



Pneumatic Diesel Forklift Trucks

D110/130/160S-5

11,000kg to 16,000kg Capacity

PRO5



Operator friendly features include:

- **Spacious Operator compartment**

Wide operator leg room, tiltable steering column and ergonomically located operator pedals with a low cowl height facilitate ease of operation.

- **Optional Deluxe Operator Cab**

The all round visibility and deluxe operator cab is newly designed for maximum comfort of climate control.

Highly visible front, top glass, side slide windows and numerous options will make operators feel right at home on the job.

- **Deluxe Suspension Seat**

Full suspension deluxe seat with 6 directional adjustments keeps operators fresh and productive throughout the shift.

- **Integrated Instrument Panel**

The centralized and integrated easy-to-read instrument panel maximizes operator efficiency. Fuel gauge, engine hour meter, air pressure gauge, engine oil pressure, coolant and transmission temperature gauge keeps operator aware of all vehicle performance systems

- **Pilot Actuated Hydraulic Control Valve and levers**

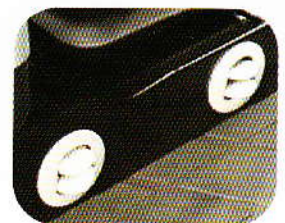
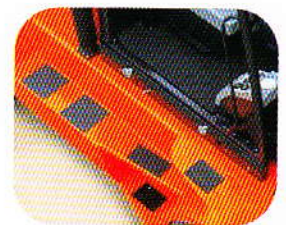
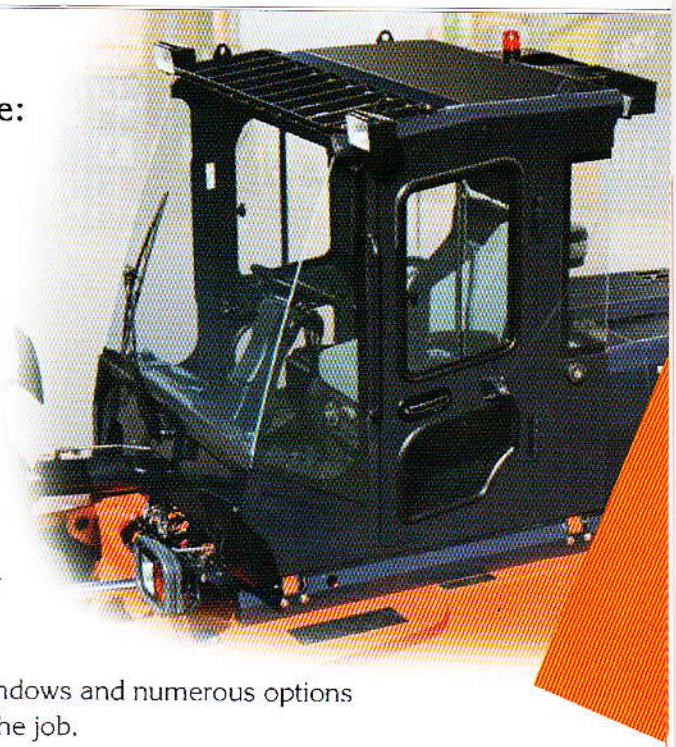
with minimal valve throw provides smooth and responsive hydraulics for superb operator control.

- **Wide Foot Steps and Grab Bar**

Wide and large open foot steps with anti-skid surface and a conveniently positioned overhead guard pillar grab bar provide effortless entry and exit.

- **Built in Air conditioning Duct and Grills (with Optional Operator Cab)**

are operator friendly positioned for maximum comfort in any environment.

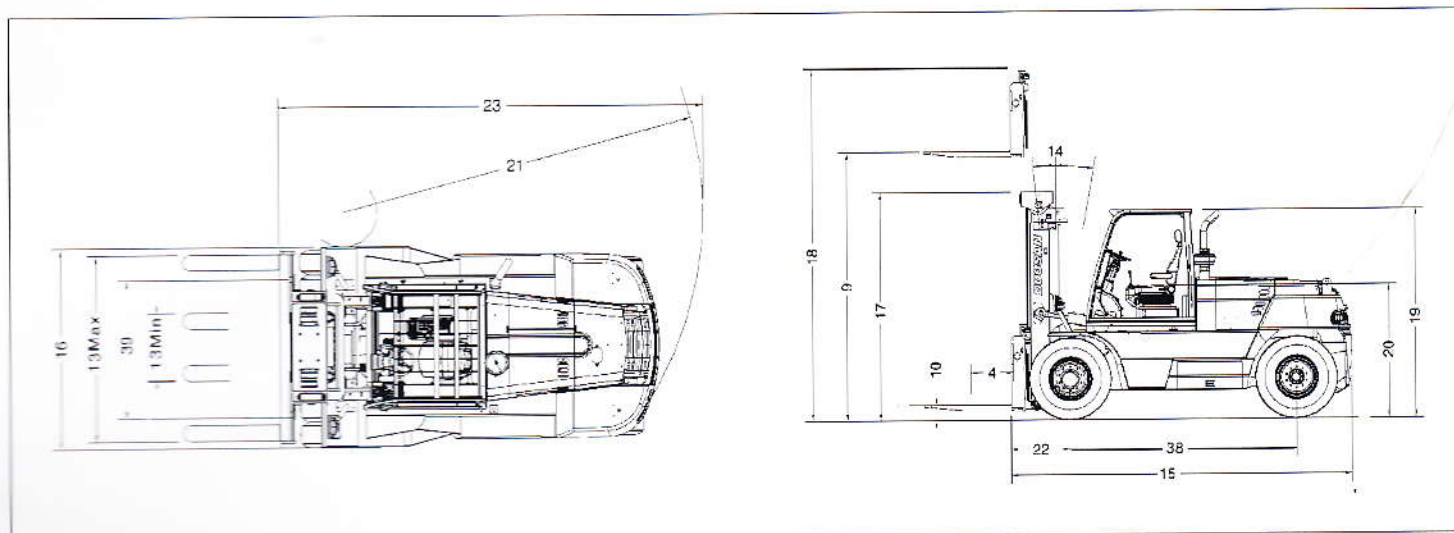


11,000/13,000/16,000 kg Capacities

MAIN VEHICLE SPECIFICATIONS

CHARACTERISTICS	1	Manufacturer			DOOSAN	DOOSAN	DOOSAN
	2	Model			D110S-5	D130S-5	D160S-5
	3	Load Capacity	at rated load center	kg	11,000	13,000	16,000
	4	Load Center		mm	600	600	600
	5	Power Type	Elec, Diesel, LPG, Gasoline		Diesel	Diesel	Diesel
	6	Operator Type			driver seated	driver seated	driver seated
	7	Tire Type	P: Pnu. E: Solid Soft, C: Cush		P	P	P
	8	Wheels (x=Driven)	Front / Rear		2 x 2 / 2	2 x 2 / 2	2 x 2 / 2
	9	Max. Fork Height	with STD 2-stage mast	mm	3,000	3,000	3,000
DIMENSIONS	10	Free Lift		mm	0	0	0
	12	Fork Carriage	ISO Class		-	-	-
	13	Forks	Length x Width x Thickness	mm	1,350 x 200 x 70	1,350 x 200 x 85	1,350 x 200 x 85
			Fork Spacing(Min x Max)	mm	470 x 2,140	470 x 2,140	470 x 2,290
	14	Tilt of Mast	Forward/Backward	deg	15 / 12	15 / 12	15 / 12
	15	Overall Dimensions	Length to Fork Face	mm	4,340	4,340	4,750
			Overall Width	mm	2,350	2,350	2,490
			Mast Lowered Height	mm	2,970	2,970	3,170
			Mast Extended Height	mm	4,470	4,470	4,670
			Overhead Guard Height	mm	2,765	2,765	2,928
			Seat Height	mm	1,660	1,660	1,820
	21	Turning Radius	Minimum outside	mm	4,040	4,040	4,400
	22	Load Moment Center		mm	755	760	815
	23	Aisle 90 degree stacking(add load length & clearance)		mm	4,790	4,790	5,195
PERFORMANCE	24	Travel Speed	Loaded/Unloaded	km/h	33.0 / 36.0	33.0 / 38.0	29.0 / 33.0
	25	Lifting Speed	Loaded/Unloaded	mm/s	450 / 490	430 / 490	375 / 440
	26	Lowering Speed	Loaded/Unloaded	mm/s	480 / 430	480/430	430 / 410
	28	Max. drawbar pull	Loaded at 1.0 mph(1.6 km/h)	kg	8,080	8,080	10,400
	30	Max. gradeability	Loaded at 1.0 mph(1.6 km/h)	%	33	29.5	28.5
	32	Total Service Weight , Unloaded		kg	15,540	16,800	18,900
WEIGHT	33	Axle Load	Loaded, Front / Rear	kg	23,340 / 3,200	26,500 / 3,300	31,870 / 3,030
	34		Unloaded, Front / Rear	kg	7,110 / 8,430	7,300 / 9,500	8,680 / 10,220
	35	Number of wheels (F/R)			4 / 2	4 / 2	4 / 2
	36	Tires	Size , Front		10.00 x 20 - 16PR	10.00 x 20 - 16PR	12.00 x 20 - 16PR
CHASSIS	37		Size , Rear		10.00 x 20 - 16PR	10.00 x 20 - 16PR	12.00 x 20 - 16PR
	38	Wheel Base	Distance	mm	2,850	2,850	3,150
	39	Tread Width	Front / Rear	mm	1,724 / 1,860	1,724 / 1,860	1,825 / 1,910
	40	Ground Clearance	Loaded at the lowest point	mm	224	224	224
	41		Loaded at center of wheelbase	mm	363	363	363
	42	Brakes	Service		Foot / Air	Foot / Air	Foot / Air
	43		Parking		Hand / Air	Hand / Air	Hand / Air
POWER TRAIN	45	Battery	Voltage / Ampere	V/AH	24(12 x 2) / 100	24(12 x 2) / 100	24(12 x 2) / 100
	49	Engine	Manufacturer		Doosan	Doosan	Doosan
			Model		DE08TS	DE08TS	DE08TS
			Rated Power (DIN)	HP(PS)/rpm	140 / 2,200	140 / 2,200	160 / 2,200
				kW/rpm	103 / 2,200	103 / 2,200	118 / 2,200
	51		Maximum Torque	kgm/rpm	55 / 1,400	55 / 1,400	63 / 1,400
	52		Cylinders/ Displacements	CC	6 / 8,071	6 / 8,071	6 / 8,071
	55		Type		Full Autoshift	Full Autoshift	Full Autoshift
			Number of Speed (Fwd/Rev)		3 / 3	3 / 3	3 / 3
	57		System	bar	190	190	210
		Hydraulic Pressure			140	140	140

DIMENSIONAL DRAWING



MAST SPECIFICATIONS and RATED CAPACITIES

Model	Mast Type	Maximum Fork Height	Fully Lowered Height	Fully Extended Height	Free Lift	Rated Load Capacities		
				With Load Backrest	With Load Backrest	Tilt Angle		LC 600mm
						FWD	BWD	
		mm	mm	mm	mm	deg	deg	kg
D110S-5	STD	3000	2965	4465	0	15	12	11000
		3500	3215	4965	0	15	12	11000
		4000	3465	5465	0	15	12	11000
		4500	3715	5965	0	15	12	11000
		5000	4165	6665	0	15	12	11000
		5500	4415	7165	0	15	12	10500
		6000	4665	7665	0	15	12	9500
D130S-5	STD	3000	2965	4465	0	15	12	13000
		3500	3215	4965	0	15	12	13000
		4000	3465	5465	0	15	12	13000
		4500	3715	5965	0	15	12	13000
		5000	4165	6665	0	15	12	13000
		5500	4415	7165	0	15	12	12000
		6000	4665	7665	0	15	12	11000
D160S-5	STD	2900	2950	4400	0	15	12	16000
		3000	3170	4670	0	15	12	16000
		3500	3420	5170	0	15	12	16000
		4000	3670	5670	0	15	12	16000
		4500	3920	6170	0	15	12	16000
		5000	4370	6870	0	15	12	16000
		5500	4620	7370	0	15	12	15000
		6000	4870	7870	0	15	12	14000
	FFT	3700	2930	5335	1360	15	10	15000
		4000	3030	5635	1480	15	10	15000
		4500	3195	6130	1645	15	10	15000
		5000	3360	6635	1815	15	10	15000
		5500	3530	7135	1980	15	10	14400
		6000	3695	7630	2145	15	10	13400
		6500	3865	8130	2310	15	10	12400