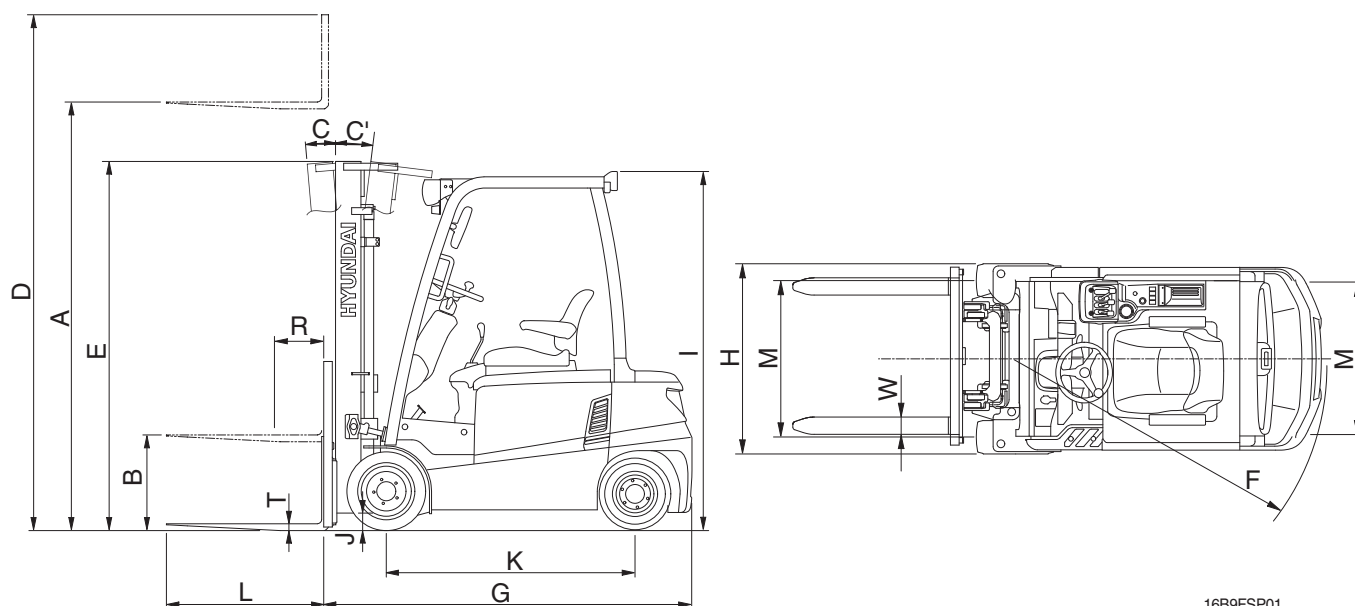


8. SPECIFICATIONS

1. SPECIFICATION



16B9FSP01

Model			Unit	16B-9F	18B-9F	20B-9F
Capacity			kg (lb)	1600 (3200)	1800 (3500)	2000 (4000)
Load center		R	mm (in)	500 (24")	←	←
Weight			kg (lb)	3085 (6801)	3214 (7085)	3394 (7482)
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	500/330	←	←
	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	15	←	←
	Gradeability (Load)		%	22	21	18
	Min turning radius (Outside)	F	mm (ft-in)	1710 (5' 7")	1795 (5' 11")	1810 (5' 11")
ETC	Max hydraulic pressure		kgf/cm ²	170	←	←
	Hydraulic oil tank		ℓ (usgal)	20 (5.28)	←	←
Overall length		G	mm (ft-in)	2035 (6' 8")	2120 (6' 11")	2130 (7' 0")
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 (3.3")	94 (3.7")	←
Wheel base		K	mm (ft-in)	1355 (4' 5")	1440 (4' 9")	←
Wheel tread (front/rear)		M/M'	mm (ft-in)	895/880 (2' 11"/2' 11")	905/880 (3' 0"/2' 11")	←

2. SPECIFICATION FOR MAJOR COMPONENTS

1) CONTROLLER

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

2) MOTOR

Item	Unit	Traction	Pump
Model	—	AMBS4003	ABDU4001
Type	—	AC	←
Rated voltage	Vac	30	←
Output	kW	4.0×2	12.0
Insulation	—	Class F	Class F

3) BATTERY

Item	Unit	16B-9F	18/20B-9F
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	—	SB 350 or SR350	

4) CHARGER

Item	Unit	16/18/20B-9F
Type	-	Constant current, constant voltage
Battery capacity for charge	V-AH	48-440~520
AC input	V	Triple phase 410
		Single phase 220
		Triple phase 220/380
		Triple phase 440
DC output	V	64±1
Charge time	hr	6±2
Connector (CE spec)	-	SB 350 or SR 350

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	—	2 spool, 3 spool, 4 spool
Operating method	—	Mechanical
Main relief valve pressure	bar	170
2nd relief valve pressure	bar	130

7) DRIVE UNIT

Item	Unit	Specification	
		Standard	★Option
Max. axle load	kg (lb)	2700 (5953)	3850 (8818)
Max. input speed	rpm	5000	
Max. output torque (wheel)	N·m	2260	1320
Gear ratio	—	20	26.75
Weight without fluid (1EA)	kg (lb)	35 / 77	31 (68)
Oil quantity	ℓ (U.S. gal)	0.35 (0.37)	

★ : Machine Serial No. 16B-9F : #0682-, 20B-9F : #0987-

8) WHEELS

Item	16B-9F	18B-9F	20B-9F
Type (STD/OPT)	SOLID/NON MARKING		
Quantity (front/rear)	2/2		
Front-drive	18×7-8	200/50-10	←
Rear-steering	16×6-8	←	←

9) BRAKES & STEERING

Item		Specification
Brakes	Travel	Front wheel, wet disc brake
	Parking	Ratchet type
Steering	Type	Full hydraulic, power steering

3. TIGHTENING TORQUE

No	Items		Size	kgf · m	lbf · ft
1	Electric system	Hyd pump motor mounting bolt	M10×1.5	6.9±1.4	50±10
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	50±10
4		MCV mounting bolt, nut	M10×1.5	6.9±1.4	50±10
5		Steering unit mounting bolt	M10×1.5	6.9±1.4	50±10
7		Brake cylinder mounting bolt	M10×1.5	6.9±1.4	57.8±3.6
9	Power train system	Drive unit mounting bolt	M14×2.0	13.8±1.2	99.8±8.7
10		Steering axle mounting bolt, nut	M20×2.5	62±3.0	448±21.7
11		Front wheel mounting nut	M14×1.5	14±1.5	101±10.8
12		Rear wheel mounting nut	M12×1.5	10±1.0	72.3±7.2
13	ETC	Counterweight mounting bolt	M24×3.0	100±15	723±108
14		Seat mounting nut	M 8 × 1.25	2.5±0.5	18.1±3.6
15		Head guard mounting bolt (front)	M12×1.75	12.8±3.0	92.6±21.7
16		Head guard mounting bolt (rear)	M16×2.0	29.7±4.5	215±32.5
17		Mast mounting bolt	M16×2.0	29.7±4.5	215±32.5