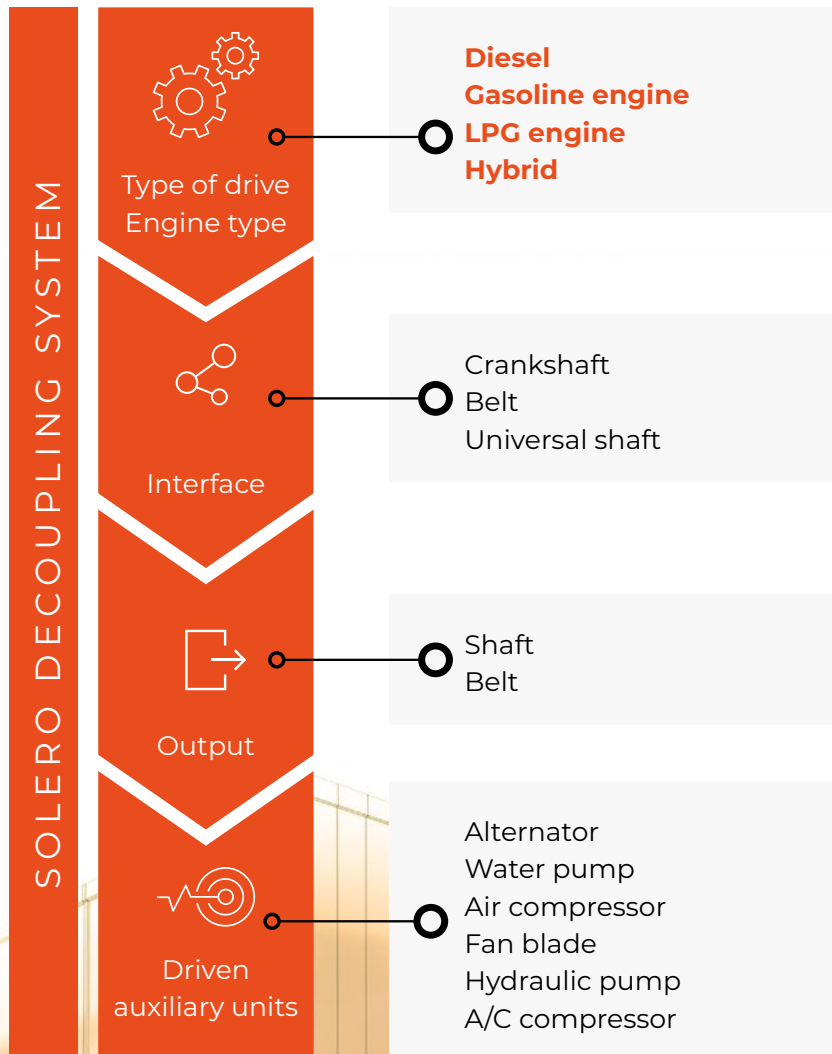
## LDD – The classic on the crankshaft

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



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

<b>Applications</b>	Fan drives
<b>Allowable ambient temperature</b>	-30 °C to +110 °C (optionally down to -50 °C)
<b>Max. input speed</b>	3,000 rpm
<b>Max. torque</b>	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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