Caliber Conversions Table

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The purpose of this conversion chart is to give you a rough idea of how the bullet diameters compare to each other. It is meant as a quick reference for when you're not sure how the different measured sizes relate. Or, for when you and your buddy are having a debate (9mm vs. .38 caliber, for instance).

Just because a .30 cal bullet is the same nominal diameter as a 7.62mm bullet does NOT mean that you can interchange the bullets in firearms chambered in those sizes.

Cartridge length seriously comes into play when you start looking into making custom ammunition or switching similar bullets and brass around. You can NOT take a cartridge that is 2.5" long and expect it to cycle properly in a firearm that is chambered for a 2.4" long cartridge. If you try to do that, you will put yourself and others at risk. Or, you'll just look like a dummy when you have to have someone take apart your gun and un-jam it for you.

I made the mistake as a kid once and grabbed the wrong cartridge for a friend's .30-30. I did get the cartridge out safely, 3 hours later, after disassembling and reassembling the whole carbine.

Not all calibers accurately reflect the actual size of the bullet. Just like the marketing department to make sure that not all things are exactly as advertised. It's their job to bend the facts, take advantage of different types of measurements, and to confuse the average consumer while making company X more money in the process. Some calibers are named for the bore diameter, and some are named for the actual bullet diameter. Some are overestimated or rounded up to make them seem like a more powerful cartridge, or rounded down to have an even number. I'm sure, for example, that the famous .44 Magnum wouldn't have been so cool if it had been named the ".42 Magnum."

DO NOT try switching bullets around. Attempting to switch bullets of like calibers in different cartridges can be dangerous. Too large of a bullet can cause cycling problems, jams, or excessive pressure buildup. Too much pressure can cause a barrel to explode injuring the operator as well as nearby people. Too small of a bullet can cause cycling

problems, or cause the bullet to rattle, rather than scream, out of the barrel. Make sure you have a micrometer to measure the true diameter of the actual bullet.

Formulae

1 inch = 1.00 Caliber = 25.4mm

Caliber x 25.4 = size in mm (Example: .45 caliber x 25.4 = 11.43 so .45 caliber = 11.43mm)

Metric designation / 25.4mm = size in Caliber (Example: 9mm / 25.4 = 0.35433 so 9mm = approximately .35 cal)

When dealing with calibers that have hyphens in them, discard the hyphen and the number after it. The number before the hyphen is the caliber of the bullet. The number after the hyphen often refers to how many grains of gunpowder was once used in the cartridge, or the year that the cartridge was made. (Example: .45-70 = .45 cal with 70 grains of black powder.)

Common name	Bore diameter (inches)	Bullet/Groove diameter (inches)	Bullet/Groove diameter (MM)
.50 cal	.500"	.510	12.954
.475 cal	-	.475	12.065
.45 cal rifle	.450	.458	11.633
.45 revolver	-	.454	11.531
.45 revolver	-	.452	11.480
.45 ACP	-	.451	11.455
.44 Mag.	-	.429	10.896
.416 cal	-	.416	10.566

.41 cal	-	.410	10.414
.40cal/10mm	-	.400	10.160
.375 cal	-	.375	9.525
9.3mm	-	.366	9.300
.35 cal rifle	.350	.358	9.093
.357 Mag .38 Spec	.350	.357	9.067
9mm, .380 .357 SIG	-	.355	9.017
.348 cal	.340	.348	8.839
.338 cal	.330	.338	8.585
.33 cal	-	.333	8.382
8mm	.315	.323	8.204
.32 Special	.313	.321	8.153
.32-20 cal	-	.312	7.924
.303 cal 7.65mm	.303	.312	7.924

7.62x39	.300-.303	.311	7.899
.30/.300 cal	.300	.308	7.832
7.5mm	-	.295	7.500
.28 cal/7mm	.275-.276	.284	7.213
.270 cal	.270	.277	7.035
.26cal/6.5mm	.256	.264	6.705
.25 cal	.250	.257	6.527
.243/6mm	.236	.243	6.172
.22 cal	.218/.219	.224	5.689
.20 cal	-	.204	5.080
.17 cal	-	.172	4.368
BB	-	.177-.180	4.495