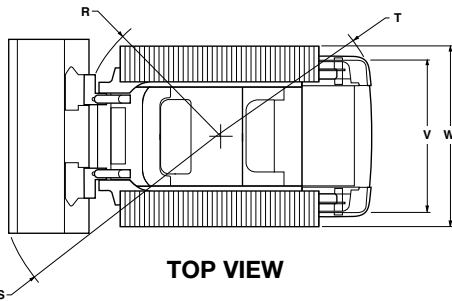
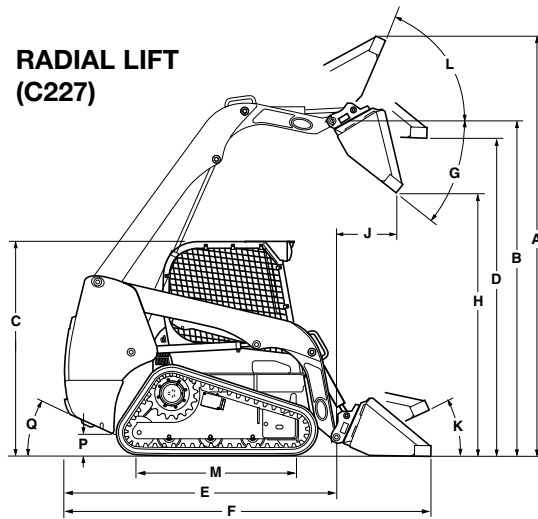
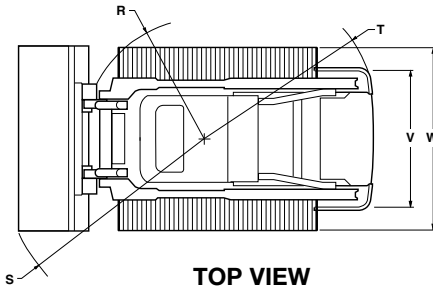
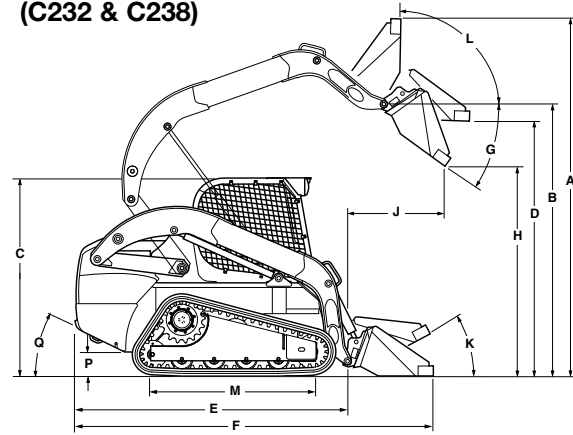


**RADIAL LIFT
(C227)**

TOP VIEW
**VERTICAL LIFT
(C232 & C238)**

TOP VIEW

C227

C232

C238

DIMENSIONS

			C227	C232	C238
Overall operating height					
A.	with foundry/excavating bucket short lip	in (mm)	154.3 (3920)	161.3 (4096)	161.3 (4096)
A.	with low profile/standard lip bucket	in (mm)	158.3 (4020)	165.3 (4199)	165.3 (4199)
A.	with low profile extended/long lip bucket	in (mm)	163.2 (4146)	170.4 (4327)	170.4 (4327)
Height to					
B.	Bucket hinge pin	in (mm)	123 (3124)	131.1 (3330)	131.1 (3330)
C.	Top of ROPS	in (mm)	78.7 (1998)	80.4 (2043)	80.4 (2043)
D.	Bottom of level bucket, fully raised	in (mm)	116.1 (2950)	124.2 (3155)	124.2 (3155)
Overall length					
E.	without attachment with coupler	in (mm)	105.1 (2669)	117.8 (2993)	118.9 (3021)
F.	with foundry excavation bucket on ground	in (mm)	129.6 (3292)	142.9 (3631)	144.0 (3659)
F.	with low profile bucket	in (mm)	133.7 (3397)	147 (3734)	148.1 (3762)
F.	with low profile extended bucket	in (mm)	138.8 (3525)	152.1 (3863)	153.2 (3891)
Dump					
G.	Dump angle	degrees	40	55	55
H.	Dump height				
	with foundry/excavating bucket short lip	in (mm)	98.2 (2495) @ 45°	104.5 (2655) @ 45°	104.5 (2655) @ 45°
	with low profile/standard lip bucket	in (mm)	95.6 (2428) @ 45°	101.6 (2581) @ 45°	101.6 (2581) @ 45°
J.	Dump reach (max height)	in (mm)	22.3 (568) @ 45°	34.4 (875) @ 45°	34.4 (875) @ 45°
Maximum attachment rollback					
K.	Bucket on ground	degrees	31	33	33
L.	Bucket at full height	degrees	99	85	85
Track and clearance					
M.	Track on ground	in (mm)	55.9 (1419)	64.5 (1639)	64.5 (1639)
P.	Ground clearance (bottom of belly pan)	in (mm)	8 (203)	9.5 (243)	9.5 (243)
Q.	Angle of departure	degrees	32	32	32
Clearance circle					
R.	without bucket	in (mm)	55.5 (1410)	58.2 (1482)	58.2 (1482)
S.	with foundry bucket in carry position	in (mm)	83.9 (2132) with 72" bucket	87.6 (2225) with 78" bucket	87.6 (2225) with 78" bucket
S.	with low profile bucket on ground	in (mm)	87.6 (2226) with 72" bucket	91.4 (2322) with 78" bucket	91.4 (2322) with 78" bucket
S.	with extended low profile on ground	in (mm)	92.3 (2344) with 72" bucket	95.8 (2434) with 78" bucket	95.8 (2434) with 78" bucket
T.	Clearance circle rear	in (mm)	59.1 (1501)	67 (1702)	67 (1702)
V.	Track gauge	in (mm)	53.4 (1356)	58.3 (1480)	58.3 (1480)
W.	Overall width	in (mm)	65.9 (1676)	76 (1930)	76 (1930)

	C227	C232	C238
ENGINE			
Manufacturer/model	FPT / F5H FL463A	FPT / F5H FL463A*F001	FPT / F5BFL413E*B002
Type	Diesel 4-stroke, turbo, D.I.	Diesel 4-stroke, turbo, D.I.	Diesel 4-stroke, Turbo, D.I.
Cylinder	4	4	4
Bore/stroke	in (mm) 3.9 x 4.3 (99 x 109)	3.9 x 4.3 (99 x 110)	3.9 x 4.3 (99 x 110)
Displacement	in ³ (L) 207 (3.4)	207 (3.4)	207 (3.4)
Fuel injection	HPCR Direct	HPCR Direct	HPCR Direct
Fuel	#2 diesel	#2 diesel	#2 diesel
Fuel filter	Pre-spin on 30 microns Main-spin on 4 microns	Pre-spin on 30 microns Main-spin on 4 microns	Pre-filter spin on @ 30 microns Main-filter spin on @ 4 microns
Air intake	Turbocharged with external EGR	Turbocharged Aftercooled with external EGR	Turbocharged Aftercooled with external EGR
Cooling	Liquid	85W140 gear oil	85W140 gear oil
Engine speeds			
High idle - no load	rpm 2500 +/- 25	2500 +/- 25	2500 +/- 25
Rated - full load	rpm 2500	2500	2500
Low idle	rpm 1150 +/- 25	1150 +/- 25	1150 +/- 25
Horsepower per SAE J1349			
Gross hp (kW)	74 (55) @ 2500 rpm	74 (55) @ 2500 rpm	90 (67) @ 2500 rpm
Net hp (kW)	68 (51) @ 2500 rpm	68 (51) @ 2500 rpm	84 (63) @ 2500 rpm
Peak torque	lb-ft (N•m) 232 (314) @ 1400 rpm	232 (314) @ 1400 rpm	282 (383) @ 1400 rpm

	C227	C232	C238
POWER TRAIN			
Drive pump electro hydraulic			
Pump to engine ratio	1:1	1:1	1:1
Displacement	in ³ (cc) 2.75 (45)	2.75 (45)	2.75 (45)
Flow	gpm (Lpm) 24.2 (91.5)	24.2 (91.5)	24.2 (91.5)
Charge pressure	psi (bar) 362 (24.5)	362 (24.5)	360 (24.5)
System relief	psi (bar) 5220 (360)	5220 (360)	5220 (360)
Control	Mechanical or Electro hydraulic	Mechanical or Electro hydraulic	Mechanical or Electro hydraulic
Drive motors			
Effective Max displacement	in ³ (cc) 67 (1098)	67 (1098)	67 (1098)
Effective Displacement opt high speed	in ³ (cc) 43.6 (714)	43.6 (714)	43.6 (714)
Speed @ high idle engine	rpm 103	103	103
Speed @ optional high speed	rpm 156	156	156
Torque @ max displ. and relief pressure	lb-ft (N•m) 4654 (6310)	4654 (6310)	4654 (6310)
Travel speed			
Low range	mph (km/h) 5.1 (8.2)	5.1 (8.2)	5.1 (8.2)
High range (optional)	7.6 (12.2)	7.6 (12.2)	7.6 (12.2)
Final drive	Planetary gearbox with 2-speed motor	Planetary gearbox with 2-speed motor	Planetary gearbox with 2-speed motor
Parking brake			
Type	Spring applied, hydraulic release disc	Spring applied, hydraulic release disc	Spring applied, hydraulic release disc
Engagement	Depress on/off brake button on instrument panel, disconnect lapbelt, get off seat, or stop engine	Depress on/off brake button on instrument panel, disconnect lapbelt, get off seat, or stop engine	Depress on/off brake button on instrument panel, disconnect lapbelt, get off seat, or stop engine

	C227	C232	C238
UNDERCARRIAGE			
System	S-Wave Pattern	S-Wave Pattern	S-Wave Pattern
Idlers / rollers per side	2/3	2/4	2/4
Ground pressure			
PSI (with spec belt)	5.9	4.2	4.4

		C227	C232	C238
HYDRAULIC SYSTEM				
Pumps				
Type		Gear	Gear	Gear
Displacement standard aux.	in ³ (cc)	2.23 (36.6)	2.23 (36.6)	2.23 (36.6)
Displacement high flow aux.	in ³ (cc)	.76 (12.5)	1.24 (20.4)	1.24 (20.4)
Pump flow	gpm (Lpm)	24.2 (91.5)	24.2 (91.5)	24.2 (91.5)
Optional high flow		32.4 (122.6)	37.6 (142.5)	37.6 (142.5)
Loader control valve				
Type		3 spool / open center / series	3 spool / open center / series	3 spool / open center / series
Relief pressure	psi (bar)	3046 (210)	3046 (210)	3046 (210)
Hydraulic filter		6 microns / spin on	6 microns / spin on	6 microns / spin on

		C227	C232	C238
CYLINDERS				
Lift cylinder				
Bore diameter	in (mm)	2.5 (63.5)	2.5 (63.5)	2.75 (69.8)
Rod diameter, in (mm)	in (mm)	1.75 (44.5)	1.75 (44.5)	2.0 (50.8)
Stroke in, in (mm)	in (mm)	31.69 (804.9)	33.5 (851.9)	33.4 (847.9)
Closed length, in (mm)	in (mm)	45.59 (1158.0)	46.9 (1192)	47.1 (1196)
Bucket cylinders				
Bore diameter, in (mm)	in (mm)	2.75 (69.9)	3.9 (99)	3.9 (99)
Rod diameter, in (mm)	in (mm)	1.38 (34.9)	1.5 (38.1)	1.5 (38.1)
Stroke, in (mm)	in (mm)	16.14 (410)	16.14 (410)	16.14 (410)
Closed length, in (mm)	in (mm)	24.02 (610)	24.02 (610)	24.02 (610)
Rated operating load				
50% tip	lbs (kg)	2700 (1225)	3200 (1451)	3800 (1723)
35% tip	lbs (kg)	1890 (860)	2240 (1018)	2660 (1209)
Tipping load	lbs (kg)	5400 (2449)	6400 (2902)	7600 (3447)
Breakout forces				
Lift cylinder	lbs (kN)	6080 (27)	4840 (21.5)	6110 (27.2)
Bucket cylinder	lbs (kN)	7270 (32.3)	7360 (32.7)	7360 (32.7)
Cycle times				
Raise	sec	3.6	3.9	4.6
Lower	sec	1.8	2.5	2.7
Dump	sec	2.2	2.7	2.7
Roll back	sec	1.7	2.0	2.0

		C227	C232	C238
WEIGHTS				
Operating weight	lbs (kg)	8270 (3750)	9630 (4370)	10,100 (4581)
Shipping weight	lbs (kg)	7970 (3615)	9300 (4220)	9765 (4430)

		C227	C232	C238
SERVICE CAPACITIES				
Fuel tank, gal (L)		19.5 (73.8)	25.5 (96.5)	25.5 (96.5)
Engine oil with filter, qt (L)		8.9 (8.5)	8.9 (8.5)	8.9 (8.5)
System Capacity with filter, qt (L)		34 (32.2)	47 (44.5)	47 (44.5)
DEF tank, gal (L)		NA	NA	2.8 (10.7)

For all dimensions and performance metrics, unless otherwise specified:

C227 – Equipped with 175 lb operator, 72” Dirt & Foundry Bucket with 12.6 (320 mm) track belt

C232 – Equipped with 175 lb operator, 78” Heavy Duty Bucket and 17.7 (450 mm) track belt

C238 – Equipped with 175 lb operator, 78” Heavy Duty Bucket and 17.7 (450 mm) track belt