

ENGINE

Model	Komatsu SAA6D107E-1 Common rail direct injection, water-cooled, emissionised, turbocharged, after-cooled diesel
Engine power at rated engine speed	2.000 rpm
ISO 14396	127 kW / 170 HP
Max. torque / engine speed	672 Nm / 1.500 rpm
No. of cylinders	6
Bore x stroke	107 x 124 mm
Displacement	6,69 ltr
Lubricating system	Gear pump, pressure feed lubrication filter
Filter	Main-flow filter
Electrical system	24 V
Battery	2 x 110 Ah
Alternator	60 A
Air-filter type	Dry-air filter with automatic dust emission and preliminary purification including a dust display

TRANSMISSION

Drive system	Electronically controlled hydrostatic transmission, switchable in all directions under full power. Fixed ratio gearbox. Variable speed limiter
Hydrostatic pump	1 variable piston pump
Hydrostatic motor	2 variable piston motors
Speed ranges (forwards/backwards)	4/4
Max. travel speeds (forwards/backwards) (Tyres 20.5 R25)	
1. speed range	4-13 km/h
2. speed range	13 km/h
3. speed range	19 km/h
4. speed range	38 km/h

CHASSIS AND TYRES

System	4-wheel drive
Front axle	HD axle, semi-floating, fixed type, TPD-differential, (LSD-differential optional)
Rear axle	HD axle, semi-floating, centre-pin support, 24° swing angle, TPD-differential, (LSD-differential optional)
Reduction gear	Spiral bevel gear
Differential	Straight bevel gear pair
Final drive	Planetary gear in an oil bath
Tyres	20.5 R25 (standard)

SERVICE REFILL CAPACITIES

Cooling system	25 ltr
Fuel tank	245 ltr
Engine oil	23 ltr
Hydraulic system	89 ltr
Axle (both front and rear axle)	24 ltr
Transfer	6,5 ltr

BRAKES

Operating brakes	Completely hydraulic dual-circuit system, running in oil bath, multi-disc brakes on all wheels, service-free
Parking brake	Operated mechanically, running in oil bath, multi-disc brake, service-free
Emergency brake	Uses the parking brake

HYDRAULIC SYSTEM

Hydraulic pump	Gear pump
Working pressure (max)	206 bar
Circulating capacity of the hydraulic pump	172 + 61 ltr/min
No. of boom/bucket cylinders	2/1
Type	Double-action
Bore diameter x stroke	
Boom cylinder	140 x 729 mm
Bucket cylinder	180 x 558 mm
Hydraulic control lever	Servo-controlled, single lever
Hydraulic cycle with rated load bucket filling	
Raise time	5,6 s
Lowering time (empty)	3,3 s
Dumping time	1,9 s

STEERING SYSTEM

System	Articulated frame steering
Type	Completely hydraulic power steering
Steering angle to either side	40°
Steering pump	Gear pump
Working pressure	206 bar
Pumping capacity	172 ltr/min
No. of steering cylinders	2
Type	Double-action
Bore diameter x stroke	70 x 453 mm
Smallest turn (outer edge of the tyre 20.5 R25)	5.475 mm

CABIN

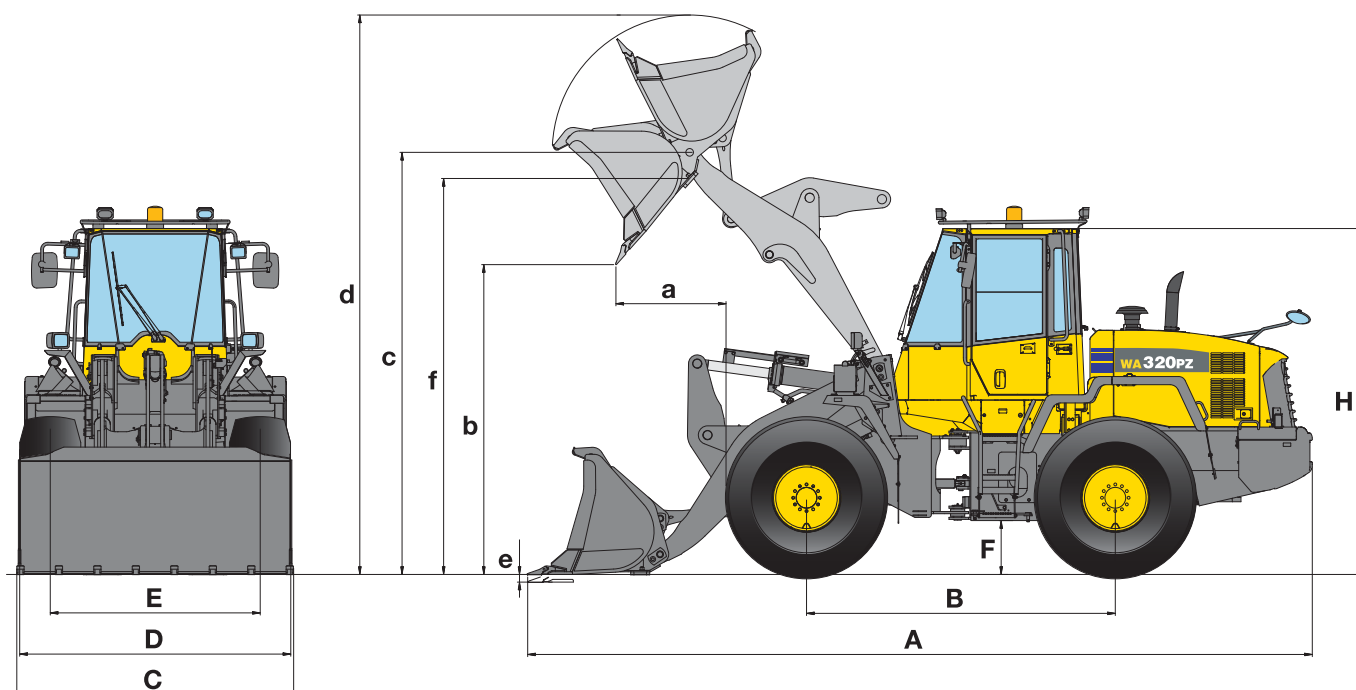
Two-door SpaceCab™ in conformity with ISO 3471 with ROPS (roll over protective structure) in conformity with SAE J1040c and FOPS (falling object protective structure) in conformity with ISO 3449. The air-conditioned pressurised cabin is mounted upon hydrobearings and is noise dampened.

ENVIRONMENT

Engine emissions	Fully complies with EU Stage IIIA and EPA Tier III exhaust emission regulations
Noise levels	
LwA external	104 dB(A) (2000/14/EC Stage II)
LpA operator ear	72 dB(A) (ISO 6396 dynamic test)
Vibration levels (EN 12096:1997)*	
Hand/arm	≤ 2,5 m/s ² (uncertainty K = 0,49 m/s ²)
Body	≤ 0,5 m/s ² (uncertainty K = 0,25 m/s ²)

* for the purpose of risk assessment under directive 2002/44/EC, please refer to ISO/TR 25398:2006.

Dimensions & Performance Figures



MEASUREMENTS AND WORKING SPECIFICATIONS

		Earthmoving		Stockpile		Universal	
		w. teeth	w. BOC	w. teeth	w. BOC	w. teeth	w. BOC
Bucket mount (direct/quick-coupler)		direct	direct	direct	direct	direct	direct
Bucket capacity (heaped, ISO 7546)	m³	2,7	2,9	3,0	3,2	2,7	2,9
Sales code		C42	C43	C32	C33	C02	C03
Material density (max)	t/m ³	1,70	1,60	1,55	1,45	1,75	1,63
Bucket weight	kg	1.325	1.415	1.265	1.355	1.210	1.300
Static tipping load, straight	kg	11.465	11.300	11.470	11.235	11.560	11.360
Static tipping load, 40° articulated	kg	9.850	9.695	9.860	9.645	9.950	9.765
Break-out force hydraulic	kN	171,5	160,6	163,5	153,6	171,5	160,6
Lifting capability hydr. at ground level	kN	162	162,2	163,6	164,8	162,7	163,4
Operating weight	kg	15.350	15.440	15.290	15.380	15.235	15.325
Turning radius at corner of tyres	mm	5.475	5.475	5.475	5.475	5.475	5.475
Turning radius at bucket edge	mm	6.180	6.150	6.195	6.165	6.180	6.150
a Reach at 45°	mm	1.145	1.015	1.185	1.055	1.145	1.015
b Dump height at 45°	mm	2.750	2.840	2.715	2.800	2.750	2.840
c Hinge pin height	mm	4.010	4.010	4.010	4.010	4.010	4.010
d Height top edge of bucket	mm	5.335	5.335	5.500	5.500	5.400	5.400
e Digging depth	mm	150	180	150	180	150	180
f Max. loading height at 45°	mm	3.655	3.655	3.655	3.655	3.655	3.655
A Overall length, bucket grounded	mm	7.850	7.725	7.905	7.780	7.850	7.725
B Wheelbase	mm	3.030	3.030	3.030	3.030	3.030	3.030
C Bucket width	mm	2.740	2.750	2.740	2.750	2.740	2.750
D Width over tyres	mm	2.580	2.580	2.580	2.580	2.580	2.580
E Track width	mm	2.050	2.050	2.050	2.050	2.050	2.050
F Ground clearance	mm	465	465	465	465	465	465
H Overall height	mm	3.200	3.200	3.200	3.200	3.200	3.200

All measurements with tyres 20.5 R25
BOC: bolt-on cutting edge



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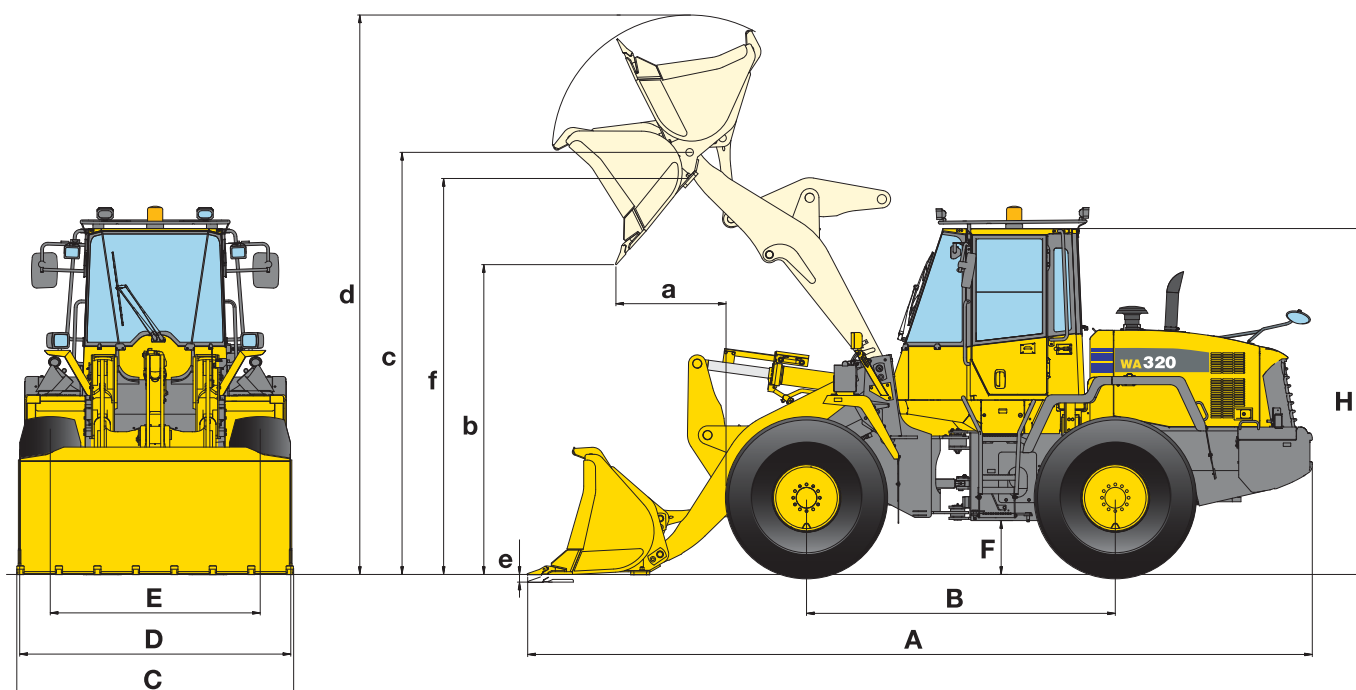
Tyres		20.5 R25 L2	20.5 R25 L5	23.5 R25 L3
Operating weight	kg	-200	+660	+340
Static tipping load, straight	kg	-130	+430	+200
Static tipping load, 40° articulated	kg	-115	+380	+175
Reach at 45°	mm	+0	-25	-60
Dump height at 45°	mm	-40	+25	+60
Width over tyres	mm	+0	+0	+75
Overall height	mm	-40	+25	+60

Earthmoving		Stockpile		Universal	
w. teeth	w. BOC	w. teeth	w. BOC	w. teeth	w. BOC
QC	QC	QC	QC	QC	QC
2,7	2,9	3,0	3,2	2,6	2,7
C72	C73	C66	C67	C62	C63
1,6	1,5	1,45	1,38	1,75	1,65
1.230	1.320	1.130	1.220	1.025	1.115
10.850	10.655	10.920	10.735	11.135	10.945
9.275	9.090	9.350	9.175	9.550	9.370
147,6	139,5	143	135,4	156,3	147,3
168	166,7	162	160	167,3	168,2
15.710	15.800	15.610	15.700	15.505	15.595
5.475	5.475	5.475	5.475	5.475	5.475
6.215	6.180	6.225	6.195	6.190	6.160
1.315	1.185	1.345	1.215	1.260	1.135
2.660	2.745	2.630	2.715	2.715	2.800
4.010	4.010	4.010	4.010	4.010	4.010
5.500	5.500	5.660	5.660	5.495	5.495
95	125	95	125	95	125
3.690	3.690	3.690	3.690	3.690	3.690
7.990	7.865	8.035	7.910	7.920	7.795
3.030	3.030	3.030	3.030	3.030	3.030
2.740	2.750	2.740	2.750	2.740	2.750
2.580	2.580	2.580	2.580	2.580	2.580
2.050	2.050	2.050	2.050	2.050	2.050
465	465	465	465	465	465
3.200	3.200	3.200	3.200	3.200	3.200

TYPICAL MATERIAL DENSITY – LOOSE (IN kg/m³)

Basalt	1.960
Bauxite, Kaolin	1.420
Earth, dry, ex store	1.510
Earth, wet, excavated	1.600
Gypsum, broken	1.810
Gypsum, crushed	1.600
Granite, broken	1.660
Limestone, broken	1.540
Limestone, crushed	1.540
Gravel, unscreened	1.930
Gravel, dry	1.510
Gravel, dry, 6-50 mm	1.690
Gravel, wet, 6-50 mm	2.020
Sand, dry, loose	1.420
Sand, damp	1.690
Sand, wet	1.840
Sand and clay, loose	1.600
Sand and gravel, dry	1.720
Sandstone	1.510
Slate	1.250
Slag, broken	1.750
Stone, crushed	1.600
Clay, natural	1.660
Clay, dry	1.480
Clay, wet	1.660
Clay and gravel, dry	1.420
Clay and gravel, wet	1.540

Dimensions & Performance Figures



MEASUREMENTS AND WORKING SPECIFICATIONS

		Earthmoving		Stockpile		Universal	
		w. teeth	w. BOC	w. teeth	w. BOC	w. teeth	w. BOC
Bucket mount (direct/quick-coupler)		direct	direct	direct	direct	direct	direct
Bucket capacity (heaped, ISO 7546)	m³	2,7	2,9	3,0	3,2	2,7	2,9
Sales code		C42	C43	C32	C33	C02	C03
Material density (max)	t/m ³	1,89	1,73	1,70	1,57	1,90	1,74
Bucket weight	kg	1.295	1.385	1.220	1.310	1.165	1.255
Static tipping load, straight	kg	12.740	12.520	12.760	12.535	12.855	12.620
Static tipping load, 40° articulated	kg	10.860	10.650	10.890	10.675	10.980	10.760
Break-out force hydraulic	kN	157,6	156,5	155,8	154,8	156,8	155,8
Lifting capability hydr. at ground level	kN	134,8	125,9	129	120,8	135,4	126,4
Operating weight	kg	14.940	15.030	14.865	14.955	14.810	14.900
Turning radius at corner of tyres	mm	5.475	5.475	5.475	5.475	5.475	5.475
Turning radius at bucket edge	mm	6.160	6.125	6.170	6.135	6.155	6.120
a Reach at 45°	mm	1.147	1.025	1.183	1.060	1.143	1.020
b Dump height at 45°	mm	2.678	2.780	2.642	2.746	2.682	2.785
c Hinge pin height	mm	3.910	3.910	3.910	3.910	3.910	3.910
d Height top edge of bucket	mm	5.260	5.260	5.415	5.415	5.320	5.320
e Digging depth	mm	105	135	105	135	105	135
f Max. loading height at 45°	mm	3.615	3.615	3.610	3.610	3.610	3.610
A Overall length, bucket grounded	mm	7.770	7.635	7.820	7.685	7.765	7.630
B Wheelbase	mm	3.030	3.030	3.030	3.030	3.030	3.030
C Bucket width	mm	2.740	2.750	2.740	2.750	2.740	2.750
D Width over tyres	mm	2.580	2.580	2.580	2.580	2.580	2.580
E Track width	mm	2.050	2.050	2.050	2.050	2.050	2.050
F Ground clearance	mm	465	465	465	465	465	465
H Overall height	mm	3.200	3.200	3.200	3.200	3.200	3.200

All measurements with tyres 20.5 R25
BOC: bolt-on cutting edge



CHANGE IN DATA CAUSED BY:

Tyres		20.5 R25 L2	20.5 R25 L5	23.5 R25 L3
Operating weight	kg	-200	+660	+340
Static tipping load, straight	kg	-140	+480	+245
Static tipping load, 40° articulated	kg	-130	+425	+220
Reach at 45°	mm	+0	-25	-60
Dump height at 45°	mm	-40	+25	+60
Width over tyres	mm	+0	+0	+75
Overall height	mm	-40	+25	+60

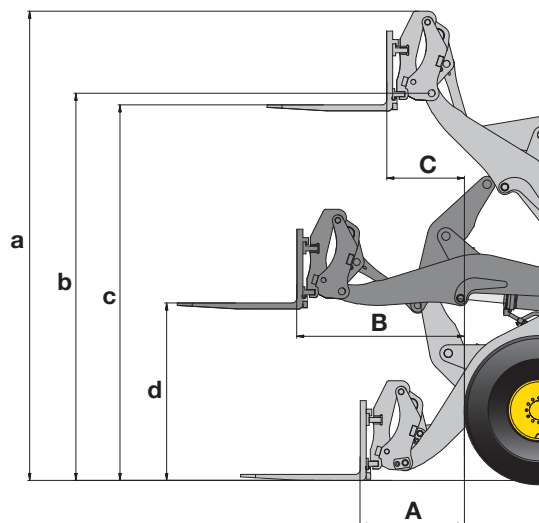
HIGH-LIFT

Earthmoving		Stockpile		Universal		Stockpile		Universal	
w. teeth	w. BOC	w. teeth	w. BOC	w. teeth	w. BOC	w. BOC	w. BOC	w. BOC	w. BOC
QC	QC	QC	QC	QC	QC	direct	QC	direct	QC
2,7	2,9	3,0	3,2	2,7	2,9	3,2	3,2	2,9	2,7
C72	C73	C66	C67	C62	C63	C26	C67	C06	C63
1,75	1,60	1,58	1,46	1,76	1,62	1,17	1,13	1,32	1,35
1.665	1.755	1.560	1.650	1.510	1.600	1.475	1.215	1.255	1.115
11.800	11.595	11.880	11.680	11.910	11.755	9.340	9.020	9.565	9.170
10.000	9.815	10.095	9.905	10.120	9.975	7.960	7.675	8.190	7.815
149,4	148,9	145,3	143	149	147,7	112	94	118	104
112,8	106,5	109,4	103,4	114	107,5	101	97	104	98
15.310	15.400	15.205	15.295	15.155	15.245	15.410	15.590	15.190	15.490
5.475	5.475	5.475	5.475	5.475	5.475	5.475	5.475	5.475	5.475
6.225	6.185	6.235	6.200	6.220	6.180	6.410	6.460	6.395	6.420
1.308	1.185	1.338	1.215	1.300	1.175	1.070	1.275	1.040	1.195
2.532	2.635	2.502	2.605	2.540	2.645	3.390	3.290	3.420	3.370
3.910	3.910	3.910	3.910	3.910	3.910	4.550	4.550	4.550	4.550
5.420	5.420	5.575	5.575	5.480	5.480	6.020	6.260	5.900	6.095
100	130	100	130	100	130	185	110	185	110
3.620	3.620	3.620	3.620	3.620	3.620	4.255	4.300	4.255	4.300
7.980	7.845	8.020	7.885	7.965	7.830	8.290	8.465	8.250	8.350
3.030	3.030	3.030	3.030	3.030	3.030	3.030	3.030	3.030	3.030
2.740	2.750	2.740	2.750	2.740	2.750	2.750	2.750	2.750	2.750
2.580	2.580	2.580	2.580	2.580	2.580	2.580	2.580	2.580	2.580
2.050	2.050	2.050	2.050	2.050	2.050	2.050	2.050	2.050	2.050
465	465	465	465	465	465	465	465	465	465
3.200	3.200	3.200	3.200	3.200	3.200	3.200	3.200	3.200	3.200

Dimensions & Performance Figures

FORK TINES

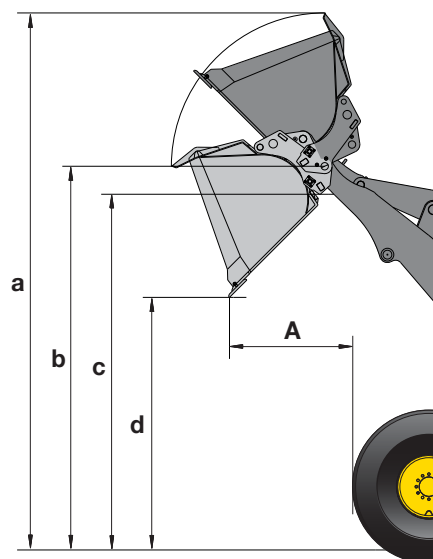
		WA320-6	WA320PZ-6
Sales code		C57	C57
Fork tine length	mm	1.200	1.200
A Max. reach at ground level	mm	970	1.015
B Max. reach	mm	1.650	1.665
C Max. reach at max. stacking height	mm	800	770
a Max. height fork-carrier	mm	4.730	4.765
b Hinge pin height	mm	3.910	4.010
c Max. stacking height	mm	3.790	3.825
d Height of forks at maximum reach	mm	1.840	1.815
Max. tipping load, straight	kg	9.443	8.870
Max. tipping load, articulated	kg	8.087	7.655
Max. payload as per EN 474-3, 80%	kg	6.000	6.120
Max. payload as per EN 474-3, 60%	kg	4.852	4.600
Weight in working order with fork tines	kg	14.574	15.055



LIGHT MATERIAL BUCKET

		WA320PZ-6	
		w. BOC	
Sales code		Q36	Q67
Bucket mount (direct/quick-coupler)		QC	QC
Bucket capacity (heaped, ISO 7546)	m ³	4,8	4,8
Material density	t/m ³	0,8	1,0
Rated load	kg	3.840	4.800
Bucket width	mm	2.740	* 2.980
Bucket weight	kg	1.240	1.400
A Reach at 45°	mm	1.350	1.240
a Height top edge of bucket	mm	5.670	5.575
b Hinge pin height	mm	4.010	4.010
c Max. loading height at 45°	mm	3.680	3.685
d Dump height at 45°	mm	2.800	2.620

* for wide tyres

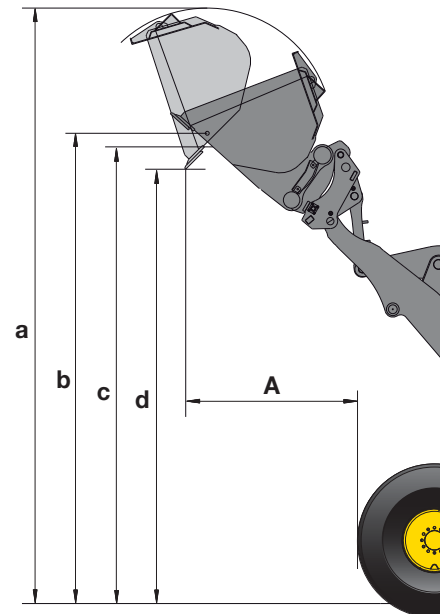


HIGH-DUMP BUCKET

	WA320PZ-6		
	w. BOC		
Sales code	Q41	Q66	
Bucket mount (direct/quick-coupler)	QC	QC	
Bucket capacity (heaped, ISO 7546)	m ³	3,5	3,5
Material density	t/m ³	1,0	1,1
Rated load	kg	3.500	3.850
Bucket width	mm	2.740	2.980*
Bucket weight	kg	2.120	2.040
A Reach at 45°	mm	1.775	1.715
a Height top edge of bucket	mm	6.380	6.410
b Hinge pin height	mm	4.960	4.990
c Max. loading height at 45°	mm	4.825	4.855
d Dump height at 45°	mm	4.570	4.660

Type B, dump cylinders located outside bucket

* for wide tyres



HIGH-DUMP BUCKET (WASTE HANDLING)

	WA320PZ-6	
	w. BOC	
Sales code	Q86	
Bucket mount (direct/quick-coupler)	QC	
Bucket capacity (heaped, ISO 7546)	m ³	2,9
Material density	t/m ³	1,0
Rated load	kg	2.900
Bucket width	mm	2.740
Bucket weight	kg	2.250
A Reach at 45°	mm	1.500
a Height top edge of bucket	mm	6.050
b Hinge pin height	mm	4.750
c Max. loading height at 45°	mm	4.550
d Dump height at 45°	mm	4.420

Type B, dump cylinders located outside bucket

