



## RB9180 GRADER



### SPECIFICATIONS

ITEM	DATA	ITEM	DATA
Total mass (kg)	17 390	Minimum steering radius (m)	7.6
Weight on front axle (kg)	4700	Blade lifting height (mm)	445
Weight on rear axle (kg)	10600	Blade cutting depth (mm)	787
Maximum inclination angle of front wheel (°)	±18	Blade cutting angle (forward) (°)	47
Maximum swinging angle of front axle (°)	±16	Blade cutting angle (backward) (°)	5
Maximum steering angle of front wheel (°)	±50	Blade tilt angle (°)	90
Steering angle of frame joint (°)	±23	Side shifting distance of blade (mm)	left 673 right 673
Cutter diameter (mm)	1626	Maximum traction force (kN)	78(f=0.75)
Blade specification (mm)	3962*635*25	Blade slewing angle (°)	360
Speed of forward I (km/h)	5	Speed of forward II (km/h)	9
Speed of forward III (km/h)	11.5	Speed of forward IV (km/h)	19.5
Forward V (km/h)	23.6	Forward VI (km/h)	38
Speed of reverse I (km/h)	5	Speed of reverse II (km/h)	11.5
Speed of reverse III (km/h)	23.6		



## REFUELING CAPACITY

ITEM	DATA	ITEM	DATA
Fuel Tank	270	Rear axle housing	28
Oil Capacity	210	Rear axle tandem	46
Engine Oil Pan	22	Transmission Oil	28
Water radiator antifreeze coolant	30		



## ENGINE

ITEM	DATA	ITEM	DATA
Engine Model	WP6G190E330	Number of cylinders	6
Engine type	In-line, water-cooled, four-stroke, direct injection	Bore/stroke (mm)	105/130
Engine power (KW)	140	Rated power (KW)	140
Minimum fuel consumption(g/kW.h)	215	Rated rotation speed (r/min)	2200
Max torque (N.m)/rotation speed (r/min)	760/1400-1600	Displacement (ml)	6750
Emission standard	GB 20891-2014 (China III emission)		



## TRANSMISSION SYSTEM

ITEM	DATA	ITEM	DATA
Model of hydraulic converter	ZFW320	type of hydraulic converter	Single-stage single-phase ternary part, which connected with the gearbox
Hydraulic converter circulating circle (mm)	320	Torque ratio at hydraulic converter stall	1.94
Transmission model	ZF 6WG158	Transmission type	Counter-shaft power shift
Operation mode of transmission	electro-hydraulic operation	Oil pressure of transmission shifting operation (MPa)	1.3-1.8
Gear ratio of transmission forward II	3.42	Gear ratio of transmission forward I	5.986
Gear ratio of transmission forward IV	1.48	Gear ratio of transmission forward III	2.594
Gear ratio of transmission forward VI	0.672	Gear ratio of transmission forward V	1.178
Gear ratio of transmission reverse II	2.594	Gear ratio of transmission reverse I	5.986
Final ratio of drive axle	3.091	Gear ratio of transmission reverse III	1.178

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Tandem reduction ratio	1.389	Wheel reduction ratio of drive axle	4.2
Rim	14.00/1.5-25	Tyre size	17.5-25-12PR
Tyre pressure of rear axle (MPa)	0.25±0.01	Tyre pressure of front axle (MPa)	0.25±0.01
Total reduction ratio	18.031	service brake press (MPa)	10.3±0.5



## HYDRAULIC SYSTEM

ITEM	DATA	ITEM	DATA
Type of hydraulic pressure	Open-type system	Main pump model	Gear pump(jinan)
Pressure of safety valve of Husco multi-way valve (MPa)	21.4±0.35	System pressure (Mpa)	21
Nominal flow rate of Husco multi-way valve (L/min)	65	Pressure of overload valve of Husco multi-way valve (MPa)	23.4
Front wheel tilt cylinder	φ100*φ50-169-473	Front wheel steering cylinder	φ63*φ45-340-577
Locking cylinder	φ80*φ60-63.5-38	Slewing cylinder	φ80*φ35-279.5-507
Blade sideshift cylinder	φ90*φ50-1346-1794	Blade swinging cylinder	φ90*φ50-693.5-955.5
Blade lifting cylinder	φ90*φ50-1379.5-493.5	Steering articulated cylinder	φ110*φ50-303-610
Blade angle-varying cylinder	φ100*φ50-260.5-562		



## CONFIGURATION

ITEM	DATA	ITEM	DATA
Overall length (mm)	8975	Wheelbase (mm)	6480
Overall width (mm)	2710	Tandem center distance (mm)	1538
Overall height (mm)	3240	Ground clearance of rear axle (mm)	430
Ground clearance of front axle (mm)	610		

