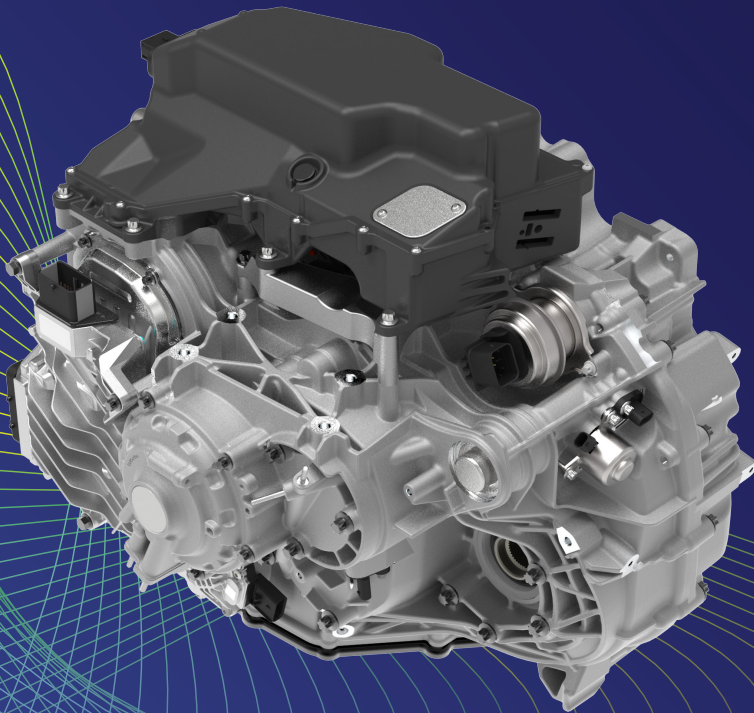


## DT2 Dual Clutch Transmission

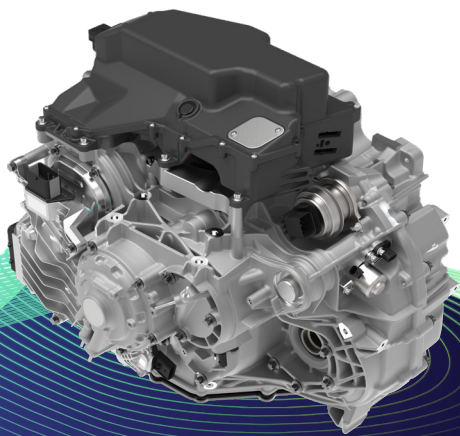


### Main benefits of the product

This fundamentally new, compact and cost-effective hybrid automatic transmission is based on the well-known “dual clutch principle”. However we conceived an innovative and improvement to this concept, that enables an electric motor to become an integral part of the transmission.

1. The unit can be either equipped with a 48 Volt, or with a high voltage powerful electric machine (90kW), without any design changes to the mechanical architecture.
2. The 48V solution equips mild hybrid electric vehicles, resulting in a fuel saving of up to 15%.

[Key technical details »](#)



## Main technical differentiating features

Our platform approach assures that customers can integrate either a conventional, mild or plug-in hybrid transmission in their vehicle platforms at minimum application cost while the high commonality of components (>90%) between the 3 variants offers a clear economy of scale.

1. Compact and versatile Our patented gear train design in which we combine a planetary gear set and a single layshaft, results in world's most compact DCT and makes that DT2 fits perfectly in compact cars as well as in big SUVs.
2. DT2 hybrid DCT's have a P2 configuration for optimal efficiency and drivability allowing to drive in electric mode in all gears, perform EV shifts under load with consistent shift behavior and driveability also during ICE restart.

## DT2

### Dual Clutch Transmission

#### Key technical details

Orientation:	Front Transversal
Max. Input Torque:	350 Nm
Max. / Peak Input Speed:	6.500 / 7.000 rpm
Gears:	7 Speeds + R
1st Gear Ratio:	1:18
Ratio Spread:	7,6
Shift Mechanism / Shifter:	Electric Shift Drum / SbW RND (P, S, L, M optional)
Park Lock:	Electrically Actuated
Clutches:	Wet Plate Clutch
Oil Pump:	2 Electric Pumps
Installation Length (min. / max.):	320/378 mm
Center Distance:	180,5 mm
Weight (Oil):	77 kg

#### Hybrid Variants

	48V	PHEV
Hybridization:	P2 with ICE Clutch	P2 with ICE Clutch
Nominal E-Motor Voltage:	48 V	320 V
E-Motor Power (mot. / gen.):	21 kW / 24 kW	92 kW / 115 kW
Weight (Oil):	97 kg	115 kg

#### About Punch Powertrain

Punch Powertrain nv is an independent global automotive supplier of innovative and energy efficient drivetrains. The company builds on 50 years of excellence in the development and production of world-class transmission technologies, offering continuously variable transmissions (CVTs), dual clutch transmissions (DCTs), as well as hybrid and electric drivetrains for car makers worldwide.