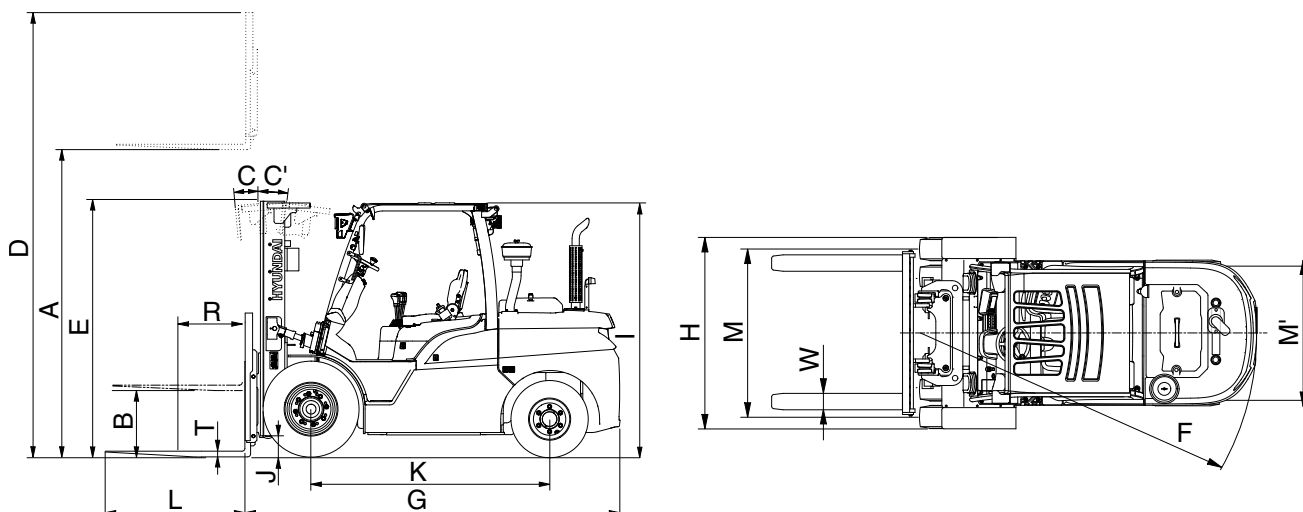


8. SPECIFICATIONS

1. SPECIFICATION TABLE



35D9VB8SP01

Model		Unit	35D-9VB	45D-9VB	50DN-9VB
Capacity		kg (lb)	3500 (8000)	4500 (10000)	5000 (11000)
Load center	R	mm (in)	600 (24")	←	←
Weight (Unloaded)		kg (lb)	5851 (12899)	6860 (15124)	7264 (16014)
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 (ft/min)	540/530 (106/104)	470/460 (92/90)
	Lowering speed (Unload/Load)		mm/sec (ft/min)	525/550 (103/108)	480/480 94/94
	L×W×T	L,W,T	mm (in)	1070×122×50 (42×4.8×2)	1200×150×60 (47×5.9×2.4)
Mast	Tilt angle (forward/backward)	C/C'	degree	8/10	←
	Max height	D	mm (ft. in)	4234 (13' 11")	4147 (13' 7")
	Min height	E	mm (ft. in)	2235 (7' 4")	2220 (7' 3")
Body	Travel speed (Unload/Load)		km/h (mph)	30.2/27.9 (18.8/17.3)	30.2/27.6 (18.7/17.2)
	Max gradeability (Unload/Load)		%	19.0/47.5	16.8/37.1
	Min turning radius (Outside)	F	mm (ft. in)	2895 (9' 6")	3038 (10')
ETC	System set pressure		bar (psi)	210 (3050)	←
Length to face of forks		G	mm (ft. in)	3149 (10' 4")	3347 (11')
Overall width		H	mm (ft. in)	1370 (4' 6")	1418 (4' 8")
Overhead guard height		I	mm (ft. in)	2230 (7' 4")	2220 (7' 3")
Ground clearance		J	mm (in)	170 (6.7")	155 (6.1")
Wheel base		K	mm (ft. in)	2030 (6' 8")	2100 (6' 11")
Wheel tread front/rear		M/M'	mm (ft. in)	1132/1140 (3' 9"/3' 9")	1120/1140 (3' 8"/3' 9")
Max drawbar pull (Unload/Load)			kg (lb)	4264/4459 (9400/9831)	4223/4358 (9307/9596)

2. SPECIFICATION FOR MAJOR COMPONENTS

1) ENGINE

Item	Unit	Specification
Model	—	HDI DN03
Type	—	Vertical, 4 cycle DI
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)	98 × 113 (3.86 × 4.45)
Piston displacement	cc (cu in)	3409 (208)
Compression ratio	—	18:1
Rated gross horse power	ps/rpm	95/2300
Maximum torque at rpm	kgf · m/rpm	35.7/1600
Engine oil quantity	ℓ (U.S.gal)	12.6 (3.3)
Dry weight	kg (lb)	362 (798)
High idling speed	rpm	2500
Low idling speed	rpm	800
Rated fuel consumption	g/kWh	215
Starting motor	V-kW	12-2.7
Alternator	V-A	13.5-110
Battery	V-AH	12-100
Fan belt deflection	mm (in)	10~12 (0.40~0.47)

2) MAIN PUMP

Item	Unit	Specification
Type	—	Gear pump
Capacity	cc/rev (in ³ /rev)	46.1 (2.81) + 7.0 (0.43)
Maximum operating pressure	bar (psi)	230 (3336) + 172 (2495)
Engine idling speed (High/Low)	rpm	2450/850
Weight	kgf (lbf)	9.1 (20)

3) MAIN CONTROL VALVE

Item	Unit	Specification
Type	—	Mono-block (3spool / 4spool / 5spool)
Operating method	—	Manual (hand lever)
Maximum flow rated (Lift/Tilt)	lpm (US. gpm)	115/40 (30/11)
Main relief valve set pressure (DV1)	bar (psi)	210 (3050)
Attachment oil flow rated (Aux1/2/3)	lpm (US. gpm)	60/60/60 (16/16/16)
Attachment relief valve pressure (DV2)	bar (psi)	140~180 (2030~2610)
Weight	kgf (lbf)	3spool : 11 (24) / 4spool : 13 (29) 5spool : 15 (33)

4) STEERING UNIT

Item	Unit	Specification
Type	—	Load sensing, Non-load reaction
Capacity	cc/rev (in ³ /rev)	125 (7.63)
Steering relief valve set pressure	bar (psi)	135 (1960)
Weight	kgf (lbf)	5.5 (12)

5) PRIORITY VALVE

Item	Unit	Specification
Type	—	Load sensing, dynamic signal
Rated input flow	lpm (US.gpm)	150 (40)
Max. inlet and EF Pressure	bar (psi)	241 (3495)
Max. CF Pressure	bar (psi)	190 (2756)
Weight	kgf (lbf)	6 (13)

6) POWER TRAIN DEVICES

Item		Specification
Torque converter	Model	KAPEC 2.25
	Type	3 Element, 1 stage, 2 phase
	Stall ratio	2.25 : 1
Transmission	Type	Power shift
	Gear shift(FWD/REV)	2/1
	Control	Electrical single lever type
	Overhaul ratio	FWD 1st : 2.667 2nd : 1.024
		REV 1.838
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 8.25-15-14 PR
		Double 7.50-16-12 PR
	Rear(steer)	7.00-12-14 PR
Brakes	Travel	Front wheel, wet disk brake
	Parking	SAHR (Spring Actuate Hydraulic Release) type
Steering	Type	Full hydraulic, power steering
	Steering angle	74.8° to both right and left angle, respectively
	Relief valve pressure	135 bar (1960 psi)

3. TIGHTENING TORQUE

NO	Item		Size	kgf · m	lbf · ft
1	Engine	Engine mounting bolt	M12×1.75	12.8±3.0	92.6±21.7
2		Engine bracket mounting bolt, nut	M10×1.5	6.9±1.4	49.9±10.1
3		Radiator mounting bolt, nut	M10×1.5	6.9±1.4	49.9±10.1
4	Hydraulic system	Hydraulic pump mounting bolt	M14×1.5	7.0±0.5	51±3.6
5		MCV mounting bolt	M 8×1.25	2.5±0.5	18.1±3.6
6		Steering unit mounting bolt	M10×1.5	4.0±0.5	28.9±3.6
7		Priority valve mounting bolt, nut	M 8×1.25	2.5±0.5	18.1±3.6
8		Tilt cylinder; rod-end bolt, nut	M14×2.0	15±1.5	147±14
9		Tilt cylinder pin; mounting bolt	M10×1.5	4.0±1.5	28.9±3.6
10	Power train system	Transmission mounting bolt, nut	M16×2.0	7.5±1.5	54.2±10.8
11		Torque converter mounting bolt	M10×1.5	6.9±1.4	50±10
12		Drive axle mounting bolt, nut	M24×2.0	62.5±9.5	452±68.7
13		Drive shaft mounting bolt	3/8-24 UNF	7.0±0.7	50.6±5.1
14		Steering axle mounting bolt, nut	M14×2.0	19.6±2.9	142±21
15		Front wheel mounting nut	M22×1.5	66.3	447
16		Rear wheel mounting nut	M22×1.5	66.3	447
17	Others	Counterweight mounting bolt	M30×3.5	100±15	723±108
18		Operator's seat mounting nut	M 8×1.25	2.5±0.5	18.1±3.6
19		Head guard mounting bolt	M12×1.75	12.8±3.0	92.6±21.7
20		Cabin mounting bolt	M12×1.75	12.8±3.0	92.6±21.7