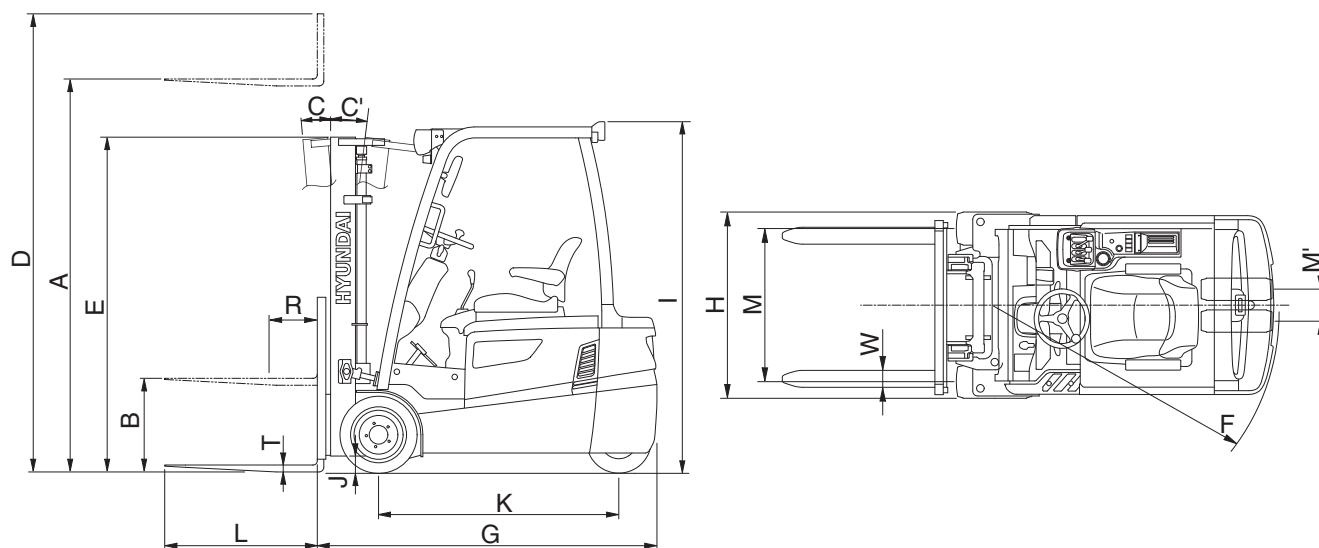


8. SPECIFICATIONS

1. SPECIFICATION



15BT9SP01

Model			Unit	15BT-9	18BT-9	20BT-9
Capacity			kg (lb)	1500 (3000)	1800 (3500)	2000 (4000)
Load center		R	mm (in)	500 (24")	←	←
Weight			kg (lb)	3125 (6890)	3365 (7420)	3500 (7715)
Fork	Lifting height	A	mm (ft-in)	3025 (9' 11")	←	3030 (9' 11")
	Free lift	B	mm (in)	35 (1.4")	←	40 (1.6")
	Lifting speed [Unload/Load]		mm/sec	600/410	←	←
	Lowering speed [Unload/Load]		mm/sec	450/500	←	←
	L×W×T	L,W,T	mm (in)	900×100×35 (35.4×3.9×1.4)	←	900×100×40 (35.4×3.9×1.6)
Mast	Tilt angle forward/backward	C/C'	degree	5/7	←	←
	Max height	D	mm (ft-in)	4020 (13' 2")	←	←
	Min height	E	mm (ft-in)	1970 (6' 6")	←	1979 (6' 6")
Body	Travel speed [Unload]		km/h	17	←	←
	Gradeability [Load]		%	29.5	27.5	24.5
	Min turning radius [Outside]	F	mm (ft-in)	1540 (5' 1")	1630 (5' 4")	1660 (5' 5")
ETC	Max hydraulic pressure		kgf/cm ²	190	←	←
	Hydraulic oil tank		l (usgal)	20	←	←
Overall length		G	mm (ft-in)	1885 (6' 2")	1975 (6' 6")	2010 (6' 7")
Overall width		H	mm (ft-in)	1074 (3' 6")	1105 (3' 8")	←
Overhead guard height		I	mm (ft-in)	2065 (6' 9")	←	←
Ground clearance (Mast)		J	mm (in)	85 (3.4")	←	94 (3.7")
Wheel base		K	mm (ft-in)	1335 (4' 5")	1420 (4' 8")	←
Wheel tread front/Rear		M	mm (ft-in)	895/170 (2' 11"/0' 7")	905/170 (3' 0"/0' 7")	←

2. SPECIFICATION FOR MAJOR COMPONENTS

1) CONTROLLER

Item	Unit	Traction motor controller	Pump motor controller
Model	-	Dual AC2	AC2
Type	-	MOSFET	←
Dimension	mm	322×200×149	200×250×148
Current limit	A	330A+330A	450A
Communication	-	CAN	←

2) MOTOR

Item	Unit	Traction	Pump
Model	—	AMDN4001	ABDD4002
Type	—	AC	AC
Rated voltage	Vac	32	30
Output	kW	4.7	14.0
Insulation	—	Class F	Class F

3) BATTERY

Item	Unit	15BT-9	18/20BT-9
Rated voltage	V	48	←
Dimension (W×L×H)	mm	978×545×635	978×630×635
Min. Battery weight	kg	780	950
Max. Battery weight	kg	980	1140
Connector (CE spec)	—	SB 350 or SR350 (SBE 320)	

4) CHARGER

Item	Unit	15BT-9	18/20BT-9
Type	-	Constant current, constant voltage	
Battery capacity for charge	V-AH	48-440~520	48-530~600
AC input	V	Triple phase 410	
		Single phase 220	
		Triple phase 220/380	
		Triple phase 440	
DC output	V	62±1	
Charge time	hr	6±2	
Connector (CE spec)	-	SB 350 or SR350 (SBE 320)	

5) GEAR PUMP

Item	Unit	Specification
Type	—	Fixed displacement gear pump
Capacity	cc/rev	19.6
Maximum operating pressure	bar	210
Rated speed (max/min)	rpm	3000/500

6) MAIN CONTROL VALVE

Item	Unit	Specification
Type	-	3 spool, 4 spool
Operating method	-	Mechanical
Main relief valve pressure	bar	190
2nd relief valve pressure	bar	130

7) DRIVE UNIT

Item	Unit	Specification
Max. axle load	kg/lb	2700/5953
Max. input speed	rpm	5000
Max. output torque (wheel)	N · m	2260
Gear ratio	-	20
Weight without fluid	kg/lb	35 kg (77 lb)/EA
Oil quantity	ℓ /U.S · qt	0.6/0.63

8) WHEELS

Item	15BT-9	18BT-9	20BT-9
Type (STD/OPT)	SOLID Non-marking		
Quantity (front/rear)	2/2		
Front-drive	18 × 7-8	200/50-10	←
Rear-steering	15 × 4.5-8	15 × 4.5-8, 15 × 5.5-9 (wide tire)	

9) BRAKES & STEERING

Item		Specification
Brakes	Travel	Front wheel, wet disc brake
	Parking	Ratchet type
Steering	Type	Full hydraulic, power steering
	Steering angle	90° to both right and left angle, respectively

3. TIGHTENING TORQUE

NO	Items		Size	kgf · m	lbf · ft
1	Electric system	Hyd pump motor mounting bolt	M 8 × 1.25	2.5 ± 0.5	18.1 ± 3.6
2		Traction motor mounting bolt	M 8 × 1.25	2.5 ± 0.5	18.1 ± 3.6
3	Hydraulic system	Hydraulic pump mounting bolt	M 8 × 1.25	2.5 ± 0.5	18.1 ± 3.6
4		MCV mounting bolt, nut	M 8 × 1.25	2.5 ± 0.5	18.1 ± 3.6
5		Steering unit mounting bolt	M10 × 1.5	5 ± 1	36 ± 7.2
6		Brake cylinder mounting bolt	M10 × 1.5	5 ± 1	36 ± 7.2
7		Hydraulic oil tank mounting bolt	M 8 × 1.25	2.5 ± 0.5	18.1 ± 3.6
8	Power train system	Drive axle mounting bolt, nut	M14 × 2.0	13.8 ± 1.2	99.8 ± 8.7
9		Steering axle mounting bolt, nut	M14 × 2.0	16 ± 2.0	115.7 ± 14.5
10		Front wheel mounting nut	M14 × 1.5	14 ± 1.5	101 ± 10.8
11		Rear wheel mounting nut	M14 × 1.5	14 ± 1.5	101 ± 10.8
12	ETC	Counterweight mounting bolt	M30 × 3.5	199 ± 15	1439 ± 108
13		Seat mounting bolt	M 8 × 1.25	2.5 ± 0.5	18.1 ± 3.6
14		Head guard mounting bolt	M12 × 1.75	12.8 ± 3.0	93 ± 22