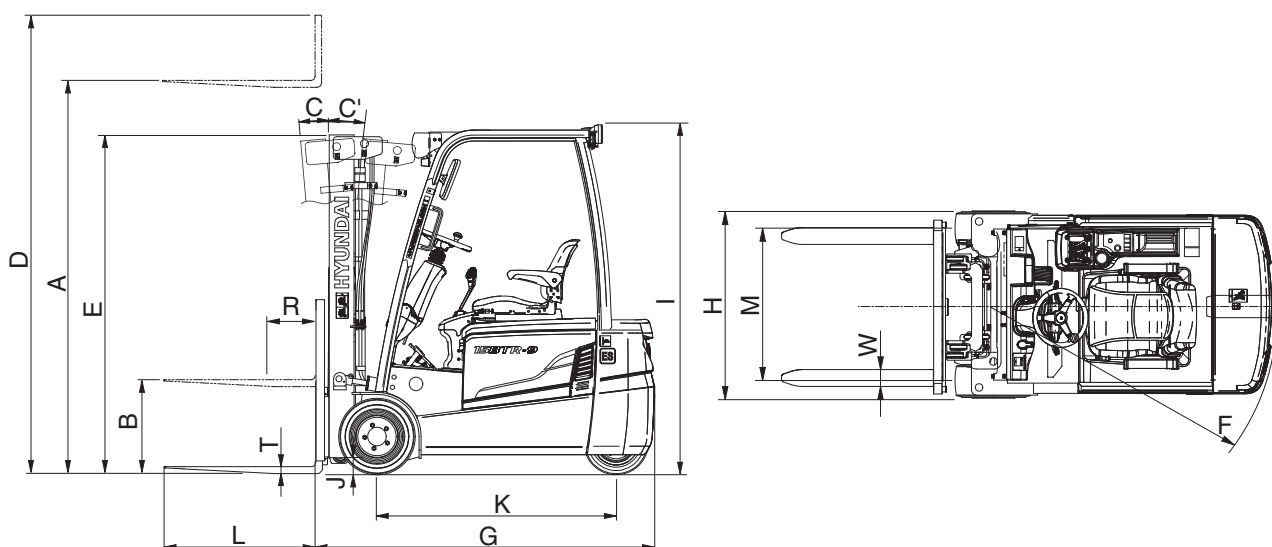


8. SPECIFICATIONS

1. SPECIFICATION



10BTR9SP01

Model			Unit	10BTR-9	13BTR-9	15BTR-9
Capacity			kg (lb)	1000 (2000)	1300 (2500)	1500 (3000)
Load center		R	mm (in)	500 (24")	←	←
Weight			kg (lb)	2405 (5300)	2630 (5800)	2840 (6260)
Fork	Lifting height	A	mm (ft-in)	3025 (9' 11")	←	←
	Free lift	B	mm (in)	35 (1.4")	←	←
	Lifting speed [Unload/Load]		mm/sec	530/310	530/300	530/290
	Lowering speed [Unload/Load]		mm/sec	450/500	←	←
	L×W×T	L,W,T	mm (in)	800×80×35 (31.5×3.1×1.4)	←	←
Mast	Tilt angle forward/backward	C/C'	degree	5/6	←	←
	Max height	D	mm (ft-in)	3535 (11' 7")	←	←
	Min height	E	mm (ft-in)	1970 (6' 6")	←	←
Body	Travel speed [Unload]		km/h	13.0	←	←
	Gradeability [Load]		%	18	15	13
	Min turning radius [Outside]	F	mm (ft-in)	1335 (4' 5")	1425 (4' 8")	1480 (4' 10")
ETC	Max hydraulic pressure		kgf/cm ²	190	←	←
	Hydraulic oil tank		l (usgal)	18	←	←
Overall length		G	mm (ft-in)	1655 (5' 5")	1750 (5' 9")	1810 (5' 11")
Overall width		H	mm (ft-in)	990 (3' 3")	←	←
Overhead guard height		I	mm (ft-in)	2020 (6' 8")	←	←
Ground clearance (Mast)		J	mm (in)	85 (3.3")	←	←
Wheel base		K	mm (ft-in)	1065 (3' 6")	1165 (3' 10")	1220 (4' 0")
Wheel tread front/Rear		M	mm (ft-in)	835 (2' 9")	←	←

2. SPECIFICATION FOR MAJOR COMPONENTS

1) CONTROLLER

Item	Unit	Traction motor controller	Pump motor controller
Model	-	ACE2	←
Type	-	MOSFET	←
Dimension	mm	200×185×95	←
Current limit	A	500	←
Communication	-	CAN	←

2) MOTOR

Item	Unit	Traction	Pump
Model	—	AMDH6001	AMDA4001
Type	—	AC	AC
Rated voltage	Vac	16	16
Output	kW	4.3	9.0
Insulation	—	Class F	Class F

3) BATTERY

Item	Unit	10BTR-9	13BTR-9	15BTR-9
Rated voltage	V	24	←	←
Dimension (W×L×H)	mm	827×324×627	827×432×627	827×486×627
Min. Battery weight	kg	432	570	657
Max. Battery weight	kg	478	630	727
Connector	—	SRE 320A BLACK		

4) CHARGER

Item	Unit	10/13/15BTR-9
Type	-	Constant current, constant voltage
Battery capacity for charge	V-AH	24V/625~750
AC input	V	Triple phase 410
		Single phase 220
		Triple phase 220/380
		Triple phase 440
DC output	V	32±1
Charge time	hr	6±2
Connector	-	SRE 320A BLACK

5) GEAR PUMP

Item	Unit	Specification
Type	—	Fixed displacement gear pump
Capacity	cc/rev	16.5
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	150
2nd relief valve pressure	bar	130

7) DRIVE UNIT

Item	Unit	Specification
Max. axle load	kg/lb	2000/4410
Maximum brake-torque	N · m	1400
Maximum wheel torque	N · m	470
Gear ratio	-	20.5
Weight without fluid	kg/lb	55.3/122
Oil quantity	ℓ /U.S · qt	6.0/6.3

8) WHEELS

Item	10/13/15BTR-9
Type (STD/OPT)	SOLID/Non-marking
Quantity (front/rear)	2/1
Front-drive	18 × 7-8
Rear-steering	18 × 7-8

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	3.4 ± 0.7	24.6 ± 5.1
2		Traction motor mounting bolt	M 8 × 1.25	2.5 ± 0.5	18.1 ± 3.6
3	Hydraulic system	Hydraulic pump mounting bolt	M10 × 1.5	6.9 ± 1.4	49.9 ± 10.1
4		MCV mounting bolt, nut	M10 × 1.5	6.9 ± 1.4	49.9 ± 10.1
5		Steering unit mounting bolt	M10 × 1.5	6.9 ± 1.4	49.9 ± 10.1
6		Brake cylinder mounting bolt	M10 × 1.5	6.9 ± 1.4	49.9 ± 10.1
7		Hydraulic oil tank mounting bolt	M 8 × 1.25	3.4 ± 0.7	24.6 ± 5.1
8	Power train system	Drive axle mounting bolt, nut	M12 × 1.75	14.3 ± 1.0	103 ± 7.2
9		Steering axle mounting bolt, nut	M14 × 2.0	13.8 ± 1.3	99.8 ± 9.4
10		Front wheel mounting nut	M14 × 1.5	15.7 ± 2.3	114 ± 16.6
11		Rear wheel mounting nut	M14 × 1.5	15.7 ± 2.3	114 ± 16.6
12	ETC	Counterweight mounting bolt	M30 × 3.5	100 ± 15	723 ± 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