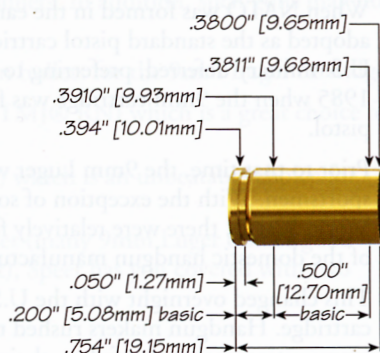


9mm LUGER

759

9mm LUGER

Alternate Names:	9x19mm Luger, 9x19mm Parabellum, 9x19mm P08, 9 Para
Parent Cartridge:	7.65mm Luger
Country of Origin:	Germany
Year of Introduction:	1902
Designer(s):	DWM
Governing Body:	SAAMI/CIP



CARTRIDGE CASE DATA

Case Type:	Rimless, slight taper		
Average Case Capacity:	14.5 grains H ₂ O	Max. Cartridge OAL:	1.169 inch
Max. Case Length:	.754 inch	Primer:	Small Pistol
Case Trim to Length:	.744 inch	RCBS Shell holder:	# 16
Current Manufacturers:	CCI/Speer, Federal, Remington, Winchester, Hornady, Fiocchi, Magtech, Sellier & Bellot, Lapua, Prvi Partizan, Cor-Bon, PMC, IMI, RUAG		

BALLISTIC DATA

Max. Average Pressure (MAP):	35,000 psi, 33,000 CUP - SAAMI	Test Barrel Length:	4.000 inch
Rifling Twist Rate:	1 turn in 10 inch		
Muzzle velocities of factory loaded ammunition	Bullet Wgt.	Muzzle velocity	
	115-grain	1,190 fps	
	124-grain	1,140 fps	
	135-grain	1,010 fps	
	147-grain	990 fps	

HISTORICAL NOTES

- The 9mm Luger or 9x19mm Parabellum cartridge can trace its history back to 1902 when Georg Luger redesigned his 7.65mm Luger cartridge case to accept a 9mm bullet.
- The new 9x19mm cartridge and Luger pistol were adopted by the German Navy in 1904.

- The German Army followed suit in 1908.
- The 9mm Luger served the German military forces well through two World Wars in both pistols and submachine guns.
- When NATO was formed in the early 1950s, the 9mm Luger cartridge was adopted as the standard pistol cartridge for all NATO military services. The U.S. military deferred, preferring to stick with the 45 Auto cartridge until 1985 when the 9mm cartridge was finally adopted along with the Beretta M9 pistol.
- Prior to that time, the 9mm Luger was mostly ignored by American sportsmen. With the exception of some souvenir Lugers and P38 pistols from World War II, there were relatively few pistols in 9mm caliber in the U.S. Few of the domestic handgun manufacturers made guns in this chambering.
- This changed overnight with the U.S. military adoption of the 9mm cartridge. Handgun makers rushed to bring out 9mm caliber pistols, ammunition makers beefed up their 9mm product lines and American law enforcement agencies adopted it in droves.
- Today, the 9mm Luger cartridge is by far the most popular pistol cartridge in the world. Every major ammunition manufacturer and most military arsenals make it. Indeed, it is hard to find a major military organization or law enforcement agency that does not use it.
- How about Russia? In the early 2000s, the Russian military made a momentous decision; the 9mm Luger cartridge was taken into Russian military service along with the new "Grach" (crow) pistol for it.
- In the U.S., this cartridge is called the 9mm Luger. In Europe (and in military service) it is called the 9x19mm Luger or 9x19 Parabellum.

What Is The Meaning of "Parabellum"?

The German firm of Deutsche Waffen und Munition Fabrik (DWM) was one of the first companies to manufacture the new 9x19mm cartridge. The company telegraphic address was "Parabellum" which is Latin meaning "for war." The surname stuck to the cartridge until recently.

Interesting Fact

When the Russian military took the 9mm Luger cartridge into military service in the early 2000s, it was the first time the Russian military adopted a cartridge that was not designed for and unique to the Russian military.

BALLISTIC NOTES

- There are three "standard" loads for the 9mm Luger cartridge:
 - A 115-grain bullet at a muzzle velocity of approximately 1,190 fps.
 - A 124-grain bullet at a muzzle velocity of approximately 1,150 fps.
 - A 147-grain bullet at a muzzle velocity of 990 fps (subsonic).
- Bullets may be full metal jacket (FMJ) designs with a round nose (RN), semi-round nose (SRN) or flat nose (FN) ogive. Jacketed hollow point (JHP) and jacketed soft point (JSP) designs are popular as well.
- The 9mm NATO military load consists of a 124-grain FMJ RN bullet at a muzzle velocity of 1,250 fps.
- 9mm Luger +P ammunition with similar ballistics to the 9mm NATO cartridge have been developed for law enforcement use. These loads offer

- a 10% improvement in muzzle energy over the standard load at the cost of increased wear on the handguns.
- Many military pistols and submachine guns in 9mm Luger are not designed to feed or function with JHP or JSP bullets. In addition, such guns may not cycle reliably with mild loads.
- Speer offers two outstanding 115-grain bullets for the 9mm Luger cartridge:
 - A Total Metal Jacket Round Nose (TMJ® RN) which is a great choice for duplicating the factory load.
 - A Gold Dot Hollow Point (GDHP) which is an unbeatable choice for personal defense.
- For shooters who prefer a heavier bullet (many 9mm Luger caliber guns function better with this bullet weight), Speer has you covered with two 124-grain 9mm choices:
 - A Total Metal Jacket (TMJ)
 - A Gold Dot Hollow Point (GDHP)
- When 9mm Luger 124-grain ammunition is fired from a carbine or submachine gun with a barrel 10 inches or more in length, muzzle velocities can be expected to increase by approximately 15-20% over those from handguns. MAP will not increase.
- The recent surge in ownership of suppressors by sportsmen has created a need for subsonic ammunition in 9mm Luger. Speer has you covered here as well with two 147-grain bullets to choose from that are designed for subsonic loads:
 - A Gold Dot Hollow Point (GDHP)
 - A Total Metal Jacket Flat Nose (TMJ FN)
 - Use of the 147-grain bullets in barrels exceeding 10 inches is not recommended because of the long bearing surface and possibility of a bullet-in-bore.

TECHNICAL NOTES

- The 9mm Luger cartridge case is a rimless, tapered body design that headspaces on the case mouth.
- The 9mm Luger cartridge case is a limited capacity design that requires fast burning propellants as there is insufficient space for slower burning propellants. The good news is that it is virtually impossible to double charge a 9mm Luger case.
- Most 9mm Luger caliber pistols are recoil operated. The 9mm Luger cartridge is too powerful for straight blowback operation in a handgun. An exception is the roller-delayed blowback operated pistols from H&K. On the other hand, most 9mm Luger carbines and submachine guns are blowback operated.
- Most 9mm Luger caliber carbines and submachine guns work best with 124-grain full metal jacket bullets loaded to maximum muzzle velocity.
- The correct bullet diameter for the 9mm Luger is .355 inch. Note that this is the same diameter of bullet for the 380 Auto. However, the lightweight 90 to 95-grain bullets for the 380 Auto will not reliably feed or function in the 9mm Luger.
- Old 9mm Luger wartime German military ammunition is Berdan primed with a corrosive priming compound. We do not recommend attempting to fire or salvage such old ammunition.

HANDLOADING NOTES

- Recently, 9mm Luger ammunition with steel cartridge cases has been imported from Russia. We strongly recommend against attempting to reload these cases even though they may have Boxer primers.
- Some cartridge cases may be nickel-plated to assist extraction. The nickel-plating process may cause hydrogen embrittlement of the case mouths. After four to six reloads, expect case mouth splits. When this occurs, avoid the temptation to try to get one more loading out of such cases. Destroy them immediately.
- Ex-military 9mm Luger cartridge cases may have crimped primers. As these cases are hard to deprime, decapping pins may break with depressing regularity. For this reason, we recommend that you keep a supply of these inexpensive parts on hand as replacements.
- You may encounter seating difficulties when loading long, heavy 9mm bullets. The inside taper of some brands of 9mm Luger cases may not allow seating of such bullets to a depth that will meet the overall loaded length dimension. In such instances, switching case brands may solve this problem as the inside taper of 9mm cases varies from one brand to the next.
- Never load less than the minimum charges shown in the loading data as the small charge of propellant may not be sufficient to push the bullet completely down the barrel.

SAFETY NOTES

SPEER 124-grain TMJ RN @ a muzzle velocity of 1,238 fps:

- Maximum vertical altitude @ 90° elevation is 4,398 feet.
- Maximum horizontal distance to first impact with ground @ 33° elevation is 2,043 yards.
- These loads were developed and tested for safe use in HANDGUNS. Not all loads may be suitable for use in carbines or rifles chambered for this cartridge. When loading for carbine or rifle, choose the loads that developed the highest velocity in a handgun, load a few for test, ensuring bullet exit from the barrel. Pulling bullets is one of the least rewarding experiences in handloading.

115 GRAINS

DIAMETER

.355"

SECTIONAL DENSITY

0.130

9mm GDHP



Ballistic Coefficient	0.125
COAL Tested	1.125"
Speer Part No.	3994

9mm TMJ® RN



Ballistic Coefficient	0.151
COAL Tested	1.135"
Speer Part No.	3995

Propellant	Case	Primer	Starting Charge		Maximum Charge	
			Weight (grains)	Muzzle Velocity (feet/sec)	Weight (grains)	Muzzle Velocity (feet/sec)
Alliant Blue Dot	Speer	CCI 500	7.7	1161	8.5	1258
Alliant Unique	Speer	CCI 500	5.6	1166	6.3	1244
Alliant BE 86	Federal	Federal 100	5.4	1136	6.2	1241
Vihtavuori 3N37	Speer	CCI 500	6.0	1128	6.7	1225
Accurate No. 7	Speer	CCI 500	8.6	1158	9.6 C	1220
Alliant Power Pistol	Speer	CCI 500	6.2	1122	6.7	1212
Vihtavuori N350	Speer	CCI 500	5.8	1109	6.5	1210
Winchester AutoComp	Federal	Federal 100	5.2	1091	5.8	1196
Hodgdon CFE Pistol	Federal	Federal 100	5.1	1094	5.7	1188
Hodgdon HS-6	Speer	CCI 500	6.6	1048	7.4	1178
Hodgdon H. Universal	Speer	CCI 500	4.7	1046	5.3	1172
Winchester WSF	Speer	CCI 500	5.0	1041	5.6	1156
Alliant Bullseye	Speer	CCI 500	4.2	1037	4.7	1144
Winchester 231	Speer	CCI 500	4.4	1026	4.9	1133
Hodgdon TITEGROUP	Speer	CCI 500	4.1	1061	4.5	1121
Alliant Sport Pistol	Federal	Federal 100	4.0	1029	4.5	1115
Accurate No. 5	Speer	CCI 500	6.0	1003	6.7	1102
Alliant American Select	Speer	CCI 500	4.8	1067	5.4	1102
Hodgdon Hi-Skor 700-X	Speer	CCI 500	4.0	1007	4.4	1101

WARNING! Maximum loads should be used with CAUTION • C = Compressed Load

124 GRAINS**DIAMETER**

.355"

SECTIONAL DENSITY

0.141

**9mm TMJ® RN**

Ballistic Coefficient	0.159
COAL Tested	1.135"
Speer Part No.	3993

**9mm GDHP**

Ballistic Coefficient	0.134
COAL Tested	1.120"
Speer Part No.	3998

Propellant	Case	Primer	Starting Charge		Maximum Charge	
			Weight (grains)	Muzzle Velocity (feet/sec)	Weight (grains)	Muzzle Velocity (feet/sec)
Alliant Blue Dot	Speer	CCI 500	7.1	1121	7.9	1238
Alliant BE 86	Federal	Federal 100	5.4	1124	6.0	1199
Accurate No. 9	Speer	CCI 500	9.4	1061	10.5 C	1185
Alliant Unique	Speer	CCI 500	5.2	1080	5.8	1180
Accurate No. 7	Speer	CCI 500	8.1	1077	9.0	1180
Vihtavuori 3N37	Speer	CCI 500	5.7	1063	6.4	1179
Alliant Power Pistol	Speer	CCI 500	5.6	1033	6.4	1157
Winchester AutoComp	Federal	Federal 100	5.1	1075	5.6	1156
Hodgdon CFE Pistol	Federal	Federal 100	4.7	1024	5.3	1127
Hodgdon TITEGROUP	Speer	CCI 500	4.0	1020	4.4	1095
Hodgdon H. Universal	Speer	CCI 500	4.5	993	5.0	1089
Accurate No. 5	Speer	CCI 500	5.7	963	6.4	1069
Hodgdon Hi-Skor 700-X	Speer	CCI 500	3.9	989	4.3	1067
Alliant Sport Pistol	Federal	Federal 100	3.8	984	4.3	1067
Alliant Bullseye	Speer	CCI 500	3.9	966	4.4	1059
Hodgdon HS-6	Speer	CCI 500	6.0	951	6.7	1059
Alliant American Select	Speer	CCI 500	4.5	994	5.0	1053
Winchester 231	Speer	CCI 500	4.0	887	4.5	998

WARNING! Maximum loads should be used with CAUTION • C = Compressed Load

125 GRAINS

DIAMETER

SECTIONAL DENSITY

.356"

0.142



9mm Lead-RN

Ballistic Coefficient 0.155

COAL Tested 1.130"

Speer Part No. 4602

Propellant	Case	Primer	Starting Charge		Maximum Charge	
			Weight (grains)	Muzzle Velocity (feet/sec)	Weight (grains)	Muzzle Velocity (feet/sec)
Winchester WAP	Speer	CCI 500	4.2	921	4.6	1012
Alliant Unique	Speer	CCI 500	4.1	911	4.5	1007
Alliant Red Dot	Speer	CCI 500	3.3	888	3.6	1004
Hodgdon HP38	Speer	CCI 500	3.9	917	4.2	995
Hodgdon HS-6	Speer	CCI 500	5.1	913	5.5	993
Hodgdon H. Universal	Speer	CCI 500	3.9	899	4.3	991
Winchester 231	Speer	CCI 500	3.8	911	4.1	982
Hodgdon Hi-Skor 700-X	Speer	CCI 500	3.2	920	3.4	977
Alliant Bullseye	Speer	CCI 500	3.5	929	3.8	962

WARNING! Maximum loads should be used with CAUTION • C = Compressed Load

147 GRAINS

DIAMETER

.355"

SECTIONAL DENSITY

0.167



9mm GDHP

Ballistic Coefficient 0.164

COAL Tested 1.130"

Speer Part No. 4002



9mm TMJ® FN

Ballistic Coefficient 0.188

COAL Tested 1.130"

Speer Part No. 4006

NOTES: 147-grain bullets not recommended for barrels longer than 10 inches.

Propellant	Case	Primer	Starting Charge		Maximum Charge	
			Weight (grains)	Muzzle Velocity (feet/sec)	Weight (grains)	Muzzle Velocity (feet/sec)
Alliant BE 86	Federal	Federal 100	4.5	936	5.1	1027
Alliant Blue Dot	Speer	CCI 500	5.1	900	5.8	1001
Winchester AutoComp	Federal	Federal 100	4.3	906	4.8	993
Hodgdon CFE Pistol	Federal	Federal 100	4.1	897	4.6	980
Alliant Power Pistol	Speer	CCI 500	4.5	872	5.0	975
Vihtavuori 3N37	Speer	CCI 500	4.4	886	4.9	969
Accurate No. 7	Speer	CCI 500	6.1	867	6.8	961
IMR SR 4756	Speer	CCI 500	4.2	841	4.6	957
Hodgdon HS-6	Speer	CCI 500	5.0	845	5.5	956
Alliant Unique	Speer	CCI 500	3.8	852	4.3	954
Winchester WSF	Speer	CCI 500	3.6	840	4.1	931
Accurate No. 5	Speer	CCI 500	4.5	821	5.1	931
Alliant Sport Pistol	Federal	Federal 100	3.2	820	3.6	890

WARNING! Maximum loads should be used with CAUTION • C = Compressed Load