



## Tractor steering axle ZF-TERRASTEER

The steering axle series ZF-TERRASTEER covers nearly all 4x4 applications. The TSA series has been developed over the last few years and the first axles are already in production since 2013. The TSA series benefits on the long years of ZF's experience in the field of tractor axles.

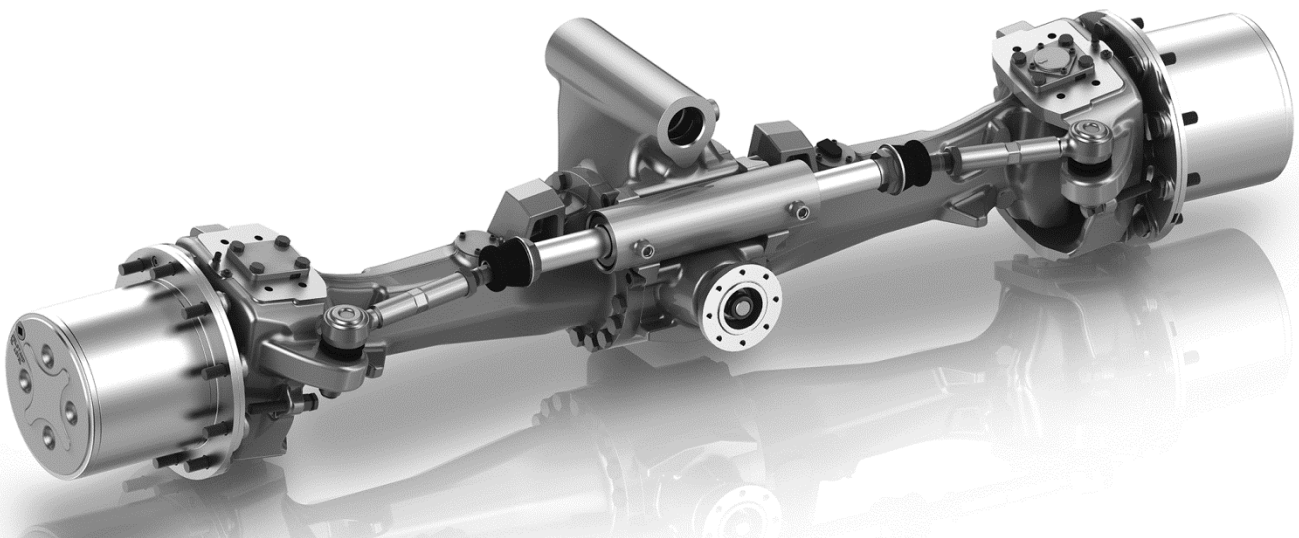
### *Global Footprint*

The TSA series is produced worldwide at 3 ZF locations (Europe, Asia and South America). At each production site it is ensured by a local development team that the global requirements as well as competitiveness and customer proximity are implemented.

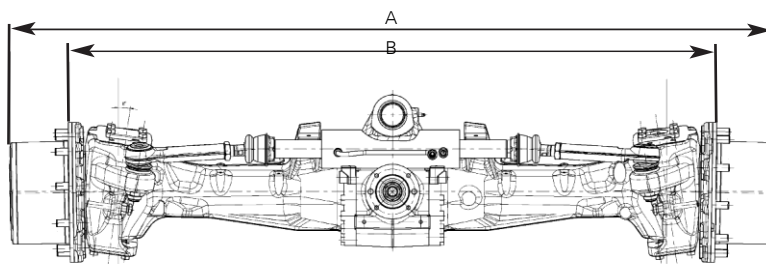
A high ratio in the planetary drive ensures optimum efficiency, lean axle design and high ground clearance with high admissible loads. Steering angles of up to 55° provide high levels of maneuverability, combined with lowest soil stress due to precise steering geometry. The results of this innovation are long service life, high tractive effort and extreme versatility of the TSA series. The steering axle ZF-TERRASTEER is characterized by its flexible, modular construction; optionally available with brakes, differential lock and steering angle sensor. The steering axle series TSA currently covers models with a performance range from 60 HP to 260 HP.



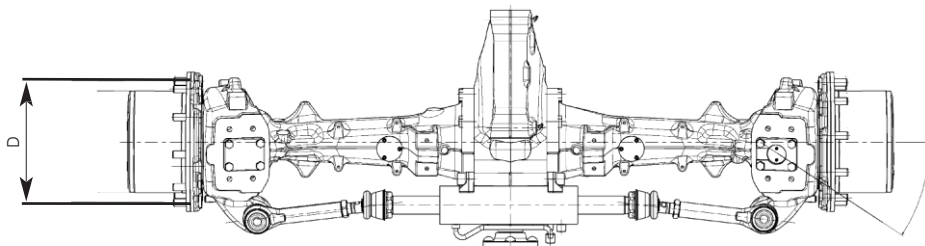
- Modular design with standardized parts enables a great variety of additional options
- Excellent ground clearance
- Improved steering behavior thanks to optimized steering geometry
- Lower fuel consumption thanks to reduced weight and increased efficiency



## TERRASTEER Rear view



## TERRASTEER Top view



09/2017. Technical modifications remain reserved. For installation investigations and for appointments and for appointments and for appointments, we advise you to order corresponding installation drawings.

Installation dimension	TERRASTEER							
	09	11	12	14	16	20	23	26
Overall width A [mm]	1,811	1,829	1,900	1,953	1,953	2,226	2,226	2,278
Flange-to-flange dimension B [mm]	1,640	1,640	1,680	1,680	1,680	1,900	1,900	1,940
Bold circle diameter D [mm]	275					335		
Max. steering angle $\beta$ [°]	55°					52°		

Technical Data	TERRASTEER							
	09	11	12	14	16	20	23	26
Engine power (reference value) [kW/HP] according to ISO 14396	66/90	77/105	92/125	103/140	114/155	147/200	169/230	191/260
Speed max. [km/h]	50							
Output torque max. [Nm]	21,000	25,000	28,000	30,000	33,000	39,000	43,000	45,000
Overall ratio	11.5 - 16.5			12.0 - 16.5		13.0 - 17.0	13.0 - 17	13 - 16.5
Axle weight [kg]	260	265	330	390	400	490	495	510
Static axle load max. [kg]	3,600	4,000	4,500	4,800	5,200	5,800	6,200	6,600
Static axle load with front loader operation max. [kg]	5,600	6,100	6,600	7,000	7,500	8,300	8,700	9,100