



TECHNICAL SPECIFICATIONS

Cushion Gas Forklift Trucks

GC15S/GC18S-5 & GC20SC-5

GC20E/GC25E/GC30E/GC33E-5

GC20P/GC25P/GC30P/GC33P-5

PRO5
SERIES



MAIN VEHICLE SPECIFICATIONS

CHARACTERISTICS	1	Manufacturer			DOOSAN	DOOSAN	DOOSAN
	2	Model			GC15S-5	GC18S-5	GC20SC-5
	3	Load Capacity	at rated load center	lb(kg)	3,000(1,500)	3,500(1,750)	4,000(2,000)
	4	Load Center		in(mm)	24(500)	24(500)	24(500)
	5	Power type	Elec, Diesel, LPG, Gasoline		LP	LP	LP
	6	Operator type			Driver-seated	Driver-seated	Driver-seated
	7	Tire type	P:Pnu, E:Solid Soft, C: Cushion		C	C	C
	8	Wheels (x=Driven)	Front/Rear		X 2 / 2	X 2 / 2	X 2 / 2
DIMENSIONS	9	Max. Fork Height	with STD 2-stage mast	in(mm)	118(3,000)	118(3,000)	118(3,000)
	10	Free Lift		in(mm)	5.1(130)	5.1(130)	5.3(135)
	12	Fork Carriage	ISO Class		II	II	II
	13	Forks	Length x Width x Thickness	in(mm)	41 x 4 x 1.4 (1,050 x 100 x 35)	41 x 4 x 1.4 (1,050 x 100 x 35)	41 x 4 x 1.6 (1,050 x 100 x 40)
			Fork Spacing(Min x Max)	in(mm)	9.5 x 35.6 (240x 905)	9.5 x 35.6 (240x 905)	9.5 x 35.6 (240x 905)
	14	Tilt of Mast	Forward/Backward	deg	6 / 8	6 / 8	6 / 8
	15	Overall Dimensions	Length to Fork Face	in(mm)	80.8(2,051)	82.9(2,106)	84.1(2,138)
			Overall Widthin(mm)	in(mm)	37(940)	39(991)	39(991)
			Mast Lowered Height	in(mm)	78(1,980)	78(1,980)	78(1,980)
			Mast Extended Height	in(mm)	159.3(4,045)	159.3(4,045)	159.4(4,050)
			Overhead Guard Height	in(mm)	81(2,060)	81(2,060)	81(2,060)
			Seat Heightin(mm)	in(mm)	39.3(1,000)	39.3(1,000)	39.3(1,000)
	20	Turning Radius	Minimum outside	in(mm)	74(1,882)	76(1,930)	77(1,956)
	22	Load Moment Center		in(mm)	15.5(394)	15.5(394)	15.7(399)
	23	Aisle 90 degree stacking(add load length & clearance)		in(mm)	89.5(2,276)	91.5(2,324)	92.7(2,355)
PERFORMANCE	24	Travel Speed	Loaded/Unloaded	mph(km/h)	11.3 / 11.6 (18.0 / 18.5)	11.3 / 11.6 (18.0 / 18.5)	11.3 / 11.6 (18.0 / 18.5)
	25	Lifting Speed	Loaded/Unloaded	fpm(mm/s)	118.1 / 128 (600 / 650)	118.1 / 128 (600 / 650)	118.1 / 128 (600 / 650)
	26	Lowering Speed	Loaded/Unloaded	fpm(mm/s)	98.4 / 88.6 (500 / 450)	98.4 / 88.6 (500 / 450)	98.4 / 88.6 (500 / 450)
	28	Max. drawbar pull	Loaded at 1.0 mph (1.6km/h)	lb(kg)	3,196(1,450)	3,174(1,440)	3,152(1,430)
	30	Max. gradeability	Loaded at 1.0 mph (1.7km/h)	%	36.5	31.5	29
	32	Total Service Weight, Unloaded		lb(kg)	5,940(2,695)	6,510(2,955)	6,800(3,085)
WEIGHT	33	Axle Load	Loaded, Front/Rear	lb(kg)	7,840 / 1,100 (3,685 / 510)	8,345 / 1,450 (4,035 / 670)	9,400 / 1,400 (4,435 / 650)
	34		Unloaded, Front/Rear	lb(kg)	2,370 / 3,570 (1,075 / 1,620)	2,190 / 4,320 (995 / 1,960)	2,095 / 4,695 (955 / 2,130)
	35						
CHASSIS	36	Tires	Number of wheels(F/R)		2 / 2	2 / 2	2 / 2
			Size, Front		18 x 6 x 12.12	18 x 7 x 12.12	18 x 7 x 12.12
			Size, Rear		14 x 5 x 10	14 x 5 x 10	14 x 5 x 10
	38	Wheel Base	Distance	in(mm)	50.6 (1,285)	50.6 (1,285)	50.6 (1,285)
	39	Tread Width	Front/Rear	in(mm)	31 / 31 (787 / 787)	32 / 31 (813 / 787)	32 / 31 (813 / 787)
	40	Ground Clearance	Loaded at the lowest point	in(mm)	3 (75)	3 (75)	3 (75)
	41		Loaded at center of wheelbase	in(mm)	4.3 (110)	4.3 (110)	4.3 (110)
	42	Brakes	Service		Shoe / ODB	Shoe / ODB	Shoe / ODB
	43		Parking		Hand / Mech	Hand / Mech	Hand / Mech
POWER TRAIN	45	Battery	Voltage/Ampere	V/AH	12 / 45	12 / 45	12 / 45
	49	Engine	Manufacturer/Model		G424IE	G424IE	G424IE
	50		Rated Power(DIN)	HP/rpm	45.5 / 2,450	45.5 / 2,450	45.5 / 2,450
	51			kW/rpm	33.9 / 2,450	33.9 / 2,450	33.9 / 2,450
	51		Maximum Torque	lb.ft/rpm	109 / 1,600	109 / 1,600	109 / 1,600
	52			kg-m/rpm	15.1 / 1,600	15.1 / 1,600	15.1 / 1,600
	52		Cylinders/Displacements	cc	4 / 2,359	4 / 2,359	4 / 2,359
	55	Transmission	Type		powershift	powershift	powershift
			Number of Speed (Fwd/Rev)		1 / 1	1 / 1	1 / 1
	57	Hydraulic Pressure	System	psi(bar)	2,552(176)	2,885.5(199)	3,132(216)
			Attachment	psi(bar)	2,552(176)	2,885.5(199)	3,132(216)

Note: Specification values quoted in this specification sheet has been rounded. Performance may vary due to operation conditions.
Products and specifications are subject to improvement and change without prior notices.

Cushion Forklift

[illegible]

MAST SPECIFICATIONS and RATED CAPACITIES

GC15S-5

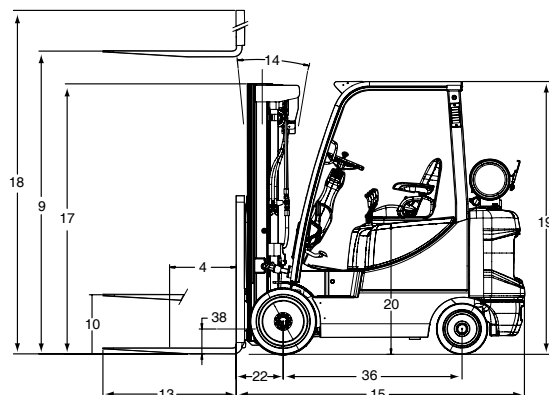
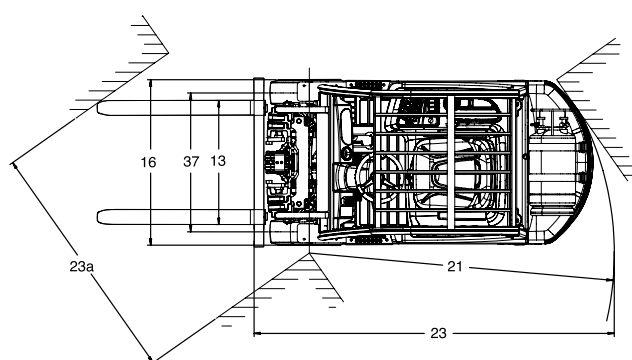
Mast type	Maximum Fork Height		Maximum Lowered Height		Fully Extended Height		Free Lift		Rated Load Capacities					
									GC15S-5					
									Tilt Angle		Load Capacities			
					Narrow Tire		Wide Tire							
	mm	in	mm	in	mm	in	mm	in	FWD deg	BWD deg	LC 500mm kg	LC 24in lb	LC 500mm kg	LC 24in lb
STD	3000	118	1980	78	4045	159	130	5	6	8	1500	3000	1500	3000
	3300	130	2130	84	4345	171	130	5	6	8	1500	3000	1500	3000
	3500	138	2230	88	4545	179	130	5	6	8	1500	3000	1500	3000
	3700	146	2330	92	4745	187	130	5	6	8	1475	2950	1475	2950
	4000	157	2530	100	5045	199	130	5	6	8	1425	2850	1425	2850
	4500	177	2780	109	5545	218	130	5	6	8	1350	2700	1350	2700
FF	2700	106	1830	72	3745	147	825	32	6	5	1500	3000	1500	3000
	3000	118	1980	78	4045	159	975	38	6	5	1500	3000	1500	3000
	3300	130	2130	84	4345	171	1125	44	6	5	1500	3000	1500	3000
FFT	4000	157	1860	73	5050	199	855	34	6	5	1400	2800	1400	2800
	4500	177	2025	80	5545	218	1020	40	6	5	1325	2650	1325	2650
	4750	187	2110	83	5795	228	1105	44	6	5	1300	2600	1300	2600
	5000	197	2225	88	6045	238	1220	48	6	5	1275	2550	1275	2550
	5500	217	2460	97	6550	258	1455	57	6	5	925	1850	1200	2400
	6000	236	2625	103	7045	277	1620	64	6	5	600	1200	850	1700

GC18S-5

Mast type	Maximum Fork Height		Maximum Lowered Height		Fully Extended Height		Free Lift		Rated Load Capacities					
									GC18S-5					
									Tilt Angle		Load Capacities			
					Narrow Tire		Wide Tire							
	mm	in	mm	in	mm	in	mm	in	FWD deg	BWD deg	LC 500mm kg	LC 24in lb	LC 500mm kg	LC 24in lb
STD	3000	118	1980	78	4045	159	130	5	6	8	1750	3500	1750	3500
	3300	130	2130	84	4345	171	130	5	6	8	1750	3500	1750	3500
	3500	138	2230	88	4545	179	130	5	6	8	1750	3500	1750	3500
	3700	146	2330	92	4745	187	130	5	6	8	1750	3500	1750	3500
	4000	157	2530	100	5045	199	130	5	6	8	1750	3500	1750	3500
	4500	177	2780	109	5545	218	130	5	6	8	1625	3250	1675	3350
FF	2700	106	1830	72	3745	147	825	32	6	5	1750	3500	1750	3500
	3000	118	1980	78	4045	159	975	38	6	5	1750	3500	1750	3500
	3300	130	2130	84	4345	171	1125	44	6	5	1750	3500	1750	3500
FFT	4000	157	1860	73	5050	199	855	34	6	5	1725	3450	1725	3450
	4500	177	2025	80	5545	218	1020	40	6	5	1650	3300	1650	3300
	4750	187	2110	83	5795	228	1105	44	6	5	1625	3250	1625	3250
	5000	197	2225	88	6045	238	1220	48	6	5	1575	3150	1575	3150
	5500	217	2460	97	6550	258	1455	57	6	5	1050	2100	1450	2900
	6000	236	2625	103	7045	277	1620	64	6	3	1000	2000	1375	2750

GC20SC-5

Mast type	Maximum Fork Height		Maximum Lowered Height		Fully Extended Height		Free Lift		Rated Load Capacities					
									GC20SC-5					
					With Load Backrest		With Load Backrest		Tilt Angle		Load Capacities			
											Narrow Tire		Wide Tire	
	mm	in	mm	in	mm	in	mm	in	FWD deg	BWD deg	LC 500mm kg	LC 24in lb	LC 500mm kg	LC 24in lb
STD	3000	118	1980	78	4050	159	135	5	6	8	2000	4000	2000	4000
	3300	130	2130	84	4350	171	135	5	6	8	2000	4000	2000	4000
	3500	138	2230	88	4550	179	135	5	6	8	2000	4000	2000	4000
	3700	146	2330	92	4750	187	135	5	6	8	1975	3950	1975	3950
	4000	157	2530	100	5050	199	135	5	6	8	1925	3850	1925	3850
	4500	177	2780	109	5550	219	135	5	6	8	1475	2950	1850	3700
FF	2700	106	1830	72	3750	148	825	32	6	5	2000	4000	2000	4000
	3000	118	1980	78	4050	159	975	38	6	5	2000	4000	2000	4000
	3300	130	2130	84	4350	171	1125	44	6	5	2000	4000	2000	4000
FFT	4000	157	1860	73	5055	199	855	34	6	5	1900	3800	1900	3800
	4500	177	2025	80	5550	219	1020	40	6	5	1825	3650	1825	3650
	4750	187	2110	83	5800	228	1105	44	6	5	1775	3550	1775	3550
	5000	197	2225	88	6050	238	1220	48	6	5	1525	3050	1750	3500
	5500	217	2460	97	6555	258	1455	57	6	3	1375	2750	1650	3300
	6000	236	2625	103	7050	278	1620	64	6	3	900	1800	1275	2550



GC20S (E/P) -5

Mast type	Maximum Fork Height		Maximum Lowered Height		Fully Extended Height		Free Lift		Rated Load Capacities							
									GC20S (E.P) -5							
									Tilt Angle				Load Capacities			
					With Load Backrest		With Load Backrest		Narrow		Wide		Narrow		Wide	
	mm	in	mm	in	mm	in	mm	in	FWD	BWD	FWD	BWD	LC500mm	LC24in	LC500mm	LC24in
STD	2030	79.9	1530	60.2	3280	129.1	147	5.8	6	8	6	8	2000	4000	2000	4000
	2580	101.6	1805	71.1	3830	150.8	147	5.8	6	8	6	8	2000	4000	2000	4000
	2950	116.1	1990	78.3	4200	165.4	147	5.8	6	8	6	8	2000	4000	2000	4000
	3230	127.2	2130	83.9	4480	176.4	147	5.8	6	8	6	8	2000	4000	2000	4000
	3500	137.8	2380	93.7	4755	187.2	147	5.8	6	8	6	8	2000	4000	2000	4000
	3800	149.6	2530	99.6	5055	199.0	147	5.8	6	8	6	8	2000	4000	2000	4000
	3950	155.5	2605	102.6	5205	204.9	147	5.8	6	8	6	8	2000	4000	2000	4000
	4350	171.3	2805	110.4	5605	220.7	147	5.8	6	8	6	8	2000	4000	2000	4000
FF	4960	195.3	3105	122.2	6205	244.3	147	5.8	6	8	6	8	1900	3800	1900	3800
	2580	101.6	1805	71.1	3830	150.8	600	23.6	6	5	6	5	2000	4000	2000	4000
	2950	116.1	1990	78.3	4200	165.4	785	30.9	6	8	6	8	2000	4000	2000	4000
	3230	127.2	2130	83.9	4480	176.4	925	36.4	6	8	6	8	2000	4000	2000	4000
FFT	3600	141.7	2380	93.7	4855	191.1	1175	46.3	6	8	6	8	2000	4000	2000	4000
	3900	153.5	1855	73.0	5155	203.0	650	25.6	6	5	6	5	2000	4000	2000	4000
	4290	168.9	1990	78.3	5560	218.9	785	30.9	6	5	6	5	2000	4000	2000	4000
	4730	186.2	2130	83.9	5980	235.4	925	36.4	6	5	6	5	1925	3850	1925	3850
	5560	218.9	2480	97.6	6805	267.9	1275	50.2	6	5	6	5	1800	3600	1800	3600
	6010	236.6	2630	103.5	7255	285.6	1425	56.1	6	5	6	5	1700	3500	1725	3500
	6500	255.9	2870	113.0	7750	305.1	1665	65.6	6	3	6	5	1650	3350	1650	3350

GC25S (E/P) -5

Mast type	Maximum Fork Height		Maximum Lowered Height		Fully Extended Height		Free Lift		Rated Load Capacities							
									GC25S (E.P) -5							
									Tilt Angle				Load Capacities			
					With Load Backrest		With Load Backrest		Narrow		Wide		Narrow		Wide	
	mm	in	mm	in	mm	in	mm	in	FWD	BWD	FWD	BWD	LC500mm	LC24in	LC500mm	LC24in
STD	2030	79.9	1530	60.2	3280	129.1	147	5.8	6	8	6	8	2500	5000	2500	5000
	2580	101.6	1805	71.1	3830	150.8	147	5.8	6	8	6	8	2500	5000	2500	5000
	2950	116.1	1990	78.3	4200	165.4	147	5.8	6	8	6	8	2500	5000	2500	5000
	3230	127.2	2130	83.9	4480	176.4	147	5.8	6	8	6	8	2500	5000	2500	5000
	3500	137.8	2380	93.7	4755	187.2	147	5.8	6	8	6	8	2500	5000	2500	5000
	3800	149.6	2530	99.6	5055	199.0	147	5.8	6	8	6	8	2500	5000	2500	5000
	3950	155.5	2605	102.6	5205	204.9	147	5.8	6	8	6	8	2500	5000	2500	5000
	4350	171.3	2805	110.4	5605	220.7	147	5.8	6	8	6	8	2425	4900	2425	4900
FF	4960	195.3	3105	122.2	6205	244.3	147	5.8	6	5	6	8	2300	4650	2300	4650
	2580	101.6	1805	71.1	3830	150.8	600	23.6	6	5	6	5	2500	5000	2500	5000
	2950	116.1	1990	78.3	4200	165.4	785	30.9	6	8	6	8	2500	5000	2500	5000
	3230	127.2	2130	83.9	4480	176.4	925	36.4	6	8	6	8	2500	5000	2500	5000
FFT	3600	141.7	2380	93.7	4855	191.1	1175	46.3	6	8	6	8	2500	5000	2500	5000
	3900	153.5	1855	73.0	5155	203.0	650	25.6	6	5	6	5	2500	5000	2500	5000
	4290	168.9	1990	78.3	5560	218.9	785	30.9	6	5	6	5	2425	4900	2425	4900
	4730	186.2	2130	83.9	5980	235.4	925	36.4	6	5	6	5	2350	4700	2350	4700
	5560	218.9	2480	97.6	6805	267.9	1275	50.2	6	5	6	5	2175	4400	2175	4400
	6010	236.6	2630	103.5	7255	285.6	1425	56.1	6	3	6	5	2100	4250	2100	4250
	6500	255.9	2870	113.0	7750	305.1	1665	65.6	6	3	6	3	1500	3600	2025	4100

GC30S (E/P) -5

Mast type	Maximum Fork Height		Maximum Lowered Height		Fully Extended Height		Free Lift		Rated Load Capacities							
									GC30S (E.P) -5							
									Tilt Angle				Load Capacities			
									Narrow		Wide		Narrow		Wide	
	mm	in	mm	in	mm	in	mm	in	FWD deg	BWD deg	FWD deg	BWD deg	LC500mm kg	LC24in lb	LC500mm kg	LC24in lb
STD	2030	79.9	1530	60.2	3280	129.1	152	6.0	6	8	6	8	3000	6000	3000	6000
	2580	101.6	1805	71.1	3830	150.8	152	6.0	6	8	6	8	3000	6000	3000	6000
	2950	116.1	1990	78.3	4200	165.4	152	6.0	6	8	6	8	3000	6000	3000	6000
	3230	127.2	2130	83.9	4480	176.4	152	6.0	6	8	6	8	3000	6000	3000	6000
	3500	137.8	2380	93.7	4755	187.2	152	6.0	6	8	6	8	3000	6000	3000	6000
	3800	149.6	2530	99.6	5055	199.0	152	6.0	6	8	6	8	3000	6000	3000	6000
	3950	155.5	2605	102.6	5205	204.9	152	6.0	6	8	6	8	3000	6000	3000	6000
	4350	171.3	2805	110.4	5605	220.7	152	6.0	6	8	6	8	2925	5850	2925	5850
	4960	195.3	3105	122.2	6205	244.3	152	6.0	6	5	6	8	2775	5550	2775	5550
FF	2580	101.6	1805	71.1	3830	150.8	605	23.8	6	5	6	5	3000	6000	3000	6000
	2950	116.1	1990	78.3	4200	165.4	790	31.1	6	8	6	8	3000	6000	3000	6000
	3230	127.2	2130	83.9	4480	176.4	930	36.6	6	8	6	8	3000	6000	3000	6000
	3600	141.7	2380	93.7	4855	191.1	1180	46.5	6	8	6	8	3000	6000	3000	6000
FFT	3900	153.5	1855	73.0	5155	203.0	655	25.8	6	5	6	5	2900	6000	2900	6000
	4290	168.9	1990	78.3	5560	218.9	790	31.1	6	5	6	5	2900	5850	2900	5850
	4730	186.2	2130	83.9	5980	235.4	930	36.6	6	5	6	5	2825	5650	2825	5650
	5560	218.9	2480	97.6	6805	267.9	1280	50.4	6	3	6	5	2625	5300	2625	5300
	6010	236.6	2630	103.5	7255	285.6	1430	56.3	6	3	6	3	2200	5150	2550	5150
	6500	255.9	2870	113.0	7750	305.1	1670	65.7	6	3	6	3	1275	3150	2275	4950

GC33S (E/P) -5

Mast type	Maximum Fork Height		Maximum Lowered Height		Fully Extended Height		Free Lift		Rated Load Capacities							
									GC33S (E.P) -5							
									Tilt Angle				Load Capacities			
									Narrow		Wide		Narrow		Wide	
	mm	in	mm	in	mm	in	mm	in	FWD deg	BWD deg	FWD deg	BWD deg	LC600mm kg	LC24in lb	LC600mm kg	LC24in lb
STD	2030	79.9	1530	60.2	3280	129.1	152	6.0	6	8	6	8	22950	6500	2950	6500
	2580	101.6	1805	71.1	3830	150.8	152	6.0	6	8	6	8	2950	6500	2950	6500
	2950	116.1	1990	78.3	4200	165.4	152	6.0	6	8	6	8	2950	6500	2950	6500
	3230	127.2	2130	83.9	4480	176.4	152	6.0	6	8	6	8	2950	6500	2950	6500
	3500	137.8	2380	93.7	4755	187.2	152	6.0	6	8	6	8	2950	6500	2950	6500
	3800	149.6	2530	99.6	5055	199.0	152	6.0	6	8	6	8	2950	6500	2950	6500
	3950	155.5	2605	102.6	5205	204.9	152	6.0	6	8	6	8	2950	6500	2950	6500
	4350	171.3	2805	110.4	5605	220.7	152	6.0	6	8	6	8	2875	6350	2875	6350
	4960	195.3	3105	122.2	6205	244.3	152	6.0	6	5	6	8	2750	6050	2750	6050
FF	2580	101.6	1805	71.1	3830	150.8	605	23.8	6	5	6	5	2950	6500	2950	6500
	2950	116.1	1990	78.3	4200	165.4	790	31.1	6	8	6	8	2950	6500	2950	6500
	3230	127.2	2130	83.9	4480	176.4	930	36.6	6	8	6	8	2950	6500	2950	6500
	3600	141.7	2380	93.7	4855	191.1	1180	46.5	6	8	6	8	2950	6500	2950	6500
FFT	3900	153.5	1855	73.0	5155	203.0	655	25.8	6	5	6	5	2900	6400	2900	6400
	4290	168.9	1990	78.3	5560	218.9	790	31.1	6	5	6	5	2875	6350	2875	6350
	4730	186.2	2130	83.9	5980	235.4	930	36.6	6	5	6	5	2800	6150	2800	6150
	5560	218.9	2480	97.6	6805	267.9	1280	50.4	6	3	6	5	2625	5800	2625	5800
	6010	236.6	2630	103.5	7255	285.6	1430	56.3	6	3	6	3	2250	4950	2550	56000
	6500	255.9	2870	113.0	7750	305.1	1670		6	3	6	3	1225	2700	2375	5250



Doosan Industrial Vehicle America Corp.
 2475 Mill Center Parkway Suite 400, Buford, GA 30518
 Tel : 678-745-2200 Fax : 678-745-2250 www.doosanlift.com