



BR18SP-7 PLUS / BR20SP-7 PLUS

7 SERIES REACH TRUCK

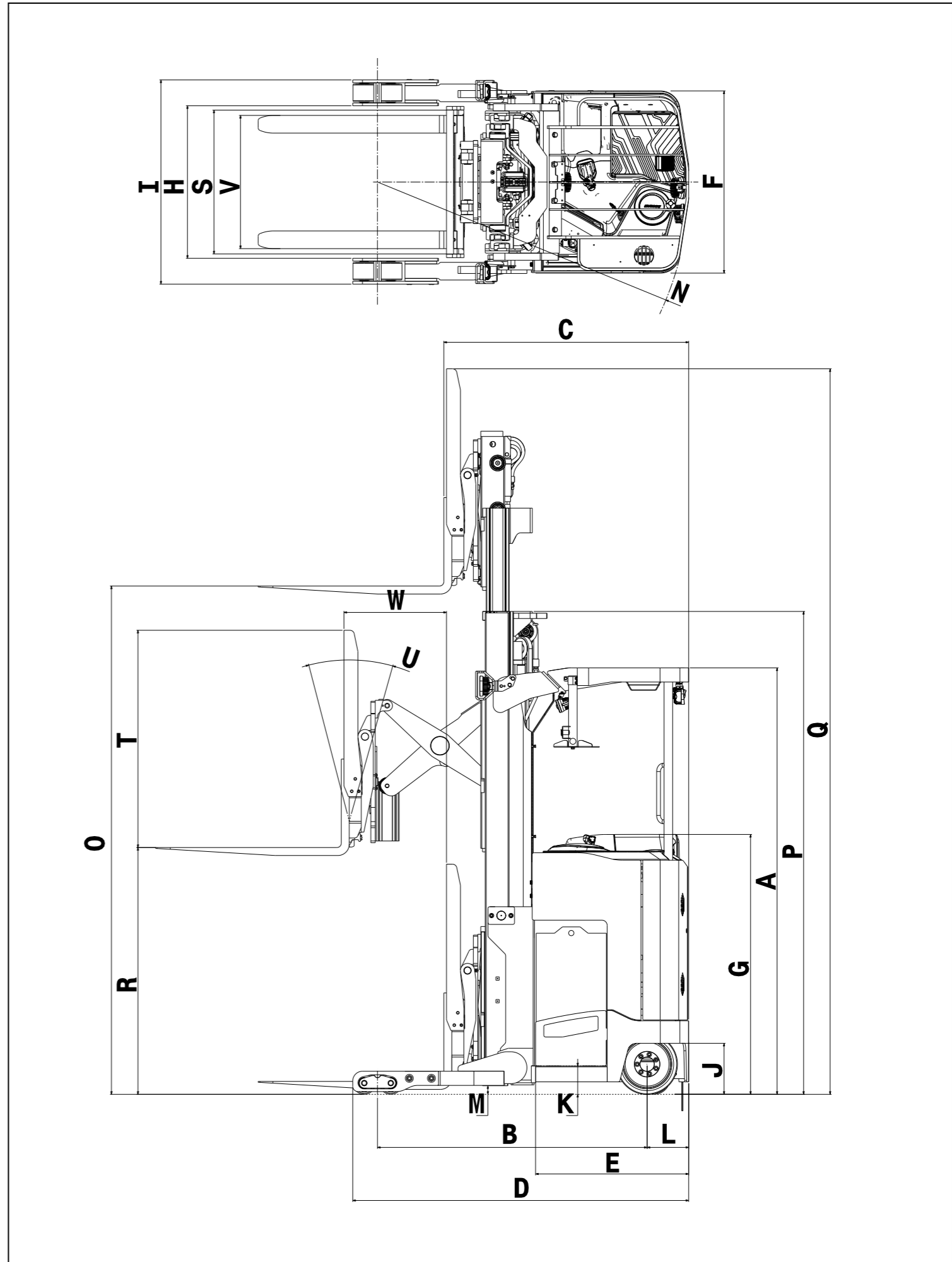
Electric 3,500 to 4,000 lbs capacity
Pantograph type



Technical Data

		DOOSAN			
General	Manufacturer		DOOSAN		
	Model		BR18SP-7 PLUS		BR20SP-7 PLUS
	Capa.	lb(kg)	3500 (1600)	3500 (1600)	4000 (1800) 4000 (1800)
	Battery Compartment	in	14.4	16.4	16.4 20.9
	Load Center	in(mm)	24 (600)		
	System Voltage	V	36		
	Operator Type		Rider Reach		
	Tire Type-Load/Caster/Drive		Poly / Poly / Poly		
	Wheel, load/Caster (Drive x)		4 / 2 (1x)		
	Weight	Total Weight (34" Leg, FFT 240", /w LBR,Fork)		7255 (3291)	7592 (3444)
Weight /wo batt at 240" MFH Mast (34" Leg)		lb(kg)	5655 (2565)	5692 (2582)	5692 (2582) 5783 (2623)
With load,Front (With Min Batt at 240" Mast Reach in)		lb(kg)	6336 (2874)	6891 (3126)	6891 (3126) 7542 (3421)
With load,Rear (With Min Batt at 240" Mast Reach in)		lb(kg)	4447 (2017)	4229 (1918)	4229 (1918) 4268 (1936)
W/O load,Front (With Min Batt at 240" Mast Reach in)		lb(kg)	2610 (1184)	2812 (1275)	2812 (1275) 3151 (1429)
W/O load,Rear (With Min Batt at 240" Mast Reach in)		lb(kg)	4645 (2107)	4781 (2169)	4781 (2169) 5132 (2328)
14.4" Battery Min		lb(kg)	1600 (730)		
16.4" Battery Min		lb(kg)	1900 (860)		
18.4" Battery Min		lb(kg)	-		
20.9" Battery Min		lb(kg)	2500 (1130)		
Chassis	Guard Height (From Ground)	A in(mm)	95 (2410) (*91" at 198" mast)		
	Wheel base	B in(mm)	58 (1475)	60 (1525)	60 (1525) 64.5 (1640)
	Head Length (Length to Fork face + Side Shift)	C in(mm)	52.5 (1335)	54.5 (1385)	54.5 (1385) 59 (1500)
	Truck Length	D in(mm)	72.8 (1850)	74.8 (1900)	74.8 (1900) 79.3 (2015)
	Power Unit Length	E in(mm)	32.7(830)	34.7(880)	34.7(880) 39.2 (995)
	Power Unit Width	F in(mm)	40.5 (1030)		
	Power Unit Height	G in(mm)	57.8 (1468)		
	Base Leg Opening (inside)	H in	34, 36, 38, 40, 42, 44		
	Base Leg Width (Outside)	I in	Inside plus 11.4"		
	Base Leg Width	in(mm)	5.7 (146)		
	Step Height	J in(mm)	11.4 (290)		
	Battery Rollover Height	K in(mm)	6.7 (170)		
	Drive CL to End of CTWT	L in(mm)	9.25 (235)		
	Underclearance (Center of Wheelbase)	M in(mm)	2 (50)		
	Outside turning radius	N in(mm)	67.4 (1713)	69.4 (1763)	69.4 (1763) 73.9 (1878)
	Right Angle Stack Aisle (48x40 in pallet)	in(mm)	See the 'Right Angle Stack Aisle' sheet		
	Operator compartment		-		
	Height	in(mm)	81.3 (2065)		
	Length	in(mm)	17.7 (450)		
	Width	in(mm)	17.9 (454)		
Track (Tread) / Rear	in(mm)	28.5 (725)			
Front End	Maximum Fork Height	O in(mm)	See the mast chart		
	Mast Lowered Height	P in(mm)	See the mast chart		
	Mast Extended Height (With STD. LBR)	Q in(mm)	See the mast chart		
	Free Lift (With STD. LBR)	R in(mm)	See the mast chart		
	Carriage Width	S in(mm)	See the mast chart		
	LBR Height	T in(mm)	See the mast chart		
	Tilt angle F/B	U deg	3 / 4		
	Fork Size (T x W x L)	in	See the mast chart		
	Fork Adjustment (Min / Max)	V in(mm)	9 (240) / 29.5 (750)		
	Reach Stroke	W in(mm)	22.8 (580)		
Battery Compartment	Battery Size A (14.4)	in(mm)	14.4 (366) x 38.75 (985) x 32 (810)		
	Battery Size B (16.4)	in(mm)	16.4 (416) x 38.75 (985) x 32 (810)		
	Battery Size C (18.4)	in(mm)	-		
	Battery Size D (20.9)	in(mm)	20.9 (531) x 38.75 (985) x 32 (810)		
Ref. Battery Size	Battery Size A (14.4)	in(mm)	13.37 (340) x 38.33 (974) x 30.56 (776)		
	Battery Size B (16.4)	in(mm)	15.62 (397) x 38.33 (974) x 30.56 (776)		
	Battery Size C (18.4)	in(mm)	-		
	Battery Size D (20.9)	in(mm)	20.21 (513) x 38.33 (974) x 30.56 (776)		
Tire Size	Tire Size - Drive (dia. x width)	in(mm)	13.5 x 5.5 (344 x 140)		
	Tire Size - Caster (dia. x width)	in(mm)	7 x 2.44 (175 x 62)		
	Tire Size - Load Wheels (dia. x width)	in(mm)	5 x 4 (125 x 100)		
Performance	Travel Speed Tractor First (Empty/Rated Load)	mph (km)	7.5 (12)		
	Travel Speed forks First (Empty/Rated Load)	mph (km)	7.5 (12)		
	Lift Speed Loaded	fpm (mm/s)	69 (350)	65 (330)	
	Lift Speed Empty	fpm (mm/s)	120 (600)		
	Lower Speed Loaded	fpm (mm/s)	110 (550)		
	Lower Speed Empty	fpm (mm/s)	110 (550)		
	Reach Speed (in/out), Empty	sec	Adjustable		
	Gradeability - Loaded - Maximum	%	10		
Gradeability - Empty - Maximum	%	10			

Dimensional Drawing



Note: Specification values quoted in this spec sheet have been rounded, exclude Load Backrest and other attachments. Performance may vary due to operating conditions. Products and specifications are subject to change without prior notice.

Mast Specifications and Rated Capacities

BR18SP-7 PLUS

Mst Type	Max. Fork Height	Overall Height			Free Lift /W STD. LBR	Fork T x W x L (STD)	Carriage Width (STD)	Tilt Range	
		Lowered	STD. LBR	Extend /W STD. LBR				FWD	BWD
		in(mm)	in(mm)	in(mm)	in(mm)	in(mm)	in	in(mm)	deg.
FFT	198 (5030)	91.0 (2310)	48 (1220)	246.9 (6270)	43.3 (1100)	1.75 x 4 x 42 (45 x 100 x 1050)	32 (813)	3	4
	210 (5330)	95.0 (2410)	48 (1220)	258.7 (6570)	47.2 (1200)	1.75 x 4 x 42 (45 x 100 x 1050)	32 (813)	3	4
	240 (6100)	107.5 (2725)	48 (1220)	288.8 (7335)	58.4 (1485)	1.75 x 4 x 42 (45 x 100 x 1050)	32 (813)	3	4
	253 (6430)	111.5 (2835)	48 (1220)	301.8 (7665)	62.8 (1595)	1.75 x 4 x 42 (45 x 100 x 1050)	32 (813)	3	4
	258 (6550)	113.0 (2875)	48 (1220)	306.5 (7785)	64.3 (1635)	1.75 x 4 x 42 (45 x 100 x 1050)	32 (813)	3	4
	270 (6890)	117.5 (2990)	48 (1220)	319.9 (8125)	68.9 (1750)	1.75 x 4 x 42 (45 x 100 x 1050)	32 (813)	3	4
	289 (7340)	126.5 (3215)	48 (1220)	337.8 (8580)	77.7 (1975)	1.75 x 4 x 42 (45 x 100 x 1050)	32 (813)	3	4

BR20SP-7 PLUS

Mst Type	Max. Fork Height	Overall Height			Free Lift /W STD. LBR	Fork T x W x L (STD)	Carriage Width (STD)	Tilt Range	
		Lowered	STD. LBR	Extend /W STD. LBR				FWD	BWD
		in(mm)	in(mm)	in(mm)	in(mm)	in(mm)	in	in(mm)	deg.
FFT	198 (5030)	91.0 (2310)	48 (1220)	246.9 (6270)	43.3 (1100)	1.75 x 4 x 42 (45 x 100 x 1050)	32 (813)	3	4
	210 (5330)	95.0 (2410)	48 (1220)	258.7 (6570)	47.2 (1200)	1.75 x 4 x 42 (45 x 100 x 1050)	32 (813)	3	4
	240 (6100)	107.5 (2725)	48 (1220)	288.8 (7335)	58.4 (1485)	1.75 x 4 x 42 (45 x 100 x 1050)	32 (813)	3	4
	253 (6430)	111.5 (2835)	48 (1220)	301.8 (7665)	62.8 (1595)	1.75 x 4 x 42 (45 x 100 x 1050)	32 (813)	3	4
	258 (6550)	113.0 (2875)	48 (1220)	306.5 (7785)	64.3 (1635)	1.75 x 4 x 42 (45 x 100 x 1050)	32 (813)	3	4
	270 (6890)	117.5 (2990)	48 (1220)	319.9 (8125)	68.9 (1750)	1.75 x 4 x 42 (45 x 100 x 1050)	32 (813)	3	4
	289 (7340)	126.5 (3215)	48 (1220)	337.8 (8580)	77.7 (1975)	1.75 x 4 x 42 (45 x 100 x 1050)	32 (813)	3	4
	300 (7610)	130.0 (3305)	48 (1220)	348.5 (8850)	81.3 (2065)	1.75 x 4 x 42 (45 x 100 x 1050)	32 (813)	3	4
	318 (8075)	139.5 (3540)	48 (1220)	367.0 (9320)	90.5 (2300)	1.75 x 4 x 42 (45 x 100 x 1050)	32 (813)	3	4

Note : These load capacities are based on the standard chassis without side shifter.

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Right Angle Stack Aisle

Truck with 16.4" battery & 42" ID & 4" space					
Pallet length	Pallet width				
	in (mm)	36 (914)	40 (1016)	44 (1118)	48 (1219)
	36 (914)	86.5 (2198)	86.1 (2187)	85.6 (2174)	85.1 (2162)
	40 (1016)	91.3 (2319)	90.9 (2310)	90.6 (2301)	90.2 (2291)
	44 (1118)	95.8 (2434)	95.5 (2426)	95.2 (2419)	94.9 (2411)
48 (1219)	100.2 (2545)	99.9 (2538)	99.7 (2532)	99.4 (2525)	

- Note
- Aisle width values shown are based on a 16.4 in. battery compartment and a 42 in. base leg opening (inside)
 - Subtract 2 in. (50mm) for 14.4 in. battery compartment.
 - Add 4.5 in. (115mm) for 20.9 in. battery compartment
 - Add a minimum of 6 in. (150mm) to 12 in. (305mm) for easy maneuvering

