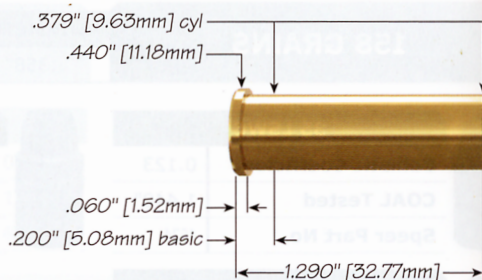


357 MAGNUM

Parent Cartridge:	38 Special
Country of Origin:	USA
Year of Introduction:	1935
Designer(s):	Smith & Wesson
Governing Body:	SAAMI/CIP



CARTRIDGE CASE DATA			
Case Type:	Rimmed, straight		
Average Case Capacity:	26.2 grains H ₂ O	Max. Cartridge OAL	1.590 inch
Max. Case Length:	1.290 inch	Primer:	Small Pistol
Case Trim to Length:	1.280 inch	RCBS Shell holder:	# 6
Current Manufacturers:	CCI/Speer, Federal, Hornady, Remington, Winchester, Cor-Bon, Black Hills, Lapua, Magtech, Aguila, Fiocchi, Prvi Partizan, PMC		

BALLISTIC DATA			
Max. Average Pressure (MAP):	35,000 psi, 45,000 CUP - SAAMI	Test Barrel Length:	10.0 inch (Unvented), 5.643 inch (Vented)
Rifling Twist Rate:	1 turn in 18.75 inch		
Muzzle velocities of factory loaded ammunition	Bullet Wgt.	Muzzle velocity	
	110-grain	1,295 fps	
	125-grain	1,450 fps	
	135-grain	1,275 fps	
	140-grain	1,400 fps	
	158-grain	1,235 fps	
	180-grain	1,080 fps	

HISTORICAL NOTES

- Until 1935, the muzzle velocity of most handgun cartridges was limited by low MAP levels required by weak gun designs and poor metallurgy.
- As a result, their terminal ballistic performance was based on heavy, blunt, lead bullets at low muzzle velocities. The larger the caliber, the better.
- In the early 1930s, noted gun writer and experimenter Elmer Keith felt that new propellants could dramatically increase the muzzle velocity and terminal ballistic effectiveness of revolver cartridges. (For additional information on Elmer Keith see the 44 Remington Magnum data).

- Keith focused on improving the 38 Special cartridge for hunting. His concept proved successful. In turn, this stimulated Smith & Wesson to commercialize the concept.
- The result was the new 357 S&W Magnum cartridge introduced in 1935, along with a suitably reinforced revolver to fire it.
- The MAP level of the 357 Magnum cartridge is more than twice that of the 38 Special. In order to prevent shooters from loading a 357 Magnum in a 38 Special revolver, the cartridge case of the 357 Magnum was increased by .135 inches.
- Although the ballistic capabilities of the new cartridge were a quantum level improvement, the expensive guns (during the Depression few people had money for such things) and the looming threat of another world war limited sales.
- The 357 Magnum did not become popular until the mid-1950s when economic prosperity returned and less expensive revolvers hit the market.
- A persistent problem was that the lead bullets used in factory loaded 357 Magnum ammunition caused barrel leading. This problem was not resolved until the introduction of jacketed bullets for the 357 Magnum in the late 1960s.
- Today, virtually every manufacturer of revolvers offers several models chambered for the 357 Magnum. Likewise, all domestic ammunition makers offer 357 Magnum factory loaded ammunition in a wide variety of bullet weights and styles.

Interesting Fact

During World War II, General George Patton became famous for carrying two ivory handled revolvers. One of them was in 357 Magnum.

BALLISTIC NOTES

- The original Remington factory load for the 357 Magnum was a 158-grain lead, semi-wadcutter bullet at a muzzle velocity of approximately 1,235 fps. This bullet remained the only factory load until the introduction of jacketed bullets. It is still listed by several manufacturers.
- For reloading the 357 Magnum, Speer offers a complete line of suitable bullets.
 - For practice, training, plinking, personal protection, and hunting small game:
 - A 158-grain Lead, Semi-wadcutter (LSWC)
 - A 158-grain Lead, Semi-wadcutter Hollow Point (LSWC HP)
 - For personal protection or hunting varmints, pests or rodents:
 - A 110-grain Jacketed Hollow Point (JHP)
 - A 125-grain Jacketed Hollow Point (JHP)
 - A 125-grain Gold Dot Hollow Point (GDHP)
 - A 125-grain Total Metal Jacket (TMJ FN)
 - A 135-grain Gold Dot Hollow Point-Short Barrel (GDHP SB)
 - To duplicate factory loads, for personal protection and for hunting predators, pests and deer:
 - A 158-grain Gold Dot Hollow Point (JHP) for personal defense
 - A 158-grain Total Metal Jacket Flat Nose (TMJ FN) for dispatching wounded game

- A 158-grain Jacketed DeepCurl Hollow Point (DCHP) for hunting deer
- A 158-grain Jacketed Soft Point (JSP) for hunting deer
- A 170-grain DeepCurl Soft Point (DCSP) has been designed especially for the 357 Magnum. It offers the deep penetration and controlled expansion necessary for hunting big game.

TECHNICAL NOTES

- The 357 Magnum cartridge case is a classic revolver design with a rim and a straight sided case. Basically, it is a longer 38 Special case.
- Case length of the 357 Magnum is .135 inches longer than the 38 Special in order to prevent chambering a 357 Magnum cartridge in 38 Special handguns.
- Case capacity of the 357 Magnum is approximately 10% more than the 38 Special.
- The MAP level of the 357 Magnum is 35,000 psi which is over twice that of the 38 Special and 175% higher than the 38 Special +P.
- Most revolver bullets must be of a special, compact ogive design (flat nose) to maximize case capacity. All Speer 357 Magnum bullets are designed to these parameters.
- Ammunition in 38 Special and 38 Special +P may be safely fired in guns chambered for the 357 Magnum.

HANDLOADING NOTES

- To prevent bullet elongation in revolvers, all bullets for the 357 Magnum cartridge must be crimped securely in the cannelure on the bullet's surface.
- We recommend loading lead bullets no faster than 1,034 fps to avoid leading the barrel.
- 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.
- If you wish to load Speer Plastic Shot Capsules for pest and rodent control, we recommend that you load them in 38 Special cases for best patterning. Shot capsules loaded in 38 Special cases can be fired safely from 357 Magnum revolvers. Shot capsule loading data will be found in the 38 Special data section.

SAFETY NOTES

SPEER 170-grain DeepCurl Soft Point @ a muzzle velocity of 1,166 fps:

- Maximum vertical altitude @ 90° elevation is 4,743 feet.
- Maximum horizontal distance to first impact with ground @ 34° elevation is 2,234 yards.

110 GRAINS

DIAMETER

.357"

SECTIONAL DENSITY

0.123

38 JHP



Ballistic Coefficient	0.113
COAL Tested	1.575"
Speer Part No.	4007

NOTE: Do not use the 110-grain Gold Dot SB HP (#4009) in the 357 Magnum.

Propellant	Case	Primer	Starting Charge		Maximum Charge	
			Weight (grains)	Muzzle Velocity (feet/sec)	Weight (grains)	Muzzle Velocity (feet/sec)
Vihtavuori N110	Speer	CCI 500	19.0	1557	21.0 C	1693
Alliant 2400	Speer	CCI 500	17.5	1536	19.5	1670
Alliant Power Pistol	Speer	CCI 500	9.5	1326	10.5	1451
Alliant Unique	Speer	CCI 500	8.5	1284	9.7	1447
Vihtavuori 3N37	Speer	CCI 500	9.7	1305	10.8	1433
Alliant Bullseye	Speer	CCI 500	7.8	1246	8.7	1403
Hodgdon Hi-Skor 700-X	Speer	CCI 500	7.0	1208	8.0	1366
Hodgdon H. Universal	Speer	CCI 500	8.0	1264	9.0	1359
Accurate No. 5	Speer	CCI 500	10.8	1246	12.0	1330
Winchester 231	Speer	CCI 500	8.5	1231	9.5	1319

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

125 GRAINS**DIAMETER**

.357"

SECTIONAL DENSITY

0.140

**38 GDHP**

Ballistic Coefficient	0.140
COAL Tested	1.580"
Speer Part No.	4012

**38 JHP**

Ballistic Coefficient	0.129
COAL Tested	1.575"
Speer Part No.	4013

**38 TMJ® FN**

Ballistic Coefficient	0.146
COAL Tested	1.575"
Speer Part No.	4015

Propellant	Case	Primer	Starting Charge		Maximum Charge	
			Weight (grains)	Muzzle Velocity (feet/sec)	Weight (grains)	Muzzle Velocity (feet/sec)
Vihtavuori N110	Speer	CCI 500	16.8	1410	17.8	1443
Alliant 2400	Speer	CCI 500	16.5	1335	17.5	1409
Alliant Power Pistol	Speer	CCI 500	9.5	1273	10.5	1345
Alliant Unique	Speer	CCI 500	8.6	1259	9.6	1343
Winchester 296	Speer	CCI 550	18.3	1188	20.3	1336
Hodgdon H110	Speer	CCI 550	18.0	1154	20.0	1282
Accurate No. 9	Speer	CCI 500	12.6	1119	14.6	1238
Vihtavuori N350	Speer	CCI 500	9.0	1097	10.0	1226
Hodgdon H. Universal	Speer	CCI 500	7.5	1148	8.2	1200
Vihtavuori 3N37	Speer	CCI 500	9.0	1035	10.2	1180
Winchester 231	Speer	CCI 500	7.6	1129	8.3	1168
Accurate No. 7	Speer	CCI 500	12.0	1045	13.5	1134
Hodgdon HS-6	Speer	CCI 550	10.0	1009	11.3	1124

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

135 GRAINS

DIAMETER

.357"

SECTIONAL DENSITY

0.151

38 GDHP SB

Ballistic Coefficient 0.141

COAL Tested 1.590"

Speer Part No. 4014

NOTE: Long barrel velocities
(these from the 10 inch test
barrel listed).

Propellant	Case	Primer	Starting Charge		Maximum Charge	
			Weight (grains)	Muzzle Velocity (feet/sec)	Weight (grains)	Muzzle Velocity (feet/sec)
Hodgdon H110	Speer	CCI 550	17.5	1313	18.5	1387
Winchester 296	Speer	CCI 550	17.5	1264	18.5	1377
Alliant 2400	Speer	CCI 500	15.0	1219	16.0	1377
Accurate No. 9	Speer	CCI 500	14.5	1234	15.5	1345
Alliant Power Pistol	Speer	CCI 500	8.6	1192	9.6	1291
Vihtavuori 3N37	Speer	CCI 500	7.7	1093	8.7	1185
Alliant Unique	Speer	CCI 500	6.8	1082	7.8	1185

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

135 GRAINS

DIAMETER

.357"

SECTIONAL DENSITY

0.151



38 GDHP SB

Ballistic Coefficient 0.141

COAL Tested 1.590"

Speer Part No. 4014

SHORT BARREL VELOCITIES

Test Firearm: S&W Model 19 2.5"

Propellant	Case	Primer	Starting Charge		Maximum Charge	
			Weight (grains)	Muzzle Velocity (feet/sec)	Weight (grains)	Muzzle Velocity (feet/sec)
Accurate No. 9	Speer	CCI 500	14.5	1202	15.5	1258
Hodgdon H110	Speer	CCI 550	17.5	1128	18.5	1205
Alliant 2400	Speer	CCI 500	15.0	1124	16.0	1176
Alliant Power Pistol	Speer	CCI 500	8.6	1046	9.6	1137
Winchester 296	Speer	CCI 550	17.5	1105	18.5	1130
Alliant Unique	Speer	CCI 500	6.8	971	7.8	1109
Vihtavuori 3N37	Speer	CCI 500	7.7	874	8.7	1012

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

158 GRAINS

DIAMETER

.357"

SECTIONAL DENSITY

0.177



38 TMJ® FN

Ballistic Coefficient	0.173
COAL Tested	1.570"
Speer Part No.	4207



38 JHP

Ballistic Coefficient	0.163
COAL Tested	1.570"
Speer Part No.	4211



38 DCHP

Ballistic Coefficient	0.168
COAL Tested	1.575"
Speer Part No.	4215



38 JSP

Ballistic Coefficient	0.164
COAL Tested	1.570"
Speer Part No.	4217

Propellant	Case	Primer	Starting Charge		Maximum Charge	
			Weight (grains)	Muzzle Velocity (feet/sec)	Weight (grains)	Muzzle Velocity (feet/sec)
Alliant 2400	Speer	CCI 500	13.8	1128	14.8	1265
Vihtavuori N110	Speer	CCI 500	13.5	1102	15.0	1253
Hodgdon H110	Speer	CCI 550	13.9	1151	15.5	1217
Winchester 296	Speer	CCI 550	13.2	1089	14.7	1185
Accurate No. 5	Speer	CCI 500	9.0	1032	10.0	1152
Accurate No. 7	Speer	CCI 500	10.5	1015	11.7	1140
Accurate No. 9	Speer	CCI 500	12.3	1052	13.7	1136
IMR 4227	Speer	CCI 500	15.0	1003	17.0	1126
Alliant Power Pistol	Speer	CCI 500	7.5	963	8.5	1078
Vihtavuori N350	Speer	CCI 500	7.7	958	8.6	1072
Hodgdon HS-6	Speer	CCI 550	8.7	925	9.7	1040
Alliant Unique	Speer	CCI 500	6.9	978	7.7	1040
Hodgdon H. Universal	Speer	CCI 500	6.5	904	7.3	1015

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

170 GRAINS

DIAMETER

SECTIONAL DENSITY

.357"

0.191



357 DCSP

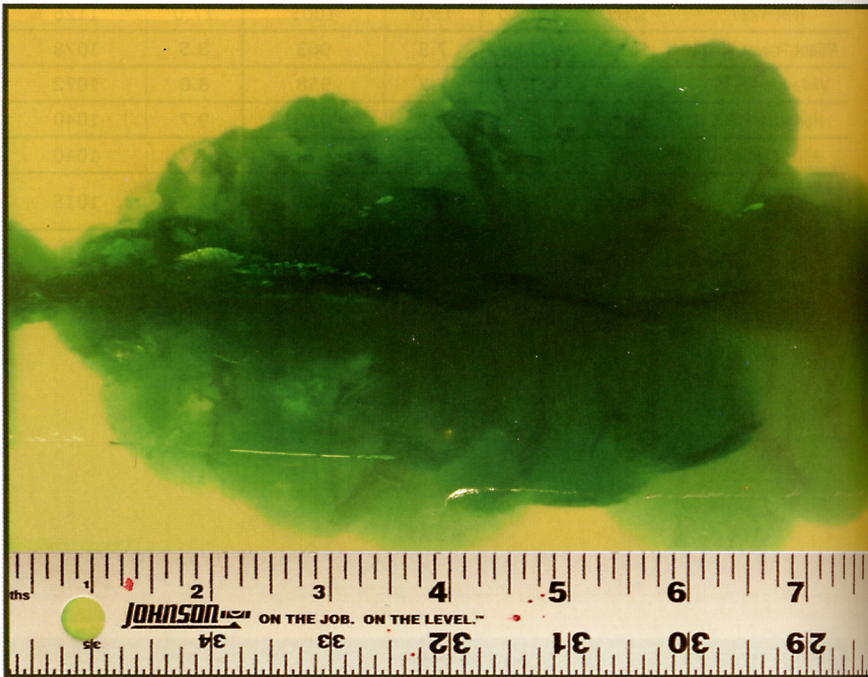
Ballistic Coefficient 0.185

COAL Tested 1.590"

Speer Part No. 4230

Propellant	Case	Primer	Starting Charge		Maximum Charge	
			Weight (grains)	Muzzle Velocity (feet/sec)	Weight (grains)	Muzzle Velocity (feet/sec)
Alliant 2400	Speer	CCI 500	13.9	1100	14.5	1166
Vihtavuori N110	Speer	CCI 500	13.2	1046	13.8	1132
Hodgdon Lil' Gun	Speer	CCI 550	14.8	1100	15.4	1121
IMR 4227	Speer	CCI 500	16.1	1037	16.7	1084
Hodgdon H110	Speer	CCI 550	14.4	1024	15.2	1076
Accurate No. 9	Speer	CCI 550	11.0	1030	11.7	1071

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



158 GRAINS**DIAMETER**

.358"

SECTIONAL DENSITY

0.176

**38 LSWC**

Ballistic Coefficient	0.123
COAL Tested	1.570"
Speer Part No.	4624

**38 LSWC HP**

Ballistic Coefficient	0.121
COAL Tested	1.575"
Speer Part No.	4628

Propellant	Case	Primer	Starting Charge		Maximum Charge	
			Weight (grains)	Muzzle Velocity (feet/sec)	Weight (grains)	Muzzle Velocity (feet/sec)
Alliant Unique	Speer	CCI 500	5.5	970	6.0	1034
IMR SR 7625	Speer	CCI 500	4.8	926	5.3	1021
Hodgdon Hi-Skor 700-X	Speer	CCI 500	4.5	904	5.0	1002
Winchester 231	Speer	CCI 500	4.9	897	5.4	989
Alliant Bullseye	Speer	CCI 500	4.3	848	4.8	939
Hodgdon HP-38	Speer	CCI 500	4.5	839	5.0	932

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

