

# FOREST MACHINE

**ZAXIS135USL**  
**ZAXIS225USRL**

## APPLICATION & ATTACHMENT

**Model Code:** ZX135USL-3  
**Engine Rated Power:** 69 kW (93 HP)  
**Operating Weight:** 14 600 - 15 400 kg

**Model Code:** ZX225USRL-3  
**Engine Rated Power:** 122 kW (164 HP)  
**Operating Weight:** 24 000 - 24 300 kg





# SPECIFICATIONS

## ZX135USL-3

### ENGINE

Model .....	Isuzu AJ-4JJ1X
Type .....	4-cycle water-cooled, direct injection
Aspiration .....	Turbocharged, intercooled
No. of cylinders .....	4
Rated power	
ISO 9249, net .....	69.0 kW (93.0 HP) at 1 800 min <sup>-1</sup> (rpm)
EEC 80/1269, net ..	69.0 kW (93.0 HP) at 1 800 min <sup>-1</sup> (rpm)
SAE J1349, net .....	69.0 kW (93.0 HP) at 1 800 min <sup>-1</sup> (rpm)
Maximum torque .....	372 N·m (38 kgf·m) at 1 600 min <sup>-1</sup> (rpm)
Piston displacement ..	2.999 L
Bore and stroke .....	95.4 mm x 104.9 mm
Batteries .....	2 x 12 V / 55 Ah

### HYDRAULIC SYSTEM

- Work mode selector  
Digging mode / Attachment mode
  - Engine speed sensing system
- |                     |  |
|---------------------|--|
| Main pumps .....    | 2 variable displacement axial piston pumps |
| Maximum oil flow .. | 2 x 117 L/min                              |
| Pilot pump .....    | 1 gear pump                                |
| Maximum oil flow .. | 33.6 L/min                                 |

### Hydraulic Motors

Travel .....	2 variable displacement axial piston pumps
Swing .....	1 axial piston motor

### Relief Valve Settings

Implement circuit .....	34.3 MPa (350 kgf/cm <sup>2</sup> )
Swing circuit .....	32.3 MPa (329 kgf/cm <sup>2</sup> )
Travel circuit .....	34.3 MPa (350 kgf/cm <sup>2</sup> )
Pilot circuit .....	3.9 MPa (40 kgf/cm <sup>2</sup> )

### Cylinder Dimensions

	Quantity	Bore	Rod diameter
Boom Cylinder	2	105 mm	70 mm
Arm Cylinder	1	115 mm	80 mm
Bucket Cylinder	1	100 mm	70 mm

### UPPERSTRUCTURE

Swing speed .....	13.7 min <sup>-1</sup> (rpm)
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### UNDERCARRIAGE

Travel speeds .....	High: 0 to 4.6 km/h Low: 0 to 2.8 km/h
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Maximum traction force .....	130 kN (13 260 kgf)
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Gradeability .....	35° (70%) continuous
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### Numbers of Rollers and Shoes on Each Side

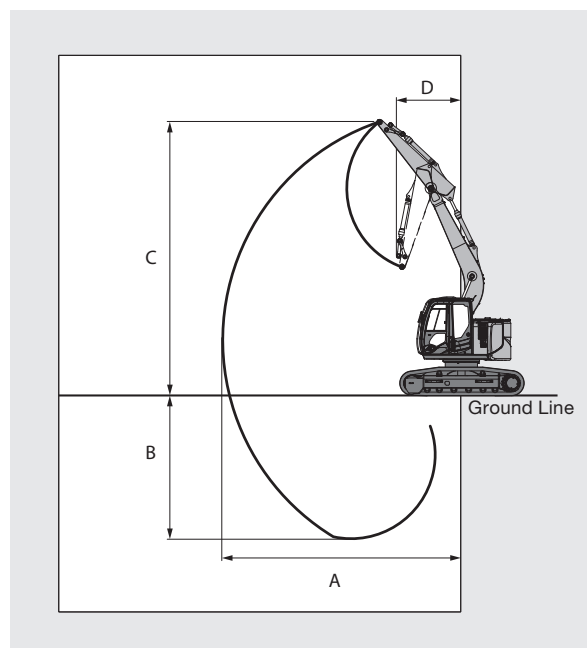
Upper rollers .....	2
Lower rollers .....	6
Track shoes .....	42

### BACKHOE ATTACHMENTS

Equipped with 4.60 m boom, 2.52 m arm.

Shoe type	Shoe width	Operating weight	Ground pressure
Triple grouser	500 mm	14 600 kg	44 kPa (0.45 kgf/cm <sup>2</sup> )
Triple grouser	600 mm	14 800 kg	37 kPa (0.38 kgf/cm <sup>2</sup> )
Triple grouser	700 mm	15 000 kg	32 kPa (0.33 kgf/cm <sup>2</sup> )
Triple grouser	800 mm	15 400 kg	28 kPa (0.29 kgf/cm <sup>2</sup> )

### WORKING RANGES



Unit: mm

	ZX135USL-3
Boom, Arm	4.60 m Boom 2.52 m Arm
A Max. working reach (arm point)	7 150
B Max. working depth (arm point)	4 250
C Max. working height (arm point)	8 210
D Min. front swing radius	1 950

Excluding track shoe lug

# SPECIFICATIONS

## Metric measure

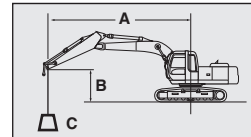
Notes: 1. Ratings are based on ISO 10567.

2. Lifting capacity of the ZAXIS Series does not exceed 75% of tipping load with the machine on firm, level ground or 87% full hydraulic capacity.

3. The load point is a hook (not standard equipment) located on the back of the bucket.

4. \*Indicates load limited by hydraulic capacity.

5. 0 m = Ground.



A: Load radius

B: Load point height

C: Lifting capacity



Rating over-side or 360 degrees

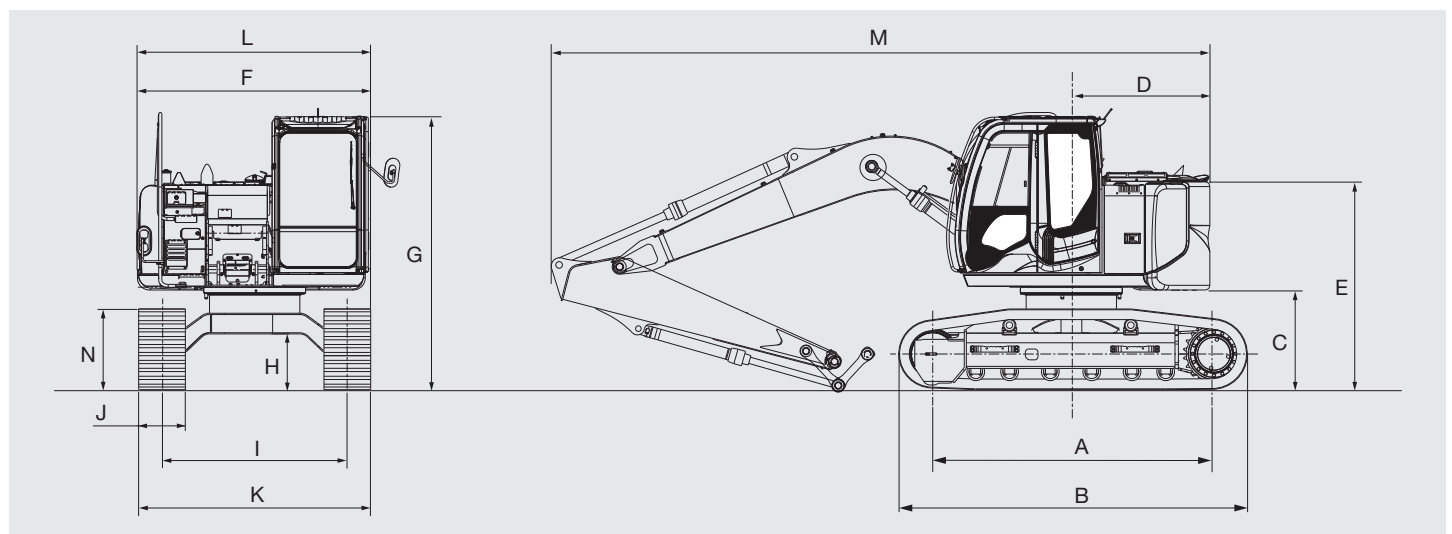


Rating over-front

Unit: 1 000 kg

Conditions	Load point height	Load radius												At max. reach		
		2.0 m		3.0 m		4.0 m		5.0 m		6.0 m		7.0 m				
																meter
Arm 2.52 m Without bucket Shoe 500 mm	7.0 m					*3.58	*3.58							*2.66	*2.66	4.64
	6.0 m					*3.38	*3.38	3.30	*3.45					*2.38	*2.38	5.63
	5.0 m					*3.60	*3.60	3.28	*3.49	2.43	*3.17			2.23	*2.25	6.30
	4.0 m															
	4.0 m			*4.77	*4.77	*4.15	*4.15	3.20	*3.77	2.41	*3.53			1.98	*2.21	6.75
	3.0 m			*6.48	*6.48	4.33	*4.95	3.10	*4.18	2.35	3.57	1.84	*2.36	1.83	*2.23	7.02
	2.0 m			6.29	*8.19	4.11	*5.78	2.98	4.62	2.29	3.50	1.81	2.77	1.76	*2.31	7.14
	2.0 m															
	1.0 m			*5.58	*5.58	3.93	*6.39	2.87	4.50	2.22	3.43	1.78	2.73	1.74	*2.44	7.12
	0 (Ground)			5.88	*6.33	3.82	6.27	2.80	4.42	2.18	3.38			1.78	*2.67	6.95
	-1.0 m	*4.71	*4.71	5.86	*8.41	3.78	6.22	2.76	4.38	2.16	3.36			1.90	2.94	6.61
	-2.0 m	*7.24	*7.24	5.90	*7.95	3.79	*6.11	2.76	4.38	2.17	3.38			2.14	3.31	6.09
	-3.0 m	*8.87	*8.87	5.99	*6.70	3.84	*5.21	2.82	*3.96					2.60	*3.49	5.33
	-4.0 m			*4.65	*4.65	*3.39	*3.39							*3.10	*3.10	4.18

## DIMENSIONS



Unit: mm

	ZX135USL-3
A Distance between tumblers	2 990
B Undercarriage length	3 790
C Counterweight clearance	*1 060
D Rear-end swing radius	1 480
E Engine cover height	2 330
F Overall width of upperstructure	2 480
G Overall height of cab	2 950
H Min. ground clearance	*595
I Track gauge	1 990
J Track shoe width	500
K Undercarriage width	2 490
L Overall width	2 500
M Overall length	7 470
N Track height with triple grouser shoes	920

NOTE: \*The dimensions do not include the height of the shoe lug.

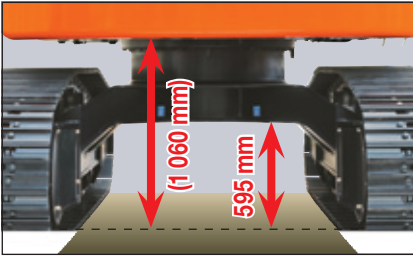
# EQUIPMENT

## EQUIPMENT

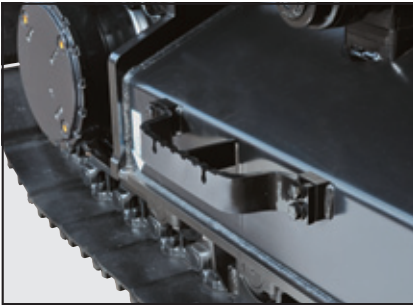
Standard and Optional equipment may vary by country, so please consult your Hitachi dealer for details.

◎ Standard ● Optional — Not

### High track



### Reinforced side step



### Reinforced upper rollers



### Straight glass cab



### Reinforced track under cover (t=9 mm)



	ZX135USL-3
Upperstructure	
Std cab with guards bracket (Straight front glass)	◎
Pre-cleaner	—
Air cleaner double filters	◎
Upperstructure reinforced under cover (t=6 mm)	◎
High-performance full-flow filters (with restriction indicator)	◎
Undercarriage	
High track	◎
Track guard (Unit each side)	◎ (2)
Reinforced upper roller (Unit each side)	◎ (2)
Reinforced track under cover (t=6 mm, High-tensile steel)	◎
Reinforced side step (Bolt mounted)	◎
Front	
Arm with damage prevention plate (Upper surface and both sides)	◎
Other	
Suspension seat with heater	●
Hose rupture valves	●
Overload warning device	●
Electric fuel refilling pump	●
Additional cabin roof front lights	●
Additional cabin roof rear lights	●
Additional boom light with cover	●
Front glass lower guard	●
Front glass upper guard (not choose: Sun visor)	●
Rain guard	●
Sun visor (not choose: Front glass upper guard)	●
12 V power source	●
Hammer and crusher piping	●
Parts for hammer and crusher	●
2 pump combined flow	●
Additional pump (30 L/min)	●
Pilot accumulator	●

# SPECIFICATIONS

## ZX225USRL-3

### ENGINE

Model .....	Isuzu AI-4HK1X
Type .....	4-cycle water-cooled, direct injection
Aspiration .....	Turbocharged, intercooled
No. of cylinders .....	4
Rated power	
ISO 9249, net .....	122 kW (164 HP) at 2 000 min <sup>-1</sup> (rpm)
EEC 80/1269, net ..	122 kW (164 HP) at 2 000 min <sup>-1</sup> (rpm)
SAE J1349, net .....	122 kW (164 HP) at 2 000 min <sup>-1</sup> (rpm)
Maximum torque .....	655 N·m (67 kgf·m) at 1 500 min <sup>-1</sup> (rpm)
Piston displacement ..	5.193 L
Bore and stroke .....	115 mm x 125 mm
Batteries .....	2 x 12 V / 88 Ah

### HYDRAULIC SYSTEM

- Work mode selector  
Digging mode / Attachment mode
  - Engine speed sensing system
- |                     |  |
|---------------------|--|
| Main pumps .....    | 2 variable displacement axial piston pumps |
| Maximum oil flow .. | 2 x 212 L/min                              |
| Pilot pump .....    | 1 gear pump                                |
| Maximum oil flow .. | 30 L/min                                   |

### Hydraulic Motors

Travel .....	2 variable displacement axial piston pumps
Swing .....	1 axial piston motor

### Relief Valve Settings

Implement circuit .....	34.3 MPa (350 kgf/cm <sup>2</sup> )
Swing circuit .....	34.3 MPa (350 kgf/cm <sup>2</sup> )
Travel circuit .....	34.3 MPa (350 kgf/cm <sup>2</sup> )
Pilot circuit .....	3.9 MPa (40 kgf/cm <sup>2</sup> )
Power boost .....	36.3 MPa (370 kgf/cm <sup>2</sup> )

### Cylinder Dimensions

	Quantity	Bore	Rod diameter
Boom Cylinder	2	120 mm	85 mm
Arm Cylinder	1	135 mm	95 mm
Bucket Cylinder	1	115 mm	80 mm

### UPPERSTRUCTURE

Swing speed .....	13.3 min <sup>-1</sup> (rpm)
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### UNDERCARRIAGE

Travel speeds .....	High: 0 to 5.5 km/h Low: 0 to 3.5 km/h
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Maximum traction force .....	203 kN (20 700 kgf)
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Gradeability .....	35° (70%) continuous
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### Numbers of Rollers and Shoes on Each Side

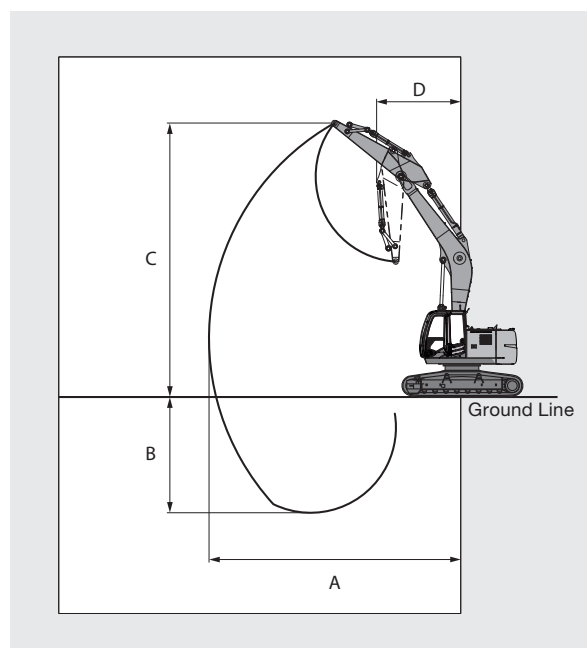
Upper rollers .....	2
Lower rollers .....	8
Track shoes .....	49

### BACKHOE ATTACHMENTS

Equipped with 5.68 m boom, 2.91 m arm.

Shoe type	Shoe width	Operating weight	Ground pressure
Triple grouser	600 mm	24 000 kg	50 kPa (0.51 kgf/cm <sup>2</sup> )
Double grouser	600 mm	24 300 kg	50 kPa (0.51 kgf/cm <sup>2</sup> )

### WORKING RANGES



Unit: mm

	ZX225USRL-3
Boom, Arm	5.68 m Boom 2.91 m Arm
A Max. working reach (arm point)	8 450
B Max. working depth (arm point)	4 630
C Max. working height (arm point)	9 310
D Min. front swing radius	2 720

Excluding track shoe lug

# SPECIFICATIONS

## Metric measure

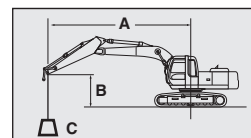
Notes: 1. Ratings are based on ISO 10567.

2. Lifting capacity of the ZAXIS Series does not exceed 75% of tipping load with the machine on firm, level ground or 87% full hydraulic capacity.

3. The load point is a hook (not standard equipment) located on the back of the bucket.

4. \*Indicates load limited by hydraulic capacity.

5. 0 m = Ground.



A: Load radius

B: Load point height

C: Lifting capacity



Rating over-side or 360 degrees

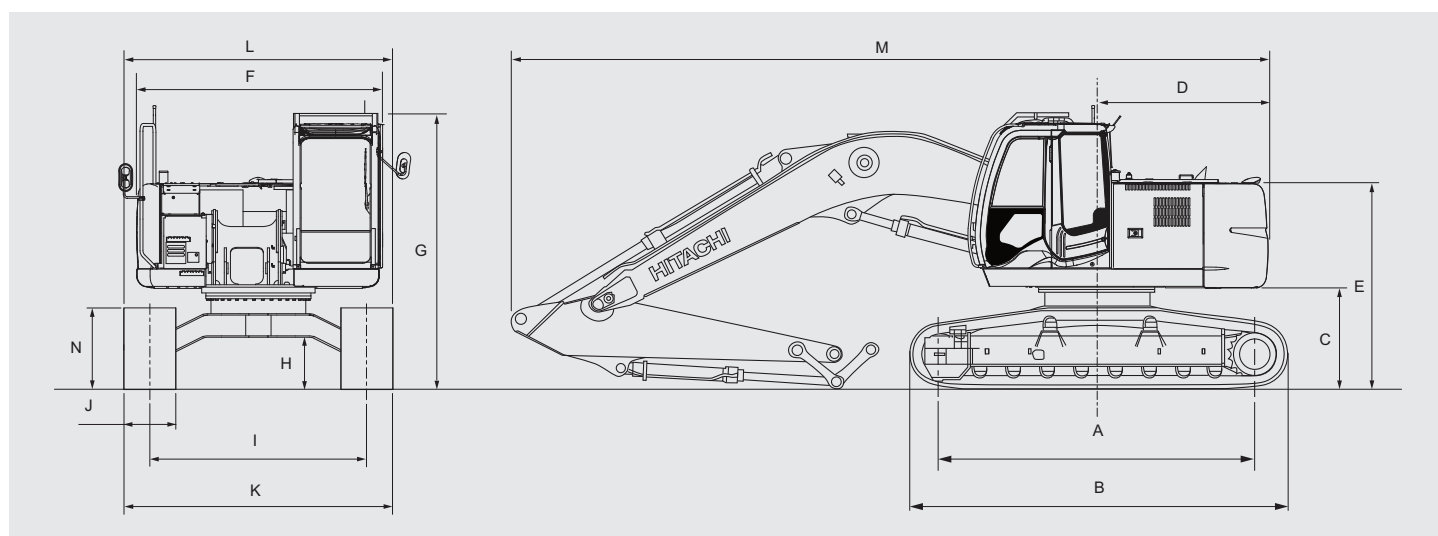


Rating over-front

Unit: 1 000 kg

Conditions	Load point height	Load radius														At max. reach		
		2.0 m		3.0 m		4.0 m		5.0 m		6.0 m		7.0 m		8.0 m				
																		meter
Arm 2.91 m Without bucket Shoe 600 mm	8.0 m							*5.77	*5.77							*4.51	*4.51	5.68
	7.0 m							*6.05	*6.05	*5.58	*5.58					*4.19	*4.19	6.63
	6.0 m							*6.26	*6.26	*5.80	*5.80	4.80	*5.08			*4.03	*4.03	7.32
	5.0 m					*6.92	*6.92	*6.69	*6.69	*6.02	*6.02	4.76	*5.54			*3.97	*3.97	7.82
	4.0 m					*8.81	*8.81	*7.30	*7.30	5.92	*6.36	4.68	*5.70	3.79	*4.77	3.67	*3.99	8.16
	3.0 m					*10.0	*10.0	7.52	*7.97	5.74	*6.73	4.58	*5.90	3.74	5.27	3.49	*4.08	8.37
	2.0 m					10.0	*11.0	7.23	*8.52	5.57	*7.06	4.47	*6.07	3.68	5.20	3.39	*4.24	8.45
	1.0 m					9.71	*11.3	7.01	*8.82	5.43	*7.24	4.38	*6.15	3.63	5.14	3.38	*4.49	8.41
	0 (Ground)			*4.84	*4.84	9.55	*11.0	6.87	*8.79	5.32	*7.23	4.31	*6.08	3.59	5.10	3.45	*4.86	8.25
	-1.0 m	*4.60	*4.60	*7.55	*7.55	9.50	*10.3	6.80	*8.42	5.26	*6.97	4.27	*5.81			3.61	*4.74	7.96
	-2.0 m	*7.66	*7.66	*10.8	*10.8	*9.30	*9.30	6.79	*7.73	5.25	*6.41	4.27	*5.23			3.90	*4.55	7.52
	-3.0 m	*9.94	*9.94	*9.15	*9.15	*7.90	*7.90	*6.64	*6.64	5.29	*5.44					*4.22	*4.22	6.90
	-4.0 m			*6.68	*6.68	*5.97	*5.97	*5.00	*5.00	*3.71	*3.71					*3.62	*3.62	6.06

## DIMENSIONS



Unit: mm

	ZX225USRL-3
A Distance between tumblers	3 660
B Undercarriage length	4 470
C Counterweight clearance	*1 270
D Rear-end swing radius	1 990
E Engine cover height	2 560
F Overall width of upperstructure	2 800
G Overall height of cab	3 340
H Min. ground clearance	*700
I Track gauge	2 590
J Track shoe width	600
K Undercarriage width	3 190
L Overall width	3 190
M Overall length	8 900
N Track height with triple grouser shoes	1 020

NOTE: \*The dimensions do not include the height of the shoe lug.

# EQUIPMENT

## EQUIPMENT

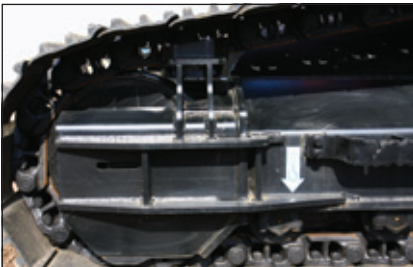
Standard and Optional equipment may vary by country, so please consult your Hitachi dealer for details.

◎ Standard ● Optional — Not

### High track



### Reinforced idler bracket



### Reinforced upper rollers



### Straight glass cab



	ZX225USRL-3
Upperstructure	
Heavier counterweight	◎
Std cab with guards bracket (Straight front glass)	◎
Pre-cleaner	◎
Air cleaner double filters	◎
Upperstructure reinforced under cover (t=6 mm)	◎
High-performance full-flow filters (with restriction indicator)	◎
Undercarriage	
High track	◎
Track guard [Unit each side]	◎ (1)
Reinforced idler bracket [Unit each side]	◎ (2)
Reinforced upper rollers	◎
Reinforced travel motor cover (t=9 mm)	◎
Reinforced track under cover (t=9 mm) (High-tensile steel)	◎
Reinforced track spring	◎
Shoe guide (idler bracket side)	◎
Reinforced side step (bolt mounted)	◎
Front	
Boom high lift bracket	◎
Arm with damage prevention plate (Upper and lower surface)	◎
Reinforced link-B (long type)	◎
Other	
Suspension seat with heater	●
Hose rupture valves	●
Overload warning device	●
Electric fuel refilling pump	●
Additional cabin roof front lights	●
Additional cabin roof rear lights	●
Additional boom light with cover	●
Front glass lower guard	●
Front glass upper guard (not choose: Sun visor)	●
Rain guard	●
Sun visor (not choose: Front glass upper guard)	●
12 V power source	●
Hammer and crusher piping	●
Parts for hammer and crusher	●
2 pump combined flow	●
Additional pump (30 L/min)	●
Pilot accumulator	●

### Reinforced track under cover (t=9 mm)



### Boom high lift bracket



These specifications are subject to change without notice.  
Illustrations and photos show the standard models, and may or may not include optional equipment, accessories, and all standard equipment with some differences in color and features. Before use, read and understand the Operator's Manual for proper operation.



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