



ALL FOR SHOPS AND WAREHOUSES

VVN

## Wheel loaders

Easy maintenance & outstanding after-sales services  
Complete line of applications and accessories  
Pilot control system, automatic leveling



### Models described in the catalog:

VVN WL 42

VVN WL2 42

VVN WL 43

VVN WL 55

VVN WL 56

VVN WL 65

VVN WL 100

VVN WL 111

VVN WL2 111

VVN WL3 111

VVN WL4 111

VVN WL 112

VVN WL 113

VVN WL 115

VVN WL 116

VVN WL 117

VVN WL2 117

VVN WL3 117

VVN WL4 117

VVN WL5 117

VVN WL6 117

VVN WL 118

VVN WL 200

VVN WL 201

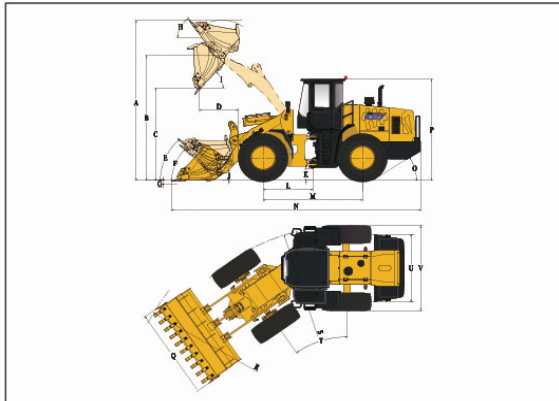
VVN WL2 201

# VVN WL4 117

## overall specifications

### DIMENSIONS

All dimensions are approximate. Dimensions may vary with bucket and tire choice. Refer to operating specifications.



NO.	DESCRIPTION	UNIT	STD	Quick-change
A	Overall Height – Bucket Raised	mm	5335	5484
B	Bucket Pin Height at Max. Lift	mm	4161	4161
C	Dump Clearance at Max. Lift ( 45°)	mm	3080	2885
D	Reach at Max. Lift and 45° Dump	mm	1210	1448
E	Rack Back Angle at Carry	°	49.3	44
F	Rack Back Angle at Ground	°	46	40
G	Digging Depth	mm	50	50-55
H	Rack Back Angle at Max. Lift	°	58.3	45
I	Dump Angle at Max. Lift	°	45	45
J	Carry Height	mm	400	400
K	Ground Clearance	mm	400	400
L	Center Line of Front Axle to Hitch	mm	1615	1615
M	Wheel Base	mm	3230	3230
N	Overall Length	mm	8150	8470
O	Departure Angle	°	27.5	27.5
P	Height to Top of Cab	mm	3380	3380
Q	Overall Width over Bucket	mm	3010	3010
R	Min. Turning Radius over Bucket	mm	7200	7310
S	Min. Turning Radius over Tires	mm	6537.5	6537.5
T	Steering Angle – Left/Right	°	35	35
U	Width at Tread Center	mm	2240	2240
V	Overall Width over Tires	mm	2835	2835

### OVERALL DATA

These specifications as following are just used for standard machine.

Bucket Capacity	3.0m³
Rated Payload	5000kg
Operating Weight	17500±300kg
Traction Force	155±3kN
Breakout Force	170±3kN
LxWxH	8150x3010x3380mm

### ENGINE&ELECTRICAL SYSTEM

Maker/Model	CUMMINS/QSB6.7
Emission Standard	EPA (TierIII)/EU StageIII
Engine Type	Turbocharged and Charge Air Cooled, Bosch Electronic, Diesel Engine
Rated Power	164kW(220hp)/2200rpm
Maximum Torque	949N·m/1500rpm
Bore x Stroke (mm)	107x124
No. of Cylinders/Displacement	6/6.7L
Compression Ratio	17.2
Air Cleaner	Three Stage Air Cleaner with Cyclone Pre-cleaner
Alternator	70Amp
Battery	2-24V/120Ah
Starting Motor	24V/7.5kW
Heating Capacity (W)	5000W
Cooling Capacity (W)	4700W

### DRIVE TRAIN

Transmission Type	Countershaft Powershift Transmission				
Shift Type	Electronic Powershift Control				
Pressure of Transmission	1.6-1.8MPa				
Torque Converter Type	Single-stage, Single-turbine, 3-element				
Torque Ratio	2.5				
Axles	Rigid Front Axle&Oscillating Rear Axle				
Rear Axle Oscillation (°)	±8°				
Differential&Limited Slip	Conventional				
Main Reducer	Spiral Bevel, 1-stage Reduction				
Final Reducer	Planetary Reduction				
Tire	23.5-25 L-3 16PR TT				
Travel Speeds	km/h	1st	2nd	3rd	4th
	Forward	6.8	13	23	36
	Reverse	6.8	13	23	

### BRAKE SYSTEM

Service Brake	Full Hydraulic Wet-discs Brake
Setting Pressure	5±0.3MPa
Parking Brake	Hydraulic Actuated Drum Brake
Emergency Brake	Hydraulic Actuated Drum Brake

### STEERING SYSTEM

Type	Hydraulic Load Sensing System	
Pump	Gear Pump, 176L/min • 2200rpm	
System Pressure	15MPa	
Cylinder	Type	Double Acting
	Bore x Stroke	2-100x324mm
Steering Angle	±35°	

### HYDRAULIC SYSTEM

Type	Single-lever(Joystick) Control			
Pump	Gear Pump, 220L/min • 2200rpm			
Control Valve	2 Spool (Bucket&Boom)			
System Pressure	16MPa			
Cylinder	Lift Cylinder	2-180x721mm		
	Tilt Cylinder	1-200x563mm		
No.-Bore x stroke				
Joystick Control Pressure	2.5MPa			
Cycle Time (Sec)	Raise	Dump	Lower	Total
	6.0	1.0	4.0	11.0

### SERVICE REFILL CAPACITY

Fuel Tank (L)	285L
Hydraulic Tank (L)	270/275 (3 <sup>rd</sup> Spool for Auxiliary Function)
Crankshaft (L)	20L
Transmission (L)	50L
Front Axle/Rear Axle (L)	31L/31L

### STANDARD EQUIPMENT

CUMMINS QSB6.7 Engine	Limited Lifting Position
ZF Transmission	Standard Lift&Bucket (3.0m³)
Electronic Powershift Control	ROPS&FOPS Cabin
ZF Axles (Full Hydraulic Wet-discs Brake)	Air Conditioner
Joystick Control(2 Spool)	Radio/MP3
Automatic Leveling	LCD Display

### OPTIONAL EQUIPMENT

Cold Starting (-35°C)	Quick-change Bucket
Oil-bath Air Filter	Rock Bucket(3.0m³)
23.5R25 ★★ L-3/L-5 TL	Enlarged Bucket(3.5m³)
3 <sup>rd</sup> Spool for Auxiliary Function	Coal Bucket(4.2m³)
Double-lever(Joystick) Control for Lift&Tilt&Auxiliary Function	3 Piece Cutting Edge, Bolt-on Type Bucket
Sliding Cabin Window	Log Fork
Electric Heating Rear Window	Grasping Pitchfork
Lockable Oil Tank Cap	Side Dump Bucket(2.5m³)
Rear View Camera	Marble Fork
Pressure Testing Connector	Fork (Quick-change Only)
High Lift & Additional Counterweight	4in1 Bucket (Quick-change Only)
Quick-change Coupler	Snow Blade (Quick-change Only)



ALL FOR SHOPS AND WAREHOUSES

#### LATVIA

SIA "Viss Veikaliem un Noliktavam"  
41A - 224 Kan davas street, Riga, LV-10 83  
Phone: +371 27727449 ( latvian, english),  
+371 22074120 (l atvian, russian, english),  
+371 20330002 (latvian, russian, english)  
E-mail: info@vvn.lv

www.vvn.lv

#### LITHUANIA

Phone: +370 70066080  
E-mail: info@vvn.lt  
www.vvn.lt

#### NORWAY

Phone: +47 219558 68  
E-mail: info@vngroup.no  
www.vngroup.no

#### ESTONIA

Phone: +372 634633 2,  
+372 63463 42  
E-mail: info@vvn.ee  
www.vvn.ee

#### DENMARK

E-mail: info@vngroup.dk  
www.vngroup.dk

#### FINLAND

Phone: +358 7532633 23  
E-mail: info@vvn.fi  
www.vvn.fi

#### RUSSIA

Phone: +7 849960925 1 5  
E-mail: info@vngroup.ru  
www.vngroup.ru

#### SWEDEN

Phone: +46 107502388  
E-mail: info@vngroup.se  
www.vngroup.se

#### BELARUS

Phone: +375 849960925 1 5  
E-mail: info@vngroup.by  
www.vngroup.by