

This is a unique reloading/information manual. It contains currently available data regarding loading information for this individual cartridge. This data is compiled from the leading U.S. Bullet and gunpowder manufacturers.

This manual is not intended to replace the many comprehensive, in-depth reloading manuals available from a host of publishers, but instead provide you with a quick and easy-to-use reference source which will enable you to compare loads, types of powders, bullets and shot charges for components you may have on hand.

Loadbooks USA, Inc., also offers the following cartridges in this series of unique One Book/One Caliber reloading manuals: .22 Hornet, .220 Swift, .222 Remington, .223 Remington, .22-250 Remington, .225 Winchester, .243 Winchester, .244/6mm Remington, 6.5x55 Swedish, .25-06 Remington, .250-3000 Savage, .270 Winchester, 7x57 Mauser, 7mm-08 Remington, .280 Remington, .284 Winchester, 7mm Remington Magnum, 7.62x39mm, 7.62x54mm Russian, .30-30 Winchester, .303 British, .308 Winchester, .30-06 Springfield, .300 Winchester Magnum, .300 Weatherby Magnum, .300 Savage, 30/40 Krag, .300 & .375 H & H Magnum, .338 Winchester Magnum, 8mm Remington Magnum, 8mm/06 & .338/06, 8mm Mauser, .356 & .358 Winchester, .35 Whelen, .35 Remington & .350 Remington Magnum, .375 & .458 Winchester, .444 Marlin, .45-70 Government, .25 & .32 A.C.P., .32 H&R Magnum, .380 ACP, 9mm Luger, .38 Super, .38 Special, .357 Magnum, 10mm/.41 Auto, .41 Magnum, .44 Magnum, .44 Special, .45 ACP, .45 Colt, .454 Casull, and The Weatherby Magnums covering 10 different Weatherby calibers.

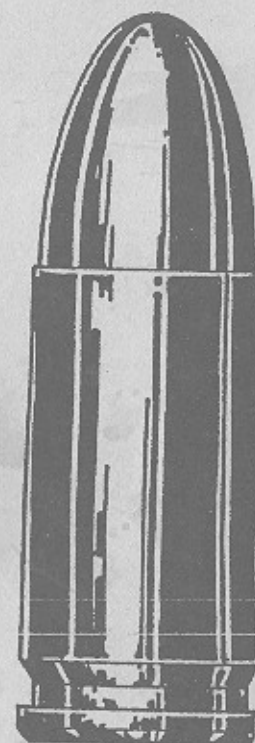
There's also two shotshell books for the 12 Gauge, and the 20/28 Gauge and .410 bore. Plus there's a large reloading manual covering 30 calibers for the Thompson/Center Contender single-shot pistol and the Remington XP-100 pistol.

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EDITION

The Complete Reloading Manual for the 9mm Luger



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Containing Unabridged Information
from U.S. Bullet
and Powder Makers

Accurate * Alliant * Hodgdon * Hornady
IMR * Lyman * Nosler * RCBS * Scot
Sierra * Speer * Winchester and Others

1,326 Proven & Tested Loads
52 Various Bullet Designs
42 Different Powders

RELOADING SAFETY RULES

Reloading is an enjoyable and rewarding hobby that is easily conducted with safety. But, like many other human endeavors, carelessness or negligence can make reloading hazardous.

The essence of reloading safety is proper handling and storage of primers and powder. By observing the following rules, the chance of hazardous occurrence becomes extremely remote.

Store powder and primers beyond the reach of children and away from heat and open flames. Do not smoke when reloading.

Keep no more powder than needed in an open container. Immediately return unused powder to its original factory container.

Don't use any powder unless its identity is positively known. Scrap all mixed powders and those of uncertain or unknown identity.

Do not store primers in bulk. To do so is to create a bomb! Bulk primers will mass detonate. Do not use primers when their identity is lost. Safely dispose of unknown types of primers.

Courtesy of Speer Reloading Manual No. 11

All loading data contained in this book is the result of testing by the various bullet and powder manufacturers. Under carefully controlled conditions and with the components and test equipment specified, this data proved safe in their tests. Since none of the companies, nor the publisher, listed herein has control over the components and equipment which may be used with this published information, no responsibility is implied or assumed for results obtained through its use.

Courtesy of Hornady Manufacturing Company, Inc.

Sierra Bullets cannot and does not accept any liability, either expressed or implied, for results of damage or injury arising from or alleged to have arisen from the use of the data in this manual.

Courtesy of Sierra Bullets

Follow loading recommendations exactly. Don't substitute components for those listed. Start loading with the minimum powder charges. Understand what you are doing and why it must be done in a specific way. Stay alert when reloading. Don't reload when distracted, disturbed or tired.

Courtesy of Nosler Bullets, Inc.

The Complete Reloading Manual for the 9mm Luger

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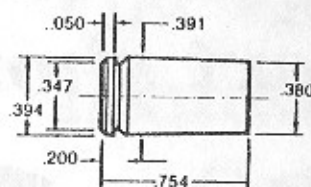
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9MM LUGER - HORNADY BULLETS



9mm LUGER

PISTOL: S & W MODEL 39
BARREL: 4", 1 in 10" TWIST
CASE: HORNADY/FRONTIER
PRIMER: FEDERAL 100

BULLET DIAMETER: .355"
MAXIMUM C.O.L.: 1.169"
MAX. CASE LENGTH: .754"
CASE TRIM LENGTH: .744"

The 9mm Luger is the most widely chambered military pistol cartridge in the world. It has become extremely popular in the U.S. and is used by a large number of law enforcement agencies. Introduced in 1902 by Georg Luger in his Luger Pistol and dubbed the 9mm Parabellum, this cartridge was adopted by the German Armed Forces just six years later. The cartridge is also used extensively in submachine guns.

The 9mm Luger is economical and relatively easy to reload. With the ending of World War II, a great number of military surplus semi-autos were sold in the U.S., which also enhanced popularity of the round in this country. Today, every major U.S. manufacturer offers a firearm in this caliber. Many foreign producers offer fine firearms in the 9mm Luger. The U.S. armed services have adopted a Beretta pistol, the M9, as the official sidearm. The large number of firearms in 9mm prompted the need for commercial ammunition and reloading supplies. Hornady offers reloading dies and eight different bullets for the 9mm.

Powders that worked exceptionally well in our test weapon were Hercules Unique, Winchester 231, and AA#2. AA#2 produced the highest velocity of all the powders tested with the 90, 100, 115 and 124 grain bullets while AA#7 and Blue Dot gave the highest velocity with the 147 grain bullet. Velocity difference between 4" and 5" barrels were negligible. Note; When reloading for the 9mm, care must be taken that little or no crimp be used, since the 9mm headspaces on the mouth of the case.

9MM LUGER - HORNADY BULLETS

90 GRAIN BULLETS:

SECTIONAL DENSITY: .102
DIAMETER: .355"

#35500 HP/XTP
Ballistic Coefficient — .099
C.O.L. — 1.080"



POWDER	VELOCITY				
	1150 fps	1200 fps	1250 fps	1300 fps	1350 fps
Red Dot	4.0 gr.	4.3 gr.	4.5 gr.		
IMR 7625	4.3 gr.	4.5 gr.			
700X	4.2 gr.	4.4 gr.	4.6 gr.		
WIN WSL	4.2 gr.	4.4 gr.	4.6 gr.	4.8 gr.	
Bullseye	4.4 gr.	4.7 gr.	5.0 gr.		
Pearl Scot	4.3 gr.	4.6 gr.	4.9 gr.	5.2 gr.	
Unique	4.9 gr.	5.1 gr.	5.3 gr.		
WIN 231	4.9 gr.	5.1 gr.	5.4 gr.	5.7 gr.	
AA #2	4.7 gr.	5.0 gr.	5.4 gr.	5.7 gr.	6.1 gr.
WIN WST	5.5 gr.	6.0 gr.			
AA #5	6.2 gr.	6.5 gr.	6.8 gr.	7.2 gr.	
HS-6	6.9 gr.	7.2 gr.	7.4 gr.	7.7 gr.	
AA #7	7.8 gr.	8.3 gr.	8.8 gr.	9.3 gr.	

Indicates maximum load - use with caution

9MM LUGER - HORNADY BULLETS

100 GRAIN BULLETS:

SECTIONAL DENSITY: .113
DIAMETER: .355"

#3552 FMJ-RN
Ballistic Coefficient — .115
C.O.L. — 1.105"



POWDER	VELOCITY				
	1050 fps	1100 fps	1150 fps	1200 fps	1250 fps
Red Dot	3.8 gr.	4.0 gr.	4.2 gr.	4.4 gr.	
WIN WSL	3.9 gr.	4.1 gr.	4.3 gr.	4.5 gr.	
Pearl Scot	4.2 gr.	4.3 gr.	4.5 gr.	4.8 gr.	
Bullseye		4.3 gr.	4.6 gr.	4.9 gr.	5.2 gr.
AA #2		4.0 gr.	4.6 gr.	5.2 gr.	5.8 gr.
Unique	4.6 gr.	4.9 gr.	5.1 gr.	5.3 gr.	
WIN 231	4.3 gr.	4.6 gr.	5.0 gr.	5.3 gr.	
WIN WST	5.2 gr.	5.5 gr.	5.9 gr.	6.2 gr.	
AA #5	5.8 gr.	6.1 gr.	6.4 gr.	6.6 gr.	6.9 gr.
HS-6		6.6 gr.	6.9 gr.	7.2 gr.	7.5 gr.
AA #7	7.3 gr.	7.7 gr.	8.1 gr.	8.4 gr.	8.8 gr.

Indicates maximum load - use with caution

9MM LUGER - HORNADY BULLETS

115 GRAIN BULLETS:

SECTIONAL DENSITY: .130
DIAMETER: .355"

#35540 HP/XTP
Ballistic Coefficient — .129
C.O.L. — 1.050"



#3555 FMJ-RN
Ballistic Coefficient — .140
C.O.L. — 1.105"



POWDER	VELOCITY				
	1050 fps	1100 fps	1150 fps	1200 fps	1250 fps
Red Dot	3.7 gr.	4.1 gr.			
WIN WSL	4.0 gr.	4.2 gr.	4.4 gr.		
Bullseye		4.5 gr.	4.8 gr.	5.1 gr.	
WIN 231	4.5 gr.	4.7 gr.	5.1 gr.	5.5 gr.	
Pearl Scot	4.6 gr.	4.8 gr.	5.0 gr.		
Unique	4.7 gr.	4.9 gr.	5.1 gr.		
AA #2	4.7 gr.	5.0 gr.	5.2 gr.	5.6 gr.	5.9 gr.
WIN WST	5.2 gr.	5.4 gr.	5.6 gr.		
AA #5	5.6 gr.	5.9 gr.	6.2 gr.	6.6 gr.	
HS-6	6.3 gr.	6.5 gr.	6.9 gr.		
AA #7	7.4 gr.	7.9 gr.	8.4 gr.		

Indicates maximum load - use with caution

9MM LUGER - HORNADY BULLETS

124 GRAIN BULLETS:

SECTIONAL DENSITY: .141
DIAMETER: .355"

#3556 FMJ-FP

Ballistic Coefficient — .174
C.O.L. — 1.050"



#3557 FMJ-RN

Ballistic Coefficient — .145
C.O.L. — 1.150"



#3567 LRN

Ballistic Coefficient — .131
C.O.L. — 1.090"



VELOCITY

POWDER	1025 fps	1050 fps	1075 fps	1100 fps	1125 fps	1150 fps	1175 fps	1200 fps
Red Dot	3.8 gr.	4.0 gr.	4.2 gr.					
WIN WSL	3.9 gr.	4.0 gr.	4.2 gr.	4.3 gr.	4.4 gr.			
Bullseye	4.1 gr.	4.2 gr.	4.4 gr.					
Pearl Soot		4.4 gr.	4.6 gr.	4.7 gr.	4.9 gr.	5.0 gr.		
Unique	4.7 gr.	4.8 gr.	4.9 gr.	5.0 gr.	5.1 gr.			
WIN 231		4.7 gr.	4.9 gr.	5.1 gr.	5.3 gr.			
AA #2	4.7 gr.	4.8 gr.	5.0 gr.	5.1 gr.	5.3 gr.	5.4 gr.	5.6 gr.	5.7 gr.
WIN WST	4.8 gr.	5.0 gr.	5.2 gr.	5.4 gr.				
AA #5	5.3 gr.	5.5 gr.	5.7 gr.	5.9 gr.	6.1 gr.	6.2 gr.		
HS-6	6.2 gr.	6.3 gr.	6.5 gr.	6.6 gr.	6.8 gr.	6.9 gr.		
AA #7	7.2 gr.	7.5 gr.	7.7 gr.	8.0 gr.				

Indicates maximum load - use with caution

9MM LUGER - HORNADY BULLETS

147 GRAIN BULLETS:

SECTIONAL DENSITY: .167
DIAMETER: .355"

#35580 HP/XTP

Ballistic Coefficient — .212
C.O.L. — 1.100"



#3559 FMJ-RN

Ballistic Coefficient — .212
C.O.L. — 1.169"



VELOCITY

POWDER	800 fps	850 fps	900 fps	950 fps	975 fps	1000 fps
SR 4756	3.2 gr.	3.4 gr.	3.6 gr.	3.6 gr.		
WIN WSF	3.3 gr.	3.6 gr.	3.9 gr.	4.2 gr.		
AA #5	3.8 gr.	4.1 gr.	4.3 gr.	4.6 gr.		
Solo 1500	3.8 gr.	4.1 gr.	4.3 gr.	4.6 gr.		
HS-6		4.4 gr.	4.7 gr.	4.9 gr.	5.1 gr.	
Blue Dot	4.2 gr.	4.5 gr.	4.8 gr.	5.2 gr.	5.3 gr.	5.5 gr.
HS-7	4.4 gr.	4.8 gr.	5.2 gr.	5.6 gr.		
AA #7	5.1 gr.	5.5 gr.	5.9 gr.	6.2 gr.	6.4 gr.	6.6 gr.

Indicates maximum load - use with caution

9mm Luger (Parabellum)

By Jan M. Libourd

The 9mm Parabellum (other sobriquets include 9mm Luger, 9x19 and 9mm NATO) dates from the very early years of this century. Its original home was the Luger pistol, but countless other handguns and submachine guns have been built to chamber it over its long history. It has been, in all probability, the world's most popular handgun cartridge for many years, and it is certainly the most popular submachine gun cartridge. Much of the Parabellum's popularity stems from the fact that it is an excellent compromise. It combines mild recoil and ease of shooting with a reasonable degree of effectiveness on the business end. It is now U.S. military standard, and it is the choice of a great many police departments.

Perhaps because it was primarily the enemy's cartridge in both World Wars, some handgun enthusiasts nursed an antipathy to the 9mm that verged on being downright irrational.

Charges leveled against the Nine have included that it was incapable of delivering decent accuracy and that as a defense cartridge it was a pathetic joke. In the past, there was probably some basis for both charges. The old 9mm ball ammo was not very effective (although very little worse than the highly touted .45 ACP hardball). Today's well-designed hollow point expanding bullets can give the 9mm stopping capabilities that put it on a par with many good .357 Magnum and .45 ACP loads. At the same time, carefully assembled handloads or good factory loads in this



caliber can deliver match-grade accuracy from the right guns.

The Parabellum can be handloaded with excellent results if a few warnings are heeded: 9mm brass varies greatly in length and case wall thickness; mixed cartridge cases will seldom, if ever, produce good, consistent results. Case volume is very small. If a bullet is seated even a little too deep, pressures can run up fast! The Parabellum can deliver good performance with a wide range of powders—from Bullseye up to such relatively slow burners as Blue Dot or AA-No. 7. Best accuracy will be ordinarily achieved with bullets that have plenty of bearing surface relative to the ogive.

Like it or loathe it, the Parabellum will remain among the most popular and important cartridges of all time.

Jan is Editor of Petersen's Handguns.

9mm Luger (Parabellum)

Test Information



RIFLE:	Barrel:	Douglas
	Length:	4'
	Twist:	1-16"

CASE:	Winchester
-------	------------

PRIMER:	Rem. 1 1/2
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Comments from the lab

Like most pistol cartridges, the 9mm headspaces from the case mouth. When loading for this cartridge, bell the case mouth just enough to reliably guide the bullet into position and then taper crimp just enough to take the bell out of the case. Using this seating, the crimping technique will help ensure proper headspacing.

The S.A.A.M.I. overall cartridge lengths for this cartridge are 1.000" min. and 1.169" max. We suggest seating to lengths on the high end of this range, provided they will function well in your particular firearm.

This load data is not +P rated and does not exceed the parameters for standard 9mm Luger pressures.

9MM LUGER - NOSLER BULLETS

Nosler

90 Grain



90 gr.
Hollow Point

*Most Accurate Load Tested
**Compressed Load

Ballistic Coefficient .268
Sectional Density .102

Powder	Charge Weight in Grains	Muzzle Velocity (fps)	Load Density
BULLSEYE	Max. 5.4	1330 fps	58%
	4.9	1220 fps	53%
	4.4*	1110 fps	47%
UNIQUE (Most Accurate Powder Tested)	Max. 6.5*	1290 fps	70%
	6.0	1190 fps	65%
	5.5	1090 fps	59%
SR 4756	Max. 6.8*	1278 fps	73%
	6.3	1183 fps	68%
	5.8	1088 fps	62%
HS 6	Max. 8.0	1352 fps	86%
	7.5	1267 fps	81%
	7.0*	1182 fps	75%
AA-No. 5	Max. 7.3	1182 fps	78%
	6.8	1104 fps	73%
	6.3*	1022 fps	68%
BLUE DOT	Max. 8.7	1220 fps	94%
	8.2	1150 fps	88%
	7.7*	1080 fps	83%
AA-No. 7	Max. 8.7*	1102 fps	94%
	8.2	1037 fps	88%
	7.7	972 fps	83%

Use Maximum Loads with Caution

9MM LUGER - NOSLER BULLETS

Nosler

115 Grain



115 gr. Full Metal Jacket

*Most Accurate Load Tested
**Compressed Load

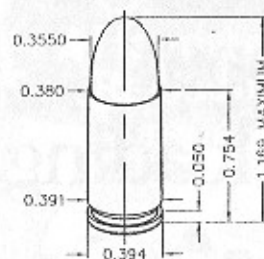
Ballistic Coefficient .103
Sectional Density .130

Powder	Charge Weight in Grains	Muzzle Velocity (fps)	Load Density
WSL	Max. 4.5*	978 fps	53%
	4.0	863 fps	47%
	3.5	748 fps	41%
HP 38	Max. 5.2	1042 fps	61%
	4.7	937 fps	55%
	4.2*	832 fps	49%
UNIQUE	Max. 6.1	1120 fps	72%
	5.6	1060 fps	66%
	5.1*	1000 fps	60%
SR 4756 (Most Accurate Powder Tested)	Max. 6.5*	1178 fps	76%
	6.0	1083 fps	71%
	5.5	988 fps	65%
HS 6	Max. 7.1*	990 fps	84%
	6.6	880 fps	78%
	6.1	770 fps	72%
BLUE DOT	Max. 8.5	1130 fps	100%
	8.0	1080 fps	94%
	7.5*	1030 fps	88%
AA-No. 7	Max. 8.5*	998 fps	100%
	8.0	933 fps	94%
	7.5	868 fps	88%

Use Maximum Loads with Caution

9MM LUGER - SIERRA BULLETS

9mm Luger



Test Specifications

Firearm Used: Colt Govt Model MKIV

Bbl. Length/Twist: 5'1x16"

Test Components

Cases: Starline

Trim-to Length: .750"

Primers: CCI-500

Remarks:

Although it was introduced in 1902, the 9mm Luger was actually adopted by the German navy two years later. The cartridge was again adopted four years later, this time by the German army, where it has remained in service ever since. Through a strange turn of events, the 9mm Luger has gone on to become the most successful military pistol cartridge in the world. Early in the Second World War, Britain lost a tremendous amount of equipment at the disastrous battle of Dunkirk. Fearing an imminent Nazi invasion, they rushed to rearm themselves with a variety of easily produced weapons, including submachineguns. Although the 9mm was never really considered for adoption by the British, they had captured huge amounts of 9mm Luger ammunition from the Italians during the campaign in Eritrea. As a result of this windfall, it was suggested that a newly designed submachinegun, the Lanchester, be chambered for the 9mm Luger. Later in the war, the British adopted the Browning High Power pistol, which was also chambered for the 9mm cartridge. After the war the 9mm became the standard NATO cartridge for handguns and submachineguns, because so many countries in the newly formed NATO forces were already using the 9mm. One of the last holdouts finally relented in 1985, when the 9mm was adopted by the U.S. military as our standard service pistol cartridge. Under its NATO designation, the cartridge is known as the 9x19mm. It is also frequently referred to as the 9mm Parabellum.

Here in the U.S., the 9mm was almost unheard of until the 1950's, when Smith & Wesson began developing a series of 9mm handguns for the police and military market. Domestic interest in the 9mm was only lukewarm until the late seventies and early eighties, when the old war horse really took off. Several factors account for this, including the military's adoption and a sudden appearance of several good quality high-capacity 9mm pistols. Today, the 9mm is one of the most popular cartridges among local, state and federal law enforcement agencies. Despite its police usage, it has never really caught on for combat competition among U.S. IPSC shooters. In all fairness, this is largely because of regulations which preclude this cartridge specifically. Variants such as the 9x21mm, and the similar .38 Super have dominated the sport for the last few years.

9MM LUGER - SIERRA BULLETS

9mm Luger, continued

Reloading for 9mm is not difficult, but one should remember that it is a high pressure cartridge. Small changes in component combinations can result in significant pressure increases, and require careful development. Sierra offers a wide range of .355" bullets, adding to the 9mm's versatility. As with most other cartridges intended for use in autoloading pistols, we recommend a firm taper crimp. The 9mm is a good cartridge with a long and illustrious history, as well as a bright future ahead.

.355 90 gr. JHP

Cartridge OAL: 1.010"



Powder ¹ / Velocity →	1200	1250	1300	1350	1400	1450
Bullseye			4.2	4.5	4.7	5.0
231		4.9	5.2	5.5	5.8	6.2
700X				4.7	5.1	5.5
PB			5.2	5.4	5.7	6.1
AA-No.5	6.2	6.5	6.8	7.1	7.3	
Unique			5.5	6.2	6.9	7.5
WAP	5.9	6.1	6.3	6.5		
Viht 3N37	5.9	6.2	6.5	6.8		
SR7625	4.7	5.2	5.4	5.8	6.2	
Herco				7.0	7.4	7.8
AA-No.7	8.1	8.6	9.0	9.4		
Viht N350	5.4	5.7	6.1	6.5		
Blue Dot			8.0	8.7	9.4	10.0
Energy/ft.lbs.	288	312	338	364	392	420

Accuracy Load: 231/5.5 grs.; 1350 fps/364 ft.lbs.

Hunting Load: Blue Dot/10.0 grs.; 1450 fps/420 ft.lbs.

INDICATES MAXIMUM LOAD - USE CAUTION
LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.

9MM LUGER - SIERRA BULLETS

9mm Luger, continued

.355 95 gr. FMJ

Cartridge OAL: 1.020"



Powder	1/ Velocity	1150	1200	1250	1300	1350	1400
Bullseye		4.5	4.8	5.0			
231		4.7	5.1	5.4	5.7	6.0	
Red Dot		4.4	4.6	4.8	5.0	5.1	
700X		4.0	4.3	4.5	4.7	4.9	
AA-No.5		6.1	6.3	6.6	6.8	7.1	7.4
Unique		5.4	5.8	6.1	6.4	6.7	7.0
WAP		5.7	6.0	6.3			
SR7625		4.8	5.1	5.4	5.7	6.0	
HS-6		6.7	7.0	7.2	7.4	7.6	7.8
Herco			5.6	6.0	6.4	6.8	7.2
Vht 3N37		5.9	6.2	6.5	6.7		
AA-No.7		7.9	8.3	8.7	9.2		
Blue Dot		7.9	8.3	8.7	9.0	9.3	9.6
Vht N350		5.7	5.9	6.1	6.3		
Energy/ft.lbs.		279	304	330	356	384	413

Accuracy Load: 231/5.7 grs.; 1300 fps/356 ft.lbs.
Hunting Load: Blue Dot/9.6 grs.; 1400 fps/413 ft.lbs.

INDICATES MAXIMUM LOAD - USE CAUTION
LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.

9MM LUGER - SIERRA BULLETS

9mm Luger, continued

.355 115 gr. JHP

Cartridge OAL: 1.015"



.355 115 gr. FMJ

Cartridge OAL: 1.090"



Powder	1/ Velocity	1050	1100	1150	1200	1250	1300
Bullseye				3.9	4.3	4.7	4.9
231			4.6	4.9	5.2	5.5	
700X				4.0	4.3	4.7	5.1
PB			4.4	4.7	5.0	5.2	
AA-No.5		5.4	5.7	6.0	6.3	6.5	6.7
Unique			5.0	5.2	5.6	6.0	6.4
WAP		4.9	5.3	5.7	6.0		
SR7625		4.4	4.7	5.0	5.2		
Herco				5.7	6.0	6.3	6.6
Vht 3N37		5.0	5.3	5.6	6.0	6.3	
AA-No.7				8.0	8.4	8.9	
Blue Dot			6.9	7.3	7.7	8.1	
Vht N350		4.8	5.2	5.6	5.9		
Energy/ft.lbs.		281	309	338	368	399	431

Accuracy Load: Unique/5.6 grs.; 1200 fps/368 ft.lbs.
Hunting Load: Herco/6.3 grs.; 1250 fps/399 ft.lbs.

INDICATES MAXIMUM LOAD - USE CAUTION
LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.

9MM LUGER - SIERRA BULLETS

9mm Luger, continued

.355 125 gr. FMJ
Cartridge OAL: 1.090"



Powder	Velocity	950	1000	1050	1100	1150	1200
Bullseye		3.5	3.7	3.9	4.1	4.3	4.5
231		3.9	4.2	4.5	4.8	5.1	
Red Dot		3.7	4.0	4.3	4.6		
700X		3.7	3.9	4.1	4.3	4.4	
AA-No.5		4.9	5.2	5.5	5.8	6.0	6.3
Unique		4.1	4.6	5.1	5.5	5.9	
WAP		4.5	4.8	5.1	5.4	5.7	
HS-6		5.4	5.7	6.0	6.3	6.6	
Herco		4.5	4.8	5.1	5.4		
Vht 3N37		4.7	5.0	5.3	5.6	5.8	
AA-No.7				7.5	7.9	8.3	8.7
Blue Dot		6.1	6.5	6.9	7.3	7.7	8.0
Vht N350		4.5	4.8	5.1	5.4	5.7	
Energy/ft.lbs.		250	278	306	336	367	400

Accuracy Load: AA-No.7/8.3 grs.; 1150 fps/367 ft.lbs.
Hunting Load: AA-No.7/8.7 grs.; 1200 fps/400 ft.lbs.

INDICATES MAXIMUM LOAD - USE CAUTION
LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.

9MM LUGER - SIERRA BULLETS

9mm Luger, continued

.355 130 gr. FMJ
Cartridge OAL: 1.120"



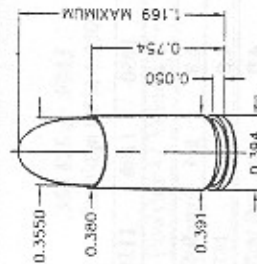
Powder	Velocity	900	950	1000	1050	1100	1150
Bullseye		3.5	3.8	4.1	4.4		
231			4.0	4.4	4.8	5.1	5.4
Red Dot			3.7	4.0	4.3	4.6	
700X				3.7	4.0	4.4	4.7
AA-No.5		4.8	5.0	5.3	5.5	5.8	6.0
Unique			4.2	4.6	5.0	5.3	5.6
WAP		4.6	4.9	5.2	5.5	5.7	5.9
SR7625				4.1	4.5	4.8	
HS-6		5.4	5.7	6.0	6.3	6.5	6.7
Herco		4.2	4.6	4.9	5.2		
AA-No.7				7.5	7.8	8.1	8.4
Blue Dot		5.9	6.3	6.7	7.1	7.5	7.9
Vht N350		4.5	4.7	5.0	5.2	5.5	
Energy/ft.lbs.		234	261	289	318	349	382

Accuracy Load: Unique/5.0 grs.; 1050 fps/318 ft.lbs.
Hunting Load: AA-No.7/8.4 grs.; 1150 fps/382 ft.lbs.

INDICATES MAXIMUM LOAD - USE CAUTION
LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.

9MM LUGER - SIERRA BULLETS

9mm Luger



Test Specifications

Firearm Used: Marlin Model 9
Bbl. Length/Twist: 16 1/2"x10"

Test Components

Cases: Federal
Trim-to Length: .750"
Primers: Federal 100

Remarks:

Introduced in 1902, the 9mm Luger is probably the oldest cartridge still in common use on a world wide scale. To say that the 9mm has been successful would be an understatement of monumental proportions. Today, the cartridge is not only holding its own, but is actually gaining in popularity. It received a big boost in 1985, when the U.S. military adopted the 9mm Luger as the "new" cartridge for service sidearms. In addition to its military duties, the 9mm has been embraced by many local, state, and federal law enforcement agencies as well. Ever since the days of the wild west, the idea of a rifle/handgun combination in the same caliber has always been a concept unique to America. This notion has given rise to a number of rifles chambered for cartridges normally associated with handguns. The 9mm Luger is one of them.

Many of the rifles chambered for the 9mm are carbine-length, semi-automatic copies of submachineguns, such as the Uzi carbine, and the H&K 94, a variant of the MP5. Our test rifle was the Marlin Model 9 Camp Carbine, an original design. Despite the differences in their appearance, all of these rifles are basically suited to the same range of tasks; small game, varmints, and plinking. Ken Hackathorn, a highly respected gunwriter and defensive shooting instructor, has recommended the Camp Carbine as a viable candidate for home defense. For shooters unable to master the heavier recoil of a shotgun, or unable to obtain a handgun due to local ordinances, this is a feasible option.

While the 9mm may qualify as a fairly powerful pistol cartridge, it is rather anemic in a rifle. Whether used in a rifle or handgun, the 9mm is neither adequate nor suitable for use on big game. When loaded with the lighter weight bullets, which showed the greatest increase in velocity over handgun data, the 9mm is effective for small game and varmints out to 50 or 75 yards. When used within its limitations, the 9mm Luger in a rifle can be an enjoyable combination.

9MM LUGER - SIERRA BULLETS

9mm Luger, continued

.355 90 gr. JHP
Cartridge OAL: 1.010"



Powder ↓ / Velocity →	1300	1400	1500	1600	1700
Unique	4.5	5.1	5.8		
Herco		5.9	6.4	6.8	7.0
AA-No.7	8.0	8.7	9.4		
Blue Dot		7.0	7.9	8.7	9.2
Energy/ft.lbs.	338	392	450	512	544

Accuracy Load: Blue Dot/8.7 grs.; 1600 fps/512 ft.lbs.
Hunting Load: Blue Dot/9.2 grs.; 1700 fps/544 ft.lbs.

.355 95 gr. FMJ
Cartridge OAL: 1.020"



Powder ↓ / Velocity →	1300	1400	1500	1600
Unique	5.0	5.5	6.0	
Herco	5.5	6.0	6.5	7.0
AA-No.7	8.0	8.6	9.1	
Blue Dot		7.1	8.0	8.8
Energy/ft.lbs.	356	413	475	540

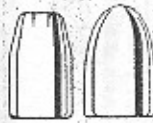
Accuracy Load: Blue Dot/8.8 grs.; 1600 fps/540 ft.lbs.
Hunting Load: Blue Dot/8.8 grs.; 1600 fps/540 ft.lbs.

INDICATES MAXIMUM LOAD - USE CAUTION
LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.

(RIFLE DATA)

9mm LUGER - SIERRA BULLETS

9mm Luger, continued



.355 115 gr. JHP
Cartridge OAL: 1.015"

.355 115 gr. FMJ
Cartridge OAL: 1.090"

Powder ↓ / Velocity →	1100	1200	1300	1350	1400
Unique	4.2	4.7	5.2	5.4	
Herco		5.0	5.6	5.8	6.1
AA-No.7	7.0	7.5	8.0	8.2	
Blue Dot	6.0	6.5	7.0	7.2	7.4
Energy/ft.lbs.	309	368	431	465	500

Accuracy Load: Blue Dot/7.2 grs.; 1350 fps/465 ft.lbs.
Hunting Load: Blue Dot/7.4 grs.; 1400 fps/500 ft.lbs.



.355 125 gr. FMJ
Cartridge OAL: 1.090"

Powder ↓ / Velocity →	1100	1150	1200	1250	1300
Unique	4.4	4.7	5.0	5.3	
Herco	4.7	5.0	5.3		
AA-No.7	6.7	7.1	7.5	7.9	
Blue Dot	6.1	6.3	6.5	6.7	7.0
Energy/ft.lbs.	336	367	400	434	469

Accuracy Load: Blue Dot/6.7 grs.; 1250 fps/434 ft.lbs.
Hunting Load: Blue Dot/7.0 grs.; 1300 fps/469 ft.lbs.



.355 130 gr. FMJ
Cartridge OAL: 1.120"

Powder ↓ / Velocity →	1050	1100	1150	1200	
Unique	4.4	4.6	4.8	5.1	
Herco	4.7	4.9	5.2	5.4	
AA-No.7	6.8	7.1	7.4	7.7	
Blue Dot	5.9	6.2	6.5	6.8	
Energy/ft.lbs.	318	349	382	416	

Accuracy Load: AA-No.7/7.7 grs.; 1200 fps/416 ft.lbs.
Hunting Load: AA-No.7/7.7 grs.; 1200 fps/416 ft.lbs.

INDICATES MAXIMUM LOAD - USE CAUTION
LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.

(RIFLE DATA)

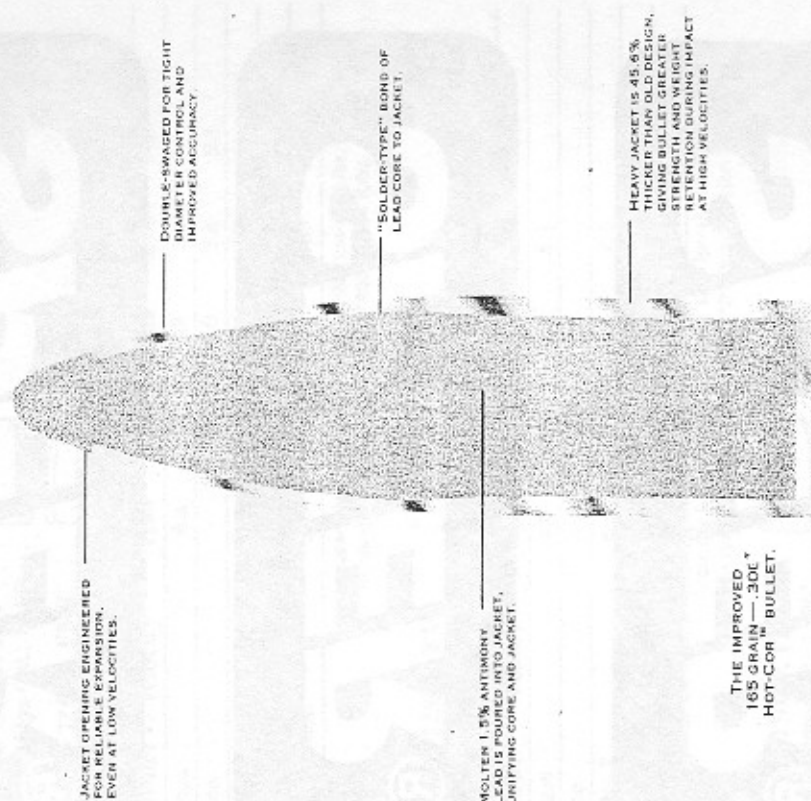
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The 9mm Luger cartridge is known by several names including 9mm Parabellum and 9x19mm. Some pistols chambered for this cartridge are marked "9mm/08" or "9mm P/08" to indicate the date (1908) when it was adopted by the German Army. Except for war souvenirs, there were few 9mm pistols in the U.S. until the 1950's.

The U.S. military considered the 9mm as a service cartridge on numerous occasions and finally adopted it in 1985 in the M-9 Beretta pistol. The compact pistols and the high magazine capacity found in many models have combined to make the 9mm Luger the most popular cartridge in the U.S. law enforcement community.

The 9mm was originally loaded with full metal jacketed bullets for reliable feeding. However, to succeed as a police service cartridge, it was necessary to use expanding bullets to limit the tremendous penetration of the FMJ 9mm bullets. The current trend in law enforcement is toward 124 and 147 grain JHP bullets.

Speer offers a number of bullets which are suitable for the 9mm. For general purpose shooting and target practice, the 115 TMJ and 124 grain Uni-Cor soft point bullets are a good choice. The 115, 124 and 147 grain Gold Dot hollow points should be chosen for serious defense work.

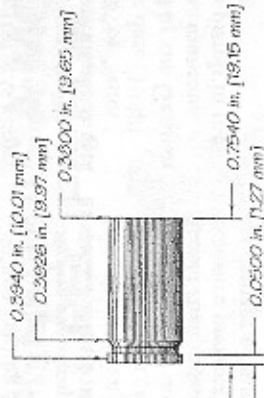
When loading the 9mm, carefully observe the cartridge overall lengths listed in the data. UNDER NO CONDITIONS SHOULD THE BULLETS BE LOADED SHORTER THAN THE LISTED LENGTHS. 9mm case capacity is relatively small and seating a bullet deeper than indicated can cause excessive pressures and the potential for damage or injury.

Loads listed for the Speer 125 grain lead bullet generally do not operate at maximum pressure. We have limited the velocity to around 1000 feet/sec to reduce barrel leading. A good rule of thumb with swaged lead bullets is to use the lightest lead which will cycle the action reliably.

The 9mm Luger headspaces on the case mouth so roll crimping is not recommended. A good taper crimp will give sufficient holding power as long as the expander ball is no larger than .354". The taper crimp also gives a nicely finished edge to the case mouth for reliable feeding. Refer to the section, "Loading for Semi-automatic Pistols" in the introduction to the handgun data. There you will find an extended discussion on reloading the 9mm Luger that contains some helpful tips.

The listed loads do not exceed the industry maximum pressure of 35,000 psi.

9MM LUGER - SPEER BULLETS



Max. Case Length: 0.754"
 Trim-to Length: 0.744"
 Max. Cart. Length: 1.168"
 RCBS Shellholder: #16
 Barrel Length: 4"
 Twist: 1-10"

Test Firearm: Smith & Wesson Model 5906
 Case: Speer
 Primers: CCI 500

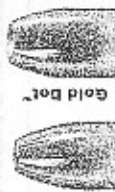


Gold Dot

.355" Dia. 115 Grain		9mm GD-HP	9mm TMJ	9mm JHP				
Sect. Density .130		0.125	0.177	0.118				
Ballistic Coefficient		1.125*	1.135"	1.125*				
C.O.L. Tested At		3994	3995	3996				
Speer Part No.								
Powder	Wt. Grs.	MzL Vel.	Powder	Wt. Grs.	MzL Vel.	Powder	Wt. Grs.	MzL Vel.
Blue Dot	8.5	1258	Viht.	6.5	1210		5.0	1133
	7.7	1161	N350	5.8	1109	231	4.5	1026
Unique	6.3	1244		7.5	1178	Tite-Group	4.5	1121
	5.6	1166	HS-6	6.7	1048		4.1	1061
Viht. 3N37	6.8	1225	H.	5.3	1172	AA	6.8	1102
	6.1	1128	Universal	4.7	1046	#5	6.1	1003
AA #7	9.6	1220		5.6	1156	American	5.4	1102
	8.6	1158	WSF	5.0	1041	Select	4.8	1067
Power Pistol	6.7	1212		4.7	1144		4.4	1101
	6.2	1122	Bullseye	4.2	1037	700-X	4.0	1007

Notes: Bold print denotes maximum loads. They should be used with caution. C - Compressed Load

9MM LUGER - SPEER BULLETS



Gold Dot

.355" Dia. 124 Grain		9mm SP		9mm GD-HP		9mm JHP		9mm JHP			
Sect. Density .141		0.115		0.134		0.134		0.134			
Ballistic Coefficient		1.120"		1.120"		1.120"		1.120"			
C.O.L. Tested At		3997		3998		3998		3998			
Speer Part No.											
Powder	Wt. Grs.	MzL Vel.	Powder	Wt. Grs.	MzL Vel.	Powder	Wt. Grs.	MzL Vel.	Powder	Wt. Grs.	MzL Vel.
HS-7	8.9	1249	Viht.	6.4	1179	700-X	4.3	1067	700-X	3.9	989
	8.0	1159	3N37	5.7	1063		4.4	1059			
	7.9	1238	Power Pistol	6.4	1157		3.9	966			
Blue Dot	7.1	1121	Tite-Group	4.4	1095	Bullseye	6.7	1059	HS-6	6.0	951
	10.5C	1185	H.	5.0	1089		5.0	1053			
	9.4	1061	Universal	4.5	993		4.5	994			
AA #9	5.8	1180	AA	6.5	1069	231	4.5	998	231	4.0	887
	5.2	1080	AA #7	5.8	963		4.0	887			
	9.0	1180	AA #7	5.8	963		4.0	887			



Gold Dot

.355" Dia. 147 Grain		9mm GD-HP	9mm TMJ								
Sect. Density .167		0.164	0.208								
Ballistic Coefficient		1.130"	1.130"								
C.O.L. Tested At		4002	4006								
Speer Part No.											
Powder	Wt. Grs.	Mzi Vel.	Powder	Wt. Grs.	Mzi Vel.	Powder	Wt. Grs.	Mzi Vel.			
Blue Dot	5.8	1001	SR	4.6	957	4756	4.1	931	WSF	3.6	840
	5.1	900	4.2	841	5.1		931	4.5		821	
Power Pistol	5.0	975	HS-6	5.6	956	#5	4.3	854	Tite- Group	3.3	864
	4.5	872		5.0	845		3.8	852		DNR	—
Viht. 3N37	4.9	969	Unique	4.3	954	HS-7	6.8	953	HS-7	6.1	866
	4.4	886		6.1	867		6.1	867			
AA #7	6.8	961	AA	6.8	953	#7	6.1	867	#7	6.1	867
	6.1	867		6.1	867		6.1	867			

Notes: Bold print denotes maximum loads. They should be used with caution. C - Compressed Load
 DNR - Do not reduce

9MM LUGER - SPEER BULLETS



**.356" Dia.
125 Grain**
Sect. Density .142

	9mm L-RN						
Ballistic Coefficient	0.155						
C.O.L. Tested At	1.130"						
Speer Part No.	4601						

Powder	Wt. Grs.	MzL Vel.	Powder	Wt. Grs.	MzL Vel.	Powder	Wt. Grs.	MzL Vel.
	4.6	1012		4.2	995		4.1	982
WAP	4.2	921	HP-38	3.9	917	231	3.8	911
	4.5	1007		5.5	993		3.4	977
Unique	4.1	911	HS-6	5.1	913	700-X	3.2	920
	3.6	1004		4.3	991		3.8	962
Red Dot	3.3	888	H. Universal	3.9	899	Bullseye	3.5	929

Notes: Bold print denotes maximum loads. They should be used with caution.

LAB NOTES...

Because of the wide variation in locking mechanisms and spring rates in 9mm pistols, some may exhibit sluggish function with the slower of the 147 grain loads. Load a few test rounds and try them for function before settling on a 147 grain load.

Military Cases

9mm Luger cases were once hard to find, but are now as abundant as flies in most areas. There is little need to use military surplus brass when there are so many good commercial cases available at a reasonable price.

In addition to requiring the extra effort of removing a primer crimp, some military case have primer pockets that are slightly different from those in commercial cases. This can cause repriming difficulties, especially on progressive equipment. Powder capacities may not be the same either, and pressure variations can show up.

Our recommendation — don't bother with military 9mm brass.

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Middlefield, CT 06455

Reloading Data Introduction:

The data listed in this section have been tested by our technicians and found to be safe when loaded with our test components and fired (under our laboratory controlled conditions) in our testing equipment. Since Lyman Products Corporation has no control over the manufacture of the various components listed, the actual loading, choice or condition of the firearms and components used, no responsibility for use of this data is implied or assumed.

Components:

The reader should bear in mind that the components listed are not of Lyman manufacture. Therefore, it is impossible that production changes affecting ballistic performance can occur at any time without our knowledge. If there is ever a question as to the correctness of the component specified, write to its manufacturer.

Starting Load:

It is essential that the reader begin with the suggested weight of powder listed in this bracket and work up slowly (following load development precautions) to his best performing load. The novice should use only the "starting load" for a period of time until he builds confidence and experience. Never decrease this charge as an increase in pressure could be encountered.

Maximum Load:

All loads which are listed as maximum were tested and classified as maximum by our technicians in accordance with our laboratory standards. Under no circumstances should these loads be exceeded, nor should they be quickly accepted by the reader as a safe working maximum for his particular rifle or pistol.

Many reloaders misinterpret the meaning of the "maximum load." They wrongly assume that if a high pressure load proved safe in a test laboratory then it is equally safe under any and all conditions. This is not true. The reader must start with the "starting load" and work up his load carefully. Working with his particular firearm and component combination, he may encounter signs of excess pressure before he reaches the maximum charge listed.

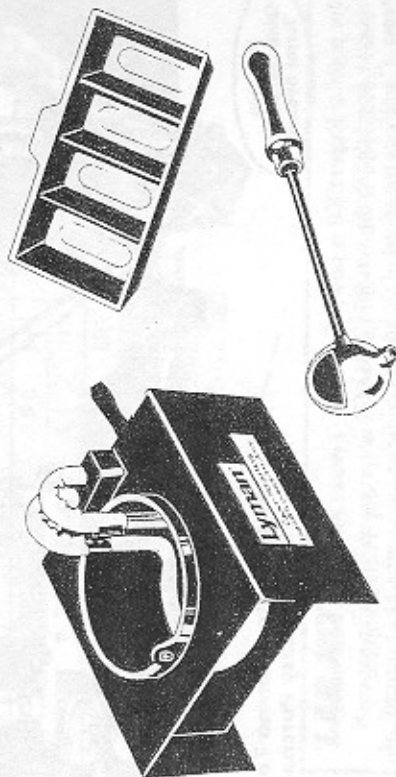
The technician classifies a load as maximum after carefully considering many aspects of its ballistic performance. The maximum average pressure of the load is not the only criteria. Often a load having an acceptable maximum average pressure will be rejected (or reduced) due to its erratic performance. Accuracy must also be considered, particularly when dealing with cast lead alloy bullets. In all instances, the maximum listing represents what our technicians consider to be the maximum working combination for the bullet, powder and caliber listed. These loads do not exceed SAAMI standards.

Accuracy Loads:

When a load is noted as such in the data tables proper, it means that the given combination of components produced the most uniform internal ballistics of any load tested utilizing that particular bullet design.

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Lyman Dept 000, Route 147 Middlefield, CT 06455

Unless noted in "Comments," the accuracy load was not fired at targets. The load, however, does have a high potential—assuming all external factors are optimum—for producing outstanding accuracy since uniform internal ballistics are critical to accuracy on target. You cannot have one without the other.

Test Parameters:

Velocities shown were taken at fifteen feet and not corrected to the muzzle.

Each test string began with a clean dry barrel and consisted of ten shots. Loads exhibiting erratic internal ballistics were not pursued.

We had no problem with leading in any of our testing.

Bullets:

Bullet numbers are listed in the introductory specifications for each cartridge and in the headline above the appropriate data block—along with an illustration of that particular bullet.

Please note these bullets are artists' rendering. Comparing your bullet against the drawing could reveal minor differences. Furthermore, minor changes are sometimes made to bullets. These drawings, which appear throughout the data sections, are for general reference only and are not intended to be a precise representation.

Bullet alloy is noted as is the exact weight of each tested bullet.

Not all cast bullets within a given caliber are intended to perform equally. We have used them in the most appropriate chamberings.

Powders:

We have limited our testing to those powders which are manufactured in the United States and which are readily available to the consumer. The following brands are listed: Dupont (now IMR), Winchester, Hercules, Alean, Hodgdon and Gearhart-Owen.

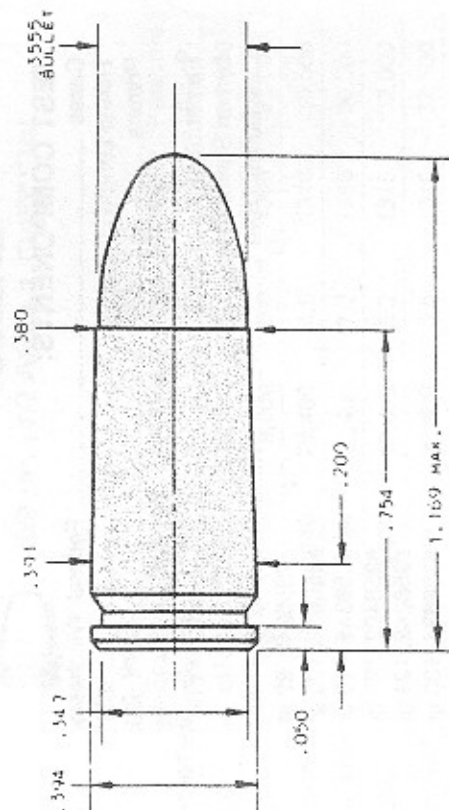
Compressed Loads:

All compressed loads are indicated with a +. Depending upon the volume of the specific cartridge case used by the reader, he may, or may not, have difficulty starting bullets in such loads. If the bullet will not start, reduce the load sufficiently so that 1/10" of space remains in the case neck. Start the bullet into the case and use whatever additional pressure is required to fully seat the bullet. Failure to comply could result in a bulged case.

Filler Wads:

Dacron filler wads in the form of 1/4-inch thick batting were used in conjunction with cast bullet loads, where indicated. This material can be purchased in most yard-goods stores. It should be cut into squares, which seal the case.

When developing a load, if a wad is desired, its should be used from the beginning as the charge weight is increased. It should never be added as an afterthought, once a maximum load has been established, since its presence could result in a pressure increase of 2,000 CUP or more.



COMMENTS:

The most common diameter for this cartridge is 0.354 inch. However, the industry standard has recently been established at 0.355 inch. All barrels of 0.354" to 0.356" are correctly matched with a bullet diameter of 0.355 inch. Barrels with larger groove diameters will often provide poor accuracy with a 0.355" bullet but chamber restrictions prevent the safe use of larger diameter bullets.

This cartridge headspaces from the mouth and therefore cases trimming must be uniform and accurate. Do not reduce cases below the trim-to length. Additionally do not roll crimp bullets as this will prevent the case from properly headspacing on its mouth.

A modest taper crimp may be employed if found necessary.

The most popular cast bullet for this round has been #356402. However, there are many good choices based upon intended use. Bullet #356637 (147 gr.) closely duplicates the U.S. Military subsonic bullet design and has proven to be very accurate.

Hercules Bullseye, Winchester 231, and Hercules Unique are very good popular propellants for this cartridge.

With any handgun cartridge, it is important not to seat bullets to a shorter length than specified in the data. This is especially important with 9mm loads. Pressures can be raised dramatically with deep seating.

9MM LUGER - LYMAN BULLETS

TEST COMPONENTS:

Cases Federal; Winchester
 Trim-to Length 751"
 Primers CCI 500;
 Winchester 1 1/2-108
 Primer Size Small Pistol
 Lyman Shell Holder No. 12
 Cast Bullets Used (Sized to .356" dia.)
 #356242, 92 gr.
 #356632, 100 gr.
 #358345, 115 gr.
 #356402, 121 gr.
 #356242, 121 gr.
 #356634, 130 gr.
 #356637, 147 gr.

TEST SPECIFICATIONS: (Velocity & Pressure)

Firearm Used Universal Receiver
 Barrel Length 4"
 Twist 1-10"
 Groove Dia. 355"

9MM LUGER - LYMAN BULLETS

#356242



92 gr. (#2 Alloy) 1.045" OAL

POWDER	Sugg. Starting Grains	Velocity fps	Pressure C.U.P.	Max. Load Grains	Velocity fps	Pressure C.U.P.
700X	4.1	1125	22,800	5.1	1285	31,000
PB	4.8	1115	19,800	6.0	1360	33,000
SR-7625	5.0	1180	23,400	5.9	1310	30,500
SR-4756	5.3	1168	22,400	7.2	1380	30,500
Bullseye	4.0	1060	19,800	5.2	1315	32,000
Red Dot	4.1	1120	22,800	5.5	1340	32,500
Green Dot	4.3	1095	20,400	6.0	1325	31,000
Unique	5.0	1065	19,800	6.8	1325	31,500
HS-6	5.8	1011	19,500	7.2	1356	29,800
231	3.8	1093	20,500	5.1	1455	32,100

#356632



100 gr. (#2 Alloy) .976" OAL

POWDER	Sugg. Starting Grains	Velocity fps	Pressure C.U.P.	Max. Load Grains	Velocity fps	Pressure C.U.P.
Bullseye	3.3	1157	21,100	4.4	1395	32,400
Unique	4.2	1193	28,300	4.7	1329	31,200
700X	3.3	1072	24,100	4.0	1300	30,800
SR-4756	3.9	1215	24,100	5.3	1415	32,700
HS-6	6.0	1205	27,600	6.6	1398	31,700
WSL	3.7	1089	26,900	4.3	1307	32,200
AA 2	4.0	1109	26,300	4.5	1259	32,200
AA 5	5.1	1129	24,800	5.7	1349	30,800
Clays	2.4	873	20,000	3.3	1168	31,500
231	3.2	1039	19,000	4.5	1333	31,000

Note: Loads shown in shaded panels are maximum.

9MM LUGER - LYMAN BULLETS

#358345

115 gr. (#2 Alloy) .997" OAL



POWDER	Sugg.			Max.		
	Starting Grains	Velocity fps	Pressure C.U.P.	Load Grains	Velocity fps	Pressure C.U.P.
**700X	3.7	1045	25,200	4.4	1160	32,500
**PB	3.7	995	23,400	4.5	1130	32,000
**SR-7625	3.8	1005	24,000	4.5	1130	31,000
SR-4756	4.2	1005	18,800	6.1	1284	32,000
**Bullseye	3.8	1035	22,800	4.9	1200	31,000
**Red Dot	3.9	1055	24,600	4.9	1200	32,000
**Green Dot	4.0	1030	24,000	5.0	1200	32,500
**Unique	4.5	1025	22,200	5.7	1210	31,500
Blue Dot	5.8	983	16,800	8.4	1339	32,300
231	2.9	1040	18,000	4.7	1443	31,600
HS-6	5.6	1000	23,800	7.0	1326	31,200

Note: Loads shown in shaded panels are maximum.

** Designates use of Winchester cases and primers.

9MM LUGER - LYMAN BULLETS

#356402

121 gr. (#2 Alloy) 1.110" OAL



POWDER	Sugg.			Max.		
	Starting Grains	Velocity fps	Pressure C.U.P.	Load Grains	Velocity fps	Pressure C.U.P.
**700X	3.3	975	25,200	4.0	1080	33,000
**PB	3.4	915	20,400	4.3	1095	31,500
**SR-7625	3.5	935	21,000	4.3	1080	31,500
SR-4765	4.0	925	17,500	5.5	1198	32,900
**Bullseye	3.7	950	21,600	4.4	1125	32,000
**Red Dot	3.8	1020	26,400	4.5	1130	32,500
**Green Dot	3.9	970	22,200	4.8	1165	32,500
**Unique	4.3	940	21,000	5.3	1135	31,000
Blue Dot	5.9	973	18,200	8.0	1253	31,600
Clays	2.2	784	18,700	3.1	1006	31,900
231	2.9	963	17,000	4.4	1264	29,600
HS-6	5.0	910	20,000	6.2	1163	29,300

#356242

121 gr. (#2 Alloy) 1.065" OAL



POWDER	Sugg.			Max.		
	Starting Grains	Velocity fps	Pressure C.U.P.	Load Grains	Velocity fps	Pressure C.U.P.
700X	3.0	940	26,000	3.7	1080	31,600
PB	3.2	872	24,500	4.1	1106	31,400
SR-7625	3.0	852	21,400	3.9	1095	31,300
Bullseye	3.4	939	23,600	4.2	1175	32,500
Red Dot	3.0	919	25,100	3.9	1140	32,000
Green Dot	3.5	966	26,200	4.4	1152	32,800
Unique	4.0	1013	26,500	5.0	1194	32,800
HS-6	5.0	904	23,000	6.3	1182	31,700
231	3.0	1010	20,000	4.1	1148	30,200

Note: Loads shown in shaded panels are maximum.

** Designates use of Winchester cases and primers.

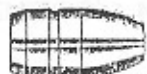
9MM LUGER - LYMAN BULLETS



#356634

130 gr. (#2 Alloy) 1.016" OAL

POWDER	Sugg. Starting Grains	Velocity fps	Pressure C.U.P.	Max. Load Grains	Velocity fps	Pressure C.U.P.
Bullseye	3.4	977	27,200	3.7	1049	31,900
Unique	3.5	972	28,000	4.0	1084	32,200
Blue Dot	5.8	969	26,900	6.5	1089	30,100
700X	3.2	927	27,100	3.7	1080	32,400
SR-4756	5.0	982	28,400	5.6	1097	31,600
HS-6	5.1	997	28,300	5.6	1060	31,000
WSF	3.8	888	24,400	4.4	1047	31,700
AA 7	6.8	1016	28,700	7.7	1191	32,700
Clays	2.2	787	22,200	3.2+	1021	31,500
231	2.6	990	19,700	4.1	1133	31,600



#356637

147 gr. (#2 Alloy) 1.058" OAL

POWDER	Sugg. Starting Grains	Velocity fps	Pressure C.U.P.	Max. Load Grains	Velocity fps	Pressure C.U.P.
Bullseye	2.8	780	24,900	3.5	942	31,600
Unique	3.2	810	25,600	3.8	956	31,800
Blue Dot	5.1	864	26,700	5.9	980	31,200
700X	2.7	803	26,500	3.3	921	32,200
SR-4756	3.1	769	25,000	3.6	896	30,700
HS-6	4.4	846	26,700	5.0	968	31,900
WSF	3.4	867	26,900	3.9	961	32,100
Clays	1.9	669	21,000	2.8+	873	31,700

Note: Loads shown in shaded panels are maximum.
+ Designates a compressed powder charge.

9MM LUGER - LYMAN BULLETS

(RIFLE DATA)

COMMENTS:

The 9mm has become the most popular autoloading pistol cartridge. This popularity has spread into small rifles chambered for the cartridge. The ballistics shown were obtained in a Marlin 16 1/2" barrel.

A caution: do not go below the listed starting charges. Doing so may cause a bullet to be stuck in the rifle length barrel. If this occurs and another round is then fired the results could be disastrous. Stay alert and be sure every cartridge is properly loaded.

Hercules Unique with all jacketed and cast bullets would be the recommended first choice propellant.

TEST COMPONENTS:

Cases Federal
Trim-to Length 751"
Primers CCI 500
Primer Size Small Pistol
Lyman Shell Holder No. 12
Cast Bullets Used (Sized to .355" dia.)
#356242, 120 gr.
#356634, 130 gr.
#356637, 147 gr.

TEST SPECIFICATIONS: (Velocity Only)

Firearm Used Marlin Model 9
Barrel Length 16 1/2"
Twist 1-10"
Groove Dia. 355"

9MM LUGER - LYMAN BULLETS

(RIFLE DATA)



#356242

120 gr. (#2 Alloy) 1.065" OAL

POWDER	Sugg. Starting Grains	Velocity fps	Pressure C.U.P.	Max. Load Grains	Velocity fps	Pressure C.U.P.
Bullseye	3.4	1131	—	4.2	1305	—
Red Dot	3.0	1070	—	3.9	1263	—
700X	3.0	1062	—	3.7	1236	—
Unique	4.0	1214	—	5.0	1402	—
HS-6	5.0	1155	—	6.3	1384	—



#356634

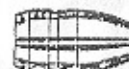
130 gr. (#2 Alloy) 1.016" OAL

POWDER	Sugg. Starting Grains	Velocity fps	Pressure C.U.P.	Max. Load Grains	Velocity fps	Pressure C.U.P.
Unique	3.5	1069	—	4.0	1166	—
HS-6	5.1	1113	—	5.6+	1252	—
SR-4756	5.0	1331	—	5.6+	1385	—
AA7	6.8	1214	—	7.7	1341	—
Blue Dot	5.8	1174	—	6.5	1265	—

Note: Loads shown in shaded panels are maximum.
+ Designates a compressed powder charge.

9MM LUGER - LYMAN BULLETS

(RIFLE DATA)



#356637

147 gr. (#2 Alloy) 1.058" OAL

POWDER	Sugg. Starting Grains	Velocity fps	Pressure C.U.P.	Max. Load Grains	Velocity fps	Pressure C.U.P.
Unique	3.2	976	—	3.8	1108	—
HS-6	4.4	986	—	5.0	1108	—
SR-4756	3.1	935	—	3.6	1041	—
Blue Dot	5.1	1073	—	5.9	1144	—
WSF	3.4	1020	—	3.9	1104	—

Note: Loads shown in shaded panels are maximum.

9MM LUGER - RCBS BULLETS

Gun: S&W Model 39
Barrel: 4"
Twist: 1-10
Cases: Speer
Primers: CCI 500, *550



38-90-RN

Wt. 90 GR.
Dia. .356"
Lube: Pistol

POWDER	WT. IN GRAINS	MUZ VEL	POWDER	WT. IN GRAINS	MUZ VEL
Unique	6.6	1469	700X	5.1	1340
	6.1	1321		4.6	1202
HS5	6.6	1314	Bullseye	5.0	1256
	6.1	1201		4.5	1122
Green Dot	6.0	1380	231	5.0	1215
	5.5	1256		4.5	1097



09-115-RN

Wt. 115 GR.
Dia. .356"
Lube: Pistol

POWDER	WT. IN GRAINS	MUZ VEL	POWDER	WT. IN GRAINS	MUZ VEL
HS5	6.6	1253	231	5.0	1138
	6.1	1171		4.5	1042
Unique	5.7	1244	Bullseye	4.5	1107
	5.2	1127		4.0	988
HP38	5.2	1307	700X	4.4	1150
	4.7	1193		3.9	1031

9MM LUGER - RCBS BULLETS



09-124-CN

Wt. 124 GR.
Dia. .356"
Lube: Pistol

POWDER	WT. IN GRAINS	MUZ VEL	POWDER	WT. IN GRAINS	MUZ VEL
HS5	6.2	1205	SR	4.1	1067
	5.7	1102	7625	3.6	948
Unique	5.2	1166	Bullseye	4.0	987
	4.7	1083		3.5	852
231	5.0	1135	700X	3.6	1040
	4.5	1015		3.1	902



9mm-124-RN

Wt. 125 GR.
Dia. .356"
Lube: Pistol

POWDER	WT. IN GRAINS	MUZ VEL	POWDER	WT. IN GRAINS	MUZ VEL
630	*9.3	1114	Red Dot	4.2	1083
	*8.9	1098		3.8	1040
Unique	5.5	1122	Bullseye	4.2	1067
	5.1	1102		3.8	1040
231	5.1	1122	700X	4.1	1122
	4.7	1094		3.7	1094
HP38	5.0	1130	SR	4.1	1043
	4.6	1104	7625	3.7	1020

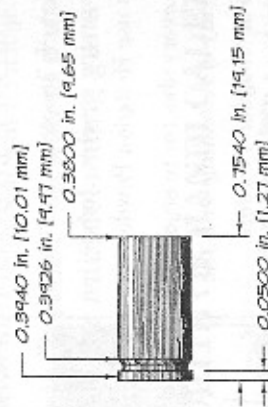
*DENOTES USE OF CCI #550 MAGNUM PRIMER

9MM LUGER

The 9mm Luger was first introduced in the Luger semi-automatic pistol in 1902. The German Navy adopted it in 1904. The U.S. military dropped the 45 ACP in favor of the Beretta Model 92-F 81 years later.

The obvious fascination for the 9mm Luger over the last 96 years has been increased round capacity over larger calibers with similar sized magazines. Law enforcement types have generally abandoned the 357 Magnum and 38 Special sixguns in favor of the 13 or 14 round semi-automatic pistols. However, others believe that simply tossing a lot of lead in the air is not the answer to stopping the bad guys. Whether the 9mm will be replaced by the 10mm or 40 S&W or 45 ACP remains to be seen. Either way, the 9mm is still a good cartridge with fine accuracy potential. With cast or jacketed bullets, HP38, TITEGROUP or Universal are hard to beat.

• • •



Casual WINCHESTER
Serial 4"

Primer: CCI 500

Twist: 1:10"
Muzzle: .750"

HODGDON

POWDER	STARTING LOADS			MAXIMUM LOADS		
	GRS.	VEL.	PRESSURE	GRS.	VEL.	PRESSURE
BULLET: 90 GR. SPR FMJ						
				DIA. .355"		C.O.L. 1.010"
HS-6	7.9	1361	27,400 CUP	8.2	1413	30,900 CUP
UNIVERSAL	5.0	1170	25,700 CUP	5.5	1266	30,100 CUP
HP-38	5.5	1312	25,400 CUP	5.8	1349	30,100 CUP
TITEGROUP	4.7	1239	25,700 CUP	5.0	1305	30,000 CUP
BULLET: 95 GR. SIE FMJ						
				DIA. .355"		C.O.L. 1.020"
HS-6	7.3	1232	26,500 CUP	7.8	1339	31,300 CUP
UNIVERSAL	4.6	1182	26,800 CUP	5.2	1292	31,700 CUP
HP-38	4.8	1189	26,300 CUP	5.3	1273	31,400 CUP
TITEGROUP	4.7	1241	28,500 CUP	5.0	1298	32,000 CUP
BULLET: 100 GR. SPR FMJ						
				DIA. .355"		C.O.L. 1.050"
HS-6	7.2	1270	23,900 CUP	7.5	1313	28,600 CUP
UNIVERSAL	4.8	1119	27,200 CUP	5.3	1212	31,500 CUP
HP-38	5.1	1218	25,200 CUP	5.5	1282	28,400 CUP
TITEGROUP	4.7	1234	28,300 CUP	5.0	1289	30,300 CUP
BULLET: 115 GR. SPR GDMF						
				DIA. .355"		C.O.L. 1.125"
HS-6	6.7	1171	26,700 CUP	7.0	1234	29,400 CUP
UNIVERSAL	4.5	1029	27,400 CUP	5.0	1149	31,200 CUP
HP-38	4.7	1075	25,300 CUP	5.1	1167	28,100 CUP
TITEGROUP	4.5	1135	29,500 CUP	4.8	1156	30,500 CUP
BULLET: 124 GR. SIE FMJ						
				DIA. .355"		C.O.L. 1.090"
HS-6	6.4	1131	25,600 CUP	6.8	1169	27,100 CUP
UNIVERSAL	4.3	1031	26,900 CUP	4.9	1118	30,600 CUP
HP-38	4.4	1009	24,600 CUP	4.8	1088	28,800 CUP
TITEGROUP	4.1	1069	27,300 CUP	4.4	1136	30,600 CUP

NEVER EXCEED MAXIMUM LOADS.

HODGDON CONTINUED

POWDER	STARTING LOADS		MAXIMUM LOADS	
	GRS.	VEL.	GRS.	VEL.
BULLET: 130 GR. S&W FMJ				
			DIA. .355"	C.O.L. 1.121"
HS-6	6.3	981	23,200 CUP	6.6 1090
UNIVERSAL	4.2	974	27,200 CUP	4.7 1058
HP-38	4.3	978	25,300 CUP	4.6 1050
TITEGROUP	4.1	1070	30,100 CUP	4.4 1102
BULLET: 147 GR. HDY XTP				
			DIA. .355"	C.O.L. 1.100"
HS-6	4.3	773	20,200 CUP	5.0 885
UNIVERSAL	3.0	803	24,100 CUP	3.3 869
TITEGROUP	3.2	855	27,500 CUP	3.6 929

NEVER EXCEED MAXIMUM LOADS.

Introduction

There has been a re-evaluation of the criteria for selecting data for inclusion. This means there will be some disagreement with previous data. The data in this guide takes precedence over all prior publications. *Previous editions of this loading guide should be discarded.*

For instance, we left out load combinations that were 'position sensitive'. This is what occurs when the load density is low. Velocity with the powder at the bullet is different from the velocity with the powder at the primer. More of these were noted with the ball propellants than with the extruded propellants.

In light of the growth of IPSC shooting, 38 Super Auto loads that make the 'major' classification (bullet weight x velocity = 175,000) are identified. While we have tested many combinations of components in 9mm Luger to attempt to meet 'major' requirements, we have not been able to find a load that makes the power floor for 'major' without exceeding SAAMI pressure recommendations. And while we were able to find loads for 38 Super Auto, they were not with lighter bullets. Turn to the data section for specific details.

In the charge tables, the 'START' charge listed for each load is our suggested beginning point with the components listed. There is the possibility that changing the named components could cause the maximum charge to be excessive, thus a reduction of the charge would be necessary. Some batches of military brass may require reducing the maximum charge by 8-12% to keep chamber pressure in line.

If you find signs of excessive pressure while using loads in this loading guide, STOP TESTING and verify all data and loading procedures. If they seem to be in order, check with our lab facility before proceeding.

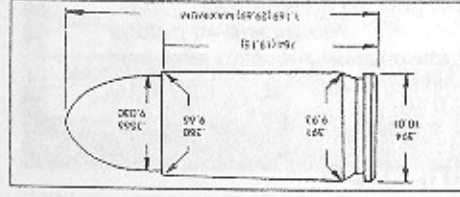
Charge weights were obtained using industry standard pressure barrels. When time permitted, off-the-shelf weapons were used to obtain velocity figures. The guns used are noted.

In reloading, the prime concern should always be SAFETY. Always wear eye protection when reloading, even when working with the 'non-volatile' components; Always keep the reloading area clean. Never have more than one propellant within easy reach at any given time. Avoid having similar looking bullets of different weights on the bench at the same time. Read the safety notes before loading.

We have not found magnum primers to offer any particular advantage with our handgun powders. But, there are some rifle cartridges where they were used.

Handgun loads using the slower powders (No. 7, No. 9, and 1680) require heavy crimp and high bullet pull to insure consistency - particularly with cast bullet loads or in extremely cold weather. Be sure your dies are capable of this, otherwise the consistency of the load will be affected.

In the text, bullet weights for cast bullets - identified by (L) are actual weights, not the nominal weights.



Adopted by the German Navy in 1904 and the German Army in 1908, the 9mm Luger is the world's most widely used military handgun cartridge. In 1985 the United States Armed Forces adopted a Beretta semi-automatic pistol in 9mm to replace the aging Model 1911A1.

It is used by numerous police and military organizations. Plus many IPSC shooters are currently using it in competition. (Hunting use should be restricted to small game and the use of expanding bullets.)

The SAAMI Maximum Average Pressure for the 9mm Luger is 33,000 C.U.P.

9mm LUGER

Gun	OBERMEYER	Max Length	0.754"
Barrel Length	4"	Trim Length	0.744"
Primer	WSP	OAL Max	1.169"
Case	FC	OAL Min	1.095"

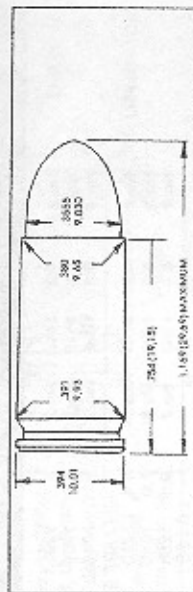
Start	Powder	Gelins	Vol.	MAXIMUM LOADS	Cumings	Length	Comment

Model	Year	Price	MPG (City)	MPG (Highway)	MPG (Combined)
PNC 90 JHP	No.2	4.8	1133	No.5	5.3
	No.5	6.8	1209	No.2	5.3
	No.7	8.8	1158	No.7	9.5
145 (L) RN	No.2	3.3	786	No.2	3.7
	No.5	4.6	866	No.5	5.1
	No.7	6.5	926	No.7	7.2
130 (L) RN	No.2	3.6	895	No.2	4.0
	No.5	5.4	1018	No.5	6.0
	No.7	7.4	1030	No.7	8.2
125 (L) RN	No.2	4.1	935	No.2	4.5
	No.5	5.6	997	No.5	6.2
	No.7	7.5	1017	No.7	8.3
115 (L) SWC	No.2	4.4	1006	No.2	4.9
	No.5	5.7	1040	No.5	6.3
	No.7	7.8	1078	No.7	8.7

SHOOTER'S LOG

Bullet	START LOADS			MAXIMUM LOADS			C.U.P.	Length	Comments
	No. 7	No. 5	No. 2	No. 7	No. 5	No. 2			
IMI 95 FMJ	No. 7 8.2	No. 5 6.5	No. 2 4.8	No. 7 10.85	No. 5 11.10	No. 2 11.10	12.81	33.000	1.000"
HDY 100 FMJ	No. 7 4.9	No. 5 6.3	No. 2 10.67	No. 7 10.81	No. 5 10.95	No. 2 10.67	12.40	29.800	1.095"
	No. 7 8.1	No. 5 10.91	No. 2 11.03	No. 7 11.03	No. 5 11.03	No. 2 11.03	9.0	29.800	
	No. 7 4.0	No. 5 6.3	No. 2 9.61	No. 7 10.52	No. 5 10.49	No. 2 10.2	4.4	29.900	1.095"
HDY 115 FMJ	No. 7 7.9	No. 5 6.3	No. 2 9.61	No. 7 10.52	No. 5 10.49	No. 2 10.2	4.4	29.900	1.095"
	No. 7 4.1	No. 5 6.4	No. 2 10.69	No. 7 10.26	No. 5 10.69	No. 2 9.7	5.0	29.800	1.055"
	No. 7 4.0	No. 5 6.3	No. 2 9.30	No. 7 10.26	No. 5 10.69	No. 2 9.7	5.0	29.800	1.055"
HDY 124 RN	No. 7 4.2	No. 5 5.8	No. 2 9.66	No. 7 10.04	No. 5 9.29	No. 2 8.96	4.7	30.900	1.095"
	No. 7 4.0	No. 5 5.8	No. 2 9.29	No. 7 10.04	No. 5 9.29	No. 2 8.96	4.7	30.900	1.095"
	No. 7 4.0	No. 5 5.8	No. 2 9.29	No. 7 10.04	No. 5 9.29	No. 2 8.96	4.7	30.900	1.095"
PMC 130 FMJ	No. 7 4.0	No. 5 5.8	No. 2 9.66	No. 7 10.04	No. 5 9.29	No. 2 8.96	4.7	30.900	1.095"
	No. 7 4.0	No. 5 5.8	No. 2 9.29	No. 7 10.04	No. 5 9.29	No. 2 8.96	4.7	30.900	1.095"
	No. 7 4.0	No. 5 5.8	No. 2 9.29	No. 7 10.04	No. 5 9.29	No. 2 8.96	4.7	30.900	1.095"
Elin 135 FMJ	No. 7 4.0	No. 5 5.8	No. 2 9.66	No. 7 10.04	No. 5 9.29	No. 2 8.96	4.7	30.900	1.095"
	No. 7 4.0	No. 5 5.8	No. 2 9.29	No. 7 10.04	No. 5 9.29	No. 2 8.96	4.7	30.900	1.095"
	No. 7 4.0	No. 5 5.8	No. 2 9.29	No. 7 10.04	No. 5 9.29	No. 2 8.96	4.7	30.900	1.095"
SPR 147 TMJ	No. 7 4.0	No. 5 5.8	No. 2 9.66	No. 7 10.04	No. 5 9.29	No. 2 8.96	4.7	30.900	1.095"
	No. 7 4.0	No. 5 5.8	No. 2 9.29	No. 7 10.04	No. 5 9.29	No. 2 8.96	4.7	30.900	1.095"
	No. 7 4.0	No. 5 5.8	No. 2 9.29	No. 7 10.04	No. 5 9.29	No. 2 8.96	4.7	30.900	1.095"

9MM LUGER - ACCURATE POWDERS



Semi-automatic carbines chambered for the 9mm Luger cartridge are intended only for informal target shooting or plinking. Although there are numerous models of selected fire weapons produced for military and law enforcement agencies, these are not generally available to the shooting public.

All loads shown below produced a small velocity increase when fired from the carbine. The velocity increase was more pronounced with the lighter bullet weights.

The SAAMI Maximum Average Pressure for the 9mm Luger cartridge is 33,000 C.U.P.

9mm LUGER

Gun	IVER JOHNSON	Max Length	0.754"
Barrel Length	18"	Trim Length	0.744"
Primer	WIN SP	OAL Max	1.169"
Case	FED	OAL Min	1.095"

Bullet	START LOADS Powder	Grain	Vel.	MAXIMUM LOADS Powder	Grain	Vel.	C.U.P.	Cartridge Length	Comment
PMC 90 JHP	No.2	4.8	1331	No.2	5.3	1512	33,000	1.095"	
	No.5	6.8	1343	No.5	7.5	1526	33,000		
	No.7	8.8	1377	No.7	9.5	1565	31,200		
IMI 95 FMJ	No.2	4.8	1241	No.2	5.3	1410	33,000	1.080"	
	No.5	6.5	1294	No.5	7.2	1470	30,700		
	No.7	8.2	1308	No.7	9.1	1466	29,100		
HDY 100 FMJ	No.2	4.9	1245	No.2	5.4	1415	33,000	1.095"	
	No.5	6.3	1289	No.5	7.0	1465	29,800		
	No.7	8.1	1301	No.7	9.0	1478	29,600		
HDY 115 FMJ	No.2	4.0	1199	No.2	4.4	1362	29,900	1.095"	
	No.5	6.3	1261	No.5	7.0	1433	31,400		
	No.7	7.9	1263	No.7	8.8	1435	29,700		
HDY 124 RN	No.2	3.7	1103	No.2	4.1	1253	29,500	1.095"	
	No.5	5.9	1166	No.5	6.5	1325	33,000		
	No.7	7.7	1223	No.7	8.5	1390	29,600		
PMC 130 FMJ	No.2	4.2	1016	No.2	4.7	1155	30,900	1.095"	
	No.5	5.4	1078	No.5	6.0	1225	33,000		
	No.7	7.3	1158	No.7	8.1	1316	31,500		
Elite 135 FMJ	No.2	4.0	971	No.2	4.4	1103	27,500	1.095"	
	No.5	5.5	1051	No.5	6.1	1228	33,000		
	No.7	6.8	1059	No.7	7.5	1249	31,000		
SPR 147 T&J	No.2	3.6	939	No.2	4.0	1010	29,200	1.095"	
	No.5	4.8	984	No.5	5.3	1095	30,900		
	No.7	6.5	1025	No.7	7.2	1165	31,900		

(RIFLE LOADS)

9MM LUGER - ALLIANT POWDERS

ALLIANT

BARREL: 4"	PRIMER: WINCHESTER SP		
BULLET: 95 GR. FMJ	DIA. .355"	C.O.L. 1.165"	
POWER PISTOL	7.8	1445	32,900 PSI
UNIQUE	6.5	1250	26,400 PSI
BULLSEYE	5.5	1295	31,400 PSI
BULLET: 115 GR. FMJ	DIA. .355"	C.O.L. 1.120"	
POWER PISTOL	6.7	1280	33,500 PSI
UNIQUE	6.1	1185	30,100 PSI
BULLSEYE	5.0	1190	31,000 PSI
BULLET: 125 GR. FMJ	DIA. .355"	C.O.L. 1.150"	
BLUE DOT	8.2	1170	29,900 PSI
HERCO	6.5	1180	32,700 PSI
POWER PISTOL	6.6	1235	34,000 PSI
UNIQUE	6.2	1170	31,300 PSI
BULLSEYE	4.9	1155	32,000 PSI
BULLET: 125 GR. LEAD	DIA. .355"	C.O.L. 1.150"	
UNIQUE	6.0	1165	29,400 PSI
BULLSEYE	4.9	1165	32,100 PSI
BULLET: 147 GR. XTP	DIA. .355"	C.O.L. 1.140"	
BLUE DOT	6.2	1050	30,200 PSI
HERCO	4.9	1010	30,500 PSI
POWER PISTOL	5.7	1095	34,000 PSI

NEVER EXCEED MAXIMUM LOADS.

9MM LUGER - IMR POWDERS

IMR

CASE: REMINGTON			BARREL: 4"		PRIMER: CCI 500	
STARTING LOADS			MAXIMUM LOADS			
POWDER	GRS.	VEL.	PRESSURE	GRS.	VEL.	PRESSURE
BULLET: 115 GR. REM JHP			DIA. .354"	C.O.L. 1.710"		
"HI-SKOR" 800-X	6.5	1150	30,300 CUP	6.5	1150	30,300 CUP
SR 4756	6.3	1175	30,600 CUP	6.3	1175	30,600 CUP
BULLET: 124 GR. REM FMJ			DIA. .354"	C.O.L. 1.135"		
"HI-SKOR" 800-X	6.5	1115	28,600 CUP	6.5	1115	28,600 CUP
SR 4756	6.3	1160	32,400 CUP	6.3	1160	32,400 CUP
BULLET: 147 GR. HDY XTP			DIA. .355"	C.O.L. 1.130"		
"HI-SKOR" 800-X	5.3	1025	32,900 CUP	5.3	1025	32,900 CUP
SR 4756	4.4	950	32,700 CUP	4.4	950	32,700 CUP

NEVER EXCEED MAXIMUM LOADS.

= NOTICE =

The information presented is based upon results obtained in our ballistics laboratory. Safe loading practices should be observed at all times. Since IMR Powder Company has no control over the circumstances of loading, we assume no liability for the results obtained, and we guarantee only that our powder meets our manufacturing standards.

9MM LUGER - SCOT POWDERS

ROYAL SCOT

Powder Charge	Bullet Weight & Type	Muzzle Velocity
4.2 grains	90 grain Sierra JHP	1,240 fps
4.0 grains	100 grain Speer JHP	1,153 fps
3.9 grains	115 grain Hornady FMJRN1,027 fps	
4.0 grains	115 Hornady JHP	1,095 fps
4.0 grains	124 grain Hornady FMJRN1,023 fps	
3.4 grains	125 grain Speer Lead RN	901 fps

PEARL SCOT

Powder Charge	Bullet Weight & Type	Muzzle Velocity
5.3 grains	90 grain Sierra JHP	1,306 fps
4.7 grains	100 grain Speer JHP	1,178 fps
4.6 grains	115 grain Hornady FMJRN1,082 fps	
4.6 grains	115 Hornady JHP	1,140 fps
4.6 grains	124 grain Hornady FMJRN1,079 fps	
4.2 grains	125 grain Speer Lead RN	977 fps

SOLO 1000

Powder Charge	Bullet Weight & Type	Muzzle Velocity
4.3 grains	90 grain Sierra JHP	1,228 fps
4.2 grains	100 grain Speer JHP	1,160 fps
4.0 grains	115 grain Hornady FMJRN1,037 fps	
4.1 grains	115 Hornady JHP	1,085 fps
4.1 grains	124 grain Hornady FMJRN1,028 fps	
3.6 grains	125 grain Speer Lead RN	871 fps

9MM LUGER - SCOT POWDERS

SOLO 1250

Powder Charge	Bullet Weight & Type	Muzzle Velocity
5.3 grains	90 grain Sierra JHP	1,296 fps
5.0 grains	100 grain Speer JHP	1,215 fps
4.8 grains	115 grain Hornady FMJRN1	1,078 fps
4.6 grains	115 Hornady JHP	1,121 fps
4.5 grains	124 grain Hornady FMJRN1	1,034 fps
4.5 grains	125 grain Speer Lead RN	940 fps

SOLO 1500

Powder Charge	Bullet Weight & Type	Muzzle Velocity
7.1 grains	90 grain Sierra JHP	1,323 fps
6.5 grains	100 grain Speer JHP	1,225 fps
6.4 grains	115 grain Hornady FMJRN1	1,139 fps
6.1 grains	115 Hornady JHP	1,182 fps
6.0 grains	124 grain Hornady FMJRN1	1,112 fps
5.9 grains	125 grain Speer Lead RN	1,008 fps

= WARNING =

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WINCHESTER Centerfire Rifle Components

When selecting reloading supplies, be sure to look for the following finest quality Winchester components.

Primers

WLR, #8-1/2 - 120, Large Rifle
WLRM, #8-1/2M - 120, Large Rifle Magnum
WSR, #6-1/2 - 116, Small Rifle

BALL POWDER Propellants

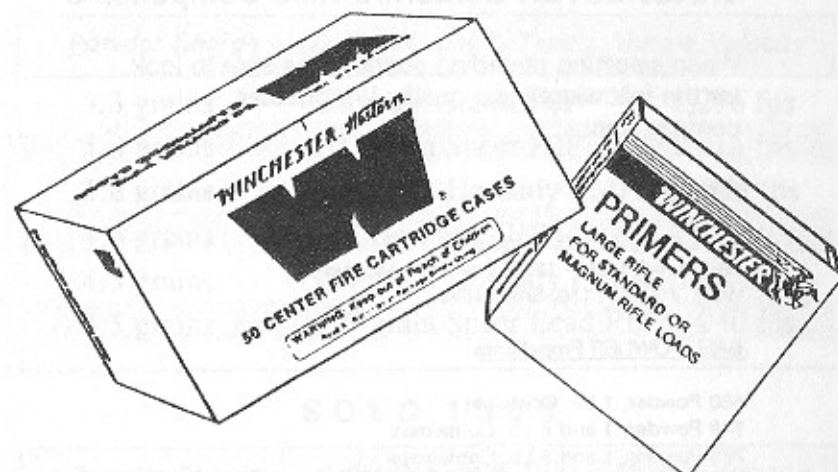
680 Powder, 1 Lb. Container
748 Powder, 1 and 8 Lb. Containers
760 Powder, 1 and 8 Lb. Containers

Unprimed Rifle

U218	218 Bee	U300H	300 H&H Mag.
U22H	22 Hornet	U300	300 Savage
U22250	22-250 Rem.	U307	307 Win.
U220S	220 Swift	U308	308 Win.
U223R	223 Rem.	U3220	32-20 Win.
U225	225 Win.	U338	338 Win. Mag.
U243	243 Win.	U348	348 Win.
U6MMR	6mm Rem.	U356	356 Win.
U2520	25-20 Win.	U358	358 Win.
U2506	25-06 Rem.	U375H	375 H&H Mag.
U257P	257 Roberts + P	U375W	375 Win.
U264	264 Win. Mag.	U4440	44-40 Win.
U270	270 Win.	U44M	44 Rem. Mag.
U284	284 Win.	U4570	45-70 Govt.
U7MM	7mm Mauser	U458	458 Win. Mag.
U3006	30-06 Springfield		
U3040	30-40 Krag		
U300WM	300 Win. Mag.		

WINCHESTER





Get Superior Control With Winchester

Reloaders make strenuous demands on their components, and that's the reason why, year after year, more reloaders depend on Winchester.

Winchester is the only ammunition company that makes all of its own components, from raw materials through final product, for the control reloaders demand. Winchester primers are tested for consistent and dependable ignition in extreme temperatures. They are non-corrosive and non-mercuric, and they're carefully controlled for weight and height.

Winchester's patented smokeless, clean-burning BALL POWDER propellants are free-flowing for precise metering and chemically stable for consistent muzzle velocity, and reduced flash and barrel erosion.

Winchester metallic components offer the consistent performance found in factory loads.



9MM LUGER - WINCHESTER POWDERS

WINCHESTER

CASE: WINCHESTER			BARREL: 4"			PRIMER: WINCHESTER SP		
POWDER			STARTING LOADS			MAXIMUM LOADS		
			GRS.	VEL.	PRESSURE	GRS.	VEL.	PRESSURE
BULLET: 95 GR. WIN FMJ			DIA. .355"			C.O.L. 1.169" MAX		
231	4.6	1145	27,100 PSI	5.1	1235	52,600 PSI		
BULLET: 114 GR. WIN CAST			DIA. .355"			C.O.L. 1.169" MAX		
231	3.8	1010	26,900 PSI	4.2	1115	32,500 PSI		
BULLET: 115 GR. WIN JHP			DIA. .355"			C.O.L. 1.169" MAX		
WSF	5.2	1095	28,700 PSI	5.7	1165	32,100 PSI		
231	4.3	1010	25,800 PSI	4.8	1120	32,100 PSI		
BULLET: 124 GR. WIN FMJ			DIA. .355"			C.O.L. 1.169" MAX		
WSF	4.7	1015	27,700 PSI	5.3	1115	32,700 PSI		
231	4.2	1005	28,800 PSI	4.5	1080	32,700 PSI		
BULLET: 124 GR. WIN LRN			DIA. .355"			C.O.L. 1.169" MAX		
WSF	4.0	945	22,200 PSI	4.7	1055	27,300 PSI		
231	3.3	910	23,800 PSI	4.0	1035	32,900 PSI		
BULLET: 147 GR. WIN CAST			DIA. .355"			C.O.L. 1.169" MAX		
WSF	3.7	905	28,500 PSI	4.1	965	32,800 PSI		
231	3.3	865	29,000 PSI	3.5	905	32,100 PSI		
BULLET: 147 GR. WIN FMJ			DIA. .355"			C.O.L. 1.169" MAX		
WSF	3.9	895	28,400 PSI	4.3	950	32,300 PSI		

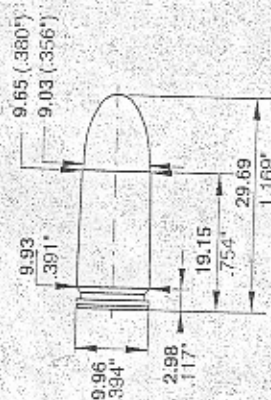
NEVER EXCEED MAXIMUM LOADS.

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9mm Luger

CIP max. dimensions in millimetres, SAAMI in inches



Country of origin: Germany
 Year of introduction: 1902
 Primer: Small Pistol
 Max. bullet diameter: 9.03 mm (.357 inch)
 Max. cartridge length: 29.69 mm (1.169 inch)
 Max. shell length: 19.15 mm (.754 inch), trim to 19.00 mm (.744 inch)
 Max. CIP pressure: 260 MPa, (37700 psi)
 Max. SAAMI pressure: 35700 CUP/37400 psi

This famous handgun cartridge was developed in the ancient gray history of Germany back in 1902. In spite of its age it was adopted as the official sidearm calibre (am. caliber) in the United States as late as 1985. Not without controversy, though. However, this U.S. decision is bound to give the cartridge a new lease of life for many years to come.

The round was developed for the more powerful 9 mm version of the Parabellum pistol as an alternative for the original 7.65 Parabellum a.k.a. .30 Luger. The 9 mm number finally became by far more popular. The Parabellum pistol (Pistole -08) became obsolete already before WW II. More modern designs replaced it but the cartridge survived. Walther P-35 is one prime example of pre-WWII handguns. Beretta 92 and CZ-75 with their countless derivatives and imitations are typical of the modern day "wondermags", as these pistols are fondly called in the U.S.

Virtually all manufacturers of centerfire pistols offer guns in 9 mm Para. It is the standard military handgun calibre (am. caliber) almost everywhere excepting the ex-communist block countries, and it has been adopted by many law enforcement agencies both in America and in Europe.

9mm Luger

Some people maligne this cartridge in police, military and defence uses. It is claimed that it lacks "stopping power". One could comment here that the standard military 9 mm is equipped with FMJ bullet. Any FMJ is a poor stopper. With modern expanding and innovative ammunition the 9mm Para. is a formidable cartridge.

One fairly widespread sporting use for this caliber is in action pistol disciplines like I.P.S.C. It is easier to control and cheaper to shoot than, say, .45 ACP.

TEST COMPONENTS:

Test barrel: 100 mm (4"), 1 in 10" twist, manufactured to meet CIP minimum dimensions.

Primers: CCI500

Cases: LAPUA, trim-to length 19.00 mm (.748")

Reloading Data, English Units:

Weight [g]	Bullet Type	Mfg.	O.A.L. [in.]	Powder Type	Starting Load			Maximum Load		
					Weight [g]	Velocity [fps]	Pressure [psi]	Weight [g]	Velocity [fps]	Pressure [psi]
88	JHP	Speer	1.063	N310	4.9	1393	29700	5.6	1510	36300
				N320	5.9	1450	29000	6.6	1577	36300
				N330	7.0	1494	29000	7.9	1640	36300
				N331	7.5	1469	29000	8.4	1595	36300
				N340	7.2	1514	27600	7.9	1642	36300
100	JHP	Speer	1.063	3N37	8.2	1531	29700	9.1	1654	36300
				N320	5.3	1289	29700	5.9	1392	36300
				N330	6.8	1406	30600	7.6	1510	36300
				N331	7.0	1354	27600	7.8	1490	36300
				N340	6.5	1365	29000	7.2	1481	36300
115	HP/HP	Hornady	1.142	3N37	7.3	1369	28300	8.2	1501	36300
				N350	7.3	1380	27600	8.2	1505	36300
				N320	5.3	1170	29000	5.9	1303	36300
				N330	6.2	1290	29700	6.9	1392	36300
				N331	6.6	1277	29700	7.3	1364	36300
				N340	5.9	1261	29700	6.6	1352	36300
				3N37	7.2	1340	23000	7.9	1423	36300
				N350	7.0	1300	23000	7.7	1407	36300

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INDICATES MAXIMUM LOAD - USE WITH CAUTION!
 LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED

9MM LUGER - VIHTAVUORI POWDERS

9mm Luger

continues from the previous page ...

Reloading Data, English Units:

Bullet				Powder			Starting Load			Maximum Load		
Weight [grs]	Type	Mfg.	O.A.L. [in.]	Type	Weight [grs]	Velocity [fps]	Pressure [psi]	Weight [grs]	Velocity [fps]	Pressure [psi]	Weight [grs]	Velocity [fps]
124	FMJ/FP	Hornady	1.142	N320	4.9	1129	27600	5.5	1216	36300		
				N330	5.5	1142	27600	6.2	1268	36300		
				N331	6.2	1186	29000	6.9	1262	36300		
				N340	5.5	1153	27600	6.3	1264	36300		
				3N37	6.5	1192	26100	7.3	1295	36300		
124	Pb-RN	Intercast	1.122	N350	6.2	1152	24700	7.0	1288	36300		
				N320	4.5	1146	28300	5.1	1234	36300		
				N330	5.3	1213	28300	6.0	1306	36300		
				N331	5.6	1193	29000	6.4	1287	36300		
				N340	5.2	1204	29000	5.8	1290	36300		
147	HPBT/XTP	Hornady	1.142	3N37	6.1	1238	29000	6.8	1330	36300		
				N350	5.8	1177	29000	6.7	1326	36300		
				N330	4.7	1006	27600	5.2	1097	36300		
				N340	4.8	1048	29000	5.3	1125	36300		
				3N37	5.6	1052	29000	6.1	1152	36300		
				N350	5.2	1027	27600	5.8	1144	36300		

INDICATES MAXIMUM LOAD - USE WITH CAUTION!
LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED

9MM LUGER - VIHTAVUORI POWDERS

9mm Luger

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TEST COMPONENTS:

Test barrel: 200 mm (4"), 1 in 10" twist, manufactured to meet CIP minimum dimensions.

Primers: CCI500

Cases: LAPUA, trim-to length 19.00 mm (.748")

Reloading Data, English Units:

Bullet				Powder			Starting Load			Maximum Load		
Weight [grs]	Type	Mfg.	O.A.L. [in.]	Type	Weight [grs]	Velocity [fps]	Pressure [psi]	Weight [grs]	Velocity [fps]	Pressure [psi]	Weight [grs]	Velocity [fps]
116	FMJ	LAPUA	1.122	N310	3.4	973	29000	3.9	1065	36300		
				N320	4.4	1100	29000	5.0	1209	36300		
				N330	5.3	1159	26100	6.0	1298	36300		
				N331	5.7	1135	26100	6.8	1320	36300		
				N340	5.4	1172	26100	6.2	1325	36300		
124	FMJ/FP	Hornady	1.082	3N37	5.9	1180	26100	7.1	1358	36300		
				N350	6.2	1266	26100	7.1	1408	36300		
				N330	4.8	1084	29000	5.3	1190	36300		
				N331	5.5	1110	29000	6.1	1236	36300		
				N340	4.8	1087	26100	5.6	1242	36300		
				3N37	5.9	1151	26100	6.7	1258	36300		
				N350	5.6	1140	26100	6.4	1281	36300		

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INDICATES MAXIMUM LOAD - USE WITH CAUTION!
LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED

9mm Luger

continues from the previous page ...

Reloading Data, English Units:

Bullet			Powder	Starting Load			Maximum Load			
Weight [grs]	Type	Mfg.		O.A.L. [in.]	Weight [grs]	Velocity [fps]	Pressure [psi]	Weight [grs]	Velocity [fps]	Pressure [psi]
124	Pb-PN	Intercast	1.122	N320	3.7	1059	26100	4.4	1184	36300
				N340	4.7	1147	26100	5.4	1267	36300
				N337	5.4	1160	26100	6.4	1313	36300
145	Pb-PN	Intercast	1.142	N350	5.6	1215	27600	6.3	1325	36300
				N331	4.5	979	26100	5.2	1109	36300
				N340	3.8	978	26100	4.6	1100	36300
147	HPBTXTP	Hornady	1.142	N337	4.5	1019	26100	5.3	1146	36300
				N350	4.6	1027	26100	5.3	1150	36300
				N337	5.2	1040	29000	5.7	1140	36300
				N350	5.3	1040	29000	5.8	1139	36300

INDICATES MAXIMUM LOAD - USE WITH CAUTION!
LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED

POWDER BURNING RATE CHART

Current Canister Grade Powders in order of approximate burning rate.
(R1 being the fastest, 748 the slowest)
This list is approximate only and not to be used for developing loads.

1.	R-1, Norma	36.	No. 9, Accurate Arms
2.	N31, Vihtavuori	37.	R123, Norma
3.	TITEWAD, Accurate Arms	38.	N110, Vihtavuori
4.	RED DOT, Alliant	39.	H110, Hodgdon
5.	CLAYS, Hodgdon	40.	296, Winchester
6.	"HI-SKOR" 700-X, IMR Co.	41.	IMR4227, IMR Co.
7.	BULLSEYE, Alliant	42.	H4227, Hodgdon
8.	TITEGROUP, Hodgdon	43.	SR4759, IMR Co.
9.	American Select, Alliant	44.	1680, Accurate Arms
10.	SOLO 1000, Accurate Arms	45.	200, Norma
11.	GREEN DOT, Alliant	46.	Reloader 7, Alliant
12.	INTERNATIONAL, Hodgdon	47.	IMR4198, IMR Co.
13.	PB, IMR Co.	48.	H4198, Hodgdon
14.	N320, Vihtavuori	49.	N120, Vihtavuori
15.	WST, Winchester	50.	H322, Hodgdon
16.	No.2, Accurate Arms	51.	2015 BR, Accurate Arms
17.	SR 7625, IMR Co.	52.	N130, Vihtavuori
18.	HP-38, Hodgdon	53.	IMR3031, IMR Co.
19.	231, Winchester	54.	N133, Vihtavuori
20.	UNIQUE, Alliant	55.	H335, Hodgdon
21.	UNIVERSAL, Hodgdon	56.	N135, Vihtavuori
22.	Power Pistol, Alliant	57.	2230, Accurate Arms
23.	N330, Vihtavuori	58.	2460, Accurate Arms
24.	HERCO, Alliant	59.	H4895, Hodgdon
25.	WSF, Winchester	60.	IMR4895, IMR Co.
26.	N340, Vihtavuori	61.	RELOADER-12, Alliant
27.	"HI-SKOR" 800-X, IMR Co.	62.	IMR-4320, IMR Co.
28.	SR4756, IMR Co.	63.	3100, Accurate Arms
29.	NO. 5, Accurate Arms	64.	IMR 4064, IMR Co.
30.	HS-6, Hodgdon	65.	202, Norma
31.	N337, Vihtavuori	66.	2520, Accurate Arms
32.	N350, Vihtavuori	67.	RELOADER-15, Alliant
33.	BLUE DOT, Alliant	68.	N140, Vihtavuori
34.	No. 7, Accurate Arms	69.	VARGET, Hodgdon
35.	2400, Alliant	70.	748, Winchester