

The 9mm Luger Cartridge: History and Performance

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Georg Luger was an interesting man. Born into a rather privileged family on March 6, 1849, his father was a renowned surgeon, so Georg was schooled in Italy. He later studied business at the *Wiener Handelsakademie* (Vienna Commercial Academy). In 1867 he enlisted into the Austria-Hungary 78th Infantry Regiment as a reserve officer cadet. It was here that he showed his superior marksmanship skills which garnered him an assignment to Austro-Hungarian Military Firearms School at Camp Bruckneudorf.

Soon he became an instructor there. Automatic firearms were in its infancy, but the idea fascinated Luger, and he took an active role in developing automatic loading firearms. After his military stint Luger floated around a bit surviving on jobs like an accountant at a jockey club. He met Austrian firearms engineer Ferdinand von Mannlicher during this time, and the two worked together on developing rifle magazines.

By 1891 Luger had found employment with Ludwig Loewe & Company, Berlin, Germany, eventually working his way into a design consultant. After Ludwig Loewe's death, the company became Deutsche Waffen und Munitions Fabriken (DWM), and was the manufacturer of the Hugo Borchardt-designed C-93 pistol. Luger was tagged with demonstrating it to the U.S. Army.

Though rejected, Luger carefully recorded the criticisms the army had with the pistol and returned to DWM. Borchardt disallowed the criticisms, which included unwieldy overall handling because of its weight and nearly vertical grip, excessive recoil from the 7.65×25 mm Borchardt cartridge, as well as being too expensive to mass produce, and refused to make any design changes. The job was then given to Luger to integrate the improvements.

Luger shortened the cartridge to 21 mm, calling it the 7.65×21mm Parabellum—Parabellum meaning "prepare for war." This allowed him to lighten and shrink the size of the toggle-link system of the C-93, shorten the stroke of the toggle, design a narrower angular grip that helped balance the pistol better in the hand and offer a more natural pointing of it. The result was the Luger Parabellum pistol of 1898.



A Model 1900 Parabellum pistol. These Swiss military service pistols were introduced in 1900 and chambered in 7.65×21mm Parabellum. The engraving of the Swiss cross "in splendor" (rather than as a coat of arms) indicates that this pistol was built before 1909. Photo from Hmaag.

Production began in 1900, and Switzerland immediately adopted the Pistole Parabellum in 7.65×21mm, a.k.a. 7.65 Parabellum and .30 Luger. The cartridge has been popular in Europe and the U.S., as well as Brazil. European police agencies used this cartridge well into the 1960s, however Germany led the move to upsize the power by increasing the bullet diameter to 9 mm, the weight of the standard bullet from 93 to 116 grains while retaining a nominal muzzle velocity of 1,200 fps from a 4.25" barrel.

The case was shortened from a net 21.59mm to a net of 19.15mm by removing the bottleneck while retaining the taper of the parent case. The result was the 9x19mm Parabellum or 9mm Luger, developed in 1901. To say that the 9mm Luger has been a success would be a severe understatement. The cartridge is, without a doubt, the most popular pistol and submachine gun cartridge in the world since the end of World War I. It has a lot going for it. First, it is effective, especially in its military role.

Newer developments in propellant and bullet design have increased its effectiveness, greatly providing even more incentive to those needing a firearm for personal defense. Pistols made for the cartridge have not been overly burdensome, and more recent developments in sub-compact handgun design allow the full-size service pistol cartridge to be crammed into astonishingly micro-weight pistols that are easy to carry. The 9mm Luger is accurate enough for the target range and the recoil is light enough to be controlled by most. The array of different firearms produced in this chambering is almost incomprehensible.

Not only has it been chambered into the beautifully engineered and produced Luger P-08 and [Browning](#) Hi-Power P35 pistols, it has been at the forefront of handgun design for more than a century. The first successful double-action, locked-breech, semi-automatic pistol, the [Walther](#) P-38, is chambered in 9mm Luger. Even revolvers, both double- and single-action, have been chambered or co-chambered in 9mm. In short, any gun enthusiast worth his or her salt that wants to shoot something prevalent and inexpensive should have something chambered in 9mm.



One of the many more recent sub-compact handguns to hit the market chambered for 9 mm, the SIG Sauer P365.

In the early days of World War II, Commonwealth countries developed and adopted a higher-pressure loading of the 9x19mm cartridge. Designated the 9 m/m ball MK 1z (Commonwealth nomenclature), it soon became the standard loading for modern firearms like the Browning Hi-Power and Sterling submachine guns. This load featured a 116-gr. bullet at a claimed 1,300 f.p.s. Canada put together a similar, but slightly softer load clocking in the mid-1,200s in 1955. It was adopted as the standard NATO load in 1962.

After the 1986 FBI Miami shootout between eight FBI agents and two murderous bank robbers, it was found that despite a 4-to-1 one advantage, the FBI lost two agents due in large part to the superior firepower of the criminals' rifles versus the FBI's .357 Mag. revolvers. A search began to find a better cartridge for revolvers as personal-defense weapons for agents and other law enforcement professionals.

Eleven years later, across the nation in North Hollywood, another pair of bank robbers stood off dozens of Los Angeles Police Department officers armed with 9mm pistols and .38 Spl. revolvers with a pair of Kalashnikovs. A dozen officers and members of the public were wounded during that 44-minute exchange. Along with other shootings, the incentive to build a firearm with a large magazine capacity and better stopping power led to the development of the so-called "Wonder-Nines."

"Wonder Nine" is a term coined by writer Robert Shimek during this period. It referred to the "wonder" pistols of the day, chambered in 9mm Luger with double-column magazines holding at

least 15 rounds. As much as anything, the popularity of the 9mm as a law-enforcement and personal-defense round in America is due to this evolution in firearms and cartridge design.

More recent bullet developments, along with some propellant improvements, have moved the 9mm ahead of such American stalwarts as the .45 ACP and .357 Mag. Mind you, the American cartridges are by no means obsolete, nor are they any less effective. In fact, some of these advances in bullet and propellant technology have rubbed off on those other cartridges. Regardless, the 102-year-old 9mm Luger is still on the throne as king of the pistol cartridges. I don't see that changing in the near future.

9mm By The Numbers - A Brief History Of The World's Most Popular Cartridge

Whether you call it the 9mm Luger, 9mm Parabellum, 9mm NATO, 9 millimeter, or just plain 9mm, 9x19mm ammunition is the most popular cartridge for handguns in the world – with more than 60% of the world's law enforcement agencies currently using the cartridge. The role of 9mm in World War I and its continued popularity today testifies to its capabilities as an efficient and effective cartridge.

Terminology and Nomenclature

Originally designed as a handgun caliber, the 9mm has reinvented itself multiple times throughout its brief 115-or-so years. In that time period, it's been found in the barrel of full-sized handguns, pocket pistols, revolvers, carbines, and even submachine guns. This variety of uses for a single caliber leaves many shooters who buy 9mm ammo confused about 9mm Luger vs. 9mm NATO or 9mm Luger vs. 9mm Parabellum or 9x19mm vs. 9mm. The simple answer is that it's all the same – other than the NATO ammo being slightly heavier.

The 9x19mm Parabellum is an ammunition cartridge with a bullet measuring 9mm in diameter and a casing that measures 19mm in length. The name “Parabellum” comes from the motto of the first company to manufacture 9x19mm ammo, the German munitions manufacturer Deutsche Waffen und Munitionsfabriken (DWM). The DWM's Latin motto – “Si vis pacem, para bellum” – translates to “If you want peace, prepare for war,” and therefore Parabellum means “prepare for war.”

The cartridge is often labeled as the 9mm Luger, associated with its developer's last name (in other words, the 9x19mm Parabellum and 9mm Luger are the same cartridge). Other times, it's 9mm NATO, which is still the same size ammunition, but with a slightly heavier bullet – 124 grain (gr) compared to 115 gr – and loaded to a higher pressure (think +P) than traditional range or training rounds.

The 9mm cartridge, unlike most pistol cartridges, has a slightly tapered casing. When stacking bullets side by side, notice the spacing difference between the bottom of the casing and the top. This increases the reliability and accuracy of feeding ammo from the magazine into the firearm, allowing it to happen quickly and without fail.

9mm ammunition has become wildly popular, leading to an incalculable number of varieties due to the wide range of projectiles available. Projectile weights can be as low as 65 grains and as heavy as 158 grains depending on the application. The most popular grain weights for training and defensive purposes include 9mm 115gr, 9mm 124gr, and 9mm 147gr.

The Development of the 9mm Cartridge

In 1902, DWM firearms designer Georg Luger developed the 9mm Parabellum as a service cartridge, designed for the DWM Luger semi-automatic pistol called the Pistole Parabellum, aka [the Luger](#). He designed it to be lethal at 50 meters.

This new caliber improved on the previous handgun ammunition, which was large and heavy. Still today, the compact cartridge has less recoil and allows for easy handling. It's lightweight, accurate, and because of its small size, handguns chambered in 9mm hold significantly more cartridges than those in higher calibers.

By the time WWI erupted, the [first submachine guns](#) were introduced and they were chambered for 9mm ammunition – given its ability to penetrate through field gear. Magazine-fed, fully automatic carbines, some of these submachine guns could shoot 900 rounds a minute.

After the birth of the [Browning Hi-Power](#) in 1935, and the gun's prevalence in WWII, the 9x19mm's popularity spread. As time passed, its use grew to encompass not only the armed forces, but police agencies and civilian self-defense as well. But the milestones for the 9mm didn't end here – they continued with:

- [NATO](#) adopting the 9x19 Parabellum in 1955 as their official sidearm cartridge
- The U.S. Military exchanging the venerable .45 ACP for the 9mm as their official cartridge
- Some of the country's largest police forces, like New York City and Los Angeles, adopting the 9mm cartridge, which has been proven ballistically superior to the .38 revolver
- The [Federal Bureau of Investigation](#) returning to the 9mm Parabellum in 2014, after they had left it for a brief period of time for the more modern 10mm cartridges

By the 1990s, many civilian gun owners moved away from handguns like the .38 Special and .357 Magnum, favoring 9mm semi-automatic handguns. Ammunition availability has followed this trend, with 9mm cartridges more plentiful and easier to find than most cartridges. According to the 14th edition of *Cartridges of the World*, 9mm ammunition led the entire market in 2013, making up 21.4% of the whole cartridge market, followed by .223 Rem at 10.2%.

Are There Different Types of 9mm Cartridges?

While 9mm Luger ammo (aka the 9mm Parabellum and the 9x19mm) is the world's most popular cartridge in both military handguns and submachine guns, it's not the only 9mm cartridge available. A wide range of rounds featuring the 9mm bullet have been developed since its birth in 1902, some better than others.

- **9mm Ultra:** Also referred to as 9mm Police, these cartridges were designed for the German police and fall between the 9mm Luger and the [.380 Auto](#). The shell measures one mm shorter than the Luger and one mm longer than the .380, leading to a casing length just .04 inches shorter than the 9x19mm. Although this cartridge is difficult to find in the U.S., there are a handful of nice firearms chambered for it, including the [Sig Sauer](#) P230 and [Benelli](#) B76 Auto.
- **9mm Bayard Long:** This 9mm cartridge was designed for the [1910 Model Bergmann-Bayard pistol](#), which was the official sidearm of the Danish military during the period. Although the cartridge (and the firearms they were designed for) were never manufactured in the U.S., some Spanish pistols were chambered for the 9mm Bayard Long and the ammo gained popularity after World War II due to military surplus.
- **9mm Browning Long:** The 9mm Browning Long was a European cartridge designed for the FN Browning 1903 Model pistol, which became the official sidearm of Sweden in 1907. Many of these pistols were released to the public after WWII as military surplus and most have been altered to fire .380 ACP ammo.
- **9mm Mauser:** The 9mm Mauser was used for a brief period from its development in 1908 for the Export Model [Mauser](#) until the gun was discontinued in 1914. Nearly a quarter-inch longer than the 9mm Luger, this rimless cartridge did have a comeback during WWI when some submachine guns were chambered for it.
- **9mm Winchester Magnum:** Released in 1988, the 9mm Winchester Magnum was designed for the stainless steel Wildey gas-operated pistol used in silhouette competitions.
- **9mm Glisenti:** The Italian military used the 9mm Glisenti during WWI and WWII. Although it highly resembles the 9mm Luger, they're not interchangeable. The Glisenti has a significantly lighter load and the Model 1910 Glisenti automatic pistols the cartridge was designed for can't handle the power of a 9mm Luger.
- **9mm ABC Mi-Bullet:** Made by [Advanced Ballistics Concepts, LLC](#), the 9mm Mi-bullet features a multipart bullet that uses Kevlar tethers that unlock and expand, allowing this 9mm cartridge to act like a shotshell. Designed as a self-defense load, the bullet reaches maximum expansion at 12 feet and holds its pattern until 21 feet, increasing the probability of hitting an attacker.
- **9x21mm:** In countries like Italy, Mexico, and France, the government prohibits its citizens from owning firearms chambered in military calibers, which makes the 9mm Luger illegal. To overcome this, the 9x21mm was developed, measuring just two mm longer than the 9x19mm.
- **9mm Steyr:** Designed for the Austrian military pistol, the [Steyr](#) Model 1912 Auto, the 9mm Steyr is longer than the Parabellum, with a case length of 23mm. Common in Austria, this cartridge is also found in Romania and Chile.

- **9x23mm Winchester:** [Winchester](#) released its 9x23mm Winchester ammunition in 1996. Designed to meet the specific regulations of the [International Practical Shooting Confederation \(IPSC\)](#). A high-pressure cartridge, the 9x23 Winchester looks like a stretched out 9mm Luger, but has many internal differences.
- **9mm Federal:** The 9mm Federal was designed as a rimmed 9mm Luger for revolvers – specifically the [Charter Arms PitBull](#), a five-shot double-action revolver. This firearm was only briefly manufactured after the cartridge's creation in 1989, as Charter Arms went out of business (although the company later reopened).
- **9mm Kurz:** The 9mm Kurz uses a 9mm bullet in a shorter, 17mm casing. Designed in 1912 by John Browning, this ammunition is sometimes referred to as the 9mm Browning Short, but is most commonly known as the .380 ACP.

The 9mm cartridge has come a long way since its conception over a century ago, dominating the consumer ammunition market as well as law enforcement agencies to this day. With its many types of cartridges, variety of uses, range of projectile types, affordability, ease of use, and ability to work in different firearms – the 9mm Luger (or whatever you'd like to call it) will remain one of the most popular calibers for years to come.