

# Areas of application



## Agriculture

- Tractors
- Self-propelled weed sprayers
- Shredders
- Harvesters
- Combine harvester
- and many others



## Industry

- Self-propelled low loaders
- Aircraft tractors



## Forestry

- Forwarders
- Skidders
- Special forestry tractors



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Continuously variable, power-split  
transmission variaDRIVE



# variaDRIVE

The new continuously variable, power-split transmission from Pfanzelt

## Shunting

In "shunting mode" (approx.  $\pm 7$  km/h), there is no switching of clutches.

The direction of travel is changed without switching operations. The driving behaviour corresponds to that of a hydrostat in this range.

Starting from standstill is smooth and jerk-free.

During longer idle times, the hydraulic power section is relieved, and the parking brake is automatically engaged.

## Shifting operations

At higher speeds, gears are changed depending on the axle ratio and tyre size:

forward: at approx. 8/20/35 km/h

backwards: at approx. 8/20 km/h

## Power transmission

The mode of operation of the power transmission at higher speeds (greater than approx.  $\pm 7$  km/h) corresponds to that of known power-split transmissions.

## Driving behaviour

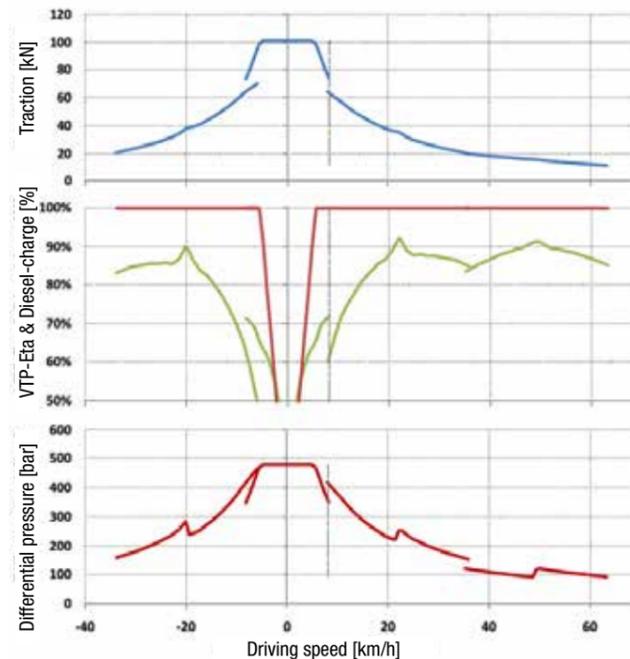
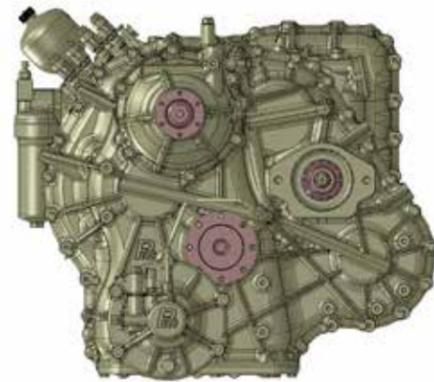
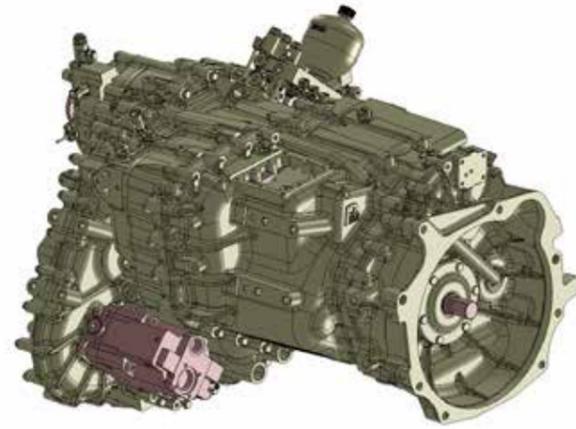
The driving behaviour corresponds to that of known power split transmissions, with the difference that changing of directions smoother and faster. (Corresponds to so-called "hydrostats.")

When the final speed is reached, the engine speed can be reduced to approx. 1500 rpm.

## Mode of operation

There are 2 gearshifts and thus 3 travel ranges during forward travel from standstill to maximum speed.

There is 1 gearshift and thus 2 travel ranges when reversing from standstill to maximum speed.



The data can vary depending on the design and be adapted to the application requirements.

## Technical specifications

Transmission configuration	Mechanical-hydrostatic, power-split continuously-variable transmission
Transmission input	Input flange: SAE 3 (alternative: cardan shaft)
	Max. input power: 250 kW Max. input speed: 2300 rpm Max. Input torque: 1750 Nm
Driving performance	Depending on axle transmission and tyres, different speed and tractive force variants are possible
	Example 1: Pulling force 80 kN Driving speeds: Forward: 0 to 70 km/h (stepless) Reverse: 0 to 30 km/h (stepless)
	Example 2: Pulling force 100 kN Driving speeds: Forward: 0 to 50 km/h (stepless) Reverse: 0 to 25 km/h (stepless)
	Example 3: Pulling force 150 kN Driving speeds: Forward: 0 to 40 km/h (stepless) Reverse: 0 to 20 km/h (stepless)
Torques/numbers of drives	Ratio between rear axle output and front axle output (36/35): 1.02 (other transmission ratios possible upon request)
	Rated torque all-wheel clutch: 3500 Nm Rated speed front axle output: 3500 rpm
	Rated speed rear axle output: 3700 rpm
	PTO clutch to engine speed ratio (53/55): 0.96 The PTO is designed for the maximum engine power.
Pump drives	Pump output 1: Flange ISO 7653-1985 Profile data splined shaft DIN ISO 14
	Pump output 2: Flange SAEJ744 127-2(C) 2-hole Profile data splined shaft DIN 5480 W35x2x30x16x9g
Dimensions	Length: approx. 1320 mm Height: approx. 760 mm Width: approx. 850 mm

Many parameters can be adjusted to your needs.

Delivery and layout already from one piece.