



ZF-Powershift Transaxles of the new TERRAPOWER (TPT) Generation

TERRAPOWER – the new generation of ZF Powershift transmissions offers full automation. Moreover, it is setting class standards with an overdrive being able to reduce the engine speed at 50km/h to less than 1500 rpm.

ZF transaxles with 6-speed Powershift are available in the models TPT 16 and TPT 20, the power range is between 120 and 210 hp. The smaller and larger models TPT 11 as well as TPT25 and TPT28 offer the well-proven 4-speed Powershift transmission. Here in total there are 32 (24) forward and 32 (24) reverse gears available as well as four PTO speeds. These ZF transaxles cover the power range from 70 to 115 HP as well as 210 to 280 HP.

The new TERRAPOWER generation provides a choice between the favorably priced standard version with manually actuated Powershift or the completely Automatic Powershift APS with optional electro-hydraulic range shift IRS (Intelligent Range Shift).

Furthermore the automated transmission functions can be integrated into a driveline management system via CAN bus. The transmission control offers full diagnostic capabilities. Automatic reverse shifting (Power Shuttle) and a great variety of options make the TERRAPOWER series widely adaptable transaxles in the medium and upper power class.

Unique stand-alone feature of TPT 16/20 is the high overdrive capability. 50km/h transport operations are possible at only 1500 rpm. 40km/h even at 1200 rpm (depending on the tire size)

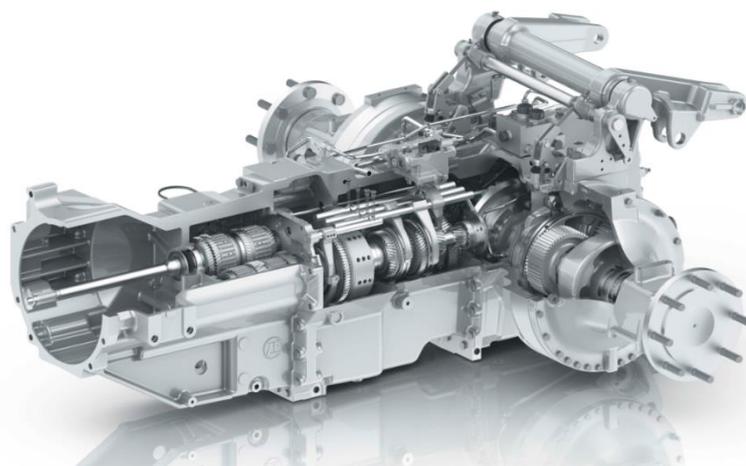
TPT 20



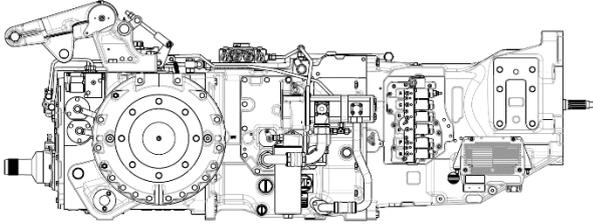
- Tractor power range between 70 and 270 hp
- Quick-response 4-speed/6-speed Powershift
- Range gearbox with optional automatization (IRS)
- Smoothly acting forward/reverse shuttle shifting
- Smooth PTO-clutch engagement
- Four PTO-speeds
- Overdrive (50 km/h at 1500 rpm, 40 km/h at 1200 rpm)

TPT Basic Line

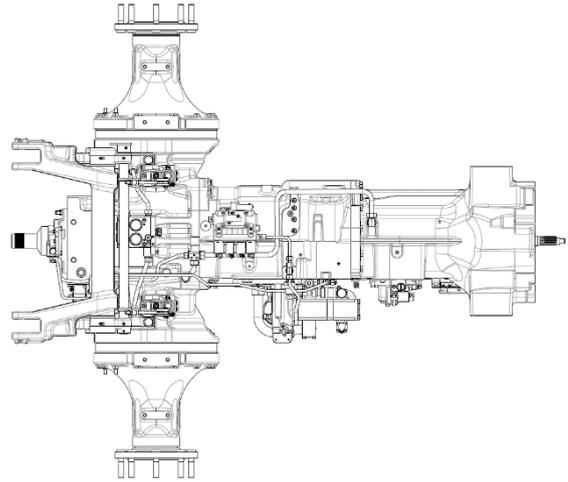
- New series for less regulated markets
- Low technical requirements
- Cost optimized
- High quality (based on the technology level of the High Line Transmission)



TERRAPOWER TPT 20 SIDEVIEW



TERRAPOWER TPT 20 TOPVIEW



Technical Data	TPT – Powershift Transmission					
	TPT11	TPT 14	TPT 16 High Line [TPT 16 Basic Line]	TPT 20 High Line [TPT 20 Basic Line]	TPT 25	TPT 28
Vehicle Data						
Engine power max. [kW/HP] acc. ISO 14396	86/117*	112/152*	126/171*	151/205*	182/248*	209 / 284*
Engine Speed (nominal)	2,000 – 2,200					
Vehicle speed max. [km/h]	40	50/60	50 / 60 [40]		40 / 50	36
Gross vehicle weight [kg]	8,000	10,000	11,500 [11,000]	13,000 [12,000]	14,000	16,000
SRI max. [m]	0.800	0.825	0.875	0.925 [0.875]	0.975	0,975
ZF Transaxle Data						
Transmission input power max regular [kW/HP]	83/113*	106/144*	116/157*	132/180*	167/224*	191 / 260*
Transmission Input torque max. regular [Nm]	463	603	670	780	964	1050
Number of gears	32F + 32R	30F + 15R	30F + 15R [24F + 12R]	30F + 15R [24F + 12R]	24F + 24R	24F +24R
Power Shift gears	4V/4R	6V/3R	6V/3R	6V/3R	4V/4R	4V / 4R
PTO stages	4: (540/E/1000/E)		4: (540/E/1000/E) [2: (540/1000)]	4: (540/E/1000/E) [2: (540/1000)]	3: (540E/1000/E)	3: (540E/1000/E)
Transaxle weight [kg]	1,200	1,390	1,600	1,700	2,075	2,400
Max. rear lift capacity [kg]**	5,300	7,600	9,200 [7,200]	9,600 [8,400]	11,000	12,000

* Power increase with boost depending on transmission type between 8-12%

** at hitch point; pending on OEM rear lift kinematics

[...] TPT Basic Line