

W170_C W190_C W230_C

**SCR
INSIDE**



	W170C	W190C	W230C
BUCKET VOLUME	2.7 - 6.0 m ³	3.2 - 7.0 m ³	3.8 - 8.0 m ³
BUCKET PAYLOAD	5.0 tonnes	6.4 tonnes	7.1 tonnes
PRODUCTIVITY (50 m DISTANCE)	280 t/h	320 t/h	375 t/h
OPERATING WEIGHT	14.5 tonnes	18.3 tonnes	20.0 tonnes
PEAK NET POWER	195 hp	230 hp	255 hp



BUILT AROUND YOU

AS LONG AS MAN SHAPES MATERIAL

MORE PRODUCTIVITY

**REDUCED COST OF
OWNERSHIP**



S, WE WILL PROVIDE THE TOOLS.

**MORE COMFORT AND
EASE OF USE**

**A COMMITTED
PARTNER**



THE MAIN COMPONENTS OF OUR W



1

THE ECOSHIFT TRANSMISSION

This transmission is a 5-speed torque converter with a lock-up auto- or manually activated from 7 km/h up to 40 km/h, in order to minimize the losses during the travel. Ecoshift uses engine de-rating to make each gearshift smoother. Its Power Inch declutching system gives you the accuracy of a hydrostatic transmission while keeping the pushing power of a torque converter. For a limited investment you can also choose the 4-speed powershift transmission



2

THE HEAVY DUTY AXLES WITH 100% FRONT LOCK*



*optional in alternative to Limited slip differentials

HEEL LOADER



3

THE COOLING BOX



Most wheel loaders mount their radiators back to back. At New Holland we have mounted them to form a cooling module like a box. The benefit is better cooling, in the harshest of environments. In addition, with a programmable reversing fan as standard, cleaning radiators will become a thing of the past.

4

REAR MOUNTED ENGINE WITH SCR ONLY TECHNOLOGY



AdBlue

The rear mounted engine results in less dead and less stress on the machine. SCR is a well-proven and reliable technology used on trucks in Europe since 2004. Since this solution does not affect combustion and it offers more power with less fuel. SCR ONLY technology doesn't require a particulate filter.

MORE PRODUCTIVITY



THE BIGGEST PAYLOAD

We designed our wheel loaders to give you the biggest bucket payload in the industry so that you can get the job done with fewer loading cycles: with just 3 passes the W170C and W230C will load a 15-tonnes and 21-tonnes payload truck respectively.



PRODUCTIVITY-BOOSTING BUCKETS

Our flat bottom buckets make all the difference. They have a better penetration in the pile and superior material retention. Their shape allows for a better roll back of the material inside the bucket, so once it's in, it stays in and you will get the job done with fewer trips.



OUTSTANDING GRIP AND RELIABILITY

Outstanding grip with front auto-lock differential: it delivers the best pushing power when you need it, as it ensures 0% slip between the wheels. When in manual mode, it is activated with a control under your left foot.

Heavy duty axles ensure superior reliability.



Note: For a limited investment, standard axles with limited slip differential are also available on the W170C and W190C. On the W230C standard axles are available with open differential without auto-lock, for flat, hard surfaces like tarmac.

**+20%
PRODUCTIVITY**



EASY DUMPING WITH POWER INCH

Power Inch is part of the ECOSHIFT transmission, it gives you the control of a hydrostatic transmission and the pushing power of a powershift. You can approach steep slopes with confidence: there will be no roll back.



SHORTER V-CYCLE DISTANCE

The lifting of the loader arm is faster, so you can do a V-cycle at full speed with the pick up point just 10 meters from the truck you are loading.



FASTER ACCELERATION, FASTER CYCLES

With ECOSHIFT you can reach maximum speed in just **100** meters. This can save you as much as 30 seconds for every loading cycle.



REDUCED COST OF OWNERSHIP



SAVE FUEL WITH LOWER ENGINE RPM

ECOSHIFT transmission has a 5th speed, so you can work at lower rpm and save fuel.

CUT LOSSES WITH LOCK-UP

The torque converter optimises push power during loading operations. When you are not loading, ECOSHIFT locks up, so there is no friction, therefore no losses, in the torque converter.

With ECOSHIFT you save more: it locks up from 8 km/h up to 40 km/h, as opposed to most other lock up systems.

SAVE FUEL WITH SMOOTHER GEAR SHIFTS

ECOSHIFT makes gear shifts very fast (8/10th second) and smooth by optimizing the gear shift depending on the working mode that you have selected. This results in fuel saving, better material retention and great comfort.

CUT FUEL WASTE WITH ECOSTOP

ECOSTOP automatically shuts down the engine and the electric system after 5 minutes of idling, so there is no waste of fuel.

**-15%
FUEL**



LESS FUEL WITH BETTER COMBUSTION

With SCR technology engine combustion is optimised for efficiency: it only uses fresh air and occurs at optimum temperature, guaranteeing the best engine output for power and fuel efficiency.

LESS MAINTENANCE WITH NO PARTICULATE FILTER

With our AdBlue technology, we don't need a particulate filter, so you make significant saving on the maintenance. It also means that the temperature in the engine compartment is lower, which means a longer life for the rubber parts and lower cooling needs than other Tier 4 solutions. The smaller fans in our wheel loaders mean you use less fuel. In addition you do not require a costly specific oil and no other tier 4i solution offer such a high fuel compatibility.

LESS MAINTENANCE WITH OPEN DIFFERENTIAL AND ECOSHIFT

The open differentials and front auto-lock reduce tire wear because of no wheel slippage.

The absence of friction in the differentials increases oil life by 50% (1500 h). The lower rpm and smoother gearshifts of ECOSHIFT increase transmission oil replacement intervals by 50% (1500 h).

More effective lubrication with longer lasting effect increases reliability.

LESS MAINTENANCE WITH THE COOLING BOX

We designed our cooling system to maximise its efficiency, making a box of the radiators rather than following the traditional approach of having them overlap. Our design significantly improves the cooling performance, lengthening the life of the oil 50% (1.500 h). The better quality of the oil also means a longer life for your wheel loader.

WELCOME ON BOARD



EXTRA WIDE ACCESS

The 4 wide steps and 2 handles make it easy for you to reach the cab; the wide door with no obstacles makes it easy to gain access.

OUTSTANDING VISIBILITY

You can work fast and confidently with excellent all-round visibility, further enhanced by the curved shape of the rear hood, which is very low due to the small cooling package.

SUPERIOR AIR VENTILATION

You can work in comfort with the efficient ventilation ensured by 16 air vents and the optional air conditioning system. In addition, the doors open 180° and can be easily locked in open position or unlocked from the driver's seat



OPERATOR SAFETY AND LOW VIBRATIONS

You will enjoy the protection of our reinforced cab, which guarantees protection against roll over (ROPS) and falling objects (FOPS). We placed the engine at the back of the machine, far from the cab, so that you will feel lower vibrations in the cab. Moreover the ECOSHIFT transmission (option) electronically optimises gear shifts according to the working mode you select, ensuring smooth shifting, so you can work comfortably.

SITTING COMFORTABLY WITH CONTROLS AT YOUR FINGERTIPS

You will enjoy the comfort of the heated seat with high vibration absorption. You can focus entirely on the job at hand and work comfortably with the steering knob, the joystick or the 2-lever control with the reverse button under your thumb. The control panel is positioned ergonomically under your right hand. The overhead radio positioning and ample storage add up to great convenience for you.

EASY OPERATING

For more comfort and productivity during repetitive activities the following functions, which can be activated or de-activated according to your preferences, will free your right hand for steering:

Auto-lift: automatically lifts the boom to the max height or to the height you have set

Reverse button: allows you to use your left hand for steering and activate reverse speed from the joystick with your right hand

Return to dig: automatically brings back the bucket in the right position for loading again

Return to travel: automatically lowers the boom to carry position; it can be adjusted according to your tyres and bucket

Auto-shift: ensures the machine always operates in the most suitable gear according to speed, kick down and engine braking

Auto-Glide Ride: reduces loader arm bounce during travel, maintaining maximum material retention on all surfaces.

It's activated from 7 km/h

A COMMITTED PARTNER



REDUCTION IN CARBON FOOTPRINT

New Holland has a long history of designing products with emissions levels well below regulatory levels.

- **Low emissions**

Our AdBlue technology, developed to meet Tier 4 regulations, not only dramatically reduces emissions levels, but also achieves exceptional fuel efficiency, which further reduces the environmental impact of the machine.

- **Low impact**

The AdBlue additive is a solution of urea and demineralised water: clean, harmless and environmentally friendly.

- **Low fuel consumption**

Our ECOSHIFT transmission features a 5th speed, so that the machine can work at lower rpm and save fuel, reducing its impact on the environment.

- **Yes to biodiesel!**

All Tier 4 interim compliant products which use our AdBlue technology can use blends of 20% biodiesel.

LEADER IN SUSTAINABILITY

New Holland's extensive offering of low emission products, our continued focus on reducing our environmental footprint throughout our products' entire life cycle and our involvement in the community have contributed to our parent company, Fiat Industrial, being recognised as Industry Leader by the Dow Jones Sustainability Index (DJSI) World and DJSI Europe. These prestigious equity indexes only admit companies that are best-in-class in managing their businesses, from an economic as well as social and environmental perspective. Fiat Industrial received a score of 81/100 compared to an average of 49/100 for all companies in its sector, and was awarded first place.



EASY MAINTENANCE FROM GROUND LEVEL

- **Designed for easy access**

The one-piece electric hood, with alternative opening solution, makes it very quick and easy to access all the service points. We positioned the engine at the rear to give you full access to the engine compartment from the ground.

- **Designed for fast servicing**

We grouped all the service points so you save time: the fuel and AdBlue filling points are next to each other and the 3 oil drains are close together.

- **Designed for less maintenance**

We positioned the radiators at the back of the cab, which means they will need less cleaning.

- **Designed for easy cleaning**

With our cooling box design, you can clean each radiator separately, and you can activate the reversible fan from the cab.

SAFETY FIRST

- **Designed for safe operation**

You can work with confidence knowing that in our cabs you are protected from roll over and falling objects. Our cabs are all ROPS and FOPS certified.

The outstanding all round visibility means that you have a full view of the bucket and all the area around the machine.

- **Designed for safe maintenance**

We designed our wheel loaders so that all the main service points are easily accessible from the ground, so you can safely carry out your daily maintenance.

SPECIFICATIONS



PRODUCTIVITY

(50-METER DISTANCE CYCLE)

Considering: density: 1.8 t/m³, fill factor: 100%, 52 cycles/hour and each hour includes a 5-minute break..... 140 m³/h or 280 t/h
52 loading cycles/h with standard bucket 2.7 m³ or 5.4 tonnes



ENGINE TIER 4 INTERIM

Compliant with tier 4 interim (EU stage 3b regulations)

FPT turbocharged engine F4HFE613Y with:

- 100% fresh air combustion
- Air to Air intercooler
- Second generation common rail (1.600 bar)
- Multiple injections similar to multi-jet automotive technology to achieve best in class load response, max torque and power with the minimum fuel consumption.

6 cylinders -6,7 liters

Max power SAE J1995 145 kW / 195 hp @1800 rpm

Maximum torque SAE J1349 950 Nm @1300 rpm

Nox emission..... 1.53 g/kWh

HC emission 0.02 g/kWh

CO emission..... 0.23 g/kWh

PM emission 0.0106 g/kWh



TRANSMISSION

All-wheel drive with planetary axles

kick-down function

5-speed powershift with lock up (ecoshift)

5-speed transmission. Lock-up eliminates torque converter friction as from 8 km/h.

Power inchproportional declutching depending on braking intensity

forward speeds 7-13-19-30-40 Km/h

reverse speeds 8-14-31 Km/h

4-speed torque converter

4-speed auto Powershift switchable to manual shifting

ZF , switchable to manual shifting

forward speeds 8-13-25-37 Km/h

reverse speeds 8-13-26 Km/h

Adjustable transmission declutch



AXLES AND DIFFERENTIAL

For outstanding traction with 50% longer maintenance intervals and 30% less tire wear

Front auto-lock differential..... 100% of available torque is always guaranteed on the wheel(s) with traction

Front and rear ZF Heavy Duty axles (options) with Open

Differential

Excellent traction:

Limited slip differential front and rear ... when one wheel slips 73% of the available axle torque is guaranteed on the other wheel

Front..... Heavy Duty axle +(ZF type MT-L3085-II)

Rear..... standard axle (ZF type MT-L3075-II)

Rear axle total oscillation..... 24°



TYRES

Tyres 20.5R25



BRAKES

Service brake Maintenance free, self-adjusting wet 4-wheel disc brakes

Area 0.39 m²/hub

Parking brake..... Disc brake on transmission activated from the cab cluster

Area 82 cm²



HYDRAULIC SYSTEM

Valves Rexroth Closed-center, Load sensing hydraulic system. Main valve with 3 sections

Steering The steering orbitrol hydraulically is actuated with priority valve

Type of pump..... Tandem Variable displacement pump (206 l/min @2000 rpm)

Automatic hydraulic functions

- Bucket Return-to-dig

- Boom Return-to-travel

- Auto lift (to adjustable height)

Control type..... Pilot control with single joystick or two levers



CAPACITIES

Fuel tank 246 usable litres

AdBlue tank 41.3 usable litres

Cooling system 28 litres

Engine oil 15 litres

Hydraulic oil..... Tank: 91 litres, total system: 180 litres

Transmission oil 34 litres



CAB AND CONTROLS

For you safety the cab complies to:

protection against falling objects (FOPS)..... ISO EN3449

protection against roll over (ROPS) ISO EN13510



NOISE AND VIBRATION

Driving noise in dB (A) 82 to SAE J88 @ 15 meters

Interior noise..... 72 LpA as per ISO6395/6396/3744

Exterior noise..... 71 dB(A) at 15 meters as per SAE J88 SEP80
103 LwA according to ISO6395/6396/3744

Switchable reverse gear alarm

Vibrations air-cushioned seat MSG 95A/732
average 1.4m/s² as per ISO/TR 25398:2006

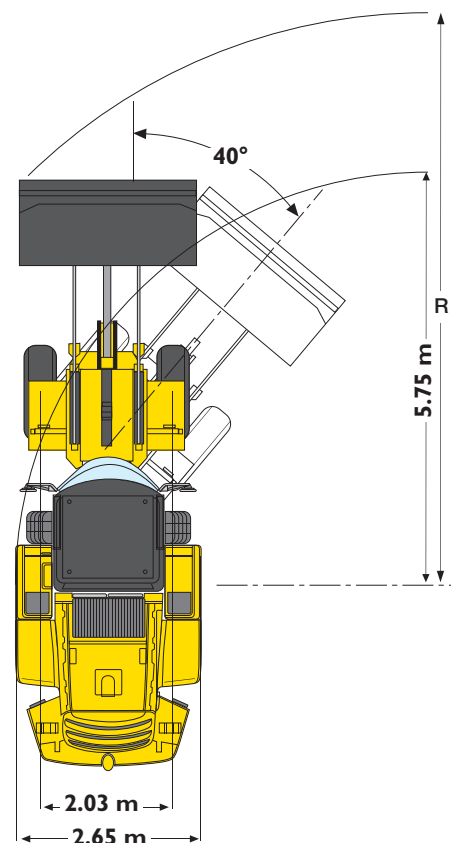
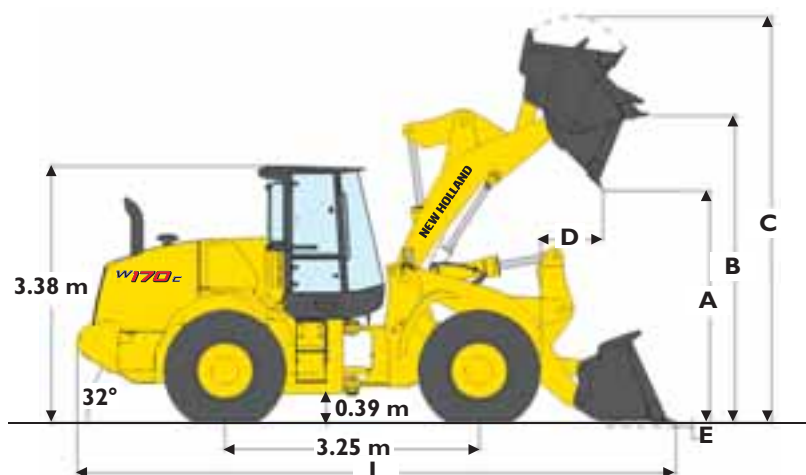


ELECTRICAL SYSTEM

24V. Batteries 2 x 12V.

Alternator 65 A

PERFORMANCE DATA



WI70C		Z-BAR buckets				LONG REACH buckets				TC buckets	
		2.7 m³		2.4 m³ w/QC		2.7 m³ bucket		2.4 m³ w/QC		2.4 m³ w/QC	
	Bucket with bolt on:	edge	teeth	edge	teeth	edge	teeth	edge	teeth	edge	teeth
Bucket volume (heaped)	m³	2.7	2.7	2.4	2.4	2.7	2.7	2.4	2.4	2.4	2.4
Bucket Payload	kg	5440	5369	5299	5325	4533	4464	4385	4409	4924	4946
Maximum material density	tonnes/m³	2.0	2.0	2.2	2.2	1.7	1.7	1.8	1.8	2.1	2.1
Bucket outside width	m	2.73	2.73	2.47	2.47	2.73	2.73	2.47	2.47	2.47	2.47
Bucket weight	kg	1237	1344	1656	1619	1237	1344	1656	1619	1627	1590
Tipping load - straight	kg	12435	12292	11356	11405	10419	10280	10129	10177	11280	11326
Tipping load - Articulated at 40°	kg	10881	10738	10599	10649	9066	8927	8770	8818	9847	9893
Breakout force	kg	14236	12885	12185	11284	14160	12817	12040	11151	12016	11193
Lift capacity from ground	kg	13607	13480	13419	13462	11302	11177	11072	11115	13096	13111
A - Dump height at 45° at full height	m	2.93	2.86	2.82	2.74	3.33	3.26	3.21	3.14	2.77	2.69
B - Hinge pin height	m	3.98	3.98	3.98	3.98	4.37	4.37	4.37	4.37	4.16	4.16
C - Overall height	m	5.52	5.52	5.51	5.51	5.91	5.91	5.90	5.90	5.67	5.66
D - Bucket reach at full height	m	1.13	1.21	1.28	1.36	1.13	1.21	1.28	1.36	1.27	1.36
E - Dig depth	cm	7.4	7.4	6.2	6.7	7.6	7.7	6.5	6.9	21	21.3
Overall length without bucket	m	6.53	6.53	6.53	6.53	6.85	6.85	6.85	6.85	6.52	6.52
L - Overall length with bucket on the ground	m	7.65	7.76	7.83	7.95	7.65	7.76	8.18	8.30	8.12	8.24
R - Turning radius to front corner of the bucket	m	6.3	6.4	6.3	6.3	6.5	6.5	6.5	6.5	6.2	6.3
Bucket rollback in carry position	°	43	43	38	38	41	41	36	36	58	58
Dump angle at full height	°	55	55	61	61	55	55	61	61	54	54
Machine operating weight	kg	14225	14532	14844	14807	14644	14751	15063	15026	14915	14878

LOADER SPEED

Raising time (loaded)	sec	5.2
Dump time (loaded)	sec	1.2
Lowering time (empty, power down)	sec	2.5
Lowering time (empty, float down)	sec	2.4

SPECIFICATIONS

PRODUCTIVITY

(50-METER DISTANCE CYCLE)

Considering: density: 1.8 t/m³, fill factor: 100%, 52 cycles/hour and each hour includes a 5-minute break..... 160 m³/h or 320 t/h
52 loading cycles/h with standard bucket 3.4 m³ or 6.2 tonnes

ENGINE TIER 4 INTERIM

Compliant with tier 4 interim (EU stage 3b regulations)

FPT turbocharged engine F4HFE613X with:

- 100% fresh air combustion
- Air to Air intercooler
- Second generation common rail (1.600 bar)
- Multiple injections similar to multi-jet automotive technology to achieve best in class load response, max torque and power with the minimum fuel consumption.
- 6 cylinders -6,7 liters
- Max power SAE J1995 172kW / 230 hp @1800 rpm
- Maximum torque SAE J1349 1184 Nm @1300 rpm
- Nox emission..... 1.53 g/kWh
- HC emission 0.02 g/kWh
- CO emission..... 0.23 g/kWh
- PM emission 0.0106 g/kWh

TRANSMISSION

All-wheel drive with planetary axles
kick-down function

5-speed powershift with lock up (ecoshift)

5-speed transmission. Lock-up eliminates torque converter friction as from 8 km/h.

Power inchproportional declutching depending on braking intensity
forward speeds 6,6-11-17-26-40 Km/h
reverse speeds 7-12-28 Km/h

4-speed torque converter

4-speed auto Powershift switchable to manual shifting
ZF , switchable to manual shifting
forward speeds 7-12-23-37 Km/h
reverse speeds 7-13-25 Km/h
Adjustable transmission declutch

AXLES AND DIFFERENTIAL

For outstanding traction with 50% longer maintenance intervals and 30% less tire wear

Front auto-lock differential..... 100% of available torque is always guaranteed on the wheel(s) with traction

Front and rear ZF Heavy Duty axles with Open Differential

Excellent traction:

Limited slip differential front and rear ... when one wheel slips 73% of the available axle torque is guaranteed on the other wheel

Front..... Heavy Duty axle +(ZF type MT-L3095-II)

Rear..... standard axle (ZF type MT-L3085-II)

Rear axle total oscillation..... 24°

TYRES

Tyres 23.5R25

BRAKES

Service brake Maintenance free, self-adjusting wet 4-wheel disc brakes

Area 0.39 m²/hub

Parking brake..... Disc brake on transmission activated from the cab cluster

Area 82 cm²

HYDRAULIC SYSTEM

Valves Rexroth Closed-center, Load sensing hydraulic system.
Main valve with 3 sections

Steering The steering orbitrol hydraulically is actuated with priority valve

Type of pump..... Tandem Variable displacement pump
(240 l/min @2000 rpm)

Automatic hydraulic functions

- Bucket Return-to-dig
- Boom Return-to-travel
- Auto lift (to adjustable height)

Control type Pilot control with single joystick or two levers

CAPACITIES

Fuel tank 288 usable litres

AdBlue tank 41.3 usable litres

Cooling system 30 litres

Engine oil 15 litres

Hydraulic oil..... Tank: 91 litres, total system: 180 litres

Transmission oil 34 litres

CAB AND CONTROLS

For you safety the cab complies to:

protection against falling objects (FOPS)..... ISO EN3449

protection against roll over (ROPS) ISO EN13510

NOISE AND VIBRATION

Driving noise in dB (A) 82 to SAE J88 @ 15 meters

Interior noise..... 72 LpA as per ISO6395/6396/3744

Exterior noise..... 71 dB(A) at 15 meters as per SAE J88 SEP80
103 LwA according to ISO6395/6396/3744

Switchable reverse gear alarm

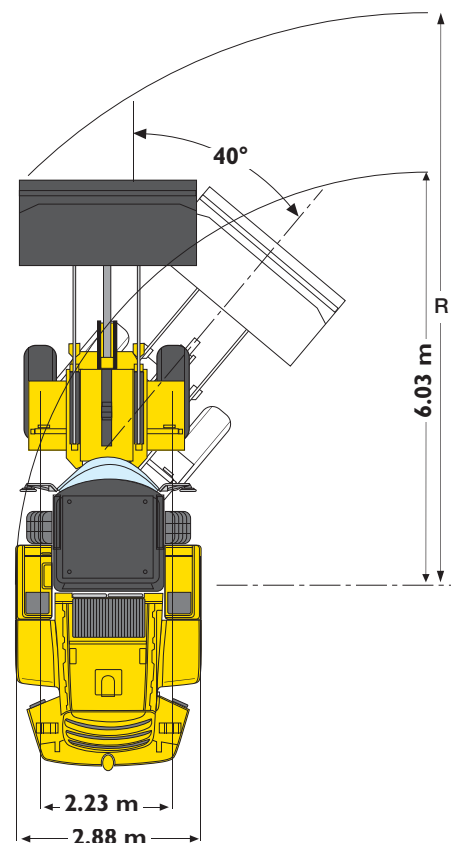
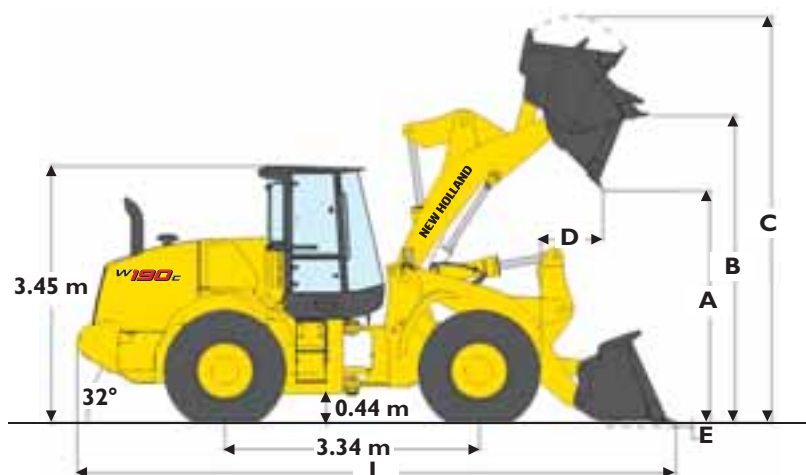
Vibrations air-cushioned seat MSG 95A/732
average 1.4m/s² as per ISO/TR 25398:2006

ELECTRICAL SYSTEM

24V. Batteries 2 x 12V.

Alternator 65A

PERFORMANCE DATA



W190C		Z-BAR buckets						LONG REACH buckets			
		3.4 m³		3.2 m³		2.8 m³		3.2 m³		2.8 m³	
	Bucket with bolt on:	edge	teeth	edge	teeth	edge	teeth	edge	teeth	edge	teeth
Bucket volume (heaped)	m³	3.42	3.24	3.20	3.10	2.8	2.5	3.2	3.1	2.8	2.5
Bucket Payload	kg	6146	6268	6184	6295	6274	6478	4878	4970	4968	5123
Maximum material density	tonnes/m³	1.80	1.94	1.93	2.03	2.24	2.59	1.53	1.60	1.77	2.05
Bucket outside width	m	2.95	2.95	2.94	2.94	2.95	2.94	2.95	2.94	2.95	2.94
Bucket weight	kg	1550	1460	1520	1430	1366	1276	1520	1430	1366	1276
Tipping load - straight	kg	14203	14465	14284	14523	14465	14917	11366	11562	11547	11889
Tipping load - Articulated at 40°	kg	12293	12536	12367	12590	12547	12955	9756	9941	9936	10246
Breakout force	kg	15076	16133	15473	16676	17751	19180	15721	16953	18032	19496
Lift capacity from ground	kg	17976	18137	18055	18201	18263	18559	13725	13885	13938	14237
A - Dump height at 45° at full height	m	2.94	2.86	2.96	2.88	3.06	2.99	3.34	3.33	3.50	3.43
B - Hinge pin height	m	4.12	4.12	4.12	4.12	4.12	4.12	4.56	4.56	4.56	4.56
C - Overall height	m	5.49	5.49	5.45	5.45	5.29	5.29	5.89	5.89	5.73	5.73
D - Bucket reach at full height	m	1.17	1.13	1.15	1.27	1.02	1.14	1.26	1.38	1.14	1.26
E - Dig depth	cm	7	5	7	5	7	5	14	11	14	11
L - Overall length with bucket on the ground	m	7.94	8.06	7.90	8.03	7.74	7.86	8.39	8.52	8.23	8.35
Overall length without bucket	m	6.78	6.78	6.78	6.78	6.78	6.78	7.24	7.24	7.24	7.24
R - Turning radius to front corner of the bucket	m	6.6	6.7	6.6	6.6	6.6	6.6	6.9	6.9	6.8	6.8
Bucket rollback in carry position	°	44	44	44	44	44	44	43	43	43	43
Dump angle at full height	°	55	55	55	55	55	55	49	49	49	49
Machine operating weight	kg	17694	17604	17664	17574	17510	17420	18046	17956	17892	17802

LOADER SPEED

Raising time (loaded)	sec	6.2
Dump time (loaded)	sec	1.2
Lowering time (empty, power down)	sec	2.9
Lowering time (empty, float down)	sec	2.5

SPECIFICATIONS

PRODUCTIVITY

(50-METER DISTANCE CYCLE)

Considering: density: 1.8 t/m³, fill factor: 100%, 52 cycles/hour and each hour includes a 5-minute break..... 210 m³/h or 375 t/h
52 loading cycles/h with standard bucket 4.0 m³ or 7.2 tonnes

ENGINE TIER 4 INTERIM

compliant with tier 4 interim (EU stage 3b regulations)

FPT turbocharged engine F4HFE6131 with:

- 100% fresh air combustion
- Air to Air intercooler
- Multiple injections similar to multi-jet automotive technology to achieve best in class load response, max torque and power with the minimum fuel consumption.

6 cylinders -6.7 liters

Max power SAE J1995 190kW / 255 hp @1800 rpm

Maximum torque SAE J1349 1300 Nm @1300 rpm

Nox emission..... 1.53 g/kWh

HC emission 0.02 g/kWh

CO emission..... 0.23 g/kWh

PM emission 0.0106 g/kWh

TRANSMISSION

All-wheel drive with planetary axles

kick-down function

5-speed powershift with lock up (ecoshift)

5-speed transmission. Lock-up eliminates torque converter friction as from 8 km/h.

Power inchproportional declutching depending on braking intensity
forward speeds 6.4-11-17-26-40 Km/h
reverse speeds 7-12-28 Km/h

4-speed torque converter

4-speed auto Powershift switchable to manual shifting

ZF, switchable to manual shifting

forward speeds 7-12-23-36 Km/h

reverse speeds 7-13-24 Km/h

Adjustable transmission declutch

AXLES AND DIFFERENTIAL

For outstanding traction with 50% longer maintenance intervals and 30% less tire wear

Front auto-lock differential..... 100% of available torque is always guaranteed on the wheel(s) with traction
Front and rear ZF Heavy Duty axles (options) with Open Differential

Excellent traction:

Limited slip differential front and rear ... when one wheel slips 73% of the available axle torque is guaranteed on the other wheel

Front and rear Heavy Duty axle +(ZF type MT-L3095-II)

Rear axle total oscillation..... 24°

TYRES

Tyres 23.5R25

BRAKES

Service brake Maintenance free, self-adjusting wet 4-wheel disc brakes

Area 0.47 m²/hub

Parking brake Disc brake on transmission activated from the cab cluster

Area 82 cm²

HYDRAULIC SYSTEM

Valves Rexroth Closed-center, Load sensing hydraulic system. Main valve with 3 sections

Steering The steering orbitrol hydraulically is actuated with priority valve

Type of pump Tandem Variable displacement pump (282 l/min @2000 rpm)

Automatic hydraulic functions

- Bucket Return-to-dig

- Boom Return-to-travel

- Auto lift (to adjustable height)

Control type Pilot control with single joystick or two levers

CAPACITIES

Fuel tank 288 usable litres

AdBlue tank 41.3 usable litres

Cooling system 30 litres

Engine oil 15 litres

Hydraulic oil..... Tank: 110 litres, total system: 200 litres

Transmission oil 34 litres

CAB AND CONTROLS

For you safety the cab complies to:

protection against falling objects (FOPS) ISO EN3449

protection against roll over (ROPS) ISO EN13510

NOISE AND VIBRATION

Driving noise in dB (A) 82 to SAE J88 @ 15 meters

Interior noise..... 72 LpA as per ISO6595/6396/3744

Exterior noise..... 71 dB(A) at 15 meters as per SAE J88 SEP80
103 LwA according to ISO6395/6396/3744

Switchable reverse gear alarm

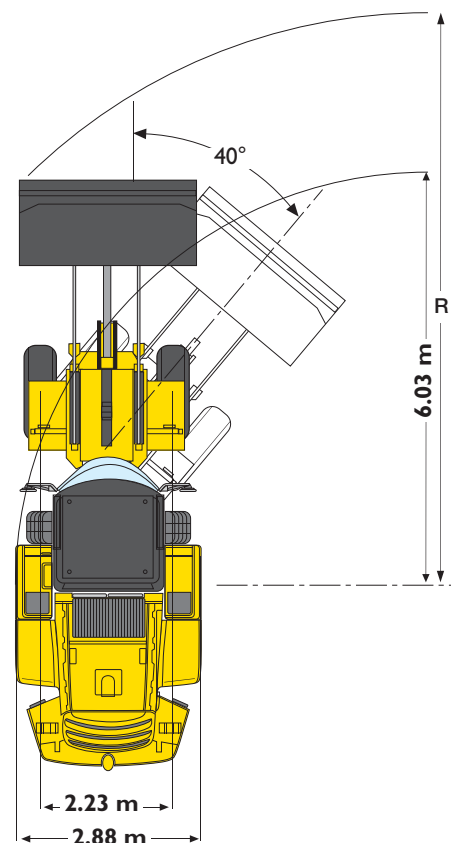
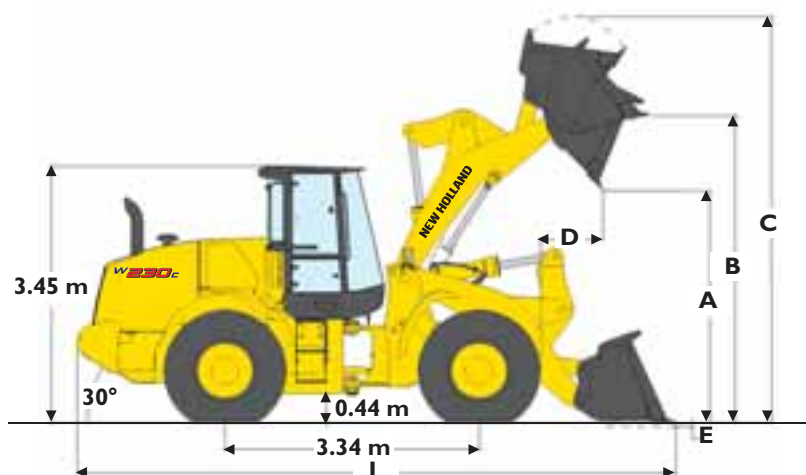
Vibrations air-cushioned seat MSG 95A/732
average 1.4m/s² as per ISO/TR 25398:2006

ELECTRICAL SYSTEM

24V. Batteries 2 x 12V.

Alternator 65A

PERFORMANCE DATA



W230C		Z-BAR buckets		LONG REACH buckets	
		4.0 m ³		4.0 m ³	
	Bucket with bolt on:	edge	teeth	edge	teeth
Bucket volume (heaped)	m ³	3.98	3.82	3.98	3.80
Bucket Payload	kg	7205	7245	5695	5735
Maximum material density	tonnes/m ³	1.8	1.9	1.4	1.5
Bucket outside width	m	2.98	2.98	2.98	2.98
Bucket weight	kg	1922	1807	1922	1807
Tipping load - straight	kg	16765	16867	13361	13463
Tipping load - Articulated at 40°	kg	14409	14491	11389	11471
Breakout force	kg	17738	18886	18061	19209
Lift capacity from ground	kg	21587	21735	16739	16887
A - Dump height at 45° at full height	m	2.86	2.86	3.22	3.22
B - Hinge pin height	m	4.12	4.12	4.56	4.56
C - Overall height	m	5.71	5.71	6.15	6.15
D - Bucket reach at full height	m	1.05	1.16	1.19	1.3
E - Dig depth	cm	7	7	14	14
L - Overall length with bucket on the ground	m	7.92	8.07	8.41	8.56
Overall length without bucket	m	6.78	6.78	7.24	7.24
R - Turning radius to front corner of the bucket	m	6.6	6.7	6.6	6.7
Bucket rollback in carry position	°	44	44	43	43
Dump angle at full height	°	50	50	44	44
Machine operating weight	kg	20068	19953	20210	20095

LOADER SPEED

Raising time (loaded)	sec	6.2
Dump time (loaded)	sec	1.4
Lowering time (empty, power down)	sec	3.8
Lowering time (empty, float down)	sec	3.1

PARTS AND SERVICE

The New Holland dealer network is, in itself, the best guarantee of continued productivity for the machines it delivers to its customers. New Holland service technicians are fully equipped to resolve all maintenance and repair issues, with each and every service point providing the high standards they are obliged to observe under New Holland's stringent quality guidelines. The New Holland global parts network ensures fast, reliable, replacement parts for less downtime, increased productivity and, of course, profitable operation for its customers.



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