

7 Series Pneumatic Diesel Forklifts

4,000 lb to 7,000 lbs Capacity

D20S/D25S/D30S/D33S-7, D35C-7

EPA Tier-4, Euro Stage III B



Building your tomorrow today

Technical Specifications

Characteristics	1.1	Manufacturer			Doosan	Doosan	Doosan	Doosan	Doosan
	1.2	Model designation			D20S-7	D25S-7	D30S-7	D33S-7	D35C-7
	1.3	Drive: Diesel, Gasoline, LP			Diesel	Diesel	Diesel	Diesel	Diesel
	1.4	Operator type: Hand, Pedestrian, Standing, Seated			Seated	Seated	Seated	Seated	Seated
	1.5	Load Capacity	Q	lb(kg)	4,000 (2,000)	5,000 (2,500)	6,000 (3,000)	6,500 (3,250)	7,000 (3,500)
	1.6	Load Center	c	in(mm)	24 (500)	24 (500)	24 (500)	24 (500)	24 (500)
	1.8	Load Distance: Center of Driveaxle to fork	x	in(mm)	18.9 (480)	18.9 (480)	19.1 (485)	19.1 (485)	19.5 (495)
Weight	1.9	Wheelbase	y	in(mm)	64.0 (1625)	64.0 (1625)	66.9 (1700)	66.9 (1700)	66.9 (1700)
	2.1	Service weight		lb(kg)	8,130 (3,690)	8,960 (4,065)	10,060 (4,565)	10,470 (4,750)	10,840 (4,915)
	2.2	Axle Loading, Loaded Front/Rear		lb(kg)	10,580/1,550 (4,965/725)	12,110/1,850 (5,695/870)	13,960/2,100 (6,575/990)	14,760/2,210 (6,960/1,040)	15,590/2,250 (7,355/1,060)
Tires	2.3	Axle Loading, Unloaded Front/Rear		lb(kg)	3,860/4,270 (1,750/1,940)	3,700/5,260 (1,680/2,385)	4,120/5,940 (1,870/2,695)	4,020/6,450 (1,825/2,925)	3,980/6,860 (1,805/3,110)
	3.1	Tires: pneumatic (P), superelastic (SE), cushion (C)			P	P	P	P	P
	3.2	Tire size, Front			7.00x15-12	7.00x15-12	28x9x15-12	28x9x15-12	250x15-18
	3.3	Tire size, Reat			6.50x10-10	6.50x10-10	6.50x10-10	6.50x10-12	6.50x10-12
	3.5	Wheels, number Front/Rear (x = driven wheels)			2x/2	2x/2	2x/2	2x/2	2x/2
	3.6	Tread, Front	b11	in(mm)	38.4 (975)	38.4 (975)	38.7 (982)	38.7 (982)	40.4 (1,026)
	3.7	Tread, Rear	b12	in(mm)	39.37 (1,000)	39.37 (1,000)	39.37 (1,000)	39.37 (1,000)	39.37 (1,000)
Dimensions	4.1	Tilt of Mast/Fork carriage Forward/Backward	α/β	$^{\circ}$	6/10	6/10	6/10	6/10	6/10
	4.2	Height, Mast lowered	h1	in(mm)	85.6 (2,175)	85.6 (2,175)	85.2 (2,165)	85.2 (2,165)	85.2 (2,165)
	4.3	Free Lift	h2	in(mm)	5.98 (152)	5.98 (152)	5.98 (152)	5.98 (152)	5.98 (152)
	4.4	Lift	h3	in(mm)	127 (3,230)	127 (3,230)	127 (3,230)	127 (3,230)	118 (3,000)
	4.5	Height, Mast Extended	h4	in(mm)	177 (4,490)	177 (4,490)	177 (4,490)	177 (4,490)	168 (4,260)
	4.7	Height of Overhead Guard(Cabin)	h6	in(mm)	85.9 (2,183)	85.9 (2,183)	85.9 (2,183)	85.9 (2,183)	85.9 (2,183)
	4.8	Height of Seat	h7	in(mm)	40.4 (1,026)	40.4 (1,026)	40.4 (1,026)	40.4 (1,026)	40.4 (1,026)
	4.19	Overall Length	l1	in(mm)	140 (3,565)	143 (3,630)	147 (3,744)	149 (3,774)	150 (3,809)
	4.20	Length to Forkface	l2	in(mm)	99.6 (2,530)	102 (2,595)	106 (2,700)	107 (2,730)	109 (2,765)
	4.21	Overall Width	b1/ b2	in(mm)	46.1 (1,170)	46.1 (1,170)	47.1 (1,197)	47.1 (1,197)	48.2 (1,255)
	4.22	Fork Dimensions	s/e/ l	in(mm)	1.57x3.94x41.3 (40x100x1,050)	1.57x3.94x41.3 (40x100x1,050)	1.77x4.92x41.3 (45x125x1,050)	1.77x4.92x41.3 (45x125x1,050)	1.77x4.92x41.3 (45x125x1,050)
	4.23	Fork carriage ISO 2328, class/type A,B			II/A	II/A	III/A	III/A	III/A
	4.24	Fork carriage width	b3	in(mm)	43.4 (1,103)	43.4 (1,103)	43.9 (1,115)	43.9 (1,115)	43.9 (1,115)
	4.31	Ground Clearance, Loaded, below mast	m1	in(mm)	4.53 (115)	4.53 (115)	4.13 (105)	4.13 (105)	4.13 (105)
	4.32	Ground Clearance, center of wheelbase	m2	in(mm)	5.63 (143)	5.63 (143)	5.63 (143)	5.63 (143)	5.63 (143)
	4.34.1	Aisle withd for pallets 1,000 x 1,200 crossways	Ast	in(mm)	154 (3,905)	155.5 (3,950)	159.5 (4,050)	160.5 (4,080)	162 (4,115)
4.35	Turning Radius	Wa	in(mm)	87.4 (2,220)	89.2 (2,265)	93.1 (2,365)	94.3 (2,395)	95.3 (2,420)	
4.36	Internal Turning Radius	b13	in(mm)	30.5 (775)	30.5 (775)	30.6 (761)	30.6 (761)	30.6 (761)	
Performance data	5.1	Travel Speed, Loaded/Unloaded		mph(km/h)	13.0/13.6 (21/22)	13.0/13.6 (21/22)	12.4/13.0 (20/21)	12.4/13.0 (20/21)	12.4/13.0 (20/21)
	5.2	Lift Speed, Loaded/Unloaded		fpm(m/s)	104/114 (0.53/0.58)	102/114 (0.52/0.58)	100/114 (0.51/0.58)	94.5/106 (0.48/0.54)	92.5/106 (0.47/0.54)
	5.3	Lowering Speed, Loaded/Unloaded		fpm(m/s)	98.4/88.6 (0.50/0.45)	98.4/88.6 (0.50/0.45)	98.4/88.6 (0.50/0.45)	98.4/88.6 (0.50/0.45)	98.4/88.6 (0.50/0.45)
	5.5	Drawbar pull, Loaded/Unloaded(@ 1.6km/h)		lb(N)	3,950/3,880 (17,540/17,250)	3,950/3,920 (17,540/17,410)	4,100/4,010 (18,230/17,850)	4,080/4,020 (18,130/17,870)	3,920/3,870 (17,440/17,220)
	5.6	Max. Drawbar pull, Loaded/Unloaded		lb(N)	4,400/4,300 (19,580/19,130)	4,410/4,350 (19,610/19,330)	4,620/4,470 (20,520/19,880)	4,590/4,480 (20,410/19,910)	4,420/4,300 (19,630/19,130)
	5.7	Gradeability, Loaded/Unloaded(@ 1.6km/h)		%	33.0/54.4	28.0/48.6	25.5/43.5	24.0/41.6	22.0/39.1
	5.8	Max. Gradeability, Loaded/Unloaded		%	37.5/62.3	30.4/53.3	28.8/49.6	27.0/47.3	24.8/44.2
	5.10	Service Brake			foot/hydraulic	foot/hydraulic	foot/hydraulic	foot/hydraulic	foot/hydraulic
Combustion Engine	7.1	Engine Manufacturer/Model			Doosan/D24NAP	Doosan/D24NAP	Doosan/D24NAP	Doosan/D24NAP	Doosan/D24NAP
	7.2	Engine power according to DIN ISO1585		hp(kW)	61.1 (45.6)	61.1 (45.6)	61.1 (45.6)	61.1 (45.6)	61.1 (45.6)
	7.3	Rated Speed		rpm	2,200	2,200	2,200	2,200	2,200
	7.3.1	Torque at 1/min		ft•lbs(N•m)	193/1,600 (262/1,600)	193/1,600 (262/1,600)	193/1,600 (262/1,600)	193/1,600 (262/1,600)	193/1,600 (262/1,600)
	7.4	Number of Cylinders/Displacement		cc	4/4/2,392	4/4/2,392	4/4/2,392	4/4/2,392	4/4/2,392
7.10	Battery Voltage/normal capacity		V/Ah	12/85	12/85	12/85	12/85	12/85	
Addition Data	10.1	Operating pressure for attachments		psi(bar)	2,260 (156)	2,260 (156)	2,260 (156)	2,260 (156)	2,260 (156)
	10.2	Oil volume for attachments		gpm(l/min)	15.9 (60)	15.9 (60)	15.9 (60)	15.9 (60)	15.9 (60)
	10.4	Fuel Tank Capacity		gal(l)	13.8 (51)	13.8 (51)	13.8 (51)	13.8 (51)	13.8 (51)
	10.7	Sound level at th driver's ear according to EN 12 053		dB(A)	80	80	80	80	80

MAST SPECIFICATION and RATED CAPACITIES

D20S-7

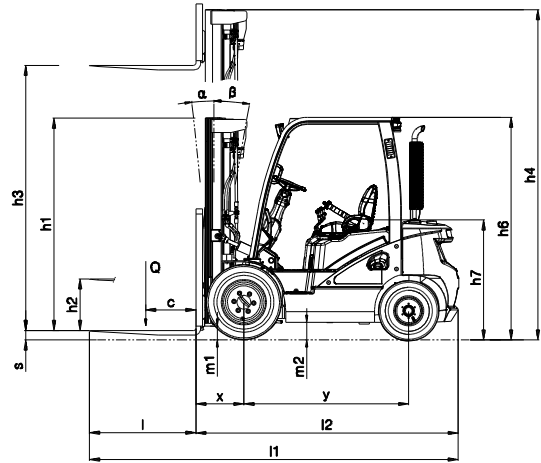
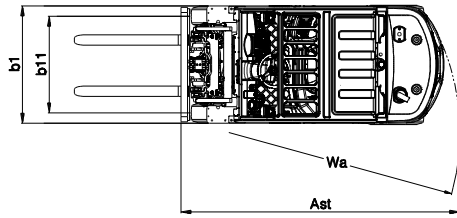
Mast type	Maximum Fork Height	Maximum Lowered Height	Fully Extended Height	Free Lift	Rated Load Capacities													
					D20S-7													
					With Load Backrest	With Load Backrest	Tilt Angle						Load Capacities					
							Single Pneu.		Double Pneu		Single Solid		Single Pneu.		Double Pneu		Single Solid	
FWD	BWD	FWD	BWD	FWD	BWD	LC 500mm	LC 24in	LC 500mm	LC 24in	LC 500mm	LC 24in							
	in	in	in	in	deg	deg	deg	deg	deg	deg	kg	lb	kg	lb	kg	lb		
STD	80	62	177	6	6	10	6	10	6	10	2,000	4,000	2,000	4,000	2,000	4,000		
	102	73	188	6	6	10	6	10	6	10	2,000	4,000	2,000	4,000	2,000	4,000		
	116	80	199	6	6	10	6	10	6	10	2,000	4,000	2,000	4,000	2,000	4,000		
	127	86	205	6	6	10	6	10	6	10	2,000	4,000	2,000	4,000	2,000	4,000		
	138	95	221	6	6	10	6	10	6	10	2,000	4,000	2,000	4,000	2,000	4,000		
	150	101	245	25	6	10	6	10	6	10	2,000	4,000	2,000	4,000	2,000	4,000		
	156	104	151	33	6	10	6	10	6	10	2,000	4,000	2,000	4,000	2,000	4,000		
	171	112	166	38	6	10	6	10	6	10	2,000	4,000	2,000	4,000	2,000	4,000		
195	124	177	48	6	5	6	10	6	10	1,900	3,750	1,925	3,900	1,975	4,000			
FF	102	73	151	25	6	10	6	10	6	10	2,000	4,000	2,000	4,000	2,000	4,000		
	116	80	166	33	6	10	6	10	6	10	2,000	4,000	2,000	4,000	2,000	4,000		
	127	86	177	38	6	10	6	10	6	10	2,000	4,000	2,000	4,000	2,000	4,000		
	142	95	192	48	6	10	6	10	6	10	2,000	4,000	2,000	4,000	2,000	4,000		
FFT	154	74	203	26	6	8	6	8	6	8	2,000	4,000	2,000	4,000	2,000	4,000		
	169	79	219	32	6	8	6	8	6	8	2,000	4,000	2,000	4,000	2,000	4,000		
	186	85	236	37	6	8	6	8	6	8	1,950	3,950	1,950	3,950	2,000	4,000		
	219	98	268	51	6	5	6	8	6	8	1,950	3,950	1,925	3,950	2,000	4,000		
	237	104	286	57	6	3	6	8	6	8	1,650	3,650	1,825	3,700	1,875	3,850		
	256	114	306	66	6	3	6	8	6	5	1,300	2,900	1,750	3,550	1,825	3,700		

D25S-7

Mast type	Maximum Fork Height	Maximum Lowered Height	Fully Extended Height	Free Lift	Rated Load Capacities													
					D25S-7													
					With Load Backrest	With Load Backrest	Tilt Angle						Load Capacities					
							Single Pneu.		Double Pneu		Single Solid		Single Pneu.		Double Pneu		Single Solid	
FWD	BWD	FWD	BWD	FWD	BWD	LC 500mm	LC 24in	LC 500mm	LC 24in	LC 500mm	LC 24in							
	in	in	in	in	deg	deg	deg	deg	deg	deg	kg	lb	kg	lb	kg	lb		
STD	80	62	130	6	6	10	6	10	6	10	2,500	5,000	2,500	5,000	2,500	5,000		
	102	73	151	6	6	10	6	10	6	10	2,500	5,000	2,500	5,000	2,500	5,000		
	116	80	166	6	6	10	6	10	6	10	2,500	5,000	2,500	5,000	2,500	5,000		
	127	86	177	6	6	10	6	10	6	10	2,500	5,000	2,500	5,000	2,500	5,000		
	138	95	188	6	6	10	6	10	6	10	2,500	5,000	2,500	5,000	2,500	5,000		
	150	101	199	6	6	10	6	10	6	10	2,500	5,000	2,500	5,000	2,500	5,000		
	156	104	205	6	6	10	6	10	6	10	2,500	5,000	2,500	5,000	2,500	5,000		
	171	112	221	6	6	5	6	10	6	10	2,500	5,000	2,500	5,000	2,500	5,000		
195	124	245	6	6	3	6	10	6	10	2,075	4,600	2,450	4,950	2,500	5,000			
FF	102	73	151	25	6	10	6	10	6	10	2,500	5,000	2,500	5,000	2,500	5,000		
	116	80	166	33	6	10	6	10	6	10	2,500	5,000	2,500	5,000	2,500	5,000		
	127	86	177	38	6	10	6	10	6	10	2,500	5,000	2,500	5,000	2,500	5,000		
	142	95	192	48	6	10	6	10	6	10	2,500	5,000	2,500	5,000	2,500	5,000		
FFT	154	74	203	26	6	8	6	8	6	8	2,500	5,000	2,500	5,000	2,500	5,000		
	169	79	219	32	6	5	6	8	6	8	2,500	5,000	2,500	5,000	2,500	5,000		
	186	85	236	37	6	3	6	8	6	8	2,450	5,000	2,500	5,000	2,500	5,000		
	219	98	268	51	6	3	6	8	6	8	2,350	5,000	2,475	5,000	2,475	5,000		
	237	104	286	57	6	3	6	8	6	8	1,525	3,400	2,325	4,750	2,400	4,850		
	256	114	306	66	6	3	6	8	6	5	1,175	2,600	2,250	4,550	2,300	4,700		

D30S-7

Mast type	Maximum Fork Height	Maximum Lowered Height	Fully Extended Height	Free Lift	Rated Load Capacities													
					D30S-7													
					With Load Backrest	With Load Backrest	Tilt Angle						Load Capacities					
							Single Pneu.		Double Pneu		Single Solid		Single Pneu.		Double Pneu		Single Solid	
FWD	BWD	FWD	BWD	FWD	BWD	LC 500mm	LC 24in	LC 500mm	LC 24in	LC 500mm	LC 24in							
	in	in	in	in	deg	deg	deg	deg	deg	deg	kg	lb	kg	lb	kg	lb		
STD	80	62	130	6	6	10	6	10	6	10	3,000	6,000	3,000	6,000	3,000	6,000		
	102	72	151	6	6	10	6	10	6	10	3,000	6,000	3,000	6,000	3,000	6,000		
	116	80	166	6	6	10	6	10	6	10	3,000	6,000	3,000	6,000	3,000	6,000		
	127	85	177	6	6	10	6	10	6	10	3,000	6,000	3,000	6,000	3,000	6,000		
	138	95	188	6	6	10	6	10	6	10	3,000	6,000	3,000	6,000	3,000	6,000		
	150	101	199	6	6	10	6	10	6	10	3,000	6,000	3,000	6,000	3,000	6,000		
	156	104	205	6	6	10	6	10	6	10	3,000	6,000	3,000	6,000	3,000	6,000		
	171	112	221	6	6	5	6	10	6	10	3,000	6,000	3,000	6,000	3,000	6,000		
195	124	245	6	6	3	6	10	6	10	2,525	5,550	2,900	5,850	2,975	6,000			
FF	102	72	151	25	6	10	6	10	6	10	3,000	6,000	3,000	6,000	3,000	6,000		
	116	80	166	32	6	10	6	10	6	10	3,000	6,000	3,000	6,000	3,000	6,000		
	127	85	177	38	6	10	6	10	6	10	3,000	6,000	3,000	6,000	3,000	6,000		
	142	95	192	48	6	10	6	10	6	10	3,000	6,000	3,000	6,000	3,000	6,000		
FFT	154	74	203	27	6	8	6	8	6	8	2,900	6,000	2,900	6,000	2,900	6,000		
	169	80	219	32	6	8	6	8	6	8	2,900	6,000	2,900	6,000	2,900	6,000		
	186	85	236	38	6	3	6	8	6	8	2,900	5,950	2,900	6,000	2,900	6,000		
	219	99	268	52	6	3	6	8	6	5	1,850	4,050	2,750	5,600	2,825	5,750		
	237	105	286	58	6	3	6	5	6	3	1,425	3,200	2,675	5,450	2,750	5,600		



D33S-7

Mast type	Maximum Fork Height	Maximum Lowered Height	Fully Extended Height	Free Lift	Rated Load Capacities											
					D33S-7											
					With Load Backrest	With Load Backrest	Tilt Angle				Load Capacities					
							Single Pneu.		Double Pneu		Single Solid		Single Pneu.		Double Pneu	
FWD	BWD	FWD	BWD	FWD	BWD	LC 500mm	LC 24in	LC 500mm	LC 24in	LC 500mm	LC 24in					
	in	in	in	in	deg	deg	deg	deg	deg	deg	kg	lb	kg	lb	kg	lb
STD	80	62	130	6	6	10	6	10	6	10	3,250	6,500	3,250	6,500	3,250	6,500
	102	72	151	6	6	10	6	10	6	10	3,250	6,500	3,250	6,500	3,250	6,500
	116	80	166	6	6	10	6	10	6	10	3,250	6,500	3,250	6,500	3,250	6,500
	127	85	177	6	6	10	6	10	6	10	3,250	6,500	3,250	6,500	3,250	6,500
	138	95	188	6	6	10	6	10	6	10	3,250	6,500	3,250	6,500	3,250	6,500
	150	101	199	6	6	10	6	10	6	10	3,250	6,500	3,250	6,500	3,250	6,500
	156	104	205	6	6	10	6	10	6	10	3,175	6,500	3,250	6,500	3,250	6,500
	171	112	221	6	6	5	6	10	6	10	3,175	6,500	3,250	6,500	3,250	6,500
195	124	245	6	6	3	6	10	6	8	2,450	5,400	3,125	6,350	3,200	6,500	
FF	102	72	151	25	6	10	6	10	6	10	3,250	6,500	3,250	6,500	3,250	6,500
	116	80	166	32	6	10	6	10	6	10	3,250	6,500	3,250	6,500	3,250	6,500
	127	85	177	38	6	10	6	10	6	10	3,250	6,500	3,250	6,500	3,250	6,500
	142	95	192	48	6	10	6	10	6	10	3,250	6,500	3,250	6,500	3,250	6,500
FFT	154	74	203	27	6	8	6	8	6	8	3,250	6,500	3,250	6,500	3,250	6,500
	169	80	219	32	6	8	6	8	6	8	3,250	6,500	3,250	6,500	3,250	6,500
	186	85	236	38	6	3	6	8	6	8	2,900	6,300	3,175	6,450	3,250	6,500
	219	99	268	52	6	3	6	8	6	5	1,750	3,950	2,975	6,050	3,050	6,200
	237	105	286	58	6	3	6	5	6	3	1,350	3,050	2,875	5,850	2,950	6,050

D35C-7

Mast type	Maximum Fork Height	Maximum Lowered Height	Fully Extended Height	Free Lift	Rated Load Capacities											
					D35C-7											
					With Load Backrest	With Load Backrest	Tilt Angle				Load Capacities					
							Single Pneu.		Double Pneu		Single Solid		Single Pneu.		Double Pneu	
FWD	BWD	FWD	BWD	FWD	BWD	LC 500mm	LC 24in	LC 500mm	LC 24in	LC 500mm	LC 24in					
	in	in	in	in	deg	deg	deg	deg	deg	deg	kg	lb	kg	lb	kg	lb
STD	71	62	120	6	6	10	6	10	6	10	3,500	7,000	3,500	7,000	3,500	7,000
	93	72	142	6	6	10	6	10	6	10	3,500	7,000	3,500	7,000	3,500	7,000
	107	80	157	6	6	10	6	10	6	10	3,500	7,000	3,500	7,000	3,500	7,000
	118	85	168	6	6	10	6	10	6	10	3,500	7,000	3,500	7,000	3,500	7,000
	138	95	187	6	6	10	6	10	6	10	3,500	7,000	3,500	7,000	3,500	7,000
	144	101	194	6	6	10	6	10	6	10	3,500	7,000	3,500	7,000	3,500	7,000
	150	104	199	6	6	10	6	10	6	10	3,500	7,000	3,500	7,000	3,500	7,000
	166	112	215	6	6	8	6	10	6	10	3,425	6,950	3,425	6,950	3,500	7,000
	189	124	239	6	6	3	6	8	6	8	3,250	6,650	3,275	6,650	3,375	6,850
FF	93	72	142	25	6	10	6	10	6	10	3,500	7,000	3,500	7,000	3,500	7,000
	107	80	157	32	6	10	6	10	6	10	3,500	7,000	3,500	7,000	3,500	7,000
	118	85	168	38	6	10	6	10	6	10	3,500	7,000	3,500	7,000	3,500	7,000
	138	95	187	48	6	10	6	10	6	10	3,500	7,000	3,500	7,000	3,500	7,000
FFT	140	74	190	27	6	8	6	8	6	8	3,400	7,000	3,400	7,000	3,400	7,000
	156	80	206	32	6	8	6	8	6	8	3,400	7,000	3,400	7,000	3,400	7,000
	172	85	222	38	6	5	6	8	6	8	3,375	6,850	3,375	6,850	3,400	7,000
	190	92	240	45	6	3	6	8	6	8	3,250	6,600	3,250	6,650	3,350	6,800
	205	99	255	52	6	3	6	8	6	5	2,600	5,800	3,150	6,450	3,250	6,600
	223	105	272	58	6	3	6	8	6	3	1,975	4,450	3,050	6,200	3,150	6,400