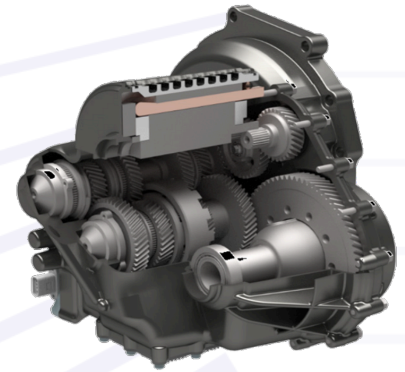


DHT - XT 20 Dedicated Hybrid Transmission

- 4 mechanical gear with all hybrid functions
- Optimized efficiency using dog clutches as shifting elements
- Powershift transmission
- Fully integrated HV solution



Technical specifications

Electric machine & Inverter	Integrated design: 3-in-1 case design Water-cooled system, EM with 13 000 rpm input speed Global efficiency above 93% in working area (at 70°C / 275V)		
	Low variant 50 kW peak	Medium variant 85 kW peak	High Variant 100 kW peak
Internal combustion engine (ICE)	Low variant 50 kW peak	Medium variant 85 kW peak	High Variant 100 kW peak
Gear ratios (output / input torque)	ICE		EM
1st hybrid gear	8,7	+	5,6
2nd hybrid gear	6,1	+	8,6
3rd hybrid gear	4,2	+	10,7
4th hybrid gear	2,9	+	12,1
EVT mode	13,8	+	15,3
Electrical ratio	/	+	10,7 (forward and backward)
ICE connection device	Dual mass flywheel		
4 axis	Primary axis, secondary axis, EM axis, differential axis		
Transfer gears	4 gear plans, 1 EM reduction, 1 final drive gear		
EVT mode (Electrical Variable Transmission)	Planetary gearset (connected to ICE, EM & Differential)		
Shifting Systems	5 dog clutches with 3 electrical actuators		
Shift comfort	Optimal shift transitions through EVT mode, without torque interruption		
Vehicle Launch	In Electric mode or with EVT mode		
Lubrication	Scavenge pump		
Transmission Control Unit (TCU)	External or integrated with PEU		
Additional features	Temperature, position and speed sensors		
Drive modes	Electric drive (forward and backward) Electric Variable Transmission drive (EM driving or regenerating) Hybrid drive with E boost mode Hybrid drive with E regeneration mode Serial mode vehicle standstill, ICE charging battery Serial mode vehicle moving, ICE charging battery		

