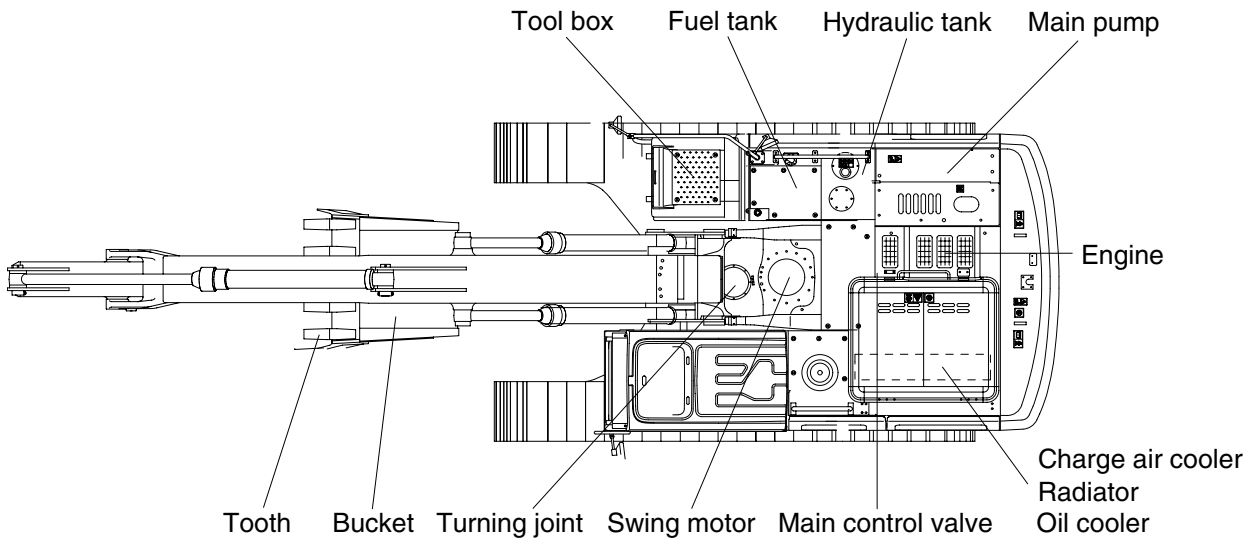
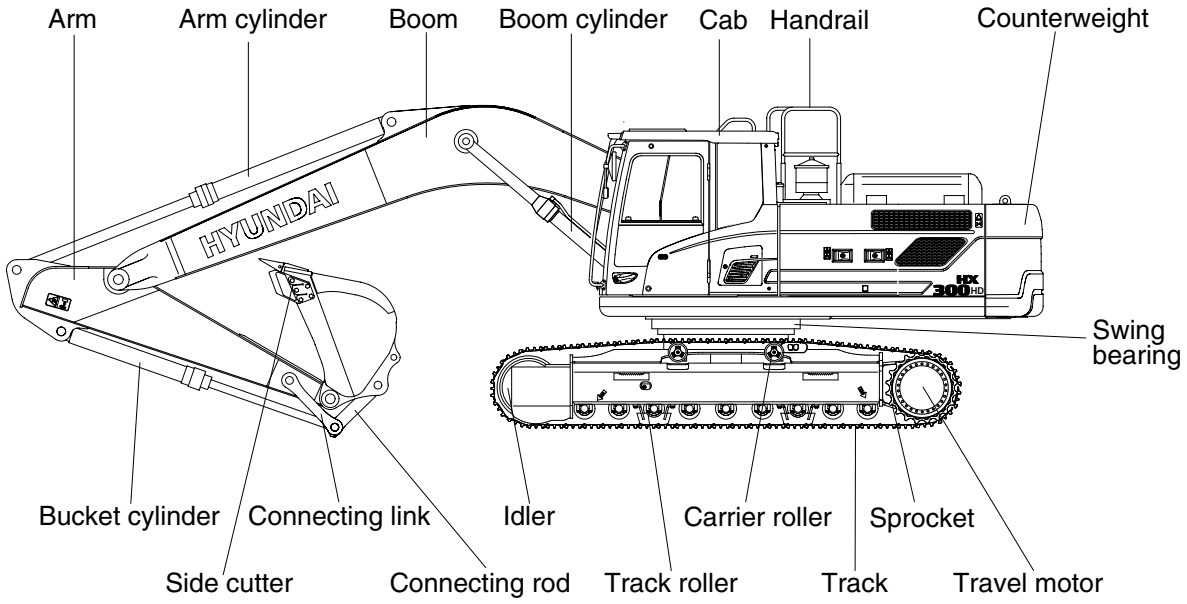
1. MAJOR COMPONENT



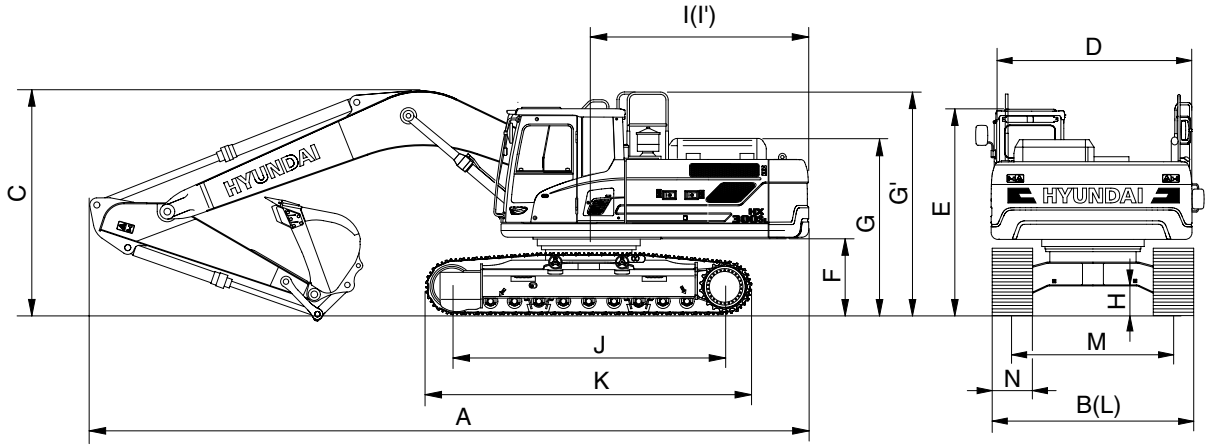


300S2SP01

2. SPECIFICATIONS

1) HX300HD

(1) 6.25 m (20' 6") boom and 3.05 m (10' 0") arm



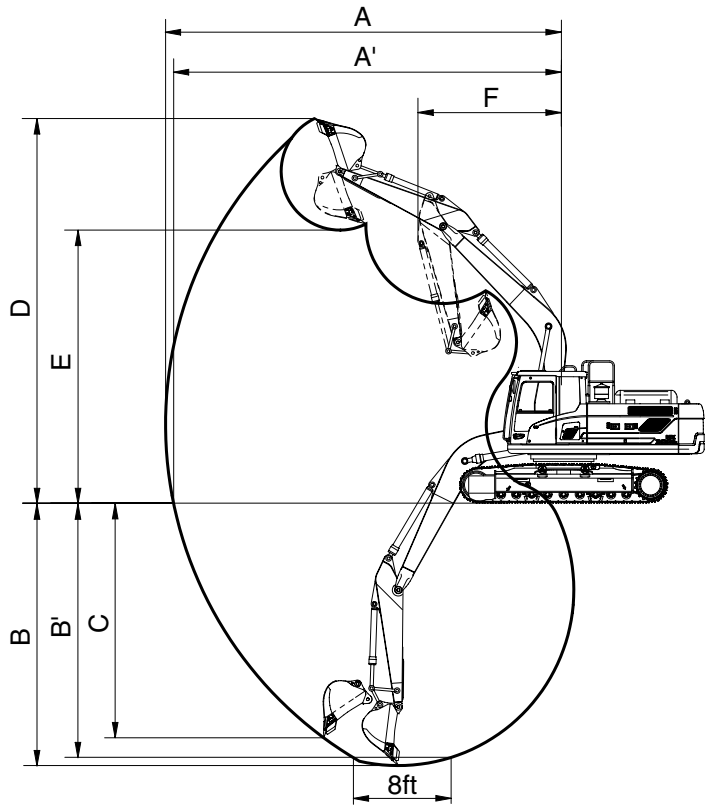
300S2SP02

Description		Unit	Specification
Operating weight		kg (lb)	30700 (67682)
Bucket capacity (SAE heaped), standard		m^3 (yd^3)	1.5 (1.96)
Overall length	A	mm	10740
Overall width, with 600 mm shoe	B		3200
Overall height of boom	C		3320
Superstructure width	D		2980
Overall height of cab	E		3130
Ground clearance of counterweight	F		1185
Overall height of engine hood	G		2657
Overall height of handrail	G'		3336
Minimum ground clearance	H		500
Rear-end distance	I		3265
Rear-end swing radius	I'		3345
Distance between tumblers	J		4030
Undercarriage length	K		4940
Undercarriage width	L		3200
Track gauge	M		2600
Track shoe width, standard	N		600
Travel speed (low/high)		km/hr (mph)	3.3/5.9 (2.1/3.7)
Swing speed		rpm	10.2
Gradeability		Degree (%)	35 (70)
Ground pressure (600 mm shoe)		kgf/cm^2 (psi)	0.58 (8.25)
Max traction force		kg (lb)	26500 (58420)

3. WORKING RANGE

1) HX300HD

(1) 6.25 m (20' 6") boom



Description		3.05 m (10' 0") Arm
Max digging reach	A	10810 mm (35' 6")
Max digging reach on ground	A'	10610 mm (34' 10")
Max digging depth	B	7330 mm (24' 1")
Max digging depth (8 ft level)	B'	7170 mm (23' 6")
Max vertical wall digging depth	C	6280 mm (20' 7")
Max digging height	D	10200 mm (33' 6")
Max dumping height	E	7150 mm (23' 5")
Min swing radius	F	4270 mm (14' 0")
Bucket digging force	SAE	165.7 [180.8] kN
		16900 [18440] kgf
		37260 [40650] lbf
	ISO	192.2 [209.7] kN
		19600 [21380] kgf
		43210 [47130] lbf
Arm digging force	SAE	131.4 [143.4] kN
		13400 [14620] kgf
		29540 [32230] lbf
	ISO	136.3 [148.7] kN
		13900 [15160] kgf
		30640 [33420] lbf

[ ] : Power boost

4. WEIGHT

1) HX300HD

Item	HX300HD	
	kg	lb
Upperstructure assembly	13740	30290
Main frame weld assembly	2720	6000
Engine assembly	617	1360
Main pump assembly	201	443
Main control valve assembly	220	485
Swing motor assembly	350	770
Hydraulic oil tank assembly	250	550
Fuel tank assembly	240	530
Counterweight	5200	11460
Cab assembly	422	930
Lower chassis assembly	10790	23790
Track frame weld assembly	3750	8270
Swing bearing	435	960
Travel motor assembly	360	790
Turning joint	54	120
Sprocket	83	183
Track recoil spring	225	500
Idler	250	551
Carrier roller	35	80
Track roller	56	123
Track-chain assembly (600 ㎜ standard triple grouser shoe)	1880	4145
Front attachment assembly (6.25 m boom, 3.05 m arm, 1.50 m^3 SAE heaped bucket)	5550	12240
6.25 m boom assembly	2285	5040
3.05 m arm assembly	1025	2260
1.50 m^3 SAE heaped bucket	1010	2230
Boom cylinder assembly	270	600
Arm cylinder assembly	360	790
Bucket cylinder assembly	220	485
Bucket control linkage total	110	240

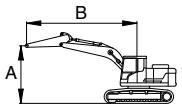
5. LIFTING CAPACITIES

1) HX300HD

Unit : mm

Model	Boom Type	Boom Length	Arm Length	Counterweight Weight (kg)	Shoe Width	Dozer Front	Dozer Rear	Outrigger Front	Outrigger Rear
HX300HD	Mono	6250	3050	5200	600	-	-	-	-

· : Rating over-front · : Rating over-side or 360 degree



Lift-point height (A)		Lift-point radius (B) 3.0 m (9.8 ft)		4.5 m (14.8 ft)		6.0 m (19.7 ft)		7.5 m (24.6 ft)		9.0 m (29.5 ft)		At max. reach Capacity		Reach
														m (ft)
7.5 m (24.6 ft)	kg											*4410	*4410	7.38
	lb											*9720	*9720	(24.2)
6.0 m (19.7 ft)	kg							*6490	5710			*4220	*4220	8.30
	lb							*14310	12590			*9300	*9300	(27.2)
4.5 m (14.8 ft)	kg			*9450	*9450	*7760	*7760	*6980	5540			*4210	4200	8.86
	lb			*20830	*20830	*17110	*17110	*15390	12210			*9280	9260	(29.1)
3.0 m (9.8 ft)	kg			*12510	11250	*9210	7400	*7720	5320	*5490	4000	*4340	3900	9.14
	lb			*27580	24800	*20300	16310	*17020	11730	*12100	8820	*9570	8600	(30.0)
1.5 m (4.9 ft)	kg			*14900	10490	*10550	7000	8210	5110	*6190	3900	*4640	3790	9.17
	lb			*32850	23130	*23260	15430	18100	11270	*13650	8600	*10230	8360	(30.1)
0.0 m (0.0 ft)	kg			*15940	10170	11280	6740	8040	4950			*5160	3870	8.94
	lb			*35140	22420	24870	14860	17730	10910			*11380	8530	(29.3)
-1.5 m (-4.9 ft)	kg	*11100	*11100	*15950	10110	11160	6640	7970	4890			*6050	4180	8.44
	lb	*24470	*24470	*35160	22290	24600	14640	17570	10780			*13340	9220	(27.7)
-3.0 m (-9.8 ft)	kg	*17910	*17910	*15100	10220	11210	6690	8050	4960			*7770	4870	7.61
	lb	*39480	*39480	*33290	22530	24710	14750	17750	10930			*17130	10740	(25.0)
-4.5 m (-14.8 ft)	kg	*18100	*18100	*13040	10520	*9550	6920					*8810	6480	6.32
	lb	*39900	*39900	*28750	23190	*21050	15260					*19420	14290	(20.7)
-6.0 m (-19.7 ft)	kg													
	lb													

※ Note

1. Lifting capacity are based on SAE J1097 and ISO 10567.
2. Lifting capacity of the ROBEX series does not exceed 75% of tipping load with the machine on firm, level ground or 87% of full hydraulic capacity.
3. The lift-point is bucket mounting pin on the arm (without bucket).
4. *indicates load limited by hydraulic capacity.

※ Lifting capacities are based upon a standard machine conditions.
Lifting capacities will vary with different work tools, ground conditions and attachments.
The difference between the weight of a work tool attachment must be subtracted.
Consult your Hyundai dealer regarding the lifting capacities for specific work tools and attachments.

⚠ Failure to comply to the rated load can cause possible personal injury or property damage.
Make adjustments to the rated load as necessary for non-standard configurations.

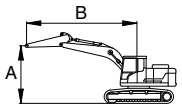
5. LIFTING CAPACITIES

1) HX300HD

Unit : mm

Model	Boom	Boom	Arm	Counterweight	Shoe	Dozer		Outrigger	
	Type	Length	Length	Weight (kg)	Width	Front	Rear	Front	Rear
HX300HD	Mono	6250	3050	5200	600	-	-	-	-

· : Rating over-front · : Rating over-side or 360 degree



Lift-point height (A)		Lift-point radius (B)										At max. reach		
		3.0 m (9.8 ft)		4.5 m (14.8 ft)		6.0 m (19.7 ft)		7.5 m (24.6 ft)		9.0 m (29.5 ft)		Capacity		Reach
														m (ft)
7.5 m (24.6 ft)	kg											*4410	*4410	7.38
	lb											*9720	*9720	(24.2)
6.0 m (19.7 ft)	kg							*6490	5710			*4220	*4220	8.30
	lb							*14310	12590			*9300	*9300	(27.2)
4.5 m (14.8 ft)	kg			*9450	*9450	*7760	*7760	*6980	5540			*4210	4200	8.86
	lb			*20830	*20830	*17110	*17110	*15390	12210			*9280	9260	(29.1)
3.0 m (9.8 ft)	kg			*12510	11250	*9210	7400	*7720	5320	*5490	4000	*4340	3900	9.14
	lb			*27580	24800	*20300	16310	*17020	11730	*12100	8820	*9570	8600	(30.0)
1.5 m (4.9 ft)	kg			*14900	10490	*10550	7000	8210	5110	*6190	3900	*4640	3790	9.17
	lb			*32850	23130	*23260	15430	18100	11270	*13650	8600	*10230	8360	(30.1)
0.0 m (0.0 ft)	kg			*15940	10170	11280	6740	8040	4950			*5160	3870	8.94
	lb			*35140	22420	24870	14860	17730	10910			*11380	8530	(29.3)
-1.5 m (-4.9 ft)	kg	*11100	*11100	*15950	10110	11160	6640	7970	4890			*6050	4180	8.44
	lb	*24470	*24470	*35160	22290	24600	14640	17570	10780			*13340	9220	(27.7)
-3.0 m (-9.8 ft)	kg	*17910	*17910	*15100	10220	11210	6690	8050	4960			*7770	4870	7.61
	lb	*39480	*39480	*33290	22530	24710	14750	17750	10930			*17130	10740	(25.0)
-4.5 m (-14.8 ft)	kg	*18100	*18100	*13040	10520	*9550	6920					*8810	6480	6.32
	lb	*39900	*39900	*28750	23190	*21050	15260					*19420	14290	(20.7)
-6.0 m (-19.7 ft)	kg													
	lb													

※ Note

1. Lifting capacity are based on SAE J1097 and ISO 10567.
2. Lifting capacity of the ROBEX series does not exceed 75% of tipping load with the machine on firm, level ground or 87% of full hydraulic capacity.
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Consult your Hyundai dealer regarding the lifting capacities for specific work tools and attachments.

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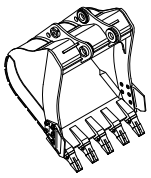
Make adjustments to the rated load as necessary for non-standard configurations.

6. BUCKET SELECTION GUIDE

1) GENERAL BUCKET



1.50 m³ SAE
heaped bucket

Capacity		Width		Weight	Recommendation				
					6.25 m (20' 6") boom				10.2 m (33' 6") boom
SAE heaped	CECE heaped	Without side cutter	With side cutter		2.1 m arm (6' 11")	2.5 m arm (8' 2")	3.05 m arm (10' 0")	3.75 m arm (12' 4")	7.85 m arm (25' 9")
1.50 m³ (1.96 yd³)	1.30 m³ (1.70 yd³)	1490 mm (59")	1610 mm (63.0")	1080 kg (2380 lb)	●	◐	◐	■	X

★ : Long reach bucket

- ● Applicable for materials with density of 2100 kg/m³ (3500 lb/yd³) or less
- ◐ Applicable for materials with density of 1800 kg/m³ (3000 lb/yd³) or less
- ■ Applicable for materials with density of 1500 kg/m³ (2500 lb/yd³) or less
- ▲ Applicable for materials with density of 1200 kg/m³ (2000 lb/yd³) or less
- X Not recommended

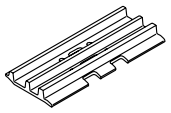
※ These recommendations are for general conditions and average use.
Work tools and ground conditions have effects on machine performance.
Select an optimum combination according to the working conditions and the type of work that is being done.
Consult your Hyundai dealer for information on selecting the correct boom−arm−bucket combination.

7. UNDERCARRIAGE

1) TRACKS

X-leg type center frame is integrally welded with reinforced box-section track frames. The design includes dry tracks, lubricated rollers, idlers, sprockets, hydraulic track adjusters with shock absorbing springs and assembled track-type tractor shoes with triple grousers.

2) TYPES OF SHOES

Model	Shapes		Triple grouser			
						
HX300HD	Shoe width	mm (in)	600 (24)	700 (28)	800 (32)	-
	Operating weight	kg (lb)	30200 (66580)	30770 (67840)	31150 (68670)	-
	Ground pressure	kgf/cm^2 (psi)	0.58 (8.27)	0.51 (7.22)	0.45 (6.4)	-
	Overall width	mm (ft-in)	3200 (10' 6")	3300 (10' 10")	3400 (11' 1")	-

3) NUMBER OF ROLLERS AND SHOES ON EACH SIDE

Item	Quantity
Carrier rollers	2 EA
Track rollers	9 EA
Track shoes	48 EA

4) SELECTION OF TRACK SHOE

Suitable track shoes should be selected according to operating conditions.

Method of selecting shoes

Confirm the category from the list of applications in **table 2**, then use **table 1** to select the shoe. Wide shoes (categories B and C) have limitations on applications. Before using wide shoes, check the precautions, then investigate and study the operating conditions to confirm if these shoes are suitable.

Select the narrowest shoe possible to meet the required flotation and ground pressure. Application of wider shoes than recommendations will cause unexpected problem such as bending of shoes, crack of link, breakage of pin, loosening of shoe bolts and the other various problems.

※ Table 1

Track shoe	Specification	Category
600 mm triple grouser	Standard	A
700 mm triple grouser	Option	B
700 mm double grouser	Option	B
800 mm triple grouser	Option	C
800 mm triple grouser (long reach)	Standard	C

※ Table 2

Category	Applications	Precautions
A	Rocky ground, river beds, normal soil	· Travel at low speed on rough ground with large obstacles such as boulders or fallen trees or a wide range of general civil engineering work
B	Normal soil, soft ground	· These shoes cannot be used on rough ground with large obstacles such as boulders or fallen trees · Travel at high speed only on flat ground · Travel slowly at low speed if it is impossible to avoid going over obstacles
C	Extremely soft ground (swampy ground)	· Use the shoes only in the conditions that the machine sinks and it is impossible to use the shoes of category A or B · These shoes cannot be used on rough ground with large obstacles such as boulders or fallen trees · Travel at high speed only on flat ground · Travel slowly at low speed if it is impossible to avoid going over obstacles

8. SPECIFICATIONS FOR MAJOR COMPONENTS

1) ENGINE

Item	Specification
Model	Cummins C8.3
Type	4-cycle turbocharged, charge air cooled diesel engine
Cooling method	Water cooling
Number of cylinders and arrangement	6 cylinders, in-line
Firing order	1-5-3-6-2-4
Combustion chamber type	Direct injection type
Cylinder bore × stroke	114 × 134.9 mm (4.49" × 5.31")
Piston displacement	8290 cc (506 cu in)
Compression ratio	18 : 1
Rated net horse power (SAE J1349)	255 Hp (190 kW) at 2200 rpm
Rated gross horse power (SAE J1995)	260 Hp (194 kW) at 2200 rpm
Maximum torque	124 kgf · m (899 lbf · ft) at 1300 rpm
Engine oil quantity	26.5 ℓ
Wet weight	604 kg
High idling speed	2450 ± 50 rpm
Low idling speed	850 ± 100 rpm
Rated fuel consumption	151 g/Hp · hr at 1400 rpm
Starting motor	24 V-7.2 kW
Alternator	24 V-90 A
Battery	2 × 12 V × 150 Ah

2) MAIN PUMP

Item	Specification
Type	Variable displacement tandem axis piston pumps
Capacity	2 × 154 cc/rev
Maximum pressure	350 kgf/cm² (4980 psi) [380 kgf/cm² (5400 psi)]
Rated oil flow	2 × 285 ℓ/min (75.3 U.S. gpm / 62.7 U.K. gpm)

[ ] : Power boost

3) GEAR PUMP

Item	Specification
Type	Fixed displacement gear pump single stage
Capacity	15 cc/rev
Maximum pressure	40 kgf/cm^2 (570 psi)
Rated oil flow	27.75 ℓ /min (7.3 U.S. gpm/7.1 U.K. gpm)

4) MAIN CONTROL VALVE

Item		Specification
Type		10 spools
Operating method		Hydraulic pilot system
Main relief valve pressure		350 kgf/cm^2 (4980 psi) [380 kgf/cm^2 (5400 psi)] *1 350 kgf/cm^2 (4980 psi) [Not applied power boost]
Port relief valve pressure	Boom	400 kgf/cm^2 (5690 psi)
	Arm	400 kgf/cm^2 (5690 psi), *1 250 kgf/cm^2 (3560 psi)
	Bucket	400 kgf/cm^2 (5690 psi), *1 270 kgf/cm^2 (3840 psi)

[ ] : Power boost *1 : Long reach only

5) SWING MOTOR

Item	Specification
Type	Axial piston motor
Capacity	156.9 cc/rev
Relief pressure	300 kgf/cm^2 (4270 psi)
Braking system	Automatic, spring applied hydraulic released
Braking torque	84.4 kgf · m (610 lbf · ft) over
Brake release pressure	36.6 kgf/cm^2 (519 psi) below
Reduction gear type	2 - stage planetary

6) TRAVEL MOTOR

Item	Specification
Type	Variable displacement axial piston motor
Capacity	282.6/156.9 cc/rev
Relief pressure	350 kgf/cm^2 (4980 psi)
Braking system	Automatic, spring applied hydraulic released
Braking torque	134 kgf · m (969 lbf · ft)
Brake release pressure	17 kgf/cm^2 (242 psi)
Reduction gear type	2-stage planetary

7) CYLINDER

Item		Specification
Boom cylinder	Bore dia × Stroke	Ø140 × 1465 mm
	Cushion	Extend only
Arm cylinder	Bore dia × Stroke	Ø150 × 1765 mm
	Cushion	Extend and retract
Bucket cylinder	Bore dia × Stroke	Ø135 × 1185 mm
	Cushion	Extend only
Bucket cylinder (long reach)	Bore dia × Stoke	Ø100 × 870 mm
	Cushion	Extend only

※ Discoloration of cylinder rod can occur when the friction reduction additive of lubrication oil spreads on the rod surface.

※ Discoloration does not cause any harmful effect on the cylinder performance.

8) SHOE

Item		Width	Ground pressure	Link quantity	Overall width
HX300HD	Standard	600 mm (24")	0.58 kgf/cm² (8.27 psi)	48	3200 mm (10' 6")
	Option	700 mm (28")	0.51 kgf/cm² (7.22 psi)	48	3300 mm (10' 10")
		800 mm (32")	0.45 kgf/cm² (6.40 psi)	48	3400 mm (11' 1")

9. RECOMMENDED OILS

HYUNDAI genuine lubricating oils have been developed to offer the best performance and service life for your equipment. These oils have been tested according to the specifications of HYUNDAI and, therefore, will meet the highest safety and quality requirements.

We recommend that you use only HYUNDAI genuine lubricating oils and grease officially approved by HYUNDAI.

Service point	Kind of fluid	Capacity ℓ (U.S. gal)	Ambient temperature °C(°F)
			-50 (-58) -30 (-22) -20 (-4) -10 (14) 0 (32) 10 (50) 20 (68) 30 (86) 40 (104)
Engine oil pan	Engine oil★1	26.5 (7.0)	★SAE 0W-40 ★SAE 0W-30 SAE 5W-30 SAE 10W-30 SAE 15W-40
Swing drive	Gear oil	11 (2.91)	★SAE 75W-90
Final drive		7.8×2 (2.1×2)	SAE 80W-90
Hydraulic tank	Hydraulic oil★3	Tank : 190 (50) System : 330 (87)	ISO VG 32 ISO VG 46, HBHO VG 46★3 ISO VG 68
Fuel tank	Diesel fuel	500 (132)	★ASTM D975 NO.1 ASTM D975 NO.2
Fitting (grease nipple)	Grease	As required	★NLGI NO.1 NLGI NO.2
Radiator (reservoir tank)	Mixture of antifreeze and soft water★2	27 (7.1)	Ethylene glycol base permanent type (50 : 50) ★Ethylene glycol base permanent type (60 : 40)

SAE : Society of Automotive Engineers
API : American Petroleum Institute
ISO : International Organization for Standardization
NLGI : National Lubricating Grease Institute
ASTM : American Society of Testing and Material

★ : Cold region
Russia, CIS, Mongolia
★1 : Meet or exceeds API CH-4 grade
★2 : Soft water
City water or distilled water
★3 : Hyundai Bio Hydraulic Oil

※ Using any lubricating oils other than HYUNDAI genuine products may lead to a deterioration of performance and cause damage to major components.

※ Do not mix HYUNDAI genuine oil with any other lubricating oil as it may result in damage to the systems of major components.

※ Do not use any engine oil other than that specified above.

※ For HYUNDAI genuine lubricating oils and grease for use in regions with extremely low temperatures, please contact HYUNDAI dealers.