Front Brakes (2 Calipers)

Front Caliper Size mm	Front Volume Required cubic inches	1.125 Inch Master Cylinder Piston Travel	1.25 Inch Master Cylinder Piston Travel	34 mm Master Cylinder Piston Travel	40mm Master Cylinder Piston Travel
80	0.779	0.784	0.635	0.554	0.400
70	0.597	0.600	0.486	0.424	0.306
60	0.438	0.441	0.357	0.311	0.225

Single Caliper volume = Pi * D /2* D/2*.05
Total Caliper volume = Single volume * 2

MC Piston travel is calculated assuming .05" of caliper piston travel

Rear Brakes (4 calipers)

Rear Caliper Size mm	Rear Volume Required cubic inches	1.125" Master Cylinder Piston Travel	1.25" Master Cylinder Piston Travel	34 mm Master Cylinder Piston Travel	40mm Master Cylinder Piston Travel
80	1.558	1.568	1.270	1.107	0.800
70	1.193	1.200	0.972	0.848	0.613
60	0.877	0.882	0.714	0.623	0.450
54	0.710	0.714	0.579	0.505	0.365

Piston travel is calculated assuming .05" of caliper piston travel

Single Caliper volume = Pi * D /2* D/2*.05
Total Caliper volume = Single volume * 4

Master Cylinder Pressure Available

1.125"	1.25"	34mm	40mm	40mmHB
1006.02	814.87	710.59	513.40	1026.81

Pressure available = Force on piston/Piston area
Piston Area = Pi*D/2*D/2

Clamping Force (1000# force on MC Piston)

	1.125"	1.25"	34mm	40mm	40mmHB
80 mm	7838.04	6348.81	5536.36	4000.02	8000.03
70 mm	6001.00	4860.81	4238.78	3062.51	6125.02
60 mm	4408.90	3571.21	3114.20	2250.01	4500.02
54 mm	3571.21	2892.68	2522.51	1822.51	3645.01

Force = Available Pressure * piston Area

Notes:

MC pressure available assumes 1000 pounds force on MC piston
Clamping force assumes 1000 pounds force on master cylinder piston
Caliper volume required calculated assuming .05" piston travel
54 mm calipers are after market rear units with built in park brakes
OEM sizes are highlighted
1 inch = 25.4mm

1.125" MC is OEM
34mm MC is P30
40mm MC is Hydroboost
40mmHB is HydroBoost with 2000# force on MC piston