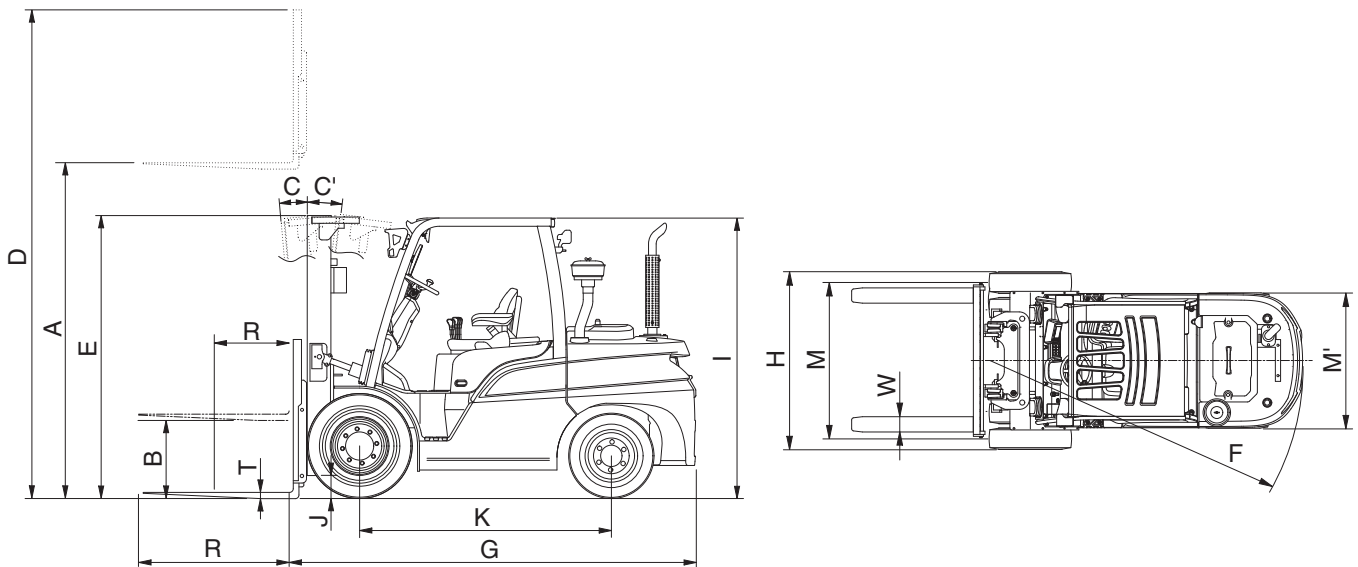


8. SPECIFICATIONS

1. SPECIFICATION TABLE



35D9SP01

Model			Unit	35D-9	40D-9	45D-9	50DA-9
Capacity			kg (lb)	3500 (8000)	4000 (9000)	4500 (10000)	5000 (11000)
Load center	R		mm (in)	600 (24")	←	←	←
Weight (Unloaded)			kg (lb)	5934 (13080)	6484 (14290)	6900 (15210)	7317 (16130)
Fork	Lifting height	A	mm (ft. in)	3020 (9' 11")	←	←	2930 (9' 7")
	Free lift	B	mm (in)	120 (4.7")	←	←	←
	Lifting speed (Unload/Load)		mm/sec	540/520	540/510	540/500	460/420
	Lowering speed (Unload/Load)		mm/sec	500/500	←	←	←
	L × W × T	L, W, T	mm (in)	1070 × 122 × 50 (42 × 4.8 × 2)	1070 × 150 × 50 (42 × 5.9 × 2)	1220 × 150 × 50 (48 × 5.9 × 2)	1200 × 150 × 60 (47 × 5.9 × 2.4)
Mast	Tilt angle (forward/backward)	C/C'	degree	8/10	←	←	←
	Max height	D	mm (ft. in)	4235 (13' 11")	←	←	4147 (13' 7")
	Min height	E	mm (ft. in)	2235 (7' 4")	2220 (7' 3")	←	←
Body	Travel speed (Unload)		km/h (mph)	26.6 (16.5)	25.7 (16.0)	25.6 (15.9)	←
	Gradeability (Load)		%	40.9	36.4	33.2	30.6
	Min turning radius (Outside)	F	mm (ft. in)	3006 (9' 10")	3005 (9' 10")	3040 (10' 0")	←
ETC	Operating pressure		kgf/cm ² (psi)	210 (2990)	←	←	←
	Hydraulic oil tank		l (U.S. gal)	64 (16.9)	←	←	←
	Fuel tank		l (U.S. gal)	72 (19.0)	←	←	←
Overall length	G		mm (ft. in)	3225 (10' 7")	←	3264 (10' 9")	3300 (10' 10")
Overall width	H		mm (ft. in)	1373 (4' 6")	1746 (5' 9")	←	←
Overhead guard height	I		mm (ft. in)	*12220 (7' 3") *23350 (7' 7")	*12210 (7' 3") *23340 (7' 7")	←	←
Ground clearance	J		mm (in)	170 (6.7")	155 (6.1")	←	←
Wheel base	K		mm (ft. in)	2000 (6' 7")	←	←	←
Wheel tread front/rear	M/M'		mm (ft. in)	1132/1140 (3' 9"/3' 9")	1282/1140 (4' 2"/3' 9")	←	←
Max drawbar pull (load)			kg (lb)	3970 (8750)	3994 (8810)	4000 (8820)	4006 (8830)

*1: Low *2: High

2. SPECIFICATION FOR MAJOR COMPONENTS

1) ENGINE

Item	Unit	Specification
Model	-	Cummins QSF 3.8
Type	-	Vertical, 4 cycle DI, Tier 4 final diesel engine
Cooling Method	-	Water cooling
Number of cylinders and arrangement	-	4 cylinders, In-line
Firing order	-	1-3-4-2
Combustion chamber type	-	Direct injection
Cylinder bore X stroke	mm (in)	100 × 120 (3.94 × 4.72)
Piston displacement	cc (cu in)	3800 (232)
Compression ratio	-	17.5 : 1
Rated gross horse power	hp/rpm	102/2200
Maximum torque at rpm	kgf · m/rpm	42.3/1600
Engine oil quantity	l (U.S.gal)	13.2 (3.49)
Dry weight	kg (lb)	316 (697)
High idling speed	rpm	2400
Low idling speed	rpm	900
Rated fuel consumption	g/kw.hr	231 (at 1700 rpm)
Starting motor	V-kW	24-3.2
Alternator	V-A	24-80
Battery	V-AH	24-75
Fan belt deflection	mm (in)	10~12 (0.40~0.47)

2) MAIN PUMP

Item	Unit	Specification
Type	-	Fixed displacement gear pump
Capacity	cc/rev	46.1
Maximum operating pressure	kgf/cm ² (psi)	235 (3340)
Rated speed (Max/Min)	rpm	3000/600

3) MAIN CONTROL VALVE

Item	Unit	Specification
Type	-	Sectional
Operating method	-	Mechanical
Relief valve pressure (Main/Aux)	kgf/cm ² (psi)	210/150 (2990/2130)
Flow capacity	lpm	125

(4) POWER TRAIN DEVICES

Item		Specification
Torque converter	Model	DE 280 (KAPEC)
	Type	3 Element, 1 stage, 2 phase
	Stall ratio	2.25 : 1
Transmission	Type	Power shift
	Gear shift(FWD/REV)	2/2
	Control	Electrical single lever type
	Overhaul ratio	FWD 1st : 2.550 2nd : 1.218
		REV 1st : 2.550 2nd : 1.218
Axle	Type	Front-wheel drive type, fixed location
	Gear ratio	11.692
Wheels	Q'ty(FR/RR)	Single : 2/2, Double : 4/2
	Front(drive)	Single 3.5 ton : 8.25-15-14 PR 4.0~5.0 ton : 300-15-18 PR
		Double 7.50-16-12 PR
	Rear(steer)	3.5/4 ton : 7.00-12-12 PR 4.5/5 ton : 7.00-12-14 PR
Brakes	Travel	Front wheel, wet disk brake
	Parking	Ratchet, drum brake
Steering	Type	Full hydraulic, power steering
	Steering angle	74.8° to both right and left angle, respectively
	Relief valve pressure	135 kgf/cm ² (1920 psi)

3. TIGHTENING TORQUE

NO	Item		Size	kgf · m	lbf · ft
1	Engine	Engine mounting bolt	M12 × 1.75	6.9 ± 1.4	50 ± 10
2		Engine bracket mounting nut	M10 × 1.5	6.9 ± 1.4	50 ± 10
3		Radiator mounting bolt, nut	M10 × 1.5	6.9 ± 1.4	50 ± 10
4	Hydraulic system	MCV mounting bolt, nut	M12 × 1.75	5 ± 1.0	36.2 ± 7.2
5		Steering unit mounting bolt	M10 × 1.5	4.0 ± 0.5	28.9 ± 3.6
6		Hydraulic pump mounting bolt	M14 × 1.5	9.5 ± 1.3	68.7 ± 9.5
7	Power train system	Transmission mounting bolt, nut	M16 × 2.0	7.5 ± 1.5	54.2 ± 10.8
8		Torque converter mounting bolt	M10 × 1.5	6.9 ± 1.4	50 ± 10
9		Drive axle mounting bolt, nut	M24 × 2.0	62.5 ± 9.5	452 ± 68.7
10		Drive shaft mounting bolt	3/8-24 UNF	7.0 ± 0.7	50.6 ± 5.1
11		Steering axle mounting bolt, nut	M14 × 2.0	19.6 ± 2.9	142 ± 21
12		Front wheel mounting nut	M22 × 1.5	62.0 ± 9.3	448 ± 67.3
13		Rear wheel mounting nut	M20 × 1.5	35.0 ± 5.0	253 ± 36.2
14	Others	Counterweight mounting bolt	M30 × 3.5	199 ± 29.9	1439 ± 216
15		Operator's seat mounting nut	M 8 × 1.25	2.5 ± 0.5	18.1 ± 3.6
16		Head guard mounting bolt	M12 × 1.75	12.8 ± 3.0	93 ± 22
17		Cabin mounting bolt	M12 × 1.75	12.8 ± 3.0	93 ± 22