

# DL300A

CONTENTS	PAGE
1. GENERAL SPECIFICATION.....	2
2. ENGINE SYSTEM.....	3
3. HYDRAULIC SYSTEM.....	6
4. DRIVE MECHANISM.....	8
5. HYDRAULIC CYLINDERS.....	13
6. FRONT.....	14
7. DIMENSIONS AND WORKING RANGE.....	16
8. PERFORMANCE DATA.....	20
9. NOISE LEVEL.....	21
10. USER SERVICE DATA.....	21
11. SUB GROUP WEIGHTS.....	22
12. LIFTING CAPACITY.....	22

MODEL

DL300A

1/22

# 1. GENERAL SPECIFICATION

ITEMS		UNIT	STD	OPT
OPERATING WEIGHT		<b>kg</b>	<b>17,640</b>	<b>18,030</b>
ENGINE (SAE J1995 Gross) (SAE J1349 Net)	RATED POWER (Gross)	<b>kW/rpm</b>	<b>156/2,100</b>	
	RATED POWER (Net)	<b>kW/rpm</b>	<b>156/2,100</b>	
	MAX. TORQUE (Gross)	<b>N.m/rpm</b>	<b>902/1,300</b>	
SYSTEM PRESSURE (WORK/STEER)		<b>bar</b>	<b>200/185</b>	
TRAVEL SPEED	FORWARD (1/2/3/4)	<b>km/h</b>	<b>6.0/11.6/21.4/32.3</b>	
	REVERSE (1/2/3)	<b>km/h</b>	<b>6.3/12.2/22.3</b>	
FRONT SPEED (RAISE/DUMP/LOWER)		<b>sec</b>	<b>6.0/1.8/3.3</b>	
GRADEABILITY		<b>%(°)</b>	<b>58(30)</b>	
TIRE SIZE		<b>-</b>	<b>23.5-25 -16PR(L3)</b>	
WORKING RANGE	BUCKET CAPACITY (SAE HEAPED)	<b>m<sup>3</sup></b>	<b>3.0 BOT</b>	<b>3.2 BOC</b>
	DUMP HEIGHT AT 45°	<b>mm</b>	<b>2,780</b>	<b>2,850</b>
	DUMP REACH AT 45°	<b>mm</b>	<b>1,290</b>	<b>1,165</b>
	MAX. DUMP ANGLE (fully raised)	<b>deg</b>	<b>47</b>	←
	MAX. TILT ANGLE (on ground)	<b>deg</b>	<b>45</b>	←
	MAX. TILT ANGLE (fully raised)	<b>deg</b>	<b>58</b>	←
	MAX. TILT ANGLE (at carry)	<b>deg</b>	<b>48</b>	←
	BUCKET HINGE HEIGHT	<b>mm</b>	<b>3,980</b>	←
	DIGGING DEPTH (0° level)	<b>mm</b>	<b>80</b>	<b>120</b>
TRAVEL DIMENSION	OVERALL LENGTH	<b>mm</b>	<b>8,240</b>	<b>8,100</b>
	OVERALL WIDTH (bucket)	<b>mm</b>	<b>2,920</b>	←
	OVERALL HEIGHT	<b>mm</b>	<b>3,435</b>	←
	GROUND CLEARANCE	<b>mm</b>	<b>460</b>	←
	WHEEL BASE	<b>mm</b>	<b>3,200</b>	←
	TREAD	<b>mm</b>	<b>2,150</b>	←
BREAKOUT FORCE		<b>kN</b>	<b>168</b>	<b>167</b>
RATED OPERATING LOAD		<b>kg</b>	<b>5,940</b>	<b>5,748</b>
MAX. STEERING ANGLE		<b>deg</b>	<b>40</b>	
TURNING RADIUS (Tire edge/Count weight edge)		<b>mm</b>	<b>5,800/5,945</b>	
SOUND LEVEL in CAB (ISO 6396)		<b>dB(A)</b>	<b>72</b>	
EXTERNAL SOUND LEVEL(ISO6395, 2000/14/EC)		<b>dB(A)</b>	<b>110*</b>	
FUEL TANK CAPACITY		<b>Liter</b>	<b>304</b>	
Every dimensions, weights, and performance data based on SAE J732C and SAE742B. ROPS/FOPS Cabin is Standard. <b>STD = 3.0 BOT, OPT = 3.2 BOC</b> * = without low noise cover				

MODEL

**DL300A**

**2/22**

## 2. ENGINE SYSTEM

### 2.1) ENGINE

EMISSION	<b>TIER 2(STAGE 2)</b>
MAKER & MODEL	<b>DOOSAN DE08TIS</b>
RATED HORSE POWER	<b>156kw (212PS)/2,100 RPM 156kw (209HP)/2,100 RPM</b>
MAX. TORQUE	<b>92kg.m/1,300 RPM</b>
FUEL CONSUMPTION	<b>160 g/ps.hr @ RATED SPEED</b>
TYPE	<b>TURBO CHARGED, AIR TO AIR INTERCOOLED, DIRECT INJECTION</b>
DISPLACEMENT	<b>8,070 cc</b>
No. OF CYLINDER	<b>6</b>
BORE DIA. & STROKE	<b>Φ111 x 139 mm</b>
HIGH IDLE SPEED	<b>2,300 ± 50 rpm</b>
LOW IDLE SPEED	<b>950 ± 25 rpm</b>
STARTING MOTOR	<b>24 V x 6.6 Kw</b>

### 2.2) ALTERNATOR

VOLTAGE	:	<b>24 V</b>
RATING AMPERES	:	<b>60 A</b>

### 2.3) BATTERY

SYSTEM VOLTAGE	:	<b>24 V</b>
QUANTITY	:	<b>12 V x 2</b>
CAPACITY (AMP)	:	<b>150 AH</b>

### 2.4) AIR CLEANER

TYPE	:	<b>THREE-STAGE CLEANING, DRY DOUBLE ELEMENT</b>
FILTRATION AREA	:	<b>16.6 m<sup>2</sup> (14.7 + 1.85)</b>
SIZE (DIA. X LENGTH)	:	<b>Φ381 mm x 530 mm</b>
INITIAL AIR RESTRICTON	:	<b>95mm H<sub>2</sub>O at 16m<sup>3</sup>/min AIR FLOW</b>

### 2.5) PRE CLEANER

AIR RESTRICTION RATE	:	<b>65mm H<sub>2</sub>O at 16m<sup>3</sup>/min AIR FLOW</b>
AIR CONTAMINANTS	:	<b>84%(A.C COARSE DUST)</b>

### 2.6) FAN (Driven by hydraulic motor)

TYPE	:	<b>SUCKER, 8 BLADE, PLASTIC</b>
SIZE	:	<b>Φ863.6 mm (34 inch)</b>
RPM AT RATED ENGINE RPM	:	<b>400~1,300 MAX. (CONTINUOUS)</b>

MODEL	<b>DL300A</b>		<b>3/22</b>
-------	---------------	--	-------------

2.7) RADIATOR

TYPE (HEAT REJECTION AREA) : **Corrugated FIN with Cu MATERIAL, AIR COOL**  
HEAT REJECTION CAPACITY : **123,000 kcal /hr**

2.8) TRANSMISSION OIL COOLER

TYPE (HEAT REJECTION AREA) : **Corrugated FIN with AL MATERIAL, AIR COOL**  
HEAT REJECTION CAPACITY : **78,000 kcal/hr**

2.9) HYDRAULIC OIL COOLER

TYPE (HEAT REJECTION AREA) : **Corrugated FIN with AL MATERIAL, AIR COOL**  
HEAT REJECTION CAPACITY : **28,000 kcal/hr**

2.10) CHARGE AIR COOLER

TYPE (HEAT REJECTION AREA) : **Corrugated FIN with AL MATERIAL, AIR COOL**  
HEAT REJECTION CAPACITY : **30,000 kcal/hr**

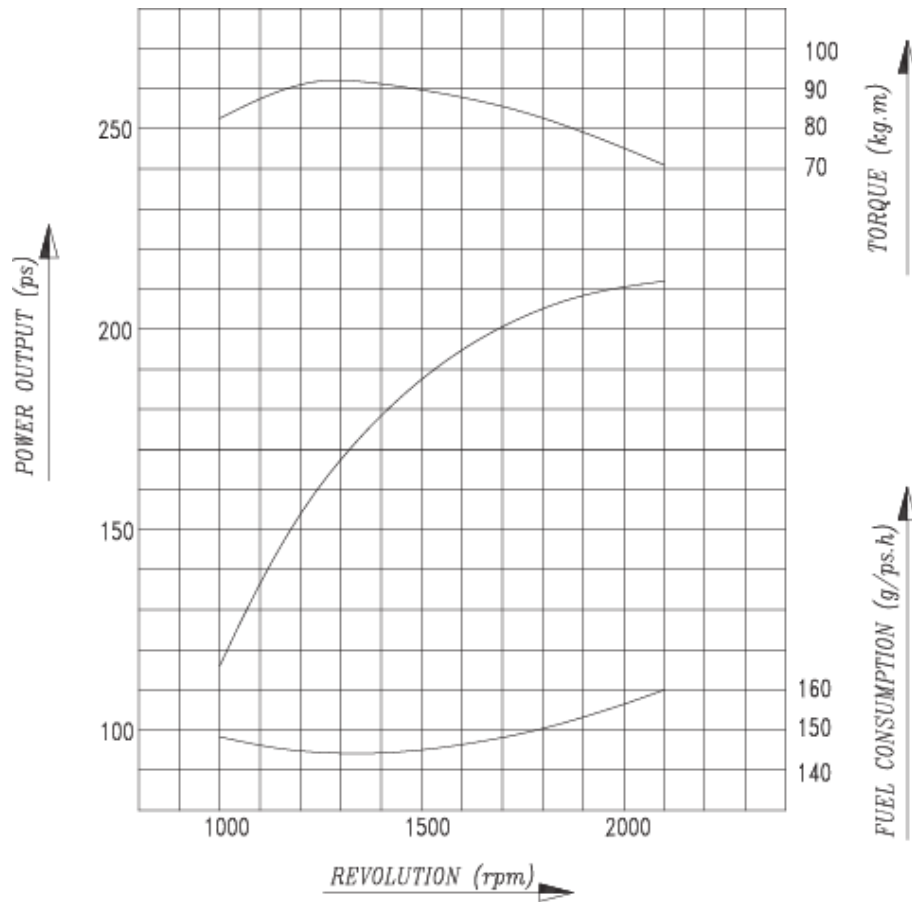
MODEL

DL300A

4/22

## 2.11) ENGINE PERFORMANCE CURVE

CONDITION	SPECIFICATION
ATMOSPHERIC PRESSURE	<b>760 mmHg (20 °C)</b>
WARMING UP	<b>SUFFICIENT</b>
COOLING FAN	<b>NOT INSTALLED</b>
ALTERNATOR	<b>NOT INSTALLED</b>
AIR CLEANER	<b>INSTALLED</b>
MUFFLER	<b>INSTALLED</b>



PERFORMANCE CONDITION	KS-R1004
POWER (MAX, RATED)	<b>156 kW/ 2,100 rpm</b>
MAX. TORQUE	<b>902 N.m/ 1,300 rpm</b>
FUEL CONSUMPTION (MAX, RATED)	<b>160 g/ps.h</b>

MODEL	DL300A		5/22
-------	--------	--	------

### 3. HYDRAULIC SYSTEM

3.1) MAIN PUMP	
TYPE	: <b>TRIPLE TANDEM VANE PUMP</b>
QUANTITY	: <b>1</b>
DISPLACEMENT	: <b>63.8/70.3/19.8 (cc/rev)</b>
MAX. FLOW RATE	: <b>132/145/41 l/min</b>
TANK PRESSURIZING DEVICE	: <b>SEMI PRESSURISED (AIR BREATHER)</b>
3.2) CONTROL VALVE	
TYPE	: <b>PILOT CONTROL w/ FLOAT</b>
SPOOL NO. OF SPOOLS(OPTION)	: <b>2 (3)</b>
SPOOL ARRANGEMENT	: <b>LOADER ARM - BUCKET</b>
RELIEF VALVE PRESSURE	: <b>200 bar</b>
OVERLOAD RELIEF VALVE PRESS	: <b>230 bar</b>
3.3) REMOTE CONTROL VALVE (STANDARD)	
TYPE	: <b>PILOT (WITH MAGNETIC COILS)</b>
PRESSURE /	: <b>20 bar AT FULL CONTROLLED STROKE</b>
STROKE CHARACTER	: <b>28 bar AT DETENT</b>
3.4) BRAKE & PILOT & FAN MOTOR SUPPLY VALVE	
BRAKE CHARGING	: <b>120 bar</b>
PILOT REDUCING PRESSURE	: <b>MAX. 28 bar</b>
SOLENOID VALVE Q'TY	: <b>PILOT CUT-OFF-1, PARKING -1</b>
SOLENOID VOLTAGE	: <b>DC 24V</b>
3.5) HYDRAULIC FAN MOTOR	
TYPE	: <b>GEAR MOTOR WITH RELIEF &amp; MAKE UP CHECK VALVE</b>
DISPLACEMENT	: <b>23 cc/rev</b>
RELIEF PRESSURE	: <b>120 bar</b>
3.6) AIR BREATHER	
RELIEF PRESSURE	: <b>0.5 bar</b>
VACUUM RELIEF	: <b>0.04 ~ 0.05 bar</b>
3.7) ACCUMULATOR ; BRAKE	
NITROGEN CHARGE PRESSURE / VOLUME	: <b>30 bar / 0.75 L</b>
3.8) ACCUMULATOR ; PILOT	
NITROGEN CHARGE PRESSURE / VOLUME	: <b>15 bar / 0.32 L</b>
3.9) ACCUMULATOR ; LIS(OPTION)	
NITROGEN CHARGE PRESSURE / VOLUME	: <b>18 bar / 4 L</b>

MODEL

**DL300A**

**6/22**

### 3.10) FILTERS

TYPE (RETURN)	:	<b>PAPER ELEMENT</b>
SIZE	:	<b>10 <math>\mu</math></b>
MAKER	:	<b>HYDAC</b>
TYPE (PILOT,FAN,BRAKE)	:	<b>GLASS FIBER</b>
SIZE	:	<b>10 <math>\mu</math></b>
TYPE (SUCTION)	:	<b>PAPER ELEMENT</b>
SIZE	:	<b>177 <math>\mu</math></b>

### 3.11) DC MOTOR-PUMP ; EMERGENCY STEER (OPTION)

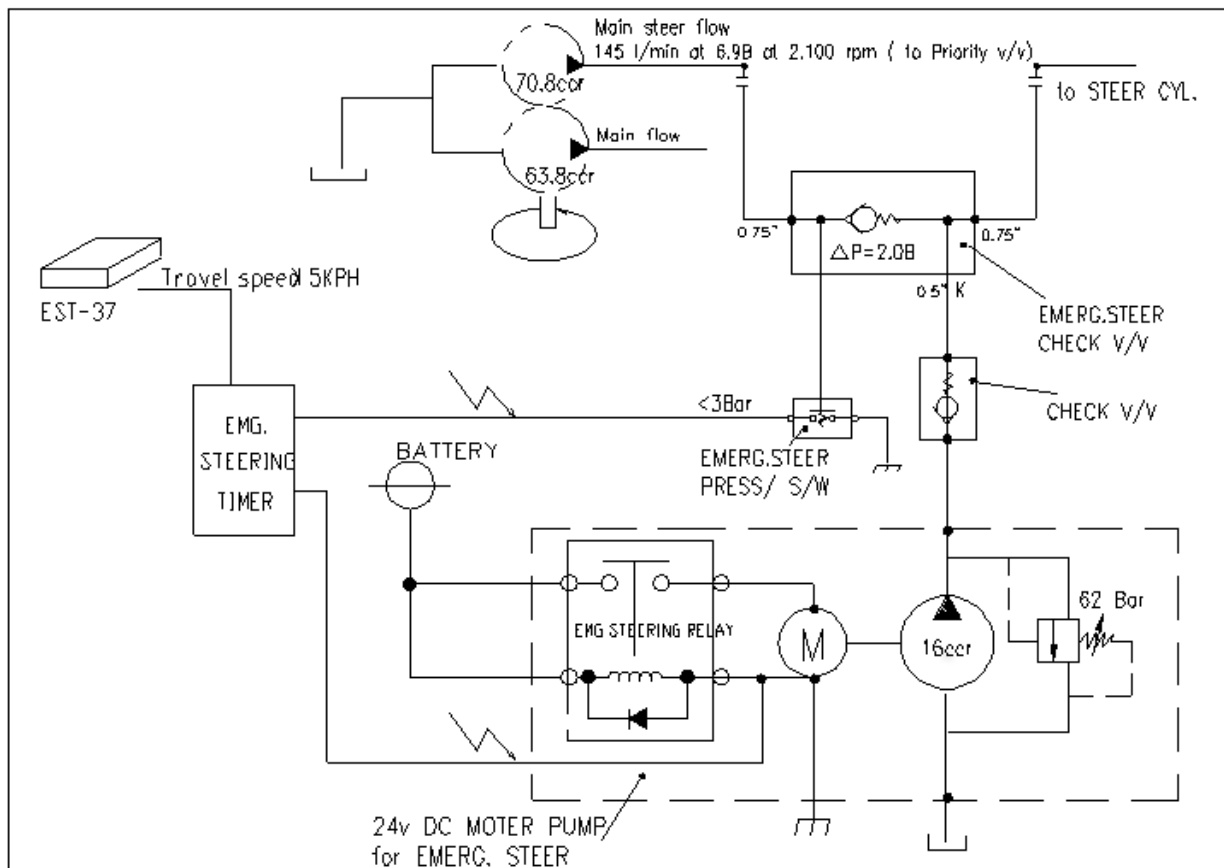
#### 3.11.1) PUMP

TYPE	:	<b>GEAR, BUILT IN CHECK AND RELIEF V/V</b>
THEORETICAL DISPLACEMENT	:	<b>16 cc/rev</b>
RELIEF PRESSURE	:	<b>62 kgf/cm<sup>2</sup></b>
RATED SPEED	:	<b>3,040 rev/min</b>

#### 3.11.2) ELECTRIC MOTOR

TYPE	:	<b>24V DC, DOUBLE TERMINAL, WATER SEALED, MEDIUM DUTY w/ FOOT MOUNTING BRACKET BUILT IN STARTER SWITCH</b>
------	---	--

#### 3.11.3) EMERGENCY STEER CIRCUIT



MODEL

DL300A

7/22

## 4. DRIVE MECHANISM

### 4.1) TRAVELLING SYSTEM

#### 4.1.1) TRANSMISSION

TYPE	:	<b>4 SPEED, FULL AUTO POWER-SHIFT, COUNTERSHAFT, ENGINE MOUNTED w/ FLEXIBLE PLATE</b>
TORQUE CONVERTER STALL RATIO	:	<b>3.06</b>
TORQUE CONVERTER SIZE	:	<b>340 mm</b>
CHARGING PUMP FLOW	:	<b>105 l/min at 2,000 rpm</b>
HYDRAULIC PUMP P.T.O RATIO	:	<b>1.0</b>
POWER SHIFT CONTROL PRESSURE	:	<b>16~18 kgf/cm<sup>2</sup></b>
CONVERTER SAFETY RELIEF PRESSURE	:	<b>11 kgf/cm<sup>2</sup></b>
CONVERTER OUTPUT LIMIT TORQUE	:	<b>168.4 Kg.m</b>
MAX. ROTATING SPEED	:	<b>2350 rpm</b>
SHIFT CONTROL	:	<b>ELECTRIC SHIFT WITH PROPORTIONAL VALVE, SOLENOID VALVES (DC 24 V)</b>
CONTROL UNIT	:	<b>EST - 37</b>
OUTPUT FLANGE	:	<b>FRONT – 7C MECHANICS REAR - 7C MECHANICS</b>
CONTROL CIRCUIT (NEXT PAGE)		

#### 4.1.2) PROPELLER SHAFT

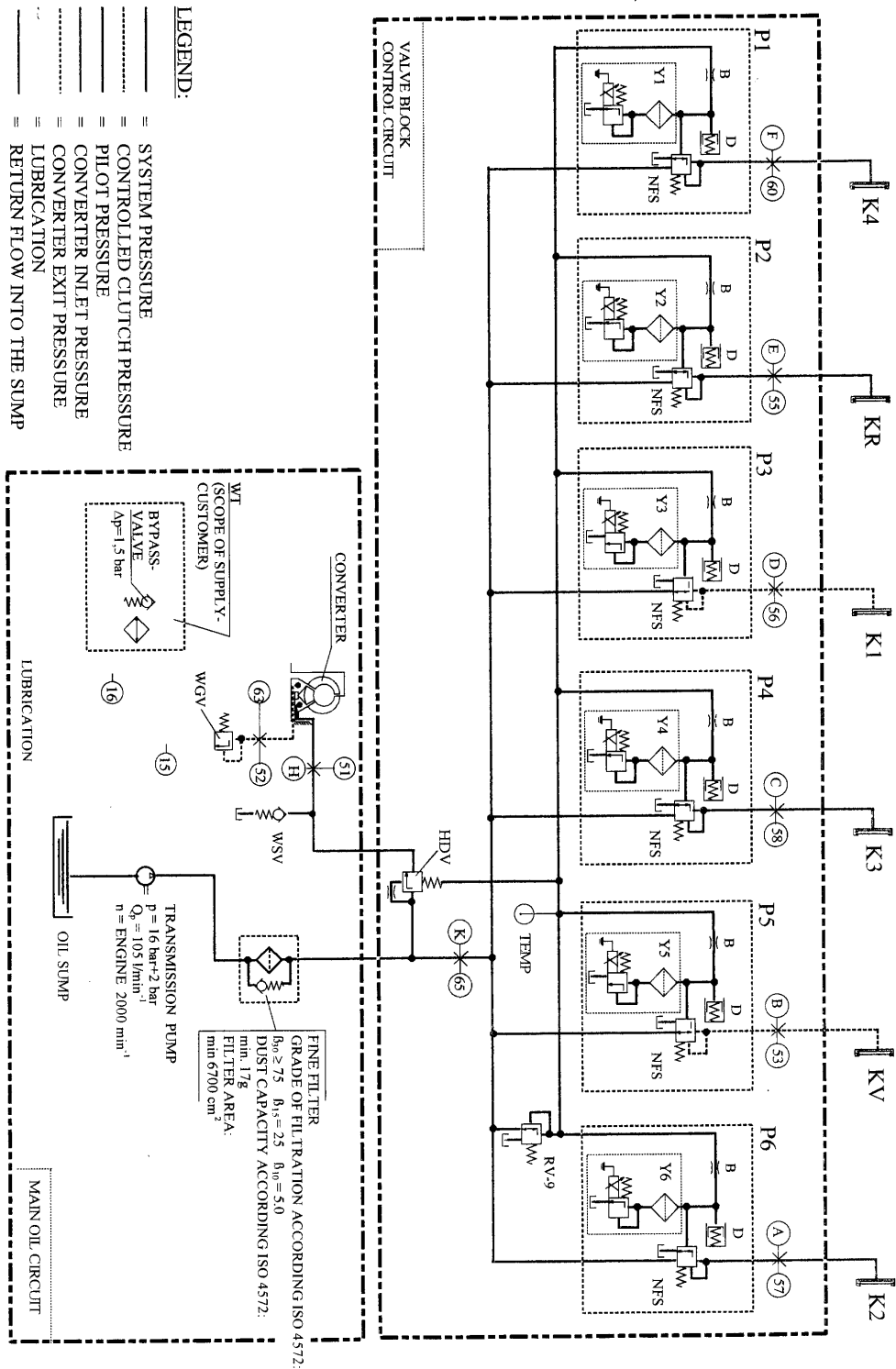
	FRONT	ARTIC	REAR
MAX. ALLOWABLE TORQUE	<b>907 Kg.m</b>	<b>907 Kg.m</b>	<b>750 Kg.m</b>
MIN. JOINT ANGLE	<b>23°/23°</b>	<b>23°/23°</b>	<b>23°/23°</b>
MAX. PHASE MISALIGNMENT	<b>±1°</b>	<b>±1°</b>	<b>±1°</b>
MAX. SPEED	<b>7,000 rpm</b>	<b>7,000 rpm</b>	<b>7,000 rpm</b>
COUPLING DIMENSION	<b>7C</b>	<b>7C</b>	<b>7C</b>

MODEL

**DL300A**

**8/22**





MODEL

DL300A

9/22

4.1.3) FRONT AXLE  
 TYPE : **FULLY FLOATING PLANETARY-TYPE  
 HUB DRIVE FIXED MOUNTING**  
 OVERALL REDUCTION RATIO : **23.334**  
 AXLE LOAD (EMPTY) : **7,765 kg**  
 AXLE LOAD (BREAKOUT) : **30,275 kg**  
 WHEEL BOLT P.C.D : **Φ425 mm**  
 BRAKE TYPE : **WET DISC**  
 BRAKE TORQUE per WHEEL : **3,330 kg.m at 60 bar**  
 DRIVE FLANGE : **7C MECHANICS**

4.1.4) REAR AXLE  
 TYPE : **FULLY FLOATING PLANETARY-TYPE  
 HUB DRIVE TRUNNION MOUNTING**  
 OVERALL REDUCTION RATIO : **23.334**  
 AXLE LOAD (EMPTY) : **9,735 kg**  
 AXLE LOAD (BREAKOUT) : **12,775 kg**  
 WHEEL BOLT P.C.D : **Φ425 mm**  
 BRAKE TYPE : **WET DISC**  
 BRAKE TORQUE per WHEEL : **3,330 kg.m at 60 bar**  
 DRIVE FLANGE : **7C MECHANICS**

4.1.5) TYRE & WHEEL  
 TYPE : **TUBLESS, SINGLE**  
 TYPE SPEC. : **23.5 x 20-16PR(L3)**  
 RIM SPEC. : **19.5 x 25**  
 DISC OFFSET : **33.5 mm**  
 TYRE RADIUS (STATIC/DYNAMIC) : **760 / 810 mm**

4.1.6) TRAVELLING PERFORMANCE (REFER TO NEXT PAGE)  
 MAX. SPEED : **32.3 KPH**  
 MAX. TRACTIVE EFFORT : **17.7 TON**  
 GRADEABILITY : **30° (58%)**

MODEL

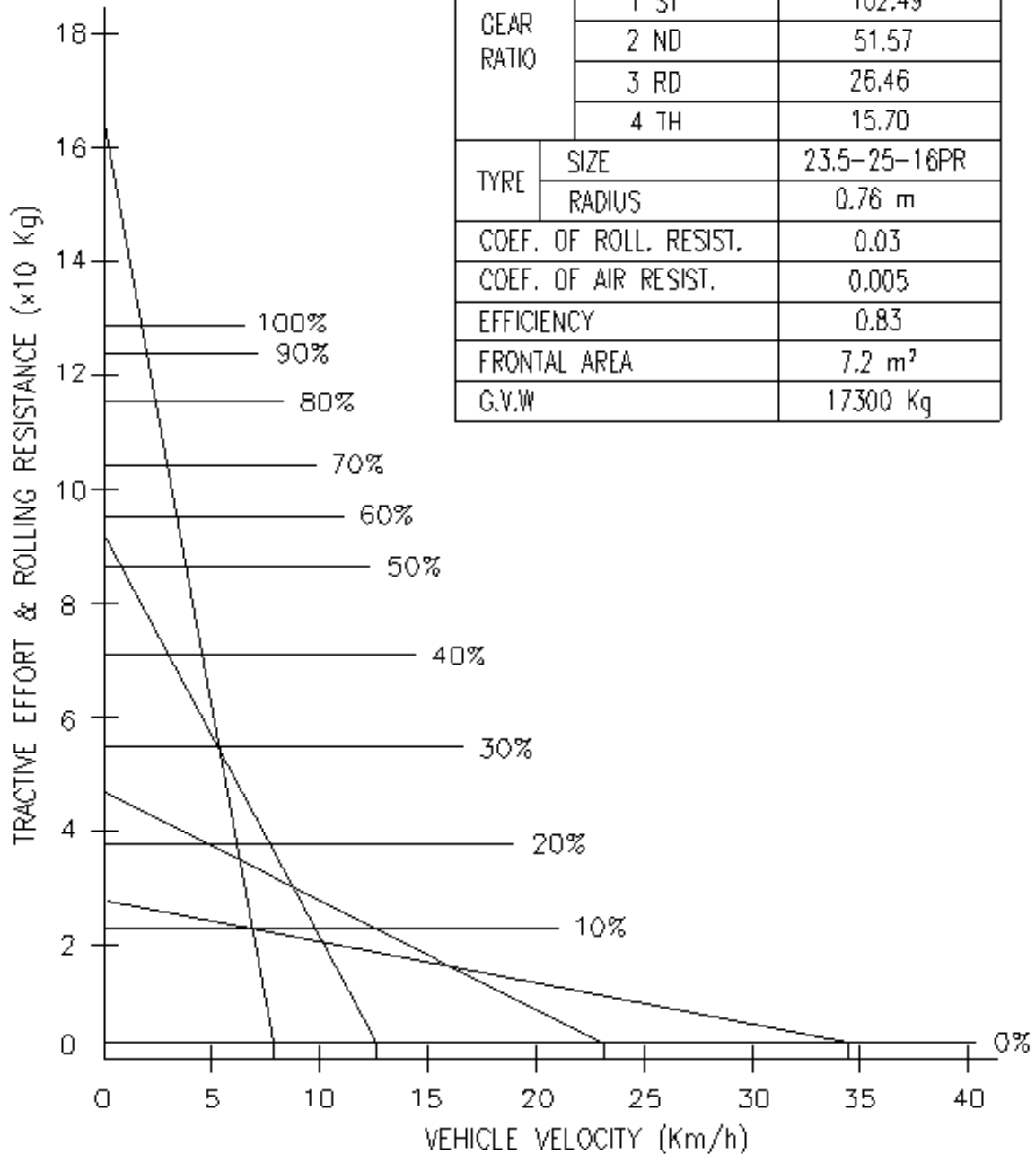
DL300A

10/22



# TRAVEL PERFORMANCE CURVE

CONST. EQUIP.



E/G	MAX. POWER	212ps/2100rpm
	MAX. TORQUE	92Kgm/1300rpm
GEAR RATIO	1 ST	102.49
	2 ND	51.57
	3 RD	26.46
	4 TH	15.70
TYRE	SIZE	23.5-25-16PR
	RADIUS	0.76 m
COEF. OF ROLL. RESIST.		0.03
COEF. OF AIR RESIST.		0.005
EFFICIENCY		0.83
FRONTAL AREA		7.2 m <sup>2</sup>
G.V.W		17300 Kg

MODEL

DL300A

11/22

## 4.2) BRAKE SYSTEM

### 4.2.1) BRAKE PUMP

TYPE	:	<b>VANE</b>
DISPLACEMENT	:	<b>19.8 cc/rev</b>
MAX. SUPPLY FLOW	:	<b>41 l/min</b>

### 4.2.2) SERVICE BRAKE VALVE (DUAL)

BRAKE PRESSURE	:	<b>60 bar</b>
PEDAL FORCE	:	<b>17 kg at 60 kgf/cm<sup>2</sup>, 175 mm RAD.</b>

### 4.2.3) PARKING BRAKE

TYPE	:	<b>SPRING-APPLIED OIL RELEASE ON FRONT DRIVE SHAFT</b>
MAX. PARKING TORQUE	:	<b>306 kg.m</b>

### 4.2.4) SYSTEM & PRESSURE

SYSTEM	:	<b>FULL HYDRAULIC, SEPARATE DUAL LINE</b>
SERVICE BRAKE PRESSURE	:	<b>60 kgf/cm<sup>2</sup></b>
PARKING BRAKE RELEASE	:	<b>120 kgf/cm<sup>2</sup></b>
BRAKE CHARGE PRESSURE	:	<b>120 kgf/cm<sup>2</sup></b>
BRAKE DISTANCE	:	<b>12.9 m at 36.5 kph</b>

## 4.3) STEERING SYSTEM

### 4.3.1) STEERING PUMP

TYPE	:	<b>VANE</b>
DISPLACEMENT	:	<b>70.3 cc/rev</b>
CONSTANT FLOW	:	<b>145 l/min</b>
RELIEF VALVE SET PRESSURE	:	<b>185 bar</b>

### 4.3.2) STEERING UNIT

TYPE	:	<b>LOAD SENSING, NON REACTION</b>
DISPLACEMENT	:	<b>120 cc/rev</b>

### 4.3.3) FLOW AMPLIFIER

TYPE	:	<b>FLOW AMPLIFIER. V/V</b>
CONTROL PRESSURE	:	<b>10.5 bar</b>
AMPLIFICATION FACTOR	:	<b>8(120*8=960cc/rev)</b>

### 4.3.4) ACCUMULATOR STEER

NITROGEN CHARGE PRESSURE / VOLUME	:	<b>35 bar / 0.16 L</b>
-----------------------------------	---	------------------------

### 4.3.5) STEERING CYLINDER

CUSHION STROKE	:	<b>38 mm</b>
----------------	---	--------------

MODEL

**DL300A**

12/22

## 5. HYDRAULIC CYLINDERS

	LIFT	BUCKET	STEER
QUANTITY	<b>2</b>	<b>1</b>	<b>2</b>
BORE (mm)	<b>150</b>	<b>200</b>	<b>80</b>
ROD DIA. (mm)	<b>85</b>	<b>105</b>	<b>40</b>
STROKE (mm)	<b>831</b>	<b>505</b>	<b>450</b>
CLOSED LENGTH (mm)	<b>1,325</b>	<b>1,030</b>	<b>860</b>
RETRACTING CUSHION	<b>X</b>	<b>X</b>	<b>O</b>
EXTENDING CUSHION	<b>X</b>	<b>X</b>	<b>X</b>
MAKER	<b>DONG YANG</b>	<b>DONG YANG</b>	<b>DONG YANG</b>

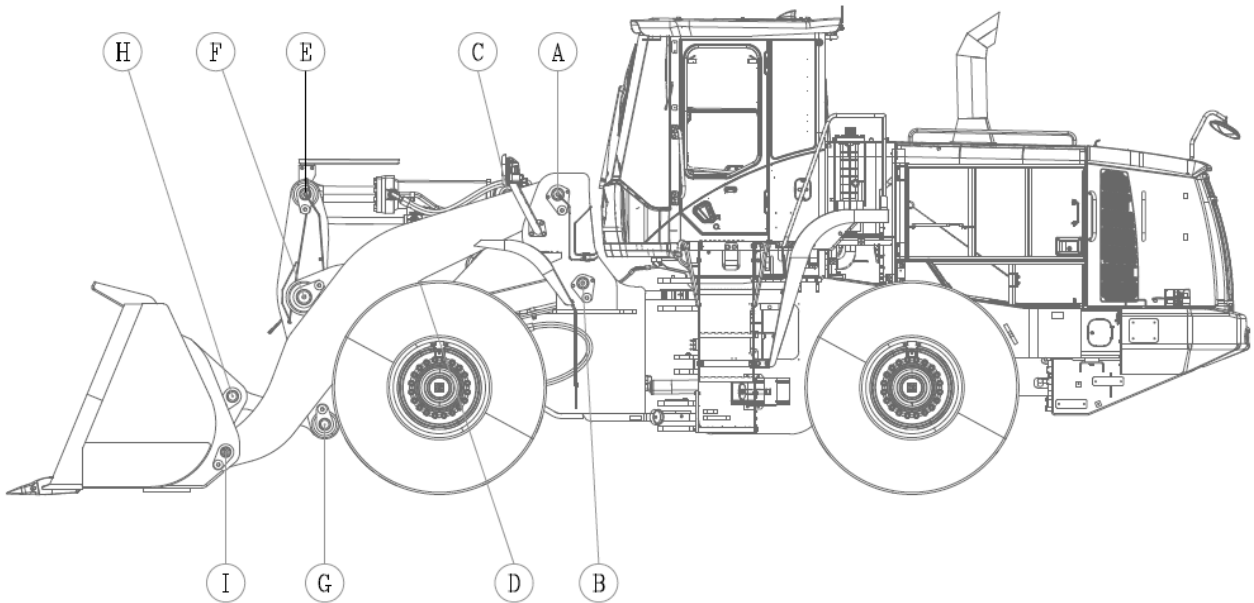
MODEL

**DL300A**

13/22

## 6. FRONT

### 6.1) FRONT LINKAGE PIN SIZES



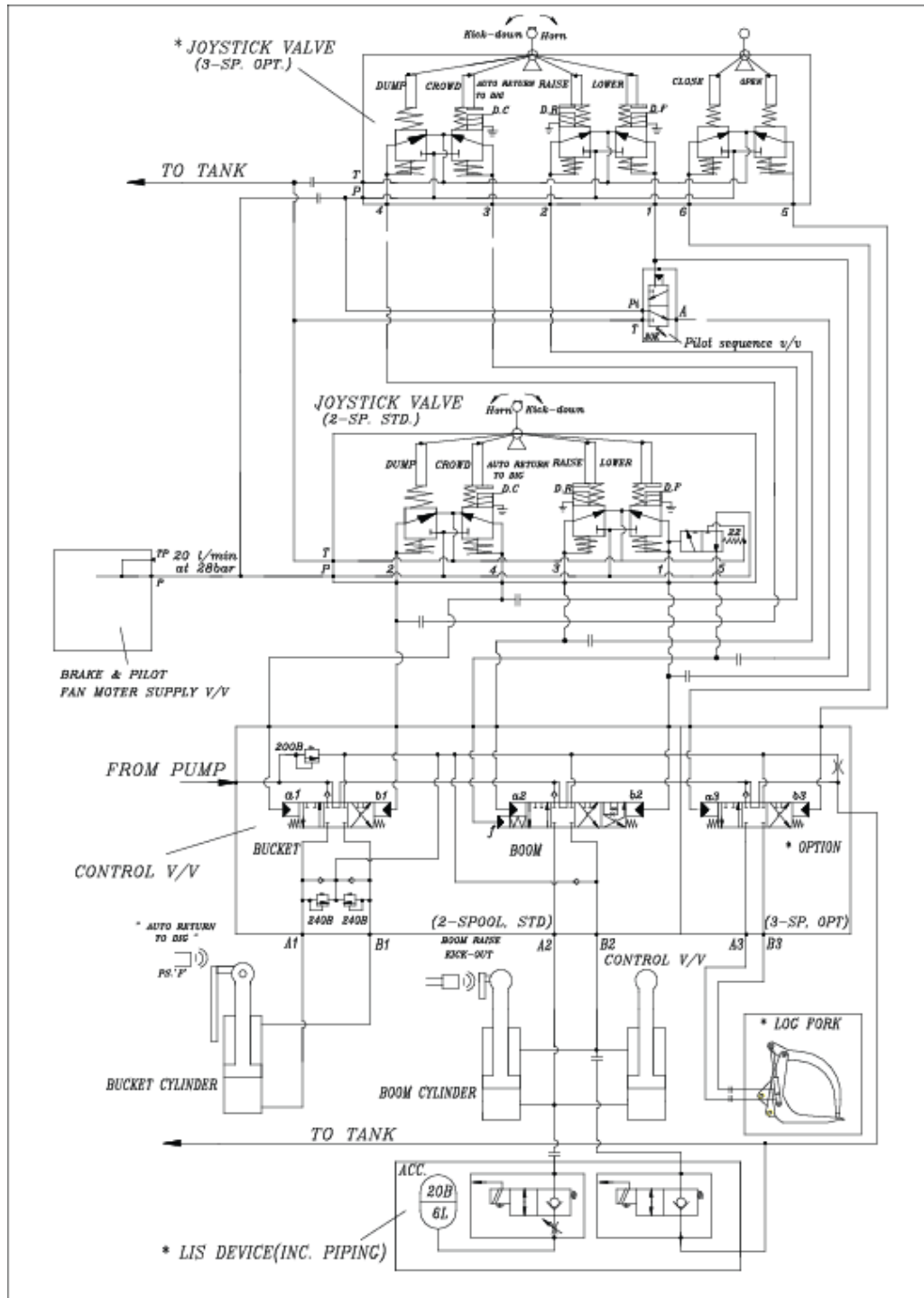
POINT	DIA. (mm)	LENGTH (mm)
A	<b>110</b>	<b>308</b>
B	<b>80</b>	<b>307</b>
C	<b>100</b>	<b>360</b>
D	<b>90</b>	<b>216</b>
E	<b>100</b>	<b>300</b>
F	<b>110</b>	<b>520</b>
G	<b>90</b>	<b>300</b>
H	<b>90</b>	<b>272</b>
I	<b>80</b>	<b>238</b>

MODEL

**DL300A**

14/22

## 6.2) OPTION PIPING

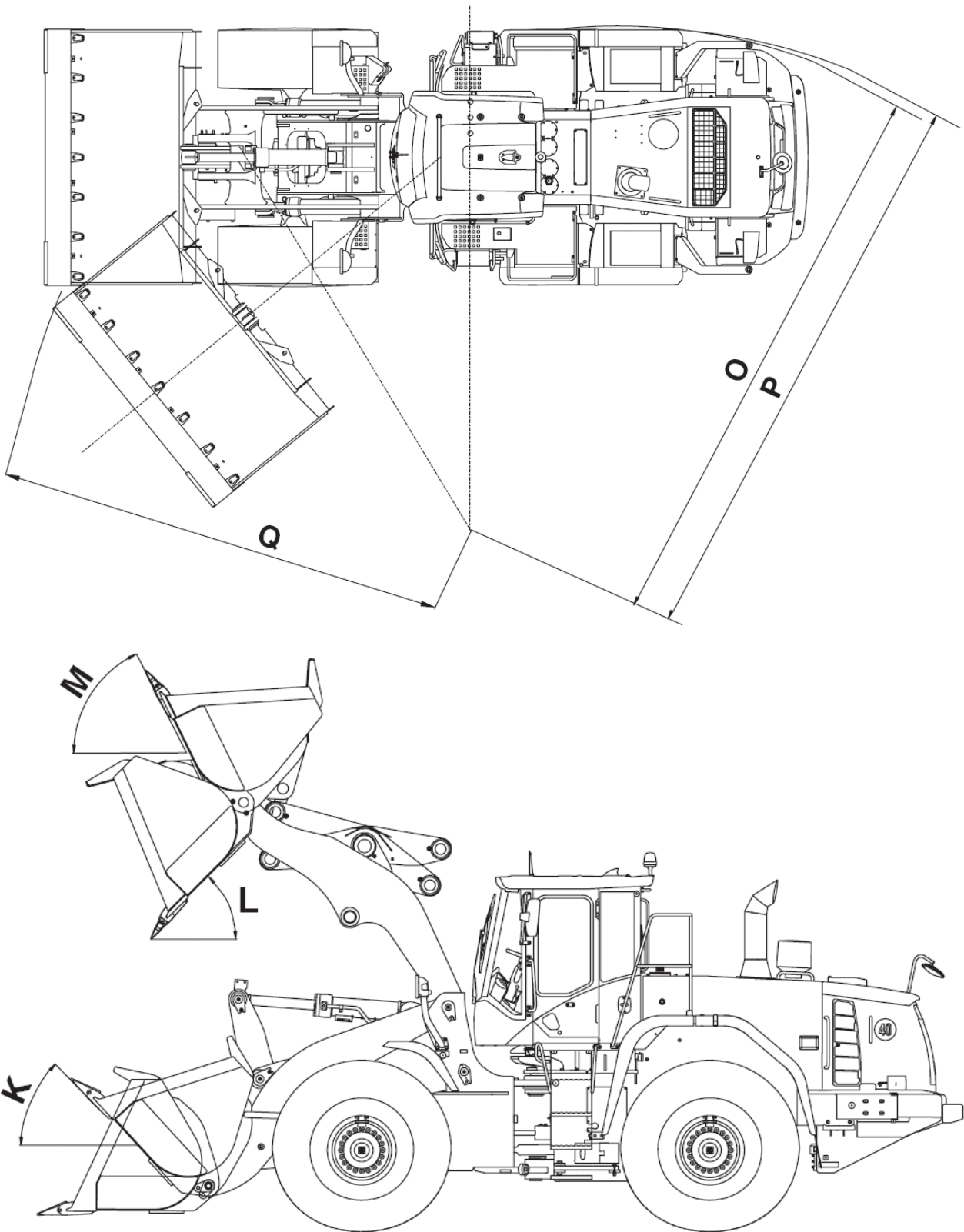


MODEL

DL300A

15/22

# 7. DIMENSIONS AND WORKING RANGE

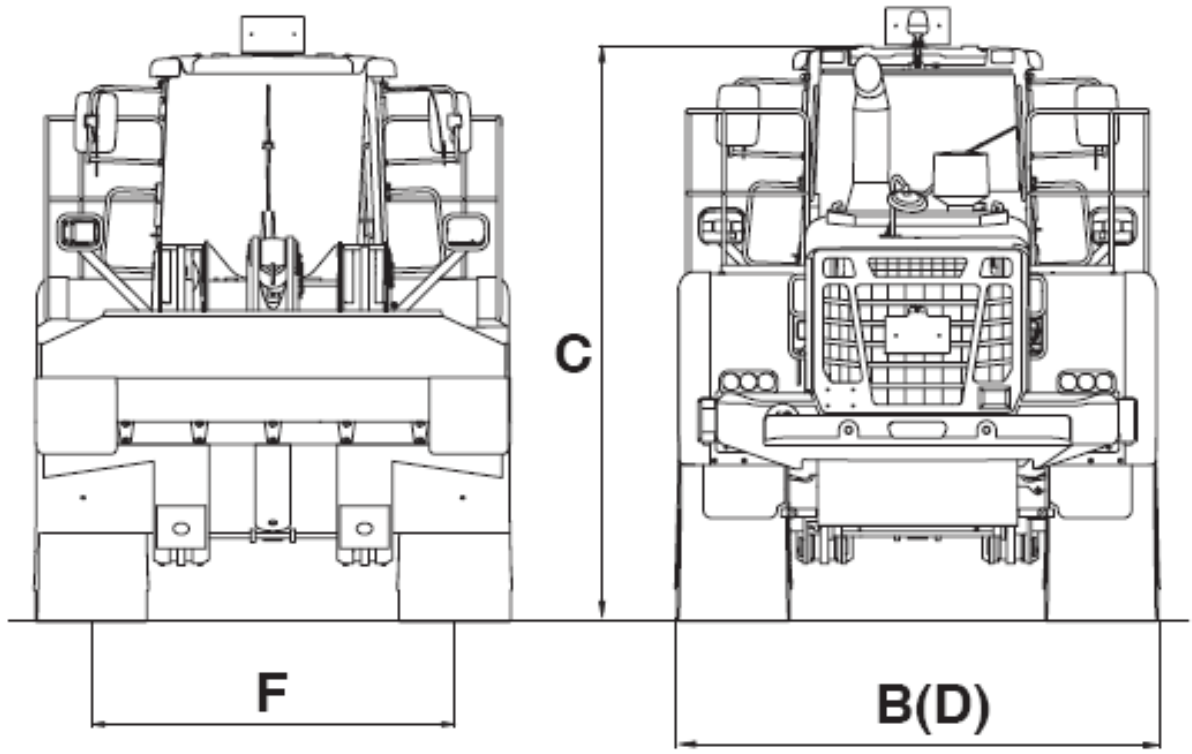
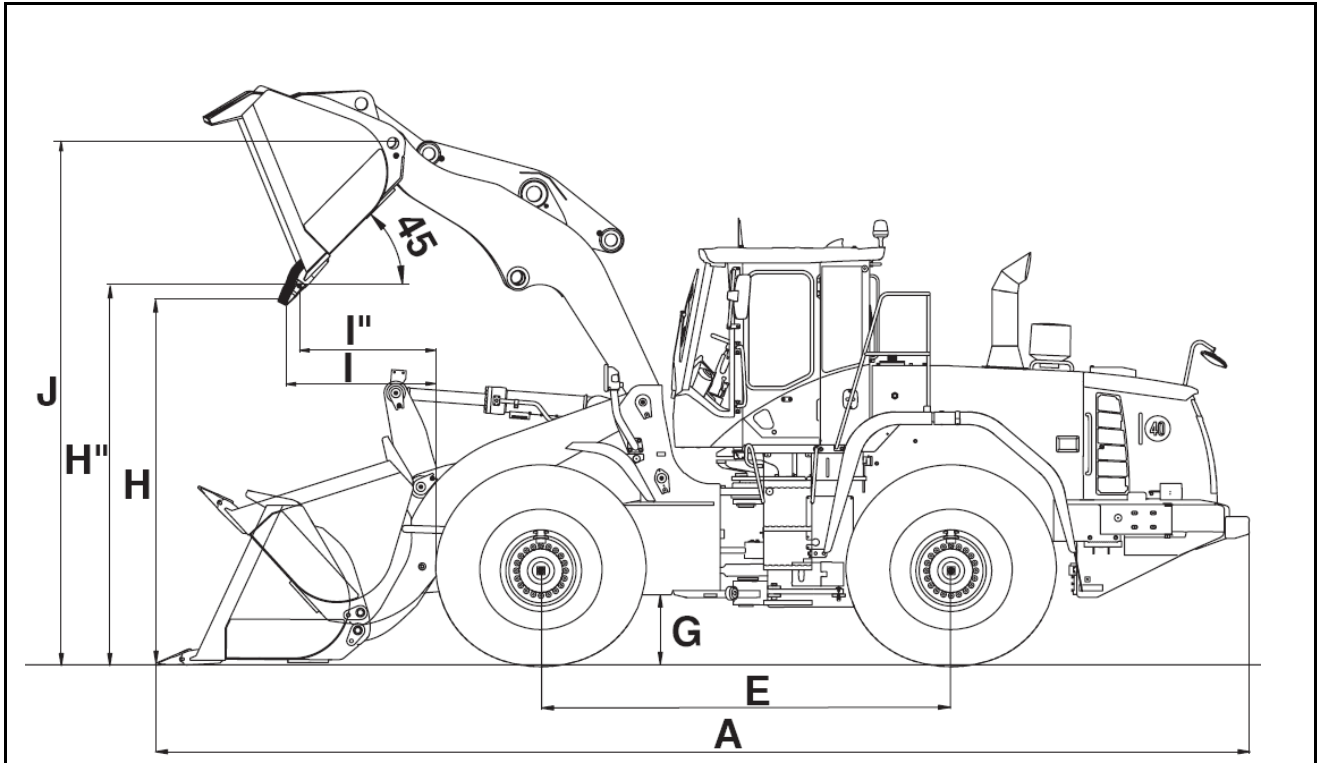


MODEL

DL300A

16/22





MODEL	DL300A		17/22
-------	--------	--	-------

Loader type			General purpose			
Bucket mount			PIN ON	PIN ON	PIN ON	PIN ON
Configuration	Code	Unit	Teeth	Teeth	Teeth(STD)	Teeth
Capacity heaped ISO/SAE		<i>m<sup>3</sup></i>	<b>2.7</b>	<b>3.0</b>	<b>3.0</b>	<b>3.3</b>
Tooth type		-	<b>Adapter tooth</b>	-	<b>Mono tooth</b>	<b>Mono tooth</b>
Bucket width	B	<i>mm</i>	<b>2,920</b>	<b>2,920</b>	<b>2,920</b>	<b>2,920</b>
Breakout force		<i>kN</i>	<b>176</b>	<b>168</b>	<b>168</b>	<b>168</b>
Static tipping load (straight)		<i>kg</i>	<b>13,650</b>	<b>13,350</b>	<b>13,670</b>	<b>13,390</b>
Static tipping load (at full turn)		<i>kg</i>	<b>11,860</b>	<b>11,600</b>	<b>11,880</b>	<b>11,635</b>
Dump height (at 45°) (at fully raised) ⇨1)	H	<i>mm</i>	<b>2,800</b>	<b>2,730</b>	<b>2,780</b>	<b>2,780</b>
Dump reach (at 45°) (at fully raised) ⇨1)	I	<i>mm</i>	<b>1,295</b>	<b>1,295</b>	<b>1,290</b>	<b>1,290</b>
Dump height (at max. dump) (at max. reach) ⇨1)		<i>mm</i>	<b>700</b>	<b>640</b>	<b>690</b>	<b>690</b>
Dump reach (at max. dump) (at max. reach) ⇨1)		<i>mm</i>	<b>1,460</b>	<b>1,440</b>	<b>1,460</b>	<b>1,460</b>
Digging depth		<i>mm</i>	<b>80</b>	<b>120</b>	<b>80</b>	<b>80</b>
Height at bucket pivot point	J	<i>mm</i>	<b>3,980</b>	<b>3,980</b>	<b>3,980</b>	<b>3,980</b>
Max. tilt angle at carry position		<i>deg</i>	<b>48</b>	<b>48</b>	<b>48</b>	<b>48</b>
Max. tilt angle at fully raised	M	<i>deg</i>	<b>58</b>	<b>58</b>	<b>58</b>	<b>58</b>
Max. tilt angle on ground	K	<i>deg</i>	<b>45</b>	<b>45</b>	<b>45</b>	<b>45</b>
Max. tilt angle at max. reach		<i>deg</i>	<b>59</b>	<b>59</b>	<b>59</b>	<b>59</b>
Max. dump angle at max. reach		<i>deg</i>	<b>69</b>	<b>69</b>	<b>69</b>	<b>69</b>
Max. dump angle on ground		<i>deg</i>	<b>72</b>	<b>72</b>	<b>73</b>	<b>73</b>
Max. dump angle at fully raised	L	<i>deg</i>	<b>47</b>	<b>47</b>	<b>47</b>	<b>47</b>
External radius at tire side	O	<i>mm</i>	<b>5,800</b>	<b>5,800</b>	<b>5,800</b>	<b>5,800</b>
External radius at bucket edge	Q	<i>mm</i>	<b>6,420</b>	<b>6,455</b>	<b>6,430</b>	<b>6,430</b>
Wheel base	E	<i>mm</i>	<b>3,200</b>	<b>3,200</b>	<b>3,200</b>	<b>3,200</b>
Width at tyres		<i>mm</i>	<b>2,760</b>	<b>2,760</b>	<b>2,760</b>	<b>2,760</b>
Tread	F	<i>mm</i>	<b>2,150</b>	<b>2,150</b>	<b>2,150</b>	<b>2,150</b>
Ground clearance	G	<i>mm</i>	<b>460</b>	<b>460</b>	<b>460</b>	<b>460</b>
Overall length	A	<i>mm</i>	<b>8,190</b>	<b>8,275</b>	<b>8,240</b>	<b>8,240</b>
Overall height	C	<i>mm</i>	<b>3,435</b>	<b>3,435</b>	<b>3,435</b>	<b>3,435</b>
Operating weight		<i>kg</i>	<b>17,855</b>	<b>17,910</b>	<b>17,640</b>	<b>17,870</b>
<b>MODEL</b>			<b>DL300A</b>			<b>18/22</b>

Loader type			General purpose			High Lift
Bucket mount			PIN ON	PIN ON	PIN ON	PIN ON
Configuration	Code	Unit	Bolt-on edge	Bolt-on edge	Teeth & segments	Bolt-on edge
Capacity heaped ISO/SAE		<b>m<sup>3</sup></b>	<b>2.9</b>	<b>3.2</b>	<b>3.2</b>	<b>3.2</b>
Tooth type		-	-	-	<b>Adapter tooth</b>	-
Bucket width	B	<b>mm</b>	<b>2,920</b>	<b>2,920</b>	<b>2,920</b>	<b>2,920</b>
Breakout force		<b>kN</b>	<b>176</b>	<b>167</b>	<b>167</b>	<b>161</b>
Static tipping load (straight)		<b>kg</b>	<b>13,520</b>	<b>13,225</b>	<b>13,190</b>	<b>10,930</b>
Static tipping load (at full turn)		<b>kg</b>	<b>11,750</b>	<b>11,495</b>	<b>11,465</b>	<b>9,500</b>
Dump height (at 45°) (at fully raised) ⇨1)	H	<b>mm</b>	<b>2,920</b>	<b>2,850</b>	<b>2,730</b>	<b>3,400</b>
Dump reach (at 45°) (at fully raised) ⇨1)	I	<b>mm</b>	<b>1,165</b>	<b>1,165</b>	<b>1,295</b>	<b>1,195</b>
Dump height (at max. dump) (at max. reach) ⇨1)		<b>mm</b>	<b>865</b>	<b>805</b>	<b>640</b>	<b>840</b>
Dump reach (at max. dump) (at max. reach) ⇨1)		<b>mm</b>	<b>1,390</b>	<b>1,370</b>	<b>1,440</b>	<b>1,970</b>
Digging depth		<b>mm</b>	<b>80</b>	<b>120</b>	<b>120</b>	<b>245</b>
Height at bucket pivot point	J	<b>mm</b>	<b>3,980</b>	<b>3,980</b>	<b>3,980</b>	<b>4,530</b>
Max. tilt angle at carry position		<b>deg</b>	<b>48</b>	<b>48</b>	<b>48</b>	<b>51</b>
Max. tilt angle at fully raised	M	<b>deg</b>	<b>58</b>	<b>58</b>	<b>58</b>	<b>55</b>
Max. tilt angle on ground	K	<b>deg</b>	<b>45</b>	<b>45</b>	<b>45</b>	<b>45</b>
Max. tilt angle at max. reach		<b>deg</b>	<b>59</b>	<b>59</b>	<b>59</b>	<b>57</b>
Max. dump angle at max. reach		<b>deg</b>	<b>69</b>	<b>69</b>	<b>69</b>	<b>61</b>
Max. dump angle on ground		<b>deg</b>	<b>72</b>	<b>72</b>	<b>71</b>	<b>66</b>
Max. dump angle at fully raised	L	<b>deg</b>	<b>47</b>	<b>47</b>	<b>47</b>	<b>45</b>
External radius at tire side	O	<b>mm</b>	<b>5,800</b>	<b>5,800</b>	<b>5,800</b>	<b>5,800</b>
External radius at bucket edge	Q	<b>mm</b>	<b>6,375</b>	<b>6,405</b>	<b>6,455</b>	<b>6,645</b>
Wheel base	E	<b>mm</b>	<b>3,200</b>	<b>3,200</b>	<b>3,200</b>	<b>3,200</b>
Width at tyres		<b>mm</b>	<b>2,760</b>	<b>2,760</b>	<b>2,760</b>	<b>2,760</b>
Tread	F	<b>mm</b>	<b>2,150</b>	<b>2,150</b>	<b>2,150</b>	<b>2,150</b>
Ground clearance	G	<b>mm</b>	<b>460</b>	<b>460</b>	<b>460</b>	<b>460</b>
Overall length	A	<b>mm</b>	<b>8,015</b>	<b>8,100</b>	<b>8,275</b>	<b>8,615</b>
Overall height	C	<b>mm</b>	<b>3,435</b>	<b>3,435</b>	<b>3,435</b>	<b>3,435</b>
Operating weight		<b>kg</b>	<b>17,980</b>	<b>18,030</b>	<b>18,065</b>	<b>18,155</b>

MODEL

DL300A

19/22

## 8. PERFORMANCE DATA

### 8.1) PRESSURE SETS

WORKING	<b>200 ± 5 bar</b>
STEERING RELIEF (LS PORT SIDE)	<b>185 ± 5 bar</b>
(STEER PUMP SIDE)	<b>210 ± 5 bar</b>
PILOT CONTROL	<b>28 ± 2 bar</b>
BRAKE ACCUMULATOR CHARGING	<b>120 ± 5bar</b>
SERVICE BRAKE	<b>60 ± 3 bar</b>
FAN MOTOR RELIEF.	<b>120 ± 5 bar</b>
PARKING BRAKE RELEASE	<b>120 ± 5 bar</b>
T/M SELECTION PRESSURE	<b>17 ± 1 bar</b>

### 8.2) SPEED & FORCE

OPERATION		UNIT	SPEED-FORCE	REMARKS
ARM	UP	<b>sec</b>	<b>6.0 ± 0.5</b>	
	DOWN	<b>sec</b>	<b>3.3 ± 0.4</b>	
BUCKET	CROWD	<b>sec</b>	<b>2.5 ± 0.3</b>	<b>Max. Height</b>
	DUMP	<b>sec</b>	<b>1.8 ± 0.3</b>	
STEERING	LOCK TO LOCK	<b>TURN</b>	<b>4.0 ± 0.3</b>	
E/G RPM	HIGH	<b>RPM</b>	<b>2,300 ± 50</b>	<b>(On machine)</b>
	LOW	<b>RPM</b>	<b>950 ± 25</b>	<b>(On machine)</b>
E/G RPM	HYDRAULIC STALL	<b>RPM</b>	<b>2,100</b>	
	CONVERTER STALL	<b>RPM</b>	<b>2,200</b>	
	T/C + HYD. STALL	<b>RPM</b>	<b>1,770</b>	
COOLING FAN	E/G HIGH	<b>RPM</b>	<b>1,300 ± 50</b>	
TRAVEL SPEED (1/2/3/4)		<b>km/h</b>	<b>6.0/11.6/21.4/32.3</b>	
BRAKING DISTANCE		<b>m</b>	<b>12.5 m at 34 KPH</b>	
MAX. TRACTIVE EFFORT		<b>ton</b>	<b>17,700</b>	
BREAKOUT FORCE (BOT 3.0)		<b>kN</b>	<b>168</b>	
PAYLOAD		<b>ton</b>	<b>5,400</b>	
STATIC TIPPING LOAD (straight)		<b>kg</b>	<b>13,670</b>	<b>BOT 3.0</b>
STATIC TIPPING LOAD (full turn)		<b>kg</b>	<b>11,880</b>	<b>BOT 3.0</b>
RATED OPERATION LOAD		<b>kg</b>	<b>5,940</b>	<b>BOT 3.0</b>

MODEL

DL300A

20/22

## 9. NOISE LEVEL

SURFACE SOUND POWER LEVEL (L <sub>WA</sub> )	<b>110 dB(A) (ISO 6395)</b>
OPERATOR'S CABIN NOISE LEVEL (L <sub>PA</sub> )	<b>72 dB(A) (ISO 6396)</b>

## 10. USER SERVICE DATA

COMPARTMENT/ GREASE JOINT		No, OF C/G	REFILL CAPACITY	FLUID OR LUBRICANT	SERVICE INTERVAL (hr)	
					LUBE	FILTER
COOLING SYSTEM		1	50 ℓ	WATER	2000	-
FUEL TANK		1	304 ℓ	DIESEL	-	500
HYD. SYSTEM		1	210 ℓ	ISO #46	2000	250
ENGINE CRANKCASE		2	21 ℓ	E/G OIL	250	250
AXLE	FRONT	1	42 ℓ	GEAR OIL	1500	-
	REAR	1	42 ℓ	GEAR OIL	1500	-
T/C AND T/M		1	48 ℓ	SAE 15W40	1000	1000
FRONT PROPELLER SHAFT		1	-	GREASE	250	-
FRONT PIN		13	-	GREASE	50	-
ARTICULATION JOINT		2	-	GREASE	50	-
REAR AXLE PIVOT		2	-	GREASE	50	-
STEER CYLINDER		4	-	GREASE	50	-

MODEL

DL300A

21/22

## 11. SUB GROUP WEIGHTS

ITEM	UNIT	WEIGHT	REMARKS
COUNTERWEIGHT	<i>kg</i>	<b>1,100</b>	
FRONT FRAME	<i>kg</i>	<b>1,582</b>	
REAR FRAME	<i>kg</i>	<b>1,620</b>	
OIL TANK	<i>kg</i>	<b>146</b>	<i>w/o Oil</i>
FUEL TANK	<i>kg</i>	<b>308</b>	<i>Tank ass'y w/o Oil</i>
ENGINE	<i>kg</i>	<b>800</b>	<i>w/Cac pipe&amp; Oil</i>
TRANSMISSION	<i>kg</i>	<b>500</b>	<i>w/o Oil, w/o Lock-up</i>
AXLE_FRONT	<i>kg</i>	<b>970</b>	<i>w/ Oil</i>
AXLE_REAR	<i>kg</i>	<b>810</b>	<i>w/ Oil</i>
TIRE(26.5x25-20PR) at Each Tire	<i>kg</i>	<b>275</b>	<i>Domestic tire</i>
RIM at Each Rim	<i>kg</i>	<b>190</b>	
PROPELLER SHAFTS (F/C/R)	<i>kg</i>	<b>-</b>	
RADIATOR	<i>kg</i>	<b>300</b>	<i>w/o Water</i>
MAIN PUMP	<i>kg</i>	<b>67</b>	
CONTROL VALVE	<i>kg</i>	<b>60</b>	
COVER GROUP	<i>kg</i>	<b>362</b>	
AXLE PIVOT SUPPORT_FRONT	<i>kg</i>	<b>73</b>	
AXLE PIVOT SUPPORT_REAR	<i>kg</i>	<b>160</b>	
CABIN ASS'Y (ROPS)	<i>kg</i>	<b>450</b>	
LOADER ARM ASS'Y	<i>kg</i>	<b>1,760</b>	
TILT LEVER ASS'Y	<i>kg</i>	<b>395</b>	
LINK	<i>kg</i>	<b>41</b>	
CYLINDER_(ARM + BUCKET)	<i>kg</i>	<b>542</b>	
3.0 m <sup>3</sup> BUCKET ASS'Y (mono Tooth)	<i>kg</i>	<b>1,170</b>	
3.2 m <sup>3</sup> BUCKET ASS'Y(w/Cutting edge)	<i>kg</i>	<b>1606</b>	

## 12. LIFTING CAPACITY

BUCKET	UNIT	3.0 m <sup>3</sup> BOT
Lifting Capacity to Max.Height	<i>kgf</i>	<b>7,781</b>

MODEL	DL300A		22/22
-------	--------	--	-------